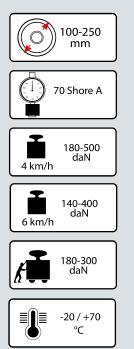


## SIGMA ELASTIC RUBBER WHEELS WITH ALUMINIUM CENTRE





#### 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

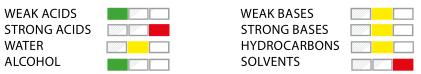
The excellent elasticity guarantees an easy overcoming of obstacles, vibration damping and noise reduction during use.

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 industrialhandling, 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.



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



# **T22** SIGMA ELASTIC RUBBER WHEELS WITH ALUMINIUM CENTRE



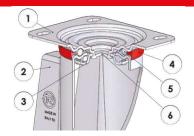
|     |    | (Ling) | $\bigcirc$ | (Ig) |        |    | -   |    | <b>→</b> [ <u>+</u> ] | Static | ſ.  | 4 km/h | 6 km/h |      |
|-----|----|--------|------------|------|--------|----|-----|----|-----------------------|--------|-----|--------|--------|------|
| mm  | mm | kg     | CODE       | kg   | CODE   | mm | mm. | mm | mm                    | daN    | daN | daN    | daN    | <br> |
| 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









- Plate: electrolytically galvanised steel plate
   Fork: electrolytically galvanised steel plate
   Ball race ring: electrolytically galvanised steel plate
- 4) Dust seal: orange polyethylene
- Swivel actions: double ball ring with grease lubrication 5) 6) King pin: integrated with the plate and cold-riveted Available with total front foot brake
- 4 km/h (kg) (kg) (kg) CODE CODE CODE daN mm kg kg kg mm mm mm mm mm mm mm 120 180 100 0.96 0.71 1.17 727302 128 37 40 724402 726202 0 0 100x85 80x60 9 0 Ξ 125 0 726213 727313 230 50 1.49 724413 1.14 2.37 166 140x110 105x80 11 57 156 160 50 2.59 724410 0 2.22 726210 0 2.80 727310 0 199 140x110 105x80 11 56 156 300 0 Ð 180 50 2.85 724405 2.56 726205 3.06 727305 219 140x110 105x80 11 56 156 300 0 Ξ. 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



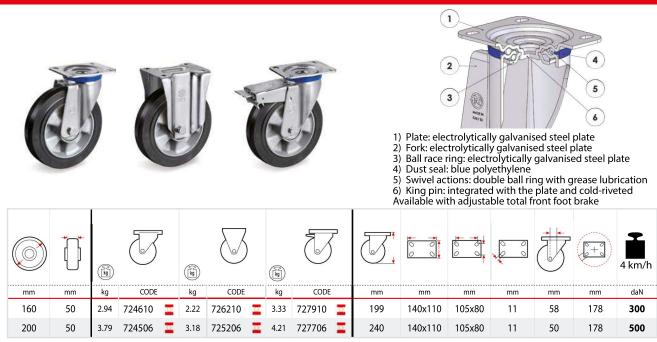
**Directional lock** for brackets d. 150-200 mm

#### Standard-duty brackets NL - max carrying capacity 300 daN



| Ø   |    | (kg) | J.     | J.  |         |        | 000 | ++ |    |      |    |      | 4 km/h |
|-----|----|------|--------|-----|---------|--------|-----|----|----|------|----|------|--------|
| mm  | mm | kg   | COD.   | 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



#### Options available to order

Wheel with grey rubber tyre



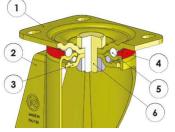
# **72** sigma elastic rubber wheels with aluminium centre

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









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

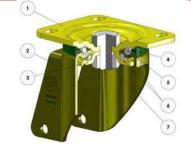
| $\bigcirc$ |    | (g   | V      |     | (kg) | $\bigcup$ |   | وي   | J      | ١٦ | J.  |         |        | 000 | <b>F</b> | ( <u>+</u> ) | 4 km/h | 6 km/h |
|------------|----|------|--------|-----|------|-----------|---|------|--------|----|-----|---------|--------|-----|----------|--------------|--------|--------|
| mm         | mm | kg   | CODE   |     | kg   | CODE      |   | kg   | CODE   |    | mm  | mm      | mm     | mm  | mm       | mm           | daN    | daN    |
| 100        | 40 | 1.31 | 727602 | 0   | 0.81 | 728512    | 0 |      |        |    | 138 | 100x85  | 80x60  | 9   | 46       |              | 180    | 140    |
| 125        | 50 | 2.30 | 727613 | 0   | 1.66 | 728523    | Ū |      |        |    | 170 | 140x110 | 105x80 | 11  | 70       |              | 230    | 180    |
| 160        | 50 | 3.57 | 727610 | 0   | 2.08 | 728514    | 0 | 4.14 | 727204 | 0  | 205 | 140x110 | 105x80 | 11  | 70       | 126          | 300    | 240    |
| 180        | 50 | 3.81 | 727605 | (0) | 2.39 | 728515    | Ū | 4.38 | 727205 | 0  | 228 | 140x110 | 105x80 | 11  | 70       | 126          | 350    | 280    |
| 200        | 50 | 4.46 | 727516 |     | 3.00 | 728516    | 0 | 5.06 | 727206 | Ð. | 250 | 140x110 | 105x80 | 11  | 70       | 126          | 500    | 400    |
| 250        | 50 | 4.74 | 727518 | 0   | 3.64 | 728518    | Ξ | 5.44 | 727208 | 0  | 298 | 140x110 | 105x80 | 11  | 66       | 173          | 500    | 400    |

