SERIES 72 AL

SIGMA ELASTIC RUBBER WHEELS WITH ALUMINIUM CENTRE

100-250 mm

70 Shore A

180-500 daN
4 km/h

140-400 daN
6 km/h

180-300 daN

-20 / +70 °C



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		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 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 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

SERIES **72 AL**

SIGMA ELASTIC RUBBER WHEELS WITH ALUMINIUM CENTRE



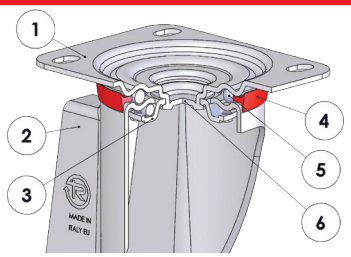
										Static		4 km/h	6 km/h
mm	mm	kg	COD.	kg	COD.	mm	mm.	mm	mm	daN	daN	daN	daN
100	40	0,44	721202	0,39	723102	15	40	32	9	**250**	**180**	**180**	**140**
125	40	0,76	721103	0,50	723003	20	40	47	14	**280**	**200**	**200**	**160**
125	40	0,78	721203	0,52	723103	20	50	47	14	**280**	**200**	**200**	**160**
125	50	0,84	722153	0,62	724153	20	58	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	1,82	721316	1,71	723126	25	58	47	14	**1000**	**300**	**500**	**400**
200	50	2,00	721206	1,71	723106	20	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

														4 km/h
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	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

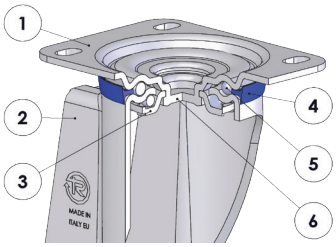
Standard-duty brackets NL - max carrying capacity 300 daN



mm	mm	kg	COD.	mm	mm	mm	mm	mm	mm	mm	mm	mm	daN
125	50	2,41	724703	166	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	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



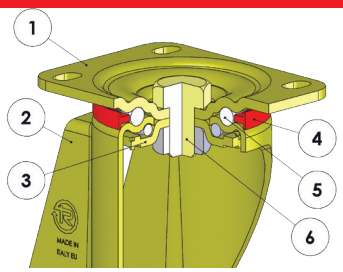
Wheel
with grey rubber
tyre

SERIES **72AL**

SIGMA ELASTIC RUBBER WHEELS WITH ALUMINIUM CENTRE

Medium-heavy duty brackets P - max carrying capacity 500 daN





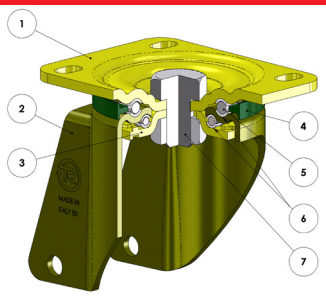
1) Plate: yellow galvanised steel plate
2) Fork: yellow galvanised steel plate
3) Ball race ring: yellow galvanised steel plate
4) Dust seal: orange polyamide
5) Swivel actions: double ball ring with grease lubrication
6) King pin: steel bolt in grade 8.8 steel and steel nut

Available with adjustable total rear foot brake

		kg	CODE	kg	CODE	kg	CODE								4 km/h	6 km/h	
mm	mm	kg	CODE	kg	CODE	kg	CODE	mm	mm	mm	mm	mm	mm	daN	daN		
100	40	1.31	727602	0.81	728512	1,48	727202	138	100x85	80x60	9	46	123	**180**	**140**		
125	50	2.30	727613	1.66	728523	2,86	727213	170	140x110	105x80	11	70	126	**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

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



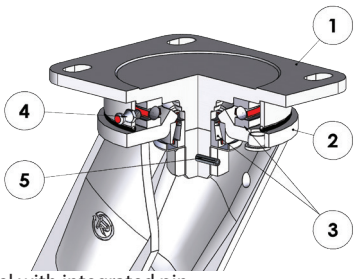
Wheel with grey rubber tyre



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

Electrowelded brackets EE MHD - max carrying capacity 500 daN





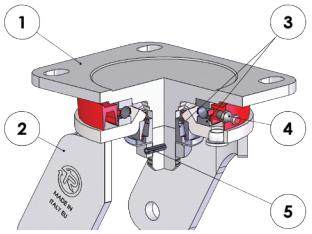
1) Plate: forged steel with integrated pin
2) Fork: deep-drawn legs electro-welded to the flange
3) Swivel actions: axial ball bearing and tapered roller bearing
4) Grease nipple
5) Anti-loosening system nut

Available with adjustable total rear foot brake

															4 km/h	6 km/h
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

											4 km/h	6 km/h
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

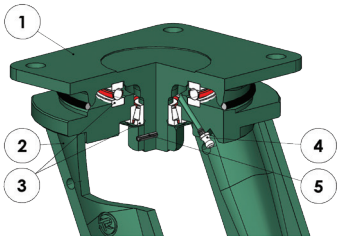


Directional lock
for brackets EE MHD
- EE HD - EEG MHD - EES
MHD: see page 428

SIGMA ELASTIC RUBBER WHEELS WITH ALUMINIUM CENTRE

Twin electrowelded brackets EEG HD - max carrying capacity 1000 daN



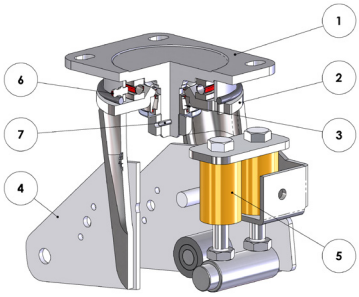


1) Plate: forged steel with integrated pin
2) Fork: deep-drawn legs electro-welded to the flange
3) Swivel actions: axial ball bearing and tapered roller bearing
4) Grease nipple
5) Anti-loosening system nut

		kg	CODE		kg	CODE							4 km/h	6 km/h
mm	mm							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 electrolitically 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

															MIN	MAX	4 km/h	6 km/h	
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	daN	daN	daN	daN	
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 428