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INDUSTRIAL - LIGHT DUTY LOADS



INDUSTRIAL - MEDIUM DUTY LOADS



INDUSTRIAL - HEAVY DUTY LOADS AND MECHANICAL HANDLING



HIGH TEMPERATURE



ANTISTATIC AND STATICALLY CONDUCTIVE



PALLET TRUCK ROLLERS



DRIVE WHEELS



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COMPACT CASTORS



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SCAFFOLDINGS



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WASTE BIN CONTAINERS



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INSTITUTIONAL



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FURNITURE



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CUSTOMISED SOLUTIONS



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ACCESSORIES

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MILESTONES

1950	Company was set up as a craft business	1995	Production of 30,000 wheels a day with 104 employees
1953	Brand registration and conversion to a joint stock company (SpA)	1996	ISO 9001 certification
1961	First foreign customer for wheels with polyurethane coating	2000	Tellure Rôta do Brasil incorporated
1972	Production of 2,000 wheels a day with 100 employees	2002	ISO 9001:2000 certification
1980	The company moved to the current 10,000 square metre plant	2004	ISO 14001 Environmental Certification
		2005	Production expansion for automatic assembly with the purchase of a 3,000 square metre facility next to the main plant

"We are working to improve, always"

This is how Roberto Lancellotti - founder of Tellure Rôta - summarises the mission of the company, which works every day to satisfy its customers' movement and handling needs for industry and home applications, through the design, manufacture and sale of wheels and brackets.



Specific design for every sector

Every day, our designers study innovative movement solutions for multiple application sectors. The result is an offer of over 8,000 catalogue items and the development of special products upon customer requests

From large industries to private homes, from office canteens to every environment of use, there is a specific solution that has been studied, developed and tested within the company, thanks to the know-how of materials and the use of the most modern conception, design and testing software.

In Tellure Rôta, technology and competence are at the customer's service.

2006	Start of the Lean production project	2016	Expansion of robotic and automated production lines for the manufacture of polyurethane wheels and rollers.
2009	OHSAS 18001:2007 Workplace Health and Safety Certification	2016	ISO 9001:2015 Quality certification and ISO 14001:2015 Environmental Certification
2011	Qualification and accreditation of the "Test & Research" lab by the Emilia-Romagna High Technology Network	2021	Tellure Rôta "Historical brand of national interest"
2012	Production expansion for thermoplastic moulding with the purchase of a third 1,500 square metre facility next to the main plant	2023	"Together we move": 70th anniversary
2013	Achievement of sixty years in the business		



Tellure Rôta, 70 years of guaranteed Made in Italy quality

The wheels and brackets are manufactured in three plants in Formigine, on a covered surface of 15,000 square metres.

Here, the skills of our people combine with technology to manufacture products which are built following certificated standards, which guarantee quality.

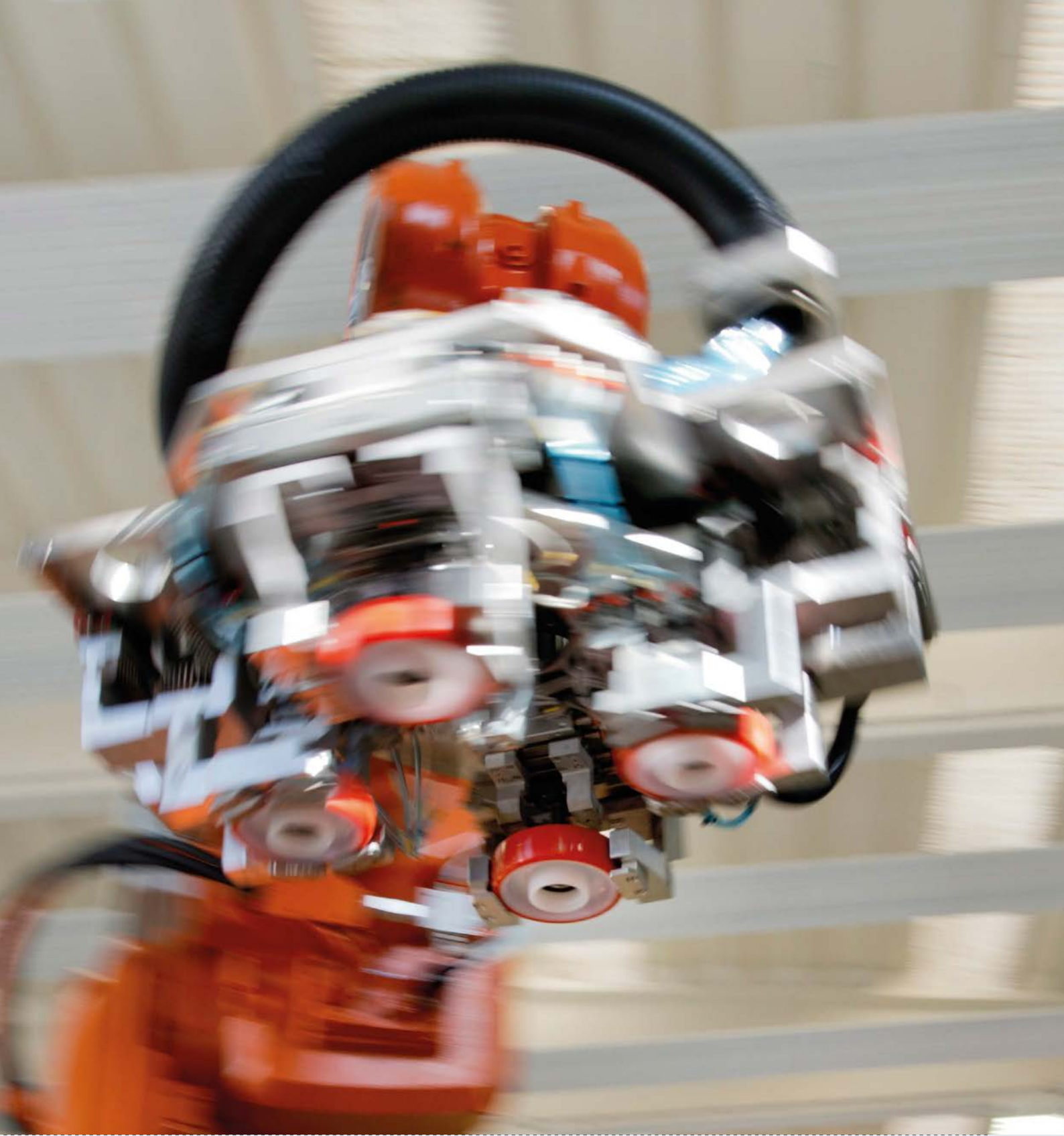
The steel sheets are moulded with automatic presses rated up to 630 Tonnes and pitch moulds. Strict and continuous checks made on the steel sheet and on the moulded components guarantee precise processing tolerances.

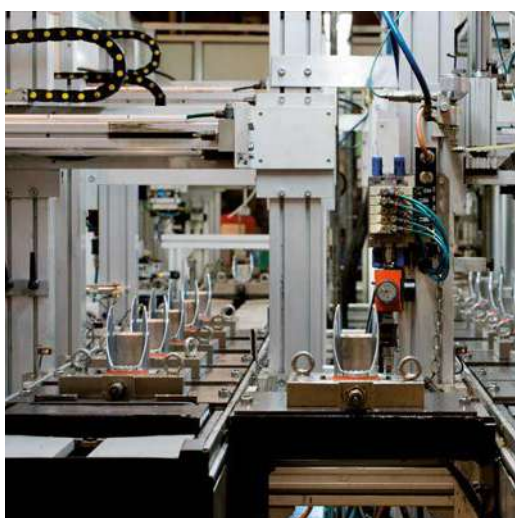
The preparation of hubs for coating and casting polyurethane wheels and rollers takes place according to in-house created formulas and by using high quality raw materials. The entire process is strictly controlled to obtain the highest performance of the Tellure Rôta polyurethanes.

The thermoplastic wheels are moulded in a specific plant with state-of-the-art presses, in a controlled environment and starting from certified materials. The process ends with the assembly of the wheels and brackets on automatic lines that guarantee high production volumes and constant high quality.

OVERVIEWS







Tellure Rôta production process is based on lean production principles, which allows a flexible response to customer requests, ensuring reliable service and rapid delivery.

Established in Italy, competitive in the world

Thanks to the commitment to product quality and innovative solutions to the different movement and handling requirements, Tellure Rôta is internationally recognised as one of the most important industrial companies in the sector. Tellure Rôta do Brasil was set-up in 2000 to strengthen the presence in South America.

CERTIFICATIONS

ISO 9001:2015 certification, that guarantee management of all company processes even more focused on complete and constant customer satisfaction;

ISO 14001:2015 environmental certification, demonstrating Tellure Rôta's ability to combine management which focuses on continuous improvement and customer satisfaction with environmental protection and prevention of pollution;

ISO 45001:2018 health and safety certification, thanks to the implementation of an internal system which guarantees regulations are respected, constant checks are performed and proactive management is done on all risks which can be found in the workplace.



A sales network with over 2,000 customers serves today 70 countries.
Tellure Rôta is based in Formigine (Modena) in the north of Italy, on a site consisting of three production plants and the research and development laboratory.





An in-house laboratory for continuous innovation

In order to guarantee to its customers excellence in designing projects, Tellure Rôta has chosen to qualify and support its production departments with the Test & Research lab, a research laboratory with operational autonomy and accredited since 2011.

Since the laboratory belongs to a network of excellence, it is constantly updated and can expand its know-how to guarantee customers with on-going innovative projects.



EQUIPMENT

The supplied equipment consists of machinery and modern and updated technologies; it is divided into:

- test machines and benches for finished products according to the Standards of reference
- measuring instruments for the dimensional control and the physical-mechanical-electrical characterisation of the materials
- FEM design and analysis software workstations

All equipment is integrated with sensors and software for the collection and processing of data and the tests are video-recorded in real time.

Where research becomes solution

The laboratory guarantees the necessary skills to develop and test new solutions for materials, products and constructive and process technologies.

In particular, it develops and characterises polyurethane mixes and thermoplastic materials able to meet the specific application requirements of wheel users and the right quality/price ratio.

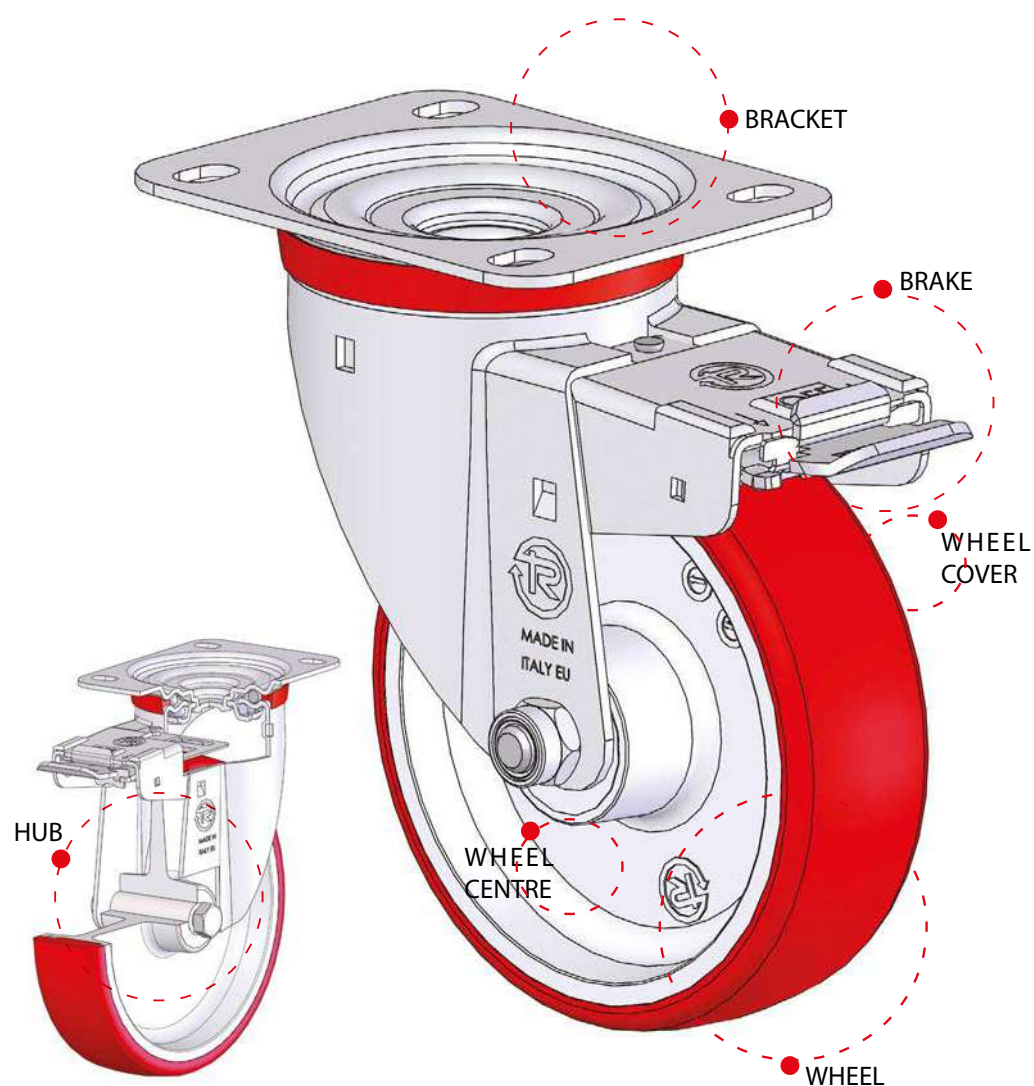
All of the chosen materials and treatments have a low environmental impact and are conform with the RoHS and Reach Directives.

TRLab also researches metal components to make brackets with optimised performance even under heavy-duty uses, and it also experiments with surface treatments that resist external chemical agents.



SERVICES

- Tests on wheels and brackets according to the wheels and brackets standards
- Tests on wheels and brackets according to standards relating to different applications (waste collection bins, mobile scaffoldings and others)
- Tests on elastomer, thermoplastic and metal materials
- Physical-mechanical characterisation tests of elastomers and vulcanised rubbers (traction, tear, abrasion, resilience, density, hysteresis)
- Electrical resistance tests on antistatic or conductive components
- Specific tests on customer projects



WHEEL

Round mechanical part allowing the transformation, by rotating around its own axis, of a sliding motion into a rolling motion.

The elements composing the wheel are: the tread, the cover, the centre, the hub and the swivel actions.

In this catalogue the wheels are divided into main usage categories. Each series contains specific information and individual codes.

Industrial - Light duty loads	
Industrial - Medium duty loads	
Industrial - Heavy duty loads and mechanical handling	
High temperatures	
Antistatic and statically conductive solutions	
Pallet truck rollers	
Drive wheels	from page 48 to page 423
Compact castors	
Scaffoldings	
Waste bin containers	
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Furniture	
Customised solutions	
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BRACKET

Connecting element between a wheel and a trolley. All wheels normally require the use of a bracket to be fitted to a trolley; the wheels which have an axis integrated in the trolley itself are an exception.

Swivel bracket: turns on its own vertical axis as the direction of movement changes; it can be swivel with top plate, swivel with bolt hole, swivel with stem. It can be fitted with a lock.

Fixed bracket: it cannot rotate; it has the task of maintaining the wheel along a guideline.

Brackets

from page 14
to page 27

BRAKE

Device to brake the rotation of the bracket around its own axis, the rotation of the wheel or the rotation of the complete castor. Front, rear, centralised, total or directional brakes can be fitted onto the swivel brackets.

Brakes

from page 28
to page 33

HUB

Central part of the wheel intended to house the axle or the bearings, making rotation easier (ball bearing, roller bearing, plain bores,...).

Hubs

from page 34
to page 35

TELLURE RÔTA BRACKETS

Light-duty SL



Carrying capacity: 130 daN
Diameters: 80-125 mm
Fitting: with top plate,
with bolt hole
Brake: front

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Standard-duty NL-NLX



Carrying capacity: 400 daN
Diameters: 65-280 mm
Fitting: with top plate, with
bolt hole, with threaded
stem, with Zamak stem
Brake: front, rear,
centralised

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Medium-duty M



Carrying capacity: 500 daN
Diameters: 150-200 mm
Fitting: with top plate
Brake: adjustable front

Page 18

Medium-Heavy duty P-PX



Carrying capacity: 750 daN
Diameters: 80-250 mm
Fitting: with top plate
Brake: front, adjustable rear

Page 19

Heavy-duty with hardened ball race grooves PT



Carrying capacity: 900 daN
Diameters: 125-200 mm
Fitting: with top plate
Brake: adjustable rear

Page 20

Extra heavy-duty EP



Carrying capacity: 1600daN
Diameters: 100-250 mm
Fitting: with top plate
Brake: adjustable rear

Page 21

Electrowelded EE MHD



Carrying capacity: 1500 daN
Diameters: 100-250 mm
Fitting: with top plate
Brake: adjustable rear

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Electrowelded EE HD-EE EHD



Carrying capacity: 3500 daN
Diameters: 150-400 mm
Fitting: with top plate
Brake: adjustable rear
(EE HD only)

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Twin electrowelded EEG MHD



Carrying capacity: 1500 daN
Diameters: 60-200 mm
Fitting: with top plate
Brake: adjustable rear
(diam. 160-200 mm only)

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Twin electrowelded EEG HD - EEG EHD



Carrying capacity: 4300 daN
Diameters: 125-300 mm
Fitting: with top plate

Page 25

Sprung loaded electrowelded EES MHD



Carrying capacity: 4300 daN
Diameters: 50-300 mm
Fitting: with top plate
Brake: adjustable front
(diam. 150-250 mm
only)

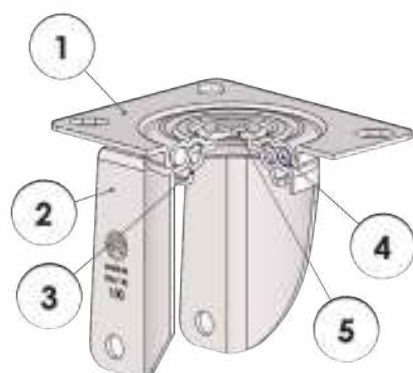
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Scaffolding TRAB



Carrying capacity: 750 daN
(according to EN 1004:2005)
Diameters: 125-200 mm
Fitting: with top plate,
with solid stem, with
threaded stem with leveller

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- 1) Plate in electrolytically galvanised steel plate
- 2) Fork in electrolytically galvanised steel plate
- 3) Ball race ring in electrolytically galvanised steel plate
- 4) Swivel actions: on two ball race rings lubricated with grease
- 5) King pin: integrated with ball race ring

Light-duty SL - max carrying capacity 130 daN

The bracket is made of electrolytically galvanised steel plate.

The swivel action is composed of two roller ball race rings in calibrated tracks obtained on pressed components. The bracket assembly is made by means of cold forming the pin integrated in the lower ring, thus guaranteeing good manoeuvrability and reduced side play.

The shaping of the fixing plate that protects the upper ball race ring and their lubrication using industrial multi-purpose grease reduce maintenance during the normal conditions of use of the bracket.

Brake: front

Fittings with wheels



SERIES 52

SERIES 53

SERIES 71

Fitting with top plate

TS								
	80	40	110	95x80	80x60	8.8	33	4 km/h
	100	40	127	95x80	80x60	8.8	29	130
	125	40	154	95x80	80x60	8.8	32	130

Fitting with bolt hole

TS								
	80	40	110	12	63	33	130	4 km/h
	100	40	127	12	63	29	130	
	125	40	154	12	63	32	130	



- 1) Top Plate: electrolytically galvanised steel plate or in AISI 304 stainless steel
- 2) Fork: electrolytically galvanised steel plate or in AISI 304 stainless steel
- 3) Ball Race Ring: electrolytically galvanised steel plate or in AISI 304 stainless steel
- 4) Dust seal: orange polyethylene
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: integrated with the plate and cold-riveted

Standard-duty NL and NLX - max carrying capacity 400 daN

Bracket made of printed steel plate with excellent swivel guaranteed by two ball race rings.

Precise assembly by means of cold-mechanical forming of the top plate integrated pin. The lubrication and adequate protection of the ball race rings against dust, together with the electrolytic galvanisation (NL) or the realisation in AISI 304 stainless steel (NLX) guarantee a long duration and a reduced request for maintenance in normal conditions of use. A specific model intended for uses with a temperature above 100°C is also available.

Brake: front, rear, centralised.

Directional lock available

Fittings with wheels



Fitting with top plate

NL-NLX

								
65	40	100	100x85	80x60	9	37	8	200
80	40	107	100x85	80x60	9	37	8	200
100	45	128	100x85	80x60	9	35	8	200
125	45	156	100x85	80x60	9	37	8	220
125	45	156	140x110	105x80	11	37	8	220
125	60	166	140x110	105x80	11	57	12	300
140	45	176	100x85	80x60	9	34	8	220
150	45	182	100x85	80x60	9	34	8	220
150	45	182	140x110	105x80	11	34	8	220
150	60	194	140x110	105x80	11	56	12	300
160	60	187	100x85	80x60	9	50	12	220
160	60	198	140x110	105x80	11	56	12	300
175	60	217	140x110	105x80	11	56	12	300
180	60	219	140x110	105x80	11	56	12	300
200	60	240	140x110	105x80	11	56	12	300

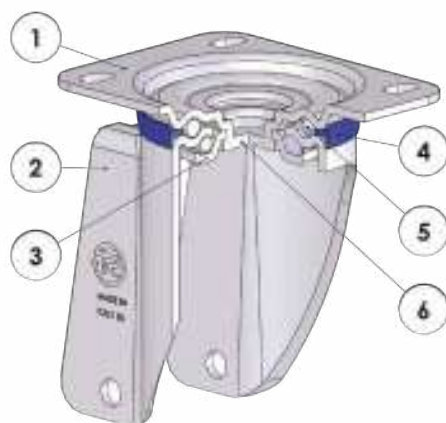
NL

225	60	263	140x110	105x80	11	56	12	300
250	90	296	200x160	160x120	14	86	12	350
260	90	300	200x160	160x120	14	86	12	350
280	90	311	200x160	160x120	14	86	12	400

Fitting with bolt hole

NL-NLX

							
65	40	100	12	73	37	8	200
80	40	107	12	73	37	8	200
100	45	128	12	73	35	8	200
125	45	156	12	73	37	8	220
140	45	176	12	73	34	8	220
150	45	182	12	73	34	8	220
150	60	188	20	102	56	12	300
160	60	193	20	102	50	12	300
175	60	212	20	102	56	12	300
180	60	214	20	102	56	12	300
200	60	236	20	102	56	12	300



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Dust seal: blue polyethylene
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: integrated with the plate and cold-riveted

Medium-duty M - max carrying capacity 500 daN

Bracket made of pressed steel plate thicker than the NL model. Excellent swivelling guaranteed by the two ball race ring. Precise assembly by means of cold-mechanical forming of the top plate integrated pin, the lubrication and adequate protection of the ball race rings against dust, together with the electrolytic galvanisation guarantee long duration and a reduced request for maintenance in normal conditions of use.

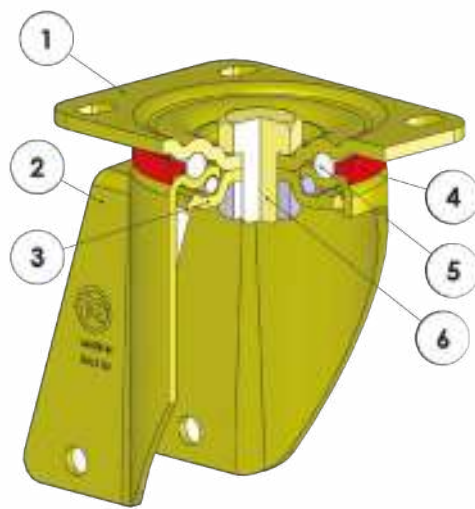
Brake: adjustable front

Fittings with wheels



Fitting with top plate

M									
	150	60	194	140x110	105x80	11	58	12	500
	160	60	199	140x110	105x80	11	58	12	500
	200	60	240	140x110	105x80	11	50	12	500



- 1) Top Plate: electrolytically colonial galvanised steel plate or AISI 304 stainless steel plate
- 2) Fork: electrolytically colonial galvanised steel plate or AISI 304 stainless steel plate
- 3) Ball Race Ring: electrolytically galvanised steel plate or AISI 304 stainless steel plate
- 4) Dust seal: orange polyamide
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: steel screw, class 8.8 and nut or A2 stainless steel screw and nut

Heavy-duty P-PX - max carrying capacity 750 daN

Bracket made of thick pressed steel plate with excellent swivelling guaranteed by two ball race rings. Precise assembly by means of highly mechanically resistant bolt and locknut anti-loosening system. The lubrication and adequate protection of the ball race rings against dust, together with the highly resistant to corrosion electrolytic galvanisation or the realisation in AISI 304 stainless steel guarantee a long duration and a reduced request for maintenance in normal conditions of use.

Brake: front in diameters 80-125 and adjustable rear in diameters 125-200

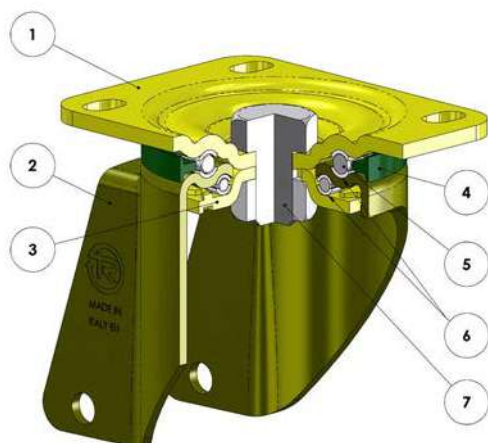
Directional lock available.

Fittings with wheels



Fitting with top plate

P	80	45	128	100x85	80x60	9	46	8	350
	100	45	138	100x85	80x60	9	46	8	350
	125	45	161	100x85	80x60	9	44	8	350
P-PX	125	60	170	140x110	105x80	11	70	12	750
	150	60	200	140x110	105x80	11	70	12	750
	160	60	205	140x110	105x80	11	70	12	750
	175	60	225	140x110	105x80	11	70	12	750
	180	60	228	140x110	105x80	11	70	12	750
	200	60	250	140x110	105x80	11	70	12	750
P	250	60	298	140x110	105x80	11	66	12	750



- 1) Top Plate: electrolytically colonial galvanised steel plate
- 2) Fork: electrolytically colonial galvanised steel plate
- 3) Ball Race Ring: electrolytically galvanised steel plate
- 4) Dust seal: orange polyamide
- 5) Swivel actions: double ball ring with grease lubrication
- 6) Ball race: tempered carbon steel
- 7) King pin: steel screw, class 8.8 and nut or A2 stainless steel screw and nut

Heavy duty PT with hardened ball race- max carrying capacity 900 daN

Bracket made of thick pressed steel plate with excellent swivelling guaranteed by two ball race rings; unlike the standard heavy-duty P, those ball race rings are made of tempered carbon steel.

Precise assembly by means of highly mechanically resistant bolt and locknut anti-loosening system. The lubrication and adequate protection of the ball race rings against dust, together with the highly resistant to corrosion electrolytic galvanisation.

The lubrication and adequate protection of the ball race rings against dust, together with the highly resistant to corrosion electrolytic galvanisation guarantee a long duration and a reduced request for maintenance in normal conditions of use.

Brake: adjustable rear

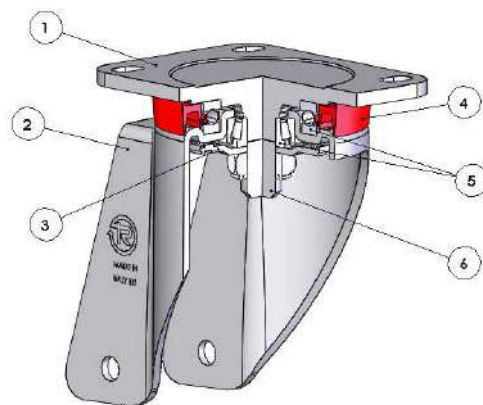
Directional lock available.

Fittings with wheels



PT

125	60	170	140x110	105x80	11	70	12	700
150	60	200	140x110	105x80	11	70	12	900
160	60	205	140x110	105x80	11	70	12	900
175	60	225	140x110	105x80	11	70	12	900
180	60	228	140x110	105x80	11	70	12	900
200	60	250	140x110	105x80	11	70	12	900



- 1) Plate: white galvanised forged steel
- 2) Fork: white galvanised steel plate
- 3) Lower bearing protection ring
- 4) Dust seal: orange polyethylene
- 5) Swivel actions: axial ball bearing and tapered roller bearing
- 6) King pin: integrated with the machine-processed plate

Extra-heavy duty EP - max carrying capacity 1600 daN

Heavy-duty load brackets equipped with fixing plate made of forged steel and integrated pin; fork in thick pressed steel plate; excellent swivelling thanks to the use of an axial bearing that guarantees vertical load and tapered bearing to compensate the oblique forces.

Low-maintenance and long-duration bracket thanks to the use of purposely shaped dust seal, lubrication of the bearings (option with grease nipple available) and highly resistant electrolytic galvanising against corrosion.

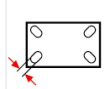
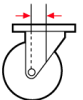
Brake: adjustable rear

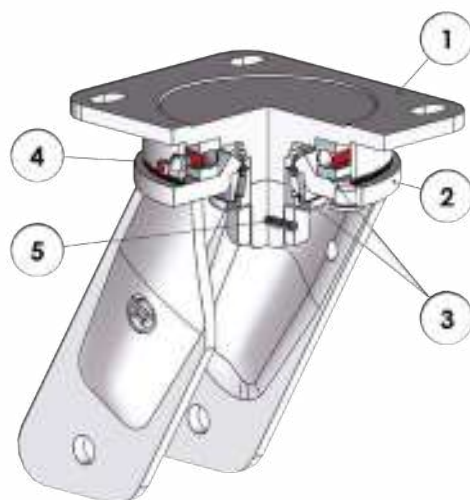
Fittings with wheels



Fitting with top plate

EP

								 4-6 km/h
100	45	140	100x85	80x60	9	46	8	350
125	45	164	100x85	80x60	9	48	8	350
150	60	200	135x110	105x80	11	70	12	1100
160	60	205	135x110	105x80	11	70	12	1100
175	60	225	135x110	105x80	11	70	12	1100
180	60	227	135x110	105x80	11	70	12	1100
200	60	250	135x110	105x80	11	70	12	1100
250	90	300	175x140	140x105	14	66	18	1600



- 1) Plate: forged steel with electrolytically gal-
vanised integrated pin
- 2) Fork: deep-drawn legs electro-welded to
the electrolytically galvanised flange
- 3) Swivel actions: axial ball bearing and ta-
pered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

Electrowelded EE MHD - max carrying capacity 1000 daN

Bracket suitable for applications with loads up to 1000 daN, even under heavy-duty conditions (mechanised towing and high speeds). Fixing plate made of forged steel with integrated pin, fork with legs shaped by means of deep-drawing process and welded to the flange; the axial and taper bearing guarantee excellent manoeuvrability also at full load and increase the side impact resistance of the bracket.

Bracket grease nipple, locknut anti-loosening system, protective o-ring against dust and zinc electroplating guarantee its extremely long duration and simple maintenance.

Brake: adjustable rear

Directional lock available.

Fittings with wheels



Fitting with top plate

EE MHD

								 4-6 km/h
100	60	170	135x110	105x80	11	51	12	1500
125	60	182	135x110	105x80	11	51	12	1500
150	60	210	135x110	105x80	11	60	12	1500
160	60	215	135x110	105x80	11	60	12	1500
180	60	242	135x110	105x80	11	70	12	1500
200	60	252	135x110	105x80	11	70	12	1500
250	60	300	135x110	105x80	11	83	12	1500



- 1) Top plate: forged steel with integrated pin painted with dark green powder
- 2) Fork: drawn legs electrowelded to the flange painted with dark green powder
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

Electrowelded EE HD and EHD - max carrying capacity 3500 daN

Bracket suitable for applications with loads up to 3500 daN, even under heavy-duty conditions (mechanised towing and high speeds). Fixing plate made of thick forged steel with integrated pin, fork with thick legs shaped by means of deep-drawing process and welded to the flange; the axial and taper bearing guarantee excellent manoeuvrability also at full load and increase the side impact resistance of the bracket. Bracket grease nipple, locknut anti-loosening system, protective o-ring against dust and green powder painting guarantee its extremely long duration and simple maintenance.

Brake: adjustable rear (EE HD model only)

Directional lock available (EE HD model only)

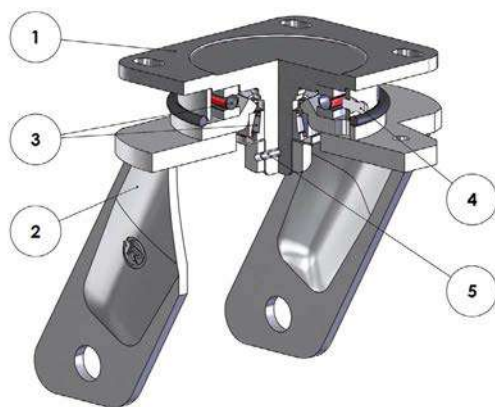
Fittings with wheels



SERIES 58GH **SERIES 62GH** **SERIES 63GH** **SERIES 64** **SERIES 68** **SERIES 72GH**

Fitting with top plate

EE HD									
	150	90	218	175x140	140x105	14,5	50	18	1600
	150	90	223	200x160	160x120	14,5	65	18	2500
	200	90	275	175x140	140x105	14,5	65	18	1600
	200	90	280	200x160	160x120	17	74	18	2500
	250	90	320	175x140	140x105	14,5	74	18	1600
	250	90	325	200x160	160x120	17	74	18	2500
	300	90	360	175x140	140x105	14,5	81	18	1600
	300	90	365	200x160	160x120	17	81	18	2500
EE EHD	300	130	384	250x200	210x160	19	78	24	3500
	400	130	475	250x200	210x160	19	95	24	3500



- 1) Plate: forged steel with electrolytically galvanised integrated pin
- 2) Fork: deep-drawn legs electro-welded to the electrolytically galvanised flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut (only diam. 100-200 mm)

Twin electrowelded EEG MHD - max carrying capacity 1500 daN

Bracket suitable for applications with loads up to 1500 daN, even under heavy-duty conditions (mechanised towing and high speeds). Fixing plate made of forged steel with integrated pin, fork with legs shaped by means of deep-drawing process and welded to the flange; the axial and taper bearing guarantee excellent manoeuvrability also at full load and increase the side impact resistance of the bracket. Bracket grease nipple, locknut anti-loosening system, protective o-ring against dust and zinc electroplating guarantee its extremely long duration and simple maintenance.

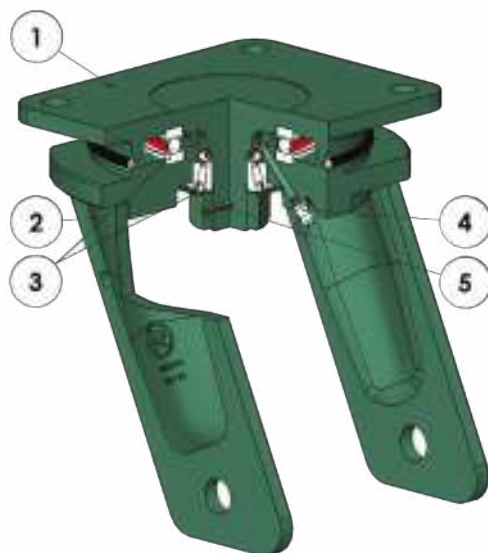
Brake: adjustable rear (on diam. 160-200 mm), operating on wheel rotation only
Directional lock available (on diam. 100-125 mm).

Fittings with wheels



Fitting with top plate

EEG MHD									
	60	80	92	100x85	80x60	9	40	12	500
	70	80	100	100x85	80x60	9	43	12	500
	80	80	112	100x85	80x60	9	42	12	500
	100	90	140	135x110	105x80	11	55	12	1000
	125	90	175	135x110	105x80	11	55	12	1000
	160	130	221	135x110	105x80	11	55	18	1500
	200	130	258	135x110	105x80	11	65	18	1500



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

Twin electrowelded EEG HD and EHD - max carrying capacity 4300 daN

Bracket suitable for applications with loads up to 4300 daN, even under heavy-duty conditions (mechanised towing and high speeds). Fixing plate made of thick forged steel with integrated pin, fork with thick legs shaped by means of deep-drawing process and welded to the flange; the axial and taper bearing guarantee excellent manoeuvrability also at full load and increase the side impact resistance of the bracket. Bracket grease nipple, locknut anti-loosening system, protective o-ring against dust and green powder painting guarantee its extremely long duration and simple maintenance.

The top plate's longer side of fixed brackets is parallel to the axle of the wheel.

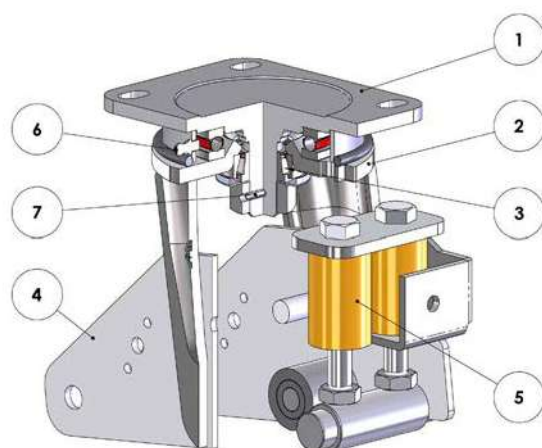
Fittings with wheels



SERIES 58GH SERIES 62AL SERIES 63GH SERIES 64 SERIES 68P SERIES 72AL SERIES 72GH

Fitting with top plate

EEG HD									
	125	130	210	175x140	140x105	14	50	18	1600
	150	130	223	175x140	140x105	14	50	18	1600
	160	130	228	175x140	140x105	14	50	18	1600
	200	130	280	175x140	140x105	14	65	18	1600
	200	130	285	200x160	160x120	17	62	18	2000
EEG EHD	200	190	280	250x200	210x160	19	62	24	3500
	250	190	330	250x200	210x160	19	62	24	3500
	300	190	385	250x200	210x160	19	75	30	4300



- 1) Top plate: electrolytically galvanised forged steel with integrated pin.
- 2) Main fork: deep-drawn legs electrowelded to the flange and electrolytically galvanised U-shaped component electrowelded to the legs.
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) spring-hinged plates: plates electrowelded to the axle
- 5) Polyurethane springs
- 6) Grease nipple (on diam. 150-250 mm)

Electrowelded sprung-loaded bracket EES MHD - max load capacity 1000 daN (tension up to 400 daN)

Bracket suitable for applications with loads up to 1000 daN, even under heavy-duty conditions (powered towing and high speeds). The polyurethane springs ensure a great vibration damping effect in presence of obstacles or uneven surfaces.

Fixing plate made of forged steel with integrated pin. Main fork with legs shaped by means of deep-drawing process and welded to the flange; spring-hinged plates electrowelded to the axle. The axial and taper bearings guarantee excellent manoeuvrability also at full load and increase the side-impact resistance of the bracket. The grease nipple, the anti-loosening locknut system, the dust-protective o-ring and the zinc-electroplating guarantee an extremely long duration and a simple maintenance of the bracket.

Brake: front adjustable brake which locks the wheel only (on diam. 150-250 mm)

Directional lock available (only on diam. 150-200 mm and not suitable for models with brake)

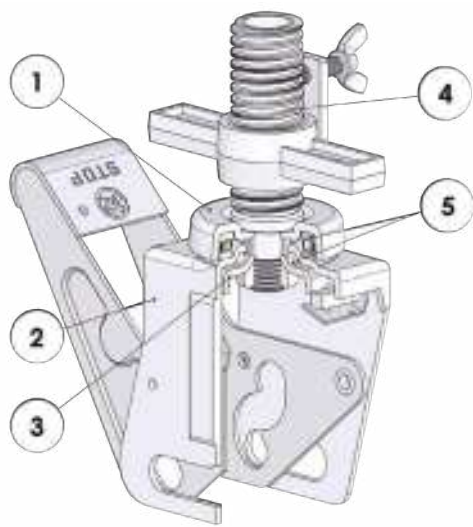
Fittings with wheels



Fitting with top plate

EES MHD

											
mm	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN	daN
50	71	93	100x85	80x60	9	34	12	7	30	300	300
75	71	118	100x85	80x60	9	35	12	9	30	350	350
150	65	243	135x110	105x80	11	100	12	25	50	400	1000
160	65	248	135x110	105x80	11	100	12	25	50	400	1000
200	65	268	135x110	105x80	11	100	12	25	50	400	1000
250	65	316	135x110	105x80	11	110	12	25	50	400	1000



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electroplated galvanised steel
- 4) King pin: stem with acme thread manufactured steel from tube, nut locked by mechanical deformation (different for top plate and solid stem models)
- 5) Swivel actions: for brackets diam. 125 and 150 mm: 125 and 150 mm: grease-lubricated double ball raceways; for brackets diam. 200 mm: single direction axial bearing and a grease-lubricated single ball raceway

Scaffolding - max carrying capacity 750 daN according to UNI EN 1004-1:2021

Bracket designed for the specific requirements of the scaffolding sector, regulated by Standard EN 1004-1:2021.

When the brake is actioned, its construction allows eliminating the offset of the wheel by aligning the bracket's swivel axis and the wheel's swivel axis on the same vertical, thus significantly increasing the set's resistance to static loads.

Also available with **double pedal** (one pedal to lock and one to release)



SERIES 60

SERIES 68

Fitting with top plate

TRAB								
	150	192	140x110	105x80	19	40	300	700
	200	243	140x110	105x80	19	40	400	750

Fitting with threaded stem

TRAB								
	150	192	83	M38x6	500	40	300	700
	200	243	81	M38x6	500	40	400	750

Fitting with solid stem

TRAB								
	125	150	89	38	57	30	250	500
	150	192	83	38	57	40	300	700
	200	243	81	38	57	40	400	750



Front brake for SL bracket diameters 80-125 mm

Total brake, it locks both wheel and bracket rotation.

The braking device is integral with the fork. The plastic brake pedal is used for locking and releasing the device. The extremely low position of the pedal makes it easier to use even when fitting to particularly bulky structures. The hardened carbon steel spring, coated with thin zinc sheets, has very high corrosion resistance.



Front brake for NL - NLX - P brackets diameters 80-150 mm

Total brake, it locks both wheel and bracket rotation

The front brake remains within the operator's reach while pushing the trolley. This brake has double lock/release pedal to improve accessibility. The fold-away braking release pedal reduces clearances.

The shape of the wheel's braking spring optimises wheel locking in both rotation directions.

The hardened carbon steel spring, coated with thin zinc sheets, has very high corrosion resistance.

For NLX brackets, this brake is available in a completely STAINLESS STEEL version.



Front brake for NL - NLX brackets diameters 150-200 mm

Total brake, it locks both wheel and bracket rotation.

The front brake remains within the operator's reach while pushing the trolley. This brake has a double lock/release pedal to improve its accessibility. The fold-away braking release pedal reduces clearances.

The shape of the wheel's braking spring optimises wheel locking in both rotation directions.

The hardened carbon steel spring, coated with thin zinc sheets, has very high corrosion resistance.

For brackets NLX, this brake is available in a completely STAINLESS STEEL version.



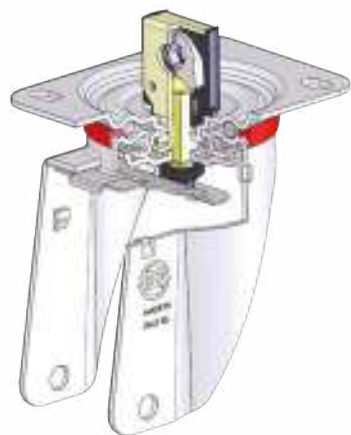
Rear brake for NL brackets diameters 160-200 mm

Total brake, it locks both wheel and bracket rotation.

The rear type brake conceived for maximum simplicity of use, has a single lock and release pedal, specially ribbed to ensure optimal strength.

The position of the lock pedal is within the operator's reach when towing the trolley.

The hardened carbon steel springs coated with thin zinc sheets and the steel braking pedal coated with yellow electrolytic galvanising, are highly resistant to corrosion.

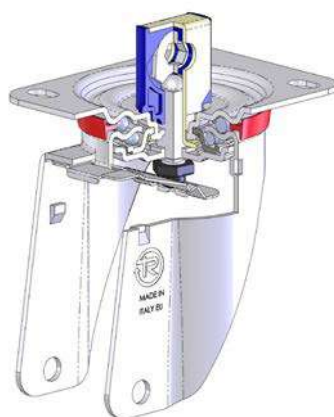


Adjustable centralised brake for NL brackets diameters 160-200 mm

The cam system is designed so that the brake can be engaged on two brackets at the same time, using a connection rod and just one lock pedal.

The hardened carbon steel spring, coated with thin zinc sheets, has very high corrosion resistance. This brake is equipped with an adjustment system to compensate for normal wheel wear during use.

Brake set-up for use with 11 mm hexagonal bar spanner.



Adjustable central braking system for brackets NL diameters 160-200 mm

Total brake with locking / unlocking position.

The locking takes place by means of a 11 mm hexagonal bar which rotates until the brake is on.

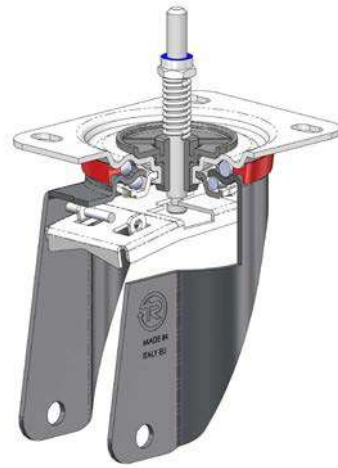
The brake will be on until it is voluntarily released.

This braking system is usually fitted in pairs, allowing the activation of both brakes with a single operating shaft.

This a total breaking system blocking both the swivel head and the wheel rotation.

The hardened carbon steel spring, coated with thin zinc sheets, ensures very high corrosion resistance

This brake is equipped with an adjustment system to compensate for normal wheel wear during use



Dead man brake for brackets NL diameters 160-200 mm

Dead man brake is normally on during non-operating conditions.

A vertical pressure on the M10 threaded stem, placed at the center of the top plate, releases the brake and unlocks the wheel and bracket, allowing the movement of the structure to which it is fitted.

Once the M10 threaded stem is released, the locking of the castor is restored.

The braking efficiency can be adjusted by increasing or decreasing the pressure applied on the wire spring assembled to the M10 stem.



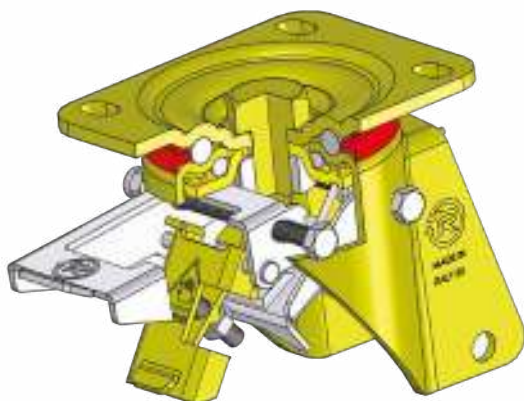
Adjustable front brake for M brackets diam. 150-200 mm

Total brake, it locks both wheel and bracket rotation

The front brake remains within the operator's reach while pushing the trolley. This brake has double lock/release pedal to improve accessibility. The fold-away braking release pedal reduces clearances.

The hardened carbon steel spring, coated with thin zinc sheets, has very high corrosion resistance.

Locking force can be adjusted using an M8 socket screw and 13 mm spanner. This system has been designed to optimise braking based on the hardness of the wheel tread, its wear and the conditions of use. Make sure that the braking setting obtained (by means of adjustment) is suitable for the specific operating requirements.



Adjustable rear brake for P-PX-PT-EP brackets diameters 150-200 mm

Total brake, it locks both wheel and bracket rotation.

The rear type brake remains within the operator's reach while towing the trolley. This brake is made to obtain optimal braking values, while maintaining maximum simplicity of use.

A top-to-bottom movement using the tip of the foot on two independent pedals is all that's needed to engage and release the brake quickly and smoothly. Locking force can be adjusted using an M8 socket screw, in order to optimise braking based on the hardness of the wheel tread, its wear and the conditions of use; before use, we suggest making sure that the brake setting obtained (by means of adjustment) is suitable for the specific operating requirements.



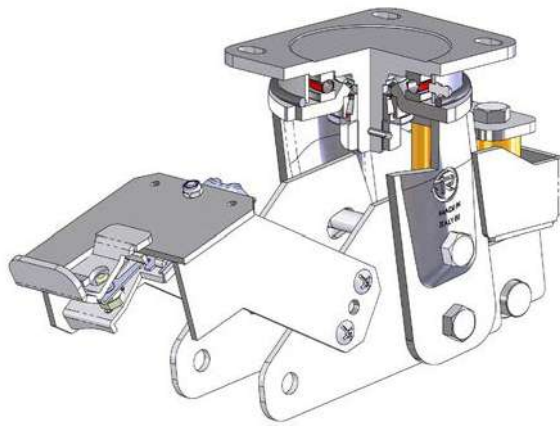
Adjustable rear brake for EE MHD and EE HD brackets diam. 125-300

Total brake, it locks both wheel and bracket rotation.

The rear type brake remains within the operator's reach while towing the trolley. This brake is made to obtain optimal braking values, while maintaining maximum simplicity of use and the necessary strength.

A top-to-bottom movement using the tip of the foot on two independent pedals is all that's needed to engage and release the brake quickly and smoothly. Locking force can be adjusted using an M8 socket screw, in order to optimise braking based on the hardness of the wheel tread, its wear and the conditions of use; before use, we suggest making sure that the braking setting obtained (by means of adjustment) is suitable for the specific operating requirements.

The brake for electrowelded brackets is a parking brake suitable for flat floors.



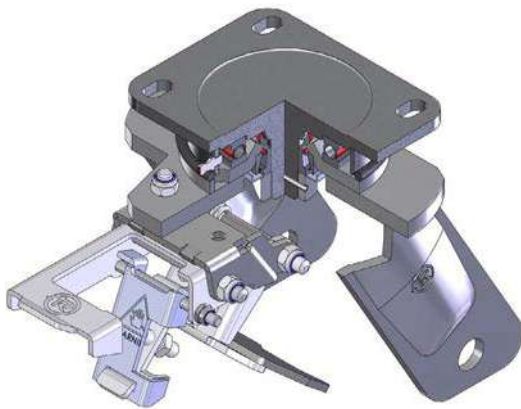
Adjustable front brake for sprung-loaded brackets EES MHD - diam. 150-250 mm

Front locking system, it locks only the wheel.

Single lock /unlock pedal, with top-down activation for maximum reduction of encumbrance.

The hardened carbon steel spring, coated with thin zinc sheets, ensures very high corrosion resistance.

Locking force can be adjusted using an M8 hexagonal head screw and a 13 mm spanner; this system has been designed to optimize braking operations according to the hardness of the wheel tread, to the wheel wear level and to the environment of use. It is recommended to check that the braking setting obtained by means of adjustment is suitable for the specific operating requirements.



Adjustable rear brake for EEG MHD twin brackets diameters 160-200 mm

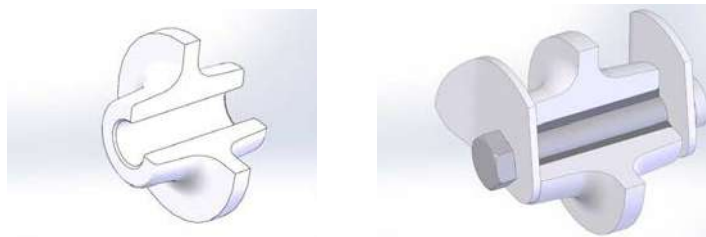
The brakes operates on wheel rotation only

The rear type brake remains within the operator's reach while towing the trolley. This brake is made to obtain optimal braking values, while maintaining maximum simplicity of use and the necessary strength.

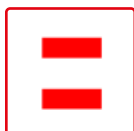
A top-to-bottom movement using the tip of the foot on two independent pedals is all that's needed to engage and release the brake quickly and smoothly. The shaped U-bolt allows to obtain optimal braking values.

Locking force can be adjusted using an M8 socket screw, in order to optimise braking based on the hardness of the wheel tread, its wear and the conditions of use; before use, we suggest making sure that the braking setting obtained (by means of adjustment) is suitable for the specific operating requirements.

The brake for electrowelded brackets is a parking brake suitable for flat floors.



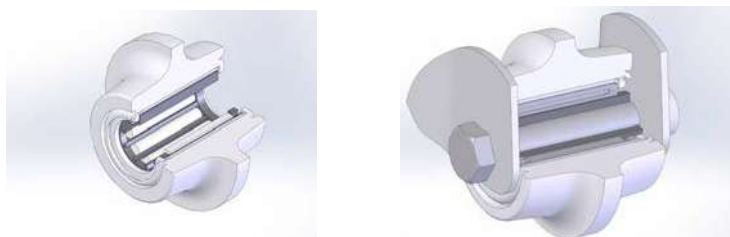
Hub with plain bore



Suitable for applications involving non-continuous movements and limited loads.

The relative sliding friction coefficient range is $b= 0.003-0.005$.

The plain bearing can be joined directly to the wheel bore. The axle set is made with a calibrated and machined tube to create a homogeneous and precision bearing coupling surface. Acting like a spacer, the tube is inserted into the bearing and tightened to the bracket using a screw and nut up to the predefined torque setting. The bearing slides freely on the tube. Axle sets can be supplied in the galvanised steel or stainless steel version. The centre of model P64 C/B is specifically dimensioned to obtain the variations for spline and key housing in the precision hole, in order to make this a drive wheel.



Hub with roller bearings

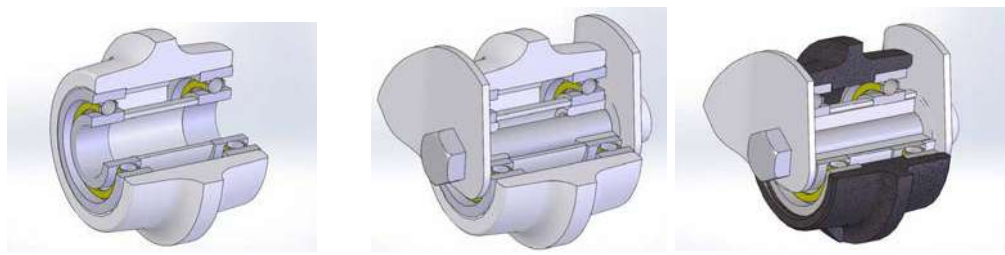


Suitable for applications involving non-continuous movements and heavier loads respect to wheels with hub with plain bore, as it guarantees low friction coefficients even in the presence of heavy loads.

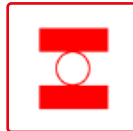
The indicative sliding friction coefficient is $b=0.0025$.

The bearing with steel cylindrical rollers or stainless steel rollers, with plastic cage is assembled in the seat specifically obtained on the hub. The axle set is made with a calibrated and machined tube to create a homogeneous and precision roller bearing coupling surface.

Acting like a spacer, the tube is inserted into the roller bearing and tightened to the bracket using a screw and nut up to the predefined torque setting. The roller bearing slides freely on the tube. Axle sets can be supplied in the galvanised steel or stainless steel version.



Hub with ball bearings



This is the ideal solution for heavier loads and continuous movements.

The indicative sliding friction coefficient is $b=0.0015$.

The shielded ball bearings are placed inside the seats of the wheel hub. The tolerance of the seats ensures a proper coupling with the ball bearings. An internal spacer is also inserted between the ball bearings for a proper functioning of the ball bearings once the axle material has been fitted.

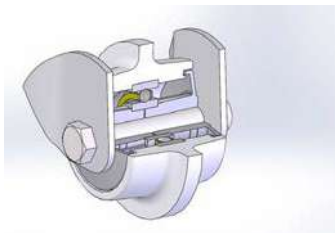
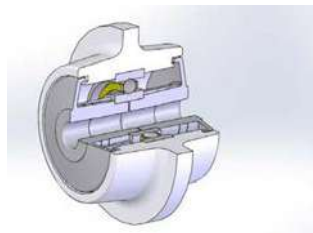
The axle material can comprise the following components:

Solution a): a machined axle bushing (to be inserted inside the ball bearings), two side spacers, a bolt and a nut. The axle material is tightened up by locking the nut on the bolt with a proper torque force.

Solution b): two top hats (t-bushes), a bolt and a self locking nut. Each top hat is inserted inside each ball bearing bore. The side collar of the top hat works as a side spacer. The axle material is then tightened up by locking the nut on the bolt with a proper torque force.

The axle components can be made of standard steel or stainless steel.

The loose wheels and rollers can be ordered with bearing facilities only (please note that the internal spacer is not supplied along with the wheel without ball bearings).



Hub with single ball bearing



Solution for applications involving continuous movements and non-heavy loads.

The indicative sliding friction coefficient is $b=0.0015$.

The hub of the thermoplastic wheel is overprinted on a radial type ball bearing with double shield, making them permanently integral.

Two polyamide plain bores loaded with fibreglass with internal labyrinth protect the bearing against dirt, processing residues and aggressive agents.

Stainless steel ball bearing model is also available.

The wheel is directly fitted by means of partially threaded screw and self-locking nut.

The safety and easy handling of a trolley depends on choosing the most suitable wheel, therefore, it is recommended to consider the following factors:

1. NATURE AND CONDITION OF THE FLOOR

The type of floor and the presence of any obstacles will have an influence on the thrust/traction force required to move the trolley, on the transmission of vibrations and wear of the wheel:

- Extremely thick wheels with soft tread and large diameter are normally chosen for uneven floors or with obstacles;
- Wheels with a more sturdy tread are normally chosen for smooth floors and heavy loads.

For each series, the catalogue shows the floor for which a wheel is suitable:

					
TILES	ASPHALT	RESIN-CEMENT	NOT PAVED	EXPANDED METAL	WITH CHIPS
↓	↓	↓	↓	↓	↓
PLASTIC MATERIALS, POLYURETHANE, RUBBER	RUBBER OR ELASTIC POLYURETHANE	PLASTIC MATERIALS, POLYURETHANE, RUBBER	RUBBER OR ELASTIC POLYURETHANE	RUBBER OR ELASTIC POLYURETHANE	RUBBER OR ELASTIC POLYURETHANE

2. ENVIRONMENT OF USE

The wheel and bracket materials may or may not be suitable for use in aggressive environments: extreme temperatures, humidity, acids, solvents, bases and hydrocarbons.

The table on page 40 shows the compatibility with a detailed list of chemical substances. The table on page 42 shows the carrying capacity reduction upon temperature variation.

3. MAGNITUDE AND NATURE OF THE LOAD

The weight of the load, its nature (solid or liquid) and the tare of the trolley determine the minimum carrying capacity the wheel must have to guarantee safe handling.

GLOSSARY

Static load



Maximum load (expressed in daN) that a motionless (stationary) wheel can support without generating any permanent deformation that may reduce operating efficiency.

Dynamic carrying capacity



Maximum load value (expressed in daN) that can be supported by a moving wheel. This value is determined in compliance with Standard ISO 22883-22884 for industrial use and ISO 22879-22880 for civil and domestic use. See page 46-47 for the test conditions.

With a 4-wheel trolley, calculate the minimum carrying capacity required using the following formula:

Solid load:

MINIMUM CARRYING CAPACITY REQUIRED = (SOLID LOAD WEIGHT + TROLLEY TARE): 3
(3 out of 4 wheels are always in contact with the ground)

Liquid load:

MINIMUM CARRYING CAPACITY REQUIRED = (LIQUID LOAD WEIGHT + TROLLEY TARE): 2
(2 out of 4 wheels are always in contact with the ground)

For each series, the catalogue shows the static, dynamic carrying capacity values and rolling resistance of each wheel.

4. MEANS OF TRACTION AND SPEED

For a static use (trolley handled only occasionally and stopped for most of the time), it is recommended to check:

STATIC CARRYING CAPACITY OF THE WHEEL > MINIMUM CARRYING CAPACITY REQUIRED

Whereas, if the trolley is intended for frequent use or for long distances, assess the type of handling: manual, with towed mechanical means or applied to a driving mechanism.

Manual handling

The trolley speed is generally less than 4 km/h; it is recommended to check:

DYNAMIC CARRYING CAPACITY OF THE WHEEL > MINIMUM CARRYING CAPACITY REQUIRED
ROLLING RESISTANCE > (SOLID/LIQUID LOAD WEIGHT + TROLLEY TARE):4

The smoother the wheel, the less effort is required.

For each wheel, Tellure Rôta catalogue shows the ROLLING RESISTANCE value: it is the maximum applicable load in correspondence of which the traction/thrust effort remains below 5 daN.

Rolling resistance



The rolling resistance is the value (expressed in daN) of the maximum load that can be supported by each single wheel at a constant speed of 4 km/h with application of a tractive force or thrust equal to 5 daN (excluding the initial pickup).

The 20 daN of traction/thrust force (corresponding to a 4-wheeled trolley) is the recommended limit for most of the adult working population. The tables in the introductory notes to each series highlight the traction force required for keeping a wheel, burdened by a certain weight, moving.

The values are detected on the TRLab laboratory test bench that detects the rolling resistance on a 1 metre long metal surface. They represent the average traction/thrust force value.

The force required for starting a wheel, defined starting point, significantly depends on the alignment position of the brackets and is always higher than indicated on the table.

The necessary force decreases if the wheel diameter increases: we recommend increasing the diameter down to traction/thrust values below 3 daN, for high movement frequency or movement along long sections.

For each series, the catalogue shows a table with the traction/thrust force at different load values, upon varying the diameter.

Towed mechanical movement

The dynamic carrying capacity of the wheels refers to a speed not higher than 4 km/h (1.1 m/s); the carrying capacity decreases if speed exceeds this value. Use the correction factor of the carrying capacity shown in the table on page 39 and we recommend to check:

WHEEL DYNAMIC CARRYING CAPACITY x CORRECTION FACTOR (%) > MINIMUM CARRYING CAPACITY REQUIRED

On-board mechanical movement

In this case the wheels are subjected to particular stress and strain, different case by case.

We recommend contacting Tellure Rôta Technical Service to choose the most suitable product for your application.

Based on the above information, the path provides:

- Choice of recommended wheels for the environmental conditions defined by the application (temperature, humidity, any aggressive chemicals and type of floor), based on the material compatibility tables and geometry of the product respect to its use.
- Choice of strap diameter and width to meet the carrying capacity, speed requirements and the product's easy movement.
- Choice of suitable bracket for the environment of use and for the requested speed and carrying capacity features.

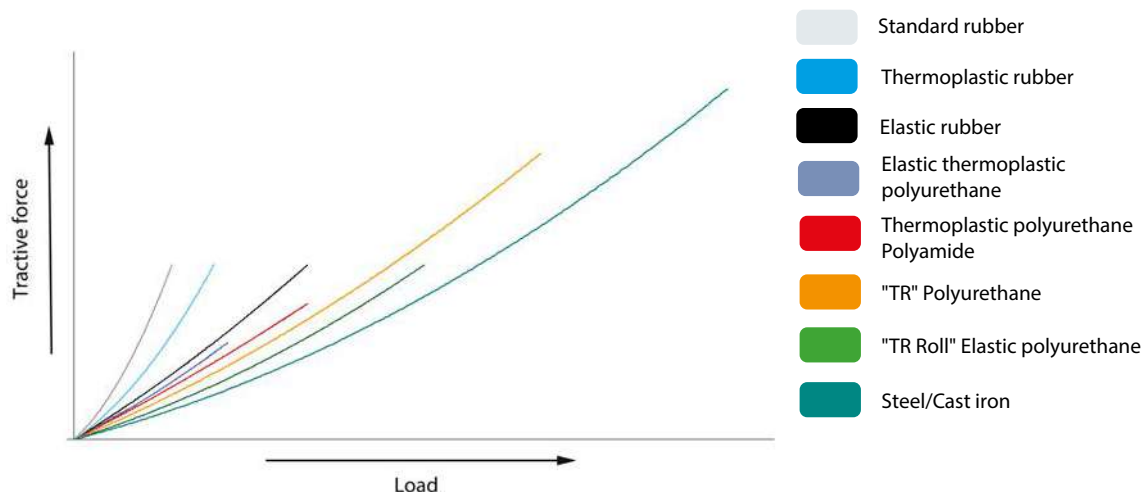
Tellure Rôta provides its experience and know-how in the movement solutions sector so that choosing a wheel becomes the most satisfying process for the final user.

FURTHER DETAILS AND INFORMATION

AVAILABLE TABLES

• AGGRESSIVE CHEMICAL AGENTS COMPATIBILITY	PAGE 40
• CARRYING CAPACITY ADJUSTMENTS BASED ON TEMPERATURE	PAGE 42
• CARRYING CAPACITY ADJUSTMENTS BASED ON SPEED	PAGE 43
• TABLE FOR CHOICE OF WHEEL	PAGE 44

Comparison chart of the rolling resistance between the different materials



Comparison table of the hardness between the different materials

	Elastic rubber	"TR Roll" Elastic polyurethane	Standard rubber	Thermoplastic rubber Elastic thermoplastic polyurethane		"TR" Polyurethane	Thermoplastic polyurethane		Polyamide	
Shore A	70	75	80	85	90	92				
Shore D						45	55	65	70	75

For further information on choosing the right wheel:

- see Internet site www.tellurerota.com
- contact Tellure Rôta Sales Department:
Tel. Export: 0039 059.410231-253 - Tel Italian Sales Dept.: 059.410300-306
E-mail: comm.estero@tellurerota.com - comm.italia@tellurerota.com

COMPATIBILITY WITH AGGRESSIVE CHEMICAL AGENTS

Materials		Steel	Stainless steel	Aluminium alloys	Cast iron	Standard rubber
%						
WEAK ACIDS	Fatty acids	●	●	●	●	●
	Acetic acid	●	●	●	●	●
	Boric acid in solution 30	●	●	●	●	●
	Oleic acid	●	●	●	●	●
	Oxalic acid in solution 10	●	●	●	●	●
STRONG ACIDS	Sulphuric acid	●	●	●	●	●
	Hydrochloric acid in sol. 30	●	●	●	●	●
	Chromic acid in solution 10	●	●	●	●	●
	Phosphoric acid in sol. 10	●	●	●	●	●
	Nitric acid in solution 10	●	●	●	●	●
	Sulphuric acid in sol. 10	●	●	●	●	●
WEAK BASES	Aluminium acetate	●	●	●	●	●
	Ammonium carbonate	●	●	●	●	●
	Ammonium sulphate	●	●	●	●	●
	Sodium cyanide in sol. 10	●	●	●	●	●
	Alkaline solutions at 80°C	●	●	●	●	●
STRONG BASES	Ammonium hydrate	●	●	●	●	●
	Sodium carbonate in sol. 10	●	●	●	●	●
	Sodium phosphate in sol. 10	●	●	●	●	●
	Sodium hydroxide in sol.	●	●	●	●	●
	Sodium silicate in sol. 10	●	●	●	●	●
ALCOHOL	Alkybenzols	●	●	●	●	●
	Amyl alcohol	●	●	●	●	●
	Ethyl alcohol	●	●	●	●	●
	Methyl alcohol	●	●	●	●	●
	Propyl alcohol	●	●	●	●	●
SOLVENTS	Acetone	●	●	●	●	●
	Turpentine	●	●	●	●	●
	Amyl acetate	●	●	●	●	●
HYDRO CARBONS	Petrol	●	●	●	●	●
	Diesel oil	●	●	●	●	●
	Mineral oils	●	●	●	●	●
OTHERS	Sea Water	●	●	●	●	●
	Water at 80°C	●	●	●	●	●
	Cold water	●	●	●	●	●
	Sodium Chloride in sol.	●	●	●	●	●
	Saturated steam 10	●	●	●	●	●

● recommended

● partially resistant

● not suitable

ON-LOAD BEHAVIOUR VARIATION BASED ON TEMPERATURE FOR NON-INTENSIVE USE WITH MANUAL HANDLING

		Load resistance %							
Temperature		-40/-20°C	-20/0°C	0/20°C	20/40°C	40/ 60°C	60/ 80°C	80/ 130°C	>130°C
INDUSTRIAL - LIGHT DUTY LOADS	22	-	80	100	100	85	50	-	-
	23	40	100	100	100	85	60	-	-
	52	-	80	100	100	85	50	-	-
	53	40	100	100	100	85	60	-	-
	71	-	80	100	100	85	50	-	-
	82	-	100	100	100	100	-	-	-
	82AF	-	100	100	100	100	-	-	-
INDUSTRIAL - MEDIUM DUTY LOADS	60	-	100	100	100	90	70	40	-
	61	-	100	100	100	85	60	-	-
	68	50	100	100	100	90	70	60	-
	73	40	100	100	100	85	60	50	-
	73AE	-	100	100	100	85	60	-	-
INDUSTRIAL HEAVY DUTY LOADS AND MECHANICAL HANDLING	58AL	-	100	100	100	90	80	-	-
	58HT	-	100	100	100	90	80	-	-
	58GH	-	100	100	100	90	80	-	-
	62BS	-	100	100	100	90	80	-	-
	62AL	-	100	100	100	90	80	-	-
	62ER	-	100	100	100	90	80	-	-
	62GH	-	100	100	100	90	80	-	-
	62NY	-	100	100	100	90	80	-	-
	63AC	-	100	100	100	90	80	-	-
	63GH	-	100	100	100	90	80	-	-
	64	-	100	100	100	90	80	-	-
	65AL	-	100	100	100	90	80	-	-
	65GH	-	100	100	100	90	80	-	-
	65HT	-	100	100	100	90	80	-	-
	65ER	-	100	100	100	90	80	-	-
	66	-	100	100	100	90	80	-	-
	68P	50	100	100	100	90	70	60	-
	69	100	100	100	100	100	100	100*	100*
	72AL	40	100	100	100	85	60	40	-
	72GH	40	100	100	100	85	60	40	-
HIGH TEMPERATURE	67	50	100	100	100	100	100	100	100
	68FV	70	100	100	100	100	100	100	-
	72GS	50	50	100	100	100	100	100	50
PALLET TRUCK ROLLERS	59HS	-	100	100	100	90	80	-	-
	74	-	100	100	100	90	80	-	-
	75	-	100	100	100	90	80	-	-
	75HS	-	100	100	100	90	80	-	-
	76	50	100	100	100	90	70	60	-
	77	-	100	100	100	90	80	-	-
	78	-	100	100	100	90	70	40	-
	79	-	100	100	100	90	80	-	-
ANTISTATIC AND STATICALLY CONDUCTIVE SOLUTIONS	53AS	40	100	100	100	85	60	-	-
	62ESD	-	contact with TR	100	100	contact with TR	contact with TR	-	-
	65ESD	-	contact with TR	100	100	contact with TR	contact with TR	-	-

- = not suitable

* = not suitable in ball bearing hub wheel

The % reduction of the load capacity are indicative and are shown in order not to compromise the product functionality. A dynamic use in environments constantly above 40° and below 0° must be carefully evaluated with Tellure Rôta, depending on the real conditions of use.

