

Geared Motors RBM/I for travel wheel systems

Material: Housing: Aluminium, painted blue (RAL 5009).
Gears: bevel-gear system, case hardened, fatigue endurable.
Lubrication: Mineral oil.
Motor: Three-phase AC

400 V 50 Hz, dual speed, with brake.

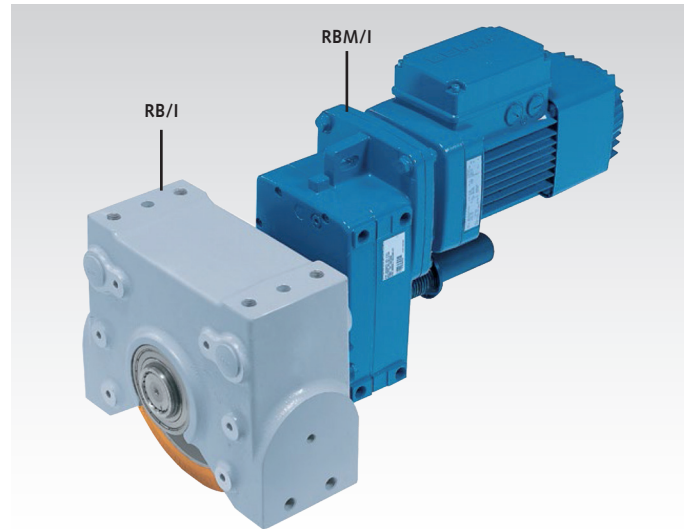
Other motor and gear box versions (e.g. with frequency inverter or angular gear) on request.

Ready-to-mount dual-speed geared motors incl. adaptor flange (as torque support) to be combined with travel-wheel sets RB/I. The mounting position can be modified in steps of 15°.

Single Wheel Drive: one geared motor RBM/I is flange-mounted onto one travel-wheel system RB/I. In carriages two opposing travel-wheel sets have to be powered.

Central Drive Set: the geared motor is flange-mounted onto the travel-wheel system. The connection with the opposing travel-wheel system is done with a central drive set (this set has to be ordered separately). The connecting shaft (output shaft) is already mounted on the geared motors (covered with protection sleeve and protection cap).

Ordering Details: e.g.: Product No., Type, Size



Travel-Wheel System RB/I has to be ordered separately.

Geared Motors RBM/I for Travel-Wheel System Size 200

| Product No. | Motor-Type | P* kW | Transm. i | Current* A | Weight kg | Dimensions Table |
|-------------|------------|-------|-----------|------------|-----------|------------------|
| 482 211 46 | 63A8/2 | 0,25 | 123 :1 | 0,95 | 23 | 1 |
| 482 212 46 | 71A8/2 | 0,34 | 126 :1 | 1,0 | 29 | 3 |
| 482 213 46 | 80A8/2 | 0,50 | 39,9 :1 | 1,4 | 34 | 2 |
| 482 214 46 | 90B8/2 | 0,80 | 39,4 :1 | 2,3 | 46 | 4 |
| 482 215 46 | 100A8/2 | 1,20 | 19,9 :1 | 3,2 | 54 | 4 |
| 482 221 46 | 63A8/2 | 0,25 | 135 :1 | 0,95 | 27 | 3 |
| 482 222 46 | 71A8/2 | 0,34 | 44,1 :1 | 1,0 | 25 | 1 |
| 482 223 46 | 90B8/2 | 0,50 | 45,5 :1 | 1,4 | 46 | 4 |
| 482 224 46 | 90B8/2 | 0,80 | 23 :1 | 2,3 | 46 | 4 |

* Values at double-pole operation (high speeds).

Selection Tales for Travel-Wheel Systems

First the Travel-Wheel-System Size (200 or 250 depending on the ultimate load) and Type of Travel Wheel (cast iron flanged wheel or Hydropur-tyre wheel, depending on the operating conditions)

Geared Motors RBM/I for Travel-Wheel System Size 250

| Product No. | Motor-Type | P* kW | Transm. i | Current* A | Weight kg | Dimensions Table |
|-------------|------------|-------|-----------|------------|-----------|------------------|
| 483 231 46 | 63A8/2 | 0,25 | 156 :1 | 0,95 | 29 | 5 |
| 483 232 46 | 71A8/2 | 0,34 | 166 :1 | 1,0 | 34 | 8 |
| 483 233 46 | 90B8/2 | 0,80 | 48,3 :1 | 2,3 | 47 | 7 |
| 483 234 46 | 100A8/2 | 1,20 | 49 :1 | 3,2 | 66 | 9 |
| 483 235 46 | 100A8/2 | 1,20 | 25,3 :1 | 3,2 | 55 | 7 |
| 483 241 46 | 63A8/2 | 0,25 | 156 :1 | 0,95 | 29 | 5 |
| 483 242 46 | 71A8/2 | 0,34 | 166 :1 | 1,0 | 34 | 8 |
| 483 243 46 | 80A8/2 | 0,50 | 55,7 :1 | 1,4 | 39 | 6 |
| 483 244 46 | 90B8/2 | 0,80 | 55,7 :1 | 2,3 | 58 | 9 |
| 483 245 46 | 100A8/2 | 1,20 | 29,2 :1 | 3,2 | 55 | 7 |

has to be selected. The further selection is done according to the load to be moved per driving motor and according to the driving speed, the table value intersection point states the Product No. of the geared motor to be used.

