SERIES 53

# BLACK RUBBER WHEELS WITH PRESSED STEEL DISCS

80-280 mm

80 Shore A

65-390 daN
4 km/h

50-200 daN

-20 / +60 °C



## Description

Tyre: black standard rubber, hardness 80 Shore A.

Centre: electrolytically galvanised steel plate, made of two riveted discs.

Hub with polyamide self-lubricating plain bore.
Cylindrical roller bearing hub in plastic cage.

## Uses

Suitable for trolleys with light-duty loads, also in the presence of obstacles and for indoor-outdoor use.
Examples of recommended applications: tool trolleys, trolleys for industrial indoor handling, small mobile scaffoldings, waste bin containers.

## Environments of use

Suitable for industrial and institutional environments, also in presence of humidity and oils. Not suitable in presence of aggressive chemical agents.

| | | | |
|---|---|---|---|
| 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 floors, even outdoors.
They easily overcome obstacles, do not damage fragile floors, but they may mark the floor.



## Force required to push or tow a wheel

| | 50 kg | 100 kg | 150 kg | 200 kg | 250 kg | 300 kg |
|---|---|---|---|---|---|---|
| 80 mm | 5 | ---- | ---- | ---- | ---- | ---- |
| 100 mm | 3 | ---- | ---- | ---- | ---- | ---- |
| 125 mm | 2.5 | 6 | ---- | ---- | ---- | ---- |
| 140 mm | 2.2 | 5.5 | 9 | ---- | ---- | ---- |
| 150 mm | 2 | 5 | 8 | ---- | ---- | ---- |
| 160 mm | 1.5 | 3.5 | 7.5 | ---- | ---- | ---- |
| 180 mm | 1 | 3 | 6.1 | ---- | ---- | ---- |
| 200 mm | 1 | 3 | 5.5 | 8.5 | ---- | ---- |
| 225 mm | < 1 | 2.1 | 4.8 | 7.5 | 11 | ---- |
| 250 mm | < 1 | 2 | 4 | 6 | 9 | 12 |
| 280 mm | < 1 | 2 | 3.5 | 5 | 7 | 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



**Light-duty brackets SL**
Maximum carrying capacity 130 daN - available diameters 80-125 mm
Top plate and bolt hole fittings. Available with front brake.



**Standard-duty brackets NL**
Maximum carrying capacity 390 daN - available diameters 80-280 mm
Top plate, bolt hole and solid stem fittings. Available with front brake.

## Options available to order:

The series 53 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.




Wheel with conductive rubber tread
(roller bearing hub only, see p. 312)

# BLACK RUBBER WHEELS WITH PRESSED STEEL DISCS



| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Static | | 4 km/h |
| mm | mm | kg | CODE | mm | mm | daN | daN | daN |
| 80 | 25 | 0.17 | 531121 | 12 | 39 | **260** | **50** | **65** |
| 100 | 30 | 0.28 | 531122 | 12 | 44 | **300** | **75** | **80** |
| 100 | 30 | 0.25 | 531132 | 12 | 39 | **300** | **75** | **80** |
| 125 | 37.5 | 0.51 | 531103 | 15 | 44 | **330** | **85** | **130** |
| 125 | 37.5 | 0.44 | 531133 | 12 | 39 | **330** | **85** | **130** |
| 140 | 37.5 | 0.64 | 531104 | 15 | 44 | **340** | **95** | **150** |
| 150 | 40 | 0.73 | 531111 | 15 | 44 | **350** | **100** | **170** |
| 160 | 40 | 1.00 | 531110 | 20 | 58 | **370** | **120** | **180** |
| 180 | 45 | 1.33 | 531105 | 20 | 58 | **390** | **130** | **200** |
| 200 | 50 | 1.75 | 531106 | 20 | 58 | **410** | **140** | **230** |
| 200 | 50 | 1.74 | 531206 | 25 | 58 | **410** | **140** | **230** |
| 225 | 50 | 2.16 | 531107 | 20 | 58 | **420** | **160** | **250** |
| 250 | 60 | 3.24 | 531108 | 25 | 73 | **500** | **175** | **300** |
| 280 | 60 | 3.92 | 531109 | 25 | 73 | **550** | **200** | **390** |