CARRYING CAPACITY ADJUSTMENT CHART BASED ON SPEED

		Carrying capacity %					
Speed		< 4 km/h	6 km/h	10 km/h	12 km/h	16 km/h	> 16 km/h
	INDUSTRIAL - MEDIUM DUTY LOADS	60	100	60	-	-	-
		61	100	60	-	-	-
	INDUSTRIAL HEAVY DUTY LOADS AND MECHANICAL HANDLING	58AL	100	80	-	-	-
		58HT	100	80	60	50	-
		58GH	100	80	65	60	contact with TR
		62AL	100	100	80	70	60
		62ER	100	100	80	70	60
		62GH	100	100	80	70	60
		62NY	100	80	-	-	-
		63AC	100	80	65	60	50
							contact with TR
		63GH	100	80	65	60	50
							contact with TR
		64	100	80	60	50	40
		65AL	100	80	-	-	-
		65GH	100	80	60	50	40
		65HT	100	80	60	50	-
		65ER	100	80	60	50	-
		66	100	80	-	-	-
		72AL	100	80	-	-	-
		72GH	100	80	-	-	-
	PALLET TRUCK ROLLERS	59HS	100	80	65	60	50
							contact with TR
		74	100	80	65	60	50
							contact with TR
		75	100	70	50	40	30
		75HS	100	80	60	50	40
	ANTISTATIC AND STATICALLY CONDUCTIVE SOLUTIONS	77	100	80	-	-	-
		79	100	80	65	60	-
							-
		62ESD	100	100	80	70	60
		65ESD	100	80	-	-	-

This table only shows references to the types of wheels that Tellure Rôta recommends for use at speeds above 4 km/h.

For the products not found in this table, use with mechanical handling and at speeds above 4 km/h is not recommended.

For use at speeds above 4 km/h, we recommend using wheels with ball bearing hub, combined with Medium-heavy duty brackets P-PX, heavy-duty brackets with hardened ball race PT, extra-heavy duty EP, electrowelded EE MHD, EE HD, EE EHD, twin electrowelded EEG MHD, EEG HD, EEG EHD, sprung loaded electrowelded EES MHD.

The light-duty SL, NL, NLX and medium-duty M brackets are not recommended for use at high speeds.

SUMMARY TABLE FOR CHOOSING THE RIGHT WHEEL

		Load capacity daN			Rolling resistance daN		Means of traction	
		< 250	250 / 500	> 500	< 125	> 125	Manual	Mechanical
INDUSTRIAL - LIGHT DUTY LOADS	22	●	●	●	●	●	●	●
	23	●	●	●	●	●	●	●
	52	●	●	●	●	●	●	●
	53	●	●	●	●	●	●	●
	71	●	●	●	●	●	●	●
	82	●	●	●	●	●	●	●
	82AF	●	●	●	●	●	●	●
INDUSTRIAL - MEDIUM DUTY LOADS	60	●	●	●	●	●	●	●
	61	●	●	●	●	●	●	●
	68	●	●	●	●	●	●	●
	73	●	●	●	●	●	●	●
	73AE	●	●	●	●	●	●	●
INDUSTRIAL HEAVY DUTY LOADS AND MECHANICAL HANDLING	58AL	●	●	●	●	●	●	●
	58HT	●	●	●	●	●	●	●
	58GH	●	●	●	●	●	●	●
	62BS	●	●	●	●	●	●	●
	62AL	●	●	●	●	●	●	●
	62ER	●	●	●	●	●	●	●
	62GH	●	●	●	●	●	●	●
	62NY	●	●	●	●	●	●	●
	63AC	●	●	●	●	●	●	●
	63GH	●	●	●	●	●	●	●
	64	●	●	●	●	●	●	●
	65AL	●	●	●	●	●	●	●
	65GH	●	●	●	●	●	●	●
	65HT	●	●	●	●	●	●	●
	65ER	●	●	●	●	●	●	●
	66	●	●	●	●	●	●	●
	68P	●	●	●	●	●	●	●
	69	●	●	●	●	●	●	●
	72AL	●	●	●	●	●	●	●
	72GH	●	●	●	●	●	●	●
HIGH TEMPERATURE	67	●	●	●	●	●	●	●
	68FV	●	●	●	●	●	●	●
	72GS	●	●	●	●	●	●	●
PALLET TRUCK ROLLERS	59HS	●	●	●	●	●	●	●
	74	●	●	●	●	●	●	●
	75	●	●	●	●	●	●	●
	75HS	●	●	●	●	●	●	●
	76	●	●	●	●	●	●	●
	77	●	●	●	●	●	●	●
	78	●	●	●	●	●	●	●
	79	●	●	●	●	●	●	●
ANTISTATIC AND STATICALLY CONDUCTIVE SOLUTIONS	53AS	●	●	●	●	●	●	●
	62ESD	●	●	●	●	●	●	●
	65ESD	●	●	●	●	●	●	●

Tellure Rôta products are produced in conformity with the international standards for wheels and brackets sector.

The following table summarises the main international standards, with references to Tellure Rôta series designed and tested in accordance with the specifications of each standard.

Standard	Title	TR Series to which it applies
ISO 22877:2004 UNI EN 12526:2002	Vocabulary, recommended symbols and multilingual dictionary	All series
ISO 22878:2004 UNI EN 12527:2001	Wheels and brackets, test methods and equipment	All series
ISO 22879:2016 UNI EN 12528:2001	Wheels and brackets, wheels for furniture	33, 34, 35, 39
ISO 22880:2016 UNI EN 12529:2001	Wheels and brackets, wheels for furniture, wheels for swivel chairs	34
ISO 22881:2004 UNI EN 12530:2001	Wheels and brackets, wheels and brackets for manually propelled institutional equipment	32, 36, 37, 38
ISO 22883:2004 UNI EN 12532:2001	Wheels and brackets, wheels and brackets for applications up to 1.1 m/s	22, 23, 52, 53, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 68P, 68FV, 69, 71, 72, 72GS, 73, 73AE, 74, 75, 76, 77, 78, 79, 82
ISO 22884:2004 UNI EN 12533:2001	Wheels and brackets, wheels and brackets for applications over 1.1 m/s and up to 4.4 m/s	58AL, 58HT, 58GH, 59, 62AL, 62ER, 62GH, 62ESD, 62NY, 63GH, 63AL, 64, 65AL, 65GH, 65HT, 65ER, 65ESD, 66, 68P, 72AL, 72GH, 74, 75, 75HS, 77, 79

Tellure Rôta also guarantees that:



- the catalogue products are all conform with the European Directives 2011/65/CE (RoHS II) and 2015/863/CE (RoHS III) specifications; Tellure Rôta commits to maintaining product conformity, even after the upgrading of Directive.



- the products respect specifications stated under regulation 1907/06/EC (REACH) and, together with its suppliers, commits to working in respect of subsequent upgrades.



- a wide range of products is compatible for each category regulated by the Decision of AfPS (Assembly for Product Security), with regard to the PAH (Polycyclic aromatic hydrocarbons) content limits in GS certified products.

THE TRLAB TESTS



The quality of the Tellure Rôta products is guaranteed by in-house testing procedures that include acceptance tests on raw materials and of all other purchased components, tests on semi-finished products in various stages of the process and tests on the finished product.

The “Test & Research” laboratory is equipped with testing machines and benches for in-house testing as provided by the international standards in the wheels and brackets sector and of specific application sectors.

Specifically:

- Dynamic load test on wheels and brackets for the industrial sector in accordance with Standard ISO 22883:2004 or ISO 22884:2004
- Dynamic load test on wheels and brackets for the waste collection container sector in accordance with UNI EN 840-5:2020
- Dynamic load test on wheels and brackets for the institutional sector in accordance with ISO 22881:2004
- Conformity tests on wheels and brackets for the mobile scaffolding sector in accordance with Standard UNI EN 1004-1:2021;
- Rolling resistance tests on wheels and brackets for the industrial sector in accordance with UNI 11330:2009;
- Braking efficiency and engagement tests of the braking device in accordance with ISO 22883:2004 or ISO 22884:2004;
- Static load tests on wheels for the institutional sector in accordance with ISO 22881:2004

The following layout describes the tests made in accordance with the sector standards, in order to determine the industrial wheels' carrying capacity stated in the catalogue.

	Industrial wheels manual handling	Industrial wheels mechanical handling
Standard	ISO 22883	ISO 22884
Test load	Rated carrying capacity	
Test speed	4 km/h	A= 6 km/h; B = 10 km/h; C= 16 km/h
Env. temperature	Between 15 and 28 °C	
Floor	Hard floor with obstacles	
Height of obstacles	5% of the wheel diameter for soft rolling strip (hardness ≤ 90 ShA); 2.5% of the wheel diameter for hard rolling strip (hardness > 90 ShA)	
Layout of obstacles	width 100 mm, rounded corners with radius between 1.5 and 5 mm and arranged 45 degrees with respect to the translation axis and in an alternating pattern to the right and to the left	
Quantity of obstacles	500 obstacles separated from each other between 1 and 3 m	5 times the wheel diameter in mm (e.g. one wheel diam. 200 mm must pass 1,000 obstacles); the obstacles are spaced out: ≥ 1 m; $B \geq 1.5$ m; ≥ 3 m
Duration	Sequence of cycles with a maximum duration of 3 min., with a maximum pause time of 1 min.. The wheel must pass the foreseen obstacles, and complete 15,000 revs without obstacles.	Sequence of cycles with a maximum duration of 3 min., with a maximum pause time of 1 min.. The wheel must pass the foreseen obstacles, and complete 15,000 revs without obstacles.

For any further details or explanations contact Tellure Rôta Sales Department.

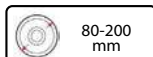
INDUSTRIAL LIGHT DUTY LOADS



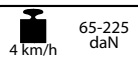


SERIES
22

GREY RUBBER WHEELS
WITH POLYPROPYLENE CENTRE



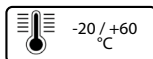
80-200
mm



65-225
daN



50-140
daN



-20 / +60
°C

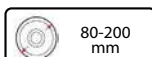
INOX

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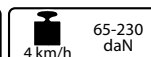


SERIES
23

GREY RUBBER WHEELS
PRESSED STEEL DISCS



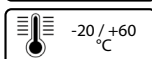
80-200
mm



65-230
daN



50-140
daN



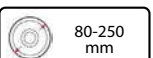
-20 / +60
°C

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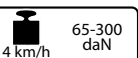


SERIES
52

BLACK RUBBER WHEELS
WITH POLYPROPYLENE CENTRE



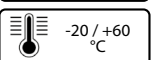
80-250
mm



65-300
daN



50-175
daN



-20 / +60
°C

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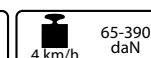


SERIES
53

BLACK RUBBER WHEELS
PRESSED STEEL DISCS



80-280
mm



65-390
daN



50-200
daN



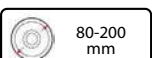
-20 / +60
°C

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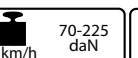


SERIES
71

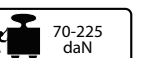
THERMOPLASTIC RUBBER WHEELS
WITH POLYPROPYLENE CENTRE



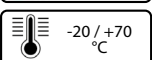
80-200
mm



70-225
daN



70-225
daN



-20 / +70
°C

INOX

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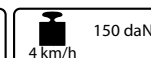


SERIES
82

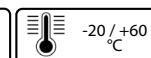
PNEUMATIC WHEELS
WITH POLYPROPYLENE CENTRE



260 mm



150 daN



-20 / +60
°C

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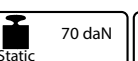


SERIES
82

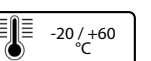
PUNCTURE-PROOF PNEUMATIC WHEELS
WITH POLYPROPYLENE CENTRE



260 mm



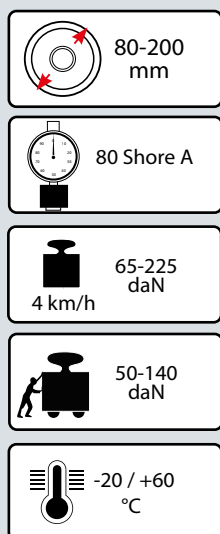
70 daN



-20 / +60
°C

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GREY NON-MARKING RUBBER WHEELS WITH POLYPROPYLENE CENTRE



INOX



Description

Tyre: grey non-marking standard rubber, hardness 80 Shore A

Centre: polypropylene.

Hub with plain bore which directly houses the axle.

Hub with cylindrical roller bearing with plastic cage.

Uses

Suitable for trolleys with light-duty loads, also in the presence of obstacles and for indoor-outdoor use.

The grey non-marking rubber tyre makes them suitable for use on fragile floors as well as in domestic/institutional environments.

Examples of recommended applications: luggage trolleys, tool trolleys, small mobile scaffoldings, waste bin containers.

Environments of use

Suitable for industrial and institutional environments, also in the presence of humidity and weak acids. Not suitable in presence of strong acids, bases and solvents.

Fitted with stainless steel brackets, they are also suitable in presence of medium-harsh chemical agents.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40

Floors

Suitable for all types of floors, even outdoors.

They facilitate overcoming of obstacles.

They do not damage or mark floors.



Force required to push or tow a wheel

 	50 kg	100 kg	150 kg	200 kg	225 kg
80 mm	5	----	----	----	----
100 mm	2.5	----	----	----	----
125 mm	2.2	6	----	----	----
140 mm	2	5.5	----	----	----
150 mm	2	5	----	----	----
160 mm	1.5	3.5	7.5	----	----
180 mm	1	3.2	6	----	----
200 mm	1	3	5.5	8.5	10

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 225 daN - available diameters 80-200 mm
Top plate and bolt hole fittings. Available with front brake.



Stainless steel standard-duty brackets NLX

Maximum carrying capacity 225 daN - available diameters 80-200 mm
Top plate and bolt hole fittings. Available with front brake.

Options available to order:

The series 22 wheels are also available with assembled thread guards. To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.

GREY NON-MARKING RUBBER WHEELS WITH POLYPROPYLENE CENTRE

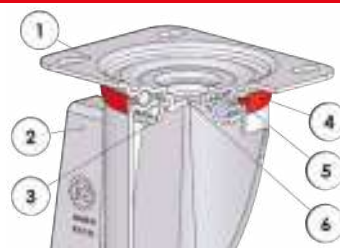


		 													
mm	mm	kg	CODE	mm	mm	daN	daN	daN							
80	25	0.11	222101	12	39	150	50	65							
100	30	0.21	222102	12	44	200	75	80							
125	37.5	0.41	221103	15	44	225	85	110							
140	37.5	0.60	221104	15	44	250	95	120							
150	40	0.67	221111	15	44	275	100	130							
160	40	0.73	221110	20	59	300	120	150							
180	45	1.02	221105	20	59	350	130	180							
200	50	1.51	221106	20	59	400	140	225							



		  													
mm	mm	kg	CODE	mm	mm	daN	daN	daN							
80	25	0.14	224101	12	39	150	50	65							
100	30	0.24	224102	12	44	200	75	80							
125	37.5	0.44	223103	15	44	225	85	110							
140	37.5	0.63	223104	15	44	250	95	120							
150	40	0.70	223111	15	44	275	100	130							
160	40	0.75	223110	20	59	300	120	150							
200	50	1.84	223106	20	59	400	140	225							

Standard-duty brackets NL - max carrying capacity 225 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	
80	25	0,64	224401	0,36	225701	0,82	225201	107	100x85	80x60	9	37	120	65		
100	30	0,73	224402	0,48	225702	0,88	225202	128	100x85	80x60	9	35	120	80		
125	37.5	1,06	224403	0,71	225703	1,20	225203	156	100x85	80x60	9	37	120	110		
140	37.5	1,18	224404	0,80	225704	1,32	225204	177	100x85	80x60	9	34	120	120		
150	40	1,31	224411	0,93	225711	1,45	225211	182	100x85	80x60	9	34	120	130		
160	40	2,10	224410	1,73	225710	2,38	225210	199	140x110	105x80	11	56	156	150		
180	45	2,40	224405	2,11	225705	2,69	225205	219	140x110	105x80	11	56	156	180		
200	50	2,72	224406	2,50	225706	3,00	225206	240	140x110	105x80	11	56	156	225		
80	25	0,69	224601	0,39	225901	0,86	225221	107	100x85	80x60	9	37	120	65		
100	30	0,78	224602	0,51	225902	0,93	225222	128	100x85	80x60	9	35	120	80		
125	37.5	1,09	224603	0,73	225903	1,24	225223	156	100x85	80x60	9	37	120	110		
140	37.5	1,20	224604	0,82	225904	1,35	225224	177	100x85	80x60	9	34	120	120		
150	40	1,31	224611	0,93	225911	1,45	225231	182	100x85	80x60	9	34	120	130		
160	40	2,18	224610	1,75	225910	2,47	225230	199	140x110	105x80	11	56	156	150		
200	50	2,76	224606	2,67	225906	3,04	225226	240	140x110	105x80	11	56	156	225		

Options available to order



Bracket
with rear
brake
d. 150-200 mm



Bracket
with directional
lock
d. 80-125 mm



Directional lock
for brackets
d. 150-200 mm

GREY NON-MARKING RUBBER WHEELS WITH POLYPROPYLENE CENTRE

Standard-duty brackets NL - max carrying capacity 225 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

																																																																																																																																																																																																																																																																																																																																																																																												
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Stainless steel standard-duty brackets NLX - max carrying capacity 225 daN

INOX



- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	
80	25	0.59	224801	0.33	226101	0.76	225401	107	100x85	80x60	9	37	120	65		
100	30	0.70	224802	0.45	226102	0.88	225402	128	100x85	80x60	9	35	120	80		
125	37.5	0.96	224803	0.80	226103	1.10	225403	156	100x85	80x60	9	37	120	110		
140	37.5	1.10	224804	0.88	226104	1.25	225404	177	100x85	80x60	9	34	120	120		
150	40	1.24	224811	1.02	226111	1.38	225411	182	100x85	80x60	9	34	120	130		
160	40	2.04	224810	1.60	226110	2.31	225410	199	140x110	105x80	11	56	156	150		
180	45	2.34	224805	1.90	226105	2.63	225405	219	140x110	105x80	11	56	156	180		
200	50	2.69	224806	2.24	226106	2.98	225406	240	140x110	105x80	11	56	156	225		

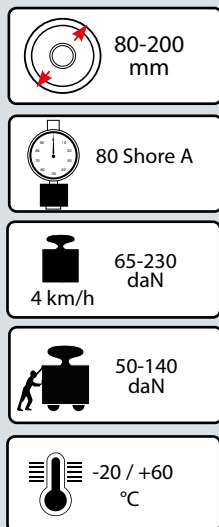


- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) King pin: bushing in stainless steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

INOX

																
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN				
80	25	0.53	227801	0.70	225501	107	73	12	37	120	65					
100	30	0.66	227802	0.86	225502	128	73	12	35	120	80					
125	37.5	0.94	227803	1.09	225503	156	73	12	37	120	110					
140	37.5	1.10	227804	1.18	225504	177	73	12	34	120	120					
150	40	1.17	227811	1.31	225511	182	73	12	34	120	130					
160	40	1.83	227810	2.14	225510	193	102	20	56	156	150					
180	45	2.15	227805	2.44	225505	214	102	20	56	156	180					
200	50	2.61	227806	2.89	225506	236	102	20	56	156	225					

GREY NON-MARKING RUBBER WHEELS WITH PRESSED STEEL DISCS



Description

Tyre: grey non-marking standard rubber, hardness 80 Shore A

Centre: electrolytically galvanised steel plate, made of two riveted discs.

Hub with polyamide self-lubricating plain bore.

Cylindrical roller bearing hub with plastic cage.

Uses

Suitable for trolleys with light-duty loads, also in presence of obstacles and for indoor-outdoor use.

The grey non-marking rubber tyre makes them suitable for use on fragile floors as well as in domestic/institutional environments.

Examples of recommended applications: luggage trolleys, tool trolleys, small mobile scaffoldings, waste bin containers.

Environments of use

Suitable for industrial and institutional environments, also in presence of humidity and oils. Not suitable in presence of aggressive chemical agents.

WEAK ACIDS	
STRONG ACIDS	
WATER	
ALCOHOL	

WEAK BASES	
STRONG BASES	
HYDROCARBONS	
SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of floors, even outdoors.

They facilitate the overcoming of obstacles.

They do not damage or mark floors.



Force required to push or tow a wheel

 	50 kg	100 kg	150 kg	200 kg	230 kg
80 mm	5	----	----	----	----
100 mm	3	----	----	----	----
125 mm	2.5	6	----	----	----
140 mm	2.2	5.5	9	----	----
150 mm	2	5	8.5	----	----
160 mm	1.5	3.5	7.5	----	----
200 mm	1	3	5.5	8.5	11

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 230 daN - available diameters 80-200 mm
Top plate and bolt hole fittings. Available with front brake.

Options available to order:

The series 23 wheels are also available with assembled thread guards. To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.



Wheels
with SL brackets
d. 80-125 mm

GREY NON-MARKING RUBBER WHEELS WITH PRESSED STEEL DISCS

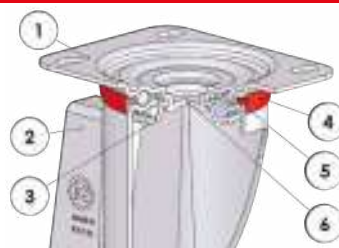


															
mm	mm	kg	CODE	mm	mm	daN	daN	daN							
80	25	0.17	231121	12	39	260	50	65							
100	30	0.28	231122	12	44	300	75	80							
125	37.5	0.51	231103	15	44	330	85	130							
140	37.5	0.64	231104	15	44	340	95	150							
150	40	0.73	231111	15	44	350	100	170							
160	40	1.00	231110	20	58	370	120	180							
200	50	1.75	231106	20	58	410	140	230							



															
mm	mm	kg	CODE	mm	mm	daN	daN	daN							
80	25	0.19	233121	12	39	260	50	65							
100	30	0.31	233122	12	44	300	75	80							
125	37.5	0.54	233103	15	44	330	85	130							
140	37.5	0.66	233104	15	44	340	95	150							
150	40	0.76	233111	15	44	350	100	170							
160	40	1.07	233110	20	58	370	120	180							
200	50	1.81	233106	20	58	410	140	230							

Standard-duty brackets NL - max carrying capacity 230 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	4 km/h	
80	25	0.69	234401	0.49	235701	0.87	235201	107	100x85	80x60	9	37	120	65		
100	30	0.82	234402	0.62	235702	1.00	235202	128	100x85	80x60	9	35	120	80		
125	37.5	1.18	234403	0.92	235703	1.30	235203	156	100x85	80x60	9	37	120	130		
140	37.5	1.31	234404	0.93	235704	1.46	235204	177	100x85	80x60	9	34	120	150		
150	40	1.42	234411	1.04	235711	1.57	235211	182	100x85	80x60	9	34	120	170		
160	40	2.44	234410	2.07	235710	2.69	235210	199	140x110	105x80	11	56	156	180		
200	50	3.25	234406	2.89	235706	3.39	235206	240	140x110	105x80	11	56	156	230		

80	25	0.70	234601	0.51	235901	0.89	235221	107	100x85	80x60	9	37	120	65		
100	30	0.84	234602	0.65	235902	1.03	235222	128	100x85	80x60	9	35	120	80		
125	37.5	1.21	234603	0.95	235903	1.33	235223	156	100x85	80x60	9	34	120	130		
140	37.5	1.34	234604	0.96	235904	1.49	235224	177	100x85	80x60	9	34	120	150		
150	40	1.45	234611	1.07	235911	1.60	235231	182	100x85	80x60	9	37	120	170		
160	40	2.50	234610	2.13	235910	2.75	235230	199	140x110	105x80	11	56	156	180		
200	50	3.31	234606	3.05	235906	3.45	235226	240	140x110	105x80	11	56	156	230		

Options available to order:



Bracket
with rear
brake
d. 150-200 mm



Bracket
with directional
lock
d. 80-125 mm



Directional lock
for brackets
d. 150-200 mm

GREY NON-MARKING RUBBER WHEELS WITH PRESSED STEEL DISCS

Standard-duty brackets NL - max carrying capacity 230 daN



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) King pin: bushing in electrolytically galvanised steel
- 5) Swivel actions: double ball ring with grease lubrication

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN				
80	25	0.61	237701	0.79	235601	107	73	12	37	120	65				
100	30	0.74	237702	0.94	235602	128	73	12	35	120	80				
125	37.5	1.09	237703	1.24	235603	156	73	12	37	120	130				
140	37.5	1.23	237704	1.38	235604	177	73	12	34	120	150				
150	40	1.35	237711	1.49	235611	182	73	12	34	120	170				
160	40	1.78	237710	2.04	235610	193	102	20	56	156	180				
200	50	3.16	237706	3.29	235606	236	102	20	56	156	230				

80	25	0.63	237901	0.80	235621	107	73	12	37	120	65				
100	30	0.76	237902	0.96	235622	128	73	12	35	120	80				
125	37.5	1.12	237903	1.27	235623	156	73	12	37	120	130				
140	37.5	1.26	237904	1.41	235624	177	73	12	34	120	150				
150	40	1.38	237911	1.52	235631	182	73	12	34	120	170				
160	40	1.85	237910	2.10	235630	193	102	20	56	156	180				
200	50	3.22	237906	3.35	235626	236	102	20	56	156	230				

Options available to order:

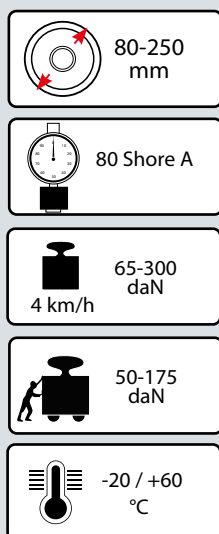


Fitting
with stem
in Zamak
alloy



Experience and innovation

BLACK RUBBER WHEELS WITH POLYPROPYLENE CENTRE



Description

Tyre: black standard rubber, hardness 80 Shore A.

Centre: polypropylene.

Hub with plain bore which directly houses the axle.

Hub with cylindrical roller bearing with plastic cage.

Uses

Suitable for trolleys with light-duty loads, also in the presence of obstacles and for indoor-outdoor use.

Examples of recommended applications: luggage trolleys, tool trolleys, small mobile scaffoldings, waste bin containers.

Environments of use

Suitable for industrial and institutional environments, also in presence of humidity and weak acids. Not suitable in presence of strong acids, bases and solvents.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of floors, even outdoors.

They easily overcome obstacles, do not damage fragile floors, but they may mark the floor.



Force required to push or tow a wheel

 	50 kg	100 kg	150 kg	200 kg	250 kg	300 kg
80 mm	5	----	----	----	----	----
100 mm	2.5	----	----	----	----	----
125 mm	2.2	6	----	----	----	----
140 mm	2	5.5	----	----	----	----
150 mm	2	5	----	----	----	----
160 mm	1.5	3.5	7.5	----	----	----
180 mm	1	3.2	6	----	----	----
200 mm	1	3	5.5	8.5	----	----
250 mm	1	2.2	4	6	8.2	11

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Light-duty brackets SL

Maximum carrying capacity 110 daN - available diameters 80-125 mm
Top plate and bolt hole fittings. Available with front brake.



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 80-250 mm
Top plate, bolt hole, solid stem fittings. Available with front brake.

Options available to order:

The series 52 wheels are also available with assembled thread guards. To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.

BLACK RUBBER WHEELS WITH POLYPROPYLENE CENTRE

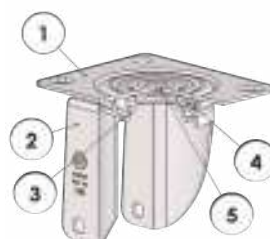


																
mm	mm	kg	CODE	mm	mm	daN	daN	daN								
80	25	0.11	522101	12	39	150	50	65								
100	30	0.21	522102	12	44	200	75	80								
100	30	0.19	521132	12	39	200	75	80								
125	37.5	0.41	521103	15	44	225	85	110								
125	37.5	0.35	521133	12	39	225	85	110								
140	37.5	0.48	521104	15	44	250	95	120								
150	40	0.61	521111	15	44	275	100	130								
160	40	0.73	521110	20	59	300	120	150								
180	45	1.02	521105	20	59	350	130	180								
200	50	1.31	521106	20	59	400	140	225								
200	50	1.28	521206	25	59	400	140	225								
250	60	2.59	521108	25	75	500	175	300								



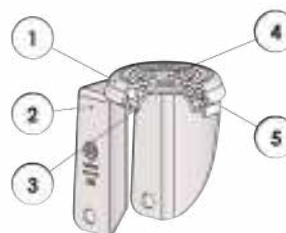
																
mm	mm	kg	CODE	mm	mm	daN	daN	daN								
80	25	0.14	524101	12	39	150	50	65								
100	30	0.24	524102	12	44	200	75	80								
125	37.5	0.44	523103	15	44	225	85	110								
140	37.5	0.51	523104	15	44	250	95	120								
150	40	0.61	523111	15	44	275	100	130								
160	40	0.75	523110	20	59	300	120	150								
180	45	1.18	523105	20	59	350	130	180								
200	50	1.48	523106	20	59	400	140	225								
200	50	1.45	523206	25	59	400	140	225								
250	60	2.78	523108	25	75	500	175	300								

Light-duty brackets SL - max carrying capacity 110 daN



- 1) Plate in electrolytically galvanised printed steel plate
 - 2) Fork in electrolytically galvanised printed steel plate
 - 3) Ball Race Ring in electrolytically galvanised printed steel plate
 - 4) Swivel actions: on two ball race rings lubricated with grease
 - 5) Bracket closing king pin integrated with ball race ring
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	
80	25	0.45	525801	0.44	526001	0.57	526301	110	95x80	100x85	80x60	8.8	33	120	65	
100	30	0.54	525802	0.53	526002	0.68	526302	127	95x80	100x85	80x60	8.8	29	120	80	
125	37.5	0.78	525803	0.76	526003	0.89	526303	154	95x80	100x85	80x60	8.8	32	120	110	



- 1) Plate in electrolytically galvanised printed steel plate
 - 2) Fork in electrolytically galvanised printed steel plate
 - 3) Ball Race Ring in electrolytically galvanised printed steel plate
 - 4) Bracket closing king pin integrated with ball race ring
 - 5) Swivel actions: on two ball race rings lubricated with grease
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN					
80	25	0.40	526101	0.50	526201	110	63	12	33	120	65					
100	30	0.49	526102	0.60	526202	127	63	12	29	120	80					
125	37.5	0.72	526103	0.82	526203	154	63	12	32	120	110					

BLACK RUBBER WHEELS WITH POLYPROPYLENE CENTRE

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	
80	25	0.64	524401	0.36	525701	0.82	525201	107	100x85	80x60	9	37	120	65		
100	30	0.73	524402	0.48	525702	0.88	525202	128	100x85	80x60	9	35	120	80		
125	37.5	1.06	524403	0.71	525703	1.20	525203	156	100x85	80x60	9	37	120	110		
140	37.5	1.18	524404	0.80	525704	1.32	525204	177	100x85	80x60	9	34	120	120		
150	40	1.31	524411	0.93	525711	1.45	525211	182	100x85	80x60	9	34	120	130		
160B	40	1.41	524412	1.25	525712			187	100x85	80x60	9	50		150		
160	40	2.10	524410	1.73	525710	2.38	525210	199	140x110	105x80	11	56	156	150		
180	45	2.40	524405	2.11	525705	2.69	525205	219	140x110	105x80	11	56	156	180		
200	50	2.72	524406	2.50	525706	3.00	525206	240	140x110	105x80	11	56	156	225		
250	60	6.02	524708	4.52	525708			296	200x160	160x120	14	87		300		

80	25	0.69	524601	0.39	525901	0.86	525221	107	100x85	80x60	9	37	120	65		
100	30	0.78	524602	0.51	525902	0.93	525222	128	100x85	80x60	9	35	120	80		
125	37.5	1.09	524603	0.73	525903	1.24	525223	156	100x85	80x60	9	37	120	110		
140	37.5	1.20	524604	0.82	525904	1.35	525224	177	100x85	80x60	9	34	120	120		
150	40	1.31	524611	0.93	525911	1.45	525231	182	100x85	80x60	9	34	120	130		
160B	40	1.43	524612	1.23	525912			187	100x85	80x60	9	50		150		
160	40	2.18	524610	1.75	525910	2.47	525230	199	140x110	105x80	11	56	156	150		
180	45	2.40	524605	2.27	525905	2.68	525225	219	140x110	105x80	11	56	156	180		
200	50	2.76	524606	2.67	525906	3.04	525226	240	140x110	105x80	11	56	156	225		
250	60	6.12	524908	4.70	525908			296	200x160	160x120	14	87		300		

Options available to order:



Bracket
with rear
brake
d. 150-200 mm



Bracket
with directional
lock
d. 80-125 mm

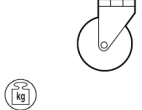
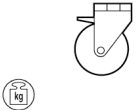


Directional lock
for brackets
d. 150-200 mm

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

Available with total front foot brake																									
																									
mm	mm	kg	CODE		kg	CODE		mm	mm	mm	mm	mm	mm	mm	daN										
80	25	0.55	527701		0.68	525601		107	73	12	37	120	65												
100	30	0.68	527702		0.75	525602		128	73	12	35	120	80												
125	37.5	0.96	527703		1.10	525603		156	73	12	37	120	110												
140	37.5	1.12	527704		1.26	525604		177	73	12	34	120	120												
150	40	1.25	527711		1.39	525611		182	73	12	34	120	130												
160	40	1.44	527710		1.73	525610		193	102	20	56	156	150												
180	45	2.28	527705		2.57	525605		214	102	20	56	156	180												
200	50	2.62	527706		2.91	525606		236	102	20	56	156	225												
80	25	0.58	527901		0.70	525621		107	73	12	37	120	65												
100	30	0.71	527902		0.78	525622		128	73	12	35	120	80												
125	37.5	1.08	527903		1.23	525623		156	73	12	37	120	110												
140	37.5	1.19	527904		1.34	525624		177	73	12	34	120	120												
150	40	1.35	527911		1.50	525631		182	73	12	34	120	130												
160	40	1.47	527910		1.75	525630		193	102	20	56	156	150												
180	45	2.44	527905		2.73	525625		214	102	20	56	156	180												
200	50	2.80	527906		3.08	525626		236	102	20	56	156	225												

BLACK RUBBER WHEELS WITH POLYPROPYLENE CENTRE

Standard-duty brackets NL - max carrying capacity 300 daN



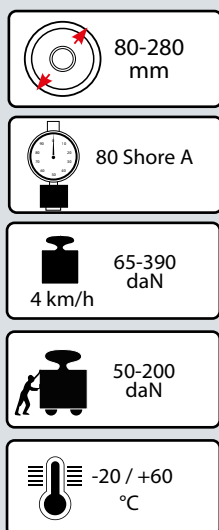
- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Solid stem: galvanised steel
 - 5) King pin: bushing in galvanised steel
 - 6) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN			
100	30	0,81	529202	0,96	529302	128	73	22	47	35	120	80			
125	37.5	1,11	529203	1,28	529303	156	73	22	47	37	120	110			
150	40	1,34	529211	1,50	529311	182	73	22	47	34	120	130			
160	40	2,32	529210	2,62	529310	193	102	26	56	56	156	150			
160	40	2,96	525520	3,26	525620	193	102	40	86	56	156	150			
200	50	2,96	529206	3,27	529306	236	102	26	56	56	156	225			
200	50	3,60	525516	3,91	525616	236	102	40	86	56	156	225			



Products made in Italy

BLACK RUBBER WHEELS WITH PRESSED STEEL DISCS



Description

Tyre: black standard rubber, hardness 80 Shore A.

Centre: electrolytically galvanised steel plate, made of two riveted discs.

Hub with polyamide self-lubricating plain bore.

Cylindrical roller bearing hub in plastic cage.

Uses

Suitable for trolleys with light-duty loads, also in the presence of obstacles and for indoor-outdoor use.

Examples of recommended applications: tool trolleys, trolleys for industrial indoor handling, small mobile scaffoldings, waste bin containers.

Environments of use

Suitable for industrial and institutional environments, also in presence of humidity and oils. Not suitable in presence of aggressive chemical agents.

WEAK ACIDS		
STRONG ACIDS		
WATER		
ALCOHOL		

WEAK BASES		
STRONG BASES		
HYDROCARBONS		
SOLVENTS		

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of floors, even outdoors.

They easily overcome obstacles, do not damage fragile floors, but they may mark the floor.



Force required to push or tow a wheel

 	50 kg	100 kg	150 kg	200 kg	250 kg	300 kg
80 mm	5	----	----	----	----	----
100 mm	3	----	----	----	----	----
125 mm	2.5	6	----	----	----	----
140 mm	2.2	5.5	9	----	----	----
150 mm	2	5	8	----	----	----
160 mm	1.5	3.5	7.5	----	----	----
180 mm	1	3	6.1	----	----	----
200 mm	1	3	5.5	8.5	----	----
225 mm	< 1	2.1	4.8	7.5	11	----
250 mm	< 1	2	4	6	9	12
280 mm	< 1	2	3.5	5	7	9

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Light-duty brackets SL

Maximum carrying capacity 130 daN - available diameters 80-125 mm
Top plate and bolt hole fittings. Available with front brake.



Standard-duty brackets NL

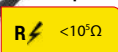
Maximum carrying capacity 390 daN - available diameters 80-280 mm
Top plate, bolt hole and solid stem fittings. Available with front brake.

Options available to order:

The series 53 wheels are also available with assembled thread guards. To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.



Wheel with conductive rubber tread (roller bearing hub only, see p. 304)



BLACK RUBBER WHEELS WITH PRESSED STEEL DISCS



																		
mm	mm	kg	CODE	mm	mm	daN	daN	daN										
80	25	0.17	531121	12	39	260	50	65										
100	30	0.28	531122	12	44	300	75	80										
100	30	0.25	531132	12	39	300	75	80										
125	37.5	0.51	531103	15	44	330	85	130										
125	37.5	0.44	531133	12	39	330	85	130										
140	37.5	0.64	531104	15	44	340	95	150										
150	40	0.73	531111	15	44	350	100	170										
160	40	1.00	531110	20	58	370	120	180										
180	45	1.33	531105	20	58	390	130	200										
200	50	1.75	531106	20	58	410	140	230										
200	50	1.74	531206	25	58	410	140	230										
225	50	2.16	531107	20	58	420	160	250										
250	60	3.24	531108	25	73	500	175	300										
280	60	3.92	531109	25	73	550	200	390										



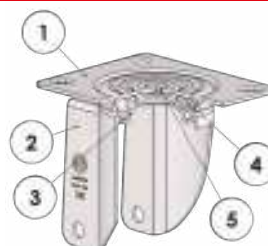
																		
mm	mm	kg	CODE	mm	mm	daN	daN	daN										
80	25	0.19	533121	12	39	260	50	65										
100	30	0.31	533122	12	44	300	75	80										
125	37.5	0.54	533103	15	44	330	85	130										
140	37.5	0.66	533104	15	44	340	95	150										
150	40	0.76	533111	15	44	350	100	170										
160	40	1.07	533110	20	58	370	120	180										
180	45	1.39	533105	20	58	390	130	200										
200	50	1.81	533106	20	58	410	140	230										
200	50	1.78	533206	25	58	410	140	230										
225	50	2.42	533107	20	58	420	160	250										
250	60	3.14	533108	25	73	500	175	300										
280	60	3.84	533109	25	73	550	200	390										

Options available to order:

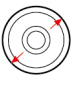
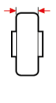
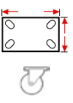
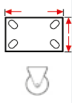
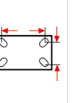
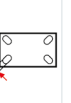


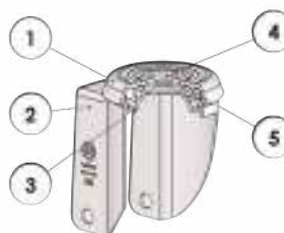
Wheel with conductive
rubber tread
(roller bearing hub only, see
p. 304)

Light-duty brackets SL - max carrying capacity 130 daN

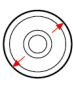
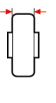
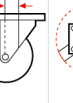


- 1) Plate in electrolytically galvanised printed steel plate
 - 2) Fork in electrolytically galvanised printed steel plate
 - 3) Ball Race Ring in electrolytically galvanised printed steel plate
 - 4) Swivel actions: on two ball race rings lubricated with grease
 - 5) Bracket closing king pin integrated with ball race ring
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	
80	25	0.51	535801	0.50	536001	0.63	536301	110	95x80	100x85	80x60	8.8	33	120	65	
100	30	0.60	535802	0.59	536002	0.74	536302	127	95x80	100x85	80x60	8.8	29	120	80	
125	37.5	0.87	535803	0.85	536003	0.98	536303	154	95x80	100x85	80x60	8.8	32	120	130	



- 1) Plate in electrolytically galvanised printed steel plate
 - 2) Fork in electrolytically galvanised printed steel plate
 - 3) Ball Race Ring in electrolytically galvanised printed steel plate
 - 4) Bracket closing king pin integrated with ball race ring
 - 5) Swivel actions: on two ball race rings lubricated with grease
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN					
80	25	0.46	536101	0.56	536201	110	63	12	33	120	65					
100	30	0.55	536102	0.66	536202	127	63	12	29	120	80					
125	37.5	0.81	536103	0.91	536203	154	63	12	32	120	130					

BLACK RUBBER WHEELS WITH PRESSED STEEL DISCS

Standard-duty brackets NL - max carrying capacity 390 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	kg	mm	mm	mm	mm	mm	mm	daN	
80	25	0.69	535001	0.49	535701	0.87	535401		107	100x85	80x60	9	37	120	65	
100	30	0.82	535002	0.62	535702	1.00	535402		128	100x85	80x60	9	35	120	80	
125	37.5	1.18	535003	0.92	535703	1.30	535403		156	100x85	80x60	9	37	120	130	
140	37.5	1.27	535004	1.09	535704	1.46	535404		177	100x85	80x60	9	34	120	150	
150	40	1.40	535011	1.22	535711	1.57	535411		182	100x85	80x60	9	34	120	170	
160B	40	1.75	535012	1.55	535712				187	100x85	80x60	9	50		180	
160	40	2.44	535010	2.07	535710	2.69	535410		199	140x110	105x80	11	56	156	180	
180	45	2.78	535005	2.49	535705	3.07	535405		219	140x110	105x80	11	56	156	200	
200	50	3.25	535006	2.89	535706	3.39	535406		240	140x110	105x80	11	56	156	230	
225	50	3.67	535007	3.18	535707	3.95	535407		263	140x110	105x80	11	56	156	250	
250	60	6.66	534708	5.16	535708				296	200x160	160x120	14	87		300	
280	60	7.35	534709	5.84	535709				311	200x160	160x120	14	87		390	

80	25	0.70	535101	0.51	535901	0.89	535421		107	100x85	80x60	9	37	120	65	
100	30	0.84	535102	0.65	535902	1.03	535422		128	100x85	80x60	9	35	120	80	
125	37.5	1.21	535103	0.95	535903	1.33	535423		156	100x85	80x60	9	37	120	130	
140	37.5	1.34	535104	0.96	535904	1.49	535424		177	100x85	80x60	9	34	120	150	
150	40	1.45	535111	1.07	535911	1.60	535431		182	100x85	80x60	9	34	120	170	
160B	40	1.81	535112	1.61	535912				187	100x85	80x60	9	50		180	
160	40	2.50	535110	2.13	535910	2.75	535430		199	140x110	105x80	11	56	156	180	
180	45	2.85	535105	2.56	535905	3.13	535425		219	140x110	105x80	11	56	156	200	
200	50	3.31	535106	3.05	535906	3.45	535426		240	140x110	105x80	11	56	156	230	
225	50	3.93	535107	3.45	535907	4.22	535427		263	140x110	105x80	11	56	156	250	
250	60	6.56	534908	5.06	535908				296	200x160	160x120	14	87		300	
280	60	7.27	534909	5.76	535909				311	200x160	160x120	14	87		390	

Options available to order:



Wheel with conductive rubber tread (roller bearing hub only, see p. 304)



Bracket with rear brake d. 150-200 mm



Bracket with directional lock d. 80-125 mm



Directional lock for brackets d. 150-200 mm

Standard-duty brackets NL - max carrying capacity 230 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

																	
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	4 km/h				
80	25	0.61	537701	0.78	538201	107	73	12	37	120	65						
100	30	0.74	537702	0.94	538202	128	73	12	35	120	80						
125	37.5	1.09	537703	1.24	538203	156	73	12	37	120	130						
140	37.5	1.23	537704	1.38	538204	177	73	12	34	120	150						
150	40	1.35	537711	1.49	538211	182	73	12	34	120	170						
160	40	1.78	537710	2.04	538210	193	102	20	56	156	180						
180	45	2.66	537705	3.95	538205	214	102	20	56	156	200						
200	50	3.16	537706	3.29	538206	236	102	20	56	156	230						

80	25	0.63	537901	0.80	538221	107	73	12	37	120	65						
100	30	0.76	537902	0.96	538222	128	73	12	35	120	80						
125	37.5	1.12	537903	1.27	538223	156	73	12	37	120	130						
140	37.5	1.26	537904	1.41	538224	177	73	12	34	120	150						
150	40	1.38	537911	1.52	538231	182	73	12	34	120	170						
160	40	1.85	537910	2.10	538230	193	102	20	56	156	180						
180	45	2.73	537905	3.01	538225	214	102	20	56	156	200						
200	50	3.22	537906	3.35	538226	236	102	20	56	156	230						

Options available to order:



Wheel with conductive rubber tread (roller bearing hub only, see p. 304)

BLACK RUBBER WHEELS WITH PRESSED STEEL DISCS

Standard-duty brackets NL - max carrying capacity 230 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Solid stem: galvanised steel
 - 5) King pin: bushing in galvanised steel
 - 6) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN			
100	30	0,88	539202	1,03	538802	128	73	22	47	35	120	80			
125	37.5	1,21	539203	1,38	538803	156	73	22	47	37	120	130			
150	40	1,46	539211	1,62	538811	182	73	22	47	34	120	170			
160	40	2,59	539210	2,89	538810	193	102	26	56	56	156	180			
160	40	3,23	535520	3,53	535620	193	102	40	86	56	156	180			
180	45	3,59	535515	3,89	535615	214	102	40	86	56	156	200			
200	50	3,40	539206	3,71	538806	236	102	26	56	56	156	230			
200	50	4,04	535516	4,35	535616	236	102	40	86	56	156	230			



Technology at work

GREY NON-MARKING THERMOPLASTIC RUBBER WHEELS WITH POLYPROPYLENE CENTRE

80-200 mm

85 Shore A

70-225 daN
4 km/h

70-225 daN

-20 / +70 °C

INOX



Description

Tyre: grey non-marking thermoplastic rubber, hardness 85 Shore A, excellent rolling resistance and elasticity.

Centre: polypropylene.

Hub with plain bore which directly houses the axle.

Hub with cylindrical roller bearing in plastic cage. Also available with stainless steel roller bearing. Hub with double shielding ball bearing, coprinted in the centre of the wheel: diam. 80-125 mm. Hub with double shielding ball bearings: diam. 150-200 mm.

The bearings are protected from dirt, machining residue and corrosive substances by a glass-fibre reinforced polyamide installation bushing with internal labyrinth seal.

Also available with stainless steel ball bearings.

Uses

Indicated for trolleys with light-duty loads, mainly for indoor use; the grey non-marking rubber tyre makes it suitable for use on fragile floors and also in domestic/institutional environments.

Excellent rolling resistance guarantees minimum effort in manual handling.

Examples of recommended applications: luggage trolleys, tool trolleys, institutional and catering trolleys, trolleys for industrial indoor use, tubular trolleys.

Environments of use

Suitable for industrial and institutional environments, also in presence of humidity.

Fitted with stainless steel brackets, they are also recommended for environments with presence of aggressive chemical agents. Not suitable in presence of organic solvents, chlorinated substances, hydrocarbons and mineral oils.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

It does not stain or damage fragile floors. Suitable for tiles and cement-resin.

Not recommended on abrasive, unpaved floors or in presence of processing residues.



Force required to push or tow a wheel

 	50 kg	100 kg	150 kg	200 kg	225 kg
80 mm	3,5	----	----	----	----
100 mm	2,2	5	----	----	----
125 mm	1,5	3,5	----	----	----
150x35 mm	1	2,5	4,7	----	----
150x45 mm	< 1	2	3,8	----	----
160 mm	< 1	1,3	2,5	3,2	----
200 mm	< 1	1,3	2,5	2,8	4,2

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Light-duty brackets SL

Maximum carrying capacity 120 daN - available diameters 80-125 mm
Top plate and bolt hole fittings. Available with front brake.



Standard-duty brackets NL

Maximum carrying capacity 225 daN - available diameters 80-200 mm
Top plate, bolt hole and Zamak expander stem fittings. Available with front brake.



Stainless steel standard-duty brackets NLX

Maximum carrying capacity 225 daN - available diameters 80-200 mm
Top plate and bolt hole fittings. Available with front brake.

Options available to order:

The series 71 wheels are also available with assembled thread guards. To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.



Wheel for large commercial kitchens (conforms to Standard DIN 18867-8)
d. 160 and 200 mm

GREY NON-MARKING THERMOPLASTIC RUBBER WHEELS WITH POLYPROPYLENE CENTRE



																
mm	mm	kg	COD.	mm	mm	daN	daN	daN								
80	30	0,09	711101	12	39	100	70	70								
100	30	0,12	711102	12	44	150	100	100								
100	30	0,11	711132	12	39	150	100	100								
125	35	0,20	711103	15	44	180	120	120								
125	35	0,20	711133	12	39	180	120	120								
150	35	0,27	711105	15	44	210	140	140								
150	45	0,36	711104	20	59	270	180	180								
200	50	0,70	711106	20	59	330	225	225								

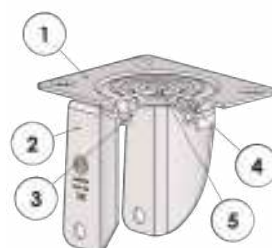


																
mm	mm	kg	COD.	kg	COD.	mm	mm	daN	daN	daN						
80	30	0,11	713101	0,11	713201	12	39	100	70	70						
100	30	0,14	713102	0,14	713202	12	44	150	100	100						
125	35	0,22	713103	0,22	713203	15	44	180	120	120						
150	35	0,30	713105	0,30	713205	15	44	210	140	140						
150	45	0,41	713104	0,41	713204	20	59	270	180	180						
200	50	0,74	713106	0,74	713206	20	59	330	225	225						

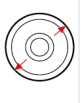
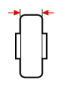
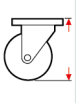
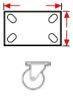
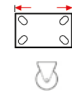
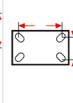
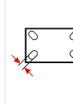
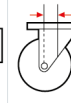
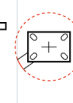


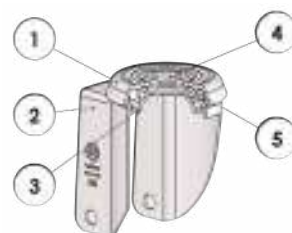
																
mm	mm	kg	COD.	kg	COD.	mm	mm	daN	daN	daN						
80	30	0,14	712201			8	40	100	70	70						
100	30	0,18	712202			8	45	150	100	100						
125	35	0,25	712203			8	45	180	120	120						
150	45	0,62	712204	0,62	712404	12	60	270	180	180						
160	50	0,71	712210	0,71	712410	12	60	300	200	200						
200	50	0,92	712206	0,92	712406	12	60	330	225	225						

Light-duty brackets SL - max carrying capacity 120 daN

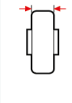
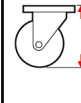
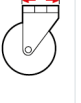
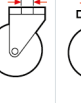
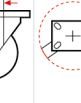


- 1) Plate in electrolytically galvanised printed steel plate
 - 2) Fork in electrolytically galvanised printed steel plate
 - 3) Ball Race Ring in electrolytically galvanised printed steel plate
 - 4) Swivel actions: on two ball race rings lubricated with grease
 - 5) Bracket closing king pin integrated with ball race ring
- Available with total front foot brake

																
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN
80	30	0,43	715801	0,42	716001	0,55	716301	110	95x80	100x85	80x60	8,8	33	120		70
100	30	0,46	715802	0,45	716002	0,60	716302	127	95x80	100x85	80x60	8,8	29	120		100
125	35	0,63	715803	0,61	716003	0,74	716303	154	95x80	100x85	80x60	8,8	32	120		120



- 1) Plate in electrolytically galvanised printed steel plate
 - 2) Fork in electrolytically galvanised printed steel plate
 - 3) Ball Race Ring in electrolytically galvanised printed steel
 - 4) Bracket closing king pin integrated with ball race ring
 - 5) Swivel actions: on two ball race rings lubricated with grease
- Available with total front foot brake

																
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN					
80	30	0,38	716101	0,48	716201	110	63	12	33	120	70					
100	30	0,41	716102	0,52	716202	127	63	12	29	120	100					
125	30	0,57	716103	0,67	716203	154	63	12	32	120	120					

Options available to order:



Wheel for large commercial kitchens (conforms to Standard DIN 18867-8)
d. 160 and 200 mm



Wheel with single stainless steel ball bearing
d. 80-125 mm

GREY NON-MARKING THERMOPLASTIC RUBBER WHEELS WITH POLYPROPYLENE CENTRE

Standard-duty brackets NL - max carrying capacity 225 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	
80	30	0,60	714201	0,36	715701	0,79	716601	107	100x85	80x60	9	37	120	70	
100	30	0,70	714202	0,39	715702	0,85	716602	128	100x85	80x60	9	35	120	100	
125	35	0,86	714203	0,61	715703	1,00	716603	156	100x85	80x60	9	37	120	120	
150	35	0,96	714204	0,76	715704	1,14	716604	182	100x85	80x60	9	34	120	140	
150	45	1,72	714211	1,35	715711	2,00	716611	194	140x110	105x80	11	56	156	180	
200	50	2,07	714206	1,86	715706	2,35	716606	240	140x110	105x80	11	56	156	225	
80	30	0,61	714501	0,38	715901	0,82	716621	107	100x85	80x60	9	37	120	70	
100	30	0,71	714502	0,39	715902	0,86	716622	128	100x85	80x60	9	35	120	100	
125	35	0,87	714503	0,62	715903	1,03	716623	156	100x85	80x60	9	37	120	120	
150	35	1,11	714504	0,81	715904	1,16	716624	182	100x85	80x60	9	34	120	140	
150	45	1,87	714511	1,40	715911	2,05	716631	194	140x110	105x80	11	56	156	180	
200	50	2,10	714506	2,02	715906	2,34	716626	240	140x110	105x80	11	56	156	225	
80	30	0,58	714701	0,45	714801	0,75	714901	107	100x85	80x60	9	37	120	70	
100	30	0,64	714702	0,50	714802	0,81	714902	128	100x85	80x60	9	35	120	100	
125	35	0,81	714703	0,61	714803	0,97	714903	156	100x85	80x60	9	37	120	120	
150	45	1,86	714731	1,68	714811	2,15	714911	194	140x110	105x80	11	56	156	180	
160	50	1,95	714710	1,77	714810	2,24	714910	199	140x110	105x80	11	56	156	200	
200	50	2,22	714736	2,13	714806	2,51	714906	240	140x110	105x80	11	56	156	225	

Options available to order:



Bracket
with directional
lock
d. 80-125 mm



Directional lock
for brackets
d. 150-200 mm



Wheel for large commercial
kitchens (conforms
to Standard DIN 18867-8)
d. 160 and 200 mm

Standard-duty brackets NL - max carrying capacity 225 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

																		
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
80	30	0,53	717401	0,71	716501	107	73	12	37	120	70							
100	30	0,63	717402	0,84	716502	128	73	12	35	120	100							
125	35	0,80	717403	0,95	716503	156	73	12	37	120	120							
150	35	0,90	717404	1,04	716504	182	73	12	34	120	140							
150	45	1,58	717411	1,87	716511	188	102	20	56	156	180							
200	50	1,97	717406	2,26	716506	236	102	20	56	156	225							
80	30	0,55	717801	0,73	716521	107	73	12	37	120	70							
100	30	0,64	717802	0,84	716522	128	73	12	35	120	100							
125	35	0,82	717803	0,98	716523	156	73	12	37	120	120							
150	35	0,93	717804	1,00	716524	182	73	12	34	120	140							
150	45	1,85	717811	1,92	716531	188	102	20	56	156	180							
200	50	2,02	717806	2,29	716526	236	102	20	56	156	225							
80	30	0,53	714301	0,70	715501	107	73	12	37	120	70							
100	30	0,58	714302	0,75	715502	128	73	12	35	120	100							
125	35	0,74	714303	0,94	715503	156	73	12	37	120	120							
150	45	1,74	714331	2,06	715511	188	102	20	56	156	180							
160	50	1,83	714310	2,15	715510	193	102	20	56	156	200							
200	50	2,11	714336	2,41	715506	236	102	20	56	156	225							

Options available to order:



Wheel for large commercial kitchens (conforms to Standard DIN 18867-8) d. 160 and 200 mm



Fitting with threaded stem



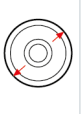
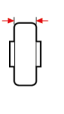
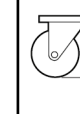
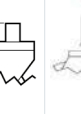
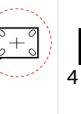
Fitting with unthreaded stem with dimensions that can be customised

GREY NON-MARKING THERMOPLASTIC RUBBER WHEELS WITH POLYPROPYLENE CENTRE

Standard-duty brackets NL - max carrying capacity 225 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Stem: zamak expander
 - 5) King pin: bushing in electrolytically galvanised steel
 - 6) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

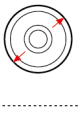
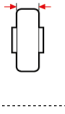
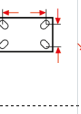
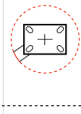
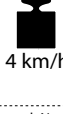
																	
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN			
80	30	0,65	719201	0,83	719301	109	20	65	20-24	37	120	70					
100	30	0,75	719202	0,96	719302	130	20	65	20-24	35	120	100					
125	35	1,02	719203	1,07	719303	158	20	65	20-24	37	120	120					

Stainless steel standard-duty brackets NLX - max carrying capacity 225 daN

INOX



- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN			
80	30	0,59	714401	0,33	715301	0,76	716701	107	100x85	80x60	9	37	120	70			
100	30	0,61	714402	0,36	715302	0,79	716702	128	100x85	80x60	9	35	120	100			
125	35	0,76	714403	0,59	715303	0,90	716703	156	100x85	80x60	9	37	120	120			
150	35	0,99	714404	0,76	715304	1,01	716704	182	100x85	80x60	9	34	120	140			
150	45	1,63	714411	1,22	715311	1,95	716711	194	140x110	105x80	11	56	156	180			
200	50	2,04	714406	1,59	715306	2,33	716706	240	140x110	105x80	11	56	156	225			
80	30	0,61	714601	0,36	715601	0,79	716721	107	100x85	80x60	9	37	120	70			
100	30	0,64	714602	0,37	715602	0,80	716722	128	100x85	80x60	9	35	120	100			
125	35	0,78	714603	0,62	715603	0,93	716723	156	100x85	80x60	9	37	120	120			
150	35	1,03	714604	0,81	715604	1,03	716724	182	100x85	80x60	9	34	120	140			
150	45	1,71	714611	1,27	715611	2,00	716731	194	140x110	105x80	11	56	156	180			
200	50	2,09	714606	1,62	715606	2,36	716726	240	140x110	105x80	11	56	156	225			
150	45	1,85	715411	1,55	715011	2,14	716911	194	140x110	105x80	11	56	156	180			
160	50	1,94	715410	1,64	715010	2,23	716910	199	140x110	105x80	11	56	156	200			
200	50	2,22	715406	1,97	715036	2,51	716906	240	140x110	105x80	11	56	156	225			

Stainless steel standard-duty brackets NLX - max carrying capacity 225 daN

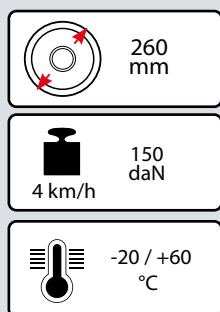
INOX



- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) King pin: bushing in stainless steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

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PNEUMATIC WHEELS WITH POLYPROPYLENE CENTRE



Description

Tyre: four plies ribbed or country profiled tyre; working pressure 2 bar.

Centre: polypropylene.

Hub with plain bore which directly houses the axle.

Hub with cylindrical roller bearing with plastic cage.

Uses

Suitable for use with light and medium-duty loads, on any type of flooring, also for mixed indoor and outdoor use.

Also suitable on sandy base.

Examples of recommended applications: wheelbarrows, box charts.

Environments of use

Suitable for industrial and outdoor environments, also in presence of humidity and medium-harsh chemical agents.

Not suitable in presence of organic solvents, chlorinated substances, hydrocarbons and mineral oils.

WEAK ACIDS				
STRONG ACIDS				
WATER				
ALCOHOL				

WEAK BASES				
STRONG BASES				
HYDROCARBONS				
SOLVENTS				

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 36.

Floors

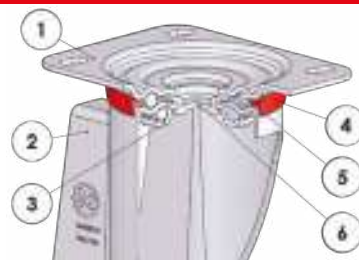
It is functional on all type of floors and especially on uneven floors and soft floor surfaces such as grass, as well as on floor with obstacles and with chips.





														
mm	mm	kg	CODE	kg	CODE	mm	mm	daN						
260	85	0.91	821601	1.03	823601	20	74	150	ribbed profile					
260	85	0.90	821602	1.00	823602	25	74	150	ribbed profile					
260	85	0.96	822601	1.08	824601	20	74	150	country profile					
260	85	0.95	822602	1.05	824602	25	74	150	country profile					

Standard-duty brackets NL - max carrying capacity 150 daN



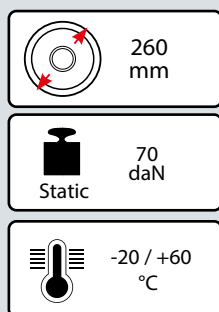
- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Dust seal: orange polyethylene
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: integrated with the plate and cold-riveted

																
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN					
260	85	4.33	825601 	2.83	826601 	300	200x160	160x120	14	86	150					
260	85	4.43	825701 	2.93	826701 	300	200x160	160x120	14	86	150					



																
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN					
260	85	4.38	825602 	2.89	826602 	300	200x160	160x120	14	86	150					
260	85	4.48	825702 	2.98	826702 	300	200x160	160x120	14	86	150					

PUNCTURE-PROOF PNEUMATIC WHEELS WITH POLYPROPYLENE CENTRE



Description

Tyre: expanded polyurethane foam, without inner tube.

Centre: polypropylene.

Hub with cylindrical roller bearing with plastic cage.

Uses

Suitable for use with light and medium-duty loads, on any type of flooring, also for mixed indoor and outdoor use. The expanded polyurethane foam tyre eliminates wheel failure as a consequence of a puncture that can occur with traditional pneumatic (air filled) wheels.

Also suitable on sandy base.

Examples of recommended applications: wheelbarrows, box charts.

Environments of use

Suitable for industrial and outdoor environments, also in presence of humidity and medium-harsh chemical agents. Not suitable in presence of organic solvents, chlorinated substances, hydrocarbons and mineral oils.

WEAK ACIDS				WEAK BASES			
STRONG ACIDS				STRONG BASES			
WATER				HYDROCARBONS			
ALCOHOL				SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40

Floors

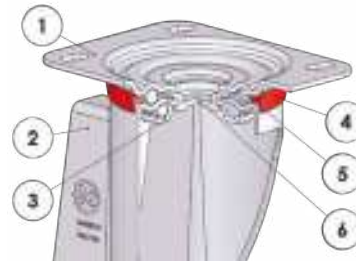
It is functional on all type of floors and especially on uneven floors and soft floor surfaces such as grass, as well as on floor with obstacles and with chips.





														
mm	mm	kg	COD.	mm	mm	daN								
260	75	1,03	823701	20	77	70	country profile							

Standard-duty brackets NL - max carrying capacity 70 daN



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Dust seal: orange polyethylene
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: integrated with the plate and cold-riveted

															
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN				
260	75	4,48	827601	2,98	828601	300	200x160	160x120	14	86	70				

INDUSTRIAL MEDIUM DUTY LOADS



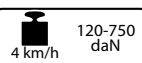


SERIES **60**

THERMOELASTIC POLYURETHANE
WHEELS WITH POLYAMIDE 6 CENTRE



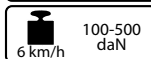
80-250
mm



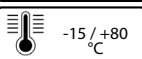
120-750
daN



120-450
daN



6 km/h



-15 / +80
°C

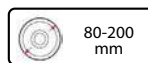
INOX

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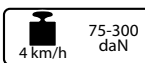


SERIES **61**

THERMOELASTIC POLYURETHANE
WHEELS WITH POLYAMIDE 6 CENTRE



80-200
mm



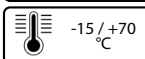
75-300
daN



75-300
daN



6 km/h



-15 / +70
°C

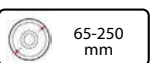
INOX

PAGE 102

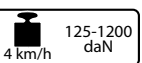


SERIES **68**

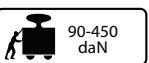
SOLID WHEELS
IN POLYAMIDE 6



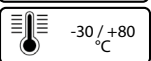
65-250
mm



125-1200
daN



90-450
daN



-30 / +80
°C

INOX

PAGE 110

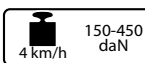


SERIES **73**

WHEELS IN SIGMA ELASTIC RUBBER
WITH POLYAMIDE 6 CENTRE



100-200
mm



150-450
daN



100-350
daN



-20 / +70
°C

INOX

PAGE 122

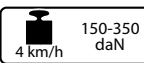


SERIES **73^{EA}**

ELASTIC RUBBER WHEELS
WITH POLYAMIDE CENTRE



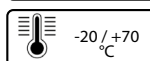
100-200
mm



150-350
daN



100-235
daN



-20 / +70
°C

PAGE 130

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE



INOX



Description

Tyre: red thermoplastic polyurethane, hardness 55 Shore D, excellent rolling resistance and elasticity features, good resistance to wear and tearing.

Centre: polyamide 6.

Hub with plain bore which directly houses the axle.
Hub with cylindrical roller bearing in plastic cage. Also available with stainless steel roller bearing.
Hub with double shielding ball bearing, co-printed in centre (diam. 80-125 mm). Hub with double shielding ball bearings (diam. 150-200 mm). The bearings are protected from dirt, machining residue and corrosive substances by a glass-fibre reinforced polyamide installation bushing with internal labyrinth seal. Diam. 250 mm: hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding. Also available with stainless steel ball bearing.

Uses

Suitable for trolleys and machinery with medium-duty loads, also in case of continuous handling.

Suitable for indoor and outdoor use with frequent washing and sterilisation.

Examples of recommended applications: trolleys for industrial use, tubular trolleys, trolleys for food and chemical industry, mobile scaffoldings (fitted with suitable brackets, they meet Standard UNI EN 1004-1:2021).

Environments of use

Suitable for industrial environments, also in presence of water and saturated vapour, alcohol and glycol, mineral and organic acids.

WEAK ACIDS				WEAK BASES			
STRONG ACIDS				STRONG BASES			
WATER				HYDROCARBONS			
ALCOHOL				SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.

Not recommended unpaved floors or in presence of processing residues.

Not suitable in presence of obstacles, even if small.

They do not mark fragile floors.



Force required to push or tow a wheel

 	100 kg	150 kg	200 kg	250 kg	300 kg	350 kg	400 kg	450 kg	750 kg
80 mm	4,5	----	----	----	----	----	----	----	----
100 mm	2,2	4,5	----	----	----	----	----	----	----
125 mm	1,2	2,2	4	----	----	----	----	----	----
150x35 mm	< 1	2	3,2	5	----	----	----	----	----
150x45 mm	< 1	1,8	2,6	3,5	5	5,3	----	----	----
160 mm	<1	1,6	2,2	3	3,9	5,1	6	---	---
200 mm	< 1	1,5	2	2,8	3,7	4,8	5,5	6,5	----
250 mm	< 1	< 1	<1	2	2,8	3,7	4,8	5	7

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate, bolt hole, solid stem, Zama expander fittings. Available with front brake.



Stainless steel standard-duty brackets NLX

Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate and bolt hole fittings. Available with front brake.



Medium-duty brackets M

Maximum carrying capacity 450 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 750 daN - available diameters 100-250 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Medium-heavy duty brackets PX in stainless steel

Maximum carrying capacity 450 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable rear brake.



Mobile scaffolding brackets (See Scaffolding section on page 360)

Maximum carrying capacity 400 daN - maximum capacity according to UNI EN 1004-1:2021 750 daN
Available diameters 125-200 mm. Top plate, unthreaded stem, threaded stem with leveller fittings. Available with brake and double brake pedal.