Heavy-duty PT brackets with hardened ball race grooves - max carrying capacity 500 daN









- Plate: yellow galvanised steel plate
   Fork: yellow galvanised steel plate

- 2) Fork: yeilow 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

|     |    |      | J        | (kg) | $\bigcup$ | E)   | F        | J   |         |        | 000 |    |     | 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 茎 | 2,08 | 728514 🔼  | 4,14 | 728204 茎 | 205 | 140x110 | 105x80 | 11  | 70 | 126 | 300    | 240    |
| 180 | 50 | 3,90 | 725505 罩 | 2,39 | 728515 🧮  | 4,38 | 728205 茎 | 228 | 140x110 | 105x80 | 11  | 70 | 126 | 350    | 280    |
| 200 | 50 | 4,46 | 725516 📮 | 3,00 | 728516 📮  | 5,03 | 728206 革 | 250 | 140x110 | 105x80 | 11  | 70 | 126 | 500    | 400    |

Options available to order

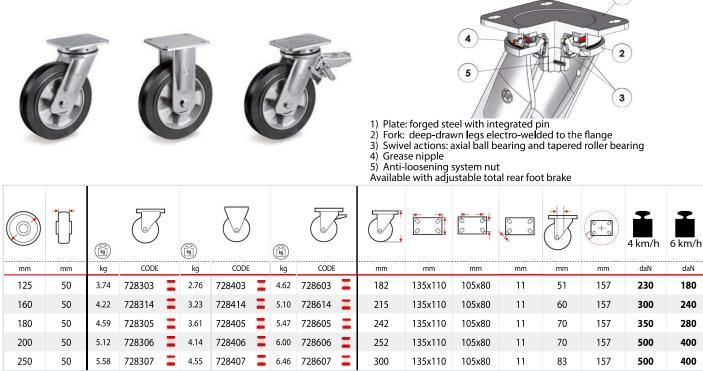


Wheel with grey rubber tyre



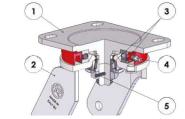
**Directional lock** for brackets P-PT d. 150-200 mm

#### Electrowelded brackets EE MHD - max carrying capacity 500 daN



#### Twin electrowelded brackets EEG MHD - max carrying capacity 400 daN





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

|     | *     |      | V      |    | (See |        |   |     |         |        | 00 |    | 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 | Ū. | 2.60 | 728162 | С | 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

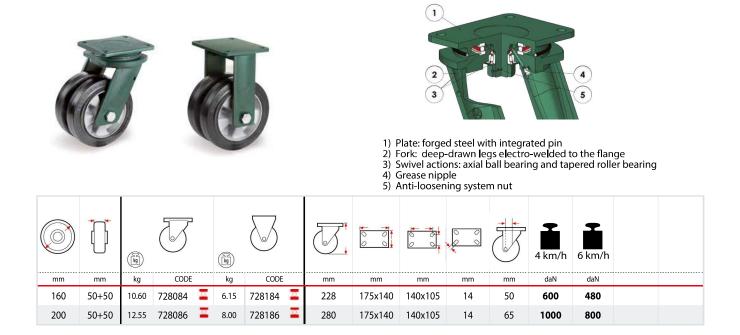


Directional lock for brackets EE MHD - EE HD - EEG MHD - EES MHD: see page 420



# **72** SIGMA ELASTIC RUBBER WHEELS WITH ALUMINIUM CENTRE

#### Twin electrowelded brackets EEG HD - max carrying capacity 1000 daN





**INDUSTRIAL - HEAVY DUTY LOADS AND MECHANICAL HANDLING** 

#### Electrowelded brackets EE MHD - max carrying capacity 500 daN - damping up to 400 daN







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

| Ø   |    | (kg  |          | all a |          | E)   | F        |     |         |        | 000<br>000 |     | ( <u>0</u> +0) | M  |     |     | 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 革 | 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 茎 | 7,44  | 726408 🌄 | 9,89 | 726508 茎 | 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