Travel-Wheel System Size 200 with Cast Wheel, $R_{max.} = 2500$ kg

| Product No. matching geared motor RBM/I at speed in m/min* | Weight | 12.5 (3.1) | 40 (10) | 80 (20) |
|--|--------------|--------------|------------|---------|
| to 5000 kg | 482 211 46** | 482 213 46** | 482 215 46 | |
| to 6000 kg | 482 211 46** | 482 213 46** | - | |
| to 10000 kg | 482 212 46 | 482 214 46 | - | |
| to 11000 kg | 482 212 46 | - | - | |

* Values in brackets apply to lower speeds (the motors are dual-speed).

** Central drive not possible (due to stepped shaft or dimensions of motor casing).

Travel-Wheel System Size 200 with Hydropur Tyre $R_{max.} = 1200$ kg

| Product No. matching geared motor RBM/I at speed in m/min* | Weight | 12.5 (3.1) | 40 (10) | 80 (20) |
|--|------------|--------------|------------|---------|
| to 2000 kg | 482 221 46 | 482 222 46** | 482 224 46 | |
| to 4000 kg | 482 221 46 | 482 223 46 | - | |
| to 5000 kg | 482 221 46 | 482 223 46 | - | |

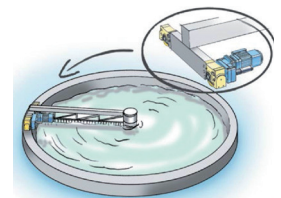
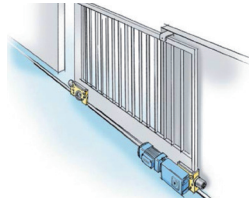
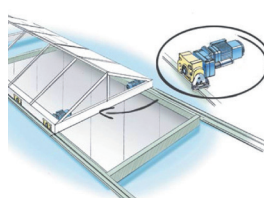
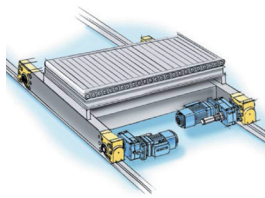
Travel-Wheel System Size 250 with Cast Wheel, $R_{max.} = 3500$ kg

| Product No. matching geared motor RBM/I at speed in m/min* | Weight | 12.5 (3.1) | 40 (10) | 80 (20) |
|--|--------------|--------------|--------------|---------|
| to 5000 kg | 483 231 46** | 483 233 46** | 483 235 46** | |
| to 8000 kg | 483 231 46** | 483 233 46** | - | |
| to 16000 kg | 483 232 46 | 483 234 46 | - | |

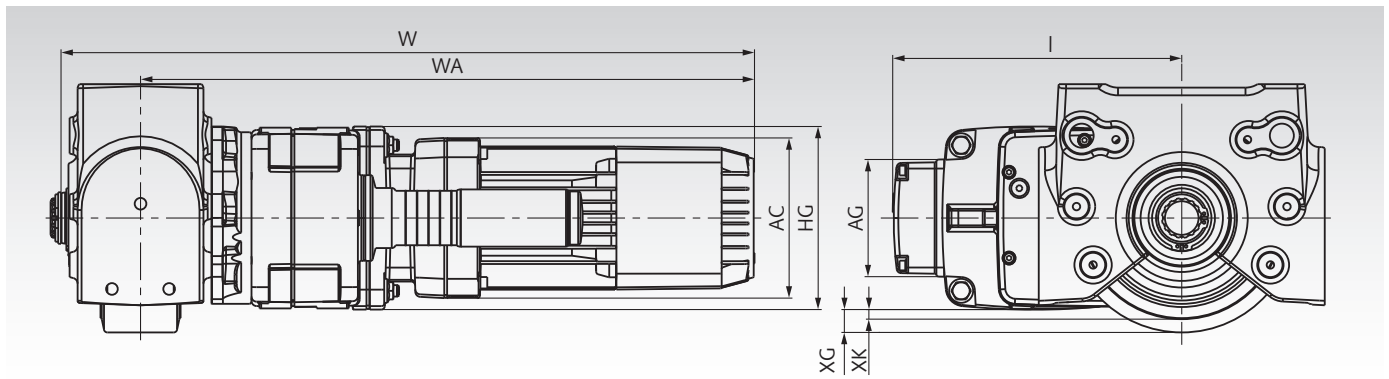
* Values in brackets apply to lower speeds (the motors are dual-speed). ** Central drive not possible.