| | | | | | | Static | | 4 km/h |
|---|---|---|---|---|---|---|---|---|
| mm | mm | kg | CODE | mm | mm | daN | daN | daN |
| 80 | 25 | 0.19 | 533121 | 12 | 39 | **260** | **50** | **65** |
| 100 | 30 | 0.31 | 533122 | 12 | 44 | **300** | **75** | **80** |
| 125 | 37.5 | 0.54 | 533103 | 15 | 44 | **330** | **85** | **130** |
| 140 | 37.5 | 0.66 | 533104 | 15 | 44 | **340** | **95** | **150** |
| 150 | 40 | 0.76 | 533111 | 15 | 44 | **350** | **100** | **170** |
| 160 | 40 | 1.07 | 533110 | 20 | 58 | **370** | **120** | **180** |
| 180 | 45 | 1.39 | 533105 | 20 | 58 | **390** | **130** | **200** |
| 200 | 50 | 1.81 | 533106 | 20 | 58 | **410** | **140** | **230** |
| 200 | 50 | 1.78 | 533206 | 25 | 58 | **410** | **140** | **230** |
| 225 | 50 | 2.42 | 533107 | 20 | 58 | **420** | **160** | **250** |
| 250 | 60 | 3.14 | 533108 | 25 | 73 | **500** | **175** | **300** |
| 280 | 60 | 3.84 | 533109 | 25 | 73 | **550** | **200** | **390** |

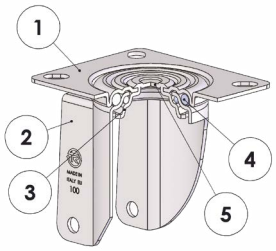
## Options available to order:



Wheel with conductive rubber tread
(roller bearing hub only, see p. 312)

## Light-duty brackets SL - max carrying capacity 130 daN

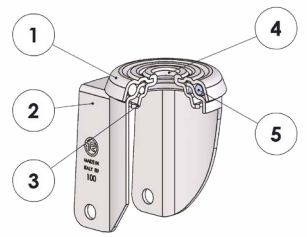





1) Plate in electrolytically galvanised printed steel plate
2) Fork in electrolytically galvanised printed steel plate
3) Ball Race Ring in electrolytically galvanised printed steel plate
4) Swivel actions: on two ball race rings lubricated with grease
5) Bracket closing king pin integrated with ball race ring
Available with total front foot brake

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kg | | kg | | kg | | | | | | | | | | 4 km/h |
| mm | mm | kg | CODE | kg | CODE | kg | CODE | mm | mm | mm | mm | mm | mm | mm | daN |
| 80 | 25 | 0.51 | 535801 | 0.50 | 536001 | 0.63 | 536301 | 110 | 95x80 | 100x85 | 80x60 | 8.8 | 33 | 120 | **65** |
| 100 | 30 | 0.60 | 535802 | 0.59 | 536002 | 0.74 | 536302 | 127 | 95x80 | 100x85 | 80x60 | 8.8 | 29 | 120 | **80** |
| 125 | 37.5 | 0.87 | 535803 | 0.85 | 536003 | 0.98 | 536303 | 154 | 95x80 | 100x85 | 80x60 | 8.8 | 32 | 120 | **130** |





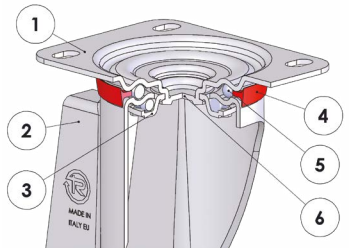

1) Plate in electrolytically galvanised printed steel plate
2) Fork in electrolytically galvanised printed steel plate
3) Ball Race Ring in electrolytically galvanised printed steel plate
4) Bracket closing king pin integrated with ball race ring
5) Swivel actions: on two ball race rings lubricated with grease
Available with total front foot brake

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kg | | kg | | | | | | | 4 km/h |
| mm | mm | kg | CODE | kg | CODE | mm | mm | mm | mm | mm | daN |
| 80 | 25 | 0.46 | 536101 | 0.56 | 536201 | 110 | 63 | 12 | 33 | 120 | **65** |
| 100 | 30 | 0.55 | 536102 | 0.66 | 536202 | 127 | 63 | 12 | 29 | 120 | **80** |
| 125 | 37.5 | 0.81 | 536103 | 0.91 | 536203 | 154 | 63 | 12 | 32 | 120 | **130** |

