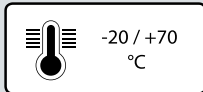
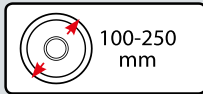


"TR-ROLL" POLYURETHANE WHEELS WITH ALUMINIUM CENTRE



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		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.

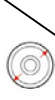

Floors

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

 	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 160-200 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.



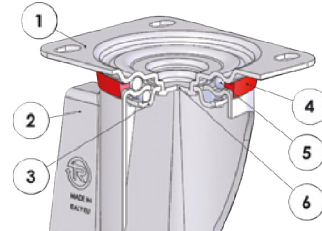
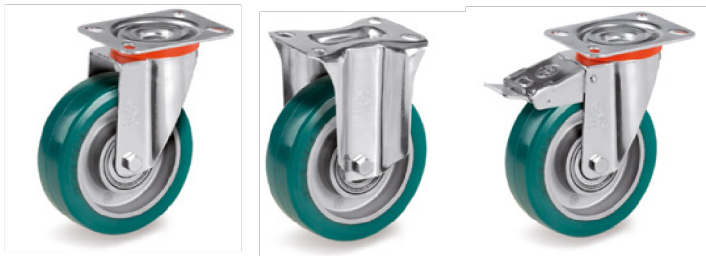
Supporti molleggiati EES MHD

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



Top view		Side view		Weight		Weight		Dimensions				Performance					
mm	mm	kg	CODE	kg	CODE	mm	mm.	mm	mm	Static	4 km/h	4 km/h	6 km/h	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-rieveted
- Available with total front foot brake

Top view		Side view		Weight		Weight		Weight		Dimensions		Dimensions		Performance	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	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

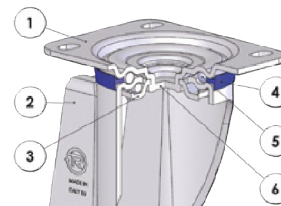


mm	mm	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	daN
160	50	2,74	624804	199	140x110	105x80	11	56	M10x1,5	65	300	
200	50	3,32	624806	240	140x110	105x80	11	56	M10x1,5	65	300	



mm	mm	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	daN
125	40	2,44	624903	165	140x110	105x80	11	46	40	17,5	35	18,5	300	
160	50	2,86	624910	199	140x110	105x80	11	56	40	17,5	35	18,5	300	
200	50	3,38	624916	240	140x110	105x80	11	56	40	17,5	35	18,5	300	

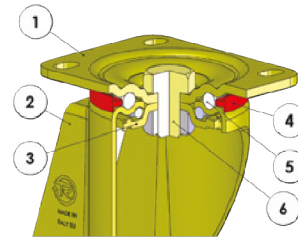
Medium-duty brackets M - max carrying capacity 500 daN



- 1) Plate: electrolytically galvanised steel plate
 - 2) Fork: electrolytically galvanised steel plate
 - 3) Ball race ring: 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

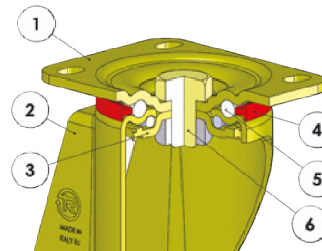
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN
160	50	2,95	624504	2,24	627704	3,42	627404	199	140x110	105x80	11	58	178	500
200	50	3,69	624506	3,04	627706	4,07	627406	240	140x110	105x80	11	50	178	500

Medium-heavy duty brackets P - max carrying capacity 750 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	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	



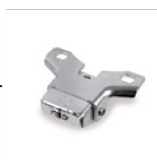
- 1) Plate: galvanised colonial steel plate
 - 2) Fork: galvanised colonial steel plate
 - 3) Ball race ring: galvanised colonial steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
-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

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

Options available to order:

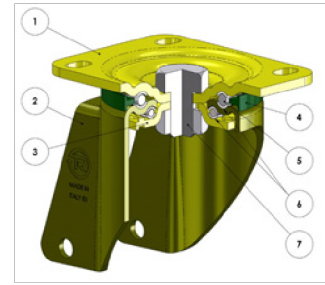


Footguard for brackets NL-M-P-PT



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

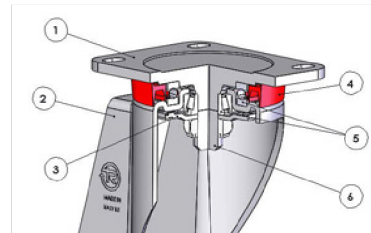
Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 700 daN



