



"TR" POLYURETHANE WHEELS WITH ALUMINIUM CENTRE



-  80-200 mm
-  92 Shore A
-  220-850 daN
4 km/h
-  170-680 daN
6 km/h
-  150-360 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		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
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.



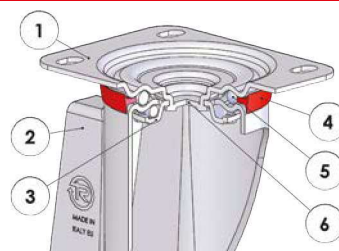
R $10^9\Omega$

ESD polyurethane wheels, with electrical resistance <math><10^9\Omega</math> (page 314)



mm		kg	COD.	kg	COD.	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		kg	CODE	kg	CODE	kg	CODE	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

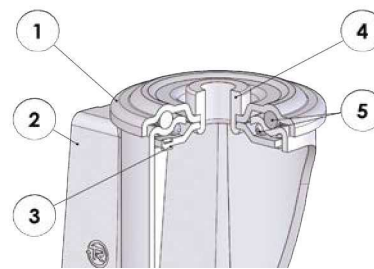
Standard-duty brackets NL - max carrying capacity 300 daN



mm	mm	kg	COD.	mm	mm	mm	mm	mm	mm	mm	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	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

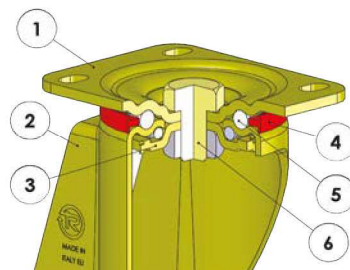
Medium-duty brackets M - max carrying capacity 500 daN



- 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:

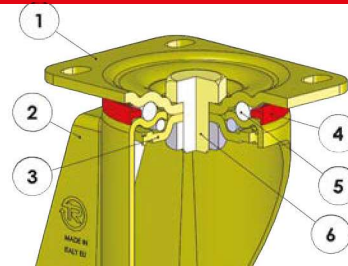


Directional lock for P-PT brackets d. 150-200 mm



Footguard for brackets NL-M-P-PT

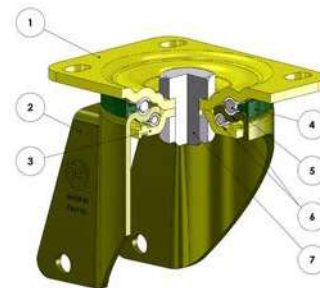
Medium-heavy duty brackets P - max carrying capacity 750 daN



- 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		kg	CODE	kg	CODE	kg	CODE	mm					4 km/h	6 km/h	
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		kg	COD.	kg	COD.	kg	COD.	mm					4 km/h	6 km/h	
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:

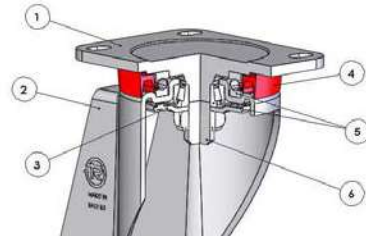


Directional lock for P-PT brackets d. 150-200 mm



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