Options available to order

The series 60 wheels are also available with assembled thread guards. To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE



															
mm	mm	kg	COD.	mm	mm.	daN	daN	daN							
80	30	0,11	601101	12	39	220	120	120							
100	30	0,15	601102	12	44	300	170	170							
125	35	0,25	601103	15	44	350	230	230							
150	35	0,35	601105	15	44	500	250	250							
150	45	0,51	601104	20	59	700	280	350							
200	50	0,87	601106	20	59	750	320	450							

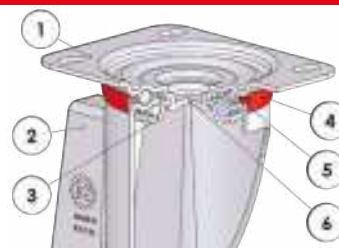


															
mm	mm	kg	COD.	kg	COD.	mm	mm	daN	daN	daN					
80	30	0,13	603101	0,13	603201	12	39	220	120	120					
100	30	0,17	603102	0,17	603202	12	44	300	170	170					
125	35	0,25	603103	0,25	603203	15	44	350	230	230					
150	35	0,37	603105	0,37	603205	15	44	500	250	250					
150	45	0,54	603104	0,54	603204	20	59	700	280	350					
200	50	0,92	603106	0,92	603206	20	59	750	320	450					



															
mm	mm	kg	COD.	kg	COD.	mm	mm.	daN	daN	daN	daN				
80	30	0,17	602201	0,17	602401	8	40	220	130	130	100				
100	30	0,21	602202	0,21	602402	8	45	300	200	200	160				
125	35	0,30	602203	0,30	602403	8	45	350	250	250	200				
150	45	0,76	602204	0,76	602404	12	60	700	300	350	280				
160	50	0,87	602210	0,87	602410	12	60	720	320	400	320				
200	50	1,16	602206	1,16	602406	12	60	750	360	450	360				
250	50	1,50	602208			20	58	1000	450	750	500				

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	
80	30	0,57	604201	0,42	605701	0,73	606601	107	100x85	80x60	9	37	120	120			
100	30	0,64	604202	0,50	605702	0,80	606602	128	100x85	80x60	9	35	120	170			
125	35	0,85	604203	0,65	605703	1,01	606603	156	100x85	80x60	9	37	120	220			
150	35	0,97	604204	0,78	605704	1,13	606604	182	100x85	80x60	9	34	120	220			
150	45	1,84	604211	1,70	605711	2,12	606611	194	140x110	105x80	11	56	156	300			
200	50	2,28	604206	2,23	605706	2,57	606606	240	140x110	105x80	11	56	156	300			
80	30	0,59	604501	0,44	605901	0,74	606621	107	100x85	80x60	9	37	120	120			
100	30	0,66	604502	0,52	605902	0,82	606622	128	100x85	80x60	9	35	120	170			
125	35	0,87	604503	0,67	605903	1,03	606623	156	100x85	80x60	9	37	120	220			
150	35	0,99	604504	0,80	605904	1,15	606624	182	100x85	80x60	9	34	120	220			
150	45	1,87	604511	1,73	605911	2,17	606631	194	140x110	105x80	11	56	156	300			
200	50	2,31	604506	2,27	605906	2,60	606626	240	140x110	105x80	11	56	156	300			
80	30	0,62	604701	0,47	604801	0,77	604901	107	100x85	80x60	9	37	120	130			
100	30	0,69	604702	0,54	604802	0,85	604902	128	100x85	80x60	9	35	120	200			
125	35	0,87	604703	0,67	604803	1,03	604903	156	100x85	80x60	9	37	120	220			
150	45	2,00	604731	1,85	604811	2,29	604911	194	140x110	105x80	11	56	156	300			
160	50	2,11	604710	1,96	604810	2,40	604910	199	140x110	105x80	11	56	156	300			
200	50	2,46	604736	2,41	604806	2,75	604906	240	140x110	105x80	11	56	156	300			

Options available to order



Bracket
with directional
lock
d. 80-125 mm



Directional lock
for brackets
d. 150-200 mm

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

																
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN	4 km/h				
80	30	0,51	607701	0,67	606401	107	73	12	37	120	120					
100	30	0,58	607702	0,73	606402	128	73	12	35	120	170					
125	35	0,78	607703	0,95	606403	156	73	12	37	120	220					
150	35	0,91	607704	1,07	606404	182	73	12	34	120	220					
150	45	1,73	607711	2,05	606411	188	102	20	56	156	300					
200	50	2,19	607706	2,50	606406	236	102	20	56	156	300					
80	30	0,52	607801	0,68	606421	107	73	12	37	120	120					
100	30	0,60	607802	0,75	606422	128	73	12	35	120	170					
125	35	0,80	607803	0,97	606423	156	73	12	37	120	220					
150	35	0,93	607804	1,09	606424	182	73	12	34	120	220					
150	45	1,75	607811	2,05	606431	188	102	20	56	156	300					
200	50	2,22	607806	2,53	606426	236	102	20	56	156	300					
80	30	0,55	604301	0,71	605501	107	73	12	37	120	130					
100	30	0,62	604302	0,78	605502	128	73	12	35	120	200					
125	35	0,80	604303	0,97	605503	156	73	12	37	120	220					
150	45	1,34	604331	1,50	605511	188	102	20	56	156	300					
160	50	2,02	604310	2,32	605510	193	102	20	56	156	300					
200	50	2,37	604336	2,68	605506	236	102	20	56	156	300					

Options available to order

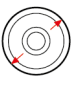
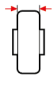
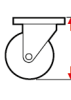
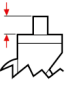
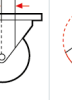


Fastening
with threaded stem

Standard-duty brackets NL - max carrying capacity 300 daN

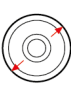
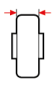
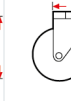
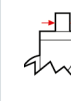
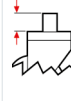
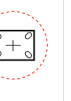


- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Stem: zamak expander
 - 5) King pin: bushing in electrolytically galvanised steel
 - 6) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

														
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	
80	30	0,63	609201	0,79	609301	109	73	20	65	20-24	37	120	120	
100	30	0,70	609202	0,85	609302	130	73	20	65	20-24	35	120	130	
125	35	0,90	609203	1,07	609303	158	73	20	65	20-24	37	120	130	



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Solid stem: galvanised steel
 - 5) King pin: bushing in electrolytically galvanised steel
 - 6) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

													
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	
100	30	0,75	606102	0,90	606202	128	73	22	47	35	120	170	
125	35	0,95	606103	1,12	606203	156	73	22	47	37	120	220	
150	35	1,08	606104	1,24	606204	182	73	22	47	34	120	220	
150	45	2,10	606111	2,40	606211	188	102	26	56	56	156	300	
200	50	2,53	606106	2,84	606206	236	102	26	56	56	156	300	

Options available to order



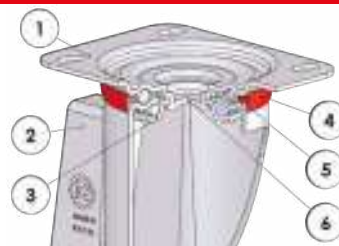
Bracket with Zama stem fitted with wheels with roller bearings and single ball bearing d. 80-125 mm



Connection with solid stem with dimensions that can be customised

Stainless steel standard-duty brackets NLX - max carrying capacity 300 daN

INOX



- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	
80	30	0,57	604401	0,42	605101	0,73	606701	107	100x85	80x60	9	37	120	120	
100	30	0,64	604402	0,50	605102	0,80	606702	128	100x85	80x60	9	35	120	170	
125	35	0,78	604403	0,66	605103	0,94	606703	156	100x85	80x60	9	37	120	220	
150	35	1,06	604404	0,94	605104	1,22	606704	182	100x85	80x60	9	34	120	220	
150	45	1,87	604411	1,73	605111	2,14	606711	194	140x110	105x80	11	56	156	300	
200	50	2,28	604406	2,23	605106	2,57	606706	240	140x110	105x80	11	56	156	300	
80	30	0,59	604601	0,44	605601	0,74	606721	107	100x85	80x60	9	37	120	120	
100	30	0,66	604602	0,52	605602	0,82	606722	128	100x85	80x60	9	35	120	170	
125	35	0,80	604603	0,68	605603	0,96	606723	156	100x85	80x60	9	37	120	220	
150	35	0,92	604604	0,80	605604	1,08	606724	182	100x85	80x60	9	34	120	220	
150	45	1,87	604611	1,73	605611	2,17	606731	194	140x110	105x80	11	56	156	300	
200	50	2,31	604606	2,27	605606	2,60	606726	240	140x110	105x80	11	56	156	300	
80	30	0,62	605401	0,47	605001	0,77	606901	107	100x85	80x60	9	37	120	130	
100	30	0,69	605402	0,54	605002	0,85	606902	128	100x85	80x60	9	35	120	200	
125	35	0,80	605403	0,68	605003	0,96	606903	156	100x85	80x60	9	37	120	220	
150	45	2,00	605411	1,85	605011	2,29	606911	194	140x110	105x80	11	56	156	300	
160	50	2,11	605410	1,96	605010	2,40	606910	199	140x110	105x80	11	56	156	300	
200	50	2,46	605406	2,41	605006	2,75	606906	240	140x110	105x80	11	56	156	300	

Stainless steel standard-duty brackets NLX - max carrying capacity 300 daN

INOX



- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) King pin: bushing in stainless steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

															
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	4 km/h	daN			
80	30	0,51	607901	0,67	608801	107	73	12	37	120	120				
100	30	0,58	607902	0,73	608802	128	73	12	35	120	170				
125	35	0,72	607903	0,88	608803	156	73	12	37	120	220				
150	35	0,78	607904	0,94	608804	182	73	12	34	120	220				
150	45	1,75	607911	2,05	608811	188	102	20	56	156	300				
200	50	2,19	607906	2,50	608806	236	102	20	56	156	300				
80	30	0,52	608001	0,68	608821	107	73	12	37	120	120				
100	30	0,60	608002	0,75	608822	128	73	12	35	120	170				
125	35	0,74	608003	0,90	608823	156	73	12	37	120	220				
150	35	0,84	608004	1,00	608824	182	73	12	34	120	220				
150	45	1,78	608011	2,08	608831	188	102	20	56	156	300				
200	50	2,22	608006	2,53	608826	236	102	20	56	156	300				
80	30	0,55	606301	0,71	606501	107	73	12	37	120	130				
100	30	0,62	606302	0,78	606502	128	73	12	35	120	200				
125	35	0,74	606303	0,90	606503	156	73	12	37	120	220				
150	45	1,34	606311	1,50	606511	188	102	20	56	156	300				
160	50	2,02	606310	2,32	606510	193	102	20	56	156	300				
200	50	2,37	606306	2,68	606506	236	102	20	56	156	300				

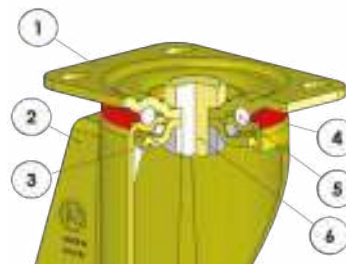
Medium-duty brackets M - max carrying capacity 450 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electroplated galvanised steel
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	
150	45	2,16	604311	1,70	605711	2,64	606811	194	140x110	105x80	11	58	178	350	
200	50	2,64	604306	2,23	605706	3,04	606806	240	140x110	105x80	11	50	178	450	
150	45	2,19	604711	1,73	605911	2,68	606831	194	140x110	105x80	11	58	178	350	
200	50	2,67	604706	2,27	605906	3,11	606826	240	140x110	105x80	11	50	178	450	
150	45	2,32	608411	1,85	604811	2,74	608911	194	140x110	105x80	11	58	178	350	
160	50	2,43	608410	2,96	604810	2,85	608910	199	140x110	105x80	11	58	178	400	
200	50	2,82	608406	2,41	604806	3,27	608906	240	140x110	105x80	11	50	178	450	

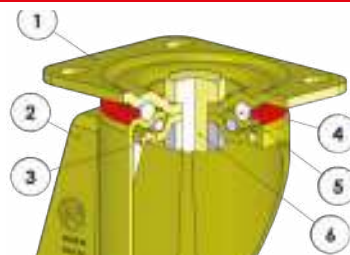
Medium-heavy duty brackets P - max carrying capacity 450 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

																
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	4 km/h	6 km/h
100	30	1,04	607102	0,63	608102	1,18	609002	138	100x85	80x60	9	46	123	170		
125	35	1,19	607103	0,74	608103	1,34	609003	161	100x85	80x60	9	44	123	230		
100	30	1,06	607302	0,65	608302	1,20	609102	138	100x85	80x60	9	46	123	170		
125	35	1,21	607303	0,76	608303	1,36	609103	161	100x85	80x60	9	44	123	230		
100	30	1,08	608202	0,67	608222	1,23	608242	138	100x85	80x60	9	46	123	200	160	
125	35	1,21	608203	0,76	608223	1,36	608243	161	100x85	80x60	9	44	123	250	200	

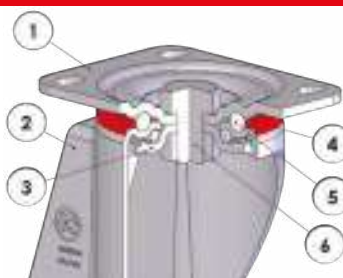
Medium-heavy duty brackets P - max carrying capacity 750 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

Available with adjustable total rear foot brake																	
		Front wheel						Rear wheel						Total rear foot brake			
																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	4 km/h	6 km/h
150	45	2,77	607604	1,85	608604	3,34	609004	200	140x110	105x80	11	70	126	350			
200	50	3,26	607606	2,40	608606	3,83	609006	250	140x110	105x80	11	70	126	450			
150	45	2,80	607504	1,88	608504	3,37	609104	200	140x110	105x80	11	70	126	350			
200	50	3,29	607506	2,44	608506	3,87	609106	250	140x110	105x80	11	70	126	450			
150	45	2,93	608211	2,01	608231	3,37	608251	200	140x110	105x80	11	70	126	350			
160	50	3,04	608210	2,12	608230	3,60	608250	205	140x110	105x80	11	70	126	400			
200	50	3,44	608206	2,58	608226	4,01	608246	250	140x110	105x80	11	70	126	450			
250	50	3,99	608208	3,13	608228	4,73	608248	298	140x110	105x80	11	66	126	750			

Stainless steel medium-heavy duty brackets PX - max carrying capacity 450 daN

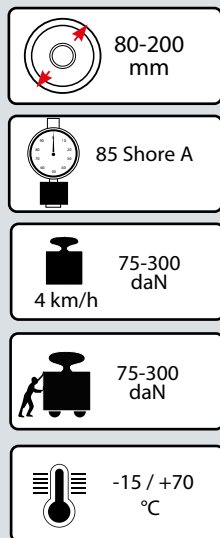


INOX

- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: screw and nut in stainless steel
- Available with adjustable total rear foot brake

Available with adjustable total rear foot brake																						
																						
mm	mm	kg	COD.		kg	COD.		kg	COD.		mm	mm	mm	mm	mm	mm	mm	mm	daN	4 km/h	6 km/h	
150	45	2,77	607004		1,85	607114		3,34	607214		200	140x110	105x80	11	70	126	350					
200	50	3,26	607006		2,40	607116		3,83	607216		250	140x110	105x80	11	70	126	450					
150	45	2,80	607314		1,88	607414		3,37	607514		200	140x110	105x80	11	70	126	350					
200	50	3,29	607316		2,44	607416		3,87	607516		250	140x110	105x80	11	70	126	450					
150	45	2,93	609411		2,01	609811		3,37	609911		200	140x110	105x80	11	70	126	350					
160	50	3,04	609410		2,12	609810		3,60	609910		205	140x110	105x80	11	70	126	400					
200	50	3,44	609406		2,58	609806		4,01	609906		250	140x110	105x80	11	70	126	450					

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE



INOX



Description

Tyre: blue non-marking thermoplastic polyurethane, hardness 85 Shore A, excellent rolling resistance and elasticity, good resistance to wear and tearing.

Centre: polyamide 6.

Hub with plain bore which directly houses the axle.

Hub with cylindrical roller bearing in a plastic cage. Also available with stainless steel roller bearings.

Hub with double shielding ball bearing, co-printed in centre (diam. 80-125 mm). Hub with double shielding ball bearing (diam. 150-200 mm). The bearing is protected from dirt, machining residue and corrosive substances by a glass-fibre reinforced polyamide installation bushing with internal labyrinth seal.

Uses

Suitable for trolleys and machinery with medium-duty loads, also in case of continuous handling.

Suitable for indoor use for frequent washing and sterilisation.

Excellent rolling resistance guarantees minimum effort in manual handling.

Examples of recommended applications: trolleys for industrial indoor use, tubular trolleys, trolleys for food and chemical industry, mobile scaffoldings (fitted with suitable brackets, they meet Standard UNI EN 1004-1:2021).

Environments of use

Suitable for industrial environments, also in presence of water and oils. Not suitable in presence of aggressive chemicals.

WEAK ACIDS				
STRONG ACIDS				
WATER				
ALCOHOL				

WEAK BASES				
STRONG BASES				
HYDROCARBONS				
SOLVENTS				

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin. Not recommended on unpaved floors or in presence of processing residues. They facilitate overcoming small obstacles along the path. They do not mark or damage fragile floors.



Force required to push or tow a wheel

 	50 kg	100 kg	150 kg	200 kg	250 kg	300 kg
80 mm	3,4	----	----	----	----	----
100 mm	1,5	4	----	----	----	----
125 mm	1	2,5	4	----	----	----
150x35 mm	< 1	2	3	4,5	----	----
150x45 mm 	< 1	1,8	3	3,3	4,1	----
150x45 mm 	< 1	1,3	2,5	2,3	2,8	----
160 mm 	< 1	1,3	1,7	2,2	3,3	----
200 mm 	< 1	< 1	1,6	2,5	3,7	5
200 mm 	< 1	< 1	1,4	1,9	2,3	2,9

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 80-200 mm

Top plate, bolt hole, solid stem, Zamak expander fittings. Available with front brake.



Stainless steel standard-duty brackets NLX

Maximum carrying capacity 300 daN - available diameters 80-200 mm

Top plate and bolt hole fittings Available with front brake.

Options available to order:

The series 61 wheels are also available with assembled thread guards (version with hub and roller bearings). To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE



															
mm	mm	kg	COD.	mm	mm	daN	daN	daN							
80	30	0,11	611101	12	39	160	75	75							
100	30	0,15	611102	12	44	200	120	120							
125	35	0,25	611103	15	44	350	180	180							
150	35	0,35	611105	15	44	400	220	230							
150	45	0,51	611104	20	59	450	240	250							
200	50	0,87	611106	20	59	500	300	300							



															
mm	mm	kg	COD.	kg	COD.	mm	mm	daN	daN	daN					
80	30	0,13	613101	0,13	613201	12	39	160	75	75					
100	30	0,17	613102	0,17	613202	12	44	200	120	120					
125	35	0,25	613103	0,25	613203	15	44	350	180	180					
150	35	0,37	613105	0,37	613205	15	44	400	220	230					
150	45	0,54	613104	0,54	613204	20	59	450	240	250					
200	50	0,92	613106	0,92	613206	20	59	500	300	300					



															
mm	mm	kg	COD.	kg	COD.	mm	mm.	daN	daN	daN					
80	30	0,17	612201	0,17	612401	8	40	160	85	85					
100	30	0,21	612202	0,21	612402	8	45	200	120	120					
125	35	0,30	612203	0,30	612403	8	45	350	180	180					
150	45	0,76	612204	0,76	612404	12	60	450	250	250					
160	50	0,87	612210	0,87	612410	12	60	470	275	275					
200	50	1,16	612206	1,16	612406	12	60	500	300	300					

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	4 km/h
80	30	0,57	614201	0,42	615701	0,73	616601	107	100x85	80x60	9	37	120	75		
100	30	0,64	614202	0,50	615702	0,80	616602	128	100x85	80x60	9	35	120	120		
125	35	0,85	614203	0,65	615703	1,01	616603	156	100x85	80x60	9	37	120	180		
150	35	0,97	614204	0,78	615704	1,13	616604	182	100x85	80x60	9	34	120	220		
150	45	1,84	614211	1,70	615711	2,14	616611	194	140x110	105x80	11	56	156	250		
200	50	2,28	614206	2,23	615706	2,57	616606	240	140x110	105x80	11	56	156	300		
80	30	0,59	614501	0,44	615901	0,74	616621	107	100x85	80x60	9	37	120	75		
100	30	0,66	614502	0,52	615902	0,82	616622	128	100x85	80x60	9	35	120	120		
125	35	0,87	614503	0,67	615903	1,03	616623	156	100x85	80x60	9	37	120	180		
150	35	0,99	614504	0,80	615904	1,15	616624	182	100x85	80x60	9	34	120	220		
150	45	1,87	614511	1,73	615911	2,17	616631	194	140x110	105x80	11	56	156	250		
200	50	2,31	614506	2,27	615906	2,60	616626	240	140x110	105x80	11	56	156	300		
80	30	0,62	614701	0,47	614801	0,77	614901	107	100x85	80x60	9	37	120	85		
100	30	0,69	614702	0,54	614802	0,85	614902	128	100x85	80x60	9	35	120	120		
125	35	0,87	614703	0,67	614803	1,03	614903	156	100x85	80x60	9	37	120	180		
150	45	2,00	614731	1,85	614811	2,29	614911	194	140x110	105x80	11	56	156	250		
160	50	2,11	614710	1,96	614810	2,40	614910	199	140x110	105x80	11	56	156	275		
200	50	2,46	614736	2,41	614806	2,75	614906	240	140x110	105x80	11	56	156	300		

Options available to order:



Bracket
with directional
lock
d. 80-125 mm



Directional lock
for brackets
d. 150-200 mm

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

																	
mm	mm	kg	COD.	kg	COD.	kg	mm	mm	mm	mm	mm	daN	4 km/h				
80	30	0,51	617701	0,67	616401		107	73	12	37	120	75					
100	30	0,58	617702	0,73	616402		128	73	12	35	120	120					
125	35	0,78	617703	0,95	616403		156	73	12	37	120	180					
150	35	0,91	617704	1,07	616404		182	73	12	34	120	220					
150	45	1,73	617711	2,05	616411		188	102	20	56	156	250					
200	50	2,19	617706	2,50	616406		236	102	20	56	156	300					
80	30	0,52	617801	0,68	616421		107	73	12	37	120	75					
100	30	0,60	617802	0,75	616422		128	73	12	35	120	120					
125	35	0,80	617803	0,97	616423		156	73	12	37	120	180					
150	35	0,93	617804	1,09	616424		182	73	12	34	120	220					
150	45	1,78	617811	2,08	616431		188	102	20	56	156	250					
200	50	2,22	617806	2,53	616426		236	102	20	56	156	300					
80	30	0,55	614301	0,71	615501		107	73	12	37	120	85					
100	30	0,62	614302	0,78	615502		128	73	12	35	120	120					
125	35	0,79	614303	0,96	615503		156	73	12	37	120	180					
150	45	1,34	614331	1,50	615511		188	102	20	56	156	250					
160	50	2,02	614310	2,32	615510		193	102	20	56	156	275					
200	50	2,37	614336	2,68	615506		236	102	20	56	156	300					

Options available to order:



Fitting
with threaded
stem

Standard-duty brackets NL - max carrying capacity 300 daN



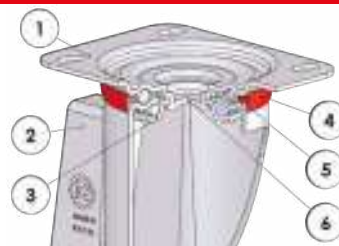
- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Stem: zamak expander
 - 5) King pin: bushing in electrolytically galvanised steel
 - 6) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

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THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE

Standard-duty brackets NLX in stainless steel - max carrying capacity 300 daN

INOX



- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN	mm	daN	mm
80	30	0,57	614401	0,42	615101	0,73	616701	107	100x85	80x60	9	37	120	75		
100	30	0,64	614402	0,50	615102	0,80	616702	128	100x85	80x60	9	35	120	120		
125	35	0,78	614403	0,66	615103	0,94	616703	156	100x85	80x60	9	37	120	180		
150	35	1,06	614404	0,94	615104	1,22	616704	182	100x85	80x60	9	34	120	220		
150	45	1,87	614411	1,73	615111	2,14	616711	194	140x110	105x80	11	56	156	250		
200	50	2,28	614406	2,23	615106	2,57	616706	240	140x110	105x80	11	56	156	300		
80	30	0,59	614601	0,44	615601	0,74	616721	107	100x85	80x60	9	37	120	75		
100	30	0,66	614602	0,52	615602	0,82	616722	128	100x85	80x60	9	35	120	120		
125	35	0,80	614603	0,68	615603	0,96	616723	156	100x85	80x60	9	37	120	180		
150	35	0,92	614604	0,80	615604	1,08	616724	182	100x85	80x60	9	34	120	220		
150	45	1,87	614611	1,73	615611	2,17	616731	194	140x110	105x80	11	56	156	250		
200	50	2,31	614606	2,27	615606	2,60	616726	240	140x110	105x80	11	56	156	300		
80	30	0,62	615401	0,47	615001	0,77	616901	107	100x85	80x60	9	37	120	85		
100	30	0,69	615402	0,54	615002	0,85	616902	128	100x85	80x60	9	35	120	120		
125	35	0,80	615403	0,68	615003	0,96	616903	156	100x85	80x60	9	37	120	180		
150	45	2,00	615411	1,85	615011	2,29	616911	194	140x110	105x80	11	56	156	250		
160	50	2,11	615410	1,96	615010	2,40	616910	199	140x110	105x80	11	56	156	275		
200	50	2,46	615406	2,41	615006	2,75	616906	240	140x110	105x80	11	56	156	300		

Standard-duty brackets NLX in stainless steel - max carrying capacity 300 daN

INOX



- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) King pin: bushing in stainless steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

																
mm	mm	kg	COD.		kg	COD.	mm	mm	mm	mm	mm	daN				
80	30	0,51	617901	≡	0,67	618801	≡	107	73	12	37	120	75			
100	30	0,58	617902	≡	0,73	618802	≡	128	73	12	35	120	120			
125	35	0,72	617903	≡	0,88	618803	≡	156	73	12	37	120	180			
150	35	0,78	617904	≡	0,94	618804	≡	182	73	12	34	120	220			
150	45	1,75	617911	≡	2,05	618811	≡	188	102	20	56	156	250			
200	50	2,19	617906	≡	2,50	618806	≡	236	102	20	56	156	300			
80	30	0,52	618001	≡	0,68	618821	≡	107	73	12	37	120	75			
100	30	0,60	618002	≡	0,75	618822	≡	128	73	12	35	120	120			
125	35	0,74	618003	≡	0,90	618823	≡	156	73	12	37	120	180			
150	35	0,84	618004	≡	1,00	618824	≡	182	73	12	34	120	220			
150	45	1,78	618011	≡	2,08	618831	≡	188	102	20	56	156	250			
200	50	2,22	618006	≡	2,53	618826	≡	236	102	20	56	156	300			
80	30	0,55	616301	I	0,71	616501	I	107	73	12	37	120	85			
100	30	0,62	616302	I	0,78	616502	I	128	73	12	35	120	120			
125	35	0,74	616303	I	0,90	616503	I	156	73	12	37	120	180			
150	45	1,34	616311	I	1,50	616511	I	188	102	20	56	156	250			
160	50	2,02	616310	I	2,32	616510	I	193	102	20	56	156	275			
200	50	2,37	616306	I	2,68	616506	I	236	102	20	56	156	300			



INOX



Description

Polyamide 6 solid wheels 6, hardness 70 Shore D.

Hub with plain bore which directly houses the axle.

Hub with cylindrical roller bearing with plastic cage. Also available with stainless steel roller bearings.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding. The wheel is also available without bearings.

Uses

Intended mainly for static uses, for medium-heavy capacities.

The excellent rolling resistance ensures that minimum manual effort is needed in handling, but only on smooth floors.

Examples of recommended applications: trolleys for internal use in the food and canning industries, tannery equipment, flower trolleys, manual pallet trucks, mobile scaffoldings (fitted with adequate brackets, they meet UNI EN 1004-1:2021 Standards).

Environments of use

Designed for industrial environments, even in presence of aggressive chemical substances. Not recommended in areas with strong organic acids and concentrated mineral acids.

WEAK ACIDS				WEAK BASES			
STRONG ACIDS				STRONG BASES			
WATER				HYDROCARBONS			
ALCOHOL				SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable only for smooth and compact floors.

Not suited for areas with obstacles.



Force required to push or tow a wheel

	100 kg	200 kg	300 kg	400 kg	500 kg	700 kg	1000 kg	1200 kg
65 mm	5.5	----	----	----	----	----	----	----
80 mm	4	----	----	----	----	----	----	----
100 mm	3.5	6	9	----	----	----	----	----
125 mm	2.5	5	6	8	----	----	----	----
150 mm	1	2.5	6	8	10	----	----	----
175 mm	< 1	2	5.5	7	9	----	----	----
200 mm	< 1	1.8	4.7	5.8	6.5	7.8	----	----
250 mm	< 1	1.5	4	4.5	6	8	12	16

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 350 daN - available diameters 65-250 mm
Top plate, bolt hole, solid stem fittings. Available with front brake.



Standard-duty brackets NLX in stainless steel

Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate and bolt hole fittings. Available with front brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 150-200 mm
Top plate fittings. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 730 daN - available diameters 100-200 mm
Top plate fittings. Available with front brake and adjustable rear brake.



Heavy supports in PX stainless steel

Maximum carrying capacity 730 daN - available diameters 150-200 mm
Top plate fittings. Available with adjustable rear brake.



Electrowelded brackets EE HD

Maximum carrying capacity 1200 daN - available diameters 250 mm
Top plate fittings. Available with adjustable rear brake.



Mobile scaffolding brackets (See Scaffolding section on page 360)

Maximum carrying capacity 400 daN - maximum capacity according to UNI EN 1004-2:2021 750 daN
Available diameters 125-200 mm. Top plate, solid stem and threaded stem with leveller fittings. Available with single brake and double pedal.

Options available to order:

The series 68 wheels are also available with assembled thread guards. To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.



Black polypropylene wheels (only version with hub with plain bore)



Polyamide 6 wheels for high loads (page 254)



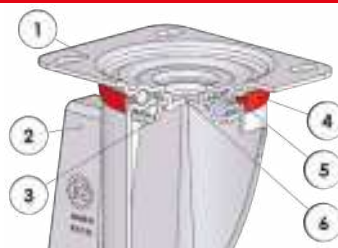
															
mm	mm	kg	CODE	mm	mm.	daN	daN	daN							
65	30	0.06	681100	12	34	125	90	120							
80	30	0.08	681111	12	39	200	150	180							
100	30	0.13	681112	12	44	350	175	300							
125	38	0.23	681103	15	44	450	200	400							
150	45	0.34	681104	20	59	600	250	500							
175	45	0.48	681105	20	59	700	275	630							
200	50	0.64	681106	20	59	800	315	730							
250	60	1.30	681108	25	88	1300	450	1200							

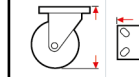
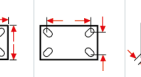
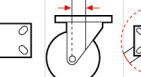


															
mm	mm	kg	CODE	kg	CODE	mm	mm	daN	daN	daN					
80	30	0.10	683111	0.10	683211	12	39	200	150	180					
100	30	0.15	683112	0.15	683212	12	44	350	175	300					
125	38	0.25	683103	0.25	683203	15	44	450	200	400					
150	45	0.51	683104	0.51	683204	20	59	600	250	500					
175	45	0.60	683105	0.60	683205	20	59	700	275	630					
200	50	0.82	683106	0.82	683206	20	59	800	315	730					
200	50	0.81	683116	0.81	683216	25	59	800	315	730					
250	60	1.38	683108			25	88	1300	450	1200					



															
mm	mm	kg	CODE	kg	CODE	mm	mm.	mm	mm	daN	daN	daN			
200	50	0.82	683306	0.63	682106	20	60	47	14	800	315	730			
200	50	0.81	683316	0.63	682106	25	60	47	14	800	315	730			



- |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |
|--|----|---|--------|---|--------|---|--------|---|---------|---|----|--|-----|---|----|---|----|---|----|---|--|
| mm | mm | kg | CODE | kg | CODE | kg | CODE | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | |
| 65 | 30 | 0.57 | 684500 | 0.37 | 685100 | | | 100 | 100x85 | 80x60 | 9 | 37 | | | | | | | | | |
| 80 | 30 | 0.58 | 684501 | 0.39 | 685101 | 0.78 | 686801 | 107 | 100x85 | 80x60 | 9 | 37 | 120 | | | | | | | | |
| 100 | 30 | 0.65 | 684502 | 0.46 | 685102 | 0.85 | 686802 | 128 | 100x85 | 80x60 | 9 | 35 | 120 | | | | | | | | |
| 125 | 38 | 0.89 | 684503 | 0.64 | 685103 | 1.04 | 686803 | 156 | 100x85 | 80x60 | 9 | 37 | 120 | | | | | | | | |
| 125PG | 38 | 1.10 | 684513 | 0.91 | 685143 | 1.30 | 686843 | 156 | 140x110 | 105x80 | 11 | 37 | 120 | | | | | | | | |
| 150B | 45 | 1.02 | 684512 | 0.85 | 685142 | | | 182 | 100x85 | 80x60 | 9 | 50 | | | | | | | | | |
| 150 | 45 | 1.77 | 684504 | 1.45 | 685104 | 1.99 | 686804 | 194 | 140x110 | 105x80 | 11 | 56 | 156 | | | | | | | | |
| 175 | 45 | 1.90 | 684505 | 1.56 | 685105 | 2.13 | 686805 | 217 | 140x110 | 105x80 | 11 | 56 | 156 | | | | | | | | |
| 200 | 50 | 2.14 | 684506 | 1.92 | 685106 | 2.33 | 686806 | 240 | 140x110 | 105x80 | 11 | 56 | 156 | | | | | | | | |
| 250 | 60 | 4.62 | 684108 | 3.19 | 685108 | | | 296 | 200x160 | 160x120 | 14 | 86 | | | | | | | | | |

tellureRôta | 113

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN					
65	30	0.51	687700			100	73	12	37		120					
80	30	0.52	687701	0.70	686701	107	73	12	37	120	180					
100	30	0.55	687702	0.80	686702	128	73	12	35	120	200					
125	38	0.85	687703	0.99	686703	156	73	12	37	120	220					
150	45	1.57	687704	1.86	686704	188	102	20	56	156	300					
175	45	1.73	687705	2.02	686705	212	102	20	56	156	300					
200	50	1.95	687706	2.24	686706	236	102	20	56	156	300					
80	30	0.54	687901	0.73	686721	107	73	12	37	120	180					
100	30	0.62	687902	0.83	686722	128	73	12	35	120	200					
125	38	0.87	687903	1.02	686723	156	73	12	37	120	220					
150	45	1.75	687904	2.03	686724	188	102	20	56	156	300					
175	45	1.85	687905	2.14	686725	212	102	20	56	156	300					
200	50	2.13	687906	2.42	686726	236	102	20	56	156	300					
200	50	2.19	688006	2.48	686606	236	102	20	56	156	300					

Options available to order:



Fitting with
threaded
stem

Standard-duty brackets NL - max carrying capacity 300 daN

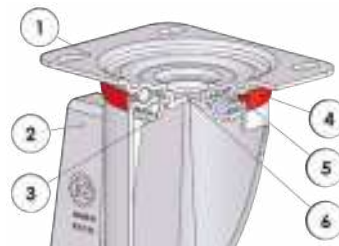


- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Solid stem: galvanised steel
 - 5) King pin: bushing in galvanised steel
 - 6) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
mm	mm	kg	CODE		kg	CODE		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm</

Stainless steel standard-duty brackets NLX - max carrying capacity 300 daN

INOX



- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	4 km/h
80	30	0.55	684401	0.29	685401	0.73	689001	107	100x85	80x60	9	37	120	180	
100	30	0.61	684402	0.36	685402	0.76	689002	128	100x85	80x60	9	35	120	200	
125	38	0.78	684403	0.63	685403	0.95	689003	156	100x85	80x60	9	37	120	220	
150B	45	1.03	684408	0.83	685408			182	100x85	80x60	9	50		220	
150	45	1.65	684404	1.20	685404	1.94	689004	194	140x110	105x80	11	56	156	300	
175	45	1.79	684405	1.35	685405	2.08	689005	217	140x110	105x80	11	56	156	300	
200	50	2.02	684406	1.56	685406	2.30	689006	240	140x110	105x80	11	56	156	300	

80	30	0.56	684601	0.31	685601	0.75	689101	107	100x85	80x60	9	37	120	180	
100	30	0.64	684602	0.39	685602	0.79	689102	128	100x85	80x60	9	35	120	200	
125	38	0.80	684603	0.65	685603	0.97	689103	156	100x85	80x60	9	37	120	220	
150B	45	1.21	684608	1.00	685608			182	100x85	80x60	9	50		220	
150	45	1.83	684604	1.39	685604	2.11	689104	194	140x110	105x80	11	56	156	300	
175	45	1.91	684605	1.47	685605	2.20	689105	217	140x110	105x80	11	56	156	300	
200	50	2.20	684606	1.75	685606	2.48	689106	240	140x110	105x80	11	56	156	300	

Stainless steel standard-duty brackets NLX -- max carrying capacity 300 daN

INOX

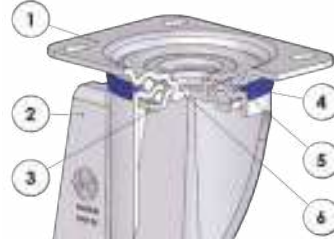


- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) King pin: bushing in stainless steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN					
80	30	0.50	685801	0.68	686001	107	73	12	37	120	180					
100	30	0.61	685802	0.79	686002	128	73	12	35	120	200					
125	38	0.79	685803	0.93	686003	156	73	12	37	120	220					
150	45	1.45	685804	1.75	686004	188	102	20	56	156	300					
175	45	1.61	685805	1.89	686005	212	102	20	56	156	300					
200	50	1.93	685806	2.22	686006	236	102	20	56	156	300					

80	30	0.52	685901	0.73	686021	107	73	12	37	120	180					
100	30	0.63	685902	0.81	686022	128	73	12	35	120	200					
125	38	0.81	685903	0.96	686023	156	73	12	37	120	220					
150	45	1.63	685904	1.93	686024	188	102	20	56	156	300					
175	45	1.73	685905	2.01	686025	212	102	20	56	156	300					
200	50	2.11	685906	2.40	686026	236	102	20	56	156	300					

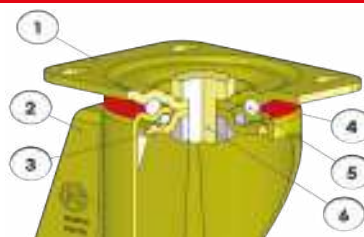
Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Dust seal: blue polyethylene
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: integrated with the plate and cold-riveted
Available with adjustable total front foot brake

																								
mm	mm	kg	CODE		kg	CODE		kg	CODE		mm	mm	mm	mm	mm	mm	daN							
150	45	2.12	684704		1.45	685104		2.52	688204		194	140x110	105x80	11	58	178	500							
200	50	2.53	684706		1.92	685106		2.89	688206		240	140x110	105x80	11	50	178	500							
150	45	2.29	685004		1.63	685304		2.70	689204		194	140x110	105x80	11	58	178	500							
200	50	2.71	685006		2.10	685306		3.01	689206		240	140x110	105x80	11	50	178	500							
200	50	2.69	684206		2.10	685166		3.22	684306		240	140x110	105x80	11	50	178	500							

Medium-heavy duty brackets P - max carrying capacity 730 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

																	
																	
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN		
150	45	2.80	687504	1.67	688504	2.98	686904	200	140x110	105x80	11	70	126	500			
175	45	2.86	687505	1.45	688505	3.43	686905	225	140x110	105x80	11	70	126	630			
200	50	3.11	687506	1.65	688506	3.39	686906	250	140x110	105x80	11	70	126	730			
150	45	2.97	687604	1.57	688604	3.54	686924	200	140x110	105x80	11	70	126	500			
175	45	2.98	687605	1.69	688605	3.55	686925	225	140x110	105x80	11	70	126	630			
200	50	3.28	687606	1.83	688606	3.85	686926	250	140x110	105x80	11	70	126	730			
200	50	3.35	684966	1.89	685366	3.63	686946	250	140x110	105x80	11	70	126	730			

Stainless steel medium-heavy duty brackets PX - max carrying capacity 730 daN



INOX

- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: red polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: screw and nut in stainless steel
- Available with adjustable total rear foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
150	45	2.66	687004	1.23	687114	3.23	687214	200	140x110	105x80	11	70	126	500	
175	45	2.86	687005	1.42	687115	3.43	687215	225	140x110	105x80	11	70	126	630	
200	50	3.06	687006	1.62	687116	3.63	687216	250	140x110	105x80	11	70	126	730	
150	45	2.86	687314	1.41	687414	3.40	687514	200	140x110	105x80	11	70	126	500	
175	45	2.94	687315	1.54	687415	3.51	687515	225	140x110	105x80	11	70	126	630	
200	50	3.24	687316	1.80	687416	3.81	687516	250	140x110	105x80	11	70	126	730	

Electrowelded brackets EE HD - max carrying capacity 1200 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn tips electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable rear drive brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
250	60	7.99	688307	6.40	688407	8.87	688707	320	175x140	140x105	14	74	166	1200	



Our work, our passion

SIGMA ELASTIC RUBBER WHEELS WITH POLYAMIDE 6 CENTRE



100-200
mm



70 Shore A



150-450
daN
4 km/h



100-350
daN



-20 / +70
°C

INOX



Description

Tyre: blue non-marking Sigma Elastic rubber, hardness 70 Shore A, good resistance to tear and wear.

Centre: polyamide 6.

Hub with plain bore which directly houses the axle.

Hub with cylindrical roller bearing in plastic cage. Also available with stainless steel roller bearings.

Hub with ball bearings with interference assembly in the seats obtained by centre moulding. The wheel is also available without bearings.

Uses

Wheels with excellent elasticity features, they are particularly suitable for use on uneven surfaces, in presence of obstacles or for mixed indoor/outdoor uses with medium-duty loads.

The good elasticity and rolling resistance guarantee minimum effort, particularly on uneven surfaces.

Examples of recommended applications: trolleys for industrial indoor and outdoor handling, manual pallet trucks, flight cases for transporting musical instruments.

Environments of use

Designed for industrial environments, even in presence of medium-harsh chemical agents. Not suitable in presence of organic, aromatic solvents, chlorinated substances and hydrocarbons.

WEAK ACIDS		
STRONG ACIDS		
WATER		
ALCOHOL		

WEAK BASES		
STRONG BASES		
HYDROCARBONS		
SOLVENTS		

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

They are suitable for use on all types of floors, even in presence of obstacles. They do not mark or damage fragile floors.



Force required to push or tow a wheel

 	50 kg	100 kg	150 kg	200 kg	300 kg	400 kg
100 mm	2	5	8	----	----	----
125 mm	1.8	3	5	7	----	----
160 mm	1	2	3	5	8.5	----
180 mm	< 1	1	2	3	5.5	----
200 mm	< 1	< 1	1	1.7	3.5	6.5

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 100-200 mm
Top plate, bolt hole and solid stem fittings. Available with front brake.



Stainless steel standard-duty brackets NLX

Maximum carrying capacity 300 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake.



Medium-duty brackets M

Maximum carrying capacity 450 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 450 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Stainless steel medium-heavy duty brackets PX

Maximum carrying capacity 450 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable rear brake.

Options available to order:

The series 73 wheels are also available with assembled thread guards. To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.

SIGMA ELASTIC RUBBER WHEELS WITH POLYAMIDE 6 CENTRE



															
mm	mm	kg	CODE	mm	mm.	daN	daN	daN							
100	40	0.31	731102	12	44	200	100	150							
125	40	0.38	731103	15	44	270	150	230							
160	50	0.83	731104	20	59	350	200	300							
180	50	0.90	731105	20	59	400	280	350							
200	50	1.04	731106	20	59	510	350	450							

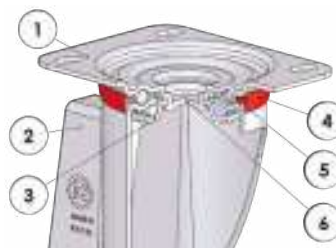


															
mm	mm	kg	CODE	kg	CODE	mm	mm	daN	daN	daN					
100	40	0.36	733102	0.36	733202	12	44	200	100	150					
125	40	0.58	733103	0.58	733203	20	44	270	150	230					
160	50	1.04	733104	1.04	733204	20	59	350	200	300					
180	50	1.10	733105	1.10	733205	20	59	400	280	350					
200	50	1.25	733106	1.25	733206	20	59	510	350	450					



															
mm	mm	kg	CODE	kg	CODE	mm	mm.	mm	mm	daN	daN	daN			
100	40	0.36	732102	0.29	734102	12	40	32	11.5	200	120	150			
125	40	0.58	732103	0.38	734103	20	44	47	17	270	200	230			
160	50	0.99	732104	0.79	734104	20	58	47	17	350	250	300			
160	50	0.94	732114	0.79	734104	25	58	47	17	350	250	300			
180	50	1.05	732105	0.85	734105	20	58	47	17	400	320	350			
180	50	1.00	732115	0.85	734105	25	58	47	17	400	320	350			
200	50	1.12	732106	0.92	734106	20	58	47	17	510	350	450			
200	50	1.07	732116	0.92	734106	25	58	47	17	510	350	450			

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	4 km/h	
100	40	0.85	735002	0.65	735102	0.97	735202	128	100x85	80x60	9	35	120	150		
125	40	1.08	735003	0.81	735103	1.19	735203	156	100x85	80x60	9	37	120	220		
160	50	2.11	735004	1.74	735104	2.36	735204	198	140x110	105x80	11	56	156	300		
180	50	2.22	735005	1.81	735105	2.46	735205	219	140x110	105x80	11	56	156	300		
200	50	2.44	735006	1.98	735106	2.69	735206	240	140x110	105x80	11	56	156	300		
100	40	0.91	735302	0.70	735402	1.02	735502	128	100x85	80x60	9	35	120	150		
125	40	1.23	735303	0.96	735403	1.34	735503	156	100x85	80x60	9	37	120	220		
160	50	2.32	735304	1.89	735404	2.51	735504	198	140x110	105x80	11	56	156	300		
180	50	2.42	735305	1.96	735405	2.61	735505	219	140x110	105x80	11	56	156	300		
200	50	2.65	735306	2.06	735406	2.77	735506	240	140x110	105x80	11	56	156	300		
100	40	0.91	735602	0.70	735702	1.02	735802	128	100x85	80x60	9	35	120	150		
125	40	1.23	735603	0.96	735703	1.34	735803	156	100x85	80x60	9	37	120	220		
160	50	2.32	735604	1.94	735704	2.56	735804	198	140x110	105x80	11	56	156	300		
180	50	2.42	735605	2.01	735705	2.66	735805	219	140x110	105x80	11	56	156	300		
200	50	2.65	735606	2.19	735706	2.89	735806	240	140x110	105x80	11	56	156	300		

Options available to order:



Bracket
with directional
lock
d. 80-125 mm



Directional lock
for brackets
d. 150-200 mm



Bracket
with active
centralised
brake
d. 160-200 mm

SIGMA ELASTIC RUBBER WHEELS WITH POLYAMIDE 6 CENTRE

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

											 4 km/h				
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN				
100	40	0.75	737702 	0.93	738202 	128	73	12	35	120	150				
125	40	0.90	737703 	1.11	738203 	156	73	12	37	120	220				
160	50	1.43	737704 	1.56	738204 	193	102	20	56	156	300				
180	50	2.21	737705 	2.49	738205 	214	102	20	56	156	300				
200	50	2.35	737706 	2.63	738206 	236	102	20	56	156	300				

100	40	0.81	737802 	0.98	738302 	128	73	12	35	120	150				
125	40	1.05	737803 	1.26	738303 	156	73	12	37	120	220				
160	50	1.64	737804 	1.77	738304 	193	102	20	56	156	300				
180	50	2.41	737805 	2.69	738305 	214	102	20	56	156	300				
200	50	2.56	737806 	2.84	738306 	236	102	20	56	156	300				

100	40	0.81	735902 	0.98	738402 	128	73	12	35	120	150				
125	40	1.05	735903 	1.26	738403 	156	73	12	37	120	220				
160	50	1.64	735904 	1.77	738404 	193	102	20	56	156	300				
180	50	2.41	735905 	2.69	738405 	214	102	20	56	156	300				
200	50	2.56	735906 	2.84	738406 	236	102	20	56	156	300				

Options available to order:

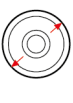
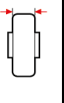
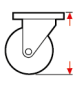
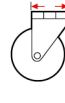
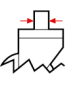
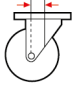
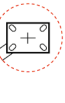


Bracket with Zamak
stem fitted
d. 80-125 mm

Standard-duty brackets NL - max carrying capacity 300 daN

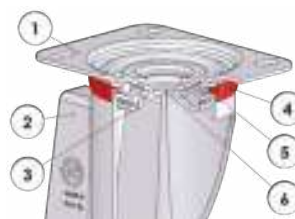


- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Solid stem: galvanised steel
 - 5) King pin: bushing in galvanised steel
 - 6) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

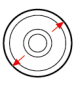
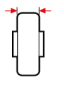
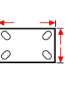
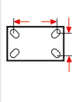
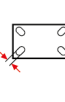
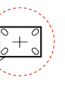
															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	mm	daN	
100	40	0,81	738702	0,96	738802	128	73	22	47	35	120			150	
125	40	1,02	738703	1,19	738803	156	73	22	47	37	120			220	
160	50	1,44	738704	1,60	738804	193	102	26	56	56	156			300	
180	50	2,44	738705	2,74	738805	214	102	26	56	56	156			300	
200	50	2,62	738706	2,93	738806	236	102	26	56	56	156			300	

Stainless steel -standard duty brackets NLX - max carrying capacity 300 daN

INOX



- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: screw and nut in stainless steel
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	
100	40	0.85	739402	0.65	739502	0.97	739602	128	100x85	80x60	9	35	120		150	
125	40	1.08	739403	0.81	739503	1.19	739603	156	100x85	80x60	9	37	120		220	
160	50	2.11	739404	1.74	739504	2.36	739604	198	140x110	105x80	11	56	156		300	
200	50	2.44	739406	1.98	739506	2.69	739606	240	140x110	105x80	11	56	156		300	
100	40	0.91	739702	0.70	739802	1.02	739902	128	100x85	80x60	9	35	120		150	
125	40	1.23	739703	0.96	739803	1.34	739903	156	100x85	80x60	9	37	120		220	
160	50	2.32	739704	1.89	739804	2.51	739904	198	140x110	105x80	11	56	156		300	
200	50	2.65	739706	2.06	739806	2.77	739906	240	140x110	105x80	11	56	156		300	

SIGMA ELASTIC RUBBER WHEELS WITH POLYAMIDE 6 CENTRE

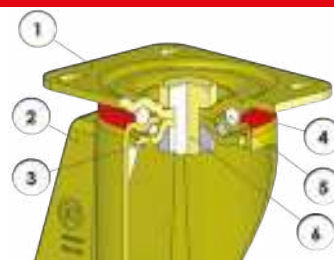
Medium-duty brackets M - max carrying capacity 450 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
160	50	2.46	736904	1.74	735104	2.89	737604	198	140x110	105x80	11	58	178	300	
200	50	2.83	736906	1.98	735106	3.24	737606	240	140x110	105x80	11	50	178	450	
160	50	2.67	738904	1.94	735404	3.09	739004	198	140x110	105x80	11	58	178	300	
200	50	3.04	738906	2.19	735406	3.44	739006	240	140x110	105x80	11	50	178	450	
160	50	2.62	739104	1.89	735704	3.04	739204	198	140x110	105x80	11	58	178	300	
200	50	2.91	739106	2.06	735706	3.32	739206	240	140x110	105x80	11	50	178	450	

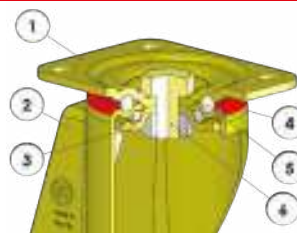
Medium-heavy duty brackets P - max carrying capacity 450 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
100	40	1,18	736002	0,69	736102	1,33	736202	138	100x85	80x60	9	46	123	150	
125	40	1,34	736003	0,82	736103	1,48	736203	161	100x85	80x60	9	44	123	230	
100	40	1,23	736302	0,73	736402	1,37	736502	138	100x85	80x60	9	46	123	150	
125	40	1,49	736303	0,97	736403	1,63	736503	161	100x85	80x60	9	44	123	230	
100	40	1,23	736602	0,73	736702	1,37	736802	138	100x85	80x60	9	46	123	150	
125	40	1,49	736603	0,97	736703	1,63	736803	161	100x85	80x60	9	44	123	230	

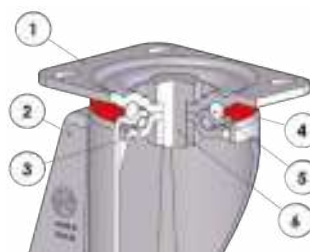
Medium-heavy duty brackets P - max carrying capacity 450 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	
160	50	3,18	736004	1,79	736104	3,75	736204	205	140x110	105x80	11	70	126	300		
180	50	3,29	736005	1,89	736105	3,86	736205	225	140x110	105x80	11	70	126	350		
200	50	3,54	736006	2,05	736106	4,11	736206	250	140x110	105x80	11	70	126	450		
160	50	3,39	736304	1,99	736404	3,91	736504	205	140x110	105x80	11	70	126	300		
180	50	3,49	736305	2,09	736405	4,06	736505	225	140x110	105x80	11	70	126	350		
200	50	3,74	736306	2,26	736406	4,31	736506	250	140x110	105x80	11	70	126	450		
160	50	3,34	736604	1,99	736704	3,91	736804	205	140x110	105x80	11	70	126	300		
180	50	3,44	736605	2,04	736705	4,01	736805	225	140x110	105x80	11	70	126	350		
200	50	3,62	736606	2,13	736706	4,19	736806	250	140x110	105x80	11	70	126	450		

Stainless steel medium-heavy duty brackets PX - max carrying capacity 450 daN

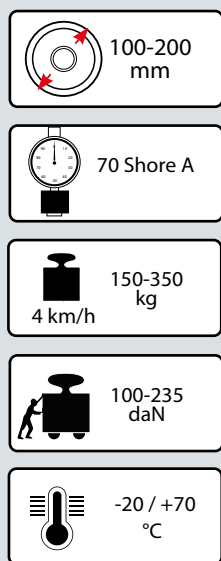


INOX

- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: screw and nut in stainless steel
- Available with adjustable total rear foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	
160	50	3,19	737004	1,74	737104	3,76	737204	205	140x110	105x80	11	70	126	300		
180	50	3,36	737005	1,81	737105	3,93	737205	225	140x110	105x80	11	70	126	350		
200	50	3,58	737006	1,98	737106	4,15	737206	250	140x110	105x80	11	70	126	450		
160	50	3,40	737304	1,94	737404	3,97	737504	205	140x110	105x80	11	70	126	300		
180	50	3,56	737305	2,01	737405	4,13	737505	225	140x110	105x80	11	70	126	350		
200	50	3,78	737306	2,19	737406	4,35	737506	250	140x110	105x80	11	70	126	450		

ELASTIC RUBBER WHEELS WITH POLYAMIDE 6 CENTRE



Description

Tyre: blue non-marking elastic rubber, hardness 70 Shore A

Centre: in polyamide 6.

Hub with plain bore hole which directly houses the axle.

Hub with ball bearings with interference assembly in the seats obtained by centre moulding.

Uses

Wheels with good elasticity, they are particularly suitable for use on uneven surfaces, in presence of obstacles or for mixed indoor/outdoor uses with medium-duty loads. Examples of recommended applications: trolleys for industrial indoor and outdoor handling, manual transpallet, flight cases for transporting musical instruments.

Environments of use

Designed for industrial environments, even in presence of medium-harsh chemical agents. Not suitable in presence of organic, aromatic solvents, chlorinated substances and hydrocarbons.

WEAK ACIDS		
STRONG ACIDS		
WATER		
ALCOHOL		

WEAK BASES		
STRONG BASES		
HYDROCARBONS		
SOLVENTS		

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

They are suitable for use on all types of floors, even in the presence of obstacles. They do not mark or damage fragile floors.



Force required to push or tow a wheel

 	50 kg	100 kg	150 kg	200 kg	300 kg	400 kg
100 mm	2	5	8	----	----	----
125 mm	1.8	3	5	7	----	----
160 mm	1	2	3	6	8.5	----
200 mm	< 1	1.7	2.5	3.8	6.5	----

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake and centralised brake.



Medium-heavy duty brackets P

Maximum carrying capacity 350 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.

SERIES 73AE

ELASTIC RUBBER WHEELS WITH POLYAMIDE 6 CENTRE

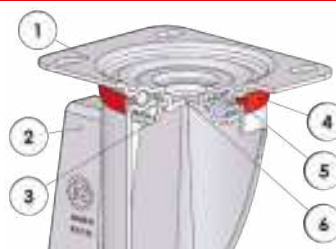


															
mm	mm	kg	CODE	mm	mm	daN	daN	daN							
100	36	0.22	731102AE	12	44	200	100	150							
125	36	0.33	731103AE	12	44	270	150	200							
160	48	0.76	731104AE	20	59	350	175	300							
200	48	1.06	731106AE	20	59	510	235	350							



															
mm	mm	kg	CODE	mm	mm	mm	mm	daN	daN	daN					
100	36	0.32	732102AE	12	40	32	10	200	100	150					
125	36	0.41	732103AE	12	40	32	10	270	150	200					
160	48	0.98	732104AE	20	55	47	14	350	175	300					
200	48	1.28	732106AE	20	55	47	14	510	235	350					

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN		
100	36	0.76	735002AE	0.56	735102AE	0.88	735202AE	128	100x85	80x60	9	35	120	150		
125	36	1.03	735003AE	0.76	735103AE	1.14	735203AE	156	100x85	80x60	9	37	120	200		
160	48	2.04	735004AE	1.67	735104AE	2.29	735204AE	198	140x110	105x80	11	56	156	300		
200	48	2.46	735006AE	2.00	735106AE	2.71	735206AE	240	140x110	105x80	11	56	156	300		

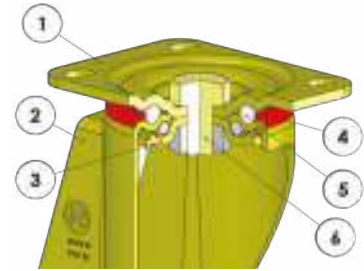
100	36	0.87	735602AE	0.66	735702AE	0.93	735802AE	128	100x85	80x60	9	35	120	150		
125	36	1.06	735603AE	0.79	735703AE	1.12	735803AE	156	100x85	80x60	9	37	120	200		
160	48	2.26	735604AE	1.88	735704AE	2.50	735804AE	198	140x110	105x80	11	56	156	300		
200	48	2.68	735606AE	2.22	735706AE	2.93	735806AE	240	140x110	105x80	11	56	156	300		



															
mm	mm	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN				
160	50	2,47	734804AE	199	140x110	105x80	11	56	M10x1,5	65	300				
200	50	2,87	734806AE	240	140x110	105x80	11	56	M10x1,5	65	300				

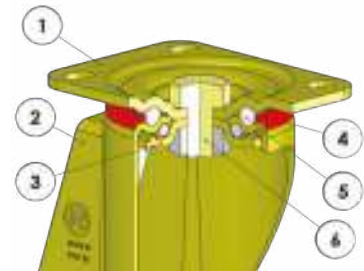
SERIES 73AE ELASTIC RUBBER WHEELS WITH POLYAMIDE 6 CENTRE

Medium-heavy duty brackets P - max carrying capacity 350 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN
100	36	1.09	736002AE	0.60	736102AE	1.24	736202AE	138	100x85	80x60	9	46	123	150
125	36	1.29	736003AE	0.77	736103AE	1.28	736203AE	161	100x85	80x60	9	44	123	200
100	36	1.19	736602AE	0.69	736702AE	1.33	736802AE	138	100x85	80x60	9	46	123	150
125	36	1.32	736603AE	0.80	736703AE	1.46	736803AE	161	100x85	80x60	9	44	123	200



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN
160	48	3.11	736004AE	1.72	736104AE	3.68	736204AE	205	140x110	105x80	11	70	126	300
200	48	3.56	736006AE	2.07	736106AE	4.13	736206AE	250	140x110	105x80	11	70	126	350
160	48	3.33	736604AE	1.98	736704AE	3.90	736804AE	205	140x110	105x80	11	70	126	300
200	48	3.78	736606AE	2.29	736706AE	4.35	736806AE	250	140x110	105x80	11	70	126	350



Details make the difference

INDUSTRIAL HEAVY DUTY LOADS AND MECHANICAL HANDLING

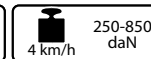


SERIES **58AL**

"TR-POWERHIGH" POLYURETHANE WHEELS WITH ALUMINIUM CENTRE



100-200
mm



250-850
daN



250-430
daN



200-680
daN



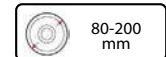
-20 / +80
°C

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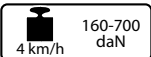


SERIES **62B**

"TR-ROLL" POLYURETHANE WHEELS WITH ALUMINIUM CENTRE



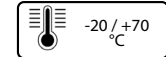
80-200
mm



160-700
daN



160-700
daN



-20 / +70
°C

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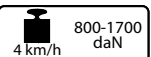


SERIES **62T**

"TR-ROLL" POLYURETHANE WHEELS WITH CAST IRON CENTRE



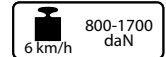
200-400
mm



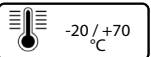
800-1700
daN



700-900
daN



800-1700
daN



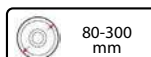
-20 / +70
°C

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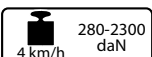


SERIES **63T** VULKOLLAN®

VULKOLLAN® WHEELS WITH CAST IRON CENTRE



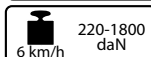
80-300
mm



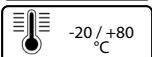
280-2300
daN



190-600
daN



220-1800
daN



-20 / +80
°C

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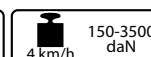


SERIES **64**

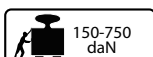
"TR" POLYURETHANE WHEELS WITH CAST IRON CENTRE



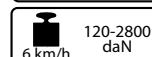
80-400
mm



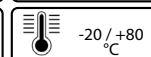
150-3500
daN



150-750
daN



120-2800
daN



-20 / +80
°C

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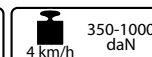


SERIES **65B**

THICK "TR" POLYURETHANE WHEELS WITH ALUMINIUM CENTRE



100-250
mm



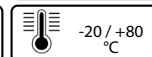
350-1000
daN



270-380
daN



280-800
daN



-20 / +80
°C

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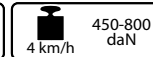


SERIES **65E**

"TR" POLYURETHANE WHEELS WITH ERGONOMIC ROUND PROFILE AND ALUMINIUM CENTRE



100-250
mm



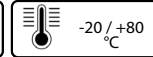
450-800
daN



250-330
daN



360-800
daN



-20 / +80
°C

ERGO
WORKPLACE

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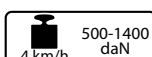


SERIES **69**

CAST IRON SOLID WHEELS



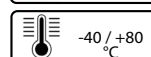
100-200
mm



500-1400
daN



260-800
daN



-40 / +80
°C

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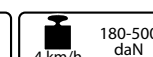


SERIES **72A**

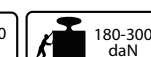
SIGMA ELASTIC RUBBER WHEELS WITH ALUMINIUM CENTRE



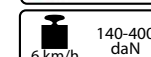
100-250
mm



180-500
daN



180-300
daN



140-400
daN



-20 / +70
°C

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SERIES **58H**

THICK "TR-POWERHIGH" POLYURETHANE
WHEELS WITH ALUMINIUM CENTRE

100-200 mm	280-400 daN	270-350 daN
280-640 daN	-20 / +80 °C	

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SERIES **58T**

"TR-POWERHIGH" POLYURETHANE
WHEELS WITH CAST IRON CENTRE

80-400 mm	350-3000 daN	210-820 daN
280-2400 daN	-20 / +70 °C	

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SERIES **62A**

THICK "TR-ROLL" POLYURETHANE
WHEELS WITH ALUMINIUM CENTRE

100-250 mm	300-800 daN	300-700 daN
300-800 daN	-20 / +70 °C	

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SERIES **62B**

"TR-ROLL" POLYURETHANE WHEELS
WITH ERGONOMIC ROUND PROFILE
AND ALUMINIUM CENTRE

100-250 mm	200-800 daN	200-800 daN
200-700 daN	-20 / +70 °C	

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SERIES **62Z**

"TR-ROLL" POLYURETHANE WHEELS WITH
POLYAMIDE 6 CENTRE

100-200 mm	230-500 daN	230-500 daN
230-450 daN	-20 / +70 °C	

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SERIES **63U**

VULKOLLAN® WHEELS
WITH STEEL CENTRE

100-250 mm	250-1500 daN	190-550 daN
200-1200 daN	-20 / +80 °C	

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SERIES **65A**

"TR" POLYURETHANE WHEELS
WITH ALUMINIUM CENTRE

80-200 mm	220-850 daN	150-360 daN
170-680 daN	-20 / +80 °C	

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SERIES **65T**

"TR" POLYURETHANE WHEELS
WITH CAST IRON CENTRE

150-300 mm	400-2200 daN	280-550 daN
320-1700 daN	-20 / +80 °C	

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SERIES **66**

"TR" POLYURETHANE WHEELS
WITH POLYAMIDE 6 CENTRE

80-250 mm	150-1000 daN	100-400 daN
120-480 daN	-20 / +80 °C	

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SERIES **68A**

POLYAMIDE 6 SOLID WHEELS FOR
HEAVY-DUTY LOADS

100-200 mm	350-1500 daN	200-650 daN
-30 / +80 °C		

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SERIES **72T**

SIGMA ELASTIC RUBBER WHEELS
CAST IRON CENTRE

120-300 mm	300-950 daN	250-500 daN
240-760 daN	-20 / +70 °C	

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"TR-POWERHIGH" POLYURETHANE WHEELS WITH ALUMINIUM CENTRE

100-200
mm

92 Shore A

250-850
daN
4 km/h

200-680
daN
6 km/h

250-430
daN

-20 / +80
°C



Description

Tyre: "TR- PowerHigh" polyurethane for high dynamic performance, hardness 92 Shore A, excellent rolling resistance and elasticity, very good resistance to wear and to tear, good resistance to hydrolisis.

Centre: made of cast aluminium.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

The excellent rolling resistance allows easy manual handling of even very high loads; they are suitable for use also for towed applications with speeds up to 8 km / h; for these reasons, they are perfect in case of use with mixed manual-mechanical handling. Examples of recommended applications: trolleys for internal handling in the logistics and automotive industries, electric pallet trucks.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

WEAK ACIDS				WEAK BASES			
STRONG ACIDS				STRONG BASES			
WATER				HYDROCARBONS			
ALCOHOL				SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.
Not suitable if large obstacles are present.



Force required to push or tow a wheel

 	150 kg	250 kg	350 kg	450 kg	550 kg	700 kg	850 kg
100 mm	2	5					
125 mm	1,5	4,1	6,2				
160 mm	<1	3	4,8	6,3	7,7	10	
200 mm	<1	3	4,9	6	7,8	9	15,50

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Medium-heavy duty brackets P

Maximum carrying capacity 350 daN - available diameters 100-125 mm
Top plate fitting. Available with front brake.



Heavy-duty PT brackets with hardened ball race grooves

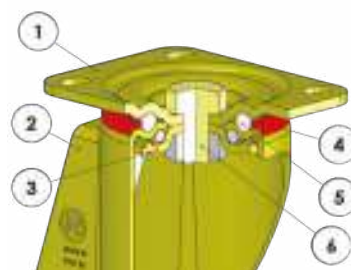
Heavy-duty PT brackets with hardened ball race grooves.
Maximum carrying capacity 850 daN - available diameters 160-200 mm

"TR-POWERHIGH POLYURETHANE WHEELS WITH ALUMINIUM CENTRE



														
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN	
100	30	0,34	582002	0,25	583102	12	40	32	10	350	250	250	200	
125	35	0,50	582003	0,41	583103	12	40	32	10	500	310	400	320	
160	50	1,25	582014	0,99	583114	20	58	47	14	950	375	800	640	
200	50	1,47	582006	1,16	583106	20	55	52	15	1000	430	850	680	

Heavy duty brackets P - max carrying capacity 350 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
100	30	1,20	587602	0,82	588602	1,35	586602	138	100x85	80x60	9	46	123	250	200
125	35	1,39	587603	0,97	588603	1,54	586603	161	100x85	80x60	9	44	123	350	320

Options available to order:

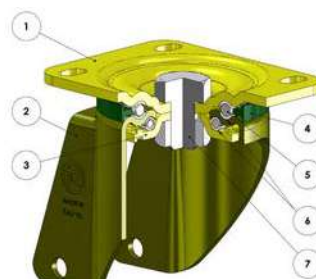


Directional lock
for P-PT brackets
d. 150-200 mm

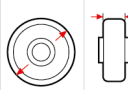
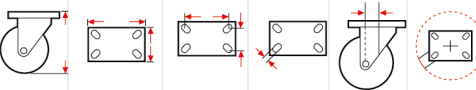


Footguard
for brackets
P-PT

Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 850 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
160	50	3,52	587554	2,53	588614	4,09	586684	205	140x110	105x80	11	70	126	800	640
200	50	3,94	587546	2,48	588606	4,41	586676	250	140x110	105x80	11	70	126	850	680

WHEELS WITH THICK "TR-POWERHIGH" POLYURETHANE AND ALUMINIUM CENTRE



100-200 mm



92 Shore A



350-800 daN
4 km/h



280-640 daN
6 km/h



280-400 daN



-20 / +80 °C



Description

Tyre: "TR- PowerHigh" polyurethane for high dynamic performance, hardness 92 Shore A, excellent rolling resistance and elasticity, very good resistance to wear and to tear, good resistance to hydrolisis.

Centre: made of cast aluminium.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

The thick tread design guarantees excellent ability to overcome obstacles and excellent performance over time even at high speeds (up to 12 km/h).

Examples of recommended applications: trolleys for indoor handling in the logistics and automotive industry, electrical pallet trucks.

Environments of use

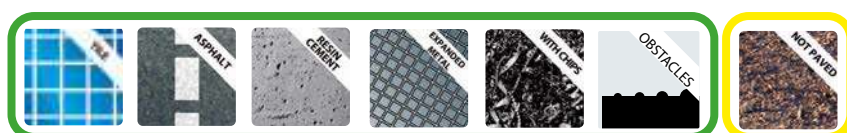
Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

WEAK ACIDS		WEAK BASES	
STRONG ACIDS		STRONG BASES	
WATER		HYDROCARBONS	
ALCOHOL		SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of industrial floors, except unpaved; it easily overcomes obstacles.



Force required to push or tow a wheel

 	100 kg	300 kg	400 kg	500kg	650 kg	800 kg
100 mm	2,3	5,3				
125 mm	2,2	5				
160 mm	1,6	4,3	5,4	6,5	10	
200 mm	1	3,8	5	6,1	8	11

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Medium-heavy duty brackets P

Maximum carrying capacity 350 daN - available diameters 100 mm
Top plate fitting. Available with front brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 800 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



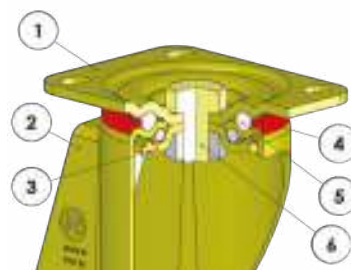
Electrowelded twin brackets EEG MHD

Maximum carrying capacity 1500 daN – available diameters 160-200 mm
Top plate fitting. Available with adjustable rear foot brake, operating on wheel rotation only



															
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN		
100	40	0,45	582302	0,37	584302	15	40	32	9	500	280	350	280		
125	40	0,76	582303	0,53	584303	20	50	47	14	650	300	450	360		
160	50	1,21	582304	0,95	584304	20	58	47	14	900	350	700	560		
200	50	1,75	582306	1,47	584306	20	60	47	14	1000	400	800	640		

Heavy duty brackets P - max carrying capacity 350 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN		
100	40	1,33	585302	0,83	585412	1,50	585502	138	100x85	80x60	9	46	123	350	280		

Options available to order:

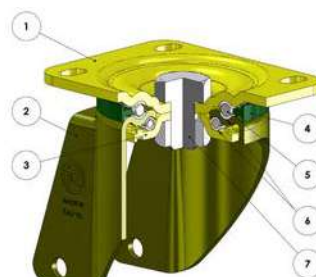


Directional lock
for P-PT brackets
d. 150-200 mm



Footguard
for brackets
P-PT

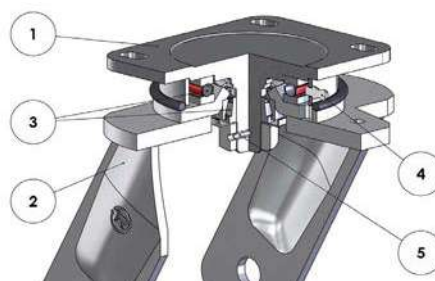
Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 800 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
125	40	2,30	585333	1,63	585403	2,83	585533	170	140x110	105x80	11	70	126	450	360
160	50	3,34	585344	2,04	585414	3,97	585544	205	140x110	105x80	11	70	126	700	560
200	50	4,36	585336	2,76	585416	4,89	585536	250	140x110	105x80	11	70	126	800	640

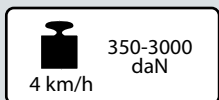
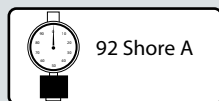
Electrowelded twin brackets EE MHD - max carrying capacity 1500 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn tips electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable rear foot brake, operating on wheel rotation only

																
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	daN
160	50+50	7,15	588074	6,28	588174	8,14	588274	221	135x110	135x175	105x80	11	55	182	1400	1100
200	50+50	8,37	588076	7,52	588176	9,37	588276	258	135x110	135x175	105x80	11	65	182	1500	1280

"TR-POWERHIGH" POLYURETHANE WHEELS WITH CAST IRON CENTRE



Description

Tyre: "TR- PowerHigh" polyurethane for high dynamic performance, hardness 92 Shore A, excellent rolling resistance and elasticity, very good resistance to wear and to tear, good resistance to hydrolisis.

Centre: cast iron.

Hub available in following configurations:

- with plain bore so that it can easily be reworked to achieve a spline or a key housing;
- with shielded ball bearing press-fitted in the seats obtained by precision machining the centre; also available without bearings.

Uses

TR- PowerHigh is the most suitable solution in case of applications with very high loads, speed of use above 12-16 km/h, intensive use, even in environments requiring resistance to hydrolisis. The excellent rolling resistance allows to easily handle high loads even with small diameter wheels.

The plain bore version, with key way or spline, is suitable for use as a drive wheel.

Examples of recommended applications: AGVs, AMRs and robotic solutions, automation, electric pallet trucks and forklifts, amusement park equipments, elevators, towed trolleys for industrial use.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated steam.