- 1) 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		kg		COD.		kg		COD.		mm		mm		mm		mm		daN		daN	
160	50	3,52	625010	2,11	628514	4,12	629904	205	140x110	105x80	11	70	126	550	550	4 km/h	6 km/h				
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						

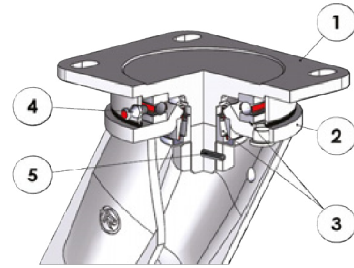
Extra-heavy duty brackets EP - max carrying capacity 700 daN



- 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		kg		COD.		kg		COD.		mm		mm		mm		mm		daN		daN	
160	50	3,76	627824	3,35	628824	4,28	626664	205	135x110	105x80	11	70	126	550	550	4 km/h	6 km/h				
200	50	4,57	627826	4,13	628826	5,14	626656	250	135x110	105x80	11	70	126	700	700						

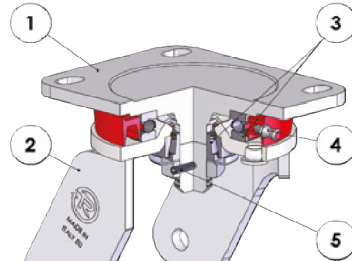
Electrowelded brackets EE MHD - max carrying capacity 700 daN



- 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	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	4 km/h	6 km/h
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:

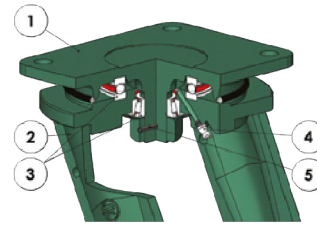


Wheels EE MHD with steering system



Directional lock for brackets EE MHD - EE HD - EED MHD: - EES MHD see page 365-367

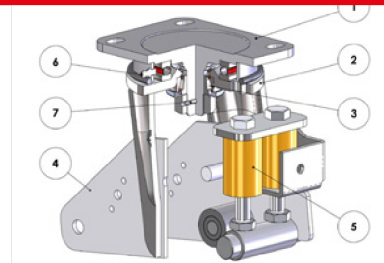
Twin electrowelded brackets EEG HD - max carrying capacity 1400 daN



- 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		kg	CODE	kg	CODE	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 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		kg	COD.	kg	COD.	kg	COD.	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 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

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

-  100-250 mm
-  75 Shore A
-  200-800 daN
4 km/h
-  200-800 daN
6 km/h
-  200-700 daN
-  -20 / +70 °C



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.

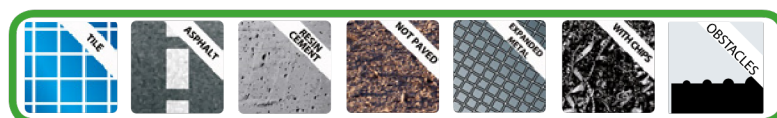
WEAK ACIDS		WEAK BASES	
STRONG ACIDS		STRONG BASES	
WATER		HYDROCARBONS	
ALCOHOL		SOLVENTS	

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

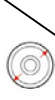

Floors

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

 	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 160-200 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.