# BLACK RUBBER WHEELS WITH PRESSED STEEL DISCS

## Standard-duty brackets NL - max carrying capacity 390 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 | |
| 80 | 25 | 0.69 | 535001 | 0.49 | 535701 | 0.87 | 535401 | 107 | 100x85 | 80x60 | 9 | 40 | 120 | **65** | |
| 100 | 30 | 0.82 | 535002 | 0.62 | 535702 | 1.00 | 535402 | 128 | 100x85 | 80x60 | 9 | 35 | 120 | **80** | |
| 125 | 37.5 | 1.18 | 535003 | 0.92 | 535703 | 1.30 | 535403 | 156 | 100x85 | 80x60 | 9 | 37 | 120 | **130** | |
| 140 | 37.5 | 1.27 | 535004 | 1.09 | 535704 | 1.46 | 535404 | 177 | 100x85 | 80x60 | 9 | 34 | 120 | **150** | |
| 150 | 40 | 1.40 | 535011 | 1.22 | 535711 | 1.57 | 535411 | 182 | 100x85 | 80x60 | 9 | 34 | 120 | **170** | |
| 160B | 40 | 1.75 | 535012 | 1.55 | 535712 | | | 185 | 100x85 | 80x60 | 9 | 50 | | **180** | |
| 160 | 40 | 2.44 | 535010 | 2.07 | 535710 | 2.69 | 535410 | 199 | 140x110 | 105x80 | 11 | 56 | 156 | **180** | |
| 180 | 45 | 2.78 | 535005 | 2.49 | 535705 | 3.07 | 535405 | 219 | 140x110 | 105x80 | 11 | 56 | 156 | **200** | |
| 200 | 50 | 3.25 | 535006 | 2.89 | 535706 | 3.39 | 535406 | 240 | 140x110 | 105x80 | 11 | 56 | 156 | **230** | |
| 225 | 50 | 3.67 | 535007 | 3.18 | 535707 | 3.95 | 535407 | 263 | 140x110 | 105x80 | 11 | 56 | 156 | **250** | |
| 250 | 60 | 6.66 | 534708 | 5.16 | 535708 | | | 296 | 200x160 | 160x120 | 14 | 87 | | **300** | |
| 280 | 60 | 7.35 | 534709 | 5.84 | 535709 | | | 311 | 200x160 | 160x120 | 14 | 87 | | **390** | |
| 80 | 25 | 0.70 | 535101 | 0.51 | 535901 | 0.89 | 535421 | 107 | 100x85 | 80x60 | 9 | 40 | 120 | **65** | |
| 100 | 30 | 0.84 | 535102 | 0.65 | 535902 | 1.03 | 535422 | 128 | 100x85 | 80x60 | 9 | 35 | 120 | **80** | |
| 125 | 37.5 | 1.21 | 535103 | 0.95 | 535903 | 1.33 | 535423 | 156 | 100x85 | 80x60 | 9 | 37 | 120 | **130** | |
| 140 | 37.5 | 1.34 | 535104 | 0.96 | 535904 | 1.49 | 535424 | 177 | 100x85 | 80x60 | 9 | 34 | 120 | **150** | |
| 150 | 40 | 1.45 | 535111 | 1.07 | 535911 | 1.60 | 535431 | 182 | 100x85 | 80x60 | 9 | 34 | 120 | **170** | |
| 160B | 40 | 1.81 | 535112 | 1.61 | 535912 | | | 185 | 100x85 | 80x60 | 9 | 50 | | **180** | |
| 160 | 40 | 2.50 | 535110 | 2.13 | 535910 | 2.75 | 535430 | 199 | 140x110 | 105x80 | 11 | 56 | 156 | **180** | |
| 180 | 45 | 2.85 | 535105 | 2.56 | 535905 | 3.13 | 535425 | 219 | 140x110 | 105x80 | 11 | 56 | 156 | **200** | |
| 200 | 50 | 3.31 | 535106 | 3.05 | 535906 | 3.45 | 535426 | 240 | 140x110 | 105x80 | 11 | 56 | 156 | **230** | |
| 225 | 50 | 3.93 | 535107 | 3.45 | 535907 | 4.22 | 535427 | 263 | 140x110 | 105x80 | 11 | 56 | 156 | **250** | |
| 250 | 60 | 6.56 | 534908 | 5.06 | 535908 | | | 296 | 200x160 | 160x120 | 14 | 87 | | **300** | |
| 280 | 60 | 7.27 | 534909 | 5.76 | 535909 | | | 311 | 200x160 | 160x120 | 14 | 87 | | **390** | |

## Options available to order:



Wheel with conductive rubber tread (roller bearing hub only, see p. 312)



Bracket with rear brake d. 150-200 mm



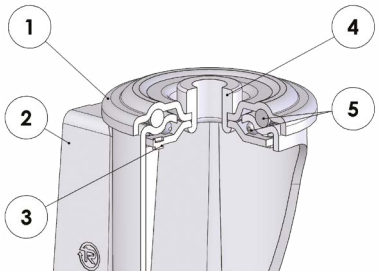
Bracket with directional lock d. 80-125 mm