WEAK ACIDS		
STRONG ACIDS		
WATER		
ALCOHOL		

WEAK BASES		
STRONG BASES		
HYDROCARBONS		
SOLVENTS		

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.

Not suitable if large obstacles are present.



Force required to push or tow a wheel

 	150 kg	300 kg	450 kg	600 kg	1000 kg	1500 kg	2000 kg	2800 kg
80 mm	4	10	----	----	----	----	----	----
100 mm	3,4	7	----	----	----	----	----	----
125x38 mm	3,1	6	10,3	----	----	----	----	----
125x50 mm	3	5,8	9,9	----	----	----	----	----
125x60 mm	3	5,8	9,9	12,5	----	----	----	----
140x54 mm	3	5,8	9,9	12,5	----	----	----	----
150x50 mm	2,2	4,7	7,7	11,3	----	----	----	----
150x54 mm	2,2	4,7	7,7	11,3	----	----	----	----
160x50 mm	2	4,5	7,4	10,8	----	----	----	----
200x50 mm	1,5	3,4	5,4	7,6	14,4	----	----	----
200x80 mm	1,1	3,1	4,5	6	10,3	15,3	----	----
250x60 mm	<1	2,7	4,2	5,6	9,8	14,4	----	----
250x80 mm	<1	2,2	4	5,4	9,2	14	----	----
300x60 mm	< 1	2,5	4,5	6	10,3	15,5	----	----
300x80 mm	< 1	1,3	3,1	4,5	7,7	11,7	14,4	----
300x100 mm	< 1	1,3	3,1	4,5	7,7	11,7	14,4	----
400x100 mm	< 1	< 1	1,8	2,9	6,1	9,9	11,7	18,9

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Available with brackets:

**Medium-heavy duty brackets P**

Maximum carrying capacity 350 daN - available diameters 80-125 mm
Top plate fitting. Available with front brake.

**Heavy-duty PT brackets with hardened ball race grooves**

Maximum carrying capacity 900 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.

**Electrowelded brackets EE MHD**

Maximum carrying capacity 1100 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.

**Electrowelded brackets EE HD**

Maximum carrying capacity 2400 daN - available diameters 200-300 mm
Top plate fitting. Available with adjustable rear brake.

**Electrowelded brackets EE EHD**

Maximum carrying capacity 3500 daN - available diameters 300-400 mm
Top plate fitting. Available with adjustable rear brake.

**Twin electrowelded brackets EEG MHD - EEG HD - EEG EHD**

Maximum carrying capacity 3800 daN - available diameters 100-300 mm
Top plate fitting.

"TR-POWERHIGH" POLYURETHANE WHEELS WITH CAST IRON CENTRE



													
mm	mm	kg	COD.	mm	mm.	mm.	mm.	daN	daN	daN			
100	40	1,50	581102	15 H7	45	55	30	500	350	300			
125	40	2,10	581103	20 H7	60	60	30	600	440	350			
125	50	2,36	581113	20 H7	60	60	30	600	600	480			
150	50	3,27	581114	20 H7	60	70	40	910	720	580			
200	50	4,86	581106	20 H7	60	70	40	1500	880	700			
200	80	8,51	581126	40 H7	80	95	60	2000	1360	1100			
250	50	7,74	581107	20 H7	60	75	45	1800	1000	800			
250	80	11,52	581117	40 H7	80	95	60	2800	1500	1200			
300	80	14,88	581128	40 H7	80	100	65	3400	1900	1550			
300	80	14,40	581108	50 H7	80	100	65	3400	1900	1550			
300	100	23,29	581118	50 H7	100	120	80	4200	2400	1950			
350	100	30,88	581109	50 H7	100	120	80	4700	2700	2200			
400	100	35,58	581110	50 H7	100	120	80	5000	3000	2400			

These wheels can also be used as drive wheels: the wheel hub is manufactured so that it can easily be reworked to achieve a spline or key housing. The carrying capacity given is valid for movements at a maximum speed of 6 km/h also if used as a drive wheel on mainly straight routes.

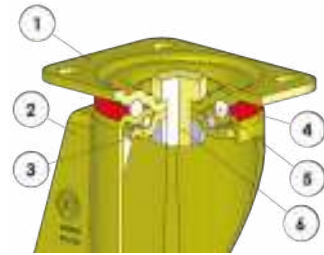
To use as a steering drive wheel or at speeds higher than 6 km/h it is advisable to contact Tellure Rôta to assess any reduction of the maximum applicable loads that may be necessary. To prevent the polyurethane tyre from deteriorating, any reworking on the wheel must be done keeping the temperature under 80°C (which is recommended as the maximum limit during normal use of the product).

Tellure Rôta is at your disposal to customise the product, modifying the bore with a groove for a key housing or a groove for a tongue according to the specifications of the Italian (UNI 6604 and UNI 6607) and European (DIN 6885) regulations in force. The maximum applicable diameter for each wheel, guaranteeing the carrying capacity values, is given in the product dimensions column.



														
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN	daN
80	28	0,51	582151	0,46	584151	12	32	28	8	370	210	350	280	220
100	38	1,02	582152	0,91	584152	15	40	35	11	500	240	450	360	300
125	38	1,45	582153	1,34	584153	15	40	35	11	600	260	550	440	350
125	50	1,98	582163	1,76	584163	20	55	47	14	800	300	750	600	480
125	50	1,96	582363	1,76	584163	25	55	47	14	800	300	750	600	480
125	58	2,86	582103	2,62	584103	20	58	47	15	800	330	850	680	550
140	54	2,35	058012	2,11	058011	20	60	47	14	800	330	900	720	580
150	50	2,50	582154	2,28	584154	20	55	47	14	910	320	900	720	580
150	54	2,48	582174	2,28	584174	20	60	47	14	950	350	950	760	620
160	50	2,65	582164	2,43	584164	20	55	47	14	1000	375	950	760	620
200	50	3,65	582156	3,43	584156	20	55	47	14	1500	420	1100	880	700
200	78	7,26	582166	6,74	584166	25	86	62	17	2000	500	1700	1360	1100
250	60	8,13	582157	7,61	584157	25	65	62	17	2500	530	1500	1200	970
250	78	9,81	582167	9,81	584167	25	86	62	17	2800	550	1900	1500	1200
250	78	9,80	582367	9,81	584167	30	86	62	17	2800	550	1900	1500	1200
300	78	13,80	582168	13,33	584168	30	86	62	17	3400	660	2400	1900	1550
300	100	22,75	582178	22,46	584178	45	100	85	19	3400	660	3000	2400	1950
400	100	28,86	582129	26,30	584129	50	120	110	28	4500	820	3800	3000	2400

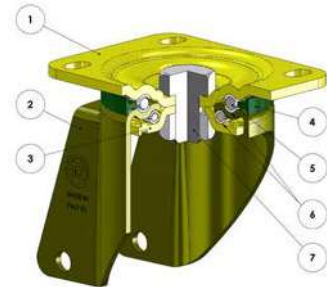
Medium-heavy duty brackets P - max carrying capacity 350 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
80	28	1,38	585851 	0,96	586851 			128	100x85	80x60	9	46	123	350	280
100	38	1,93	585852 	1,52	586852 	2,06	584852 	138	100x85	80x60	9	46	123	350	350
125	38	2,37	585853 	2,04	586853 	2,50	584853 	161	100x85	80x60	9	44	123	350	350

Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 900 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

								  						      						
																				
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN					
125	50	3,66	585003	2,65	586863	4,24	589903	170	140x110	105x80	11	70	126	750	600					
150	50	4,67	585004	3,55	586854	5,33	589904	200	140x110	105x80	11	70	126	900	720					
160	50	4,93	585014	4,08	586864	5,45	589914	205	140x110	105x80	11	70	126	900	720					
200	50	6,06	585006	5,15	586856	6,66	589906	250	140x110	105x80	11	70	126	900	880					

Options available to order:



Footguard
for brackets
P-PT



Directional lock
for P-PT brackets
d. 150-200
mm

Electrowelded brackets EE MHD - max carrying capacity 1100 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
125	50	4,88	588303	3,90	588403	5,76	588503	182	135x110	105x80	11	51	157	750	600
150	50	5,50	588304	4,51	588404	6,38	588504	210	135x110	105x80	11	60	157	900	720
160	50	5,65	588314	4,66	588414	6,53	588514	215	135x110	105x80	11	60	157	900	720
200	50	6,77	588306	5,79	588406	7,65	588506	252	135x110	105x80	11	70	157	1100	880

Electrowelded brackets EE HD - max carrying capacity 2400 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
200	78	13,72	588316	12,18	588416	14,60	588516	275	175x140	140x105	14	65	166	1600	1360
250	60	14,82	588307	13,23	588407	15,70	588507	320	175x140	140x105	14	74	166	1500	1200
250	78	17,56	588327	15,23	588427	18,44	588527	325	200x160	160x120	17	74	166	1900	1500
300	78	21,67	588338	19,32	588438	22,55	588538	365	200x160	160x120	17	81	166	2400	1900

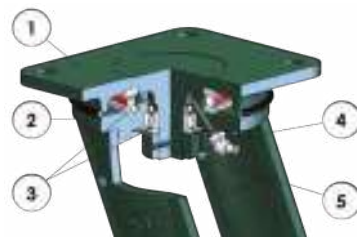
Options available to order:



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES MHD:
see page 420

"TR-POWERHIGH" POLYURETHANE WHEELS WITH CAST IRON CENTRE

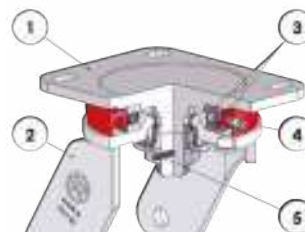
Electrowelded bracket EE EHD - max carrying capacity 3500 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

																	
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN				
300	100	29,80	588309	25,10	588409	384	250x200	210x160	19	78		3000	2400				
400	100	44,91	588310	40,21	588410	475	250x200	210x160	19	95		3500	3000				

Twin electrowelded brackets EEG MHD - max carrying capacity 1000 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

																
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN	daN				
100	38+38	4,50	588062	3,75	588162	140	135x110	105x80	11	55	900	720				
125	38+38	5,45	588063	4,70	588163	170	135x110	105x80	11	55	1000	880				

Options available to order:



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES MHD:
see page 420

Twin electrowelded brackets EEG HD - max carrying capacity 2000 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

															
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	4 km/h daN	6 km/h daN			
125	50+50	11,00	588072	7,70	588172	210	175x140	140x105	14	50	1500	1200			
150	50+50	13,10	588074	8,70	588174	223	175x140	140x105	14	50	1600	1440			
160	50+50	13,40	588084	9,00	588184	228	175x140	140x105	14	50	1600	1440			
200	50+50	17,55	588076	12,70	588176	285	200x160	160x120	17	65	2000	1760			

Twin electrowelded brackets EEG EHD - max carrying capacity 3800 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

															
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	4 km/h daN	6 km/h daN			
200	78+78	34,80	588086	25,05	588186	280	250x200	210x160	19	52	3400	2720			
250	60+60	36,95	588067	27,20	588167	330	250x200	210x160	19	62	3000	2400			
250	78+78	40,30	588077	30,55	588177	330	250x200	210x160	19	62	3500	3000			
300	78+78	50,00	588078	40,00	588178	385	250x200	210x160	19	75	3800	3100			

"TR-ROLL" POLYURETHANE WHEELS WITH ALUMINIUM CENTRE

80-200
mm

75 Shore A

4 km/h

160-700
daN

160-700
daN

-20 / +70
°C



Description

Tyre: TR-Roll polyurethane, hardness 75 Shore A, with excellent rolling resistance and elasticity and good resistance to wear and tear.

Centre: made of cast aluminium.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

They show excellent rolling resistance and ability to damp noise when manually handling medium/heavy-duty loads, for mostly indoor use, on regular floors or slightly uneven surfaces with small obstacles.

Not suitable for mechanical handling.

Examples of applications: trolleys for indoor industrial handling, containers, manual pallet trucks, tilt trucks.

Environments of use

Industrial environments, even in presence of humidity and oils. Not suitable in presence of strong acids and solvents.

WEAK ACIDS		
STRONG ACIDS		
WATER		
ALCOHOL		
WEAK BASES		
STRONG BASES		
HYDROCARBONS		
SOLVENTS		

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles, cement-resin, asphalt and expanded metal.

Not suitable on unpaved floors and/or in case large obstacles are present.



Force required to push or tow a wheel

 	150 kg	250 kg	350 kg	450 kg	550 kg	700 kg
80 mm	2,5	----	----	----	----	----
100 mm	2,2	----	----	----	----	----
125 mm	1	2,3	----	----	----	----
150 mm	<1	1,7	2,7	3,8	----	----
160 mm	<1	1,4	2,3	3,5	4,9	----
200 mm	<1	1,2	1,8	2,6	3,4	4,6

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate fitting. Available with front brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

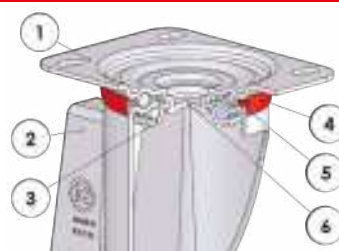
Maximum carrying capacity 700 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.

"TR-ROLL" POLYURETHANE WHEELS WITH ALUMINIUM CENTRE



															
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN			
80	25	0,20	622181	0,15	624181	12	30	28	8	230	160	160			
100	30	0,34	622182	0,25	624182	12	40	32	10	300	200	200			
125	35	0,50	622183	0,41	624183	12	40	32	10	400	250	250			
150	40	0,83	622184	0,59	624184	20	50	47	14	750	450	450			
160	50	1,23	622185	0,99	624185	20	58	47	14	850	550	550			
200	50	1,47	622186	1,16	624186	20	55	52	15	1000	700	700			

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electroplated galvanised steel
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	
80	25	0,72	625951	0,52	626751	0,91	627151	107	100x85	80x60	9	37	120	160	
100	30	0,81	625952	0,67	626752	1,08	627152	128	100x85	80x60	9	35	120	200	
125	35	1,05	625953	0,83	626753	1,28	627153	156	100x85	80x60	9	37	120	220	
150	40	2,19	625954	2,00	626754	2,63	627154	194	140x110	105x80	11	56	156	300	
160	50	2,40	625960	2,29	626760	2,97	627160	198	140x110	105x80	11	56	156	300	
200	50	2,86	625956	2,90	626756	3,12	627156	240	140x110	105x80	11	56	156	300	

Options available to order:



Directional lock
for brackets
d. 150-200 mm



Footguards for
brackets NL-M-
P-PT

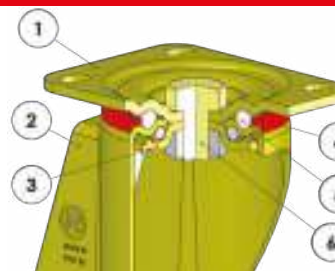
Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN
150	40	2,47	624514	2,00	626754	2,91	627414	194	140x110	105x80	11	58	178	450
160	50	2,71	624510	2,29	626760	3,15	627410	199	140x110	105x80	11	58	178	500
200	50	3,30	624516	2,90	626756	3,74	627416	240	140x110	105x80	11	50	178	500

Medium-heavy duty brackets P - max carrying capacity 700 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

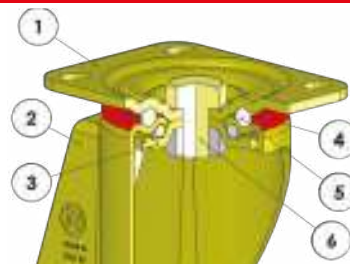
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN
100	30	1,20	627612	0,78	628542	1,35	627212	138	100x85	80x60	9	46	123	200
125	35	1,60	627633	0,98	628543	1,52	627233	161	100x85	80x60	9	44	123	250

Options available to order:



Footguards for
brackets NL-M-
P-PT

Medium-heavy duty brackets P - max carrying capacity 700 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

																									
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN											
150	40	3,18	627614	2,19	628544	3,75	627244	200	140x110	105x80	11	70	126	450											
160	50	3,52	627620	2,53	628550	4,09	627220	205	140x110	105x80	11	70	126	550											
200	50	3,94	627616	2,48	628546	4,51	627216	250	140x110	105x80	11	70	126	700											

Options available to order:



Directional lock
for brackets P
d. 150-200 mm



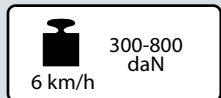
Footguards for
brackets NL-M-
P-PT



Flexibility you need



THICK "TR-ROLL" POLYURETHANE WHEELS WITH ALUMINIUM CENTRE



Description

Tyre: very thick TR-Roll polyurethane, hardness 75 Shore A, with excellent rolling resistance and elasticity and good resistance to wear and tear.

Centre: made of cast aluminium.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

Innovative product that combines the load capacity and the resistance to wear and tear of the polyurethane with the ability to overcome obstacles and to damp noise, vibrations and impacts of the elastic rubber. Combined with appropriate brackets, they guarantee excellent performance for mechanical handling up to 16 km/h. The excellent rolling resistance guarantees an easy handling of heavy loads even with wheels of small diameter.

Examples of application: trolleys for the automotive industry, towing applications.

Environments of use

Industrial environments, even in presence of humidity and oils. Not suitable in presence of strong acids and solvents.

WEAK ACIDS	
STRONG ACIDS	
WATER	
ALCOHOL	

WEAK BASES	
STRONG BASES	
HYDROCARBONS	
SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of industrial floors, even outdoors. Facilitates the overcoming of obstacles.

It does not damage the floors.



Force required to push or tow a wheel

 	150 kg	250 kg	350 kg	450 kg	550 kg	700 kg
100 mm	2	---	---	---	---	---
125x40 mm	< 1	1,5	5	---	---	---
125x50 mm	< 1	1	2	3	---	---
160 mm	< 1	1	2	3	3,5	---
200 mm	< 1	< 1	1	2	3	4
250 mm	< 1	< 1	1	2	3	4

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 100-125 mm
Top plate fitting. Available with front brake and centralised brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 750 daN - available diameters 100-250 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 700 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Extra-heavy duty brackets EP

Maximum carrying capacity 700 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded brackets EE MHD

Maximum carrying capacity 700 daN - available diameters 100-200 mm
Top plate fitting. Available with adjustable rear brake.



Twin electrowelded brackets EEG MHD - EEG HD

Maximum carrying capacity 1400 daN - available diameters 100-200 mm
Top plate fitting. Available with adjustable rear foot brake, operating on wheel rotation only (diam. 160-200 mm)



Electrowelded sprung-loaded brackets EES MHD

Maximum carrying capacity 800 daN - available diameters 160-250 mm
Top plate fitting. Available with adjustable front brake.

Options available to order:



ESD polyurethane wheels, with electrical resistance <10⁹ Ohm (page 308)





															
mm	mm	kg	CODE	kg	CODE	mm	mm.	mm	mm	daN	daN	daN	daN		
100	40	0,45	622102	0,37	624102	15	40	32	10	400	300	300	300		
125	40	0,79	622113	0,54	624113	20	40	47	14	500	350	350	350		
125	40	0,75	622103	0,53	624103	20	50	47	14	500	350	350	350		
160	50	1,20	622104	0,95	624104	20	58	47	14.5	800	550	550	550		
160	50	1,24	622114	0,95	624104	25	58	47	14.5	800	550	550	550		
180	50	1,37	622105	1,15	624105	20	58	47	14	900	600	600	600		
200	50	1,74	622106	1,52	624106	20	58	47	14	1000	700	700	700		
200	50	1,84	622116	1,60	624106	25	58	47	14	1000	700	700	700		
250	50	2.40	622108	2.10	624108	20	55	52	15	1000	700	800	800		

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	
100	40	0,86	624402	0,83	626202	1,05	627302	128	100x85	80x60	9	37	120	200	
125	40	1,35	624413	1,17	626213	1,51	627313	156	100x85	80x60	9	35	120	220	
125	40	1,46	624403	1,11	626203	2,34	627303	166	140x110	105x80	11	57	156	300	
160	50	2,88	624410	2,24	627704	3,42	627304	199	140x110	105x80	11	57	156	300	
200	50	3,18	624406	3,04	627706	3,70	627306	240	140x110	105x80	11	57	156	300	

Options available to order:



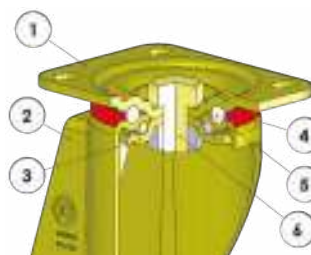
Footguard
for brackets
NL-M-P

Standard-duty brackets NL - max carrying capacity 300 daN



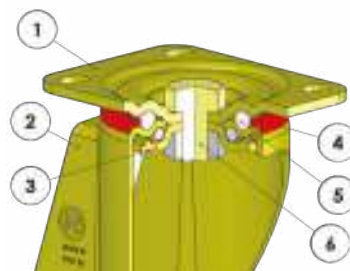
																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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Medium-heavy duty brackets P - max carrying capacity 750 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

															
															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
100	40	1,35	627602	0,85	628512	1,52	627202	138	100x85	80x60	9	46	123	300	300
125	40	1,70	627613	1,26	628513	1,87	627213	161	100x85	80x60	9	44	123	350	350



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

																	
																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN
125	40	2,33	627603	1,69	628503	2,86	627203	170	140x110	105x80	11	70	126	126	350	350	
160	50	3,60	627610	2,11	628514	4,17	627204	205	140x110	105x80	11	70	126	126	550	550	
180	50	3,84	627605	2,42	628515	4,41	627205	228	140x110	105x80	11	70	126	126	600	600	
200	50	4,31	627516	2,85	628516	4,91	627206	250	140x110	105x80	11	70	126	126	700	700	
250	50	4,84	627608	3,74	628518	5,54	627208	298	140x110	105x80	11	70	173	173	750	750	

Options available to order:

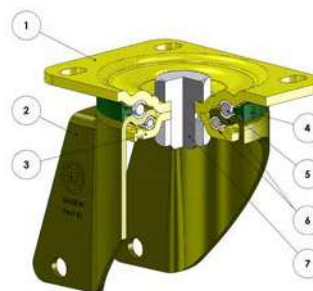


Footguard
for brackets NL-
M-P-PT



Directional lock for
brackets P-PT
diam. 160-200 mm

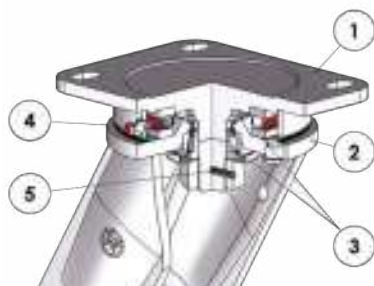
Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 700 daN



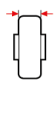
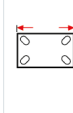
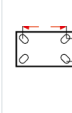
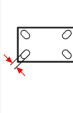
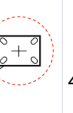
- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

		 						 						 						 						 						 						 						 					
mm	mm	kg	COD.		kg	COD.		kg	COD.		kg	COD.		mm	mm	mm	mm	mm	mm	mm	mm	daN	daN			mm	mm	mm	mm	mm	mm	daN	daN																
125	40	2,33	625003		1,69	628503		2,86	629903		170	140x110	105x80	11	70	126	350	350																															
160	50	3,52	625010		2,11	628514		4,12	629904		205	140x110	105x80	11	70	126	550	550																															
180	50	3,91	625005		2,42	628515		4,38	629905		228	140x110	105x80	11	70	126	600	600																															
200	50	4,10	625016		2,85	628516		4,66	629906		250	140x110	105x80	11	70	126	700	700																															

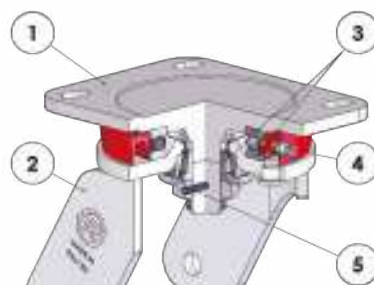
Electrowelded brackets EE MHD - max carrying capacity 700 daN



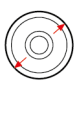
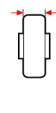
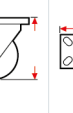
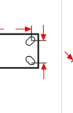
- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN	4 km/h	6 km/h
100	40	3,38	628302	2,40	628402	4,26	628602	170	135x110	105x80	11	51	157	300	300		
125	40	3,71	628303	2,73	628403	4,59	628603	182	135x110	105x80	11	51	157	350	350		
160	50	4,25	628314	3,26	628414	5,13	628614	215	135x110	105x80	11	60	157	550	550		
180	50	4,62	628305	3,64	628405	5,51	628605	242	135x110	105x80	11	70	157	600	600		
200	50	4,97	628306	3,99	628406	6,31	628606	252	135x110	105x80	11	70	157	700	700		

Twin electrowelded brackets EEG MHD - max carrying capacity 700 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn tips electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

																	
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	daN			
100	40+40	3.45	628062	2.65	628162	140	135x110	105x80	11	55			600	600			
125	40+40	4.20	628063	3.40	628163	170	135x110	105x80	11	55			700	700			

Options available to order:

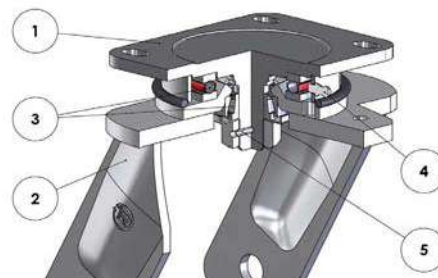


Wheels EE MHD
with steering
system

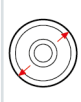
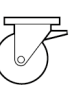
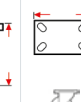
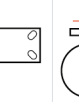
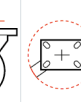


Directional lock
for brackets EE MHD
- EE HD - EED MHD: - EES MHD
see page 420

Twin electrowelded brackets EEG MHD - max carrying capacity 1400 daN



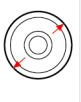
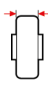
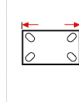
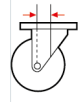
- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn tips electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable rear foot brake, operating on wheel rotation only

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN
160	50+50	7,18	628074	6,31	628174	8,17	628274	221	135x110	135x175	105x80	11	55	182		1100	1100
200	50+50	8,36	628076	7,51	628176	9,35	628276	258	135x110	135x175	105x80	11	65	182		1400	1400

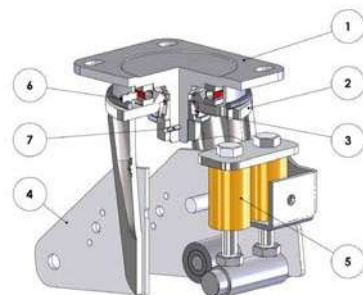
Twin electrowelded brackets EEG HD - max carrying capacity 1400 daN



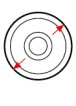
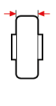
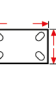
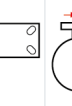
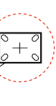
- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

													
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
160	50+50	10,60	628084	6,20	628184	228	175x140	140x105	14	50		1100	1100
200	50+50	12,30	628086	7,70	628166	280	175x140	140x105	14	65		1400	1400

Electrowelded sprung-loaded bracket EES MHD - max load capacity 800 daN - damping up to 400 daN



- 1) Top plate: electrolytically galvanised forged steel with integrated pin.
 - 2) Main fork: deep-drawn legs electrowelded to the flange and electrolytically galvanised U-shaped component electrowelded to the legs.
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) spring-hinged plates: plates electrowelded to the axle
 - 5) Polyurethane springs
 - 6) Grease nipple
 - 7) Anti-loosening locknut system
- Available with adjustable front lock

																		
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	daN	daN	daN
160	50	7,07	626304	5,82	626404	8,13	626504	248	135x110	105x80	11	100	240	25	50	400	550	550
200	50	7,67	626306	6,42	626406	8,78	626506	268	135x110	105x80	11	100	265	25	50	400	700	700
250	50	8,75	626308	7,54	626408	9,99	626508	316	135x110	105x80	11	110	315	25	50	400	800	800



Spring travel (mm): maximum difference in the total height of the castor depending on the spring tension



Initial tension (daN): in case of lighter loads than indicated, the bracket works with no damping

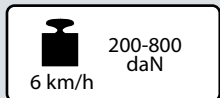
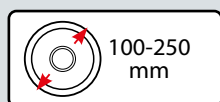


Spring tension (daN): in case of heavier loads than indicated, the bracket works with no damping



Our work, our passion

"TR-ROLL" POLYURETHANE WHEELS WITH ERGONOMIC ROUND PROFILE AND ALUMINIUM CENTRE



Description

Tyre: very thick TR-Roll polyurethane with ergonomic round profile, hardness 75 Shore A, excellent rolling resistance and elasticity and good resistance to wear and tear.

Centre: made of cast aluminium.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

The round profile reduces the start-up coefficient when the castors are positioned at 90° from the line of movement and therefore greatly reduces the amount of effort required by the operators when handling trolleys.

Combined with appropriate brackets, they guarantee excellent performance for mechanical handling up to 16 km/h.

Examples of application: trolleys for the automotive industry, lean manufacturing trolleys and whenever a combination of manual/powered handling is involved.

Environments of use

Industrial environments, even in presence of humidity and oils. Not suitable in presence of strong acids and solvents.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of industrial floors, even outdoors. Facilitates the overcoming of obstacles.

It does not damage the floors.



Force required to push or tow a wheel

 	150 kg	250 kg	350 kg	450 kg	550 kg	700 kg
100 mm	2	---	---	---	---	---
125x40 mm	< 1	1,5	5	---	---	---
125x50 mm	< 1	1	2	3	---	---
160 mm	< 1	1	2	3	3,5	---
200 mm	< 1	< 1	1	2	3	4
250 mm	< 1	< 1	1	2	3	4

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 700 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 700 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Extra-heavy duty brackets EP

Maximum carrying capacity 700 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded brackets EE MHD

Maximum carrying capacity 700 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Twin electrowelded brackets EEG MHD - EEG HD

Maximum carrying capacity 1400 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable rear foot brake, operating on wheel rotation only.



Electrowelded sprung-loaded brackets EES MHD

Maximum carrying capacity 700 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable front brake.

"TR-ROLL" POLYURETHANE WHEELS WITH ERGONOMIC ROUND PROFILE AND ALUMINIUM CENTRE



															
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN		
100	40	0,57	622142	0,52	624142	20	40	47	14	500	200	200	200		
125	40	0,68	622163	0,45	624163	20	40	47	14	500	350	350	350		
125	40	0,73	622143	0,51	624143	20	50	47	14	500	350	350	350		
125	50	0,88	622153	0,65	624153	20	58	47	14	500	450	450	450		
160	50	1,11	622144	0,89	624144	20	58	47	14,5	800	550	550	550		
200	50	1,68	622146	1,44	624146	20	58	47	14	1000	700	700	700		
250	50	2,40	622148	2,10	624148	20	55	52	15	1000	700	800	800		

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
100	40	0.96	628702	0.80	628802	1.06	628902	156	100x85	80x60	9	35	120	200	
125	40	1.35	628703	1.11	628803	1.51	628903	156	100x85	80x60	9	35	120	220	
125	40	1.46	628713	1,17	628813	2,34	628913	166	140x110	105x80	11	57	156	300	
160	50	2,95	628704	2,24	628204	3,42	628904	199	140x110	105x80	11	56	156	300	
200	50	3,69	628716	3,04	628206	4,07	628916	240	140x110	105x80	11	56	156	300	

Options available to order:



Footguard
for brackets NL-
M-P-PT



Directional lock
for brackets
NL diam. 160-200 mm

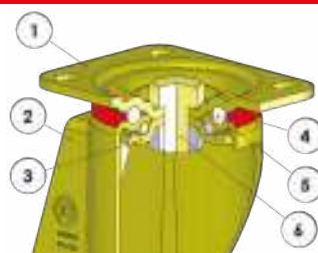
Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electroplated galvanised steel
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	4 km/h
160	50	2,81	624604	2,10	628204	3,28	627904	199	140x110	105x80	11	58	178	500	
200	50	3,52	624606	2,87	628206	3,90	627906	240	140x110	105x80	11	50	178	500	

Medium-heavy duty brackets P - max carrying capacity 700 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	4 km/h	6 km/h
125	40	2,27	629023	1,63	629123	2,83	629523	161	100x85	80x60	9	44	123	350	350	

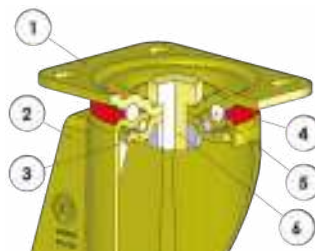
Options available to order:



Footguard
for brackets NL-
M-P-PT

"TR-ROLL" POLYURETHANE WHEELS WITH ERGONOMIC ROUND PROFILE AND ALUMINIUM CENTRE

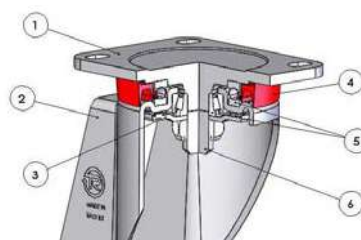
Heavy duty brackets P - max carrying capacity 700 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

		  						       							
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
125	40	2,27	629003	1,63	629103	2,83	629203	170	140x110	105x80	11	70	126	350	350
125	50	2,42	629013	2,78	629113	2,95	629213	170	140x110	105x80	11	70	126	450	400
160	50	3,46	629004	2,28	629104	4,27	629204	205	140x110	105x80	11	70	126	550	550
200	50	4,14	629006	2,68	629106	4,74	629206	250	140x110	105x80	11	70	126	700	700

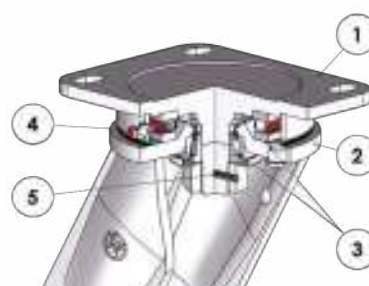
Extra-heavy duty brackets EP - max carrying capacity 700 daN



- 1) Plate: white galvanised forged steel
 - 2) Fork: white galvanised forged steel
 - 3) Lower bearing protection ring
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: axial ball bearing and tapered roller bearing
 - 6) King pin: integrated with the machine-processed plate
- Available with adjustable total rear foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
160	50	3,62	629304	3,21	629404	4,14	629504	205	135x110	105x80	11	70	126	550	550
200	50	4,40	629306	3,96	629406	4,97	629506	250	135x110	105x80	11	70	126	700	700

Electrowelded brackets EE MHD - max carrying capacity 700 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
125	40	3,65	629603	2,67	629703	4,53	629803	182	135x110	105x80	11	51	157	350	350
125	50	3,80	629613	2,82	629713	4,68	629813	182	135x110	105x80	11	51	157	450	400
160	50	4,11	629604	3,12	629704	4,99	629804	215	135x110	105x80	11	60	157	550	550
200	50	4,80	629606	3,82	629706	6,14	629806	252	135x110	105x80	11	70	157	700	700

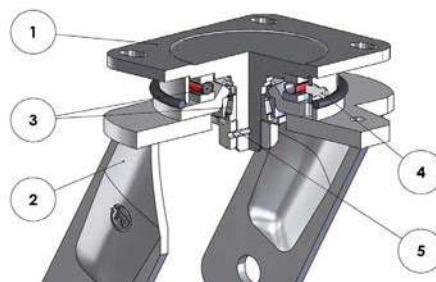
Options available to order:



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES MHD:
see page 420

"TR-ROLL" POLYURETHANE WHEELS WITH ERGONOMIC ROUND PROFILE AND ALUMINIUM CENTRE

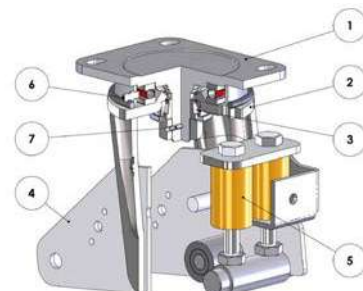
Twin electrowelded brackets EEG MHD - max carrying capacity 1400 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn tips electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable rear foot brake, operating on wheel rotation only

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN
160	50+50	7,01	629074	6,14	629174	8,00	629274	221	135x110	135x175	105x80	11	55	182		1100	1100
200	50+50	8,18	629076	7,33	629176	9,17	629276	258	135x110	135x175	105x80	11	65	182		1400	1400

Electrowelded sprung-loaded bracket EES MHD - max load capacity 700 daN - damping up to 400 daN



- 1) Top plate: electrolytically galvanised forged steel with integrated pin.
 - 2) Main fork: deep-drawn legs electrowelded to the flange and electrolytically galvanised U-shaped component electrowelded to the legs.
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) spring-hinged plates: plates electrowelded to the axle
 - 5) Polyurethane springs
 - 6) Grease nipple
 - 7) Anti-loosening locknut system
- Available with adjustable front lock

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN
160	50	7,07	626804	5,82	626904	8,13	627004	248	135x110	105x80	11	100	240	25	50	400	550
200	50	7,67	626806	6,42	626906	8,78	627006	268	135x110	105x80	11	100	265	25	50	400	700



Spring travel (mm): maximum difference in the total height of the group wheel + support depending on the spring tension



Initial tension (daN): in case of lighter loads than indicated, the bracket works with no damping

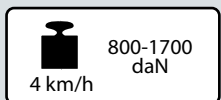
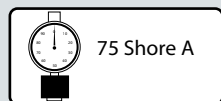


Spring tension (daN): in case of heavier loads than indicated, the bracket works with no damping



Technology at work

"TR-ROLL" POLYURETHANE WHEELS WITH CAST IRON CENTRE



Technical features

Tyre: very thick TR-Roll polyurethane, hardness 75 Shore A, with excellent rolling resistance and elasticity and good resistance to wear and tear.

Centre: cast iron.

Hub with shielded ball bearing press-fitted in the seats obtained by precision turning on the centre; also available without bearings.

Uses

Innovative product, which combines an excellent rolling resistance with the ability to damp down vibrations and overcoming obstacles and very good performance and durability in case of heavy usages and mechanical handling at speeds up to 16 km/h. Examples of applications: mechanically handled trolleys in automotive industries, logistics, carpentries; AGV trolleys; electrical pallet trucks.

Environments of use

Designed for industrial environments, even in the presence of alcohols, glycols, hydrocarbons.

Not recommended in areas with organic acids and mineral acids, base solutions and saturated steam. In case of use in particularly aggressive environments, it is possible to use a protective lacker available on request.

WEAK ACIDS	
STRONG ACIDS	
WATER	
ALCOHOL	

WEAK BASES	
STRONG BASES	
HYDROCARBONS	
SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of industrial floors, even outdoors. Facilitates the overcoming of obstacles.

It does not damage the floors.



Force required to push or tow a wheel

 	200 kg	400 kg	600 kg	800 kg	1000 kg	1200 kg	1400 kg	1600 kg
200x50 mm	<1	2,5	4	6	---	---	---	---
200x80 mm	<1	2	3,5	5,5	---	---	---	---
250 mm	<1	1,5	3	5	7	9	---	---
300 mm	<1	1	2,5	4,5	6	8	10	---
400 mm	<1	<1	1	3	5,5	7	8	10

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 800 daN - available diameters 200 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded brackets EE MHD

Maximum carrying capacity 800 daN – available diameters 200 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded brackets EE HD

Maximum carrying capacity 1400 daN – available diameters 200-300 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded brackets EE EHD

Maximum carrying capacity 1700 daN – available diameters 400 mm
Top plate fitting.



Electrowelded sprung loaded brackets EES MHD

Maximum carrying capacity 800 daN - available diameter 200 mm
Top plate fitting. Available with adjustable front brake.

Options available to order:

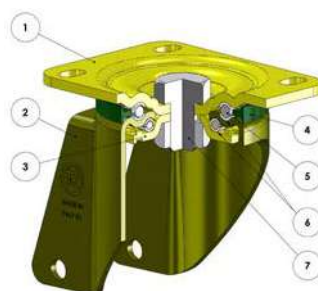


Wheel with key housing



															
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN		
200	50	3,40	622126	3,17	624126	20	55	47	14	1000	700	800	800		
200	80	6,63	622136	6,14	624136	25	88	62	18	1200	750	900	900		
250	80	8,50	622127	8,00	624127	25	86	62	17	1600	800	1200	1200		
300	80	11,50	622128	11,00	624128	30	86	62	17	1900	850	1400	1400		
400	100	33,50	622109	32,70	624109	40	100	80	18	2000	900	1700	1700		

Heavy-duty PT brackets with hardened ball race grooves - Max. carrying capacity 800 daN



- 1) Top Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball Race Ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

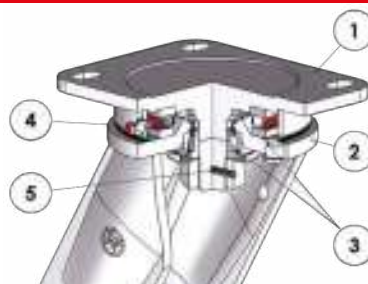
															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
200	50	5,80	627646	5,42	628656	6,35	627246	250	140x110	105x80	11	70	126	800	800

Options available to order:

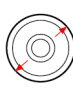
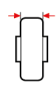


Wheel with key housing

Electrowelded brackets EE MHD - Max. carrying capacity 800 daN



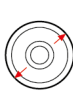
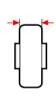
- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

																
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	daN
200	50	6,54	628316	5,56	628416	7,42	628616	252	135x110	105x80	11	70	157		800	800

Electrowelded brackets EE HD - Max. carrying capacity 1400 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

																
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	daN
200	80	13,10	628706	11,56	628806	13,98	628906	275	175x140	140x105	14,5	65	166		900	900
250	80	15,19	628708	13,60	628808	16,07	628908	320	175x140	140x105	14,5	74	166		1200	1200
300	80	18,31	628718	16,69	628818	19,19	628918	360	175x140	140x105	14,5	81	166		1400	1400

Options available to order:



Wheel with key housing



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES MHD:
see page 420

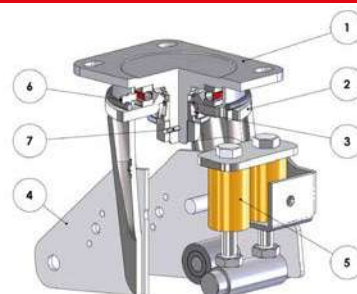
Electrowelded brackets EE EHD - Max. carrying capacity 1700 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	4 km/h	6 km/h
400	100	49,55	628729	44,85	628829	475	250x200	210x160	19	95	1700	1700

Electrowelded sprung-loaded brackets EES MHD - max carrying capacity 800 daN - damping up to 400 daN



- 1) Top plate: electrolytically galvanised forged steel with integrated pin.
 - 2) Main fork: deep-drawn legs electro-welded to the flange and electrolytically galvanised U-shaped component electro-welded to the legs.
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) spring-hinged plates: plates electro-welded to the axle
 - 5) Polyurethane springs
 - 6) Grease nipple
 - 7) Anti-loosening locknut system
- Available with adjustable front lock

																																																																																																																																																																																																																																																																																															
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Spring travel (mm): maximum difference in the total height of the group wheel + support depending on the spring tension



Initial tension (daN): in case of lighter loads than indicated, the bracket works with no damping



Spring tension (daN): in case of heavier loads than indicated, the bracket works with no damping

Options available to order:

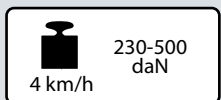
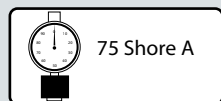


Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES MHD:
see page 420



Details make the difference

"TR-ROLL" POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE



Description

Tyre: very thick TR-Roll polyurethane, hardness 75 Shore A, with excellent rolling resistance and elasticity and good resistance to wear and tear.

Available also with ergonomic round profile (wheel diam. 125-160-200 mm).

Centre: polyamide 6.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

Excellent for trolleys and equipments handling medium-heavy and heavy duty loads, also suitable for continuous handling, even in presence of humidity and aggressive chemicals.

Suitable for towing applications and manual/mechanical handling up to 6 km/h.

They offer a higher load capacity and rolling resistance in comparison to standard elastic rubber wheels, whilst maintaining the same specifications of elasticity, vibrations absorption and obstacle overcoming.

The ergonomic round profile variant also enables to reduce the start-up coefficient when pushing/pulling a trolley from a still position.

Examples of applications are: automotive industry, lean manufacturing, cash& carry, trolleys and dollies for the chemical and food processing industry.

Environments of use

Suitable for indoor industrial environments, also in presence of medium-harsh chemical agents, alcohol, glycol and water.

Not suitable in presence of strong acids and solvents.

WEAK ACIDS	
STRONG ACIDS	
WATER	
ALCOHOL	

WEAK BASES	
STRONG BASES	
HYDROCARBONS	
SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of industrial floors, even outdoors. Facilitates the overcoming of obstacles.

It does not damage the floors.



Force required to push or tow a wheel

 	100 kg	150 kg	200 kg	250 kg	300 kg	350 kg	400 kg	500 kg
100 mm	< 1	1	2	---	---	---	---	---
125 mm	< 1	< 1	1,5	2	2,5	---	---	---
125 ER mm	< 1	< 1	1,5	2	---	---	---	---
160 mm	< 1	< 1	1	1,5	1,8	2,2	2,6	---
160 ER mm	< 1	< 1	1	1,5	1,8	2,2	2,6	---
200 mm	< 1	< 1	1	1,4	1,7	2	2,4	3,2
200 ER mm	< 1	< 1	1	1,4	1,7	2	2,4	3,2

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Abbinamento ai supporti



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 100-200 mm.
Top plate fittings. Available with front brake.



Stainless steel standard-duty brackets NLX

Maximum carrying capacity 300 daN - available diameters 100-200 mm.
Top plate fittings. Available with front brake.



Medium duty brackets M

Maximum carrying capacity 500 daN - available diameters 160-200 mm
Top plate fitting. Available with front adjustable brake.



Medium-heavy duty brackets P

Maximum carrying capacity 500 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Stainless steel medium-heavy duty brackets PX

Maximum carrying capacity 500 daN - available diameters 100-200 mm
Top plate fitting. Available with adjustable rear brake.



															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN
100	40	0,34	622302	0,34	622402	0,27	624302	15	40	32	9	300	230	230	230
125	40	0,45	622303	0,45	622403	0,37	624303	15	40	32	9	350	280	280	280
160	50	1,06	622304	1,06	622404	0,97	624304	20	55	47	14	450	400	400	360
200	50	1,36	622306	1,36	622406	1,27	624306	20	55	47	14	600	500	500	450



Ergonomic round profile

ERGO
WORKPLACE

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN
125ER	40	0,40	622603	0,40	622503	0,32	624603	15	40	32	9	300	250	250	250
160ER	50	1,00	622604	1,00	622504	0,91	624704	20	55	47	14	450	400	400	360
200ER	50	1,27	622606	1,27	622506	1,18	624706	20	55	47	14	600	500	500	450

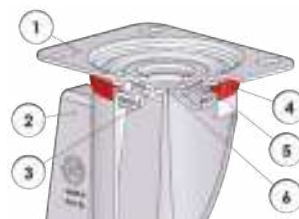
Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

														
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN
100	40	0,94	624422	0,69	626222	1,08	627322	128	100x85	80x60	9	35	120	200
125	40	1,10	624423	0,85	626223	1,24	627323	156	100x85	80x60	9	37	120	220
125ER	40	1,05	629303	0,80	629403	1,19	629503	156	100x85	80x60	9	37	120	220
160	50	2,49	624434	2,19	627724	2,78	627334	199	140x110	105x80	11	56	156	300
160ER	50	2,43	624424	2,13	627734	2,72	627324	199	140x110	105x80	11	56	156	300
200	50	2,87	624436	2,63	627726	3,07	627336	240	140x110	105x80	11	56	156	300
200ER	50	2,78	624426	2,54	627736	2,98	627326	240	140x110	105x80	11	56	156	300

Stainless steel standard-duty brackets NLX - max carrying capacity 300 daN



INOX

- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: screw and nut in stainless steel
- Available with adjustable total rear foot brake

																				
mm	mm	kg	COD.	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
100	40	0,94	625122	0,69	625222	1,08	625322	128	100x85	80x60	9	35	120	200						
125	40	1,10	625123	0,85	625223	1,24	625323	156	100x85	80x60	9	37	120	220						
125ER	40	1,05	625103	0,80	625203	1,19	625303	156	100x85	80x60	9	37	120	220						
160	50	2,49	625134	2,19	625234	2,78	625334	198	140x110	105x80	11	56	156	300						
160ER	50	2,43	625124	2,13	625224	2,72	625324	198	140x110	105x80	11	56	156	300						
200	50	2,87	625136	2,63	625236	3,07	625336	240	140x110	105x80	11	56	156	300						
200ER	50	2,78	625126	2,54	625226	2,98	625326	240	140x110	105x80	11	56	156	300						

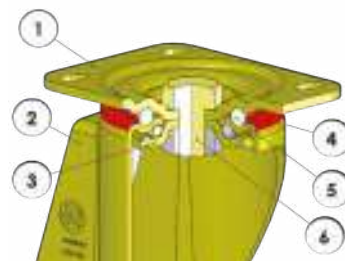
Medium duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electroplated galvanised steel
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

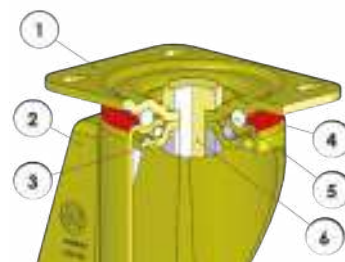
																				
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
160	50	2,49	624544	2,19	627724	2,78	627444	199	140x110	105x80	11	58	178	400						
160ER	50	2,43	624534	2,13	627734	2,72	627434	199	140x110	105x80	11	50	178	400						
200	50	3,20	624546	2,55	627726	3,58	627446	240	140x110	105x80	11	50	178	500						
200ER	50	3,11	624536	2,40	627736	3,49	627436	240	140x110	105x80	11	50	178	500						

Medium-heavy duty brackets P - max carrying capacity 500 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

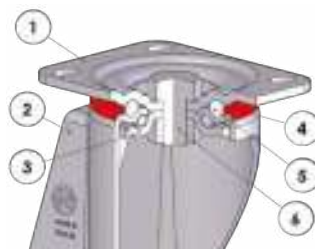
																																																																																																																																																																																																																																																																																																																
																																																																																																																																																																																																																																																																																																																
																																																																																																																																																																																																																																																																																																																
																																																																																																																																																																																																																																																																																																																
																																																																																																																																																																																																																																																																																																																
																																																																																																																																																																																																																																																																																																																
																																																																																																																																																																																																																																																																																																																
																																																																																																																																																																																																																																																																																																																
																																																																																																																																																																																																																																																																																																																
																																																																																																																																																																																																																																																																																																																
																																																																																																																																																																																																																																																																																																																
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- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total adjustable rear foot brake

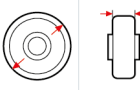
																	
																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	daN	
160	50	3,33	627634	2,00	628534	5,03	627234	205	140x110	105x80	11	70	126	400	360		
160ER	50	3,27	627624	1,94	628524	4,96	627224	205	140x110	105x80	11	70	126	400	360		
200	50	3,82	627636	2,36	628536	4,42	627236	250	140x110	105x80	11	70	126	500	450		
200ER	50	3,73	627626	2,27	628526	4,33	627226	250	140x110	105x80	11	70	126	500	450		

Stainless steel medium-heavy duty brackets PX - max carrying capacity 500 daN



INOX

- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: screw and nut in stainless steel
- Available with adjustable total rear foot brake

																							
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN						
160	50	3,33	625434	2,00	625534	5,03	625634	205	140x110	105x80	11	70	126		400	360							
160ER	50	3,27	625424	1,94	625524	4,96	625624	205	140x110	105x80	11	70	126		400	360							
200	50	3,82	625436	2,36	625536	4,42	625636	250	140x110	105x80	11	70	126		500	450							
200ER	50	3,73	625426	2,27	625526	4,33	625626	250	140x110	105x80	11	70	126		500	450							

VULKOLLAN® WHEELS WITH FORGED STEEL CENTRE



100-250
mm

93 Shore A

250-1500
daN
4 km/h

200-1200
daN
6 km/h

190-550
daN

-20 / +80
°C



Description

Tyre: Vulkollan®, hardness 93 Shore A: excellent rolling resistance and elasticity, highly resistant to wear, tear and deformations.

Centre: forged steel.

Hub with shielded ball bearings with interference assembly in the seats obtained by machining the centre; also available without bearings.

Uses

Ideal for applications with heavy duty loads, even with mechanical handling at high speeds. Fitted with appropriate brackets, they guarantee excellent performance up to 16 km/h.

The excellent rolling resistance allows an easy handling of heavy loads even with wheels of a small diameter.

Examples of recommended applications: trolleys for indoor industrial handling, AGV trolleys, containers, electrical pallet trucks, forklift trucks.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

WEAK ACIDS	
STRONG ACIDS	
WATER	
ALCOHOL	

WEAK BASES	
STRONG BASES	
HYDROCARBONS	
SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.

Not suitable if large obstacles are present.



Force required to push or tow a wheel

 	150 kg	300 kg	450 kg	600 kg	1000 kg	1500 kg
100 mm	4	----	----	----	----	----
125 mm	3.3	6.7	----	----	----	----
150 mm	2.4	4.8	7.2	9.6	----	----
175 mm	2.2	4.5	6.8	9	----	----
200 mm	1.7	3.5	5.5	7.6	14.2	----
250 mm	1.2	2.5	4	5.6	10.5	18

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 100-200 mm
Top plate fitting.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 750 daN - available diameters 80-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 900 daN - available diameters 150-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Extra-heavy duty brackets EP

Maximum carrying capacity 1500 daN - available diameters 100-250 mm
Top plate fitting. Available with adjustable rear brake.

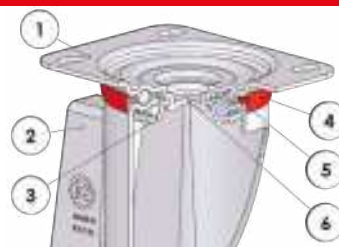
Options available to order:

The series 63AC wheels are also available with assembled thread guards. To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.



															
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN		
100	30	0,74	632122	0,67	634122	12	30	32	10	375	190	250	200		
125	40	1,38	632123	1,31	634123	12	40	32	10	500	230	350	280		
150	40	1,84	632124	1,66	634124	17	40	40	12	900	320	750	600		
150	40	1,76	632224	1,60	634224	20	40	42	12	900	320	750	600		
175	40	2,80	632125	2,56	634125	20	40	47	14	1200	340	850	680		
200	50	4,03	632126	3,79	634126	20	50	47	14	1800	420	1100	880		
200	50	4,00	632226	3,72	634226	25	50	52	15	1800	420	1100	880		
250	60	8,03	632128	7,75	634128	25	60	52	15	2200	550	1500	1200		

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Dust seal: orange polyethylene
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: integrated with the plate and cold-riveted

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN				
100	30	1.26	637322	1.01	638222	128	100x85	80x60	9	35	200				
125	40	2.03	637323	1.68	638223	156	100x85	80x60	9	37	220				
150	40	2.54	637304	2.15	638214	182	100x85	80x60	9	34	220				
150	40	3.21	637324	2.84	638224	194	140x110	105x80	11	56	300				
175	40	4.18	637325	3.89	638225	217	140x110	105x80	11	56	300				
200	50	5.43	637326	5.21	638226	240	140x110	105x80	11	56	300				

Options available to order:



Footguard
for brackets NL-
M-P-PT

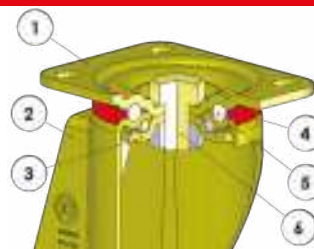
Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electroplated galvanised steel
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

Available with adjustable total front foot brake														
														
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN
150	40	3.56	637404	2.84	638224	4.13	636704	194	140x110	105x80	11	58	178	500
200	50	5.82	637406	5.21	638226	6.18	636706	240	140x110	105x80	11	50	178	500

Medium-heavy duty brackets P - max carrying capacity 750 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

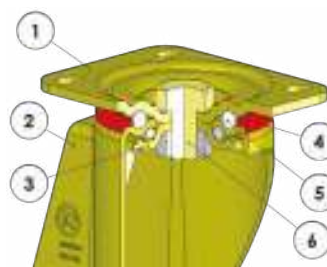
															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
100	30	1.61	637622	1.11	638622	1.75	636302	138	100x85	80x60	9	46	123	250	200
125	40	2.29	637623	1.76	638623	2.43	636303	161	100x85	80x60	9	44	123	350	280

Options available to order:

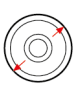
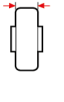
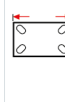
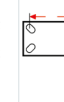
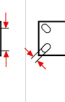
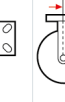
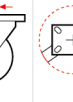


Footguard
for brackets NL-
M-P-PT

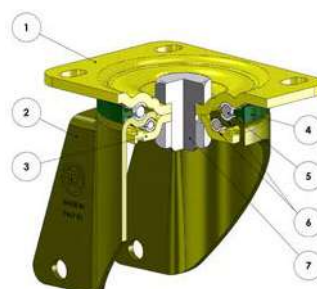
Heavy duty brackets P - max carrying capacity 750 daN



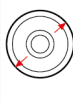
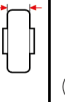
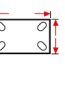
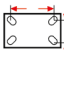
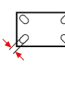
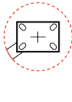
- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total adjustable rear foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
150	40	4.19	637624	2.70	638624	4.76	636304	200	140x110	105x80	11	70	126	750	600
175	40	5.14	637625	3.72	638625	5.71	636305	225	140x110	105x80	11	70	126	750	600
200	50	6.44	637626	4.98	638626	7.01	636306	250	140x110	105x80	11	70	126	750	600

Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 900 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

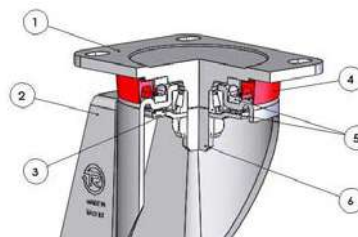
															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
150	40	4,19	635604	2,70	638624	4,76	635304	200	140x110	105x80	11	70	126	750	600
175	40	5,14	635605	3,72	638625	5,71	635305	225	140x110	105x80	11	70	126	850	680
200	50	6,44	635606	4,98	638626	7,01	635306	250	140x110	105x80	11	70	126	900	800

Options available to order:

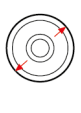
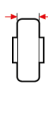
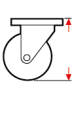
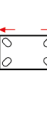
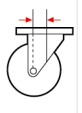


Footguard
for brackets NL-
M-P-PT

Extra-heavy duty brackets EP - max carrying capacity 1500 daN



- 1) Plate: white galvanised forged steel
- 2) Fork: white galvanised forged steel
- 3) Lower bearing protection ring
- 4) Dust seal: orange polyethylene
- 5) Swivel actions: axial ball bearing and tapered roller bearing
- 6) King pin: integrated with the machine-processed plate
Available with adjustable total rear foot brake

																									
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN								
100	30	1.85	637822	1.61	638822			140	100x85	80x60	9	46				250	200								
125	40	2.56	637823	1.70	638823			164	100x85	80x60	9	45				350	280								
150	40	4.46	637824	3.97	638824	5.03	636504	200	135x110	105x80	11	70	126			750	600								
175	40	5.44	637825	5.02	638825	6.01	636505	225	135x110	105x80	11	70	126			850	680								
200	50	6.75	637826	6.30	638826	7.32	636506	250	135x110	105x80	11	70	126			1100	880								
250	60	13.58	637828	11.74	638828			300	175x140	140x105	14	66				1500	1200								

VULKOLLAN® WHEELS WITH CAST IRON CENTRE



80-300
mm

93 Shore A

280-2300
daN
4 km/h

220-1800
daN
6 km/h

190-600
daN

-20 / +80
°C



Description

Tyre: Vulkollan®, hardness 93 Shore A: excellent rolling resistance and elasticity, highly resistant to wear, tear and deformations.

Centre: cast iron.

Hub with shielded ball bearings with interference assembly in the seats obtained by machining the centre; also available without bearings.

Uses

Ideal for applications with heavy duty loads, even with mechanical handling at high speeds. Combined with appropriate brackets, they guarantee excellent performance up to 16 km/h.

The excellent rolling resistance allows an easy handling of heavy loads even with wheels of small diameter.

Examples of recommended applications: trolleys for indoor industrial handling, AGV trolleys, containers, electrical pallet trucks, forklift trucks.

Environments for use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.

Not suitable if large obstacles are present.



Force required to push or tow a wheel

 	150 kg	300 kg	450 kg	600 kg	1000 kg	1500 kg	2000 kg
80 mm	4,5	11	----	----	----	----	----
100 mm	3,8	7,7	----	----	----	----	----
125x38 mm	3,5	7	11,5	----	----	----	----
125x50 mm	3,3	6,5	11	----	----	----	----
150x50 mm	2,5	5,2	8,6	12,6	----	----	----
160x50 mm	2,3	5	8,3	12	----	----	----
180x50 mm	2	4,1	6,8	9,7	----	----	----
200x50 mm	1,7	3,8	6	8,5	16	----	----
200x80 mm	1,3	3,5	5,0	6,7	11,5	17	----
250x60 mm	1	3	4,7	6,3	10,9	16	----
250x80 mm	< 1	2,5	4,5	6	10,3	15,5	----
300x60 mm	< 1	2	4	5,5	9,6	15	----
300x80 mm	< 1	1,5	3,5	5	8,6	13	16

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Available with brackets:



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate fitting. Available with front brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 750 daN - available diameters 80-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 900 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Extra-heavy duty brackets EP

Maximum carrying capacity 1600 daN - available diameters 100-250 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded brackets EE MHD - EE HD - EE EHD.

Maximum carrying capacity 2300 daN - available diameters 125-400 mm
Top plate fitting. Available with adjustable rear brake.



Twin electrowelded brackets EEG MHD - EEG HD - EEG EHD

Maximum carrying capacity 3500 daN - available diameters 100-250 mm
Top plate fitting.



Electrowelded sprung-loaded brackets EES MHD

Maximum carrying capacity 1000 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable front brake.

Options available to order:



Wheel
with
key housing



Wheel
with very thick
tyre

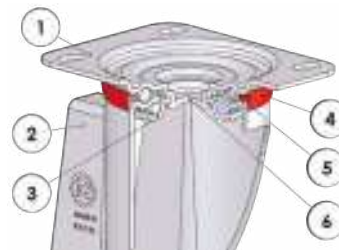


															
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN		
80	28	0,51	632151	0,46	634151	12	32	28	8	370	190	280	220		
100	38	1,02	632152	0,91	634152	15	40	35	11	500	220	380	300		
125	38	1,45	632153	1,34	634153	15	40	35	11	600	240	450	360		
125	50	1,98	632163	1,76	634163	20	55	47	14	800	270	600	440		
125	50	1,96	632363	1,76	634163	25	55	47	14	800	270	600	440		
150	50	2,50	632154	2,28	634154	20	55	47	14	910	290	750	600		
150	50	2,48	632354	2,28	634154	25	55	47	14	910	290	750	600		
160	50	2,65	632164	2,43	634164	20	55	47	14	1000	300	750	600		
160	50	2,63	632364	2,43	634164	25	55	47	14	1000	300	750	600		
180	50	3,02	632155	2,80	634155	20	55	47	14	1100	350	900	720		
200	50	3,65	632156	3,43	634156	20	55	47	14	1500	380	1000	800		
200	50	3,63	632356	3,43	634156	25	55	47	14	1500	380	1000	800		
200	78	7,26	632166	6,74	634166	25	86	62	17	2000	450	1600	1300		
200	78	7,24	632366	6,74	634166	30	86	62	17	2000	450	1600	1300		
250	60	8,13	632157	7,61	634157	25	65	62	17	2500	480	1500	1200		
250	60	8,10	632357	7,61	634157	30	65	62	17	2500	480	1500	1200		
250	78	9,81	632167	9,29	634167	25	86	62	17	2800	500	1900	1500		
250	78	9,80	632367	9,29	634167	30	86	62	17	2800	500	1900	1500		
300	60	11,43	632158	10,96	634158	30	65	62	17	3200	550	1750	1400		
300	78	13,80	632168	13,33	634168	30	86	62	17	3400	600	2300	1800		

Options available to order:

Wheel
with
key housingWheel
with very thick
tyre

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	
80	28	0.95	634551	0.82	634651	1.11	635451	107	100x85	80x60	9	37	120	200		
100	38	1.51	634552	1.40	634652	1.67	635452	128	100x85	80x60	9	35	120	200		
125	38	1.97	634553	1.86	634653	2.13	635453	156	100x85	80x60	9	37	120	220		
125	50	3.38	634563	2.89	634663	3.58	635463	166	140x110	105x80	11	57	156	300		
150	50	3.87	634554	3.59	634654			194	140x110	105x80	11	56		300		
160	50	3.98	634564	3.71	634664	4.23	635474	199	140x110	105x80	11	56	156	300		
180	50	4.48	634555	4.21	634655	4.68	635465	220	140x110	105x80	11	56	156	300		
200	50	5.16	634556	4.92	634656	5.36	635466	240	140x110	105x80	11	56	156	300		

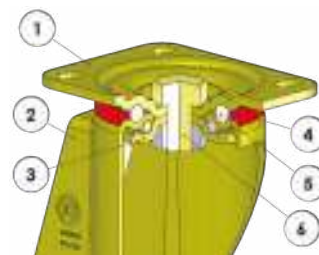
Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

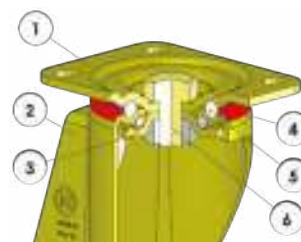
																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	
150	50	4.21	637424	3.59	634654	4.65	636724	194	140x110	105x80	11	58	178	500		
160	50	4.33	637434	3.71	634664	4.78	636734	199	140x110	105x80	11	58	178	500		
200	50	5.55	637426	4.92	634656	5.91	636726	240	140x110	105x80	11	50	178	500		

Heavy-duty brackets P - max carrying capacity 750 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
80	28	1.38	635851	0.96	636851			128	100x85	80x60	9	46		280	220
100	38	1.93	635852	1.52	636852	2.06	634852	138	100x85	80x60	9	46	123	350	300
125	38	2.37	635853	2.04	636853	2.50	634853	161	100x85	80x60	9	44	123	350	300



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total adjustable rear foot brake

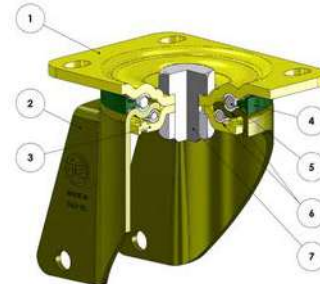
															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
125	50	3.66	635863	2.65	636863	4.24	634863	170	140x110	105x80	11	70	126	550	440
150	50	4.81	635854	3.55	636854	5.33	634854	200	140x110	105x80	11	70	126	750	600
160	50	4.93	635864	4.08	636864	5.45	634864	205	140x110	105x80	11	70	126	750	600
180	50	5.30	635855	4.45	636855	5.90	634855	228	140x110	105x80	11	70	126	750	600
200	50	6.06	635856	5.15	636856	6.66	634856	250	140x110	105x80	11	70	126	750	600

Options available to order:

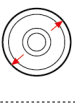
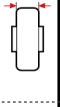
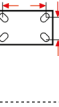
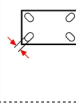


Footguard
for brackets
NL-M-P-PT

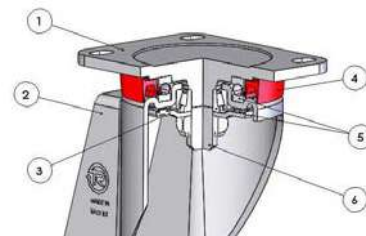
Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 900 daN



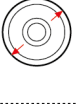
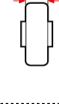
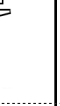
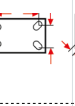
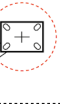
- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN		
125	50	3,66	635003	2,65	636863	4,24	639903	170	140x110	105x80	11	70	126	600	440		
150	50	4,81	635004	3,55	636854	5,33	639904	200	140x110	105x80	11	70	126	750	600		
160	50	4,93	635014	4,08	636864	5,45	639914	205	140x110	105x80	11	70	126	750	600		
180	50	5,30	635005	4,45	636855	5,90	639905	228	140x110	105x80	11	70	126	900	720		
200	50	6,06	635006	5,15	636856	6,66	639906	250	140x110	105x80	11	70	126	900	800		

Extra-heavy duty brackets EP - max carrying capacity 1600 daN



- 1) Plate: white galvanised forged steel
 - 2) Fork: white galvanised forged steel
 - 3) Lower bearing protection ring
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: axial ball bearing and tapered roller bearing
 - 6) King pin: integrated with the machine-processed plate
- Available with adjustable total rear foot brake

																	
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN		
100	38	2.15	637852	1.92	638852			140	100x85	80x60	9	46		350	300		
125	38	2.64	637853	2.44	638853			164	100x85	80x60	9	48		350	300		
150	50	5.04	637854	4.63	638854	5.56	636654	200	135x110	105x80	11	70	126	750	600		
160	50	5.16	637864	4.75	638864	5.68	636664	205	135x110	105x80	11	70	126	750	600		
180	50	5.60	637855	5.20	638855	6.20	636655	228	135x110	105x80	11	70	126	900	720		
200	50	6.35	637856	6.06	638856	6.95	636656	250	135x110	105x80	11	70	126	1000	800		
200	80	12.30	637866	10.46	638866			275	175x140	140x105	14	66		1600	1300		
250	60	13.16	637857	11.32	638857			300	175x140	140x105	14	66		1500	1200		

Options available to order:



Footguard for brackets
NL-M-P-PT

Electrowelded brackets EE MHD - max carrying capacity 1000 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

Available with adjustable total rear foot brake																						
																						
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN					
125	50	4.88	638303	3.90	638403	5.76	638903	182	135x110	105x80	11	51	157	600	440							
150	50	5.50	638304	4.51	638404	6.38	638904	210	135x110	105x80	11	60	157	750	600							
160	50	5.65	638314	4.66	638414	6.53	638914	215	135x110	105x80	11	60	157	750	600							
180	50	6.14	638305	5.16	638405	7.02	638905	242	135x110	105x80	11	70	157	900	720							
200	50	6.77	638306	5.79	638406	7.65	638906	252	135x110	105x80	11	70	157	1000	800							

Electrowelded brackets EE HD - max carrying capacity 2300 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

															
															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
200	80	13.72	638316	12.18	638416	14.60	638916	275	175x140	140x105	14	65	166	1600	1300
250	60	14.82	638307	13.23	638407	15.70	638907	320	175x140	140x105	14	74	166	1500	1200
250	80	16.50	638317	14.91	638417	17.38	638917	320	175x140	140x105	14	74	166	1600	1300
250	80	17.56	638327	15.23	638427	18.44	638927	325	200x160	160x120	17	74	166	1900	1500
300	60	18.24	638308	16.62	638408	19.12	638908	360	175x140	140x105	14	81	166	1600	1300
300	60	19.30	638328	16.95	638428	20.18	638928	365	200x160	160x120	17	81	166	1750	1400
300	80	20.61	638318	18.99	638418	21.49	638918	360	175x140	140x105	14	81	166	1600	1300
300	80	21.67	638338	19.32	638438	22.55	638938	365	200x160	160x120	17	81	166	2300	1800

Options available to order:

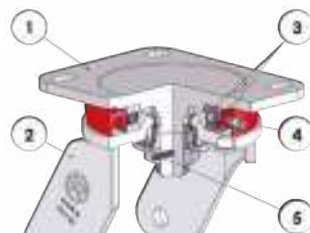


Directional lock
for brackets EE MHD
- EE HD - EED MHD - EES
MHD: see page 420



Bracket
EE MHD
with steering
system

Twin electrowelded brackets EEG MHD - max carrying capacity 900 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	daN			
100	38+38	4.50	638062	3.75	638162	140	135x110	105x80	11	55	700	600			
125	38+38	5.45	638063	4.70	638163	170	135x110	105x80	11	55	900	720			

Twin electrowelded brackets EEG HD - max carrying capacity 2000 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	daN			
125	50+50	11.00	638072	7.70	638172	210	175x140	140x105	14	50	1200	880			
150	50+50	13.10	638074	8.70	638174	223	175x140	140x105	14	50	1500	1200			
160	50+50	13.40	638084	9.00	638184	228	175x140	140x105	14	50	1500	1200			
200	50+50	15.90	638066	11.30	638166	280	175x140	140x105	14	65	1600	1300			
200	50+50	17.55	638076	12.70	638176	285	200x160	160x120	17	65	2000	1600			

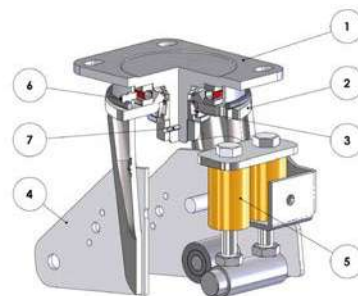
Twin electrowelded brackets EEG EHD - max carrying capacity 3500 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	daN	
200	80+80	34.80	638086 	25.05	638186 	280	250x200	210x160	19	52			3200	2500	
250	60+60	36.95	638067 	27.20	638167 	330	250x200	210x160	19	62			3000	2400	
250	80+80	40.30	638077 	30.55	638177 	330	250x200	210x160	19	62			3500	2800	

Electrowelded sprung-loaded brackets EES MHD - max carrying capacity 1000 daN - damping up to 400 daN



- 1) Top plate: electrolytically galvanised forged steel with integrated pin.
- 2) Main fork: deep-drawn legs electrowelded to the flange and electrolytically galvanised U-shaped component electrowelded to the legs.
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) spring-hinged plates: plates electrowelded to the axle
- 5) Polyurethane springs
- 6) Grease nipple
- 7) Anti-loosening system nut

																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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Spring travel (mm): maximum difference in the total height of the group wheel + support depending on the spring tension



Initial tension (daN): in case of lighter loads than indicated, the bracket works with no damping



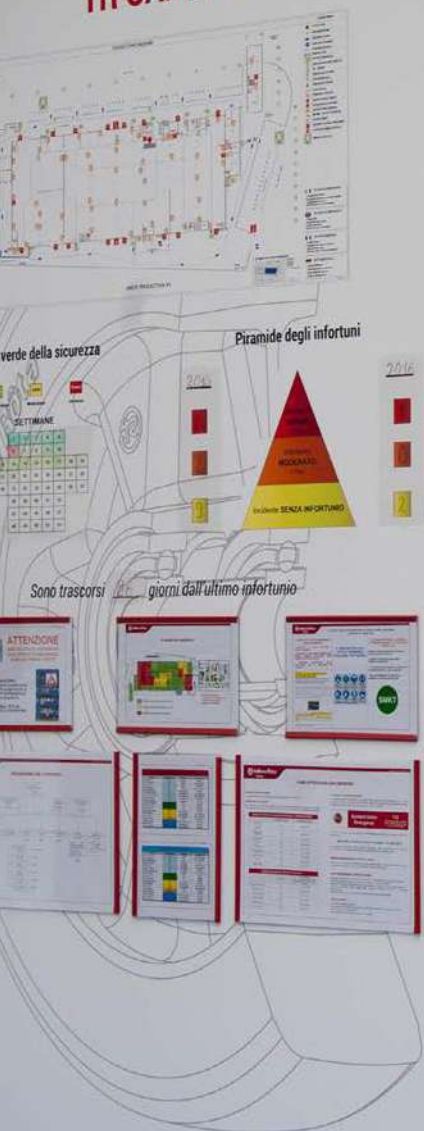
Spring tension (daN): in case of heavier loads than indicated, the bracket works with no damping

Options available to order:



Directional lock
for brackets EE MHD
- EE HD - EED MHD - EES
MHD: see page 420

TR SAFETY



"TR" POLYURETHANE WHEELS WITH CAST IRON CENTRE



Description

Tyre: "TR" polyurethane, hardness 92 Shore A, excellent rolling resistance and elasticity, highly resistant to wear.