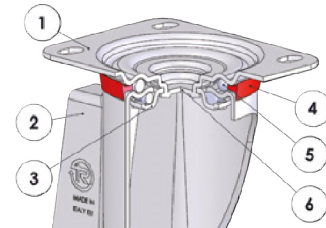
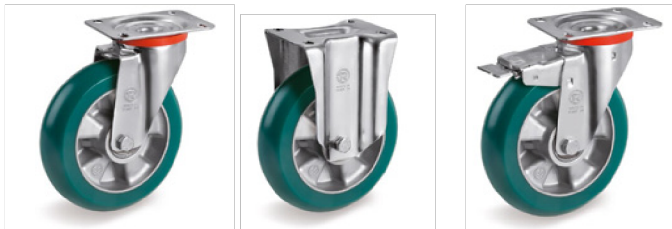
Electrowelded sprung-loaded brackets EES MHD

Maximum carrying capacity 700 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
100	40	0,57	622142	0,52	624142	20	40	47	14	500	200	200	200
125	40	0,68	622163	0,45	624143	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-rieveted
- Available with total front foot brake

mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	mm	daN
100	40	0.96	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:

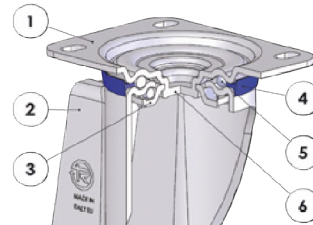


Footguard for brackets NL-M-P-PT



Directional lock for brackets NL diam. 160-200 mm

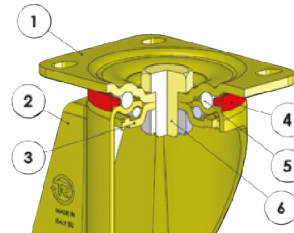
Medium-duty brackets M - max carrying capacity 500 daN



- 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
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: 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

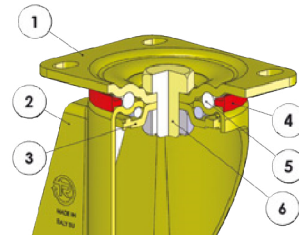
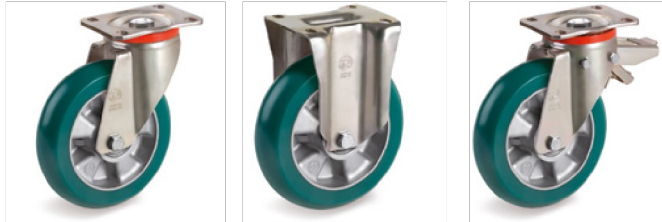
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN	daN	
125	40	2,27	629023	1,63	629123	2,83	629523	161	100x85	80x60	9	44	123	350	350

Options available to order:



Footguard for brackets NL-M-P-PT

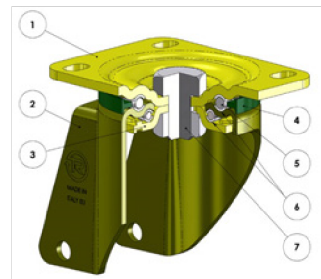
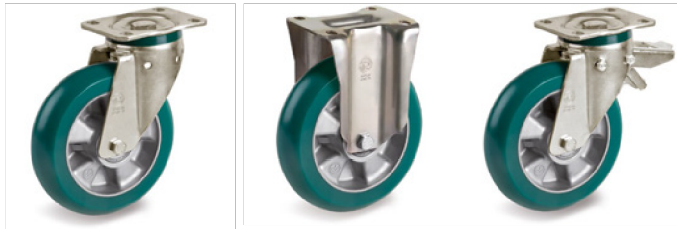
Heavy duty brackets P - max carrying capacity 700 daN



- 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		kg		COD.		kg		COD.		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	4 km/h	6 km/h				
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						

Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 700 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		kg		COD.		kg		COD.		mm		mm		mm		mm		daN		daN	
160	50	3,52	629034	2,28	629104	4,12	629234	205	140x110	105x80	11	70	126	550	550	4 km/h	6 km/h				
200	50	4,10	629036	2,68	629106	4,66	629236	250	140x110	105x80	11	70	126	700	700						

Options available to order:

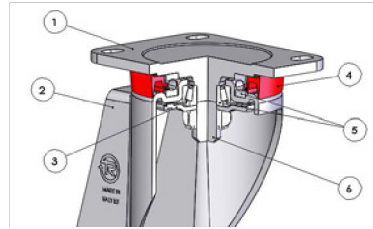


Footguard for brackets NL-M-P-PT



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

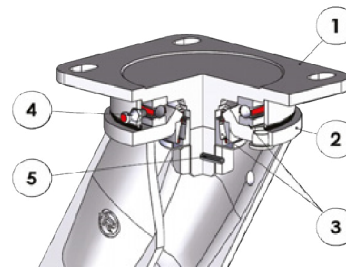
Extra-heavy duty brackets EP - max carrying capacity 700 daN



