

The motor-in-wheel drive unit (MIWD) is an ideal choice for almost any indoor electric vehicle with a wheel load up to 3200kg. The compact design minimizes the space needed for the installation. All components except for cables and wires are located under the vehicle body, freeing up much needed space inside the vehicle.

Depending on the requirements, the MIWD can be equipped with a DC, AC or PM traction motor. The unit can be produced with or without steering mechanism.

To allow different safety and functional solutions, the MIWD can be equipped with additional axels on motors and gears for mounting of encoders or other equipment. Other options include limit switches, mechanical stops, potentiometers and electromagnetic brakes.

Depending on the application, different wheel materials may be selected. The most common choices are Vulkollan or Tractothan.

Regal can provide a variety of dimensioning and construction services and offer the MIWD as a bolt-in solution complete with motor controllers and all necessary wiring.

### SPECIFICATIONS

<b>Motor type</b>	DC or AC (asynchronous or synchronous)
<b>Traction power</b>	Up to 7kW
<b>Wheel load</b>	200kg to 3200kg
<b>Battery voltage</b>	24V or 48V
<b>Typical applications</b>	AGVs, AGCs, Forklift trucks, Mobile platforms

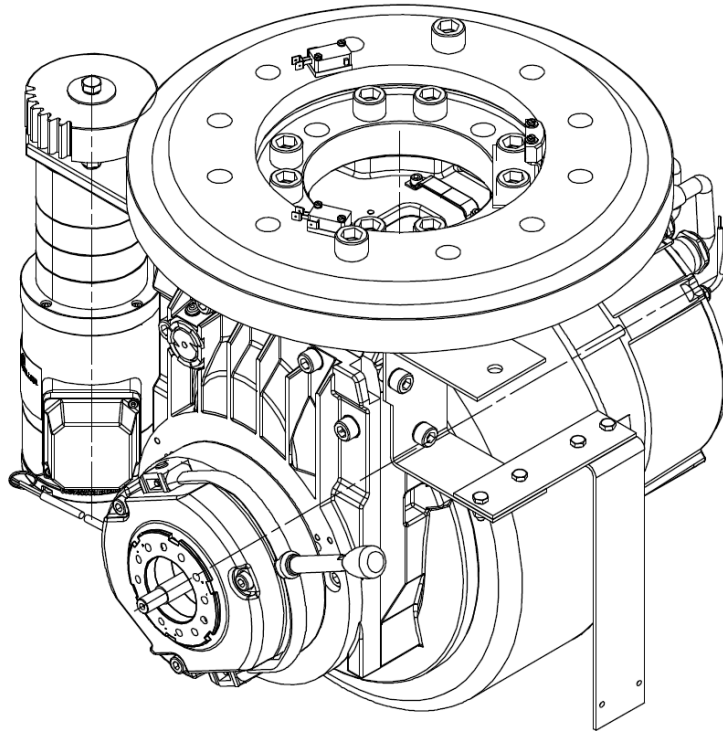
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### SPECIFICATIONS

MIWD Size	Wheel load	Voltage	Height	Max speed	Max power
15	200 kg	24 V <sub>DC</sub>	175 mm	3,6 km/h	0,13 kW
21	400 kg	24/48 V <sub>DC</sub>	293 mm	6,0 km/h	0,85 kW
21	600 kg	24/48 V <sub>DC</sub>	293 mm	4,5 km/h	0,85 kW
27L	1300 kg	24/48 V <sub>DC</sub>	315 mm	6,0 km/h	2,50 kW
27	1300 kg	24/48 V <sub>DC</sub>	360 mm	6,0 km/h	2,50 kW
32	1700 kg	48 V <sub>DC</sub>	406 mm	10,0 km/h	4,50 kW
35	2200 kg	48 V <sub>DC</sub>	451 mm	10,0 km/h	5,50 kW
41	3200 kg	48 V <sub>DC</sub>	490 mm	10,0 km/h	7,00 kW

This table shows a number of possible configurations for the MIWD (all values are approximate). Other configurations are available, contact Regal to find the right one for you.

### SAMPLE ILLUSTRATION (unit with steering, EM brake, limit switches and a custom bracket for AGV antenna)



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