Centre: cast iron.

Hub available in following configurations:

- with plain bore so that it can easily be reworked to achieve a spline, also available with key housing;
- with shielded ball bearing press-fitted in the seats obtained by precision machining the centre; also available without bearings.

Uses

Ideal for applications with heavy duty loads, even with mechanical handling at high speeds. Combined with appropriate brackets, they guarantee excellent performance up to 16 km/h.

The excellent rolling resistance allows an easy handling of heavy loads even with wheels of small diameter.

The plain bore version, with key way or spline, is suitable for use as a drive wheel.

Examples of recommended applications: trolleys for indoor industrial handling, AGV trolleys, containers, electrical pallet trucks.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated steam.

WEAK ACIDS		WEAK BASES	
STRONG ACIDS		STRONG BASES	
WATER		HYDROCARBONS	
ALCOHOL		SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.

Not suitable if large obstacles are present.



Force required to push or tow a wheel

	150 kg	300 kg	450 kg	600 kg	1000 kg	1500 kg	2000 kg	2800 kg
80 mm	4,5	11	----	----	----	----	----	----
100 mm	3,8	7,7	----	----	----	----	----	----
125x38 mm	3,5	7	11,5	----	----	----	----	----
125x50 mm	3,3	6,5	11	----	----	----	----	----
125x60 mm	3,3	6,5	11	14	----	----	----	----
150x50 mm	2,5	5,2	8,6	12,6	----	----	----	----
150x60 mm	2	4	8	11	----	----	----	----
150x80 mm	1,8	3,5	6	10,5	18	----	----	----
160x50 mm	2,3	5	8,3	12	----	----	----	----
180x50 mm	2	4,1	6,8	9,7	----	----	----	----
200x50 mm	1,7	3,8	6	8,5	16	----	----	----
200x80 mm	1,3	3,5	5,0	6,7	11,5	17	----	----
250x60 mm	1	3	4,7	6,3	10,9	16	----	----
250x80 mm	< 1	2,5	4,5	6	10,3	15,5	----	----
300x60 mm	< 1	2	4	5,5	9,6	15	----	----
300x80 mm	< 1	1,5	3,5	5	8,6	13	16	----
400x100 mm	< 1	< 1	2	3,2	6,8	11	13	21

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Available with brackets:



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate fitting. Available with front brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 750 daN - available diameters 80-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 900 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Extra-heavy duty brackets EP

Maximum carrying capacity 1600 daN - available diameters 100-250 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded brackets EE MHD - EE HD - EE EHD.

Maximum carrying capacity 2800 daN - available diameters 125-400 mm
Top plate fitting. Available with adjustable rear brake.



Twin electrowelded brackets EEG MHD - EEG HD - EEG EHD

Maximum carrying capacity 4300 daN - available diameters 100-300 mm
Top plate fitting



Electrowelded sprung-loaded brackets EES MHD

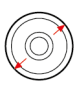
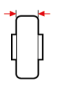
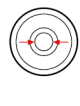
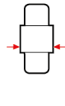
Maximum carrying capacity 1000 daN - available diameters 160-250 mm
Top plate fitting. Available with adjustable front brake.

"TR" POLYURETHANE WHEELS WITH CAST IRON CENTRE



These wheels can also be used as drive wheels: the wheel hub is manufactured so that it can easily be reworked to achieve a spline or key housing. The carrying capacity given is valid for movements at a maximum speed of 6 km/h also if used as a drive wheel on mainly straight routes.

To use as a steering drive wheel or at speeds higher than 6 km/h it is advisable to contact Tellure Rôta to assess any reduction of the maximum applicable loads that may be necessary. To prevent the polyurethane tyre from deteriorating, any reworking on the wheel must be done keeping the temperature under 80°C (which is recommended as the maximum limit during normal use of the product).

													
mm	mm	kg	COD.	mm	mm.	mm.	mm.	daN	daN	daN			
100	40	1,50	641102	15 H7	45	55	30	500	400	300			
100	40	1,45	641112	20 H7	45	55	30	500	400	300			
100	40	1,39	641122	25 H7	45	55	30	500	400	300			
125	40	2,10	641103	20 H7	60	60	30	600	450	360			
125	40	2,07	641143	25 H7	60	60	30	600	450	360			
125	50	2,36	641113	20 H7	60	60	30	700	550	440			
125	50	2,28	641123	25 H7	60	60	30	700	550	440			
125	50	2,19	641133	30 H7	60	60	30	700	550	440			
150	40	3,00	641104	20 H7	60	70	40	730	550	440			
150	50	3,27	641114	20 H7	60	70	40	910	700	560			
150	50	3,13	641154	25 H7	60	70	40	910	700	560			
150	50	3,04	641164	30 H7	60	70	40	910	700	560			
150	50	2,93	641174	35 H7	60	70	40	910	700	560			
160	50	3,35	641124	20 H7	60	70	40	910	700	560			
160	50	3,27	641134	25 H7	60	70	40	910	700	560			
160	50	3,18	641144	30 H7	60	70	40	910	700	560			
180	50	4,30	641105	20 H7	60	70	40	1100	800	650			
180	50	4,26	641115	25 H7	60	70	40	1100	800	650			
180	50	4,17	641125	30 H7	60	70	40	1100	800	650			
180	50	4,05	641135	35 H7	60	70	40	1100	800	650			
200	50	4,86	641106	20 H7	60	70	40	1500	950	750			
200	50	4,72	641156	25 H7	60	70	40	1500	950	750			
200	50	4,63	641166	30 H7	60	70	40	1500	950	750			
200	50	4,52	641176	35 H7	60	70	40	1500	950	750			
200	50	4,39	641186	40 H7	60	70	40	1500	950	750			
200	60	5,20	641116	25 H7	60	70	40	1700	1100	900			
200	80	8,51	641136	35 H7	80	95	60	2000	1400	1150			
250	50	7,74	641107	20 H7	60	75	45	1800	1100	900			
250	50	7,63	641007	25 H7	60	75	45	1800	1100	900			
250	50	7,54	641017	30 H7	60	75	45	1800	1100	900			
250	50	7,43	641027	35 H7	60	75	45	1800	1100	900			
250	50	7,30	641037	40 H7	60	75	45	1800	1100	900			
250	80	11,52	641117	40 H7	80	95	60	2800	1600	1300			
250	80	11,09	641177	50 H7	80	95	60	2800	1600	1300			
250	80	10,46	641127	60 H7	80	95	60	2800	1600	1300			
300	80	14,88	641128	40 H7	80	100	65	3400	2100	1700			
300	80	14,40	641108	50 H7	80	100	65	3400	2100	1700			
300	100	23,80	641138	40 H7	100	120	80	4200	2500	2000			
300	100	23,29	641118	50 H7	100	120	80	4200	2500	2000			
300	100	22,67	641148	60 H7	100	120	80	4200	2500	2000			
350	100	30,88	641109	50 H7	100	120	80	4700	2800	2250			
400	100	35,58	641110	50 H7	100	120	80	5000	3500	2800			



													
mm	mm	kg	COD.	mm	mm.	mm.	mm.	daN	daN	daN			
100	40	1,50	641202	15 H7	45	5x5	17,3	500	400	300			
125	40	2,10	641203	20 H7	60	6x6	22,8	600	450	360			
150	40	2,90	641204	20 H7	60	6x6	22,8	730	550	440			
150	50	3,70	641214	20 H7	60	6x6	22,8	910	700	560			
180	50	4,40	641205	20 H7	60	6x6	22,8	1100	800	650			
200	50	4,60	641206	20 H7	60	6x6	22,8	1500	950	750			
200	60	6,00	641216	25 H7	60	8x7	28,3	1700	1100	900			
200	80	8,40	641226	40 H7	80	12x8	43,3	2000	1400	1150			
250	50	6,60	641207	20 H7	60	6x6	22,8	1800	1100	900			
250	80	11,00	641217	40 H7	80	12x8	43,3	2800	1600	1300			
250	80	10,10	641227	60 H7	80	18x11	64,4	2800	1600	1300			
300	80	14,40	641208	50 H7	80	14x9	53,8	3400	2100	1700			
300	100	21,20	641218	50 H7	100	14x9	53,8	4200	2500	2000			
350	100	26,10	641209	50 H7	100	14x9	53,8	4700	2800	2250			
400	100	31,60	641210	50 H7	100	14x9	53,8	5000	3500	2800			

The standard reference used by Tellure Rôta for the construction of the key housing is UNI EN 6604-69; therefore, the tolerance on the width of the key housing is JS9.

Tellure Rôta is at your disposal to customise the product, modifying the bore with a groove for a key housing of different dimensions or a groove for a tongue according to the specifications of the Italian (UNI 6604 and UNI 6607) and European (DIN 6885) regulations in force. The maximum applicable diameter for each wheel, guaranteeing the carrying capacity values, is given in the product dimensions column

"TR" POLYURETHANE WHEELS WITH CAST IRON CENTRE



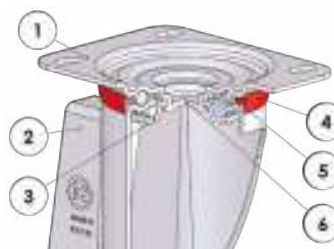
															
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN		
80	20	0,36	642181	0,34	644181	12	18	32	14	200	150	150	120		
80	28	0,51	642151	0,46	644151	12	32	28	8	370	190	280	220		
100	38	1,02	642152	0,91	644152	15	40	35	11	500	220	380	300		
125	38	1,45	642153	1,34	644153	15	40	35	11	600	240	450	360		
125	50	1,98	642163	1,76	644163	20	55	47	14	800	270	550	440		
125	50	1,96	642363	1,76	644163	25	55	47	14	800	270	550	440		
125	58	2,86	642103	2,62	644103	20	58	47	15	800	250	600	480		
150	50	2,50	642154	2,28	644154	20	55	47	14	910	290	750	600		
150	50	2,48	642354	2,28	644154	25	55	47	14	910	290	750	600		
150	58	2,83	642104	2,59	644104	20	58	47	15	1400	350	850	680		
150	78	5,69	642124	5,19	644124	25	88	62	18	1700	400	1000	800		
160	50	2,65	642164	2,43	644164	20	55	47	14	1000	300	750	600		
160	50	2,63	642364	2,43	644164	25	55	47	14	1000	300	750	600		
180	50	3,02	642155	2,80	644155	20	55	47	14	1100	350	900	720		
200	50	3,65	642156	3,43	644156	20	55	47	14	1500	380	1000	800		
200	50	3,63	642356	3,43	644156	25	55	47	14	1500	380	1000	800		
200	78	7,26	642166	6,74	644166	25	86	62	17	2000	450	1600	1300		
200	78	7,24	642366	6,74	644166	30	86	62	17	2000	450	1600	1300		
250	50	7,00	642147	6,92	644147	20	55	52	15	1750	400	1200	960		
250	60	8,13	642157	7,61	644157	25	65	62	17	2500	480	1500	1200		
250	60	8,10	642357	7,61	644157	30	65	62	17	2500	480	1500	1200		
250	78	9,81	642167	9,81	644167	25	86	62	17	2800	500	1900	1500		
250	78	9,80	642367	9,81	644167	30	86	62	17	2800	500	1900	1500		
300	60	11,43	642158	10,96	644158	30	65	62	17	3200	550	1750	1400		
300	78	13,80	642168	13,33	644168	30	86	62	17	3400	600	2300	1800		
300	100	22,75	642178	22,46	644178	45	100	85	19	3400	600	2500	2000		
360	120	31,63	642139	30,50	644139	40	120	90	23	3800	750	2800	2200		
400	100	28,86	642129	26,30	644129	50	120	110	28	4500	750	2800	2200		

Options available to order:



Wheel
with very thick
tyre

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN
80	28	0.95	644551	0.82	644651	1.11	645451	107	100x85	80x60	9	37	120	200
100	38	1.51	644552	1.40	644652	1.67	645452	128	100x85	80x60	9	35	120	200
125	38	1.97	644553	1.86	644653	2.13	645453	156	100x85	80x60	9	37	120	220
125	50	3.38	644563	2.89	644663	3.58	645463	166	140x110	105x80	11	56	156	300
150	50	3.87	644554	3.59	644654	4.12	645464	194	140x110	105x80	11	56	156	300
160	50	3.98	644564	3.71	644664	4.23	645474	199	140x110	105x80	11	56	156	300
180	50	4.48	644555	4.21	644655	4.68	645465	220	140x110	105x80	11	56	156	300
200	50	5.16	644556	4.92	644656	5.36	645466	240	140x110	105x80	11	56	156	300

Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN
150	50	4.21	644954	3.59	644654	4.65	645564	194	140x110	105x80	11	58	178	500
160	50	4.33	644964	3.71	644664	4.78	645574	199	140x110	105x80	11	58	178	500
200	50	5.55	644956	4.92	644656	5.91	645566	240	140x110	105x80	11	50	178	500

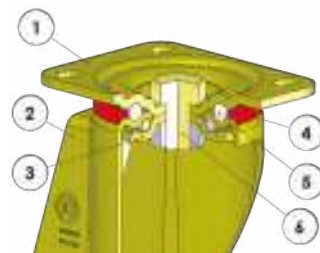
Options available to order:



Footguard
for brackets NL-
M-P-PT

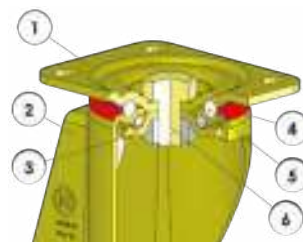
"TR" POLYURETHANE WHEELS WITH CAST IRON CENTRE

Medium-heavy duty brackets P - max carrying capacity 750 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
80	28	1.38	645851	0.96	646851			128	100x85	80x60	9	46	123	280	220
100	38	1.93	645852	1.52	646852	2.06	644852	138	100x85	80x60	9	46	123	350	300
125	38	2.37	645853	2.04	646853	2.50	644853	161	100x85	80x60	9	48	123	350	300



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total adjustable rear foot brake

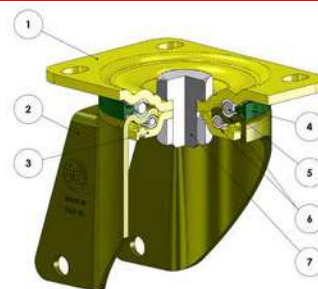
															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
125	50	3.66	645863	2.65	646863	4.24	644863	170	140x110	105x80	11	70	126	550	440
150	50	4.81	645854	3.55	646854	5.33	644854	200	140x110	105x80	11	70	126	750	600
160	50	4.93	645864	4.08	646864	5.45	644864	205	140x110	105x80	11	70	126	750	600
180	50	5.30	645855	4.45	646855	5.90	644855	228	140x110	105x80	11	70	126	750	600
200	50	6.06	645856	5.15	646856	6.66	644856	250	140x110	105x80	11	70	126	750	600

Options available to order:



Footguard
for brackets NL-
M-P-PT

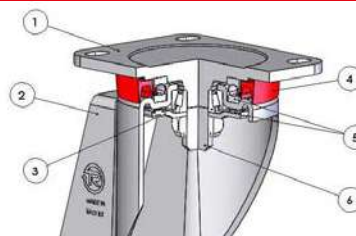
Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 900 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

																
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	daN
125	50	3,66	645003	2,65	646863	4,24	649903	170	140x110	105x80	11	70	126		550	440
150	50	4,67	645004	3,55	646854	5,33	649904	200	140x110	105x80	11	70	126		750	600
160	50	4,93	645014	4,08	646864	5,45	649914	205	140x110	105x80	11	70	126		750	600
180	50	5,30	645005	4,45	646855	5,90	649905	228	140x110	105x80	11	70	126		900	720
200	50	6,06	645006	5,15	646856	6,66	649906	250	140x110	105x80	11	70	126		900	800

Extra-heavy duty brackets EP - max carrying capacity 1600 daN

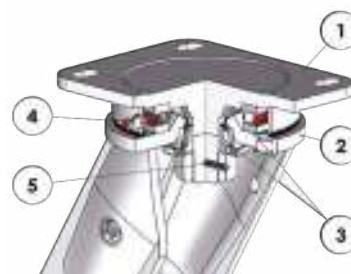


- 1) Plate: white galvanised forged steel
 - 2) Fork: white galvanised forged steel
 - 3) Lower bearing protection ring
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: axial ball bearing and tapered roller bearing
 - 6) King pin: integrated with the machine-processed plate
- Available with adjustable total rear foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	daN
100	38	2.15	647852	1.92	648852			140	100x85	80x60	9	46			350	300
125	38	2.64	647853	2.44	648853			164	100x85	80x60	9	48			350	300
125	50	4.61	647863	4.16	648863			188	135x110	105x80	11	70			550	440
150	50	5.04	647854	4.63	648854	5.56	646654	200	135x110	105x80	11	70	126		750	600
150	58	5.44	647824	4.96	648824			200	135x110	105x80	11	70			850	680
160	50	5.16	647864	4.75	648864	5.68	646664	205	135x110	105x80	11	70	126		750	600
180	50	5.60	647855	5.20	648855	6.20	646655	228	135x110	105x80	11	70	126		900	720
200	50	6.35	647856	6.06	648856	6.95	646656	250	135x110	105x80	11	70	126		1000	800
200	78	12.30	647866	10.46	648866			275	175x140	140x105	14	66			1600	1300
250	60	13.16	647857	11.32	648857			300	175x140	140x105	14	66			1500	1200

"TR" POLYURETHANE WHEELS WITH CAST IRON CENTRE

Electrowelded brackets EE MHD - max carrying capacity 1000 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
125	50	4.88	648303	3.90	648403	5.76	648503	182	135x110	105x80	11	51	157	550	440
150	50	5.50	648304	4.51	648404	6.38	648504	210	135x110	105x80	11	60	157	750	600
160	50	5.65	648314	4.66	648414	6.53	648514	215	135x110	105x80	11	60	157	750	600
180	50	6.14	648305	5.16	648405	7.02	648505	242	135x110	105x80	11	70	157	900	720
200	50	6.77	648306	5.79	648406	7.65	648506	252	135x110	105x80	11	70	157	1000	800

Electrowelded brackets EE HD - max carrying capacity 2300 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
150	78	12.15	648315	10.61	648415	13.03	648515	218	175x140	140x105	14	50	166	1000	800
150	78	12.15	648324	10.61	648424			223	200x160	160x120	17	50		1000	800
200	78	13.72	648316	12.18	648416	14.60	648516	275	175x140	140x105	14	65	166	1600	1300
250	60	14.82	648307	13.23	648407	15.70	648507	320	175x140	140x105	14	74	166	1500	1200
250	78	16.50	648317	14.91	648417	17.38	648517	320	175x140	140x105	14	74	166	1600	1300
250	78	17.56	648327	15.23	648427	18.44	648527	325	200x160	160x120	17	74	166	1900	1500
300	60	18.24	648308	16.62	648408	19.12	648508	360	175x140	140x105	14	81	166	1600	1300
300	60	19.30	648328	16.95	648428	20.18	648528	365	200x160	160x120	17	81	166	1750	1400
300	78	20.61	648318	18.99	648418	21.49	648518	360	175x140	140x105	14	81	166	1600	1300
300	78	21.67	648338	19.32	648438	22.55	648538	365	200x160	160x120	17	81	166	2300	1800

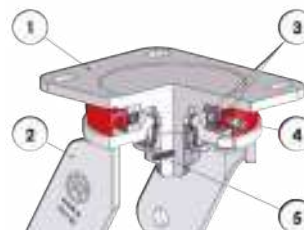
Electrowelded bracket EE EHD - max carrying capacity 2800 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	4 km/h	6 km/h			
300	100	29.80	648309	25.10	648409	384	250x200	210x160	19	78	2500	2000			
400	100	44.91	648310	40.21	648410	475	250x200	210x160	19	95	2800	2200			

Twin electrowelded brackets EEG MHD - max carrying capacity 900 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	4 km/h	6 km/h			
100	38+38	4.50	648062	3.75	648162	140	135x110	105x80	11	55	700	600			
125	38+38	5.45	648063	4.70	648163	170	135x110	105x80	11	55	900	720			

Options available to order:



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES
MHD: see page 420



Bracket
EE MHD
with steering
system

"TR" POLYURETHANE WHEELS WITH CAST IRON CENTRE

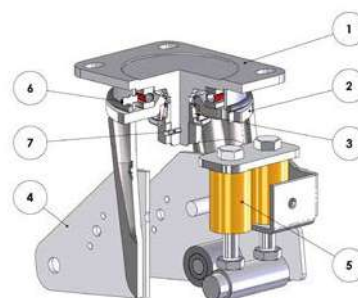
Twin electrowelded brackets EEG HD - max carrying capacity 2000 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

										 4 km/h	 6 km/h			
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	daN		
125	50+50	11.00	648072	7.70	648172	210	175x140	140x105	14	50	1100	880		
150	50+50	13.10	648074	8.70	648174	223	175x140	140x105	14	50	1500	1200		
160	50+50	13.40	648084	9.00	648184	228	175x140	140x105	14	50	1500	1200		
200	50+50	15.90	648066	11.30	648166	280	175x140	140x105	14	65	1600	1300		
200	50+50	17.55	648076	12.70	648176	285	200x160	160x120	17	65	2000	1600		

Electrowelded sprung-loaded brackets EES HD - max carrying capacity 1000 daN - damping up to 400 daN



- 1) Top plate: electrolytically galvanised forged steel with integrated pin.
 - 2) Main fork: deep-drawn legs electrowelded to the flange and electrolytically galvanised U-shaped component electrowelded to the legs.
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) spring-hinged plates: plates electrowelded to the axle
 - 5) Polyurethane springs
 - 6) Grease nipple
 - 7) Anti-loosening locknut system
- Available with adjustable front lock

																				
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN	daN	daN	
160	50	8,47	649304 	7,22	649404 	9,53	649504 	248	135x110	105x80	11	100	240	25	50	400	750	600		
200	50	9,47	649306 	7,82	649406 	10,18	649506 	268	135x110	105x80	11	100	265	25	50	400	1000	800		
250	50	11,85	649308 	10,64	649408 	13,09	649508 	316	135x110	105x80	11	110	315	25	50	400	1000	960		

"TR" POLYURETHANE WHEELS WITH ALUMINIUM CENTRE

80-200
mm

92 Shore A

220-850
daN
4 km/h170-680
daN
6 km/h150-360
daN-20 / +80
°C

Description

Tyre: "TR" polyurethane, hardness 92 Shore A, excellent rolling resistance and elasticity, highly resistant to wear and tear.

Centre: made of cast aluminium.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

Suitable for applications with medium/heavy-duty loads, also with mechanical handling, with speed up to 6 km/h.

The excellent rolling resistance allows an easy handling of heavy loads even with wheels of small diameter.

Examples of recommended applications: trolleys for indoor industrial handling, AGV trolleys, containers, electrical pallet trucks, tilt trucks.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons.

Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

WEAK ACIDS	
STRONG ACIDS	
WATER	
ALCOHOL	

WEAK BASES	
STRONG BASES	
HYDROCARBONS	
SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.

Not suitable if large obstacles are present.



Force required to push or tow a wheel

 	150 kg	250 kg	350 kg	450 kg	550 kg	700 kg	850 kg
80 mm	3,2	---	---	---	---	---	
100 mm	2,3	5,2	---	---	---	---	
125 mm	1,7	4,5	6,5	---	---	---	
150 mm	1,2	3,8	6	7	8	---	
160 mm	<1	3,3	5	6,5	8	11,2	
200 mm	<1	3	4,9	6	7,8	10,5	18

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Available with brackets :



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate and bolt hole fittings. Available with the front brake and centralised brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 750 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 850 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable rear brake.



Extra-heavy duty brackets EP

Maximum carrying capacity 850 daN - available diameters 100-200 mm
Top plate fitting. Available with adjustable rear brake.

Options available to order:

The series 65AL wheels are also available with assembled thread guards. To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.



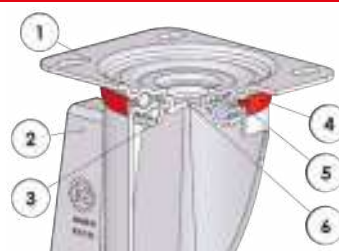
R <10⁹Ω

ESD polyurethane wheels, with electrical resistance <10⁹ Ohm (page 314)



										Static					
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN		
80	25	0,20	652101	0,15	654101	12	30	28	8	280	150	220	170		
100	30	0,34	652102	0,25	654102	12	40	32	10	350	225	250	200		
125	35	0,50	652103	0,41	654103	12	40	32	10	500	280	400	320		
150	40	0,91	651104	0,66	653104	20	50	47	14	850	330	600	480		
160	50	1,25	652114	0,99	654114	20	58	47	14	950	350	800	640		
200	50	1,47	651106	1,16	653106	20	55	52	15	1000	360	850	680		
200	50	1,45	651206	1,16	653106	25	55	52	15	1000	360	850	680		

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
80	25	0.72	659301	0.52	658201	0.91	656501	107	100x85	80x60	9	37	120	200	
100	30	0.94	659302	0.69	658202	1.08	656502	128	100x85	80x60	9	35	120	200	
125	35	1.14	659303	0.89	658203	1.28	656503	156	100x85	80x60	9	37	120	220	
150	40	1.66	659312	1.52	658112			182	100x85	80x60	9	50		220	
150	40	2.34	659304	2.04	658104	2.63	656504	194	140x110	105x80	11	56	156	300	
160	50	2.68	659514	2.38	658114	2.97	656514	198	140x110	105x80	11	56	156	300	
200	50	3.05	659306	2.76	658106	3.25	656506	240	140x110	105x80	11	56	156	300	

Options available to order:



Directional lock
for brackets
d. 150-200 mm



Footguard
for brackets NL-
M-P-PT

Standard-duty brackets NL - max carrying capacity 300 daN



													
mm	mm	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN		
160	50	2,61	654804	199	140x110	105x80	11	56	M10x1,5	65	300		
200	50	3,96	654806	240	140x110	105x80	11	56	M10x1,5	65	300		



													
mm	mm	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	
160	50	2.84	654710	199	140x110	105x80	11	56	40	17,5	35	18,5	300
200	50	3.05	654716	240	140x110	105x80	11	56	40	17,5	35	18,5	300



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

													
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN		
80	25	0,65	656401	0,78	656801	107	73	12	37	120	200		
100	30	0,88	656402	1,02	656802	128	73	12	35	120	200		
125	35	1,08	656403	1,23	656803	156	73	12	37	120	220		
150	40	2,20	656404	2,49	656804	188	102	20	56	156	300		
160	50	2,54	656414	2,96	656814	193	102	20	56	156	300		
200	50	2,95	656406	3,24	656806	236	102	20	56	156	300		

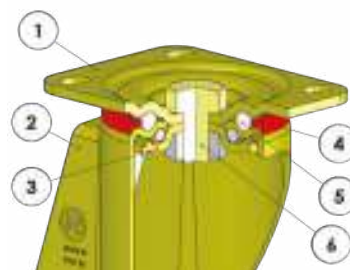
Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
150	40	2.68	659604	2.04	658104	3.16	659704	194	140x110	105x80	11	58	178	500	
160	50	3.03	659614	2.38	658114	3.49	659714	199	140x110	105x80	11	58	178	500	
200	50	3.44	659606	2.76	658106	3.80	659706	240	140x110	105x80	11	50	178	500	

Heavy duty brackets P - max carrying capacity 750 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
100	30	1.20	657602	0.82	658602	1.35	656602	138	100x85	80x60	9	46	123	250	200
125	35	1.39	657603	0.97	658603	1.54	656603	161	100x85	80x60	9	44	123	350	280

Options available to order:

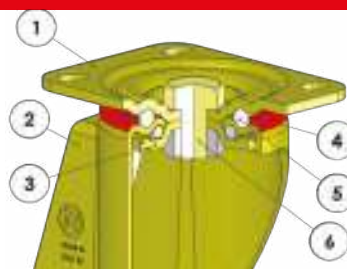


Directional lock
for P-PT brackets
d. 150-200 mm



Footguard
for brackets NL-
M-P-PT

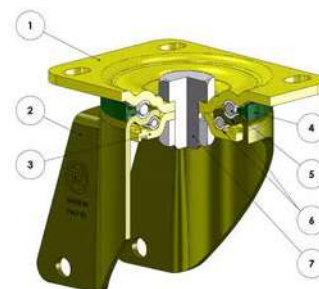
Medium-heavy duty brackets P - max carrying capacity 750 daN



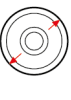
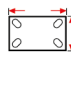
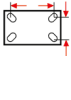
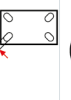
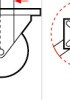
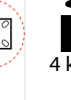
- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
150	40	3.18	657604	2.19	658604	3.75	656604	200	140x110	105x80	11	70	126	600	480
160	50	3.52	657514	2.53	658614	4.09	656614	205	140x110	105x80	11	70	126	750	600
200	50	3.94	657606	2.48	658606	4.51	656606	250	140x110	105x80	11	70	126	750	600

Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 850 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
150	40	3,18	657544	2,19	658604	3,66	656674	200	140x110	105x80	11	70	126	600	480
160	50	3,52	657554	2,53	658614	4,09	656684	205	140x110	105x80	11	70	126	800	640
200	50	3,94	657546	2,48	658606	4,41	656676	250	140x110	105x80	11	70	126	850	680

Options available to order:

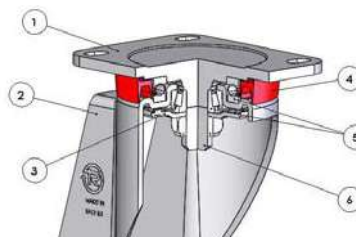


Directional lock
for P-PT brackets
d. 150-200 mm

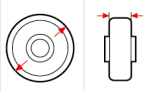
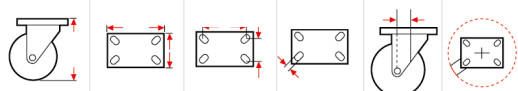
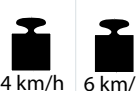


Footguard
for brackets NL-
M-P-PT

Extra-heavy duty brackets EP - max carrying capacity 850 daN



- 1) Plate: white galvanised forged steel
 - 2) Fork: white galvanised forged steel
 - 3) Lower bearing protection ring
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: axial ball bearing and tapered roller bearing
 - 6) King pin: integrated with the machine-processed plate
- Available with adjustable total rear foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
100	30	1.44	657802	1.31	658802			140	100x85	80x60	9	46		250	200
125	35	1.79	657803	1.45	658803			164	100x85	80x60	9	48		350	280
150	40	3.44	657704	2.96	658704	4.01	656904	200	135x110	105x80	11	70	126	600	480
160	50	3.78	657714	3.30	658714	4.35	657014	205	135x110	105x80	11	70	126	800	640
200	50	4.19	657706	3.75	658706	4.76	656906	250	135x110	105x80	11	70	126	850	680



Technology at work

"TR" POLYURETHANE WHEELS WITH CAST IRON CENTRE



150-300
mm



92 Shore A



400-2200
daN
4 km/h



320-1700
daN
6 km/h



280-550
daN



-20 / +80
°C



Description

Tyre: "TR" polyurethane, hardness 92 Shore A, excellent rolling resistance and elasticity features, highly resistant to wear and tear.

Centre: cast iron.

Hub with shielded ball bearings with interference assembly in the seats obtained by machining the centre; also available without bearings.

Uses

Suitable for applications with medium/heavy-duty loads, also with mechanical handling, with speed up to 6 km/h.

The excellent rolling resistance allows a manually handling of heavy loads.

Examples of recommended applications: trolleys for indoor industrial handling, AGV trolleys, containers, electrical pallet trucks, tilt trucks.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

WEAK ACIDS			WEAK BASES		
STRONG ACIDS			STRONG BASES		
WATER			HYDROCARBONS		
ALCOHOL			SOLVENTS		

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.

Not suitable if large obstacles are present.



Force required to push or tow a wheel

 	100 kg	300 kg	500 kg	700 kg	1000 kg	2000 kg
150x30 mm	1.4	5.7	----	----	----	----
150x35 mm	1.9	5	----	----	----	----
175 mm	1	3.9	11.6	----	----	----
200 mm	< 1	2.2	6	10.4	19	----
250 mm	< 1	2	5.8	8.4	14.8	----
300 mm	< 1	1.7	4.5	7	10	19.3

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Combination with brackets



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 150-200 mm
Top plate and bolt hole fittings. Available with front brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 750 daN - available diameters 150-250 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 900 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable rear brake.



Extra-heavy duty brackets EP

Maximum carrying capacity 1200 daN - available diameters 150-250 mm
Top plate fitting. Available with adjustable rear brake.

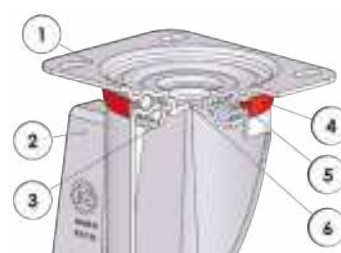
Options available to order:

The series 65GH wheels are also available with assembled thread guards. To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.



															
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN		
150	30	1,45	652104	0,96	654104	17	30	40	12	700	280	400	320		
150	35	1,60	652224	1,36	654224	20	35	47	14	825	290	490	390		
175	35	2,03	652105	1,79	654105	20	35	47	14	900	350	650	520		
200	45	3,51	652106	3,27	654106	20	45	47	14	1125	380	1000	800		
200	45	3,42	652206	3,14	654206	25	45	52	15	1125	380	1000	800		
250	50	5,50	652208	5,31	654108	20	50	52	15	1750	400	1200	960		
250	50	5,59	652108	5,31	654108	25	50	52	15	1750	400	1200	960		
300	70	12,31	652109	11,85	654109	30	70	62	16	3000	550	2200	1700		

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel sheet
 - 2) Fork: electrolytically galvanised steel sheet
 - 3) Ball race ring: electrolytically galvanised steel sheet
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
150	30	2.81	656204	2.45	658204	3.10	656524	192	140x110	105x80	11	56	156	300	
150	35	2.96	656214	2.60	658214	3.25	656534	192	140x110	105x80	11	56	156	300	
175	35	3.41	656205	3.12	658205	3.69	656525	217	140x110	105x80	11	56	156	300	
200	45	4.92	656206	4.70	658206	4.70	656526	240	140x110	105x80	11	56	156	300	

Options available to order:



Directional lock
for brackets
d. 150-200 mm



Footguard
for brackets NL-
M-P-PT

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel sheet
 - 2) Fork: electrolytically galvanised steel sheet
 - 3) Ball race ring: electrolytically galvanised steel sheet
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

															
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	
150	30	2,68	656424	2,96	656824	188	102	20	56	156	300				
150	35	2,83	656434	3,11	656834	188	102	20	56	156	300				
175	35	3,29	656425	3,57	656825	212	102	20	56	156	300				
200	45	4,77	656426	5,06	656826	236	102	20	56	156	300				

Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel sheet
 - 2) Fork: electrolytically galvanised steel sheet
 - 3) Ball race ring: electroplated galvanised steel
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-rieveted
- Available with adjustable total front foot brake

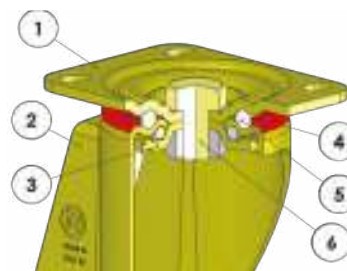
															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
150	35	3.31	657214	2.60	658214	3.78	657334	194	140x110	105x80	11	58	178	490	
200	45	5.31	657206	4.70	658206	5.25	657326	240	140x110	105x80	11	50	178	500	

Options available to order:



Footguard
for brackets NL-
M-P-PT

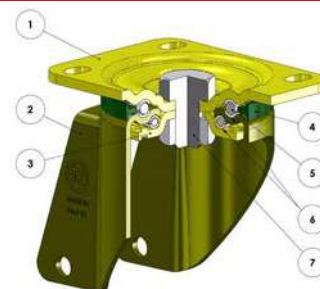
Medium-heavy duty brackets P - max carrying capacity 750 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

																	
																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN		
150	30	3,80	657404	2,36	658404	4,08	656624	200	140x110	105x80	11	70	126	400	320		
150	35	3,95	657414	2,51	658414	4,52	656634	200	140x110	105x80	11	70	126	490	390		
175	35	4,42	657405	3,00	658405	4,99	656625	225	140x110	105x80	11	70	126	650	520		
200	45	5,89	657406	4,43	658406	6,46	656626	250	140x110	105x80	11	70	126	750	600		
250	50	8,10	657408	7,00	658408	8,80	656628	298	140x110	105x80	11	66	173	750	600		

Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 900 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
150	35	3,95	657444	2,51	658414	4,52	658314	200	140x110	105x80	11	70	126	490	390
175	35	4,42	657435	3,00	658405	4,99	658305	225	140x110	105x80	11	70	126	650	520
200	45	5,89	657436	4,43	658406	6,20	658306	250	140x110	105x80	11	70	126	900	800

Options available to order:

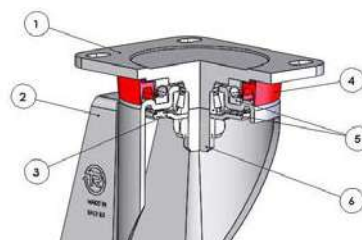


Directional lock
for brackets
d. 150-200 mm



Footguard for
brackets NL-M-
P-PT

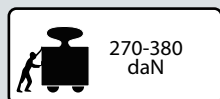
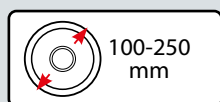
Extra-heavy duty brackets EP - max carrying capacity 1200 daN



- 1) Plate: white galvanised forged steel
- 2) Fork: white galvanised forged steel
- 3) Lower bearing protection ring
- 4) Dust seal: orange polyethylene
- 5) Swivel actions: axial ball bearing and tapered roller bearing
- 6) King pin: integrated with the machine-processed plate
Available with adjustable total rear foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
150	30	4.06	657804 	2.32	658804 			200	135x110	105x80	11	70		400	320
150	35	4.21	657814 	3.73	658814 	4.78	656914 	200	135x110	105x80	11	70	126	490	390
175	35	4.66	657805 	4.24	658805 	5.23	656915 	225	135x110	105x80	11	70	126	650	520
200	45	6.14	657806 	5.70	658806 	6.71	656916 	250	135x110	105x80	11	70	126	1000	800
250	50	11.14	657808 	9.30	658808 			300	175x140	140x105	14	66		1200	960

WHEELS WITH THICK "TR" POLYURETHANE AND ALUMINIUM CENTRE



Technical features

Tyre: very thick "TR" polyurethane, hardness 92 Shore A; excellent rolling resistance and elasticity, highly resistant to wear and tear.

Centre: made of cast aluminium.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

Designed to improve trolleys' handling under heavy loads on uneven surfaces. The thick tread guarantees: excellent ability to overcome obstacles, reduced fatigue when pushing the trolley, excellent performance in presence of mechanical handling or mixed manual-mechanical handling, excellent performance over time, even at high speeds (up to 12 km/h).

Examples of recommended applications: trolleys for indoor handling in the logistics and automotive industry, electrical pallet trucks.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

WEAK ACIDS		
STRONG ACIDS		
WATER		
ALCOHOL		

WEAK BASES		
STRONG BASES		
HYDROCARBONS		
SOLVENTS		

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of industrial floors, except unpaved; it easily overcomes obstacles.



Force required to push or tow a wheel

 	100 kg	300 kg	400 kg	500 kg	650 kg	800 kg
100 mm	2.5	5.5	----	----	----	----
125 mm	2.4	5.3	----	----	----	----
160 mm	1.8	4.7	5.8	7	11	----
180 mm	1.5	4.4	5.6	6.5	10	----
200 mm	1.2	4	5.4	6.2	9	12

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Available with brackets



Medium-heavy duty brackets P

Maximum carrying capacity 750 daN - available diameters 100-250 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 800 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded brackets EE MHD

Maximum carrying capacity 800 daN - available diameters 100-200 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded twin brackets EEG MHD

Maximum carrying capacity 1500 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable rear foot brake, operating on wheel rotation only



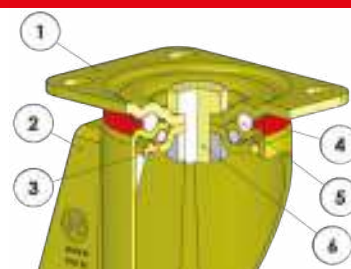
Electrowelded sprung-loaded brackets EES MHD

Maximum carrying capacity 1000 daN - available diameters 160-250 mm
Top plate fitting. Available with adjustable front brake.



															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	daN	daN	daN	daN		
100	40	0,45	652302	0,37	654302	15	40	32	9	500	270	350	280		
125	40	0,76	652303	0,53	654303	20	50	47	14	650	280	450	360		
160	50	1,18	652304	0,95	654304	20	58	47	14.5	900	320	700	560		
180	50	1,37	652305	1,15	654305	20	58	47	14	950	335	750	600		
200	50	1,70	652306	1,47	654306	20	58	47	14	1000	350	800	640		
250	50	2,40	652308	2,10	654308	20	55	52	15	1200	380	1000	800		

Medium-heavy duty brackets P - max carrying capacity 750 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

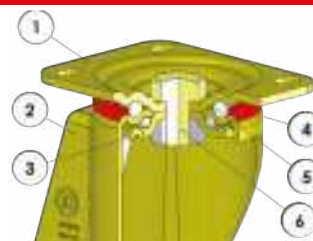
															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
100	40	1.33	655302	0.83	655412	1.50	655502	138	100x85	80x60	9	46	123	350	280

Options available to order:



Footguard
for brackets M-
P-PT

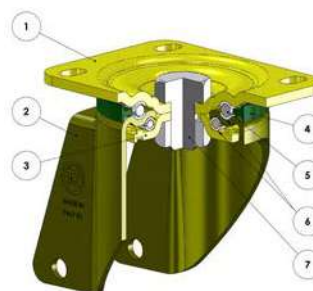
Medium-heavy duty brackets P - max carrying capacity 750 daN



- 1) Plate: yellow galvanised steel plate
- 2) Fork: yellow galvanised steel plate
- 3) Ball race ring: yellow galvanised steel plate
- 4) Dust seal: orange polyamide
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: steel bolt in grade 8.8 steel and steel nut
Available with adjustable total rear foot brake

																
																
																
																
																
																
																
																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN	
125	40	2.30	655303	1.63	655403	2.83	655503	170	140x110	105x80	11	70	126	450	360	
160	50	3.53	655310	2.04	655414	4.10	655504	205	140x110	105x80	11	70	126	700	560	
180	50	3.78	655305	2.36	655415	4.35	655505	228	140x110	105x80	11	70	126	750	600	
200	50	4.22	655316	2.76	655416	4.82	655506	250	140x110	105x80	11	70	126	750	600	
250	50	4.84	655318	3.74	655418	5.54	655508	298	140x110	105x80	11	66	126	750	600	

Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 800 daN



- 1) Plate: yellow galvanised steel plate
- 2) Fork: yellow galvanised steel plate
- 3) Ball race ring: yellow galvanised steel plate
- 4) Dust Seal: dark green polyamide 6
- 5) Swivel actions: double ball ring with grease lubrication
- 6) Ball race: hardened carbon steel grooves
- 7) King pin: steel screw, class 8.8 and stainless steel nut
Available with rear adjustable brake

															
															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
125	40	2,30	655333 	1,63	655403 	2,83	655533 	170	140x110	105x80	11	70	126	450	360
160	50	3,34	655344 	2,04	655414 	3,97	655544 	205	140x110	105x80	11	70	126	700	560
180	50	3,71	655335 	2,36	655415 	4,35	655535 	228	140x110	105x80	11	70	126	750	600
200	50	4,36	655336 	2,76	655416 	4,89	655536 	250	140x110	105x80	11	70	126	800	640

Options available to order:



Directional lock
for P brackets
d. 150-200 mm



Footguard
for brackets M-
P-PT

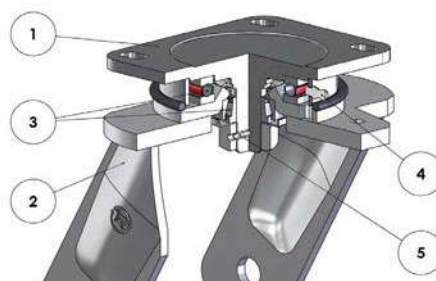
Electrowelded brackets EE MHD - max carrying capacity 800 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
100	40	3.36	655602	2.38	655702	4.24	655802	170	135x110	105x80	11	51	157	350	280
125	40	3.68	655603	2.70	655703	4.56	655803	182	135x110	105x80	11	51	157	450	360
160	50	4.18	655614	3.19	655714	5.06	655814	215	135x110	105x80	11	60	157	700	560
180	50	4.56	655605	3.58	655705	5.45	655805	242	135x110	105x80	11	70	157	750	600
200	50	4.88	655606	3.90	655706	6.22	655806	252	135x110	105x80	11	70	157	800	640

Electrowelded twin brackets EE MHD - max carrying capacity 1500 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn tips electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable rear foot brake, operating on wheel rotation only

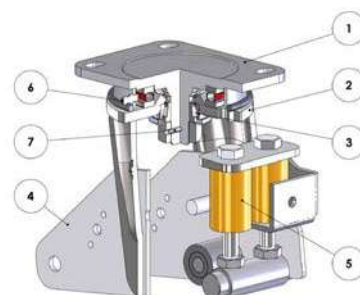
																					
																					
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN				
160	50+50	7,15	658074	6,28	658174	8,14	658274	221	135x110	135x175	105x80	11	55	182	1400	1100					
200	50+50	8,37	658076	7,52	658176	9,37	658276	258	135x110	135x175	105x80	11	65	182	1500	1280					

Options available to order:



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES MHD:
see page 420

Electrowelded sprung-loaded brackets EES MHD - max carrying capacity 1000 daN - damping up to 400 daN



- 1) Top plate: electrolytically galvanised forged steel with integrated pin.
 - 2) Main fork: deep-drawn legs electrowelded to the flange and electrolytically galvanised U-shaped component electrowelded to the legs.
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) spring-hinged plates: plates electrowelded to the axle
 - 5) Polyurethane springs
 - 6) Grease nipple
 - 7) Anti-loosening locknut system
- Available with adjustable front lock

mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN	daN	daN
160	50	7,07	655004	5,82	657104	8,13	654904	248	135x110	105x80	11	100	240	25	50	400	700	560	
200	50	7,67	655006	6,42	657106	8,78	654906	268	135x110	105x80	11	100	265	25	50	400	800	640	
250	50	8,75	655008	7,54	657108	9,99	654908	316	135x110	105x80	11	110	315	25	50	400	1000	800	



Spring travel (mm): maximum difference in the total height of the group wheel + support depending on the spring tension



Initial tension (daN): in case of lighter loads than indicated, the bracket works with no damping



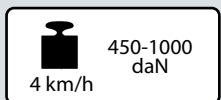
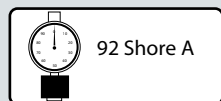
Spring tension (daN): in case of heavier loads than indicated, the bracket works with no damping

Options available to order:



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES MHD:
see page 420

"TR" POLYURETHANE WHEELS WITH ERGONOMIC ROUND PROFILE AND ALUMINIUM CENTRE



Description

Tyre: very thick TR-Roll polyurethane with ergonomic round profile; hardness 92 Shore A; excellent rolling resistance and elasticity and good resistance to wear and tear.

Centre: made of cast aluminium.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

Designed to improve trolleys' manual handling under heavy loads. The round profile reduces the start-up coefficient when the castors are positioned at 90° from the line of movement and therefore greatly reduces the amount of effort required by the operators when handling trolleys.

Combined with appropriate brackets they guarantee excellent performance for mechanical handling up to 12 km/h.

Examples of application: trolleys for the automotive industry, lean manufacturing trolleys and electrical pallet trucks.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

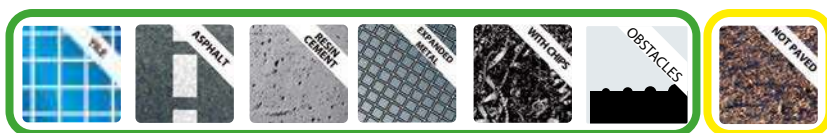
WEAK ACIDS	
STRONG ACIDS	
WATER	
ALCOHOL	

WEAK BASES	
STRONG BASES	
HYDROCARBONS	
SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of industrial floors, except unpaved; it easily overcomes obstacles.



Force required to push or tow a wheel

 	100 kg	250 kg	400 kg	500 kg	650 kg	800 kg
125 mm	2,5	5	7	---	---	---
160 mm	1,8	4,7	6	7	11	---
200 mm	1,2	4,5	5,4	6,2	9	12

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 750 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 800 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Extra-heavy duty brackets EP

Maximum carrying capacity 800 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded brackets EE MHD

Maximum carrying capacity 800 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded twin brackets EEG MHD

Maximum carrying capacity 1500 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable rear foot brake, operating on wheel rotation only



Electrowelded sprung-loaded brackets EES MHD

Maximum carrying capacity 800 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable front brake.



															
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN		
125	40	0,73	652503	0,51	654503	20	50	47	14	650	250	450	360		
160	50	1,11	652504	0,89	654504	20	58	47	14,5	900	280	700	560		
200	50	1,68	652506	1,44	654506	20	58	47	14	1000	300	800	640		
250	50	2,40	652508	2,10	654508	20	55	52	15	1200	330	1000	800		

Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electroplated galvanised steel
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

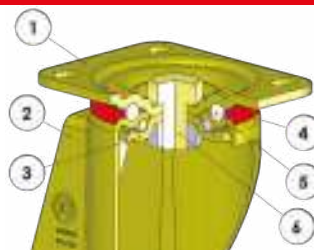
															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	
160	50	2,81	655904	2,10	656004	3,28	656304	199	140x110	105x80	11	58	178	500	
200	50	3,52	655906	2,87	656006	3,90	656306	240	140x110	105x80	11	50	178	500	

Options available to order:

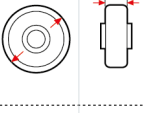
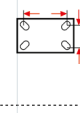
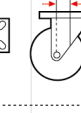


Footguard
for brackets NL-
M-P-PT

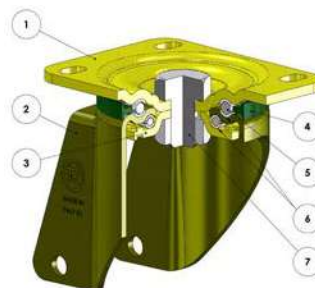
Heavy duty brackets P - max carrying capacity 750 daN



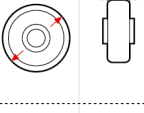
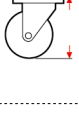
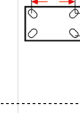
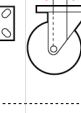
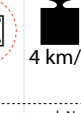
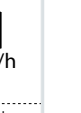
- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN
125	40	2,27	655913	1,63	656013	2,83	656313	170	140x110	105x80	11	70	126			450	360
160	50	3,46	655914	2,28	656014	4,27	656314	205	140x110	105x80	11	70	126			700	560
200	50	4,14	655916	2,68	656016	4,74	656316	250	140x110	105x80	11	70	126			750	640

Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 900 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN
125	40	2,27	655953	1,63	656013	2,83	656353	170	140x110	105x80	11	70	126			450	360
160	50	3,34	655954	2,28	656014	3,97	656354	205	140x110	105x80	11	70	126			700	560
200	50	4,36	655956	2,68	656016	4,89	656356	250	140x110	105x80	11	70	126			800	640

Options available to order:

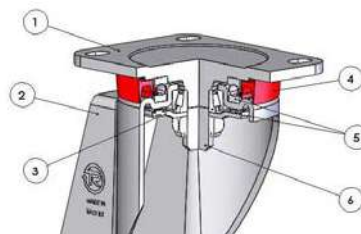


Footguard
for brackets NL
M-P-PT



Directional lock
for brackets
P-PT diam. 160-
200 mm

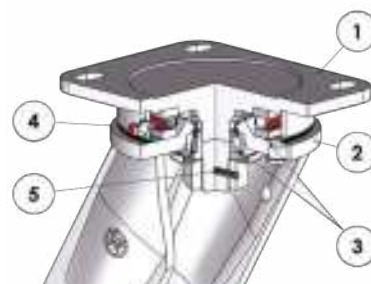
Extra-heavy duty brackets EP - max carrying capacity 800 daN



- 1) Plate: white galvanised forged steel
- 2) Fork: white galvanised forged steel
- 3) Lower bearing protection ring
- 4) Dust seal: orange polyethylene
- 5) Swivel actions: axial ball bearing and tapered roller bearing
- 6) King pin: integrated with the machine-processed plate
Available with adjustable total rear foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
160	50	3,62	655924	3,21	656024	4,14	656324	205	135x110	105x80	11	70	126	700	560
200	50	4,40	655926	3,96	656026	4,97	656326	250	135x110	105x80	11	70	126	800	640

Electrowelded brackets EE MHD - max carrying capacity 800 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut
Available with adjustable total rear foot brake

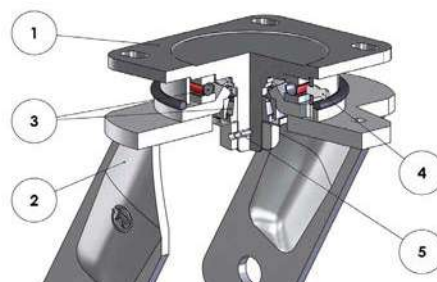
															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
125	40	3,65	655933	2,67	656033	4,53	656333	182	135x110	105x80	11	51	157	450	360
160	50	4,11	655934	3,12	656034	4,99	656334	215	135x110	105x80	11	60	157	700	560
200	50	4,80	655936	3,82	656036	6,14	656336	252	135x110	105x80	11	70	157	800	640

Options available to order:



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES MHD:
see page 420

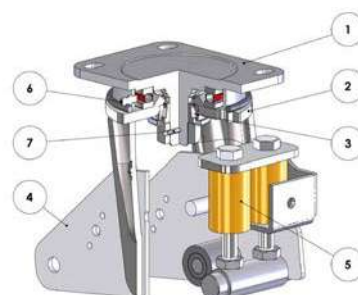
Electrowelded twin brackets EE MHD - max carrying capacity 1500 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn tips electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable rear foot brake, operating on wheel rotation only

mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN
160	50+50	7,01	659074	6,15	659174	8,01	659274	221	135x110	135x175	105x80	11	55	182		1400	1100
200	50+50	8,19	659076	7,45	659176	9,19	659276	258	135x110	135x175	105x80	11	65	182		1500	1280

Electrowelded sprung-loaded bracket EES MHD - max load capacity 800 daN - damping up to 400 daN



- 1) Top plate: electrolytically galvanised forged steel with integrated pin.
 - 2) Main fork: deep-drawn legs electro-welded to the flange and electrolytically galvanised U-shaped component electro-welded to the legs.
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) spring-hinged plates: plates electro-welded to the axle
 - 5) Polyurethane springs
 - 6) Grease nipple
 - 7) Anti-loosening locknut system
- Available with adjustable front lock

mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN	daN	daN
160	50	7,07	657904	5,82	658504	8,13	659904	248	135x110	105x80	11	100	240	25	50	400	700	560	
200	50	7,67	657906	6,42	658506	8,78	659906	268	135x110	105x80	11	100	265	25	50	400	800	640	



Spring travel (mm): maximum difference in the total height of the group wheel + support depending on the spring tension



Initial tension (daN): in case of lighter loads than indicated, the bracket works with no damping



Spring tension (daN): in case of heavier loads than indicated, the bracket works with no damping

Options available to order:



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES MHD:
see page 420

"TR" POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE



INOX

Description

Tyre: "TR" polyurethane, hardness 92 Shore A, excellent rolling resistance and elasticity, highly resistant to wear.

Centre: polyamide 6.

Hub with plain bore hole which directly houses the axle.

Hub with cylindrical roller bearing with plastic cage. Also available with stainless steel roller bearings.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding. The wheel is also available without bearings.

Uses

Excellent for trolleys and machinery with medium/heavy-duty loads, also in presence of continuous handling.

Also suitable for mechanical or mixed manual-mechanical handling, up to 6 km/h.

Its excellent rolling resistance guarantees minimum effort by manual handling.

Examples of recommended applications: trolleys for indoor industrial handling, trolleys for the food and chemical industry, manual and electric pallet trucks, equipment for dry cleaner's, slaughterhouses, meat factories.

Environments of use

Suitable for indoor environments, also in presence of medium-harsh chemical agents, alcohol, glycol and water. They are suitable for industrial environments.

Not recommended in areas with strong organic acids and mineral acids.

WEAK ACIDS				WEAK BASES			
STRONG ACIDS				STRONG BASES			
WATER				HYDROCARBONS			
ALCOHOL				SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

They do not mark or damage delicate floors.

Suitable on tiles, resin-cement, asphalt even in presence of small obstacles on the path.

Not recommended on unpaved floors or in presence of processing residues.



Force required to push or tow a wheel

 	100 kg	200 kg	300 kg	400 kg	500 kg	600 kg	800 kg	1000 kg
80 mm	5	---	---	---	---	---	---	---
100 mm	4.5	8	---	---	---	---	---	---
125 mm	4.2	7	---	---	---	---	---	---
150 mm	2.5	4	6	8				
175 mm	1.5	3.7	5.5	7.5	---	---	---	---
200 mm	< 1	3.5	5	8.5	11	17	---	---
250 mm	< 1	3	4	5	10	13	16	22

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Available with brackets:



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate and bolt hole fittings. Available with front brake.



Stainless steel standard-duty brackets NLX

Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate and bolt hole fittings. Available with front brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 600 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Stainless steel medium-heavy duty brackets PX

Maximum carrying capacity 600 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable rear brake.

Options available to order

The series 66 wheels are also available with assembled thread guards. To order them add the "PF" suffix to the wheel+bracket code. To order loose thread guards see the Accessories section.

"TR" POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE



															
mm	mm	kg	COD.	mm	mm.	daN	daN	daN							
80	25	0,10	661101	12	39	225	100	150							
100	30	0,16	661102	12	44	300	135	200							
125	30	0,25	661103	15	44	400	150	250							
150	40	0,45	661104	20	59	600	240	400							
175	40	0,62	661105	20	59	680	270	470							
200	50	0,78	661106	20	59	800	300	600							
200	50	0,75	661206	25	59	800	300	600							
250	60	1,41	661108	25	88	1200	400	1000							

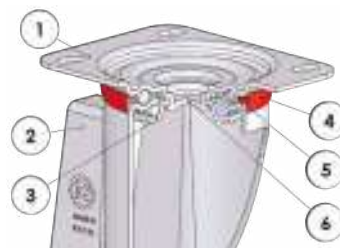


															
mm	mm	kg	COD.	kg	COD.	mm	mm	daN	daN	daN					
80	25	0,13	663101	0,13	663201	12	39	225	100	150					
100	30	0,19	663102	0,19	663202	12	44	300	135	200					
125	30	0,28	663103	0,28	663203	15	44	400	150	250					
150	40	0,54	663104	0,54	663204	20	59	600	240	400					
175	40	0,73	663105	0,73	663205	20	59	680	270	470					
200	50	0,89	663106	0,89	663206	20	59	800	300	600					
200	50	0,85	663116			25	59	800	300	600					
250	60	1,52	663108	1,52	663208	25	88	1200	400	1000					



															
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN		
80	25	0,15	662101	0,10	664101	12	32	28	10	225	100	150	120		
100	30	0,25	662102	0,15	664102	12	40	32	11,5	300	135	200	160		
125	30	0,33	662103	0,25	664103	15	40	35	13,5	400	150	250	200		
175	40	0,85	662105	0,60	664105	20	55	47	14	680	270	470	380		
200	50	1,07	662106	0,76	664106	20	55	52	15	800	300	600	480		
200	50	1,06	662126	0,76	664106	25	55	52	15	800	300	600	480		

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

		Standard						Special						Speed	
															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	
80	25	0,61	664201	0,37	665701	0,80	666601	107	100x85	80x60	9	37	120	150	
100	30	0,75	664202	0,44	665702	0,90	666602	128	100x85	80x60	9	35	120	200	
125	30	0,91	664203	0,66	665703	1,05	666603	156	100x85	80x60	9	37	120	220	
125PG	30	1,10	664213	0,86	665713	1,30	666643	156	140x110	105x80	11	37	120	220	
150	40	1,81	664204	1,44	665704	2,09	666604	194	140x110	105x80	11	56	156	300	
175	40	1,99	664205	1,70	665705	2,27	666605	217	140x110	105x80	11	56	156	300	
200	50	2,19	664206	1,97	665706	2,45	666606	240	140x110	105x80	11	56	156	300	
Special															
80	25	0,63	664501	0,41	665901	0,84	666621	107	100x85	80x60	9	37	120	150	
100	30	0,78	664502	0,46	665902	0,93	666622	128	100x85	80x60	9	35	120	200	
125	30	0,93	664503	0,68	665903	1,08	666623	156	100x85	80x60	9	37	120	220	
125PG	30	1,13	664513	0,89	665913	1,33	666653	156	140x110	105x80	11	37	120	220	
150	40	2,00	664504	1,53	665904	2,18	666624	194	140x110	105x80	11	56	156	300	
175	40	2,12	664505	1,79	665905	2,38	666625	217	140x110	105x80	11	56	156	300	
200	50	2,29	664506	2,08	665906	2,53	666626	240	140x110	105x80	11	56	156	300	

Options available to order



Wheel
with ball bearings
fitted with NL
bracket



Directional lock
for brackets
d. 150-200 mm



Footguard
for brackets
NL-M-P-PT

"TR" POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE

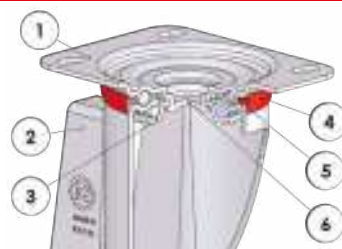
Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN					
80	25	0.54	667701	0.72	666401	107	73	12	37	120	150					
100	30	0.68	667702	0.89	666402	128	73	12	35	120	200					
125	30	0.85	667703	1.00	666403	156	73	12	37	120	220					
150	40	1.67	667704	1.96	666404	188	102	20	56	156	300					
175	40	1.86	667705	2.15	666405	212	102	20	56	156	300					
200	50	2.09	667706	2.37	666406	236	102	20	56	156	300					
80	25	0.57	667801	0.75	666421	107	73	12	37	120	150					
100	30	0.71	667802	0.91	666422	128	73	12	35	120	200					
125	30	0.88	667803	1.03	666423	156	73	12	37	120	220					
150	40	1.76	667804	2.05	666424	188	102	20	56	156	300					
175	40	1.97	667805	2.26	666425	212	102	20	56	156	300					
200	50	2.20	667806	2.48	666426	236	102	20	56	156	300					

Stainless steel standard-duty brackets NLX - max carrying capacity 300 daN



INOX

- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	4 km/h	
80	25	0.60	664401	0.34	665401	0.77	666701	107	100x85	80x60	9	37	120	150		
100	30	0.66	664402	0.41	665402	0.84	666702	128	100x85	80x60	9	35	120	200		
125	30	0.81	664403	0.64	665403	0.95	666703	156	100x85	80x60	9	37	120	220		
150	40	1.75	664404	1.31	665404	2.04	666704	194	140x110	105x80	11	56	156	300		
175	40	1.93	664405	1.49	665405	2.21	666705	215	140x110	105x80	11	56	156	300		
200	50	2.16	664406	1.70	665406	2.44	666706	240	140x110	105x80	11	56	156	300		
80	25	0.64	664601	0.38	665601	0.81	666721	107	100x85	80x60	9	37	120	150		
100	30	0.68	664602	0.44	665602	0.87	666722	128	100x85	80x60	9	35	120	200		
125	30	0.84	664603	0.67	665603	0.98	666723	156	100x85	80x60	9	37	120	220		
150	40	1.84	664604	1.40	665604	2.13	666724	194	140x110	105x80	11	56	156	300		
175	40	2.04	664605	1.60	665605	2.32	666725	215	140x110	105x80	11	56	156	300		
200	50	2.27	664606	1.81	665606	2.55	666726	240	140x110	105x80	11	56	156	300		

Stainless steel standard-duty brackets NLX - max carrying capacity 300 daN

INOX



- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) King pin: bushing in stainless steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	4 km/h				
80	25	0.54	667901	0.71	668801	107	73	12	37	120	150					
100	30	0.62	667902	0.83	668802	128	73	12	35	120	200					
125	30	0.79	667903	0.94	668803	156	73	12	37	120	220					
150	40	1.55	667904	1.83	668804	188	102	20	56	156	300					
175	40	1.74	667905	2.02	668805	212	102	20	56	156	300					
200	50	2.10	667906	2.36	668806	236	102	20	56	156	300					
80	25	0.58	668001	0.75	668821	107	73	12	37	120	150					
100	30	0.65	668002	0.85	668822	128	73	12	35	120	200					
125	30	0.82	668003	0.97	668823	156	73	12	37	120	220					
150	40	1.64	668004	1.32	668824	188	102	20	56	156	300					
175	40	1.85	668005	2.13	668825	212	102	20	56	156	300					
200	50	2.21	668006	2.47	668826	236	102	20	56	156	300					

Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
150	40	2.16	664304	1.44	665704	2.62	668704	194	140x110	105x80	11	58	178	400	
200	50	2.58	664306	1.97	665706	3.00	668706	240	140x110	105x80	11	50	178	500	
150	40	2.35	664804	1.53	665904	2.71	668904	194	140x110	105x80	11	58	178	400	
200	50	2.68	664806	2.08	665906	3.08	668906	240	140x110	105x80	11	50	178	500	
200	50	2.93	665306	2.32	665806	3.35	669206	240	140x110	105x80	11	50	178	500	

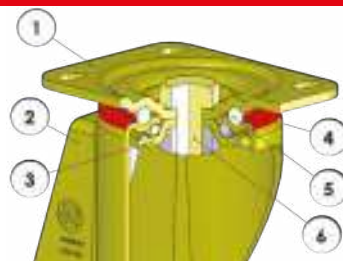
Options available to order



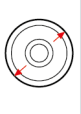
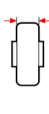
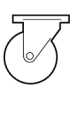
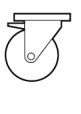
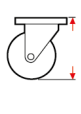
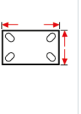
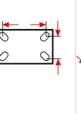
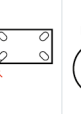
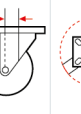
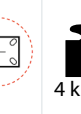
Footguard
for brackets NL-
M-P-PT

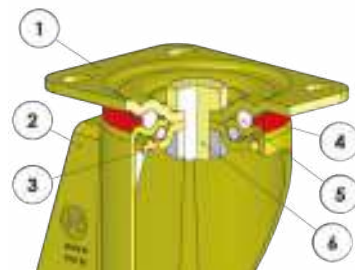
"TR" POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE

Medium-heavy duty brackets P - max carrying capacity 600 daN

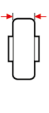
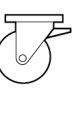
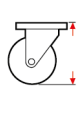
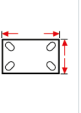
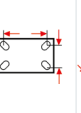
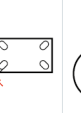
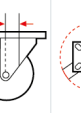


- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
100	30	1.04	667102	0.55	668102	1.19	669002	138	100x85	80x60	9	46	123	200	
125	30	1.17	667103	0.75	668103	1.31	669003	161	100x85	80x60	9	44	123	250	
100	30	1.08	667302	0.58	668302	1.22	669102	138	100x85	80x60	9	46	123	200	
125	30	1.20	667303	0.78	668303	1.34	669103	161	100x85	80x60	9	44	123	250	



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
150	40	2.79	667604	1.37	668604	3.36	669004	200	140x110	105x80	11	70	126	400	
175	40	3.01	667605	1.58	668605	3.57	669005	225	140x110	105x80	11	70	126	470	
200	50	3.25	667606	1.79	668606	3.82	669006	250	140x110	105x80	11	70	126	600	
150	40	2.89	667504	1.46	668504	3.46	669104	200	140x110	105x80	11	70	126	400	
175	40	3.11	667505	1.69	668505	3.68	669105	225	140x110	105x80	11	70	126	470	
200	50	3.36	667506	1.90	668506	3.93	669106	250	140x110	105x80	11	70	126	600	

Options available to order



Wheel
with ball bear-
ings fitted with P
bracket

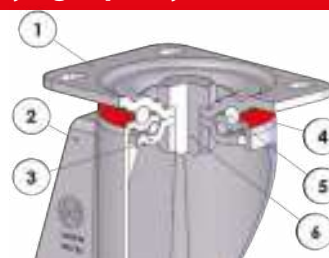


Directional lock
for brackets
d. 150-200 mm



Footguard
for brackets NL-
M-P-PT

Stainless steel medium-heavy duty brackets PX - max carrying capacity 600 daN



INOX

- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: screw and nut in stainless steel
- Available with adjustable total rear foot brake

																											
mm	mm	kg	CODE		kg	CODE		kg	CODE		mm	mm	mm	mm	mm	mm	daN										
150	40	2.75	667004	≡	1.36	667114	≡	3.32	667214	≡	200	140x110	105x80	11	70	126	400										
175	40	2.95	667005	≡	1.56	667115	≡	3.52	667215	≡	225	140x110	105x80	11	70	126	470										
200	50	3.20	667006	≡	1.76	667116	≡	3.77	667216	≡	250	140x110	105x80	11	70	126	600										
150	40	2.77	667314	≡	1.55	667414	≡	3.34	667514	≡	200	140x110	105x80	11	70	126	400										
175	40	3.09	667315	≡	1.69	667415	≡	3.66	667515	≡	225	140x110	105x80	11	70	126	470										
200	50	3.30	667316	≡	1.87	667416	≡	3.87	667516	≡	250	140x110	105x80	11	70	126	600										

POLYAMIDE 6 SOLID WHEELS FOR HEAVY LOADS

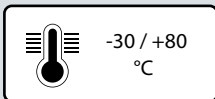
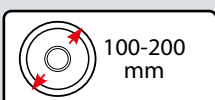


Description

Polyamide 6 solid wheels for heavy-duty loads, hardness 70 Shore D.