- 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

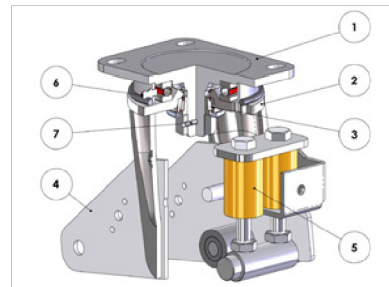
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN
125	40	3,65	629603	2,67	629703	4,53	629803	182	135x110	105x80	11	51	157	350	350
125	50	3,80	629613	2,82	629713	4,68	629813	182	135x110	105x80	11	51	157	450	400
160	50	4,11	629604	3,12	629704	4,99	629804	215	135x110	105x80	11	60	157	550	550
200	50	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 365-367

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

Options available to order:

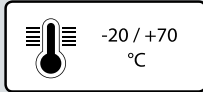


Directional lock for brackets EE MHD - EE HD - EEG MHD - EES MHD: see page 365-367



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		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.

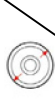

Floors

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

 	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:

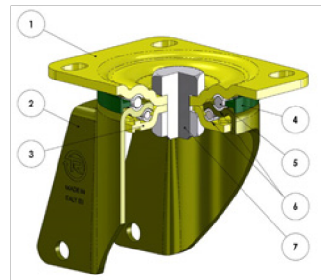


Wheel with key housing



mm		kg		COD.		mm		mm		daN		daN	
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	Static	4 km/h	4 km/h	6 km/h
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: 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

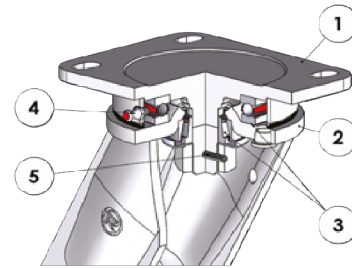
mm		kg		COD.		kg		COD.		mm		mm		mm		daN	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN	4 km/h	6 km/h
200	50	5,80	627646	5,42	628656	6,35	627246	250	140x110	105x80	11	70	126	800	800		

Options available to order:



Wheel with key housing

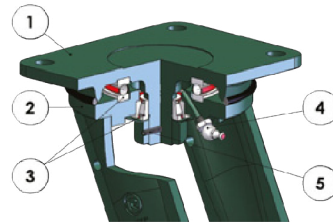
Electrowelded brackets EE MHD - Max. carrying capacity 800 daN



- 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	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	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:

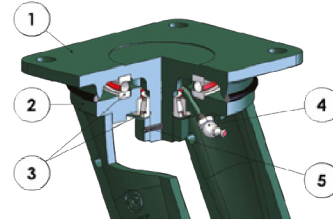


Wheel with key housing



Directional lock for brackets EE MHD - EE HD - EEG MHD - EES MHD: see page 365-367

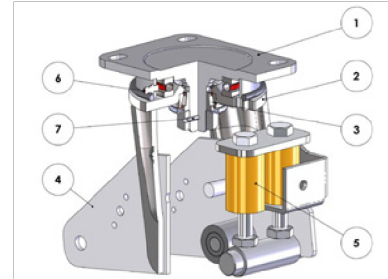
Electrowelded brackets EE EHD - Max. carrying capacity 1700 daN



- 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	daN	daN		
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

mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	daN	daN	daN
200	50	9,22	625706	7,97	625806	10,33	626006	268	135x110	105x80	11	100	265	25	50	400	800	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:

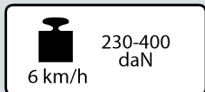


Directional lock for brackets EE MHD - EE HD - EEG MHD - EES MHD: see page 365-367



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				

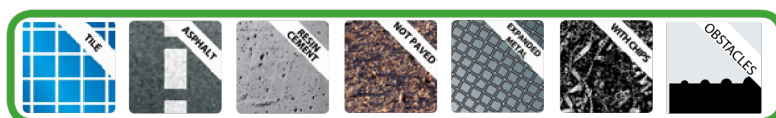
WEAK BASES				
STRONG BASES				
HYDROCARBONS				
SOLVENTS				