Travel-Wheel System Size 250 with Hydropur Tyre, $R_{max.} = 1700$ kg

| Product No. matching geared motor RBM/I at speed in m/min* | Weight | 12.5 (3.1) | 40 (10) | 80 (20) |
|--|--------------|--------------|--------------|---------|
| to 2000 kg | 483 241 46** | 483 243 46** | 483 245 46** | |
| to 4000 kg | 483 242 46 | 483 244 46 | - | |



Dimensions Table for Travel-Wheel System Drive RBM/I



| Dimensions Table | Size of Travel-Wheel System | L mm | HG mm | W mm | WA mm | AC mm | AG mm | XG (Vers.G) mm | XK (Vers.K) mm |
|------------------|-----------------------------|------|-------|------|-------|-------|-------|----------------|----------------|
| 1 | 200 | 228 | 131 | 608 | 539 | 140 | 103 | 17,5 | 30 |
| 2 | 200 | 238 | 131 | 664 | 595 | 157 | 103 | 9 | 21,5 |
| 3 | 200 | 253 | 160 | 615 | 546 | 140 | 103 | 7,5 | 20 |
| 4 | 200 | 281 | 160 | 715 | 646 | 196 | 133 | -10,5 | 2 |
| 5 | 250 | 253 | 160 | 641 | 563 | 140 | 103 | 30 | 45 |
| 6 | 250 | 263 | 160 | 697 | 619 | 157 | 103 | 30 | 45 |
| 7 | 250 | 281 | 160 | 741 | 663 | 196 | 133 | 12 | 27 |
| 8 | 250 | 272 | 190 | 650 | 572 | 140 | 103 | 15 | 30 |
| 9 | 250 | 300 | 190 | 750 | 672 | 196 | 133 | 12 | 27 |

Central Drive Set

Material: Splined shaft, coupling, washers and rings made from steel, shaft protection made from plastic.

Two sizes available suiting travel-wheel system 200 and 250. Two length for gauges up to 1500 mm or up to 2900 mm.

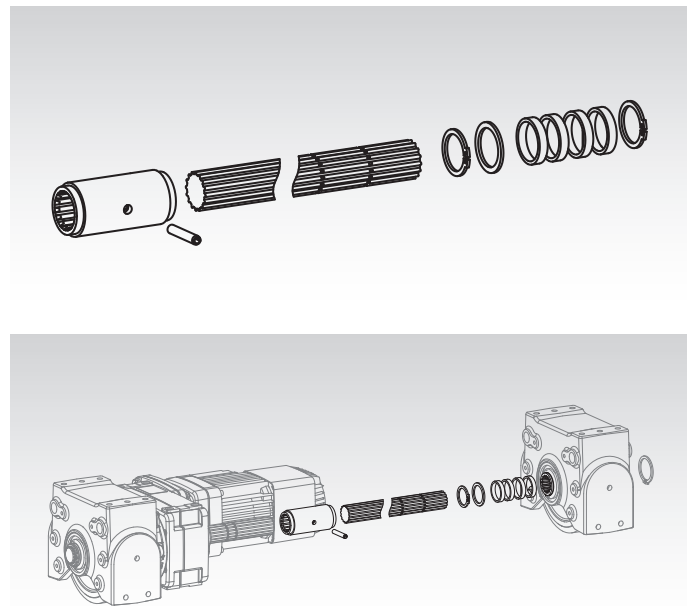
Consisting of: Splined shaft, coupling with pin, shaft protection, washers and retaining rings.

The central-drive set serves to combine two travel-wheel sets RB/I with a geared motor RBM/I to make up a central drive. To achieve this, the shaft is shortened to the required length on the coupling side, then the shaft protection cap is taken off the geared motor and the shafts are connected using the rigid coupling. The pin serves as stop inside the coupling. The shaft is fixed in the travel-wheel system with the retaining rings.

Ordering Details: e.g.: Product No, Type, Travel-Wheel System-Size, up to distance

| Product No. | Travel-Wheel Syst. Size | for Distance* up to mm | Shaft Ø mm | Shaft Length approx. mm | Weight kg |
|-------------|-------------------------|------------------------|------------|-------------------------|-----------|
| 480 256 84 | 200 | 1500 | 35 | 1115 | 9 |
| 480 257 84 | 200 | 2900 | 35 | 2515 | 18,5 |
| 480 356 84 | 250 | 1500 | 45 | 1070 | 13,5 |
| 480 357 84 | 250 | 2900 | 45 | 2470 | 29 |

* The shafts are to be shortened by the customer on assembly.

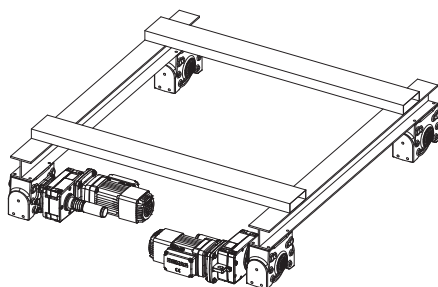


Application examples for Travel-Wheel System Drives

Two Single Drives:

4 x Travel-Wheel System RB/I
2 x Geared Motor RBM/I

Optional accessories:
4 x Buffer Set
4 x Pin Connection Set
2 x Horizontal Guide Roller Arrangement



Central Drive Set:

4 x Travel-Wheel System RB/I
1 x Geared Motor RBM/I
1 x Central Drive Set

Optional accessories:
4 x Buffer Set
4 x Pin Connection Set
2 x Horizontal Guide Roller Arrangement