Hub with plain bore hole which directly houses the axle.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding. The wheel is also available without bearings.



INOX

Uses

Intended mainly for static uses, for high carrying capacities.

The excellent rolling resistance ensures that a minimum manual effort is needed when handling, but only on smooth floors.

Examples of recommended applications: trolley for internal use in the food and canning industries, tannery equipment, flower trolley, manual pallet trucks, mobile scaffolding.

Environments of use

Designed for industrial environments, even in presence of aggressive chemical substances. Not recommended in areas with strong organic acids and concentrated mineral acids.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable only for smooth and compact floors.

Not suited for areas with obstacles.



Force required to push or tow a wheel

 	100 kg	200 kg	300 kg	500 kg	700 kg	900 kg
100 mm	2.5	3.5	4.5	----	----	----
125x35 mm	2	2.8	3.8	----	----	----
125x45 mm	2.2	3.2	4	6.5	----	----
150 mm	1.8	2.3	3.5	5.5	7	----
200 mm	1.2	1.8	2.7	3.4	5.5	8

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Available with brackets



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 125 mm
Top plate fitting. Available with front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 750 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Stainless steel medium-heavy duty brackets PX

Maximum carrying capacity 750 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 900 daN - available diameters 200 mm
Top plate fitting. Available with adjustable rear brake.



Extra-heavy duty brackets EP

Maximum carrying capacity 1000 daN - available diameters 200 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded brackets EE MHD

Maximum carrying capacity 1500 daN - available diameters 125-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Twin electrowelded brackets EEG HD

Maximum carrying capacity 2000 daN - available diameters 125-200 mm
Top plate fitting.

Options available to order



Wheel in solid polyamide 6 for extremely heavy loads



Polyamide 6 wheel for heavy loads with customised colours



															
mm	mm	kg	CODE	mm	mm	daN	daN	daN							
100	35	0.26	681202	20	44	450	200	400							
125	45	0.36	681203	20	58	700	200	650							
150	45	0.50	681204	20	58	800	300	750							
200	50	0.90	681206	20	58	1000	400	900							



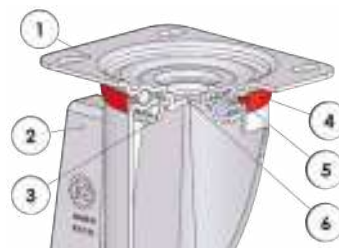
															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	daN	daN	daN			
100	35	0.33	683402	0.20	682202	15	40	35	11	450	350	350			
125	35	0.42	683403	0.29	682203	15	40	35	11	500	450	450			
125	45	0.61	683413	0.39	682213	20	56	47	13	700	400	650			
125	45	0.60	683423	0.39	682213	25	56	47	13	700	400	650			
150	45	0.74	683404	0.52	682204	20	56	47	13	800	455	750			
150	45	0.73	683424	0.52	682204	25	56	47	13	800	455	750			
200	50	1.10	683406	0.89	682206	20	56	47	13	1000	650	900			
200	50	1.08	683426	0.89	682206	25	56	47	13	1000	650	900			



EXTRA-HEAVY DUTY WHEEL

															
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	daN	daN	daN			
200	50	1,42	682126	1,12	683326	20	58	52	15	2250	650	1500			
200	50	1,36	682136	1,12	683326	25	58	52	15	2250	650	1500			

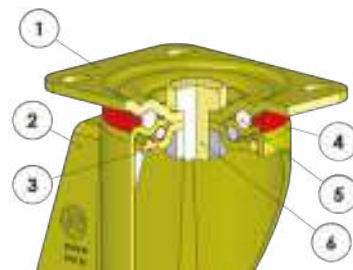
Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																																																																																																																																																																																																															
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Medium-heavy duty brackets P - max carrying capacity 750 daN

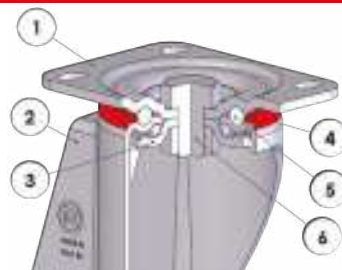


- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

																	
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN		
125	45	2.28	687533	1.49	688533	2.83	686913	170	140x110	105x80	11	70	126	650			
150	45	2.96	687524	1.83	688524	3.14	686914	200	140x110	105x80	11	70	126	750			
200	50	3.37	687526	1.91	688526	3.68	686916	250	140x110	105x80	11	70	126	750			
125	45	2.53	684993	1.74	685393	3.08	686933	170	140x110	105x80	11	70	126	650			
150	45	3.20	684974	2.07	685374	3.77	686954	200	140x110	105x80	11	70	126	750			
200	50	3.64	684976	2.18	685376	3.92	686956	250	140x110	105x80	11	70	126	750			

Stainless steel medium-heavy duty brackets PX- max carrying capacity 750 daN

INOX



- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: screw and nut in stainless steel A
- Available with adjustable total rear foot brake

																	
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN		
125	45	2.52	687033	1.10	687133	3.07	687233	170	140x110	105x80	11	70	126	650			
150	45	2.86	687014	1.42	687124	3.43	687224	200	140x110	105x80	11	70	126	750			
200	50	3.32	687016	1.88	687126	3.88	687226	250	140x110	105x80	11	70	126	750			

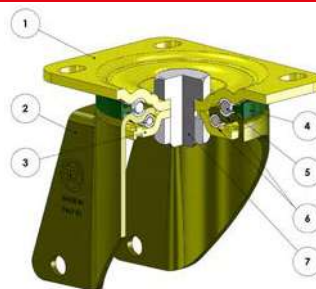
Options available to order



Directional lock
for brackets P
d. 150-200 mm

Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 900 daN

EXTRA-HEAVY DUTY WHEEL

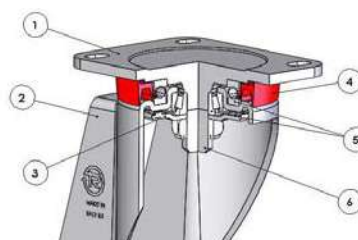


- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

																
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	
200	50	3,74	682906	2,88	685386	4,32	682916	250	140x110	105x80	11	70	126		900	

Extra-heavy duty brackets EP - max carrying capacity 1000 daN

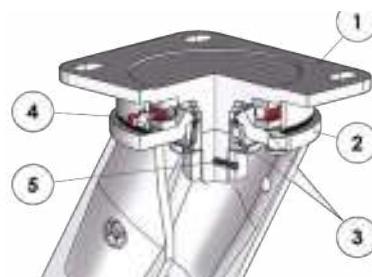
EXTRA-HEAVY DUTY WHEEL



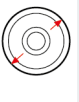
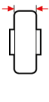
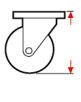
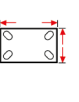
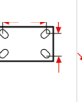
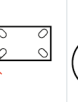
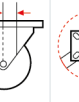
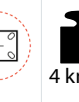
- 1) Plate: white galvanised forged steel
 - 2) Fork: white galvanised forged steel
 - 3) Lower bearing protection ring
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: axial ball bearing and tapered roller bearing
 - 6) King pin: integrated with the machine-processed plate
- Available with adjustable total rear foot brake

																
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	
200	50	4,08	682926	3,77	682936	4,63	682946	250	135x110	105x80	11	70	126		1000	

Electrowelded brackets EE MHD - max carrying capacity 1500 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

Available With adjustable total rear foot brake														
														
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	
125	45	3.26	688303	2.03	688403	4.14	688703	182	135x110	105x80	11	51	157	650
150	45	3.50	688304	2.51	688404	4.38	688704	210	135x110	105x80	11	60	157	750
200	50	4.02	688306	3.04	688406	4.90	688706	252	135x110	105x80	11	70	157	900
125	45	3.51	689303	2.28	689403	4.39	689803	182	135x110	105x80	11	51	157	650
150	45	3.74	689304	2.75	689404	4.62	689804	210	135x110	105x80	11	60	157	750
200	50	4.22	689306	3.24	689406	5.10	689806	252	135x110	105x80	11	70	157	900

EXTRA HEAVY-DUTY WHEEL



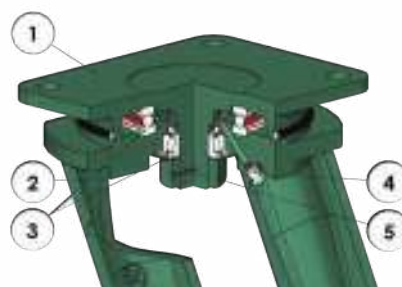
														
														
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN
200	50	4,58	682956	3,36	682966	5,39	682986	250	135x110	105x80	11	70	157	1500

Options available to order



Directional lock
for brackets EE MHD
- EE HD - EED MHD - EES
MHD: see page 420

Twin electrowelded brackets EEG HD - max carrying capacity 2000 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN				
125	45+45	9.35	688072 	4.90	688172 	210	175x140	140x105	14	50	1300				
150	45+45	9.62	688074 	5.20	688174 	223	175x140	140x105	14	50	1500				
200	50+50	12.40	688066 	7.60	688166 	285	200x160	160x120	17	65	1800				

EXTRA HEAVY-DUTY WHEEL

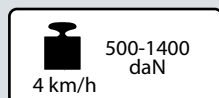


															
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN				
200	50+50	13,64	682996 	8,64	682998 	285	200x160	160x120	17	65	2000				

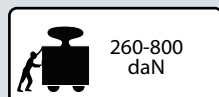
CAST IRON SOLID WHEELS



100-200
mm



500-1400
daN



260-800
daN



-40 / +80
°C



Description

Cast iron solid wheels.

Hub with plain bore which directly houses the axle.

Hub with shielded ball bearings with interference assembly in the seats obtained by machining the centre. The wheel is also available without bearings.

Uses

Intended mainly for static uses and for high carrying capacities.

The model with plain bore is resistant to temperatures from -40 °C to +400°C and is, therefore, particularly suitable for oven applications. To use a castor at temperatures above 100 °C, the wheel needs to be fitted with a specific bracket for high-temperature use.

Examples of recommended applications: trolleys for workshops, industrial ovens.

Environments of use

Designed for industrial environments, even in presence of medium-harsh chemical agents. Not recommended in humid environments and in presence of strong organic acids and concentrated mineral acids.

WEAK ACIDS	
STRONG ACIDS	
WATER	
ALCOHOL	

WEAK BASES	
STRONG BASES	
HYDROCARBONS	
SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable only for smooth and compact floors.

Not suited for areas with obstacles.

They may damage fragile floors.



Force required to push or tow a wheel

 	100 kg	300 kg	500 kg	700 kg	1000 kg	1400 kg
100x30 mm	< 1	5.6	15	----	----	----
100x40 mm	< 1	4.3	11.2	----	----	----
125 mm	< 1	3.2	7.6	14	----	----
150 mm	< 1	2.5	4.7	7.4	12.2	----
200 mm	< 1	1.7	3.5	5.8	10.3	18

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Available with brackets:



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 100-150 mm
Top plate fitting.



Medium-heavy duty brackets P

Maximum carrying capacity 750 daN - available diameters 125-200 mm
Top plate fitting.



Extra-heavy duty brackets EP

Maximum carrying capacity 1100 daN - available diameters 150-200 mm
Top plate fitting.

Options available to order



Steel wheel for
extremely
heavy loads



Wheel
with brackets NL and
P for high tempera-
tures

SERIES 69

CAST IRON SOLID WHEELS

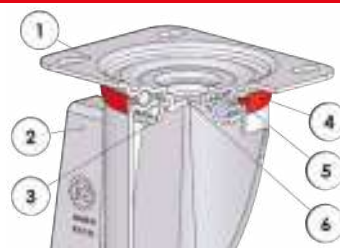


															
mm	mm	kg	CODE	mm	mm	daN	daN	daN							
100	30	0.62	691102	15	34	800	260	500							
100	30	0.70	691112	15	44	800	260	500							
100	40	0.92	691202	20	44	900	300	600							
125	40	1.09	691103	15	44	1200	350	700							
125	40	1.12	691203	20	44	1200	350	700							
150	45	1.81	691104	20	59	1500	500	1200							
200	45	3.34	691106	20	59	1900	600	1400							
200	45	3.19	691206	25	59	1900	800	1400							



															
mm	mm	kg	CODE	kg	CODE	mm	mm.	mm	mm	daN	daN	daN			
100	38	1.33	692122	1.14	694102	15	40	42	13	900	300	600			
100	38	1.28	692102	1.14	694102	20	40	42	13	900	300	600			
125	40	1.67	692103	1.43	694103	20	40	47	14	1200	350	700			
150	50	2.46	692104	2.18	694104	20	55	47	14	1500	500	1200			
200	50	3.64	692106	3.29	694106	20	55	52	15	1900	600	1400			
200	50	3.57	692126	3.57	694106	25	56	52	15	1900	600	1400			

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Dust seal: orange polyethylene
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: integrated with the plate and cold-riveted

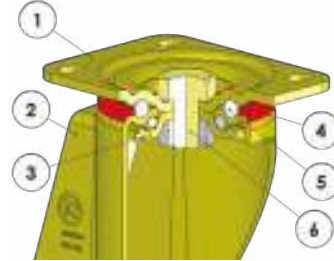
															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	4 km/h			
100	30	1.16	694802	0.89	695702	128	100x85	80x60	9	35	200				
100	40	1.50	694812	1.16	695712	128	100x85	80x60	9	35	200				
125	40	1.73	694803	1.38	695703	156	100x85	80x60	9	37	220				
150	45	3.24	694804	2.87	695704	194	140x110	105x80	11	56	300				
100	40	1.91	694902	1.57	695802	128	100x85	80x60	9	35	200				
125	40	2.31	694903	1.96	695803	156	100x85	80x60	9	37	220				
150	50	3.89	694904	3.52	695804	194	140x110	105x80	11	56	300				

Options available to order



Wheel
with NL and P
brackets for high
temperatures

Medium-heavy duty brackets P - max carrying capacity 750 daN

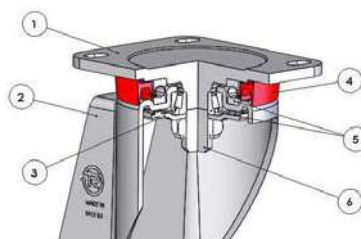


- 1) Plate: yellow galvanised steel plate
- 2) Fork: yellow galvanised steel plate
- 3) Ball race ring: galvanised colonial steel plate
- 4) Dust seal: orange polyamide
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: steel bolt in grade 8.8 steel and steel nut

											 4 km/h				
mm	mm	 kg	CODE	 kg	CODE	mm	mm	mm	mm	mm	daN				
125	40	1.96	697603 	1.46	698603 	161	100x85	80x60	9	48	350				
150	45	4.16	697504 	2.73	698504 	200	140x110	105x80	11	70	750				
200	45	5.81	697506 	4.35	698506 	250	140x110	105x80	11	70	750				

125	40	2.75	696203 	2.05	696303 	161	100x85	80x60	9	48	350				
150	50	4.81	696204 	3.38	696304 	200	140x110	105x80	11	70	750				
200	50	6.11	696206 	4.65	696306 	250	140x110	105x80	11	70	750				

Extra-heavy duty brackets EP - max carrying capacity 1100 daN



- 1) Plate: white galvanised forged steel
- 2) Fork: white galvanised forged steel
- 3) Lower bearing protection ring
- 4) Dust seal: orange polyethylene
- 5) Swivel actions: axial ball bearing and tapered roller bearing
- 6) King pin: integrated with the machine-processed plate

													
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN		
150	45	4.43	697804	3.94	698804	200	135x110	105x80	11	70	1100		
200	45	6.03	697806	5.62	698806	250	135x110	105x80	11	70	1100		
150	50	5.08	697604	4.59	697704	200	135x110	105x80	11	70	1100		
200	50	6.30	697606	5.92	697706	250	135x110	105x80	11	70	1100		

SIGMA ELASTIC RUBBER WHEELS WITH ALUMINIUM CENTRE



Description

Tyre: Sigma Elastic rubber, hardness 70 Shore A, excellent elasticity and good resistance to tear and wear.

Centre: made of cast aluminium.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

The excellent elasticity guarantees an easy overcoming of obstacles, vibration damping and noise reduction during use.

Combined with appropriate brackets, they are also suitable for mechanical handling up to 6 km/h.

Good rolling resistance means less fatigue for the operator handling the equipment. Examples of recommended applications: trolleys for indoor and outdoor industrial-handling, manual pallet trucks, heavy waste collection bins.

Environments of use

Industrial environments, even in presence of humidity. Not suitable in presence of strong acids and solvents.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of industrial floor, even outdoors.

Allows easily overcoming the obstacles and does not damage floors.



Force required to push or tow a wheel

 	100 kg	200 kg	300 kg	400 kg	500 kg
100 mm	3	---	---	---	---
125x40 mm	2.5	5	---	---	---
160 mm	1.8	3.5	5	---	---
180 mm	2.3	4	6	---	---
200 mm	1	2.4	5	6.5	9
250 mm	1	2.4	5	6.5	9

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Available with brackets :



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake. and centralised brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 500 daN - available diameters 100-250 mm
Top plate fitting. Available with adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 500 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded brackets EE MHD

Maximum carrying capacity 500 daN - available diameters 100-250 mm
Top plate fitting. Available with adjustable rear brake.



Twin electrowelded brackets EEG MHD

Maximum carrying capacity 400 daN - available diameters 100-125 mm
Top plate fitting.



Twin electrowelded brackets EEG MHD - EEG HD

Maximum carrying capacity 1000 daN - available diameters 160-200 mm
Top plate fitting.



Electrowelded sprung-loaded brackets EES MHD

Maximum carrying capacity 500 daN - available diameters 160-250 mm
Top plate fitting. Available with adjustable front brake.

Options available to order



Wheel
with grey rubber
tyre



														
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	daN	daN	daN	daN	
100	40	0.44	721202	0.39	723102	15	40	32	9	250	180	180	140	
125	40	0.76	721103	0.50	723003	20	40	47	14	280	200	200	160	
125	40	0.78	721203	0.52	723103	20	50	47	14	280	200	200	160	
125	50	0.84	721213	0.62	723113	20	59	47	14	320	230	230	180	
160	50	1.22	721210	0.96	723104	20	58	47	14	420	300	300	240	
160	50	1.20	721110	0.96	723104	25	58	47	14	420	300	300	240	
180	50	1.47	721205	1.21	723105	20	60	47	14	490	250	350	280	
200	50	2.00	721306	1.71	723126	20	58	47	14	1000	300	500	400	
200	50	2.00	721206	1.71	723106	20	58	52	16,5	1000	300	500	400	
200	50	1.99	721106	1.71	723106	25	58	52	16,5	1000	300	500	400	
250	50	2.30	721208	1.97	723108	20	60	52	15	1000	300	500	400	

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

														
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	
100	40	0.96	724402	0.71	726202	1.17	727302	128	100x85	80x60	9	37	120	180
125	50	1.49	724413	1.14	726213	2.37	727313	166	140x110	105x80	11	57	156	230
160	50	2.59	724410	2.22	726210	2.80	727310	199	140x110	105x80	11	56	156	300
180	50	2.85	724405	2.56	726205	3.06	727305	219	140x110	105x80	11	56	156	300
200	50	3.40	724306	3.18	725206	3.66	727106	240	140x110	105x80	11	56	156	300

Options available to order



Wheel with grey rubber tyre



Directional lock for brackets d. 150-200 mm

Standard-duty brackets NL - max carrying capacity 300 daN



														
mm	mm	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	daN
125	40	2,41	724703	165	140x110	105x80	11	46	40	17,5	35	18,5		230
160	50	2,81	724710	199	140x110	105x80	11	56	40	17,5	35	18,5		300
200	50	3,45	724706	240	140x110	105x80	11	56	40	17,5	35	18,5		300

Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN
160	50	2.94	724610	2.22	726210	3.33	727910	199	140x110	105x80	11	58	178		300
200	50	3.79	724506	3.18	725206	4.21	727706	240	140x110	105x80	11	50	178		500

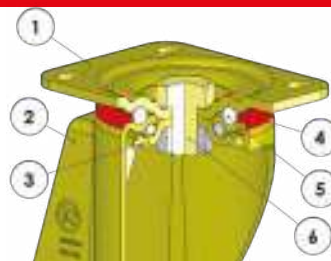
Options available to order



Wheel
with grey rubber
tyre

72^{AL} SIGMA ELASTIC RUBBER WHEELS WITH ALUMINIUM CENTRE

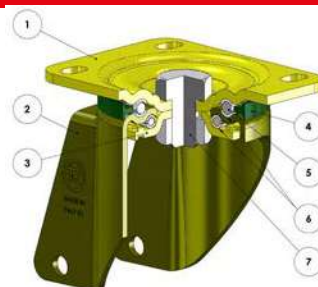
Medium-heavy duty brackets P - max carrying capacity 500 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
100	40	1.31	727602	0.81	728512			138	100x85	80x60	9	46		180	140
125	50	2.30	727613	1.66	728523			170	140x110	105x80	11	70		230	180
160	50	3.57	727610	2.08	728514	4.14	727204	205	140x110	105x80	11	70	126	300	240
180	50	3.81	727605	2.39	728515	4.38	727205	228	140x110	105x80	11	70	126	350	280
200	50	4.46	727516	3.00	728516	5.06	727206	250	140x110	105x80	11	70	126	500	400
250	50	4.74	727518	3.64	728518	5.44	727208	298	140x110	105x80	11	66	173	500	400

Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 500 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
125	50	2,30	725503	1,66	728523	2,86	728203	170	140x110	105x80	11	70	126	230	180
160	50	3,59	725510	2,08	728514	4,14	728204	205	140x110	105x80	11	70	126	300	240
180	50	3,90	725505	2,39	728515	4,38	728205	228	140x110	105x80	11	70	126	350	280
200	50	4,46	725516	3,00	728516	5,03	728206	250	140x110	105x80	11	70	126	500	400

Options available to order

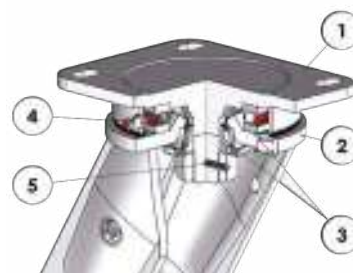


Wheel with grey rubber tyre



Directional lock for brackets P-PT d. 150-200 mm

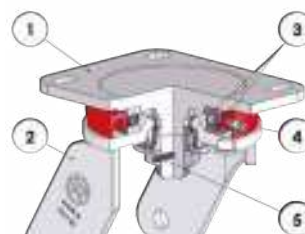
Electrowelded brackets EE MHD - max carrying capacity 500 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Anti-loosening system nut
- Available with adjustable total rear foot brake

mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
125	50	3.74	728303	2.76	728403	4.62	728603	182	135x110	105x80	11	51	157	230	180
160	50	4.22	728314	3.23	728414	5.10	728614	215	135x110	105x80	11	60	157	300	240
180	50	4.59	728305	3.61	728405	5.47	728605	242	135x110	105x80	11	70	157	350	280
200	50	5.12	728306	4.14	728406	6.00	728606	252	135x110	105x80	11	70	157	500	400
250	50	5.58	728307	4.55	728407	6.46	728607	300	135x110	105x80	11	83	157	500	400

Twin electrowelded brackets EEG MHD - max carrying capacity 400 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	daN
100	40+40	3.35	728062	2.60	728162	140	135x110	105x80	11	55	360	280
125	40+40	4.10	728063	3.35	728163	170	135x110	105x80	11	55	400	320

Options available to order



Wheel
with grey rubber
tyre



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES
MHD: see page 420

72^{HD} SIGMA ELASTIC RUBBER WHEELS WITH ALUMINIUM CENTRE

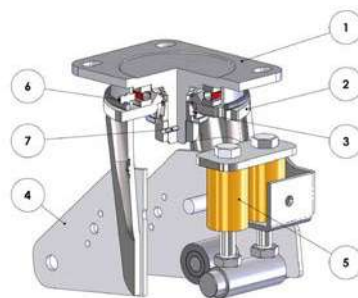
Twin electrowelded brackets EEG HD - max carrying capacity 1000 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

													
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	daN	
160	50+50	10.60	728084	6.15	728184	228	175x140	140x105	14	50	600	480	
200	50+50	12.55	728086	8.00	728186	280	175x140	140x105	14	65	1000	800	

Electrowelded brackets EE MHD - max carrying capacity 500 daN - damping up to 400 daN



- 1) Top plate: electrolytically galvanised forged steel with integrated pin.
 - 2) Main fork: deep-drawn legs electrowelded to the flange and electrolytically galvanised U-shaped component electrowelded to the legs.
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) spring-hinged plates: plates electrowelded to the axle
 - 5) Polyurethane springs
 - 6) Grease nipple
 - 7) Anti-loosening locknut system
- Available with adjustable front lock

																				
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN	4 km/h	6 km/h	
160	50	7,04	726304	5,79	726404	8,10	726504	248	135x110	105x80	11	100	240	25	50	300	300	240		
200	50	7,82	726306	6,57	726406	8,93	726506	268	135x110	105x80	11	100	265	25	50	400	500	400		
250	50	8,65	726308	7,44	726408	9,89	726508	316	135x110	105x80	11	110	315	25	50	400	500	400		



Spring travel (mm): maximum difference in the total height of the group wheel + support depending on the spring tension



Initial tension (daN): in case of lighter loads than indicated, the bracket works with no damping



Spring tension (daN): in case of heavier loads than indicated, the bracket works with no damping

Options available to order



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES MHD:
see page 420

SIGMA ELASTIC RUBBER WHEELS WITH CAST IRON CENTRE

125-300
mm

70 Shore A

300-950
daN
4 km/h

240-760
daN
6 km/h

250-500
daN

-20 / +70
°C



Description

Tyre: Sigma Elastic rubber, hardness 70 Shore A, excellent elasticity and good resistance to tear and wear.

Centre: cast iron.

Hub with shielded ball bearings with interference assembly in the seats obtained by machining the centre; also available without bearings.

Uses

The excellent elasticity guarantees an easy overcoming of obstacles, vibration damping and noise reduction during use.

Combined with appropriate brackets, they are also suitable for mechanical handling up to 6 km/h.

Also suitable for mixed indoor-outdoor uses.

Examples of recommended applications: trolleys for indoor and outdoor industrial handling, manual pallet trucks, heavy waste collection bins.

Environments of use

Industrial environments, even in presence of humidity. Not suitable in presence of organic, aromatic solvents, chlorinated substances and hydrocarbons.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of industrial floor, even outdoors.

Allows easily overcoming the obstacles and does not damage floors.



Force required to push or tow a wheel

 	100 kg	200 kg	300 kg	400 kg	500 kg	700 kg	900 kg
125 mm	1,4	3,7	7	---	---		
150 mm	1	3	5,8	9,5	---		
200x50 mm	< 1	1,8	4	7,1	11		
200x75 mm	< 1	1,8	3,3	5	7	12	
250 mm	< 1	1,5	2,7	4,1	6	10,3	
300 mm	< 1	1,4	2,4	3,6	5	8,5	12,8

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth floors. For manual handling of a 4-wheel trolley choose diameters that have values < 5 daN, for frequent handling choose values < 3 daN.

Available with brackets:



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 125-200 mm
Top plate fitting. Available with the front brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 500 daN - available diameters 125-200 mm
Top plate fitting. Available with adjustable rear brake.



Extra-heavy duty brackets EP

Maximum carrying capacity 800 daN - available diameters 150-250 mm
Top plate fitting. Available with adjustable rear brake.



Electrowelded brackets EE MHD - EE HD

Maximum carrying capacity 950 daN - available diameters 125-300 mm
Top plate fitting. Available with adjustable rear brake.



Twin electrowelded brackets EEG HD

Maximum carrying capacity 1000 daN - available diameters 150-200 mm
Top plate fitting.



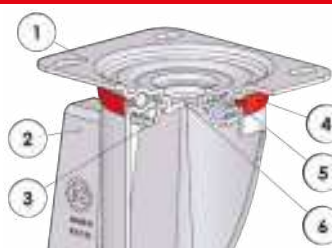
Electrowelded sprung-loaded brackets EES MHD

Maximum carrying capacity 500 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable front brake



															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	daN	daN	daN	daN		
125	50	1.88	722103	1.64	724103	20	55	47	14	450	250	300	240		
150	50	2.30	722104	2.06	724104	20	55	47	14	600	275	400	320		
150	50	2.28	722124	2.06	724104	25	55	47	14	600	275	400	320		
200	50	3.15	722106	2.87	724106	25	55	52	17	1000	335	500	400		
200	75	5.35	722126	5.07	724126	25	85	52	17.5	1200	400	700	560		
250	75	7.17	722108	6.67	724108	25	85	52	17.5	1500	450	800	640		
300	85	8.51	722109	8.05	724109	30	90	62	16	1800	500	950	760		
300	85	8.49	722129	8.05	724109	35	90	62	16	1800	500	950	760		

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
125	50	3.00	724313	2.63	725213	3.22	727113	166	140x110	105x80	11	57	156	300	
150	50	3.67	724304	3.30	725204	3.96	727124	194	140x110	105x80	11	56	156	300	
200	50	4.56	724336	4.34	725236	4.86	727126	240	140x110	105x80	11	56	156	300	

Options available to order



Directional lock
for brackets
d. 150-200 mm

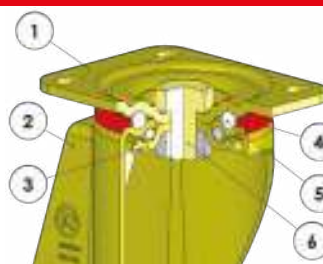
Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
150	50	4.02	724504	3.30	725204	4.49	727724	194	140x110	105x80	11	58	178	400	
200	50	4.95	724536	4.34	725236	5.11	727726	240	140x110	105x80	11	50	178	500	

Medium-heavy duty brackets P - max carrying capacity 500 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
125	50	3,80	727513	3,24	728513			170	140x110	105x80	11	70		300	240
150	50	4,65	727504	3,42	728504	5,22	727224	200	140x110	105x80	11	70	126	400	320
200	50	5,62	727506	4,16	728506	6,19	727226	250	140x110	105x80	11	70	126	500	400

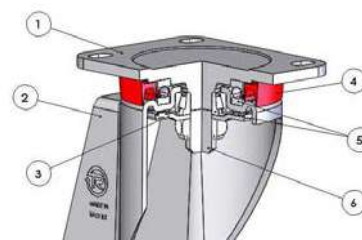
Options available to order



Directional lock
for P brackets
d. 150-200 mm

SIGMA ELASTIC RUBBER WHEELS WITH CAST IRON CENTRE

Extra-heavy duty brackets EP - max carrying capacity 800 daN



- 1) Plate: white galvanised forged steel
 - 2) Fork: white galvanised forged steel
 - 3) Lower bearing protection ring
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: axial ball bearing and tapered roller bearing
 - 6) King pin: integrated with the machine-processed plate
- Available with adjustable total rear foot brake

																	
																	
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN		
150	50	4.92	727814	4.43	728814	5.49	727324	200	135x110	105x80	11	70	126	400	320		
200	50	5.87	727816	5.43	728816	6.44	727326	250	135x110	105x80	11	70	126	500	400		
200	75	10.90	727806	9.06	728806			275	175x140	140x105	14	66		700	560		
250	75	12.71	727808	10.88	728808			300	175x140	140x105	14	66		800	640		

Electrowelded brackets EE MHD - max carrying capacity 500 daN



- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Nut anti-loosening system
- Available with adjustable total rear foot brake

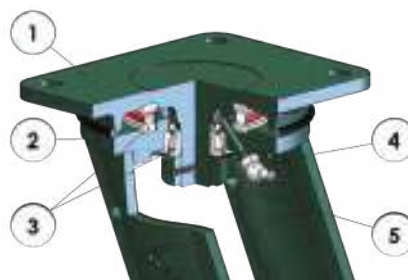
Available with adjustable total rear foot brake																					
																					
mm	mm	 kg	CODE	 kg	CODE	 kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN						
125	50	4.78	729303 	3.80	729403 	5.66	729603 	182	135x110	105x80	11	51	157	300	180						
150	50	5.30	729304 	4.31	729404 	6.18	729604 	210	135x110	105x80	11	60	157	400	320						
200	50	6.27	729306 	5.29	729406 	7.15	729606 	252	135x110	105x80	11	70	157	500	400						

Options available to order

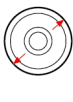
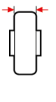
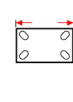
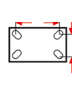
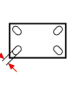


Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES
MHD see page 420

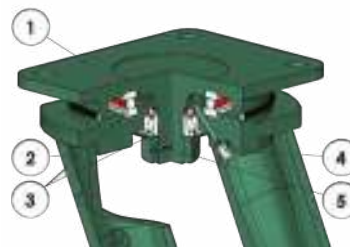
Electrowelded brackets EE HD - max carrying capacity 950 daN



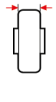
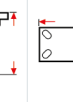
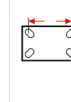
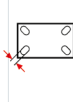
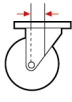
- 1) Plate: forged steel with integrated pin
 - 2) Fork: deep-drawn legs electro-welded to the flange
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) Grease nipple
 - 5) Nut anti-loosening system
- Available with adjustable total rear foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	daN
200	75	11.81	729316	10.27	729416	12.69	729616	275	175x140	140x105	14	65	166		700	560
250	75	13.86	729307	12.27	729407	14.74	729607	320	175x140	140x105	14	74	166		800	640
300	85	15.32	729308	13.70	729408	16.20	729608	360	175x140	140x105	14	81	166		950	760

Twin electrowelded brackets EEG HD - max carrying capacity 1000 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Nut anti-loosening system

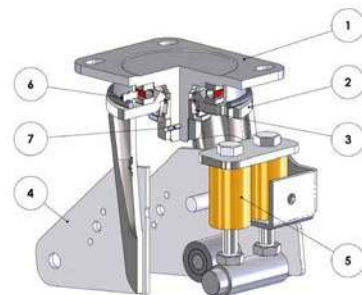
																	
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN	daN			
150	50+50	12.75	728074	8.30	728174	228	175x140	140x105	14	50			800	640			
200	50+50	14.90	728066	10.35	728166	280	175x140	140x105	14	65			1000	800			
200	50+50	16.55	728076	11.75	728176	285	200x160	160x120	17	65			1000	800			

Options available to order



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES
MHD see page 420

Electrowelded sprung-loaded brackets EES HD - max carrying capacity 500 daN - damping up to 400 daN



- 1) Top plate: electrolytically galvanised forged steel with integrated pin.
 - 2) Main fork: deep-drawn legs electrowelded to the flange and electrolytically galvanised U-shaped component electrowelded to the legs.
 - 3) Swivel actions: axial ball bearing and tapered roller bearing
 - 4) spring-hinged plates: plates electrowelded to the axle
 - 5) Polyurethane springs
 - 6) Grease nipple
 - 7) Anti-loosening locknut system
- Available with adjustable front lock

mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	daN	4 km/h	6 km/h
150	50	8,12	725704	6,87	725804	9,18	726004	243	135x110	105x80	11	100	240	25	50	400	400	320
200	50	8,97	725706	7,72	725806	10,08	726006	268	135x110	105x80	11	100	265	25	50	400	500	400



Spring travel (mm): maximum difference in the total height of the group wheel + support depending on the spring tension



Initial tension (daN): in case of lighter loads than indicated, the bracket works with no damping



Spring tension (daN): in case of heavier loads than indicated, the bracket works with no damping

Options available to order



Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES
MHD see page 420



Experience and innovation

HIGH TEMPERATURE





SERIES
67

SOLID THERMOSETTING RESIN
WHEELS



80-200
mm



150-500
daN



125-240
daN



-20 / +300
°C

INOX

PAGE 286



SERIES
68F

POLYAMIDE 6 SOLID WHEELS CHARGED
WITH GLASS FIBER



100-125
mm



250-350
daN



250-350
daN



-30 / +130
°C

INOX

PAGE 294



SERIES
72G

SILICONE RUBBER WHEELS
WITH ALUMINIUM CENTRE



100
mm



80
daN



80
daN

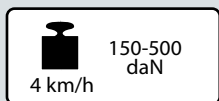
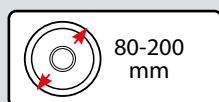


-30 / +250
°C

INOX

PAGE 298

THERMOSETTING RESIN SOLID WHEELS



Description

Thermosetting resin solid wheels, resistant to temperature from -20°C up to 300°C.

Hub with plain bore hole which directly houses the axle.

Hub with shielded ball bearings lubricated with a grease for high temperatures; steel thread-guards to protect the ball bearings from external agents and dirt. Also available with stainless steel ball bearings.

Uses

Their resistance to high temperature makes them particularly suitable for use in the food industry and in cooking ovens, particularly in the bakeries.

They are fitted with brackets and axle components, which are specific for high temperatures.

The ball bearings version ensures an excellent performance and the absence of squeaking over long cycle time applications, even in presence of heavy loads.

They are resistant to medium-harsh chemical agents.

Not suitable in presence of obstacles along the path or on delicate flooring.

Environments of use

Suitable for industrial and institutional environments, also in presence of humidity and chemical agents.

WEAK ACIDS				
STRONG ACIDS				
WATER				
ALCOHOL				

WEAK BASES				
STRONG BASES				
HYDROCARBONS				
SOLVENTS				

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable on tiles and resin-cement; not recommended on abrasive, unpaved floors or in presence of processing residues.

Not suitable on fragile floor or with obstacles along the path.



Force required to push or tow a wheel

 	100 kg	200 kg	300 kg	400 kg	500 kg
80 mm	4	----	----	----	----
100 mm	3.7	8.2	----	----	----
125 mm	3	7	11	----	----
150 mm	2	5.5	9	----	
200 mm	1	4	6.5	9	12

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Available with brackets:



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate and bolt hole fittings.



Stainless steel standard-duty brackets NLX

Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate and bolt hole fittings.



Stainless steel medium-heavy brackets PX

Maximum carrying capacity 500 daN - available diameters 150-200 mm
Top plate fitting.

SERIES 67 THERMOSETTING RESIN SOLID WHEELS



																	
mm	mm	kg	COD.	mm	mm	daN	daN	daN									
80	35	0,18	672201	12	39	250	125	150									
100	35	0,30	671102	12	44	300	130	200									
100	35	0,29	672202	15	44	300	130	200									
125	35	0,43	672203	15	44	400	180	300									
150	50	0,90	672104	20	58	500	190	300									
200	50	1,68	672106	20	58	700	240	500									

Axle sets



Low tickness PTFE-coated steel axle tubes.

Available for fitting with 80,100 and 125mm standard duty NL brackets.
Suitable also for heavy usages over short cycle time applications.



Standard steel and stainless steel axle tubes for 150 and 200mm wheels fitted with standard duty NL and NLX brackets, as well as with PX medium-heavy duty brackets.
Suitable also for heavy usages over short cycle time applications.



High tickness PTFE-coated stainless steel axle tube for assembly with 80,100 and 125mm standard duty NLX brackets.
Available to order for fitting with other brackets.
Suitable for medium-heavy duty loads over long cycle time applications.



Low friction innovative PTFE bushings over a steel or stainless steel axle tube.
Available for fitting with 80 and 100mm NL and NLX brackets.
Suitable for situations of heavier duty and long cycle time applications.



														
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm.	daN	daN	daN
80	35	0,27	672501	0,27	672601	0,21	674101	15	35	32	9	250	160	160
100	38	0,44	672502	0,44	672602	0,37	674102	15	38	32	9	300	240	240



Ball bearings protection kit composed of:
- n° 2 galvanized steel/stainless steel threadguards
- n° 2 galvanized steel/stainless steel spacers
Item nr. 924610VE (galvanised) - nr. 924609VE (stainless steel)

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Swivel actions: double ball ring with grease lubrication for high temperatures
- 5) King pin: integrated with the plate and cold-riveted

														Axle set		
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN					
80	35	0,71	677101	0,43	678101	107	100x85	80x60	9	37	150					
100	35	0,85	677102	0,53	678102	128	100x85	80x60	9	35	200					
125	35	1,07	677103	0,73	678103	156	100x85	80x60	9	37	220					
150	50	2,23	677314	1,90	678304	194	140x110	105x80	11	56	300					
200	50	3,08	677316	2,87	678306	240	140x110	105x80	11	56	300					
80	35	0,77	677201	0,49	677401	107	100x85	80x60	9	37	150					
100	35	0,91	677202	0,59	677402	128	100x85	80x60	9	35	200					



														Axle set		
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN					
80	35	0,75	677111	0,63	678111	107	100x85	80x60	9	37	160					
100	38	0,95	677112	0,80	678112	128	100x85	80x60	9	35	200					

Options available to order (plain bore)



Axle components with stainless steel tube coated with hi-thickness PTFE



Axle components with stainless steel tube coated with hi-thickness PTFE and spacers

SERIES 67 THERMOSETTING RESIN SOLID WHEELS

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) King pin: bushing in electrolytically galvanised steel
- 5) Swivel actions: double ball ring with grease lubrication for high temperatures

									Axle set						
mm	mm	kg	COD.	mm	mm	mm	mm	daN							
80	35	0,62	676101		107	73	12	37	150						
100	35	0,72	676102		128	73	12	35	200						
125	35	1,05	676103		156	73	12	37	220						
80	35	0,68	677501		107	73	12	37	150						
100	35	0,78	677502		128	73	12	35	200						



									Axle set						
mm	mm	kg	COD.	mm	mm	mm	mm	daN							
80	35	0,70	676111		107	73	12	37	160						
100	38	0,87	676112		128	73	12	35	200						

Options available to order (plain bore)



Axle components with stainless steel tube coated with hi-thickness PTFE



Axle components with stainless steel tube coated with hi-thickness PTFE and spacers

Stainless steel standard-duty brackets NLX - max carrying capacity 300 daN

INOX



- 1) Plate: AISI 304 stainless steel
- 2) Fork: AISI 304 stainless steel
- 3) Ball race ring: AISI 304 stainless steel
- 4) Swivel actions: double stainless steel ball ring with grease lubrication for high temperatures
- 5) King pin: integrated with the plate and cold-riveted

												Axle set		
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN			
80	35	0,71	677701	0,40	678701	107	100x85	80x60	9	37	150			
100	35	0,79	677702	0,52	678702	128	100x85	80x60	9	35	200			
125	35	0,92	677713	0,80	678713	156	100x85	80x60	9	37	220			
150	50	2,21	677704	1,77	678704	194	140x110	105x80	11	56	300			
200	50	3,06	677706	2,60	678706	240	140x110	105x80	11	56	300			
80	35	0,78	677901	0,47	678001	107	100x85	80x60	9	37	150			
100	35	0,86	677902	0,59	678002	128	100x85	80x60	9	35	200			



												Axle set		
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN			
80	35	0,75	678801	0,63	678901	107	100x85	80x60	9	37	160			
100	38	0,95	678802	0,80	678902	128	100x85	80x60	9	35	200			

SERIES 67 THERMOSETTING RESIN SOLID WHEELS

Stainless steel standard-duty brackets NLX - max carrying capacity 300 daN

INOX



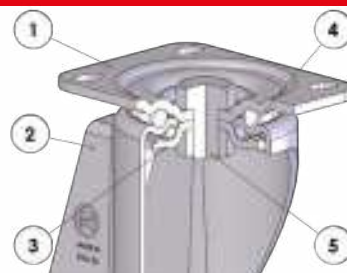
- 1) Plate: AISI 304 stainless steel
- 2) Fork: AISI 304 stainless steel
- 3) Ball race ring: AISI 304 stainless steel
- 4) King pin: bushing in stainless steel
- 5) Swivel actions: double ball ring with grease lubrication

									Axle set					
MM	MM	KG	КОД.	MM	MM	MM	MM	даН						
80	35	0,62	676701	107	73	12	37	150						
100	35	0,72	676702	128	73	12	35	200						
125	35	1,05	676703	156	73	12	37	220						
80	35	0,69	678201	107	73	12	37	150						
100	35	0,79	678202	128	73	12	35	200						



									Axle set					
MM	MM	KG	КОД.	MM	MM	MM	MM	даН						
80	35	0,70	676711	107	73	12	37	160						
100	38	0,87	676712	128	73	12	35	200						

Stainless steel medium-heavy duty brackets PX - max carrying capacity 500 daN



INOX

- 1) Plate: AISI 304 stainless steel
- 2) Fork: AISI 304 stainless steel
- 3) Ball race ring: AISI 304 stainless steel
- 4) Swivel actions: double stainless steel ball ring with grease lubrication for high temperatures
- 5) King pin: screw and nut in stainless steel

												Axle set		
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN			
150	50	3.25	677004	1.90	677104	200	140x110	105x80	11	70	300			
200	50	4.25	677006	2.74	677106	250	140x110	105x80	11	70	500			

POLYAMIDE 6 SOLID WHEELS CHARGED WITH GLASS FIBER



Description

Polyamide 6 solid wheels charged with glass fiber, to increase the resistance to temperature from -30°C up to +130°C. Hardness 80 Shore D.

Hub with ball bearings with interference assembly in the seats obtained by moulding. The bearing is protected against external agents by polyamide plain bore caps charged with glass fiber with internal labyrinth. Also available with stainless steel ball bearings.

Uses

Mainly suitable for static uses on smooth and compact flooring, for medium-duty carrying capacities. Resistant to temperatures between -30°C and +130°C, suitable for use on equipment that has to be frequently washed and sterilised, especially in auto-claves.

The excellent rolling resistance ensures that minimum effort is needed when manual handling, but only on smooth floors.

They are combined with brackets and axle components which are specific for high temperature environments.

Examples of recommended applications: trolleys for internal use in the food and canning industries, tannery equipments.

Environments of use

Resistant to medium-harsh chemical agents, they are suitable for industrial and institutional environments, also in presence of humidity and chemical agents.

Not recommended in areas with strong organic acids and mineral acids.

WEAK ACIDS
STRONG ACIDS
WATER
ALCOHOL



WEAK BASES
STRONG BASES
HYDROCARBONS
SOLVENTS



For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Only suitable on smooth and compact tile and resin-cement flooring. Not suitable in presence of obstacles.

They may damage fragile floors.

Not recommended on abrasive, unpaved floors or in presence of processing residues.



Force required to push or tow a wheel

 	100 kg	150 kg	200 kg	250 kg	300 kg	350 kg
100 mm	<1	1.2	1.5	2	---	---
125 mm	<1	< 1	1.1	1.5	1.8	2.2

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Combination with brackets



Standard-duty brackets NL

Maximum carrying capacity 220 daN - available diameters 100-125 mm
Top plate and bolt hole fittings.



Stainless steel standard-duty brackets NLX

Maximum carrying capacity 220 daN - available diameters 100-125 mm
Top plate and bolt hole fittings.



														
mm	mm	kg	CODE	kg	CODE	mm	mm	daN	daN	daN				
100	30	0.27	683502	0.27	683602	12	45	250	250	250				
125	30	0.33	683503	0.33	683603	12	45	350	350	350				

Standard-duty brackets NL - max carrying capacity 220 daN



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Dust seal: blue polyamide
- 4) Ball race ring: electrolytically galvanised steel plate
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: integrated with the plate and cold-riveted

																
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN					
100	30	0.74	684882	0.63	685182	128	100x85	80x60	9	35	220					
125	30	0.83	684883	0.72	685183	156	100x85	80x60	9	37	220					

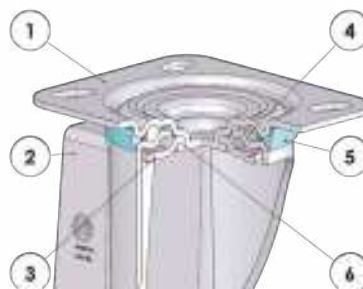


- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) King pin: bushing in electrolytically galvanised steel
- 5) Swivel actions: double ball ring with grease lubrication

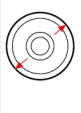
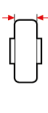
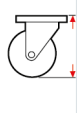
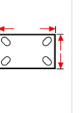
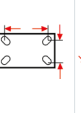
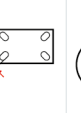
																
mm	mm	kg	CODE	mm	mm	mm	mm	daN								
100	30	0.69	688082	128	73	12	35	220								
125	30	0.78	688083	156	73	12	37	220								

Stainless steel standard-duty brackets NLX - max carrying capacity 220 daN

INOX

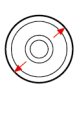
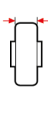
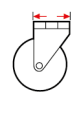
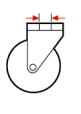
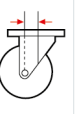


- 1) Plate: AISI 304 stainless steel
- 2) Fork: AISI 304 stainless steel
- 3) Ball race ring: AISI 304 stainless steel
- 4) Dust seal: blue polyamide
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: integrated with the plate and cold-riveted

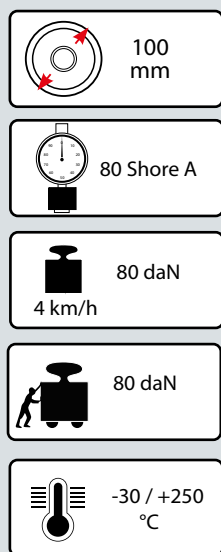
																	
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN						
100	30	0.74	684682 	0.63	685682 	128	100x85	80x60	9	35	220						
125	30	0.83	684683 	0.72	685683 	156	100x85	80x60	9	37	220						



- 1) Plate: AISI 304 stainless steel
- 2) Fork: AISI 304 stainless steel
- 3) Ball race ring: AISI 304 stainless steel
- 4) King pin: bushing in stainless steel
- 5) Swivel actions: double ball ring with grease lubrication

																	
mm	mm	kg	CODE	mm	mm	mm	mm	mm	daN								
100	30	0.69	685982 	128	73	12	35		220								
125	30	0.78	685983 	156	73	12	37		220								

SILICONE RUBBER WHEELS WITH ALUMINIUM CENTRE



INOX



Description

Tyre: red non-marking silicone rubber, hardness 80 Shore A, resistant to temperatures up to 250°C.

Centre: aluminium.

Hub with ball bearings with silicone grease for high temperatures, interference assembly in the seats obtained by moulding.

Uses

Suitable for use at temperatures from -30 up to +250°C. Particularly suitable for intermittent use in baking ovens (maximum permanence at 250°C is of 30 minutes, with subsequent period of resting of at least 30 minutes, at room temperature).

They have excellent elasticity features and guarantee an easy overcoming of obstacles on uneven flooring also; compared to high temperature solid wheels, they allow a significant noise reduction.

They are combined with brackets and axle components specific for high temperatures; all wheels are also fitted with threadguards.

Not suitable in presence of obstacles along the path or on delicate flooring.

Environments of use

Suitable for industrial and institutional environments. They are resistant to medium-harsh chemical agents and humidity. Not recommended in areas with strong acids and oils.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for use on tiles, resin-cement; not recommended on abrasive, unpaved floors or in the presence of processing residues.

Not suitable on delicate floor or with obstacles along the path.

They do not mark the floor.



Force required to push or tow a wheel

 	50 kg	75 kg	100 kg
100 mm	<1	4	----

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Available with brackets



Standard-duty brackets NL

Maximum carrying capacity 80 daN - available diameters 100 mm
Top plate and bolt hole fittings. Available with front brake.

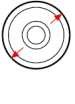
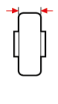
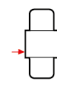


Stainless steel standard-duty brackets NLX

Maximum carrying capacity 80 daN - available diameters 100 mm
Top plate and bolt hole fittings. Available with front brake.

SERIES 72G SILICONE RUBBER WHEELS WITH ALUMINIUM CENTRE

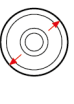
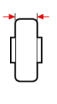
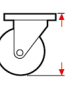
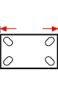
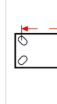
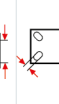
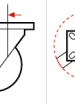


									250 °C	250 °C	250 °C			
mm	mm	kg	CODE	mm	mm.	daN	daN	daN	daN	daN	daN			
100	40	0.43	722152	15	40	100	80	80	40	40	40			

Standard-duty brackets NL - max carrying capacity 80 daN

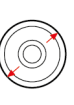
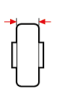
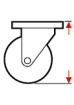
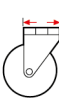
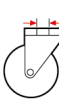


- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication for high temperatures
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															250 °C
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN
100	40	0.96	724452PF	0.71	726252PF	1.17	727152PF	128	100x85	80x60	9	35	120	80	40



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication for high temperatures
- Available with total front foot brake

											250 °C			
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	daN		
100	40	0.86	727352PF	1.07	727452PF	128	73	12	35	120	80	40		

Stainless steel standard-duty brackets NLX - max carrying capacity 80 daN



INOX

- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) Swivel actions: double stainless steel ball ring with grease lubrication for high temperatures
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN	250 °C
100	40	0.96	724462PF	0.71	726262PF	1.17	727162PF	128	100x85	80x60	9	35	120	80	40	



INOX

- 1) Plate: AISI 304 stainless steel
 - 2) Fork: AISI 304 stainless steel
 - 3) Ball race ring: AISI 304 stainless steel
 - 4) King pin: bushing in stainless steel
 - 5) Swivel actions: double stainless steel ball ring with grease lubrication for high temperatures
- Available with total front foot brake

mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	daN	250 °C			
100	40	0.86	727362PF	1.07	727462PF	128	73	12	35	120	80	40				

ANTISTATIC AND STATICALLY CONDUCTIVE SOLUTIONS



↑ ESD Protected Area ↑





SERIES
53 AS

ELECTRICAL CONDUCTIVE RUBBER
WHEELS WITH PRESSED STEEL DISCS

 80-200 mm	 65-230 daN	 50-140 daN
 -20 / +60 °C	 $<10^5 \Omega$	

PAGE 304



SERIES
62 ESD

ESD "TR-ROLL" POLYURETHANE WHEELS,
ELECTRICAL RESISTANCE $<10^9 \Omega$
WITH ALUMINIUM CENTRE

 100-200 mm	 225-560 daN	 225-480 daN
 6 km/h	 -20 / +70 °C*	 $<10^9 \Omega$

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SERIES
65 ESD

ESD "TR" POLYURETHANE WHEELS,
ELECTRICAL RESISTANCE $<10^9 \Omega$
WITH ALUMINIUM CENTRE

 80-200 mm	 170-680 daN	 150-360 daN
 6 km/h	 -20 / +70 °C*	 $<10^9 \Omega$

PAGE 314



SERIES
68 AS

ELECTRICAL CONDUCTIVE POLYAMIDE
6 SOLID WHEELS

 upon request	 $<10^5 \Omega$
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USE AND MAINTENANCE SUGGESTIONS

1. The user must ascertain the suitability of the wheels for use in ESD environments or in environments at risk of explosion (ATEX), in accordance with national or community legislation or with the technical standards of the sector for which it is intended (Directive 2014/34/EC, Directive 1999/92/EC, CEI EN 61340-5-1:2016, and similar).
2. Electrical resistance values indicated in Tellure Rôta documentation are measured in the temperature range prescribed by the ISO 22878:2004 standard (18-25 °C). As wheels may vary their electrical resistance according to the temperature, for environments with operating temperatures below 10 °C please contact Tellure Rôta.
3. When realising trolleys, chairs and furniture, it is not recommended to rely on a single conductive wheel. Because of the fact that the equipment may not rest on all wheels at the same time, an adequate number of conductive wheels must be used to ensure, in all conditions, the possibility of discharge the built up static to the ground.
4. It is forbidden to make changes to the product that could compromise its conductivity or performance.
5. Before use, make sure that the product is clean; the presence of dust or dirt could compromise the conductivity of the wheel. During cleaning, make sure you do not use products that create insulating films.
6. Check the wear of the tread and the cleanliness of the wheel at least quarterly, and in any case with appropriate frequency considering the environment, the use and the type of application, the conductivity.
7. Follow the maintenance instructions given in the user guide in the general catalogue.
8. Grease the components using products with conductivity and use characteristics suitable for the type of application.

NORMS OF REFERENCE

The main norms of reference for wheels and castors with specific electrical resistance are:

- **ISO 22878:2004** which defines the methods of measuring the electrical resistance of wheels;
- **ISO 22883:2004** which defines the range of the electrical resistance.

The reference standards for ATEX and ESD environments can be considered:

- Directive 1999/92/EC minimum requirements for improving the protection of the safety and health of workers who may be exposed to the risk of explosive atmospheres
- Directive 2014/34/EC on the harmonization of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres
- CEI EN 61340-5-1:2016 Electrostatics Part 5-1 general requirements for the protection of electronic devices from electrostatic phenomena.

It is recommended to check any regulation on health and safety on the workplace or on specific application sector in force in the country where the product will be used.

ELECTRICAL CONDUCTIVE RUBBER WHEELS WITH PRESSED STEEL DISCS


80-200
mm


80 Shore A


65-230
daN
4 km/h


50-140
daN


-20 / +60
°C


 $R < 10^5 \Omega$



Description

Tyre: electrical conductive rubber (electrical resistance below $10^5 \Omega$), hardness 80 Shore A.

Centre: electrolytically galvanised steel plate, made of two riveted discs.

Cylindrical roller bearing hub in plastic cage.

Uses

Suitable for trolleys with light-duty loads, also in potentially explosive areas and for ESD sensible environments. Suitable in the presence of obstacles and for indoor-outdoor use.

Examples of recommended applications: tool trolleys, trolleys for industrial indoor handling, small mobile scaffoldings, waste bin containers.

Environments of use

Suitable for industrial and institutional environments, also in presence of humidity and oils. Not suitable in presence of aggressive chemical agents.

WEAK ACIDS			WEAK BASES		
STRONG ACIDS			STRONG BASES		
WATER			HYDROCARBONS		
ALCOHOL			SOLVENTS		

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of floors, even outdoors.

They easily overcome obstacles, do not damage fragile floors, but they may mark the floor.



Force required to push or tow a wheel

 	50 kg	100 kg	150 kg	200 kg	250 kg	300 kg
80 mm	5	----	----	----	----	----
100 mm	3	----	----	----	----	----
125 mm	2.5	6	----	----	----	----
140 mm	2.2	5.5	9	----	----	----
150 mm	2	5	8	----	----	----
160 mm	1.5	3.5	7.5	----	----	----
180 mm	1	3	6.1	----	----	----
200 mm	1	3	5.5	8.5	----	----

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 230 daN - available diameters 80-200 mm
Top plate, bolt hole and solid stem fittings. Available with front brake.

ELECTRICAL CONDUCTIVE RUBBER WHEELS
WITH PRESSED STEEL DISCS

																
mm	mm	kg	CODE	mm	mm	daN	daN	daN								
80	25	0.19	533121AS	12	39	260	50	65								
100	30	0.31	533122AS	12	44	300	75	80								
125	37.5	0.54	533103AS	15	44	330	85	130								
150	40	0.76	533111AS	15	44	350	100	170								
160	40	1.07	533110AS	20	58	370	120	180								
180	45	1.39	533105AS	20	58	390	130	200								
200	50	1.81	533106AS	20	58	410	140	230								

Standard-duty brackets NL - max carrying capacity 230 daN



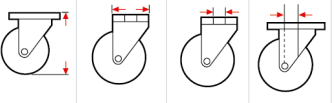
- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN		
80	25	0.70	535101AS	0.51	535901AS	0.89	535421AS	107	100x85	80x60	9	37	120	65		
100	30	0.84	535102AS	0.65	535902AS	1.03	535422AS	128	100x85	80x60	9	35	120	80		
125	37.5	1.21	535103AS	0.95	535903AS	1.33	535423AS	156	100x85	80x60	9	37	120	130		
150	40	1.45	535111AS	1.07	535911AS	1.60	535431AS	182	100x85	80x60	9	34	120	170		
160	40	2.50	535110AS	2.13	535910AS	2.75	535430AS	199	140x110	105x80	11	56	156	180		
180	45	2.85	535105AS	2.56	535905AS	3.13	535425AS	219	140x110	105x80	11	56	156	200		
200	50	3.31	535106AS	3.05	535906AS	3.45	535426AS	240	140x110	105x80	11	56	156	230		

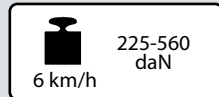
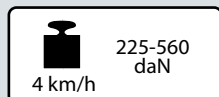
Standard-duty brackets NL - max carrying capacity 230 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) King pin: bushing in electrolytically galvanised steel
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

																
		kg	CODE	kg	CODE	mm	mm	mm	mm	mm						
80	25	0.63	537901AS	0.80	538221AS	107	73	12	37	120	65					
100	30	0.76	537902AS	0.96	538222AS	128	73	12	35	120	80					
125	37.5	1.12	537903AS	1.27	538223AS	156	73	12	37	120	130					
150	40	1.38	537911AS	1.52	538231AS	182	73	12	34	120	170					
160	40	1.85	537910AS	2.10	538230AS	193	102	20	56	156	180					
180	45	2.73	537905AS	3.01	538225AS	214	102	20	56	156	200					
200	50	3.22	537906AS	3.35	538226AS	236	102	20	56	156	230					

ESD "TR-ROLL" POLYURETHANE WHEELS, ELECTRICAL RESISTANCE $<10^9 \Omega$ WITH ALUMINIUM CENTRE



Description

Tyre: very thick ESD TR-Roll polyurethane, light-grey non-marking colour, hardness 75 Shore A, with excellent rolling resistance and elasticity and good resistance to wear and tear.

Centre: made of cast aluminium.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

Suitable for medium-heavy duty application, in those environments where, for safety reasons or for the correct functioning of the equipment, an electro static discharge is required.

This polyurethane compound combines the carrying capacity and the resistance to wear and tear of the polyurethanes with the ability to overcome obstacles and to damp noise, vibrations and impacts of the elastic rubber.

Combined with appropriate brackets, they guarantee excellent performance for mechanical handling up to 16 km/h.

The excellent rolling resistance guarantees an easy handling of heavy loads even with wheels of small diameter.

Environments of use

Industrial environments, even in presence of humidity and oils. Not suitable in presence of strong acids and solvents.

* Electrical resistance values measured in the temperature range 18-25 °C (as per ISO 22878: 2004). For environments with operating temperatures below 10 °C, please contact Tellure Rôta.

WEAK ACIDS	
STRONG ACIDS	
WATER	
ALCOHOL	

WEAK BASES	
STRONG BASES	
HYDROCARBONS	
SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of industrial floors, even outdoors. Facilitates the overcoming of obstacles.

It does not damage the floors.



Force required to push or tow a wheel

 	100 kg	200 kg	300 kg	400 kg	500 kg	550 kg
100 mm	<1	2	---	---	---	---
125 mm	<1	1,7	3,1	---	---	---
160 mm	<1	1,6	2,8	4,4	---	---
200 mm	<1	1,2	2,3	3,7	5,2	6,1

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake and centralised brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 560 daN - available diameters 100-250 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

Maximum carrying capacity 560 daN - available diameters 160-200 mm
Top plate fitting. Available with adjustable rear brake.



													
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN
100	40	0,45	622102ESD	0,37	624102ESD	15	40	32	9	320	240	240	240
125	40	0,79	622113ESD	0,54	624113ESD	20	40	47	14	400	280	280	280
160	50	1,20	622104ESD	0,95	624104ESD	20	58	47	14	640	440	440	440
200	50	1,74	622106ESD	1,52	624106ESD	20	58	47	14	800	480	560	560

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	
100	40	0,86	624402ESD	0,83	626202ESD	1,05	627302ESD	128	100x85	80x60	9	35	120	200	
125	40	1,35	624413ESD	1,17	626213ESD	1,51	627313ESD	156	100x85	80x60	9	37	120	220	
160	50	2,88	624410ESD	2,24	627704ESD	3,42	627304ESD	199	140x110	105x80	11	56	156	300	
200	50	3,18	624406ESD	3,04	627706ESD	3,70	627306ESD	240	140x110	105x80	11	56	156	300	

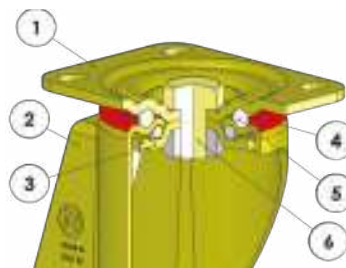
Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electroplated galvanised steel
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

														
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN
160	50	2,95	624504ESD	2,24	627704ESD	3,42	627404ESD	199	140x110	105x80	11	58	178	440
200	50	3,69	624506ESD	3,04	627706ESD	4,07	627406ESD	240	140x110	105x80	11	50	178	500

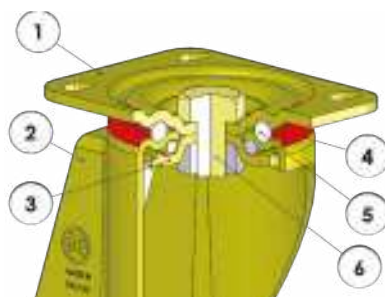
Medium-heavy duty brackets P - max carrying capacity 560 daN



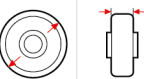
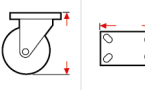
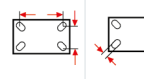
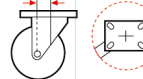
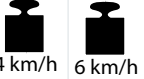
- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

															
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
100	40	1,35	627602ESD	0,85	628512ESD	1,52	627202ESD	138	100x85	80x60	9	46	123	240	240
125	40	1,70	627613ESD	1,26	628513ESD	1,87	627213ESD	161	100x85	80x60	9	44	123	280	280

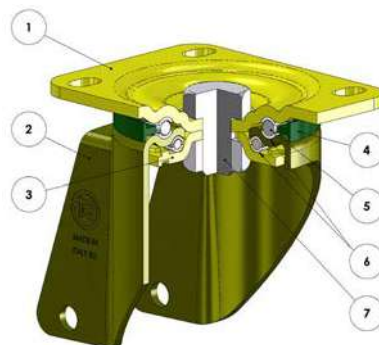
Medium-heavy duty brackets P - max carrying capacity 560 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN
160	50	3,60	627610ESD	2,11	628514ESD	4,17	627204ESD	205	140x110	105x80	11	70	126			440	440
200	50	4,31	627516ESD	2,85	628516ESD	4,91	627206ESD	250	140x110	105x80	11	70	126			560	560

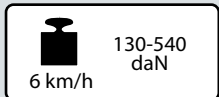
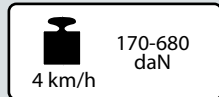
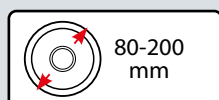
Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 560 daN



- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN
160	50	3,52	625010ESD	2,11	628514ESD	4,12	629904ESD	205	140x110	105x80	11	70	126	440	440		
200	50	4,10	625016ESD	2,85	628516ESD	4,66	629906ESD	250	140x110	105x80	11	70	126	560	560		

ESD "TR" POLYURETHANE WHEELS, ELECTRICAL RESISTANCE $<10^9 \Omega$ WITH ALUMINIUM CENTRE



Description

Tyre: ESD TR polyurethane, dark-grey non-marking colour, hardness 90 Shore A, with excellent rolling resistance and elasticity and good resistance to wear and tear.

Centre: made of cast aluminium.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

Suitable for medium-heavy duty application, in those environments where, for safety reasons or for the correct functioning of the equipment, an electro static discharge is required, also with mechanical handling, with speed up to 6 km/h. .
The excellent rolling resistance allows an easy handling of heavy loads even with wheels of small diameter.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

* Electrical resistance values measured in the temperature range 18-25 ° C (as per ISO 22878: 2004). For environments with operating temperatures below 10 ° C, please contact Tellure Rôta.

WEAK ACIDS	
STRONG ACIDS	
WATER	
ALCOHOL	

WEAK BASES	
STRONG BASES	
HYDROCARBONS	
SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.
Not suitable if large obstacles are present.



Force required to push or tow a wheel

 	150 kg	250 kg	350 kg	450 kg	550 kg	650 kg
80 mm	3,2	---	---	---	---	---
100 mm	2,3	5,2	---	---	---	---
125 mm	1,7	4,5	6,5	---	---	---
150 mm	1,2	3,8	6	7	8	---
160 mm	<1	3,3	5	6,5	8	---
200 mm	<1	3	4,9	6	7,8	9

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Available with brackets :



Standard-duty brackets NL

Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate and bolt hole fittings. Available with the front brake.



Medium-duty brackets M

Maximum carrying capacity 500 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P

Maximum carrying capacity 680 daN - available diameters 100-200 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Heavy-duty PT brackets with hardened ball race grooves

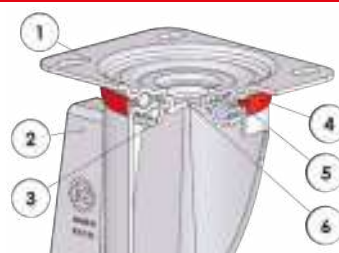
Maximum carrying capacity 680 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable rear brake.