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		kg		kg		kg		mm				daN			
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	Static	4 km/h	4 km/h	6 km/h
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

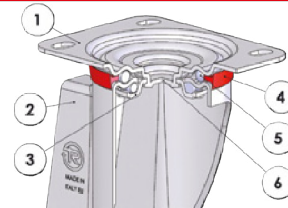


Ergonomic round profile



mm		kg		kg		kg		mm				daN			
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	Static	4 km/h	4 km/h	6 km/h
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

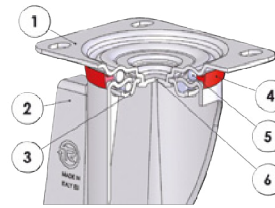
Standard-duty brackets NL - max carrying capacity 300 daN



- 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		kg		kg		kg		mm				mm		daN	
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

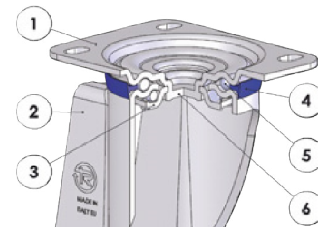
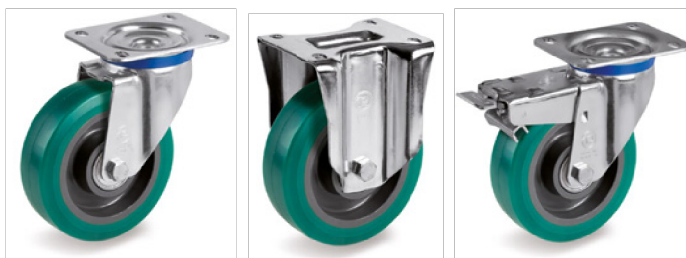


INOX

- 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

Wheel		100mm			125mm			125ER			160mm			160ER			200mm			200ER			4 km/h	daN
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										

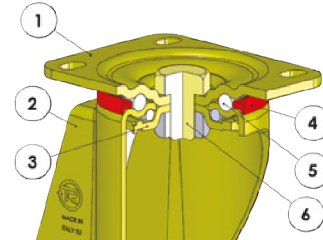
Medium duty brackets M - max carrying capacity 500 daN



- 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-rieveted
- Available with adjustable total front foot brake

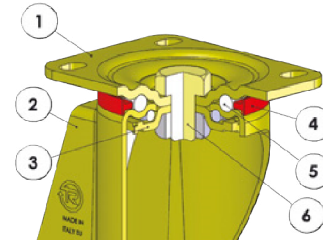
Wheel		160mm			160ER			200mm			200ER			4 km/h	daN
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm			
160	50	2,49	624544	2,19	627724	2,78	627444	199	140x110	105x80	11	58	178	400	
160ER	50	2,43	624534	2,13	627734	2,72	627434	199	140x110	105x80	11	50	178	400	
200	50	3,20	624546	2,55	627726	3,58	627446	240	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: 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	daN
100	40	1,20	627622	0,82	628522	1,35	627222	138	100x85	80x60	9	46	123	230	230
125	40	1,35	627623	0,93	628523	1,50	627223	161	100x85	80x60	9	44	123	280	280
125ER	40	1,30	629313	0,88	629413	1,45	629513	161	100x85	80x60	9	44	123	250	250

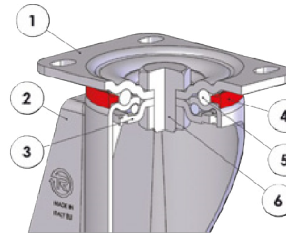


- 1) Plate: galvanised colonial steel plate
 - 2) Fork: galvanised colonial steel plate
 - 3) Ball race ring: galvanised colonial steel plate
 - 4) Dust seal: orange polyamide
 - 5) Swivel actions: double ball ring with grease lubrication
 - 6) King pin: steel bolt in grade 8.8 steel and steel nut
-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

mm	mm	kg	COD.	kg	COD.	kg	COD.	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	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