Directional lock for brackets d. 150-200 mm

## Standard-duty brackets NL - max carrying capacity 230 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 | CODE | kg | CODE | mm | mm | mm | mm | mm | daN |
| 80 | 25 | 0.61 | 537701 | 0.78 | 538201 | 107 | 73 | 12 | 40 | 120 | **65** |
| 100 | 30 | 0.74 | 537702 | 0.94 | 538202 | 128 | 73 | 12 | 35 | 120 | **80** |
| 125 | 37.5 | 1.09 | 537703 | 1.24 | 538203 | 156 | 73 | 12 | 37 | 120 | **130** |
| 140 | 37.5 | 1.23 | 537704 | 1.38 | 538204 | 177 | 73 | 12 | 34 | 120 | **150** |
| 150 | 40 | 1.35 | 537711 | 1.49 | 538211 | 182 | 73 | 12 | 34 | 120 | **170** |
| 160 | 40 | 1.78 | 537710 | 2.04 | 538210 | 193 | 102 | 20 | 56 | 156 | **180** |
| 180 | 45 | 2.66 | 537705 | 3.95 | 538205 | 214 | 102 | 20 | 56 | 156 | **200** |
| 200 | 50 | 3.16 | 537706 | 3.29 | 538206 | 236 | 102 | 20 | 56 | 156 | **230** |
| 80 | 25 | 0.63 | 537901 | 0.80 | 538221 | 107 | 73 | 12 | 40 | 120 | **65** |
| 100 | 30 | 0.76 | 537902 | 0.96 | 538222 | 128 | 73 | 12 | 35 | 120 | **80** |
| 125 | 37.5 | 1.12 | 537903 | 1.27 | 538223 | 156 | 73 | 12 | 37 | 120 | **130** |
| 140 | 37.5 | 1.26 | 537904 | 1.41 | 538224 | 177 | 73 | 12 | 34 | 120 | **150** |
| 150 | 40 | 1.38 | 537911 | 1.52 | 538231 | 182 | 73 | 12 | 34 | 120 | **170** |
| 160 | 40 | 1.85 | 537910 | 2.10 | 538230 | 193 | 102 | 20 | 56 | 156 | **180** |
| 180 | 45 | 2.73 | 537905 | 3.01 | 538225 | 214 | 102 | 20 | 56 | 156 | **200** |
| 200 | 50 | 3.22 | 537906 | 3.35 | 538226 | 236 | 102 | 20 | 56 | 156 | **230** |

## Options available to order:



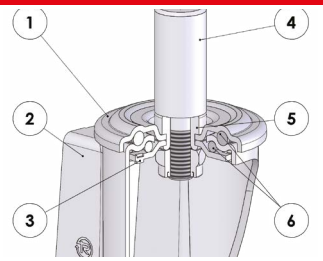
Wheel with conductive rubber tread (roller bearing hub only, see p. 312)

# BLACK RUBBER WHEELS WITH PRESSED STEEL DISCS

## Standard-duty brackets NL - max carrying capacity 230 daN








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

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | mm | kg | CODE | kg | CODE | mm | mm | mm | mm | mm | mm | daN |
| 100 | 30 | 0,88 | 539202 | 1,03 | 538802 | 128 | 73 | 22 | 47 | 35 | 120 | **80** |
| 125 | 37.5 | 1,21 | 539203 | 1,38 | 538803 | 156 | 73 | 22 | 47 | 37 | 120 | **130** |
| 150 | 40 | 1,46 | 539211 | 1,62 | 538811 | 182 | 73 | 22 | 47 | 34 | 120 | **170** |
| 160 | 40 | 2.59 | 539210 | 2.89 | 538810 | 193 | 102 | 26 | 56 | 56 | 156 | **180** |
| 160 | 40 | 3,23 | 535520 | 3,53 | 535620 | 193 | 102 | 40 | 86 | 56 | 156 | **180** |
| 180 | 45 | 3,59 | 535515 | 3,89 | 535615 | 214 | 102 | 40 | 86 | 56 | 156 | **200** |
| 200 | 50 | 3.40 | 539206 | 3.71 | 538806 | 236 | 102 | 26 | 56 | 56 | 156 | **230** |
| 200 | 50 | 4,04 | 535516 | 4,35 | 535616 | 236 | 102 | 40 | 86 | 56 | 156 | **230** |