ESD "TR" POLYURETHANE WHEELS, ELECTRICAL RESISTANCE <10⁹ Ω WITH ALUMINIUM CENTRE



													
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN
80	25	0,20	652101ESD	0,15	654101ESD	12	30	28	8	220	150	170	130
100	30	0,34	652102ESD	0,25	654102ESD	12	40	32	10	280	225	200	160
125	35	0,50	652103ESD	0,41	654103ESD	12	40	32	10	400	280	320	250
150	40	0,91	651104ESD	0,66	653104ESD	20	50	47	14	680	330	480	380
160	50	1,25	652114ESD	0,99	654114ESD	20	58	47	14	750	350	640	510
200	50	1,47	651106ESD	1,16	653106ESD	20	55	52	15	800	360	680	540

Standard-duty brackets NL - max carrying capacity 300 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

														
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN
80	25	0,72	659301ESD	0,52	658201ESD	0,91	656501ESD	107	100x85	80x60	9	37	120	170
100	30	0,94	659302ESD	0,69	658202ESD	1,08	656502ESD	128	100x85	80x60	9	35	120	200
125	35	1,14	659303ESD	0,89	658203ESD	1,28	656503ESD	156	100x85	80x60	9	37	120	220
150	40	2,34	659304ESD	2,04	658104ESD	2,63	656504ESD	194	140x110	105x80	11	56	156	300
160	50	2,68	659514ESD	2,38	658114ESD	2,97	656514ESD	198	140x110	105x80	11	56	156	300
200	50	3,05	659306ESD	2,76	658106ESD	3,25	656506ESD	240	140x110	105x80	11	56	156	300

Options available to order:



Directional lock
for brackets
d. 150-200 mm



Footguard
for brackets NL-
M-P-PT

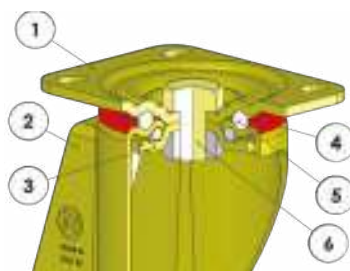
Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: blue polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with adjustable total front foot brake

																
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN		
150	40	2,68	659604ESD	2,04	658104ESD	3,16	659704ESD	194	140x110	105x80	11	58	178	480		
160	50	3,03	659614ESD	2,38	658114ESD	3,49	659714ESD	199	140x110	105x80	11	58	178	500		
200	50	3,44	659606ESD	2,76	658106ESD	3,80	659706ESD	240	140x110	105x80	11	50	178	500		

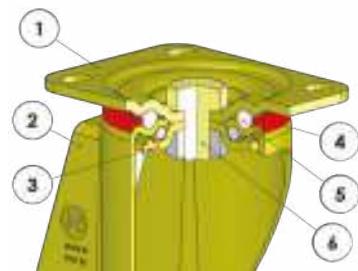
Heavy duty brackets P - max carrying capacity 680 daN



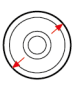
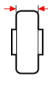
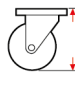
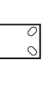
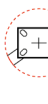
- 1) Plate: galvanised colonial steel plate
 - 2) Fork: galvanised colonial steel plate
 - 3) Ball race ring: galvanised colonial steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with total front foot brake

																
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN		
100	30	1,20	657602ESD	0,82	658602ESD	1,35	656602ESD	138	100x85	80x60	9	46	123	200	160	
125	35	1,39	657603ESD	0,97	658603ESD	1,54	656603ESD	161	100x85	80x60	9	44	123	320	250	

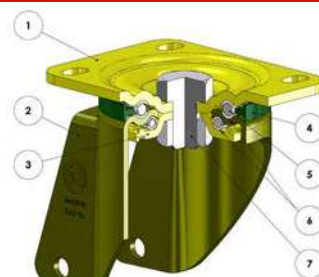
Medium-heavy duty brackets P - max carrying capacity 680 daN



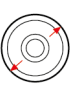
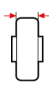
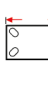
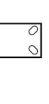
- 1) Plate: galvanised colonial steel plate
 - 2) Fork: galvanised colonial steel plate
 - 3) Ball race ring: galvanised colonial steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	4 km/h	6 km/h
150	40	3,18	657604ESD	2,19	658604ESD	3,75	656604ESD	200	140x110	105x80	11	70	126	480	250		
160	50	3,52	657514ESD	2,53	658614ESD	4,09	656614ESD	205	140x110	105x80	11	70	126	640	380		
200	50	3,94	657606ESD	2,48	658606ESD	4,51	656606ESD	250	140x110	105x80	11	70	126	680	510		

Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 680 daN



- 1) Top Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball Race Ring: electrolytically galvanised steel plate
 - 4) Dust Seal: dark green polyamide 6
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) Ball race: hardened carbon steel grooves
 - 7) King pin: steel screw, class 8.8 and stainless steel nut
- Available with rear adjustable brake

																	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	4 km/h	6 km/h
150	40	3,18	657544ESD	2,19	658604ESD	3,66	656674ESD	200	140x110	105x80	11	70	126	480	250		
160	50	3,52	657554ESD	2,53	658614ESD	4,09	656684ESD	205	140x110	105x80	11	70	126	640	380		
200	50	3,94	657546ESD	2,48	658606ESD	4,41	656676ESD	250	140x110	105x80	11	70	126	680	510		

ELECTRICAL RESISTANCE MEASUREMENT ACCORDING TO ISO 2878: 2004

The TR Lab, Test & Research laboratory of Tellure Rôta, has the necessary equipment for the measurement of electrical resistance on the wheel according to **ISO 22878: 2004**.

At the customer's request, the laboratory can issue a test report with the results of the tests carried out.



PALLET TRUCK ROLLERS





SERIE **59H**

"TR-POWERHIGH" POLYURETHANE ROLLERS
WITH STEEL CENTRE

85 mm	600-1100 daN	400-560 daN
480-880 daN	-20 / +80 °C	

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SERIE **74** **VULKOLLAN®**

VULKOLLAN® ROLLERS
WITH STEEL CENTRE

80-85 mm	400-1000 daN	180-450 daN
320-800 daN	-20 / +80 °C	

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SERIE **75**

"TR" POLYURETHANE ROLLERS
WITH STEEL CENTRE

35-85 mm	350-800 daN	200-475 daN
335-540 daN	-20 / +80 °C	

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SERIE **75H**

"TR" POLYURETHANE ROLLERS
WITH STEEL CENTRE

85 mm	480-890 daN	400-560 daN
390-720 daN	-20 / +80 °C	

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SERIE **76**

POLYAMIDE 6 SOLID ROLLERS

40-85 mm	700-1200 daN	335-500 daN
-30 / +80 °C		

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SERIE **77**

"TR" POLYURETHANE ROLLERS
WITH POLYAMIDE 6 CENTRE

82-85 mm	450-600 daN	320-420 daN
300-400 daN	-20 / +80 °C	

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SERIE **78**

THERMOPLASTIC POLYURETHANE
ROLLERS WITH POLYAMIDE 6 CENTRE

82 mm	450-750 daN	390-530 daN
-15 / +80 °C		

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SERIE **79**

"TR-ROLL" POLYURETHANE ROLLERS
WITH STEEL CENTRE

80-85 mm	400-650 daN	400-650 daN
320-520 daN	-20 / +70 °C	

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"TR-POWERHIGH" POLYURETHANE PALLET TRUCK ROLLERS FOR ELECTRIC PALLET TRUCKS WITH STEEL CENTRE

85 mm

92 Shore A

600-1100 daN
4 km/h

480-880 daN
6 km/h

400-560 daN

-20 / +80 °C



Description

Tyre: "TR- PowerHigh" polyurethane for high dynamic performance, hardness 92 Shore A, excellent rolling resistance and elasticity, very good resistance to wear and to tear, good resistance to hydrolisis.

Centre: obtained from a steel tube.

Hub with sealed ball bearings 6006 type 2RS, protective plastic-rings, with plastic labyrinths with integrated lip, to protect the bearings from dust and other elements that could limit their correct functioning over time.

Uses

Perfect for use on electric pallet trucks, both walk-behind and with operator on board models, even in case of handling very heavy loads, at speeds above 12-16 km / h, and intensive use even over long terms.

The excellent rolling resistance still allows to move manually easily high loads. They are also suitable for use in environments where resistance to hydrolisis is required.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.

Not suitable if voluminous obstacles are present.



Force required to push or tow a wheel

 	100 kg	200 kg	300 kg	400 kg	500 kg	600 kg	800 kg
85x60 mm	< 1	2,2	3,6	5	----	----	----
85x70 mm	< 1	1,9	2,9	4	6	----	----
85x75 mm	< 1	1,9	2,9	4	6	----	----
85x80 mm	< 1	1,8	2,6	3,8	5	7,2	----
85x85 mm	< 1	1,8	2,6	3,8	5	7,2	----
85x90 mm	< 1	1,7	2,4	3,5	4,8	6,4	----
85x100 mm	< 1	1,6	2,2	3,2	4,5	6	10
85x105 mm	< 1	1,6	2,2	3,2	4,5	6	10
85x110 mm	< 1	1,5	2	3	4,2	5,7	10,5

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

"TR-POWERHIGH" POLYURETHANE PALLET TRUCK ROLLERS FOR ELECTRIC PALLET TRUCKS WITH STEEL CENTRE



														
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	daN	daN	daN	daN	
85	60	0,84	593101F12	0,54	595101	12	65	55	22	900	400	600	480	
85	60	0,84	593101F17	0,54	595101	17	65	55	22	900	400	600	480	
85	60	0,84	593101F20	0,54	595101	20	65	55	22	900	400	600	480	
85	60	0,82	593101F25	0,54	595101	25	65	55	22	900	400	600	480	
85	70	1,04	593103F12	0,72	595103	12	59	55	22	1000	450	700	560	
85	70	1,03	593103F17	0,72	595103	17	59	55	22	1000	450	700	560	
85	70	1,03	593103F20	0,72	595103	20	59	55	22	1000	450	700	560	
85	70	1,02	593103F25	0,72	595103	25	59	55	22	1000	450	700	560	
85	75	1,12	593104F12	0,79	595104	12	80	55	22	1000	450	750	600	
85	75	1,11	593104F17	0,79	595104	17	80	55	22	1000	450	750	600	
85	75	1,11	593104F20	0,79	595104	20	80	55	22	1000	450	750	600	
85	75	1,10	593104F25	0,79	595104	25	80	55	22	1000	450	750	600	
85	80	1,19	593105F12	0,86	595105	12	85	55	22	1100	500	800	640	
85	80	1,19	593105F17	0,86	595105	17	85	55	22	1100	500	800	640	
85	80	1,19	593105F20	0,86	595105	20	85	55	22	1100	500	800	640	
85	80	1,18	593105F25	0,86	595105	25	85	55	22	1100	500	800	640	
85	85	1,27	593106F12	0,92	595106	12	90	55	22	1100	500	850	680	
85	85	1,26	593106F17	0,92	595106	17	90	55	22	1100	500	850	680	
85	85	1,26	593106F20	0,92	595106	20	90	55	22	1100	500	850	680	
85	85	1,25	593106F25	0,92	595106	25	90	55	22	1100	500	850	680	
85	90	1,34	593107F12	0,99	595107	12	95	55	22	1200	525	900	720	
85	90	1,34	593107F17	0,99	595107	17	95	55	22	1200	525	900	720	
85	90	1,34	593107F20	0,99	595107	20	95	55	22	1200	525	900	720	
85	90	1,33	593107F25	0,99	595107	25	95	55	22	1200	525	900	720	
85	100	1,50	593109F12	1,13	595109	12	105	55	22	1300	540	1000	800	
85	100	1,49	593109F17	1,13	595109	17	105	55	22	1300	540	1000	800	
85	100	1,49	593109F20	1,13	595109	20	105	55	22	1300	540	1000	800	
85	100	1,48	593109F25	1,13	595109	25	105	55	22	1300	540	1000	800	
85	105	1,57	593110F12	1,19	595110	12	110	55	22	1300	540	1050	840	
85	105	1,56	593110F17	1,19	595110	17	110	55	22	1300	540	1050	840	
85	105	1,56	593110F20	1,19	595110	20	110	55	22	1300	540	1050	840	
85	105	1,55	593110F25	1,19	595110	25	110	55	22	1300	540	1050	840	
85	110	1,65	593111F12	1,26	595111	12	115	55	22	1400	560	1100	880	
85	110	1,64	593111F17	1,26	595111	17	115	55	22	1400	560	1100	880	
85	110	1,64	593111F20	1,26	595111	20	115	55	22	1400	560	1100	880	
85	110	1,63	593111F25	1,26	595111	25	115	55	22	1400	560	1100	880	



mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	daN	daN	daN	daN	
85	74	1,20	059007	0,99	059003	12	75	55	22	1000	450	740	590	



Description

Tyre: Vulkollan®, hardness 93 Shore A: excellent values of rolling resistance and elasticity, highly resistant to wear, tear and deformations.

Centre: obtained from a steel tube.

Hub with shielded ball bearing with interference assembly in the seats obtained by precision machining of the centre; also available without bearings.

Model with labyrinth seals: protective plastic-rings, with interference assembly into the ball bearings. They ensure longer life, by preventing entry of dust and foreign bodies.

Uses

Excellent for use on electric pallet trucks, also in case of heavy loads and high speed handling (up to 16 km/h). Their excellent values of rolling resistance make the manual handling of heavy loads easier.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

WEAK ACIDS				WEAK BASES			
STRONG ACIDS				STRONG BASES			
WATER				HYDROCARBONS			
ALCOHOL				SOLVENTS			

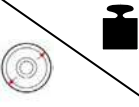
For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.
Not suitable if voluminous obstacles are present.



Force required to push or tow a wheel

	100 kg	200 kg	300 kg	400 kg	500 kg	600 kg	800 kg
80x70 mm	1	2,2	3,4	4,7	7	----	----
80x90 mm	<1	2	2,8	4,1	5,6	7,4	15
85x40 mm	1,2	3,1	6	8,5	----	----	----
85x70 mm	<1	2,1	3,2	4,4	6,6	7,8	----
85x80 mm	<1	2	2,9	4,2	5,5	7,5	13
85x90 mm	<1	1,9	2,6	3,9	5,3	7	12
85x100 mm	<1	1,8	2,4	3,5	5	6,6	11

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Options available to order

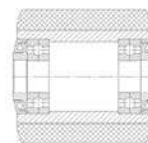


Rollers fitted
with electrowelded
brackets EE MHD



											 Static	 4 km/h	 6 km/h		
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	daN	daN	daN	daN		
80	70	1,07	742202	0,83	744202	20	70	47	14	1000	410	700	560		
80	90	1,38	742105	1,14	744105	20	90	47	14	1200	470	900	720		
85	40	0,72	742121	0,48	744121	20	40	47	14	575	250	400	320		
85	70	1,13	742122	0,89	744122	20	70	47	14	1000	430	700	560		
85	80	1,26	742123	1,02	744123	20	80	47	14	1050	460	800	640		
85	80	1,19	742224	0,91	744224	25	80	52	15	1050	460	800	640		
85	90	1,41	742125	1,17	744125	20	90	47	14	1200	480	900	720		
85	100	1,54	742127	1,30	744127	20	100	47	14	1300	500	1000	800		

With labyrinths



Labyrinths: protective plastic-rings, with interference assembly in front of the ball bearings. They ensure longer life, protecting them from dust and foreign bodies that may limit the roller's free rotation.

									Static		4 km/h	6 km/h				
mm	mm	kg	COD.	mm	mm	mm	mm	mm	daN	daN	daN	daN				
80	65	0,98	743201	20	70	47	20,5	930	400	650	520					
80	85	1,32	743202	20	90	47	20,5	1130	460	850	680					
85	65	1,07	743203	20	70	47	20,5	930	410	650	520					
85	75	1,20	743204	20	80	47	20,5	980	450	750	600					
85	75	1,13	743224	25	80	47	20,5	980	450	750	600					
85	85	1,35	743205	20	90	47	20,5	1130	470	850	680					
85	95	1,48	743206	20	100	47	20,5	1230	490	950	760					

Options available to order



Rollers fitted with electrowelded brackets EE MHD



Rollers with customised dimensions



TR Lab, we work for the future

"TR" POLYURETHANE PALLET TRUCK ROLLERS WITH STEEL CENTRE



Description

Tyre: "TR" polyurethane, hardness 92 Shore A, excellent values of rolling resistance and elasticity, highly resistant to wear.

Centre: obtained from a steel tube:

Hub with shielded ball bearing with interference assembly in the seats obtained by precision machining of the centre; also available without bearings.

Model with labyrinth seals: protective plastic-rings, with interference assembly into the ball bearings. They ensure longer life, by preventing entry of dust and foreign bodies.

Uses

Excellent for use on manual pallet trucks, also in case of heavy loads. Their excellent values of rolling resistance make the manual handling of heavy loads easier. The model with electrowelded brackets allows handling heavy loads while maintaining a low centre of gravity. It is a common solution to move set design in the show business sector.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.
Not suitable if voluminous obstacles are present.



Force required to push or tow a wheel

 	100 kg	200 kg	300 kg	400 kg	500 kg	600 kg	800 kg
80x70 mm	1	2,4	3,7	5,1	7,6	----	----
80x90 mm	<1	2,2	3,1	4,5	6,1	7,8	----
82x70 mm	1	2,4	3,6	5	7,5	----	----
82x85 mm	<1	2,3	3,4	4,8	6,8	7,7	----
82x90 mm	<1	2,1	3	4,3	6	7,6	----
82x100 mm	<1	2	2,7	4	5,6	7,5	13,5
85x40 mm	1,2	3,4	6	----	----	----	----
85x70 mm	<1	2,3	3,5	4,8	7,2	----	----
85x80 mm	<1	2,2	3,1	4,6	6	8,6	----
85x90 mm	<1	2,1	3,1	4,7	6,4	7,7	----
85x100 mm	<1	1,9	2,6	3,8	5,4	7,2	12

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Options available to order



Compact castors:
see page 354

"TR" POLYURETHANE PALLET TRUCK ROLLERS WITH STEEL CENTRE



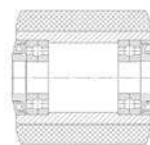
														
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	daN	daN	daN	daN	daN
35	27	0,06	752099			6	30	22	7			100		
50	40	0,23	752100	0,18	754100	15	40	35	11			150		
80	40	0,82	752101	0,62	754101	20	40	47	14	400	200		350	235
80	70	1,06	752102	0,82	754102	20	70	47	14	700	390		560	375
80	90	1,35	752105	1,11	754105	20	90	47	14	900	430		700	470
82	60	0,95	752131	0,71	754131	20	67	47	14	600	360		480	325
82	70	1,09	752132	0,85	754132	20	70	47	14	700	400		560	375
82	70	1,04	752232	0,84	754232	20	70	47	16	700	400		560	375
82	75	1,14	752143	0,90	754143	20	75	47	14	750	400		590	400
82	85	1,27	752134	1,03	754134	20	85	47	14	850	425		670	450
82	90	1,33	752135	1,09	754135	20	90	47	14	900	440		700	470
82	100	1,45	752137	1,21	754137	20	100	47	14	1000	460		800	540
85	40	0,72	752121	0,48	754121	20	40	47	14	400	250		350	235
85	70	1,12	752122	0,88	754122	20	70	47	14	700	410		560	375
85	75	1,17	752129	0,93	754129	20	75	47	14	750	410		590	400
85	80	1,25	752123	1,01	754123	20	80	47	14	800	430		630	425
85	80	1,08	752223	0,90	754223	25	80	52	15	800	430		630	425
85	90	1,39	752125	1,15	754125	20	90	47	14	900	450		700	470
85	100	1,52	752127	1,28	754127	20	100	47	14	1000	475		800	540

Options available to order



Rollers
with customised
dimensions

With labyrinths



Labyrinths: protective plastic-rings, with interference assembly in front of the ball bearings. They ensure longer life, protecting them from dust and foreign bodies that may limit the roller's free rotation.

								 Static	 4 km/h	 6 km/h					
mm	mm	kg	COD.	mm	mm	mm	mm	daN	daN	daN	daN				
80	65	0.97	753101	20	70	47	20.5	650	360	530	350				
80	85	1.29	753102	20	90	47	20.5	850	420	670	450				
82	65	1.03	753103	20	70	47	20.5	650	380	530	350				
82	80	1.21	753104	20	85	47	20.5	800	405	630	425				
82	85	1.27	753105	20	90	47	20.5	850	425	670	450				
82	95	1.39	753106	20	100	47	20.5	950	450	750	500				
85	65	1.06	753107	20	70	47	20.5	650	390	530	350				
85	75	1.19	753108	20	80	47	20.5	750	410	590	400				
85	75	1.12	753223	25	80	47	20.5	750	410	590	400				
85	85	1.33	753109	20	90	47	20.5	850	440	670	450				
85	95	1.46	753110	20	100	47	20.5	950	460	750	500				

"TR" POLYURETHANE PALLET TRUCK ROLLERS FOR ELECTRIC PALLET TRUCKS WITH STEEL CENTRE



Description

Tyre: "TR" polyurethane, hardness 92 Shore A, excellent values of rolling resistance and elasticity, highly resistant to wear.

Centre: obtained from a steel tube:

Hub with sealed ball bearings 6006 type 2RS, protective plastic-rings, with plastic labyrinths with integrated lip, to protect the bearings from dust and other elements that could limit their correct functioning over time.

Uses

Designed for assembly on electric pallet trucks, both walk-behind model and with operator on board.

They ensure a long product life under continuous mechanical handling

Their excellent values of rolling resistance make anyway the manual handling of heavy loads easier.

Environments of use

Designed for industrial environments, even in presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.

Not suitable if voluminous obstacles are present.

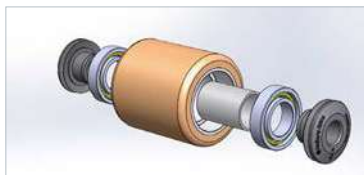


Force required to push or tow a wheel

 	100 kg	200 kg	300 kg	400 kg	500 kg	600 kg	800 kg
85x60 mm	<1	2,2	3,6	5	----	----	----
85x65 mm	<1	2,2	3,6	5	----	----	----
85x70 mm	<1	1,9	2,9	4	6	----	----
85x75 mm	<1	1,9	2,9	4	6	----	----
85x80 mm	<1	1,8	2,6	3,8	5	7,2	----
85x85 mm	<1	1,8	2,6	3,8	5	7,2	----
85x90 mm	<1	1,7	2,4	3,5	4,8	6,4	----
85x95 mm	<1	1,7	2,4	3,5	4,8	6,4	----
85x100 mm	<1	1,6	2,2	3,2	4,5	6	10
85x105 mm	<1	1,6	2,2	3,2	4,5	6	10
85x110 mm	<1	1,5	2	3	4,2	5,7	10,5

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

"TR" POLYURETHANE PALLET TRUCK ROLLERS FOR ELECTRIC PALLET TRUCKS WITH STEEL CENTRE

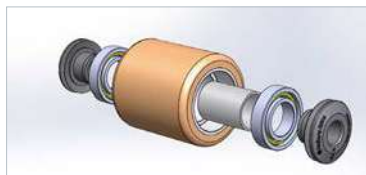


													
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	daN	daN	daN	daN
85	60	0,84	753151F12	0,54	755151	12	65	55	22	600	400	480	390
85	60	0,84	753151F17	0,54	755151	17	65	55	22	600	400	480	390
85	60	0,84	753151F20	0,54	755151	20	65	55	22	600	400	480	390
85	60	0,82	753151F25	0,54	755151	25	65	55	22	600	400	480	390
85	65	0,96	753152F12	0,65	755152	12	70	55	22	650	400	530	430
85	65	0,95	753152F17	0,65	755152	17	70	55	22	650	400	530	430
85	65	0,95	753152F20	0,65	755152	20	70	55	22	650	400	530	430
85	65	0,94	753152F25	0,65	755152	25	70	55	22	650	400	530	430
85	70	1,04	753153F12	0,72	755153	12	75	55	22	700	450	560	450
85	70	1,03	753153F17	0,72	755153	17	75	55	22	700	450	560	450
85	70	1,03	753153F20	0,72	755153	20	75	55	22	700	450	560	450
85	70	1,02	753153F25	0,72	755153	25	75	55	22	700	450	560	450
85	75	1,12	753154F12	0,79	755154	12	80	55	22	750	450	590	480
85	75	1,11	753154F17	0,79	755154	17	80	55	22	750	450	590	480
85	75	1,11	753154F20	0,79	755154	20	80	55	22	750	450	590	480
85	75	1,10	753154F25	0,79	755154	25	80	55	22	750	450	590	480
85	80	1,19	753155F12	0,86	755155	12	85	55	22	800	500	630	510
85	80	1,19	753155F17	0,86	755155	17	85	55	22	800	500	630	510
85	80	1,19	753155F20	0,86	755155	20	85	55	22	800	500	630	510
85	80	1,18	753155F25	0,86	755155	25	85	55	22	800	500	630	510
85	85	1,27	753156F12	0,92	755156	12	90	55	22	850	500	670	540
85	85	1,26	753156F17	0,92	755156	17	90	55	22	850	500	670	540
85	85	1,26	753156F20	0,92	755156	20	90	55	22	850	500	670	540
85	85	1,25	753156F25	0,92	755156	25	90	55	22	850	500	670	540

Options available to order

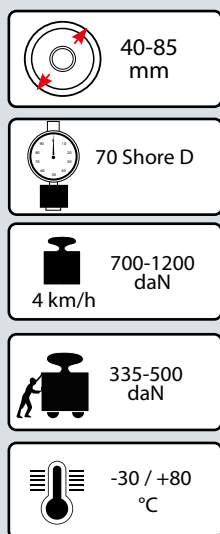


Rollers with lab-
yirynths and axle
tube with bore 13
mm



														
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	daN	daN	daN	daN	
85	90	1,34	753157F12	0,99	755157	12	95	55	22	900	525	700	560	
85	90	1,34	753157F17	0,99	755157	17	95	55	22	900	525	700	560	
85	90	1,34	753157F20	0,99	755157	20	95	55	22	900	525	700	560	
85	90	1,33	753157F25	0,99	755157	25	95	55	22	900	525	700	560	
85	95	1,42	753158F12	1,06	755158	12	100	55	22	950	525	750	610	
85	95	1,41	753158F17	1,06	755158	17	100	55	22	950	525	750	610	
85	95	1,41	753158F20	1,06	755158	20	100	55	22	950	525	750	610	
85	95	1,40	753158F25	1,06	755158	25	100	55	22	950	525	750	610	
85	100	1,50	753159F12	1,13	755159	12	105	55	22	1000	540	800	640	
85	100	1,49	753159F17	1,13	755159	17	105	55	22	1000	540	800	640	
85	100	1,49	753159F20	1,13	755159	20	105	55	22	1000	540	800	640	
85	100	1,48	753159F25	1,13	755159	25	105	55	22	1000	540	800	640	
85	105	1,57	753160F12	1,19	755160	12	110	55	22	1050	540	840	680	
85	105	1,56	753160F17	1,19	755160	17	110	55	22	1050	540	840	680	
85	105	1,56	753160F20	1,19	755160	20	110	55	22	1050	540	840	680	
85	105	1,55	753160F25	1,19	755160	25	110	55	22	1050	540	840	680	
85	110	1,65	753161F12	1,26	755161	12	115	55	22	1100	560	890	720	
85	110	1,64	753161F17	1,26	755161	17	115	55	22	1100	560	890	720	
85	110	1,64	753161F20	1,26	755161	20	115	55	22	1100	560	890	720	
85	110	1,63	753161F25	1,26	755161	25	115	55	22	1100	560	890	720	

POLYAMIDE 6 PALLET TRUCK ROLLERS



Description

Solid polyamide 6 pallet truck rollers, hardness 70 Shore D; excellent values of rolling and impact resistance. Reduced deformation under load.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings. Hub with plain bore hole which directly houses the axle.

Uses

Suitable for use on manual pallet trucks, also with humidity and highly aggressive chemical agents.

Their excellent values of rolling resistance make the manual handling of heavy loads easier. It is specifically recommended for use in the food and canning industries.

Environments of use

Suitable for industrial environments, also in presence of humidity and chemical agents. Not recommended in areas with strong organic acids and concentrated mineral acids.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.

Not recommended in presence of obstacles.

They may damage fragile flooring.



Force required to push or tow a wheel

	100 kg	200 kg	300 kg	500 kg	600 kg	800 kg	1000 kg
82x60 mm	1.2	2.6	4.5	7	8.7	----	----
82x70 mm	1.2	2.5	3.8	6.5	7.9	10.8	----
82x90 mm	< 1	1.9	2.9	5.5	6	8.4	10.8
82x100 mm	< 1	1.7	2.6	5	5.5	7.5	9.7

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.



														
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	daN	daN	daN		
82	60	0.47	763011	0.23	761011	20	60	47	14	1000	335	700		
82	70	0.49	763012	0.25	761012	20	70	47	14	1100	350	850		
82	90	0.57	763014	0.33	761014	20	90	47	14	1300	450	1100		
82	100	0.65	763015	0.41	761015	20	100	47	14	1400	500	1200		



					
mm	mm	kg	CODE	mm	mm
50	55	0.12	760002	12	55

					
mm	mm	kg	CODE	mm	mm
40	43	0.05	760001	17	45

Options available to order



Rollers fitted with 25 mm bore ball bearings

"TR" POLYURETHANE PALLET TRUCK ROLLERS WITH POLYAMIDE CENTRE 6

82-85
mm

92 Shore A

450-600
daN
4 km/h

360-480
daN
6 km/h

320-470
daN

-20 / +80
°C



Description

Tyre: "TR" polyurethane, hardness 92 Shore A, excellent values of rolling resistance and elasticity, highly resistant to wear.

Centre: polyamide 6.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

Suitable for use on manual and electric pallet trucks, with speed up to 6 km/h. Their excellent values of rolling resistance make the manual handling of heavy loads easier.

Environments of use

Designed for industrial environments, even in presence of medium-harsh chemical agents. Not recommended in areas with strong organic acids and mineral acids.

WEAK ACIDS				WEAK BASES			
STRONG ACIDS				STRONG BASES			
WATER				HYDROCARBONS			
ALCOHOL				SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.
Not suitable if voluminous obstacles are present.



Force required to push or tow a wheel

 	100 kg	200 kg	300 kg	400 kg	500 kg	600 kg
82x70 mm	1.1	2.7	5	7.8	----	----
82x90 mm	< 1	2.1	4	6.6	9.7	----
82x100 mm	< 1	1.9	3.5	5.4	7.8	10.5
85x70 mm	< 1	2.5	4.7	7.6	11	----
85x90 mm	< 1	2.3	4	6	8	11

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single roller at the constant speed of 4 km/h on smooth floor. For manual handling of a trolley choose diameters that have values < 5 daN, for frequent handling choose values < 3 da N.



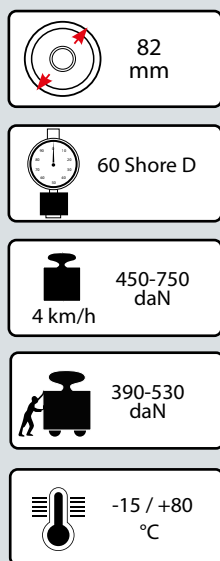
														
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	daN	daN	daN	daN	
82	70	0.60	772132	0.36	774132	20	70	47	14	550	300	450	360	
82	90	0.70	772135	0.46	774135	20	90	47	14	610	340	510	400	
82	100	0.76	772137	0.52	774137	20	100	47	14	700	380	600	480	
85	70	0.65	772122	0.41	774122	20	70	47	14	600	310	500	400	
85	90	0.76	772125	0.52	774125	20	90	47	14	700	350	600	480	

Options available to order



Rollers fitted
with 25 mm bore
ball bearings

THERMOPLASTIC POLYURETHANE PALLET TRUCK ROLLERS WITH POLYAMIDE CENTRE 6



Description

Tyre: thermoplastic polyurethane, hardness 60 Shore D, excellent values of rolling resistance and elasticity, highly resistant to wear and tear.

Centre: polyamide 6.

Hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding; also available without bearings.

Uses

Suitable for use on manual pallet trucks, also with humidity and highly aggressive chemical agents.

Their excellent values of rolling resistance make the manual handling of heavy loads easier.

It is specifically recommended for use in the food and canning industries.

Environments of use

Suitable for industrial environments, also in presence of humidity and chemical agents. Not recommended in areas with strong organic acids and concentrated mineral acids.

WEAK ACIDS				WEAK BASES			
STRONG ACIDS				STRONG BASES			
WATER				HYDROCARBONS			
ALCOHOL				SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.

Not suitable if voluminous obstacles are present.



Force required to push or tow a wheel

 	100 kg	200 kg	300 kg	400 kg	500 kg	600 kg	700 kg
82x60 mm	1.2	2.4	3.8	5.2	---	---	---
82x70 mm	< 1	2	3.3	4.8	6.5	---	---
82x80 mm	< 1	1.5	2.4	3.7	5.2	7	---
82x90 mm	< 1	1.5	2.4	3.6	4.8	6.1	7.5
82x100 mm	< 1	1.5	2.4	3.5	4.7	5.9	7.3

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.



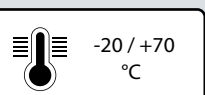
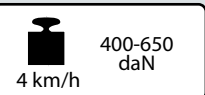
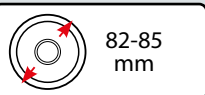
										 Static	 4 km/h			
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	daN	daN	daN		
82	60	0.47	782101	0.27	784101	20	60	47	14	450	390	450		
82	70	0.53	782102	0.32	784102	20	70	47	14	500	410	500		
82	80	0.59	782103	0.38	784103	20	80	47	14	600	500	600		
82	90	0.64	782104	0.43	784104	20	90	47	14	700	525	700		
82	100	0.69	782105	0.49	784105	20	100	47	14	750	530	750		

Options available to order



Rollers fitted with 25 mm bore ball bearings

"TR-ROLL" PALLET TRUCK ROLLERS WITH STEEL CENTRE



Description

Tyre: TR-Roll polyurethane; hardness 75 Shore A; excellent rolling resistance and elasticity and good resistance to wear and tear.

Centre: obtained from a steel tube.

Hub with shielded ball bearing with interference assembly in the seats obtained by precision machining of the centre; also available without bearings.

Uses

Excellent for use on electric pallet trucks, also in case of heavy loads and high speed handling (up to 12 km/h; for applications at higher speeds please contact Tellure Rôta). They guarantee silent running and vibration damping and are suitable also on uneven surfaces and in presence of obstacles.

Their excellent values of rolling resistance make the manual handling of heavy loads easier.

Environments of use

Designed for industrial environments, even in the presence of alcohols, glycols, hydrocarbons. Not recommended in areas with organic acids and mineral acids, base solutions and saturated vapour.

WEAK ACIDS				WEAK BASES			
STRONG ACIDS				STRONG BASES			
WATER				HYDROCARBONS			
ALCOHOL				SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for all types of industrial floors, even outdoors. Facilitates the overcoming of obstacles.

It does not damage the floors.



Force required to push or tow a wheel

 	100 kg	200 kg	400 kg	500 kg	600 kg	700 kg
80x90 mm	<1	1,5	3,5	4,5	5,5	
82x60 mm	1	2	3,5			
82x70 mm	<1	1,5	2,5	4		
82x90 mm	<1	1	2,5	3,5	4,5	
82x100 mm	<1	1,5	2,5	3	3,5	4,5
85x70 mm	<1	1,5	2,8	5		
85x80 mm	<1	1,5	2,5	3,5		
85x90mm	<1	1	2,5	3,5	4,5	
85x100 mm	<1	1	2	3	3,5	

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.



										 Static		 4 km/h	 6 km/h	
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	daN	daN	daN	daN	
80	90	1,25	792105	1,06	794105	20	90	47	14	750	490	580	460	
82	60	0,87	792121	0,67	794121	20	60	47	14	500	400	400	320	
82	70	0,98	792122	0,79	794122	20	70	47	14	550	450	450	360	
82	90	1,21	792125	1,03	794125	20	90	47	14	750	580	580	460	
82	100	1,34	792127	1,15	794127	20	100	47	14	850	620	650	520	
85	70	1,04	792132	0,84	794132	20	70	47	14	550	450	450	360	
85	80	1,16	792133	0,96	794133	20	80	47	14	600	520	520	400	
85	90	1,28	792135	1,08	794135	20	90	47	16	750	580	580	460	
85	100	1,40	792137	1,20	794137	20	100	47	14	850	650	650	520	

Options available to order



Rollers fitted with 25 mm bore ball bearings

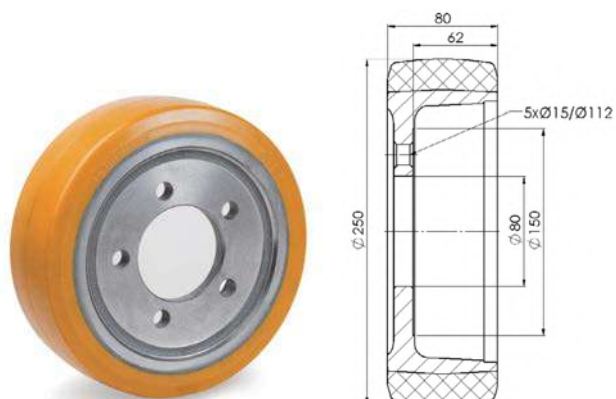


Rollers with labyrinths

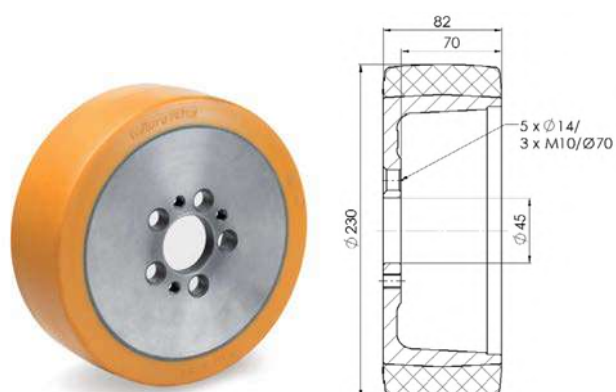
DRIVE WHEELS



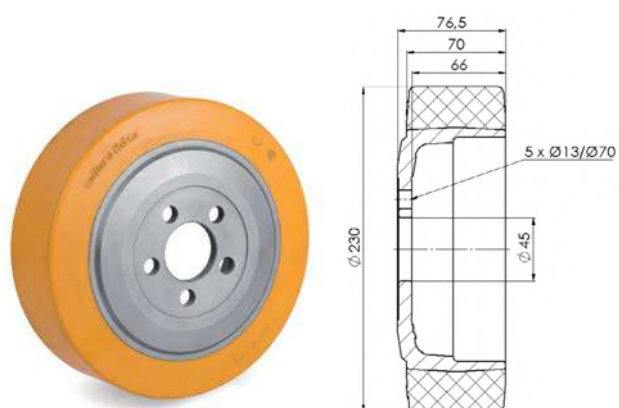
"TR" POLYURETHANE DRIVE WHEELS, CAST IRON CENTRE



mm	mm	kg	CODE
250	80	7,24	064413

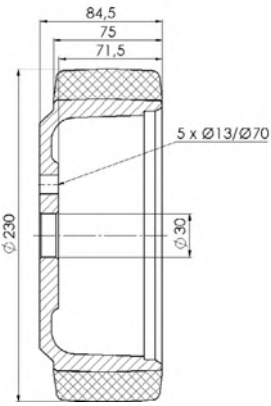


mm	mm	kg	CODE
230	82	5,91	064665

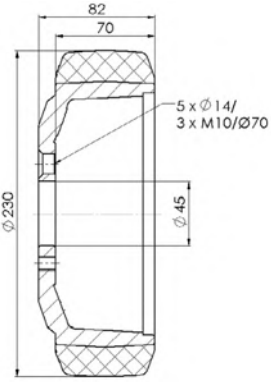


mm	mm	kg	CODE
230	70	4,80	064712

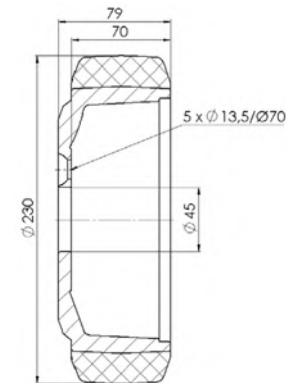
“TR” POLYURETHANE DRIVE WHEELS, CAST IRON CENTRE

			
mm	mm		
230	75	6,80	064222

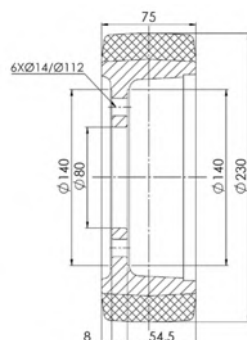



			
mm	mm		
230	70	5,73	064673

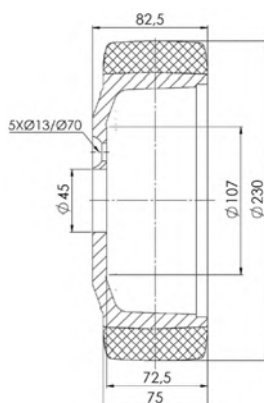



			
mm	mm		
230	70	5,47	064674

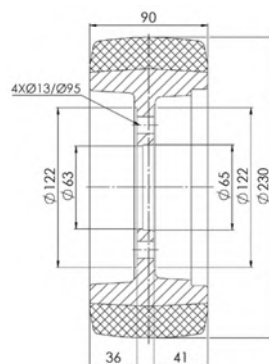
"TR" POLYURETHANE DRIVE WHEELS, CAST IRON CENTRE



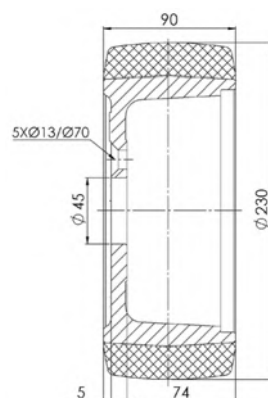
mm	mm	kg	CODE
230	75	6,64	064838



mm	mm	kg	CODE
230	75	5,83	064839

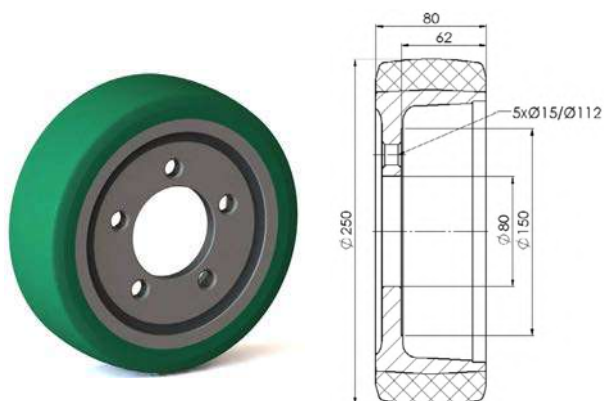


mm	mm	kg	CODE
230	90	8,69	064836

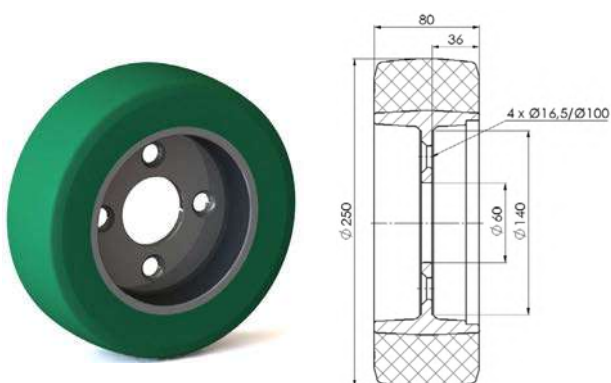


mm	mm	kg	CODE
230	90	7,28	064837

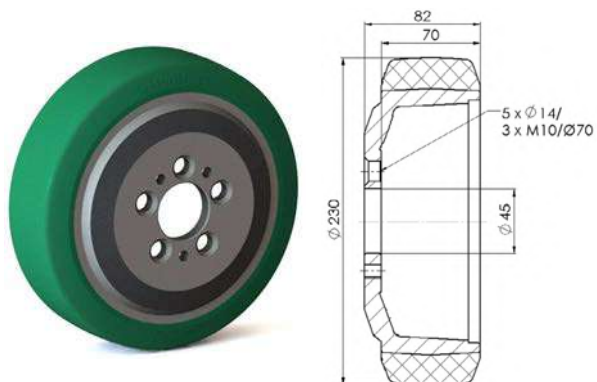
“TR-ROLL” POLYURETHANE DRIVE WHEELS, CAST IRON CENTRE



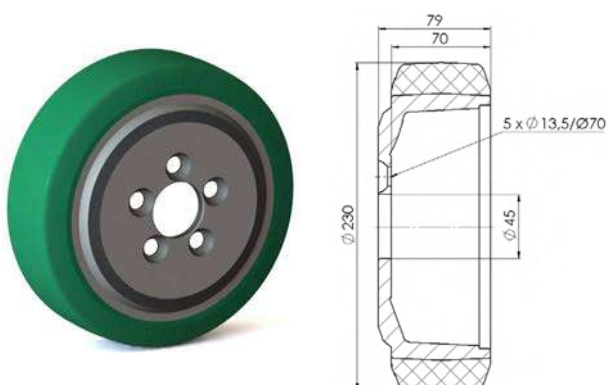
mm	mm	kg	CODE
250	80	7,24	062730



mm	mm	kg	CODE
250	80	6,17	062719

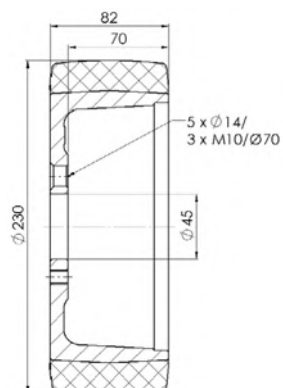


mm	mm	kg	CODE
230	70	5,03	062728

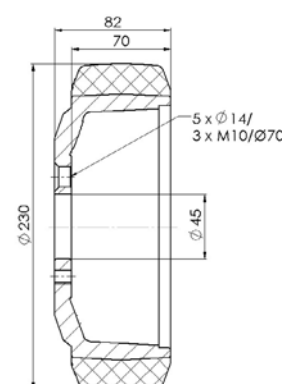


mm	mm	kg	CODE
230	70	5,02	062729

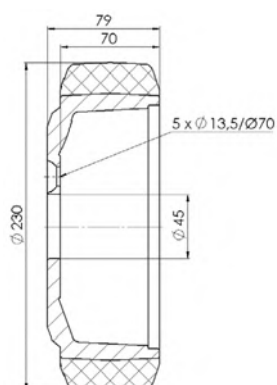
"TR-POWERHIGH POLYURETHANE DRIVE WHEELS, CAST IRON CENTRE



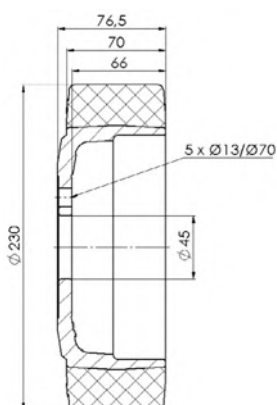
mm	mm	kg	CODE
230	82	5,91	580103



mm	mm	kg	CODE
230	70	5,73	580101

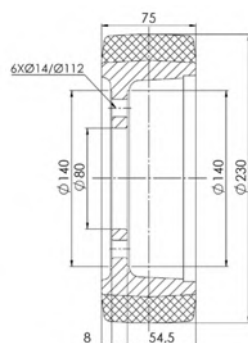


mm	mm	kg	CODE
230	70	5,47	580102

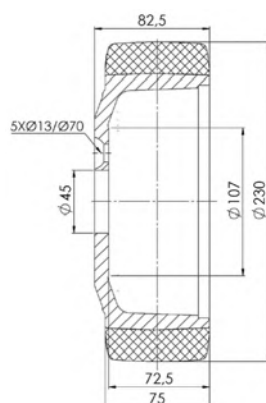


mm	mm	kg	CODE
230	70	4,80	580104

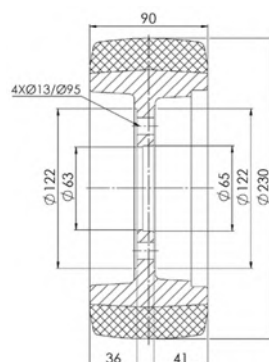
“TR-POWERHIGH” POLYURETHANE DRIVE WHEELS, CAST IRON CENTRE



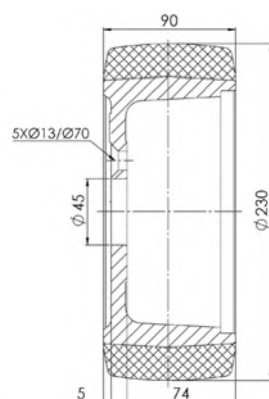
mm	mm	kg	CODE
230	75	6,64	580109



mm	mm	kg	CODE
230	75	5,83	580110

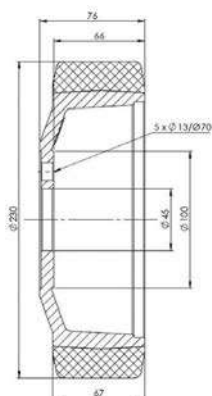


mm	mm	kg	CODE
230	90	8,69	580107

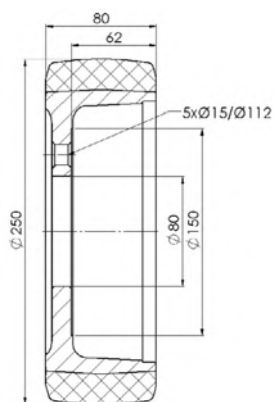


mm	mm	kg	CODE
230	90	7,28	580108

"TR-POWERHIGH" POLYURETHANE DRIVE WHEELS, CAST IRON CENTRE



mm	mm	kg	CODE
230	66,8	5,05	580105



mm	mm	kg	CODE
250	80	7,24	580106



Compact castors for AGV, AMR and other automated handling equipment, and wherever intensive use of the wheel is required, with high load capacities and reduced height and radius dimensions. In the version in Power High material, designed specifically for very intensive use and to maximize performance, the wheel has a crowned tread in order to ease the rotation of the the swivel bracket during frequent changes of direction.

"TR" POLYURETHANE PALLET TRUCK ROLLERS WITH STEEL CENTRE

SERIES **75**

Institutional brackets



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

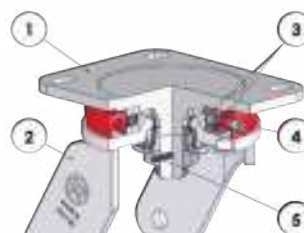
													
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	3 km/h
35	27	0,25	757300 	0,27	757400 	53	60x60	45x45	6	17	70	100	
50	40	0,57	757301 	0,63	757401 	71	60x60	45x45	6	25,5	83	150	



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

													
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	3 km/h
35	27	0,21	757500 	0,24	757600 	53	55	10	17	70	100		
50	40	0,56	757501 	0,61	757601 	71	55	10	25,5	83	150		

Electrowelded brackets EE MHD - max carrying capacity 630 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

															
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN	daN	daN	daN	daN
80	70	3,96	758301	2,98	758401	130	135x110	105x80	11	55	560	375			
85	70	4,02	758311	3,04	758411	132,5	135x110	105x80	11	55	560	375			
85	80	4,15	758321	3,17	758421	132,5	135x110	105x80	11	55	630	425			

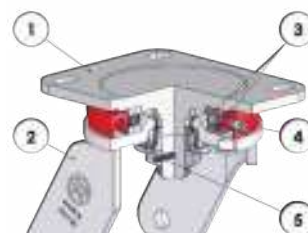
"TR" POLYURETHANE WHEELS WITH CAST IRON CENTRE

SERIES

64

COMPACT CASTORS

Twin electrowelded brackets EEG MHD - max carrying capacity 900 daN

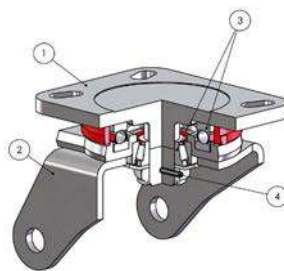


- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

															
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN	daN			
100	38+38	4,50	648062 	3,75	648162 	140	135x110	105x80	11	55	700	600			
125	38+38	5,45	648063 	4,70	648163 	170	135x110	105x80	11	55	900	720			

"TR-POWERHIGH" POLYURETHANE PALLET TRUCK ROLLERS WITH STEEL CENTRE

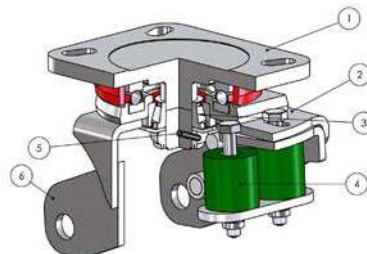
Twin electrowelded brackets EEG MHD - max carrying capacity 500 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Anti-loosening system nut

														
mm	mm	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN	4 km/h	6 km/h	
60	35+35	1,72	590102	92	100x85	80x60	9	40	400	320				
70	35+35	2,29	590103	100	100x85	80x60	9	43	500	400				
80	35+35	2,55	590105	112	100x85	80x60	9	42	500	500				

Electrowelded sprung-loaded brackets EES HD - max carrying capacity 250 daN



- 1) Top plate: electrolytically galvanised forged steel with integrated pin.
- 2) Main fork: deep-drawn legs electrowelded to the flange and electrolytically galvanised U-shaped component electrowelded to the legs.
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Polyurethane springs
- 5) Anti-loosening locknut system
- 6) Spring-hinged plates: plates electrowelded to the axle

														
mm	mm	kg	COD.	mm	mm	mm	mm	mm	daN	daN	daN	daN	daN	daN
50	32+32	2,23	590201	93	100x85	80x60	9	34	7	30	250	300	300	240
75	30+30	2,90	590204	118	100x85	80x60	9	35	9	30	300	350	350	280

Options available to order



TR-Roll elastic polyurethane rollers



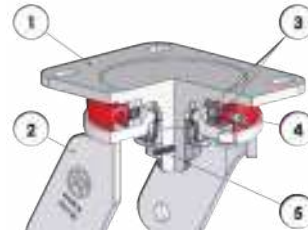
TR polyurethane rollers

“TR-POWERHIGH” POLYURETHANE WHEELS WITH CAST IRON CENTRE

SERIES

58H

Twin electrowelded brackets EEG MHD - max carrying capacity 1000 daN



- 1) Plate: forged steel with integrated pin
- 2) Fork: deep-drawn legs electro-welded to the flange
- 3) Swivel actions: axial ball bearing and tapered roller bearing
- 4) Grease nipple
- 5) Anti-loosening system nut

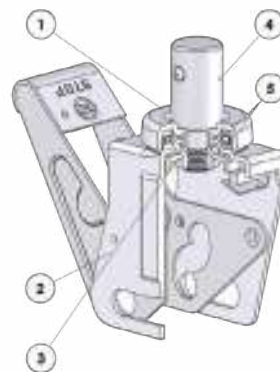
																
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN	4 km/h	6 km/h			
100	38+38	4,50	588062 	3,75	588162 	140	135x110	105x80	11	55	900		720			
125	38+38	5,45	588063 	4,70	588163 	170	135x110	105x80	11	55	1000		880			

SCAFFOLDINGS

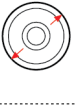
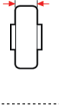
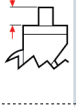
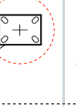
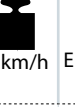


Thermoplastic polyurethane wheels with polyamide 6 centre

Wheel description on page 92-94

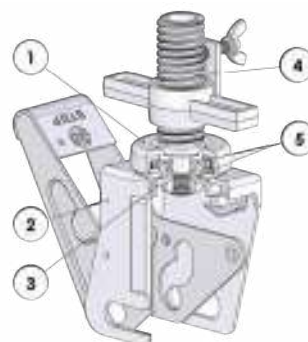


- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) King pin: diam. 150-200 mm: solid stem in steel and nut locked by mechanical deformation; diam. 125 mm: cold-headed solid stem
- 5) Swivel actions: diam. 125-150 mm: grease-lubricated double ball raceways; diam. 200 mm: single direction axial bearing and a grease-lubricated single ball raceway

		1 PEDAL		2 PEDALS																																																																																																																																																																																																																																																																																			
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Thermoplastic polyurethane wheels with polyamide 6 centre

Wheel description on page 92-94



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) King pin: stem with acme thread manufactured steel from tube, nut locked by mechanical deformation
- 5) Swivel actions: diam. 150 mm: grease-lubricated double ball raceways; diam. 200 mm: single direction axial bearing and a grease-lubricated single ball raceway

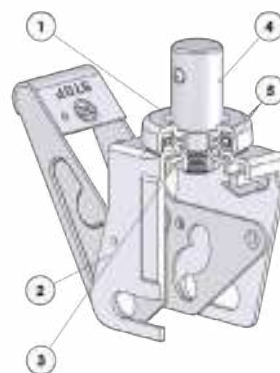
		1 PEDAL		2 PEDALS													
																	
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	mm	daN	daN		
150	45	3.86	609704	5.37	609714	192	83	M38x6	500	40	150	300	700				
200	50	4.56	609726	5.67	609736	243	81	M38x6	500	40	165	400	750				



This symbol indicates the castor carrying capacity according to UNI EN 1004-1:2021, par. 7.5 (Castor Wheels), that is guaranteed when the brake is engaged, without bracket offset and when the wheel is in a static position. With the brake released and the wheel free to rotate, the maximum load capacity is indicated in the "Dynamic carrying capacity" column at 4 km/h, defined in accordance with ISO 22883:2004

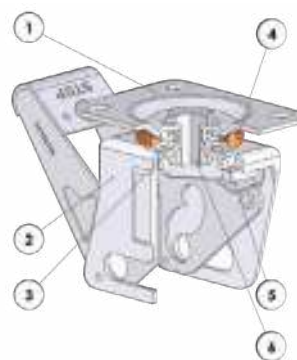
Polyamide 6 solid wheels

Wheel description on page 110-112



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) King pin: diam. 150-200 mm: solid stem in steel and nut locked by mechanical deformation; diam. 125 mm: cold-headed solid stem
- 5) Swivel actions: diam. 125-150 mm: grease-lubricated double ball raceways; diam. 200 mm: single direction axial bearing and a grease-lubricated single ball raceway

mm	mm	1 PEDAL		2 PEDALS		2 PEDALS					4 km/h	EN 1004				
		kg	CODE	kg	CODE	mm	mm	mm	mm	mm						
125	38	1.69	689503	1.91	689513	150	89	38	57	30	130	250	500			
150	45	3.06	689504	3.37	689514	192	83	38	57	40	150	300	700			
200	50	3.68	689506	3.99	689516	243	81	38	57	40	165	400	750			



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Dust seal: orange polyamide
- 5) King pin: steel pin and nut locked through mechanical deformation
- 6) Swivel actions: diam. 150 mm: grease-lubricated double ball raceways; diam. 200 mm: single direction axial bearing and a grease-lubricated single ball raceway

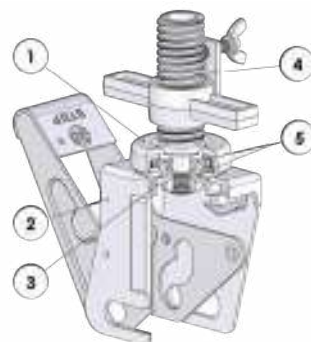
mm	mm	kg	CODE	mm	mm	mm	mm	mm	mm	4 km/h	EN 1004					
150	45	3.76	689604	192	140x110	105x80	12	40	150	300	700					
200	50	4.38	689606	243	140x110	105x80	12	40	165	400	750					



This symbol indicates the castor carrying capacity according to UNI EN 1004-1:2021, par. 7.5 (Castor Wheels), that is guaranteed when the brake is engaged, without bracket offset and when the wheel is in a static position. With the brake released and the wheel free to rotate, the maximum load capacity is indicated in the "Dynamic carrying capacity" column at 4 km/h, defined in accordance with ISO 22883:2004

Polyamide 6 solid wheels

Description on page 110-112



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) King pin: stem with acme thread manufactured steel from tube, nut locked by mechanical deformation
- 5) Swivel actions: diam. 150 mm: grease-lubricated double ball raceways; diam. 200 mm: single direction axial bearing and a grease-lubricated single ball raceway

		1 PEDAL		2 PEDALS																																																																																																																																																																																																																																																																																			</
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Customisations for scaffolding castors

Customised products are made upon customer's specific request for:

- NL brackets and Scaffolding brackets with stems of different dimensions and sizes
- assembly with different wheels.



TEST REPORT ACCORDING TO UNI EN 1004-1:2021

The TR Lab, Test & Research laboratory of Tellure Rôta, has the necessary equipment for conformity testing on wheel and castor according to **UNI EN 1004-1:2021, par. 7.5**; the test is carried out under static load and also measures the braking efficiency. The conformity requires carrying out 2 tests on 5 equal products.

The laboratory releases a test report with the results of the tests.



WASTE BIN CONTAINERS

and Paper Only



CONTINENTAL T100

Black rubber wheels with polypropylene centre

Wheel description on page 62-64



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake, total rear foot brake, centralised brake

														    				 4 km/h
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN			
160	40	2.10	524410	2.38	525210	2.60	524010	199	140x110	105x80	11	56	156	150				
200	50	2.72	524406	3.00	525206	3.22	524006	240	140x110	105x80	11	56	156	225				



																
mm	mm	kg	CODE	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	daN
200	50	3.45	524206	240	140x110	105x80	11	56	40	34	16.5	225				

Options available to order



Directional lock for brackets d. 150-200 mm



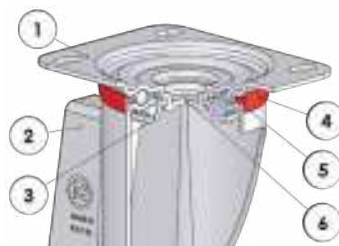
Wheel with roller bearings



Wheel with grey rubber tyre

Black rubber wheels with pressed steel discs

Wheel description on page 70-72



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Dust seal: orange polyethylene
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake, total rear foot brake, centralised brake

														
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN
160	40	2.44	535010	2.69	535410	2.97	534010	199	140x110	105x80	11	56	156	180
200	50	3.25	535006	3.39	535406	3.67	534006	240	140x110	105x80	11	56	156	230



														
mm	mm	kg	CODE	mm	mm	mm	mm	mm	mm	mm	mm	daN		
200	50	3.45	534806	240	140x110	105x80	11	56	40	34	16.5	230		

Options available to order



Directional lock
for brackets
d. 150-200 mm



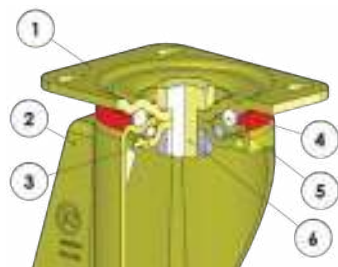
Wheel
with roller
bearings



Wheel
with grey rubber
tyre

Sigma Elastic rubber wheels with aluminium centre

Wheel description on page 268-270

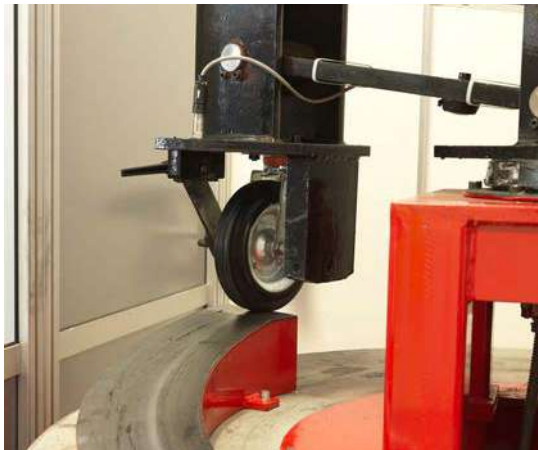
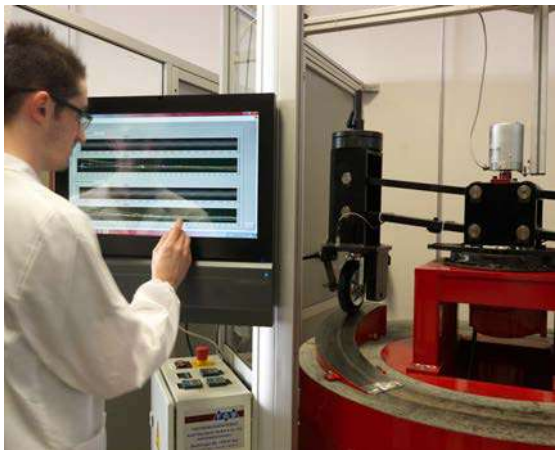


- 1) Plate: yellow galvanised steel plate
 - 2) Fork: yellow galvanised steel plate
 - 3) Ball race ring: yellow galvanised steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
- Available with adjustable total rear foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	km/h
200	50	4.46	727516	3.00	728516	5.06	727206	250	140x110	105x80	11	56	126	500	4

TEST REPORT ACCORDING TO UNI EN 840-5: 2020

The TR Lab, Test & Research laboratory of Tellure Rôta has the necessary equipment for Dynamic testing on wheel and castor according to **UNI EN 840-5:2020, par. 4.9.3**.
The laboratory issues a test report with the results of the tests.



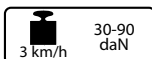
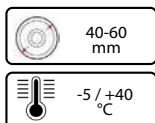
INSTITUTIONAL





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POLYAMIDE 6 WHEELS

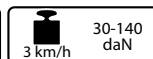
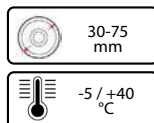


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36

THERMOPLASTIC POLYURETHANE
WHEELS WITH POLYAMIDE 6 CENTRE



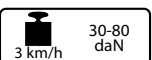
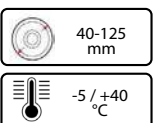
INOX

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37

GREY RUBBER WHEELS WITH
POLYPROPYLENE CENTRE

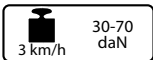
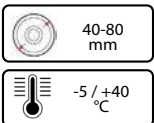


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THERMOPLASTIC RUBBER WHEELS
WITH POLYPROPYLENE CENTRE



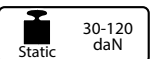
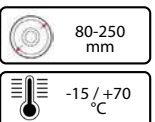
INOX

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51

THERMOPLASTIC RUBBER WHEELS
WITH POLYPROPYLENE CENTRE



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POLYAMIDE 6 WHEELS



Description

Polyamide 6 solid wheels.

Hub with plain bore hole which directly houses the axle.

Uses

Recommended for use on catering and institutional trolleys having light carrying capacities.

Good resistance to chemical agents: not suitable on uneven flooring.

Examples of recommended applications: shop display units, trolleys for restaurants, furniture with light loads.

Environments of use

Suitable for industrial and institutional environments, also in presence of humidity and chemical agents.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable on tiles and resin-cement; not recommended on abrasive, unpaved floors or in presence of processing residues.

Not suitable on fragile floor or with obstacles along the path.





																		
mm	mm	kg	CODE	mm	mm	daN												
40	17	0.02	321102	8	21	30												
50	17	0.02	321104	8	22	40												
50	22	0.03	321105	8	28	50												
60	22	0.03	321106	8	28	60												

Institutional brackets



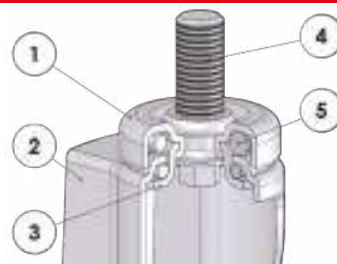
- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Swivel actions: double ball ring with grease lubrication
- 5) King pin: integrated with the plate and cold-riveted

				2 pc package														
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN							
40	17	0.12	324101	0.29	324001	61	42x42	30x30	5	24	30							
50	17	0.12	324102	0.31	324002	66	42x42	30x30	5	24	40							
60	22	0.22	324103	0.56	324003	82	60x60	45x45	6	21	60							



																		
mm	mm	kg	CODE	mm	mm	mm	mm	daN										
40	17	0.10	325101	61	55x25	42	5	30										
50	17	0.10	325102	66	55x25	42	5	40										
60	22	0.20	325103	82	60x60	45x45	6	60										

Institutional brackets



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Galvanised steel threaded stem
- 5) Swivel actions: double ball ring with grease lubrication

				2 pc package											
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	mm	mm	mm	mm
40	17	0.12	326101	0.26	326001	61	35	M10	20	24	30				
50	17	0.14	326102	0.28	326002	66	35	M10	20	24	40				
60	22	0.23	326103	0.47	326003	82	41	M12	24	21	60				

Institutional twin brackets for high carrying capacity



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

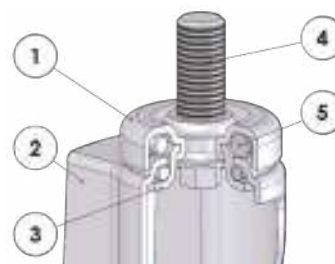
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	mm	mm	mm
50	18+18	0.28	324302	0.33	328202	71	60x60	45x45	6	25.5	83	90			

Institutional twin brackets for high carrying capacity



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

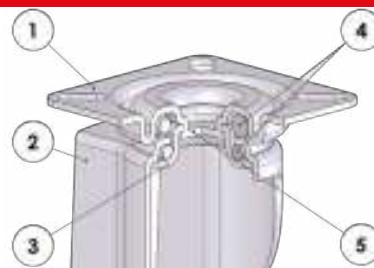
														
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	mm	mm
50	18+18	0.26	323202	0.31	327202	71	55	10	25.5	83	90			



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Galvanised steel threaded stem
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

														
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	mm	mm
50	18+18	0.29	326202	0.34	329202	71	52	M10	25	25.5	83	90		

Institutional brackets for high carrying capacity



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

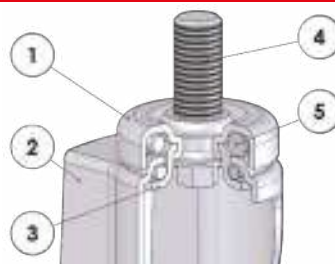
															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN			
50	30	0.27	324402	0.32	328302	71	60x60	45x45	6	25.5	83	80			



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN				
50	30	0.24	323302	0.29	327302	71	55	10	25.5	83	80				

Institutional brackets for high carrying capacity



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Galvanised steel threaded stem
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

														
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN		
50	30	0.28	326302	0.33	329302	71	52	M10	25	25.5	83	80		

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE



Description

Tyre: thermoplastic polyurethane.

Centre: polyamide 6.

Hub with plain bore hole which directly houses the axle.

Uses

Suitable for use on different types of trolleys within the institutional sector, particularly in catering.

Good load carrying capacity in relation to small diameter wheels.

Resist well to frequent washing, making them suitable in environments where hygiene must be guaranteed.

Environments of use

Suitable for industrial and institutional environments, also in presence of humidity and chemical agents.

WEAK ACIDS				WEAK BASES			
STRONG ACIDS				STRONG BASES			
WATER				HYDROCARBONS			
ALCOHOL				SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable on tiles and resin-cement; not recommended on abrasive, unpaved floors or in the presence of processing residues.

