SERIES 61

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE

80-200 mm

85 Shore A

75-300 daN
4 km/h

75-300 daN

-15 / +70 °C

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		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 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.

SERIES **61**

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE



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



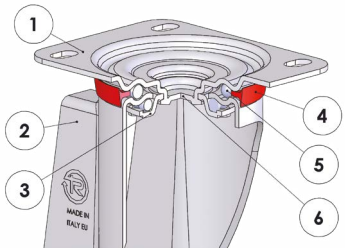
mm	mm	kg	COD.	kg	COD.	mm	mm	Static daN	daN	4 km/h daN
80	30	0,13	613101	0,13	613201	12	39	**160**	**75**	**75**
100	30	0,17	613102	0,17	613202	12	44	**200**	**120**	**120**
125	35	0,25	613103	0,25	613203	15	44	**350**	**180**	**180**
150	35	0,37	613105	0,37	613205	15	44	**400**	**220**	**230**
150	45	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.	Static daN	daN	4 km/h 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

		kg		kg		kg									4 km/h
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN
80	30	0,57	614201	0,42	615701	0,73	616601	107	100x85	80x60	9	40	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	40	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	40	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

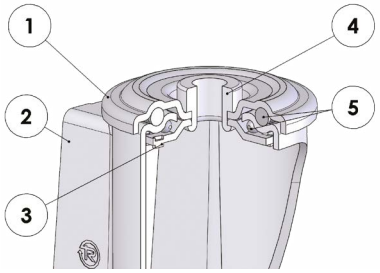


Directional lock
for brackets
d. 150-200 mm

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

											4 km/h
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN
80	30	0,51	617701	0,67	616401	107	73	12	40	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	40	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	40	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**

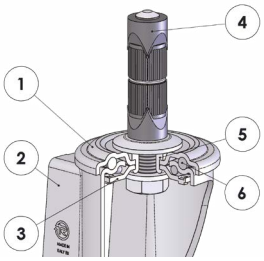
Options available to order:



Fitting with threaded stem

Standard-duty brackets NL - max carrying capacity 300 daN



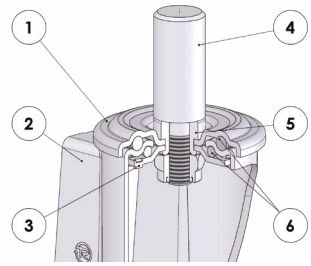


1) Plate: electrolytically galvanised steel plate
2) Fork: electrolytically galvanised steel plate
3) Ball race ring: electrolytically galvanised steel plate
4) Stem: zamak expander
5) King pin: bushing in electrolytically galvanised steel
6) Swivel actions: double ball ring with grease lubrication

Available with total front foot brake

												4 km/h
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN
80	30	0,63	619201	0,79	619301	109	20	65	20-24	40	120	**75**
100	30	0,70	619202	0,85	619302	130	20	65	20-24	35	120	**120**
125	35	0,90	619203	1,07	619303	158	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 galvanised steel
6) Swivel actions: double ball ring with grease lubrication

Available with total front foot brake

												4 km/h
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN
100	30	0,75	616102	0,90	616202	128	73	22	47	35	120	**120**
125	35	0,95	616103	1,12	616203	156	73	22	47	37	120	**180**
150	35	1,08	616104	1,24	616204	182	73	22	47	34	120	**220**
150	45	2,10	616111	2,40	616211	188	102	26	56	56	156	**250**
200	50	2,53	616106	2,84	616206	236	102	26	56	56	156	**300**

Options available to order:



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



Fitting with solid stem with customised dimensions

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE

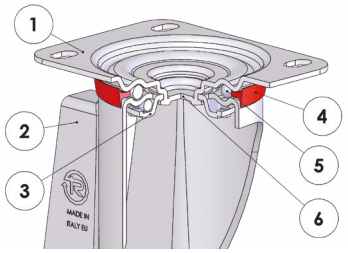
Standard-duty brackets NLX in stainless steel - max carrying capacity 300 daN

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

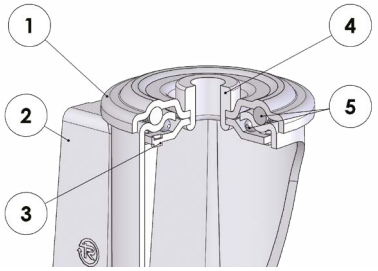
Available with total front foot brake

		S1 kg		S2 kg		S3 kg								4 km/h
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN
80	30	0,57	614401	0,42	615101	0,73	616701	107	100x85	80x60	9	40	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	40	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	40	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

											4 km/h
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN
80	30	0,51	617901	0,67	618801	107	73	12	40	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	40	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	0,71	616501	107	73	12	40	120	**85**
100	30	0,62	616302	0,78	616502	128	73	12	35	120	**120**
125	35	0,74	616303	0,90	616503	156	73	12	37	120	**180**
150	45	1,34	616311	1,50	616511	188	102	20	56	156	**250**
160	50	2,02	616310	2,32	616510	193	102	20	56	156	**275**
200	50	2,37	616306	2,68	616506	236	102	20	56	156	**300**