They do not damage fragile flooring and are also suitable in presence of small obstacles.





																		
mm	mm	kg	CODE	mm	mm	daN												
30	18	0,02	361100	6	21	30												
40	18	0,02	361101	8	21	40												
50	18	0,02	361102	8	22	55												
60	25	0,06	361103	8	28	70												
75	24	0,07	361104	8	28	90												

Institutional brackets



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
30	18	0,08	364300	0,08	365100			47,5	42x42	32x32	5	14,5		30	
40	18	0,11	364301	0,11	365101	0,13	368101	59	42x42	32x32	5	23	76	40	
50	18	0,13	364302	0,12	365102	0,16	368102	66	55x55	40x40	6	24	76	55	
60	25	0,24	364303	0,21	365103	0,28	368103	82	60x60	45x45	6	21	84	70	
75	24	0,28	364304	0,24	365104	0,33	368104	101	60x60	45x45	6	30	91	90	



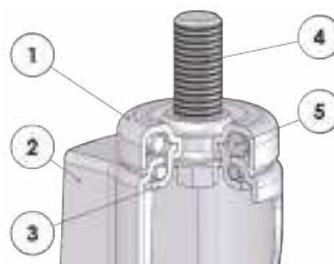
		2 pc package																
mm	mm	kg	CODE	mm	mm	mm	mm	mm	mm	daN								
40	18	0,30	324001	59	42x42	32x32	5	23		40								
50	18	0,34	324002	66	55x55	40x40	6	24		55								
60	25	0,56	324003	82	60x60	45x45	6	21		70								

Institutional brackets



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

Available with total front foot brake											
											
											
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN
30	18	0,07	363100			47,5	35	10	14,5		30
40	18	0.10	363101	0.12	367101	59	35	10	23	76	40
50	18	0.13	363102	0.13	367102	66	35	10	24	76	55
60	25	0.24	363103	0.25	367103	82	41	12	21	84	70
75	24	0,24	363104	0,29	367104	101	41	12	30	91	90



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Galvanised steel threaded stem
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

						2 pcs package									
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN
30	18	0,09	366300					47,5	35	M10	20	14,5			30
40	18	0,12	366301	0,14	369101	0,34	366001	59	35	M10	20	23	76		40
50	18	0,13	366302	0,16	369102	0,38	366002	66	35	M10	20	24	76		55
60	25	0,24	366303	0,28	369103	0,62	366003	82	42	M12	25	21	84		70
75	24	0,28	366314	0,33	369114			101	41	M12	25	30	91		90

Options available to order



Different stem dimensions

Institutional twin brackets for high carrying capacity



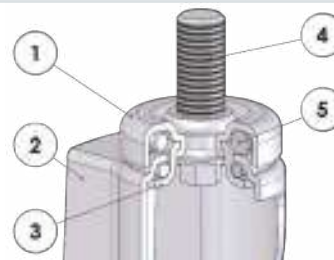
- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

													
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
50	18+18	0.30	364402	0.35	368202	71	60x60	45x45	6	25.5	83	140	



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

													
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
50	18+18	0.27	363202	0.32	367202	71	55	10	25.5	83	140		



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Galvanised steel threaded stem
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

													
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
50	18+18	0.31	366402	0.36	369202	71	52	M10	25	25.5	83	140	

Stainless steel institutional brackets

INOX



- 1) Plate: AISI 304 stainless steel plate
 - 2) Fork: AISI 304 stainless steel plate
 - 3) Ball race ring: AISI 420 stainless steel plate
 - 4) Swivel actions: double ball ring in stainless steel with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN
50	24	0.20	364312NX	0.16	365112NX	0.24	368102NX	71	60x60	45x45	6	22	80	55
60	25	0.23	364303NX	0.18	365103NX	0.27	368103NX	82	60x60	45x45	6	22	84	70
75	24	0.25	364304NX	0.20	365104NX	0.32	368104NX	101	60x60	45x45	6	27	91	90

INOX



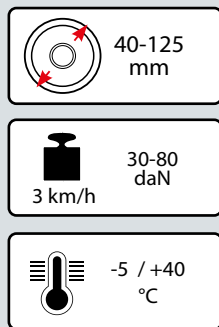
- 1) Plate: AISI 304 stainless steel plate
 - 2) Fork: AISI 304 stainless steel plate
 - 3) Ball race ring: AISI 420 stainless steel plate
 - 4) Swivel actions: double ball ring in stainless steel with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	3 km/h
50	24	0.17	363102NX	0.21	367102NX	71	42	12	22	80	55	
60	25	0.18	363103NX	0.24	367103NX	82	42	12	22	84	70	
75	24	0.20	363104NX	0.29	367104NX	101	42	12	27	91	90	



People make the difference

GREY RUBBER WHEELS WITH POLYPROPYLENE CENTRE



Description

Tyre: non-marking grey rubber, good elasticity.

Centre: polypropylene with metal thread-guards.

Hub with plain bore hole which directly houses the axle.

Uses

Suitable for use on different types of trolleys within the furniture and institutional sector.

They can also be used on fragile floors and in presence of small obstacles.

Example of recommended applications: shop display units and windows, low carrying capacity tool trolleys, supermarket trolleys.

Environments of use

Suitable for industrial and institutional environments, also in presence of humidity and medium-harsh chemical agents. Not suitable in the presence of organic solvents, chlorinated substances, hydrocarbons and mineral oils.

WEAK ACIDS				WEAK BASES		
STRONG ACIDS				STRONG BASES		
WATER				HYDROCARBONS		
ALCOHOL				SOLVENTS		

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable on tiles and resin-cement; not recommended on abrasive, unpaved floors or in presence of processing residues.

They do not damage fragile floors and are also suitable in the presence of small obstacles.





																		
mm	mm	kg	CODE	mm	mm	daN												
40	18	0.03	371100	8	21	30												
50	18	0.06	371101	8	22	35												
60	24	0.10	371102	8	28	50												
75	24	0.14	371203	8	28	55												
80	24	0.17	371103	8	28	55												
100	24	0.22	371104	8	28	60												
125	30	0.46	371105	10	35	80												

Institutional brackets



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

																			
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN					
40	18	0.12	374100	0.11	375100	0.15	378100	59	42x42	30x30	5	24	78	30					
50	18	0.20	374101	0.20	375101	0.24	378101	66	55x55	40x40	6	24	76	35					
60	24	0.28	374102	0.26	375102	0.40	378102	82	60x60	45x45	6	21	83	50					
75	24	0.40	374303	0.31	375303	0.48	378303	101	60x60	45x45	6	25	91	55					
80	24	0.43	374103	0.34	375103	0.50	378103	104	60x60	45x45	6	25	91	55					
100	24	0.48	374104	0.40	375104	0.57	378104	121	60x60	45x45	6	32	95	55					
125	30	0.87	374105	0.80	375105	0.97	378105	152	77x67	55x45	8	40	115	80					

GREY RUBBER WHEELS WITH POLYPROPYLENE CENTRE

Institutional brackets



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Swivel actions: double ball ring with grease lubrication
- 5) King pin: integrated with the plate and cold-riveted

		2 pc package											
													
mm	mm	kg	CODE	mm	mm	mm	mm	mm	daN				
50	18	0.39	374001	66	55x55	40x40	6	24	35				
60	24	0.68	374002	82	60x60	45x45	6	21	50				



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

													
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN	h	
40	18	0.11	373100	0.14	377100	59	35	10	24	78	30		
50	18	0.16	373101	0.19	377101	66	35	10	24	76	35		
60	24	0.25	373102	0.32	377102	82	41	12	21	83	50		
75	24	0.31	373303	0.40	377303	101	41	12	25	91	55		
80	24	0.34	373103	0.43	377103	104	41	12	25	91	55		
100	24	0.40	373104	0.49	377104	121	41	12	32	91	55		
125	30	0.76	373105	0.87	377105	149	55	12	40	115	80		

Institutional brackets



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Galvanised steel threaded stem
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

						2 pc package									
															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN
40	18	0.13	376100	0.18	379100			59	35	M8	15	24	78	30	
50	18	0.18	376101	0.21	379101	0.34	376001	66	35	M8	15	24	76	35	
60	24	0.29	376102	0.36	379102	0.60	376002	82	41	M12	25	21	83	50	
75	24	0.36	376303	0.43	379303			101	41	M12	25	25	91	55	
80	24	0.39	376103	0.46	379103			104	41	M12	25	25	91	55	
100	24	0.44	376104	0.53	379104			121	41	M12	25	32	95	55	
125	30	0.79	376105	0.89	379105			149	52	M12	25	40	115	80	

Institutional twin brackets

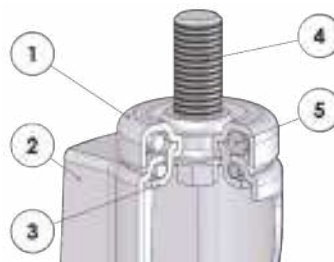


- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	mm	mm	daN
50	18+18	0.35	374201	0.40	378201	70	60x60	45x45	6	30	82	60			
75	24+24	0.64	374203	0.72	378203	100	60x60	45x45	6	33	95	80			

GREY RUBBER WHEELS WITH POLYPROPYLENE CENTRE

Twin brackets for institutional



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Galvanised steel threaded stem
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with total front foot brake

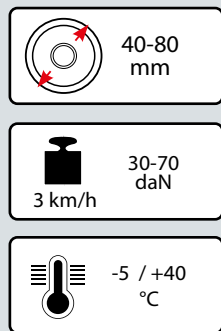
																	
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
50	18+18	0.30	376201	0.37	379201	70	42	M10	15	30	82	60					
75	24+24	0.50	376203	0.68	379203	100	52	M12	25	33	95	80					



Quality You need



GREY NON-MARKING THERMOPLASTIC RUBBER WHEELS WITH POLYPROPYLENE CENTRE



Description

Tyre: grey non-marking thermoplastic rubber.

Centre: polypropylene.

Hub with plain bore which houses the axle.

Uses

Suitable for institutional trolleys, especially for catering. The grey non-marking thermoplastic rubber tyre makes them also suitable on delicate floorings. They can resist frequent washings and are therefore a good option in those environments where cleanliness must be guaranteed.

Environments of use

Suitable for industrial and institutional environments, also in the presence of humidity. Not suitable in the presence of organic solvents, chlorinated substances, hydrocarbons and mineral oils. Not recommended in presence of strong organic and mineral acids.

WEAK ACIDS				
STRONG ACIDS				
WATER				
ALCOHOL				
WEAK BASES				
STRONG BASES				
HYDROCARBONS				
SOLVENTS				

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

It does not stain or damage fragile floors. Suitable for tiles and cement-resin. Not recommended on abrasive, unpaved floors or in the presence of processing residues.





																		
mm	mm	kg	COD.	mm	mm	daN												
40	18	0,01	381100	8	21	30												
50	18	0,02	381101	8	22	40												
60	24	0,04	381102	8	28	60												
75	24	0,05	381203	8	28	70												
80	24	0,07	381103	8	28	70												

Institutional brackets



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with front locking brakes

																					
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN							
40	18	0,09	384200	0,10	385200	0,12	388200	59	42x42	30x30	5	24	78	30							
50	18	0,13	384201	0,14	385201	0,15	388201	66	55x55	40x40	6	24	78	40							
60	24	0,22	384202	0,19	385202	0,26	388202	82	60x60	45x45	6	21	83	60							
75	24	0,26	384303	0,22	385303	0,32	388303	101	60x60	45x45	6	25	91	70							
80	24	0,28	384203	0,24	385203	0,33	388203	104	60x60	45x45	6	25	91	70							

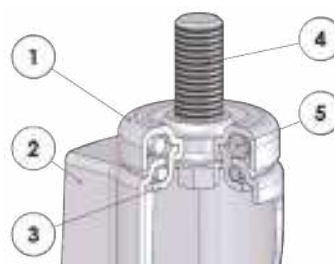
GREY NON-MARKING THERMOPLASTIC RUBBER WHEELS WITH POLYPROPYLENE CENTRE

Supporti per collettività



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Swivel actions: double ball ring with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with front locking brakes

															
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN			
40	18	0,08	383200	0,11	387200	59	35	10	24	78	30				
50	18	0,10	383201	0,12	387201	66	35	10	24	78	40				
60	24	0,19	383202	0,22	387202	82	41	12	21	83	60				
75	24	0,23	383303	0,28	387303	101	41	12	25	91	70				
80	24	0,24	383203	0,29	387203	104	41	12	25	91	70				



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: electrolytically galvanised steel plate
 - 4) Galvanised steel threaded stem
 - 5) Swivel actions: double ball ring with grease lubrication
- Available with front locking brakes

															
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN			
40	18	0,09	386200	0,12	389200	59	35	M8	15	24	78	30			
50	18	0,11	386201	0,14	389201	66	35	M8	15	24	78	40			
60	24	0,22	386202	0,26	389202	82	41	M12	25	21	83	60			
75	24	0,26	386303	0,32	389303	101	41	M12	25	25	91	70			
80	24	0,28	386203	0,33	389203	104	41	M12	25	25	91	70			

Options available to order



Various dimensions
stems

Stainless steel institutional brackets

INOX



- 1) Plate: AISI 304 stainless steel plate
 - 2) Fork: AISI 304 stainless steel plate
 - 3) Ball race ring: AISI 420 stainless steel plate
 - 4) Swivel actions: double ball ring in stainless steel with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	
50	24	0.20	384211NX	0.15	385211NX	0.24	388211NX	71	60x60	45x45	6	22	80	40	
60	24	0.22	384202NX	0.17	385202NX	0.26	388202NX	82	60x60	45x45	6	22	84	60	
75	24	0.24	384303NX	0.19	385303NX	0.30	388303NX	101	60x60	45x45	6	27	91	70	

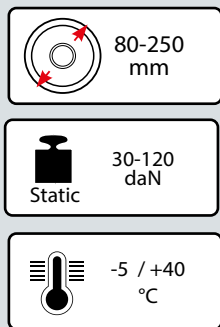
INOX



- 1) Plate: AISI 304 stainless steel plate
 - 2) Fork: AISI 304 stainless steel plate
 - 3) Ball race ring: AISI 420 stainless steel plate
 - 4) Swivel actions: double ball ring in stainless steel with grease lubrication
 - 5) King pin: integrated with the plate and cold-riveted
- Available with total front foot brake

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN				
50	24	0.17	383211NX	0.21	387211NX	71	42	12	22	80	40				
60	24	0.19	383202NX	0.23	387202NX	82	42	12	22	84	60				
75	24	0.21	383303NX	0.27	387303NX	101	42	12	27	91	70				

BLACK THERMOPLASTIC RUBBER WHEELS WITH POLYPROPYLENE CENTRE



Description

Tyre: black thermoplastic rubber.

Centre: polypropylene.

Hub with plain bore hole which directly houses the axle.

Uses

Mainly suitable for static applications, on even flooring and for light carrying capacities.

Example of recommended applications: compressors, welding machines.

Environments of use

Suitable for industrial and institutional environments, also in presence of humidity. Not suitable in the presence of organic solvents, chlorinated substances, hydrocarbons and mineral oils.

WEAK ACIDS			
STRONG ACIDS			
WATER			
ALCOHOL			

WEAK BASES			
STRONG BASES			
HYDROCARBONS			
SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable on tiles and resin-cement; not recommended on abrasive, unpaved floors or in presence of processing residues.

Not suitable for uneven surfaces.





																		
mm	mm	kg	CODE	mm	mm	daN												
80	26	0.09	511101	10	34	30												
100	30	0.11	511112	8	35	35												
100	30	0.11	511122	12	35	35												
125	35	0.18	511103	15	44	50												
150	35	0.23	511104	15	44	90												
175	45	0.33	511105	20	59	100												
200	50	0.72	511106	20	59	120												
250	50	0.89	511108	20	59	120												

Institutional brackets

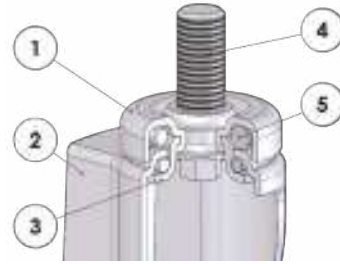


- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Swivel actions: double ball ring with grease lubrication
- 5) King pin: integrated with the plate and cold-riveted

																		
mm	mm	kg	CODE	mm	mm	mm	mm	mm	daN									
80	26	0.43	514411	106	60x60	45x45	6	28	30									
100	30	0.48	514412	128	60x60	45x45	6	32	35									

BLACK THERMOPLASTIC RUBBER WHEELS WITH POLYPROPYLENE CENTRE

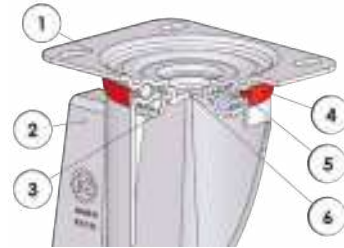
Institutional brackets



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Galvanised steel threaded stem
- 5) Swivel actions: double ball ring with grease lubrication

														
mm	mm	kg	CODE		mm	mm	mm	mm	mm	daN				
80	26	0.35	516801		103	41	M12	25	28	30				
100	30	0.40	516802		126	41	M12	25	32	35				

Standard-duty brackets NL - max carrying capacity 90 daN



- 1) Plate: electrolytically galvanised steel plate
- 2) Fork: electrolytically galvanised steel plate
- 3) Ball race ring: electrolytically galvanised steel plate
- 4) Dust seal: orange polyethylene
- 5) Swivel actions: double ball ring with grease lubrication
- 6) King pin: integrated with the plate and cold-riveted

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	kg				
80	26	0.62	514401		0.34	515701		107	100x85	80x60	9	37	30		
100	30	0.63	514402		0.37	515702		128	100x85	80x60	9	35	35		
125	35	0.82	514403		0.48	515703		156	100x85	80x60	9	37	50		
150	35	0.91	514404		0.54	515704		182	100x85	80x60	9	42	90		



Seventy years of reliability



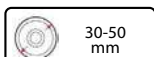
FURNITURE



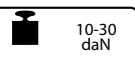


SERIES
33

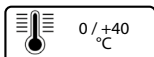
RUBBER BALL WHEELS



30-50
mm



10-30
daN



0 / +40
°C

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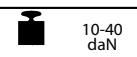


SERIES
34

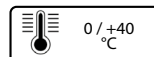
PAIRED POLYAMIDE 6 OR POLYPROPYLENE WHEELS



35-100
mm



10-40
daN



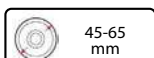
0 / +40
°C

PAGE 402

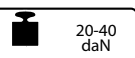


SERIES
35

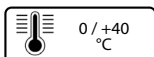
RUBBER HALF-BALL WHEELS



45-65
mm



20-40
daN



0 / +40
°C

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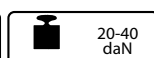


SERIES
39

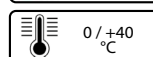
TRANSPARENT POLYURETHANE WHEELS WITH METHACRYLATE CENTRE



50-75
mm



20-40
daN



0 / +40
°C

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RUBBER BALL WHEELS



Description

Black rubber ball wheels with zinc-plated brackets.

Hub with plain bore hole which directly houses the axle.

Uses

Suitable for indoor applications, without aggressive chemicals. They can be used on fragile flooring, even carpet.

Examples of recommended applications: house and office furniture with low carrying capacity.

Environments of use

Suitable for domestic environments without aggressive chemicals.

WEAK ACIDS			WEAK BASES		
STRONG ACIDS			STRONG BASES		
WATER			HYDROCARBONS		
ALCOHOL			SOLVENTS		

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable on tiles and delicate flooring; not recommended on abrasive, unpaved floors or in presence of processing residues.

Not recommended in presence of obstacles.





			2 pc package											
			kg	CODE	kg	CODE	mm	mm	mm	mm	daN			
30	0.11	334101	0.26	334001	48	40x40	27x27	5	10					
40	0.15	334102	0.34	334002	59	40x40	27x27	5	20					
50	0.23	334103	0.51	334003	69	47x47	35x35	6	30					



			2 pc package											
			kg	CODE	kg	CODE	mm	mm	mm	daN				
30	0.09	333101	0.21	333001	46	32	9	10						
40	0.13	333102	0.30	333002	57	32	9	20						
50	0.20	333103	0.43	333003	66	36	10	30						



			2 pc package											
			kg	CODE	kg	CODE	mm	mm	mm	mm	daN			
30	0.10	336101	0.25	336001	51	SPANNER 13	M8	15	10					
40	0.14	336102	0.33	336002	63	SPANNER 13	M8	15	20					
50	0.22	336103	0.47	336003	73	SPANNER 13	M8	15	30					

PAIRED POLYAMIDE 6 AND POLYPROPYLENE WHEELS



Description

Paired wheels in black or grey polyamide 6.
Steel stems and plates



Paired wheels in transparent or blue polypropylene.
Steel stems and plates.

Uses

Suitable for indoor applications, without aggressive chemicals. They can be used on fragile flooring, even carpet.

Examples of recommended applications: chairs with low carrying capacity for home and office.

Environments of use

Suitable for domestic environments without aggressive chemicals.

WEAK ACIDS				WEAK BASES			
STRONG ACIDS				STRONG BASES			
WATER				HYDROCARBONS			
ALCOHOL				SOLVENTS			

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable on tiles and fragile floors not recommended on abrasive, unpaved floors or in presence of processing residues.

Not recommended in presence of obstacles.





Black polyamide 6 wheels

mm	mm	kg	CODE	mm	mm	mm	mm	daN							
35	39	0.05	344100	50	28x28	19x19	5	10							
50	59	0.09	344101	68	38x38	27x27	5	30							



Black polyamide 6 wheels

mm	mm	kg	CODE	mm	mm	mm	mm	daN							
35	39	0.04	346200	44.5	SPANNER 12	M8	15	10							
50	59	0.07	346201	62	SPANNER 12	M10	15	30							



Black polyamide 6 wheels
Package with 2 pieces and 4 fittings

		2 pc package													
mm	mm	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN				
35	39	0.22	340000	50/44,5	28x28	19x19	5	SPANNER 12	M8	15	10				
50	59	0.30	340001	68/62	38x38	27x27	5	SPANNER 12	M10	15	30				



Grey polyamide 6 wheels

															
mm	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	daN				
60	42	0.13	347403 	0.14	342103 	86	48x48	34x34	6	74	30				
75	48	0.16	347404 	0.19	342104 	106	48x48	34x34	6	87	30				
100	57	0.51	347405 	0.53	342105 	124	60x60	42x42	6	115	40				



Transparent polypropylene wheels

mm	mm	kg	CODE	mm	mm	mm	mm	daN						
50	54	0.08	347102	61	SPANNER 12	M10	15	20						



Blue polypropylene wheels

mm	mm	kg	CODE	mm	mm	mm	mm	daN						
50	54	0.09	347202	66	35x35	26x26	4	20						



Blue polypropylene wheels

mm	mm	kg	CODE	mm	mm	mm	mm	daN						
50	54	0.08	347302	61	SPANNER 12	M10	15	20						

RUBBER SPHERICAL WHEELS



Description

Black rubber spherical wheels with chrome-plated brackets and electrolytically galvanised Zamak alloy fittings. The wheels are supplied in pair only (one right and one left wheels).

Uses

Suitable for indoor applications, without aggressive chemicals. They can be used on fragile floors, even carpet.

Examples of recommended applications: house and office furniture with low carrying capacity.

Environments of use

Suitable for domestic environments without aggressive chemicals.

WEAK ACIDS		WEAK BASES	
STRONG ACIDS		STRONG BASES	
WATER		HYDROCARBONS	
ALCOHOL		SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable on tiles and delicate flooring; not recommended on abrasive, unpaved floors or in presence of processing residues.

Not recommended in presence of obstacles.





	RH		LH											
	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	daN				
	45	0.09	354101	0.09	354201	56	28x28	19x19	5	20				
	55	0.14	354102	0.14	354202	66	38x38	27x27	5	30				
	65	0.19	354103	0.19	354203	76	38x38	27x27	5	40				



	RH		LH											
	mm	kg	CODE	kg	CODE	mm	mm	mm	mm	daN				
	45	0.09	356101	0.09	356201	52	SPANNER 12	M8	15	20				
	55	0.13	356102	0.13	356202	62	SPANNER 12	M8	15	30				
	65	0.18	356103	0.18	356203	72	SPANNER 12	M10	15	40				



Package with 2 wheels and 4 fittings

																			
	mm	kg			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	daN				
	45	0.25	350001		52	28x28	19x19	5	SPANNER 12	M8	15	20							
	55	0.35	350002		62	38x38	27x27	5	SPANNER 12	M8	15	30							

TRANSPARENT POLYURETHANE WHEELS WITH METHACRYLATE CENTRE



Description

Tyre: transparent polyurethane.

Centre: methacrylate.

Hub with plain bore hole which directly houses the axle.

Zinc-plated brackets.

Uses

Suitable for indoor applications, without aggressive chemicals. They can be used on delicate flooring, even carpet.

Examples of recommended applications: house and office furniture with low carrying capacity.

Environments of use

Suitable for domestic environments without aggressive chemicals.

WEAK ACIDS		
STRONG ACIDS		
WATER		
ALCOHOL		

WEAK BASES		
STRONG BASES		
HYDROCARBONS		
SOLVENTS		

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable on tiles and fragile flooring; not recommended on abrasive, unpaved floors or in presence of processing residues.

Not recommended in presence of obstacles.





															
mm	mm	kg	CODE	mm	mm	mm	mm	mm	daN						
50	20	0.14	392002	71	42x42	32x32	4.5	25	20						
75	23	0.33	392004	103	60x60	43x43	6.5	28	40						



															
mm	mm	kg	CODE	mm	mm	mm	mm	daN							
50	20	0.14	392102	69	M8	15	25	20							
75	23	0.31	392104	101	M10	25	28	40							

Options available to order



Wheels
with thread
bracket
d. 78 mm



Wheels
with thread
bracket
d. 78 mm

TRIPODS



Originally designed to move theatre stage sets, Tellure Rôta tripods are ideally suited to **transporting heavy loads in a tight space** with minimal effort by operators as well as very little noise and few vibrations. Using “TR” and “TR-Roll” polyurethane wheels ensures a long lifespan together with low starting and rolling resistance.

TRIPODS WITH WHEELS FROM SERIES 62AL



Available with NL brackets (standard duty)

										
mm	mm	kg	COD.	mm	mm	mm	mm	mm	daN	
100	40	8.47	062074 	170	135x110	105x80	11	416	600	
125	40	10.20	062140 	198	135x110	105x80	11	466	660	

Available with P brackets (medium-heavy duty)

										
mm	mm	kg	COD.	mm	mm	mm	mm	mm	daN	
100	40	9.63	062141 	179	135x110	105x80	11	440	900	
125	40	11.20	062199 	202	135x110	105x80	11	480	1000	

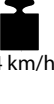


The loading capacity refers to manual handling (up to 4 km/h), on regular surfaces and in the absence of obstacles.

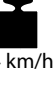
TRIPODS WITH WHEELS FROM SERIES 65AL



Available with NL brackets (standard duty)

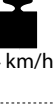
										
mm	mm	kg	COD.	mm	mm	mm	mm	mm	daN	
100	30	7.92	065016 	170	135x110	105x80	11	416	600	
125	35	9.54	065017 	198	135x110	105x80	11	466	660	

Available with P brackets (medium-heavy duty)

										
mm	mm	kg	COD.	mm	mm	mm	mm	mm	daN	
100	30	8.82	065123 	179	135x110	105x80	11	440	750	
125	35	10.40	065134 	202	135x110	105x80	11	480	1000	

TRIPODS WITH WHEELS FROM SERIES 64



										
mm	mm	kg	COD.	mm	mm	mm	mm	mm	daN	
100	38+38	23.60	064328 	190	135x110	105x80	11	540	1000	



The loading capacity refers to manual handling (up to 4 km/h), on regular surfaces and in the absence of obstacles.

PRODUCTS FOR SPECIFIC CUSTOMER REQUIREMENTS

Tellure Rôta designs and implements customised solutions, manufactured according to the specific requirements of customers.

Thanks to its flexible production system and a specific prototyping department, Tellure Rôta can make customised products which are then tested in TR Lab to verify their performance.

The manufacturing of special solutions is subject to minimum quantities, which can vary according to the type of product.

The designing of a Tellure Rôta customised goes through the following phases:

- MEETING THE CUSTOMER TO ACQUIRE THE SPECIFIC REQUIREMENTS
- CREATING A DEDICATED PROJECT
- SHARING THE RESULTS WITH THE CUSTOMER
- IMPLEMENTING THE WHEEL PROTOTYPE
- QUALITY TEST
- CUSTOMER VALIDATION
- PRODUCTION START

Some examples of customised projects



THERMOPLASTIC MATERIAL WHEEL WITH CUSTOMISED COLOURS



THERMOPLASTIC MATERIAL WHEEL FOR THE PALLET TRUCK SECTOR



ELECTROWELDED CASTORS WITH STEERING SYSTEM



POLYURETHANE WHEELS WITH INCREASED THICKNESS TO BETTER OVERCOME OBSTACLES



BRACKETS WITH CUSTOMISED STEM



BRACKETS WITH CUSTOMISED STEM



WHEEL WITH TWIN ELECTROWELDED BRACKET
DIAM. 400 MM FOR HEAVY-DUTY LOADS



POLYAMIDE 6 WHEEL FOR EXTRA-HEAVY LOADS



CASTORS WITH LOW TOTAL HEIGHT FOR
AGV-AMR



HIGH PERFORMANCE POLYURETHANE DRIVE WHEELS



POLYURETHANE COATING



COATING FOR MOTORWHEELS

ACCESSORIES FOR WHEELS AND CASTORS: THREADGUARDS AND COUNTER-PLATES

Threadguards

Threadguards in galvanised steel for series 22-52

		GALVANISED
		
mm	mm	CODE
80	25	100027
100	30	100027
125	37.5	100010
140	37.5	100010
150 - 22	40	100028
150 - 52	40	100005
200	50	100007

Threadguards in galvanised steel for series 23-53

		GALVANISED
		
mm	mm	CODE
80	25	100010
100	30	100009
125	37.5	100012
140	37.5	100014
150	40	100014
160	40	100015
180	50	100016
200	50	100017

Polyamide 6 threadguards and galva- nised steel series 60-61-71 (models with plain bore and ball bearing)

		POL 6	GALVANISED
			
mm	mm	CODE	CODE
80	30	100501	100461
100	30	100502	100462
125	35	100503	100463
150	35	100504	
150	45	100514	

Threadguards in galvanised steel for series 63AC

		GALVANISED
		
mm	mm	CODE
100	30	100031
125	40	100032
150	40	100033
200	50	100035

Threadguards in galvanised steel for series 65AL

		GALVANISED
		
mm	mm	CODE
80	25	100461
100	30	100462
125	35	100463
150	40	100464
200	50	100466

Threadguards in galvanised steel for series 65GH

		GALVANISED
		
mm	mm	CODE
150	30	100033
150	35	100033
175	35	100034
200	45	100035

Threadguards

Threadguards in galvanised steel and stainless steel for series 66

		GALVANISED
mm	mm	CODE
80	25	100461
100	30	100031
125	30	100032
150	40	100033
175	40	100034
200	50	100035

Threadguards in galvanised steel and in stainless steel for series 68

		GALVANISED
mm	mm	CODE
80	30	100491
100	30	100498
125	38	100493
150	45	100494
175	45	100495
200	50	100496

Threadguards in galvanised steel and stainless steel for series 73

		ZINCATI
mm	mm	COD.
100	40	100012
125	40	100040
180	50	100034
200	50	100495

Counter-plates

Counter-plates for brackets NL

			
mm	mm	mm	CODE
100x85	80x60	3.0	110401
140x110	105x80	3.5	110105

Counter-plates for brackets NLX

			
mm	mm	mm	CODE
100x85	80x60	2.5	110402
140x110	105x80	3.0	110106

Counter-plates for brackets P

			
mm	mm	mm	CODE
100x85	80x60	4.0	110403
135x110	105x80	6.0	110204

Counter-plates for brackets EP

			
mm	mm	mm	CODE
100x85	80x60	5.0	110202
135x110	105x80	6.0	110204
135x110	105x80	6.0	110204
175x140	140x105	8.0	110208

All counter-plates are supplied raw (not treated on the surface) to favour their welding to the trolley.

ACCESSORIES FOR WHEELS AND CASTORS: STEMS

Solid stems and nuts for assembly

																
mm	mm	mm	mm	mm	CODE	CODE										
80	73	12	22	47	926044	921079										
100	73	12	22	47	926044	921079										
125	73	12	22	47	926044	921079										
140/150	73	12	22	47	926044	921079										
150/160	102	20	26	56	926006	921070										
175/180	102	20	26	56	926006	921070										
200	102	20	26	56	926006	921070										

Solid stems assembly layout



Threaded stems, bolts, nuts

Threaded stems

																
mm	mm	mm	mm	mm	CODE	CODE	CODE	CODE								
80	73	12	10x1.5	25	925005	922028										
100	73	12	10x1.5	25	925005	922028										
125	73	12	12x1.75	45	925006	922112										
140/150	73	12	12x1.75	45	925006	922112										
150/160	102	20	16x2	35	925007	922108	929324	947015								
175/180	102	20	16x2	35	925007	922108	929324	947015								
200	102	20	16x2	35	925007	922108	929324	947015								

Threaded stems assembly layout



Expander in Zamak alloy



Designed to optimise the handling of tubular trolleys and perfect for use on modular trolleys.

It can be combined with bolt hole swivel castors with diameter from 80 to 125 mm and it is suitable for assembly on tubes having a diameter from 20 to 24 mm.

Standard fitting with series 60, 61, 71.

Assembly and maintenance recommendations



We recommend fastening the castor with expansion stem to the tubular structures by using adequate tightening torques. Insufficient tightening torques can jeopardise the overall carrying capacity and/or the stability of the product.

The torques must be compatible with the thickness and mechanical resistance of the tube in which the product is used. The recommended carrying capacities and maintenance cycles relate to brackets with expanders secured with fastening torque of 40 N/m.

Expander fitting are subject to adjustment during use: we recommend to periodically check its proper fastening. The stem is subject to an initial adjustment during the first days of use; following control cycles may be planned according on the intervals indicated on the Use and Maintenance Guide.



ACCESSORIES FOR WHEELS AND BRACKETS: DIRECTIONAL LOCK

Directional lock for brackets NL-P

Directional lock is an accessory that can be fitted to the top plate of a swivel bracket plate by using the same fixing bolts to the trolley. When engaged, it locks the bracket rotation in a precise direction, turning it into a fixed castor. The device is used on at least two of the four swivel brackets fitted on a trolley, thus allowing the simultaneous towing of more trolleys.

Directional lock for NL brackets, diam. up to 150 mm

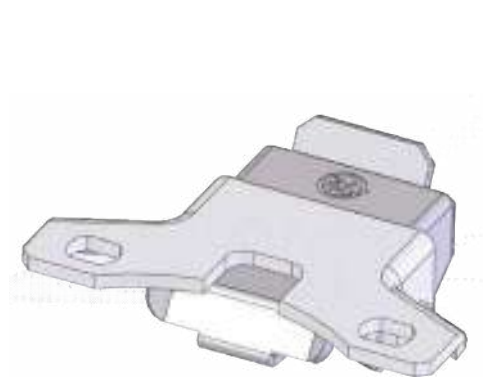


The directional lock is integrated in the swivel bracket. It is suitable for manually handled trolleys or mechanically towed trolleys at low speed (max. 6 km/h) on good condition floors.

It offers a simple engagement by self-inserting into position after pushing the front pedal.

Applicable to NL brackets diameter 80-100-125-140/150 upon request (plate dimensions 100x85 mm).

Directional lock for NL- P -PT brackets, diam. from 150 to 200 mm (Item nr 401215)



Designed for assembly on the top plate's shorter side.

It consists of galvanised steel plate parts and is suitable for manually handled or mechanically towed trolleys at low speed (max 6 km/h) on good condition floors.

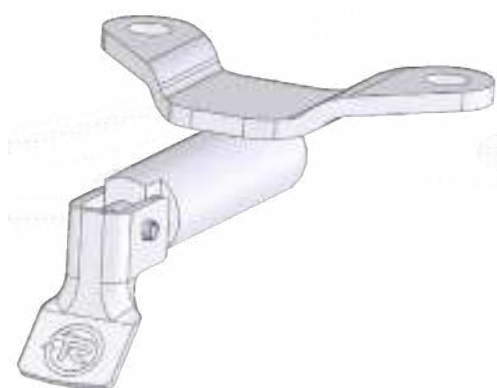
It offers a simple engagement by self-inserting into position after pushing the front pedal.

It can be purchased as an accessory and combined with the NL, P and PT series swivel brackets for wheels diameters 150, 160, 175, 180 and 200 mm (plate dimensions 140x110 mm). It can be used with swivel NL-P-PT brackets with rear brake and central brake.

It cannot be combined to NL-P brackets with front foot brake.

Directional lock for electrowelded brackets

Directional lock for EE MHD-EEG MHD- EE HD brackets (Item nr 401216-401217)

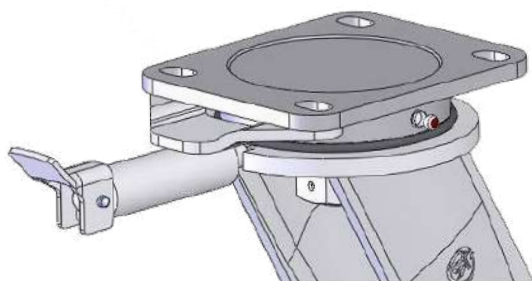


Designed for assembly on the top plate's short side, it consists of galvanised steel parts and is suitable for trolleys subject to mechanical towing at speeds up to 16 km/h on indoor and outdoor floors (asphalt, cement).

Easy to engage by self-clicking into position.

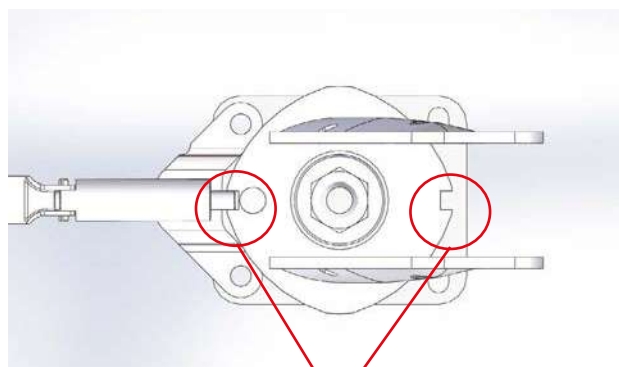
Specifications:

- it is fitted to the top plate of a castor by using the same fixing bolts which secure the castor to the trolley
- it can be fitted with EE MHD and EE HD electrowelded castors, to EEG MHD twin electrowelded castors (only on diam. 100-125 mm), to EES MHD sprung-loaded electrowelded castors (please see the table on the following page for details)
- it can be fitted to Tellure Rôta brackets which have the appropriate slots

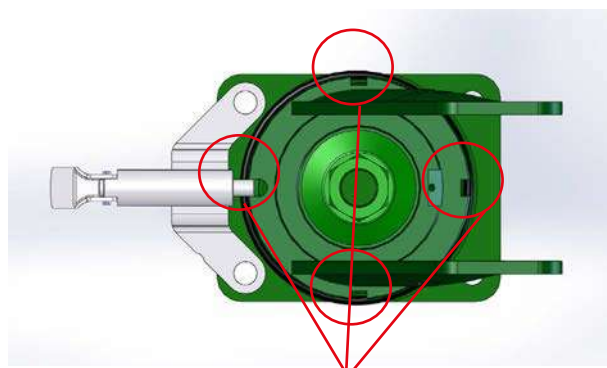


ACCESSORIES FOR WHEELS AND BRACKETS: DIRECTIONAL LOCK

Directional lock for electrowelded brackets



Bracket with 2 slots at 180°



Bracket with 4 slots at 90°

Fittings

EE	MHD			4-6 km/h			Directional lock part number	Suffix 2x180° slots	Dir. lock to be fitted on the side of the top plate with dimension:	Suffix 4x90° slots
		100	135x110	1000	Sì	Sì	401216	-B2	110 mm	-B4
		125	135x110	1000	Sì	Sì	401216	-B2	110 mm	-B4
		150	135x110	1000	Sì	Sì	401216	-B2	110 mm	-B4
		160	135x110	1000	Sì	Sì	401216	-B2	110 mm	-B4
		180	135x110	1000	Sì	Sì	401216	-B2	110 mm	-B4
		200	135x110	1000	Sì	Sì	401216	-B2	110 mm	-B4
		250	135x110	1000	Sì	Sì	401216	-B2	110 mm	-B4
EE	EES	150	135x110	1000	Sì	No	401216	-	110 mm	
	MHD	160	135x110	1000	Sì	No	401216	-	110 mm	
		200	135x110	1000	Sì	No	401216	-	110 mm	
		250	135x110	1000	Sì	No	401216	-	110 mm	
EE	EEG	100	135x110	1000	Sì	N.d.	401216	-B2	110 mm	-B4
	MHD	125	135x110	1000	Sì	N.d.	401216	-B2	110 mm	-B4
EE	HD	150	175x140	1600	Sì	No	401217	-D2	140 mm	-D4
		200	175x140	1600	Sì	No	401217	-D2	140 mm	-D4
		250	175x140	1600	Sì	No	401217	-D2	140 mm	-D4
		300	175x140	1600	Sì	No	401217	-D2	140 mm	-D4

The directional lock for electrowelded castors can be assembled **with brackets with appropriate slots**. To order castors configured with slots, please add the above specified suffix to the part number of the complete castor.

Example: to order the part number 628314 with 2 slots, it is necessary to show the part number 628314B2.

Sprung electrowelded castors EES MHD are an exception, since they are realised in standard version with 2 slots.

Directional lock for electrowelded brackets

Scheme of assembly

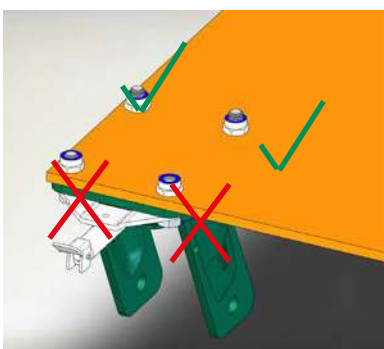
1. Four M10 bolt and four M10 nuts are required for directional lock 401216 (MHD type); M14 bolt and nuts are instead required for directional lock 401217 (HD type). Self-locking nuts and 8.8 bolt strenght are recommended. The length of the bolt depends on the characteristics of the trolley the castors have to be fitted onto (it should be usually longer than 40mm).



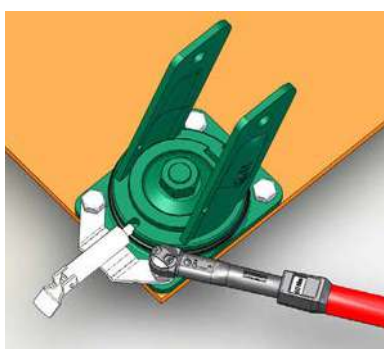
2. The directional lock and the castor have to be positioned and subsequently fastened as per the exemplification in the adjacent picture (note: the picture shows the bracket without the wheel for handiness of the image only).



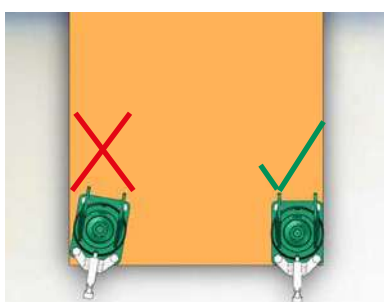
3. The bolt has to protrude through the nut by at least 3 threads.



4. The proper tightening of the bolts has to be verified by a torque wrench. The recommended tightening torque of a self-locking nut is of 25Nm for dir. lock 401216 (M10 bolts) and of 60NM for dir. lock 401217 (M14 bolts).



5. Make sure that the directional lock engages properly into the slots of the bracket and that the castors are aligned to the direction of movement of the trolley once the the directional lock is applied.



↑
Direction of movement

ACCESSORIES FOR WHEELS AND BRACKETS: FOOTGUARDS

Footguards for brackets NL - M - P - PT

Tellure Rôta's footguard is specifically designed to prevent the operator's foot crushing when handling trolleys or machines.

Due to the fixed nature of this device, in fact, safety while manoeuvring carts is ensured at all times.



Features:

- it must be fitted to the forks of the bracket by means of the axle's screw, which, for this reason, must be longer than usual;
- can be fitted to Standard-duty (NL), Medium-duty (M), Medium-heavy duty (P), as well as Heavy Duty with hardened ball race (PT) brackets

For details on the available fittings please have a look at the tables on page 423.

For fittings different than the one shown in the tables please contact our Sales Department to check availability.

Footguards for brackets NL - M - P - PT

Fittings

NL				Footguard item nr. for swivel castor	Footguard item nr. for fixed castor
	125	100x85	45	094635VE	094630VE
	125	140x110	60	094744VE	094688VE
	150	140x110	60	094781VE	094761VE
	160	140x110	60	094781VE	094761VE
	200	140x110	60	094782VE	094762VE
M	150	140x110	60	094641VE	094761VE
	160	140x110	60	094641VE	094761VE
	200	140x110	60	094783VE	094762VE
P	125	100x85	45	094689VE	094630VE
	150	140x110	60	094641VE	094641VE
	160	140x110	60	094641VE	094641VE
	175-180	140x110	60	094784VE	094784VE
	200	140x110	60	094784VE	094784VE
PT	150	140x110	60	094641VE	094641VE
	160	140x110	60	094641VE	094641VE
	175-180	140x110	60	094784VE	094784VE
	200	140x110	60	094784VE	094784VE

CORRECT PRODUCT USE

Italy has implemented EEC directive no. 83/374 concerning the manufacturer's responsibility with Italian DPR no. 224 of 24/05/1988.

Subsequent to that directive, the user must comply with and apply all the recommendations provided by the manufacturer regarding use, assembly as well as preventive and periodic maintenance of its products.

Such recommendations are summarised in the following paragraphs.

For further information, please ask Tellure Rôta for the Technical Handbook or for the "Use guide" booklet prepared by the Union of Italian Wheel Manufacturers (UCIR).

Wheel maximum load and carrying capacity

The carrying capacity declared by the manufacturer is the maximum value, expressed in daN, that a wheel or a bracket can be subjected to without reducing its operating efficiency.

The user must check the suitability of the carrying capacity declared by the manufacturer in relation to the load, the wheel and bracket layout on the trolley to be moved, the number of them actually in contact with the ground and any other conditions (type of surface on which the trolley moves, temperature, humidity, presence of aggressive chemical agents in the operating environment) that may affect the operating conditions of the mechanical moving parts.

Tractive force

The user must check that the force needed to move the trolley with the foreseen load is compatible with current provisions. To make it easier to choose the right wheel, and based on the force required to move the trolley, the rolling resistance value of each wheel is indicated in Tellure Rôta catalogue.

Speed

The maximum speed for which Tellure Rôta refers to the rated carrying capacity is 4 km/h (1.1 m/s). For applications at higher speeds, please contact Tellure Rôta.

Floor

The rated load capacity declared in this catalogue refers to use on smooth and compact floors in good condition. Uneven floors, obstacles and different levels require wheels with a larger diameter and a covering with greater elasticity.

Means of traction and moving intensity

The rated carrying capacity declared in this catalogue refers to manual handling with interruptions during use. For continuous operation or motorised handling, please contact Tellure Rôta.

Environment

The user must check that the materials used to make the selected product are compatible with physical-chemical conditions of the operating environment. The catalogue indicates the "normal" operating conditions for each type of wheel.

Electrical conductivity

If it is necessary to guarantee the electric conductivity from the connecting part to the tread, please contact Tellure Rôta.

Braking and/or locking device

Tellure Rôta produces brackets equipped with brakes and/or locks. They are designed to park

the trolley on slopes of generally no more than 3% under the condition that at least two wheels of the trolley equipped with such devices are in contact with the ground. In case of use on steeper gradients, to ensure the trolley remains at a standstill in these conditions, either the load must be reduced or the number of braking devices must be increased. Tellure Rôta is available for any further details or explanations.

Storage

Products must be stored in a well-ventilated area, without excessive humidity, with a thermal excursion ranging between -10 and +40 C and protected from dust. Never expose products to direct sunlight for extended periods of time and, in general, avoid extended storage. To store the product more efficiently and to protect it against dust, Tellure Rôta items are supplied in standard shrink-wrapped packages.

INCORRECT ACTIONS

To use wheels and brackets correctly, avoid the following:

- overloads, non-uniform load distribution, violent application of the load
- extended stationary periods under load
- impacts, collisions and falling from different heights
- activation of locks and/or brakes while the trolley is moving
- moving the trolley with locks and/or brakes engaged
- parking the trolley with the locks and/or brakes engaged on slopes of more than 3%
- washing with chemically aggressive cleaners
- replacing the wheel and/or bracket with spare parts that do not comply with the Tellure Rôta specifications.

INSTALLATION

For efficient production operation and extended service life, follow the assembly instructions listed below.

Wheel assembly

- Check the mechanical strength of the attachment parts (axle sets, nuts, washers) used for the type of assembling (projecting or fork) and the load to which they are subjected
- House the axle set horizontally, perpendicular to the operating direction, and prevent it from rotating
- Check that the nut is tightened on the axle set; Check that the wheel rotates freely once the installation has been completed.

Bracket assembly

The trolley structure must be sized to withstand the stress exerted on it and to guarantee that attachment surfaces are level. They must be flat, horizontal and sized to guarantee that the corresponding bracket attachment surfaces are perfectly coplanar in the attachment point. Connecting through welding is not recommended. It is recommended:

- To mount the bracket with a plate using screws, nuts and washers with the sizes and quantity indicated by the manufacturer
- To tighten the nuts or screws with the appropriate torque
- To guarantee that the axle set, for fixed castors, is perpendicular to the operating direction
- To guarantee that brackets with a solid stem are attached to tubular structures with precise

tolerances

- To attach the stems with the cross hole with screws that have an adequate diameter and length
- To guarantee that the tubular structure of the trolley rests completely on the bracket attachment surface
- To guarantee, for brackets with a threaded stem or bolt hole, that the bracket connection surface adheres completely to the surface equipment without interpositions. The brackets with a bolt hole must be attached using screws with the diameter indicated by the manufacturer.

MAINTENANCE

The user must carry out scheduled maintenance that includes the inspections listed below at the intervals that vary according to operating conditions.

Trolley structure check and maintenance

- Check damage to the trolley frame that may have reduced product connection efficiency;
- Check that the product connection parts are correctly tightened on the trolley structure.

Wheels and brackets checks and maintenance

- Check that the product is undamaged, fully operational and that there is no excessive clearance, wear, deformation or tearing
- Check that any locks and/or brakes, if present, are working efficiently
- Check that the environmental conditions have not changed the product (oxidation, corrosion, foreign bodies etc.), thus reducing its operating efficiency
- For products that ensure electrical conductivity, clean the rolling strip and periodically check the electrical conductivity
- Check that the wheel axle set is correctly tightened, reapplying the necessary torque
- Lubricate the moving parts with a lubricant suitable for the specific applications.

Frequency of checks and maintenance

The maximum time interval between two successive checks is as follows:

- damage to the trolley's frame: 12 months
- tightening of connection parts: 6 months
- product condition: 6 months
- brake efficiency: 3 months
- product alteration: 6 months
- electrical conductivity: 3 months
- wheel axle set tightness: 6 months
- lubrication top-up: 6 months (but the top-up lubrication has to be done every time the product is washed).

PROCEDURES FOR DISPOSING AND RECYCLING PRODUCTS

To dispose of and/or recycle the products after use, first, separate the wheel+bracket assemblies from the equipment on which they are fitted. It is best to split the wheel+bracket assemblies down into the following component parts:

- bracket
- axle unit (screw, tube, nut)
- wheel

In particular, the dismantling of the wheel from the bracket is crucial if these are prevalently made from plastic material or aluminium alloy.

Below are details of disposal and recycling of the main materials making up the Tellure Rôta wheels and brackets. In any case, we suggest comparing and supplementing these details with the procedures and rules established by the company in charge of waste disposal in the area or locality where the products are used.

Brackets and axle components

Steel and stainless steel can be recycled as ferrous scrap.

Wheels

We suggest that product recycling procedures include preliminary treatments that involve sorting the different materials in the wheels so as to ensure the correct disposal and/or recycling of each type.

- Steel and engineering cast iron can be recycled as ferrous scrap
- Aluminium alloy can be recycled as non-ferrous metal
- Plastic, thermoplastic rubber and vulcanised rubber parts can be recycled once they have been separated from the ferrous and non-ferrous metals
- Thermosetting resin can be disposed of in waste dumps
- The polyurethane parts can be disposed of in waste dumps, once separated from ferrous and non-ferrous metals.

Shrink-wrap packaging is recyclable as low density polyethylene (PE-LD).

Wooden pallets can be reused or recycled. Any paper or cardboard packaging can be returned to the paper production cycle.

As regards recycling procedures, please refer to the production consortia in the countries where the parts are disposed of.

1. General terms

The contractual relationship, further to the conclusion of each single order, is regulated by these general terms of sale and by specific terms which may be indicated in the order, where specifically undersigned. Orders passed on to commercial assistants and intermediaries are accepted subject to the approval of Tellure Rôta S.p.A.

2. Offer

The documents forming part of the offer, such as illustrations, drawings, indications of weight and size, are only determinant in approximate terms to the extent that they have not been expressly indicated as binding. Tellure Rôta S.p.A. reserves the right of ownership and copyright with regards to the cost estimates, drawings and other documents, which must not be made accessible to third parties. The purchaser assumes full responsibility for the documents it has sent to Tellure Rôta S.p.A. in the event of breach of third party industrial protection rights, also in relation with Tellure Rôta S.p.A. The latter is obliged to make projects, indicated by the purchaser as confidential, accessible to third parties only upon the purchaser's approval.

3. Orders

Except in the event of different written terms, orders of less than Euro 500.00 are not accepted.

4. Variation in the confirmed order

Tellure Rôta reserves the right to refuse or accept, also only partially, any subsequent changes in the order and proposals by the purchaser. In the event of acceptance of these variations, the new price, methods of payment and new delivery dates shall be established by Tellure Rôta, with all other terms remaining unchanged.

5. Cancellation of a confirmed order

The purchaser that cancels a confirmed order, for any cause or motive, is bound to pay in full the amount relating to materials and to supplies already ordered by Tellure Rôta S.p.A. In any case, Tellure Rôta S.p.A. has the right to a minimum compensation equal to 25% of the agreed price, with the right to withdraw this amount even from possible sums received as advance payment for the supply.

6. Prices

Prices are considered as applying to material delivered ex works from Tellure Rôta S.p.A., except in the event of different written terms. The prices of products are those shown by Tellure Rôta S.p.A. in its price list or in its offers; these prices, if not yet agreed, may however be changed at any moment and will be absolutely applied at the date fixed by Tellure Rôta S.p.A.

7. Payments

Payment of supplies must be made within the period and the terms agreed to in the order. In all events, Tellure Rôta S.p.A. is authorised to issue drafts on the customer for the sums and at the due dates. The relative costs are to be borne by the customer. Every shipment is considered as independent of others for the purpose of payment. Delays in payments or any other breach give right to the suspension of the remaining supplies and to the rescission of the contract in progress, besides giving rise to default action against the purchaser with the immediate application of interests on arrears. On sums falling due and not paid, without prejudice to Tellure Rôta S.p.A.'s right to demand payment, interests on arrears will apply, with full right, from the day after the due date, at the legal rate of interest on arrears plus eight points, in compliance with the rate set by the ECB in respect of Italian Legislative Decree no. 192/2012. Requests for reimbursement of payments or for compensations by virtue of any possible counter-claim on the part of the purchaser are not accepted.

8. Delivery terms

The agreed and confirmed shipment and/or delivery terms are expressed in working days and are only indicative and as such are not legally binding, except in the event of a definite undertak-

ing on the part of Tellure Rôta S.p.A., which must be expressly indicated on the order confirmation, and except in cases of force majeure. Any delays may not therefore, in any event, give rise to compensation for damages or the rescission, even partial, of the contract, except where such consequences are expressly accepted by Tellure Rôta S.p.A. in the order confirmation.

9. Shipment and transport

With the exception of a contrary agreement, which must be indicated in the order confirmation, the sale takes place Ex-Works. Partial shipments by Tellure Rôta S.p.A. are also accepted. Also in the event that Tellure Rôta S.p.A. is obliged to pay the relative transport cost for the goods as far as the agreed destination, the risk of loss or damage to the goods, as well as any additional costs due to events occurring after the goods have been consigned to the carrier, is transferred from Tellure Rôta S.p.A. to the purchaser at the moment in which the goods are consigned to the carrier. Any reserves, claims, or actions deriving from or in any case connected with the transport and consequent operations, must be raised by the purchaser, and exclusively against the carrier, with the absolute term of eight days from receipt of the goods, since Tellure Rôta S.p.A. is not responsible for events occurring after the consignment of the material to the carrier. Tellure Rôta S.p.A. will take care of the packaging according to experience and common practice, remaining explicitly exonerated from any responsibility for loss and/or damage. The use of special packaging, including the exclusion of packaging in the case of goods for which this is normal practice must be agreed to between Tellure Rôta S.p.A. and the purchaser upon making the order. With regards to matters not provided for, reference should be made to articles 1678 and 1702 of the Civil Code if, and to the extent, they are compatible with this clause. Samples are made available by Tellure Rôta S.p.A.'s only upon the application of a supplementary charge to be agreed from time to time on the relative price in force.

10. Faults and defects

Any claims for materials not corresponding, both in terms of quantity and of quality, to the conditions agreed to in the order, must be raised in writing within the maximum term of eight days from receipt of the goods on penalty of forfeiture. In the event of a prompt and justified claim, Tellure Rôta S.p.A.'s obligation is limited to the replacement of the goods acknowledged as not corresponding (in any case at supply conditions), to the same delivery destination as the initial supply, subject to the restitution of this initial supply, excluding any right on the part of the purchaser to request the rescission of the contract and compensation for direct or indirect damages and the reimbursement of any costs sustained for any reason. Tellure Rôta S.p.A. will not accept claims and will not be liable for damages suffered by third parties upon the occurrence of any of the following conditions: inappropriate or incorrect use, defective assembly on the part of the purchaser or of a third party, natural wear and tear, incorrect or negligent handling, electric or chemical effects, to the extent that these are not attributable to the fault of Tellure Rôta S.p.A. The purchaser loses every right of claim, and therefore the replacement of the goods, in the event that it fails to immediately suspend the use of the materials to which the claim refers.

11. Returns of materials

In the event of errors by the purchaser during the ordering phase, the material may be returned exclusively carriage free, against Tellure Rôta S.p.A.'s written authorisation, and only if perfectly integral and unused.

12. Changes in the construction

Tellure Rôta S.p.A. may make any changes in its construction without the obligation to inform the purchaser. Changes made subsequent to the order cannot give rise to compensation of any kind.

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						376327	387				
333001	401	350001	407			377100	386				
		350002	407			377101	386				
		354101	407			377102	386				
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		356202	407								
		356203	407								

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521104	64	525651	67	527910	67	535007	74	535749	74
521105	60	525656	64	527911	67	535010	74/368	535750	74
521106	60	525664	64	529602	68	535011	74	535751	74
521108	60	525665	67	529603	68	535012	74	535752	74
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521111	60	525667	67	529610	68	535101AS	307	535802	73
521132	60	525664	67	529611	68	535102	74	535803	73
521133	60	525665	67	529702	68	535102AS	307	535901	74
521206	60	525666	67	529715	68	535103	74	535901AS	307
522101	60	525670	67	529706	68	535103AS	307	535902	74
522102	60	525671	67	529710	68	535104	74	535902AS	307
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523108	60	525705	66	531104	72	535107	74	535905AS	307
523110	60	525706	66	531105	72	535110	74	535906	74
523111	60	525708	66	531106	72	535110AS	307	535906AS	307
523206	60	525710	66	531107	72	535111	74	535907	74
524006	367	525711	66	531108	72	535111AS	307	535908	74
524010	367	525712	66	531109	72	535112	74	535909	74
524101	60	525801	65	531110	72	535401	74	535910	74
524411	66	525802	65	531111	72	535402	74	535910AS	307
524412	66	525803	65	531121	72	535403	74	535911	74
525841	66	525901	66	531122	72	535404	74	535911AS	307
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525843	66	525903	66	531133	72	535406	74/368	536001	73
525844	66	525904	66	531206	72	535407	74	536002	73
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525202	66	526403	65	533108	72	535424	74	536302	73
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525205	66	526503	65	533110AS	306	535426	74	537742	75
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525210	66/367	526642	65	533111AS	306	535427	74	537744	75
525211	66	526643	65	533121	72	535430	74	537745	75
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525226	66	527703	67	534010	368	535520	76	537902	75
525230	66	527704	67	534748	74	535615	76	537902AS	307
525231	66	527705	67	534749	74	535616	76	537903	75
525516	68	527706	67	534806	368	535620	76	537903AS	307
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525642	67	527901	67	535001	74	535743	74	537905AS	307
525643	67	527902	67	535002	74	535744	74	537906	75
525644	67	527903	67	535003	74	535745	74	537906AS	307
525645	67	527904	67	535004	74	535746	74	537910	75
525646	67	527905	67	535005	74	535747	74	537910AS	307

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604706	96	609553	311	614911	106	615601	108	616624	105
604710	96	609554	311	614401	108	615602	108	616626	105
604731	95	609563	311	614402	108	615603	108	616631	105
604736	95	609564	311	614403	108	615604	108	616701	108
604711	95	609576	311	614404	108	615606	108	616702	108
604801	95	609586	311	614406	108	615611	108	616703	108
604802	95	609654	311	614411	108	615701	105	616704	108
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604806	95/96	609726	362	614504	105	615706	105	616722	108
604941	95	609736	362	614506	105	615711	105	616723	108
604942	95	609806	101	614511	105	615901	105	616724	108
604943	95	609810	101	614601	108	615902	105	616726	108
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605111	94	612203	104	614806	105	616303	109	617802	106
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605403	94	612206	104	614901	105	616306	109	617806	106
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605506	96	613103	104	615006	108	616421	106	618002	109
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605603	94	613106	104	615101	108	616424	106	618006	109
605604	94	613201	104	615102	108	616426	106	618011	109
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605702	95	613205	104	615111	108	616503	109	618804	109
609103	100	613206	104	615401	108	616506	109	618806	109
609104	101	614201	105	615402	108	616510	109	618811	109
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609703	97	614302	106	615503	106	616611	105	619201	107
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632122	192	634551	199	636656	194	638167	203	638904	201
632123	192	634552	199	636656	201	638172	203	638905	201
632124	192	634553	199	636664	201	638174	203	638906	201
632125	192	634554	199	636704	185	638184	203	638907	202
632126	192	634555	199	636706	185	638187	203	638908	202
632128	192	634556	199	636724	199	638184	203	638914	201
632128	192	634563	199	636726	199	638186	203	638916	202
632151	198	634564	199	636734	199	638214	192	638917	202
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632153	198	634652	199	636852	200	638223	192	638927	202
632162	198	634653	199	636853	200	638224	176/177	638928	202
632155	198	634654	199	636854	200	638225	192	638938	202
632156	198	634655	199	636855	200	638226	176/177	638928	202
632157	198	634656	199	636856	200	638315	201	638938	202
632158	198	634663	199	636863	200	638316	201	639316	203
632163	198	634664	199	636864	200	638305	201	639306	203
632164	198	634852	200	637316	192	638306	201	639404	203
632182	198	634853	200	637322	192	638307	202	639406	203
632167	198	634854	200	637323	192	638308	202	639504	203
632168	198	634855	200	637324	192	638314	201	639506	203
632151	198	634856	200	637325	192	638316	202	639904	201
632152	198	634863	200	637326	192	638317	202	639905	201
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632168	198	635305	194	637623	193	638405	201	641105	208
632224	192	635306	194	637624	194	638406	201	641106	208
632226	192	635451	199	637625	194	638407	202	641107	208
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632357	198	635463	199	637823	195	638416	202	641109	208
632363	198	635465	199	637824	195	638417	202	641110	208
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632367	198	635604	194	637828	195	638428	202	641117	208
634122	192	635605	194	637852	201	638438	202	641118	208
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634125	192	635852	200	637855	201	638624	194	641202	209
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634128	192	635854	200	637857	201	638626	194	641204	209
634151	198	635855	200	637864	201	638822	195	641205	209
634152	198	635856	200	637866	201	638823	195	641206	209
634153	198	635863	200	638062	202	638824	195	641207	209
634162	198	635864	200	638063	202	638825	195	641208	209
634155	198	636302	193	638066	203	638826	195	641209	209
634156	198	636315	193	638067	203	638828	195	641210	209
634157	198	636316	194	638072	203	638852	201	641214	209
634158	198	636304	194	638074	203	638853	201	641216	209
634163	198	636305	194	638076	203	638854	201	641217	209
634164	198	636306	194	638077	203	638855	201	641218	209

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641227	209	644655	211	648063	215	648508	214	652308	234
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642104	210	644663	211	648067	216	648515	214	652504	240
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642129	210	644852	212	648074	216	648517	214	652508	240
642139	210	644853	212	648076	216	648518	214	653104	220
642147	210	644854	212	648077	216	648527	214	653104ESD	388
642151	210	644855	212	648078	216	648528	214	653106	220
642152	210	644856	212	648084	216	648538	214	653106ESD	388
642153	210	644863	212	648086	216	648824	213	654101	220
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642155	210	644954	211	648163	215	648853	213	654102	220
642156	210	644956	211	648166	215	648854	213	654102ESD	388
642157	210	644964	211	648167	216	648855	213	654103	220
642158	210	645004	213	648172	216	648856	213	654103ESD	388
642163	210	645005	213	648174	216	648857	213	654104	228
642164	210	645006	213	648176	216	648863	213	654105	228
642166	210	645014	213	648177	216	648864	213	654106	228
642167	210	645451	211	648178	216	648866	213	654108	228
642168	210	645452	211	648184	216	649304	217	654114	220
642181	210	645453	211	648186	216	649306	217	654114ESD	388
642354	210	645463	211	648315	214	649308	217	654206	228
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644153	210	645864	212	648328	214	651106	220	654806	221
644162	210	646654	213	648338	214	651106ESD	388	654904	237
644155	210	646655	213	648403	214	651206	220	654906	237
644156	210	646656	213	648404	214	652101	220	654908	237
644157	210	646664	213	648405	214	652101ESD	388	655004	237
644158	210	646851	212	648406	214	652102	220	655006	237
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644164	210	646853	212	648408	214	652103	220	655302	234
644166	210	646854 #VALORE!		648409	215	652103ESD	388	655303	235
644167	210	646855 #VALORE!		648410	215	652124	228	655305	235
644168	210	646856 #VALORE!		648414	214	652125	228	655310	235
644181	210	646863	212	648415	214	652126	228	655316	235
644551	219	646864 #VALORE!		648416	214	652128	228	655318	235
644552	211	647824	213	648417	214	652128	228	655335	235
644553	211	647852	213	648418	214	652114	220	655336	235
644554	211	647853	213	648424	214	652114ESD	388	655344	235
644555	211	647854	213	648427	214	652206	228	655403	235
644556	211	647855	213	648428	214	652208	228	655412	234
644563	211	647856	213	648438	214	652224	228	655414	235
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655415	235	656403	221	657014	237	658203	220	659606	222
655416	235	656404	221	657104	237	658203ESD	388	659606ESD	389
655418	235	656406	221	657106	237	658204	228	659614	222
655502	234	656414	221	657108	237	658205	228	659614ESD	389
655503	235	656424	229	657206	229	658206	212/213	659704	222
655504	235	656425	229	657214	229	16		659704ESD	389
655505	235	656426	229	657326	229	658214	228	659706	222
655506	235	656434	229	657334	229	658274	236	659706ESD	389
655508	235	656501	220	657404	230	658276	236	659714	222
655535	235	656501ESD	388	657405	230	658314	230	659714ESD	389
655536	235	656502	220	657406	230	658305	230	659904	227
655544	235	656502ESD	388	657408	230	658306	230	659906	227
655602	236	656503	220	657414	230	658404 #VALORE!			
655603	236	656503ESD	388	657435	230	658405	230		
655605	236	656504	220	657436	230	658406	230		
655606	236	656504ESD	388	657444	230	658414	230		
655614	236	656506	220	657514	223	658408	230		
655702	236	656506EDS	388	657514ESD	390	658504	243		
655703	236	656514	220	657544	223	658506	243		
655705	236	656514ESD	388	657544ESD	390	658602	222		
655706	236	656524	228	657546	223	658602ESD	389		
655714	236	656525	228	657546ESD	390	658603	222		
655802	236	656526	228	657554	223	658603ESD	389		
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655924	242	656602	222	657602	222	658604ESD#VALORE!			
655926	242	656602ESD	390	657602ESD	389	658606	223		
655933	242	656603	222	657603	222	658606ESD#VALORE!			
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655936	242	656604	221	657604	223	658614ESD#VALORE!			
655954	241	656604ESD	390	657604ESD	390	658704	224		
655956	241	656606	221	657606	223	658706	224		
656004	240	656606ESD	390	657606ESD	390	658714	224		
656006	240	656614	221	657704	224	658802	224		
656013	241	656614ESD	390	657706	224	658803	224		
656014	241	656624	230	657714	224	658804	231		
656016	241	656625	230	657802	224	658805	231		
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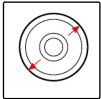
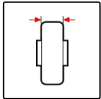
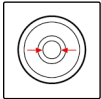
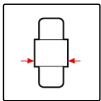
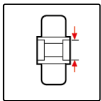
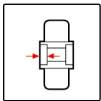
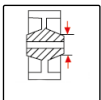
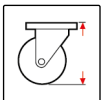
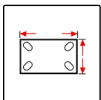
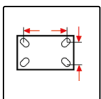
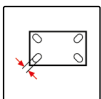
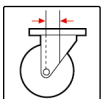
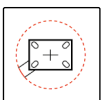
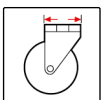
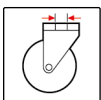
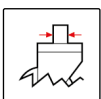
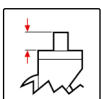
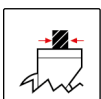
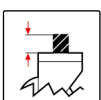
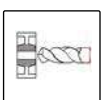
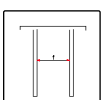
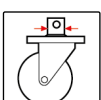
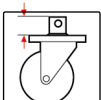
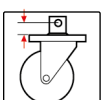
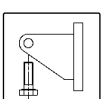
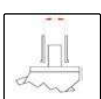
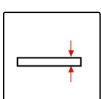
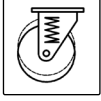
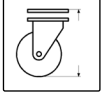
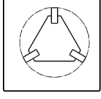
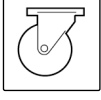
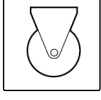
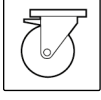
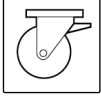
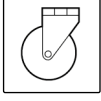
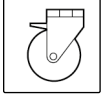
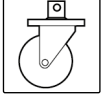
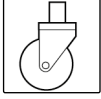
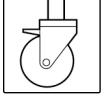
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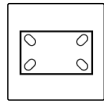
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726308	274	731104AE	132	735206AE	133	736102	128	736805	128
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726408	274	731106AE	132	735316	125	736103AE	134	736904	127
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73....

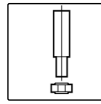
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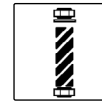
	Wheel diameter		Wheel width		Hub bore diameter
	Hub length		Ball bearing seat diameter		Ball bearing seat depth
	Hub diameter		Overall height		Top-plate outer dimensions
	Hole spacing		Hole width		Offset
	Brake swept radius		Plate diameter		Bolt hole diameter
	Solid stem diameter		Solid stem length		Threaded stem diameter
	Threaded stem length		Max. dimension of hub bore		Fork width
	Hexagonal pin diameter		Hexagonal pin protrusion		Hexagonal height
	Axle bore diameter		Tube diameter		Counter-plate thickness
	Spring travel		Initial tension		Spring tension
	Overall height (tripods)		Plate dimension (tripods)		
	Swivel top plate bracket		Fixed bracket		Swivel top plate bracket with front brake
	Swivel top plate bracket with rear brake		Swivel bolt hole bracket		Swivel bolt hole bracket with front brake
	Swivel bracket with centralised (hexagonal) brake system		Swivel bracket with stem		Swivel bracket with stem and front brake



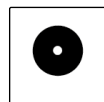
Counter-plate



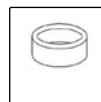
Solid stem, nut



Threaded stem, washer, nut



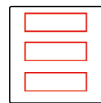
Threadguards



Spacers



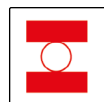
Hub with plain bore



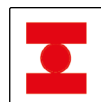
Hub with roller bearings



Hub with stainless steel roller bearings



Hub with ball bearings



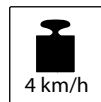
Hub with stainless steel ball bearings



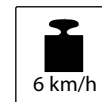
Hub with ball bearing seats



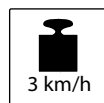
Static load



Dynamic carrying capacity at 4 km/h



Dynamic carrying capacity at 6 km/h



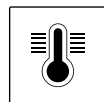
Dynamic carrying capacity at 3 km/h



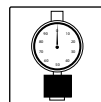
Rolling resistance



Weight



Temperature



Hardness



Available with stainless steel brackets



Wheel with ergonomic round profile



Tile floor



Asphalt floor



Resin-cement floor



Not paved floor



Expanded metal floor



Floor with chips



Floor with obstacles



SEE WEBSITE



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UNI EN ISO 9001:2015



UNI EN ISO 14001:2015



UNI EN ISO 45001:2018