

# High-Torque Wheel Hub Drive



## DATA SHEET

### Specification

Synchronous disc motor with integrated planetary gear and wheel bearing for a direct mount to the rim.

Optional emergency break

### Technical data

Motor data		PMSG xxx-500	PMSG xxx-1500
	Rated power	2 – 17 kW	
	Speed range	1500 – 6000 rpm	
	Max. torque	25 – 80 Nm	
	System voltage	24 – 96 VDC	
	Motor weight	6 – 29 kg	
Planetary gear	Reduction possibilities	1:4 / 1:7 / 1:16 / 1:24 / 1:42	1:5 / 1:25 / 1:40 / 1:100 / 1:150 (optional manual decoupling possible)
	Max. continuous torque	160 Nm	500 Nm
	Max. peak torque	500 Nm	1500 Nm
	Max. axial forces	4500 N	4500 N
	Max radial forces	5000 – 7000 N	21000 N
	Lubrication	Lifetime	Lifetime
	Durability	5000 hours	5000 hours (depending on application)
	Protection class	Up to IP 67	Up to IP 67
	Planetary gear weight	~ 7 kg	14 – 17.5 kg

### Features

Clean and environmental-friendly drive system without any pollution, very quiet

Direct mount to the rim

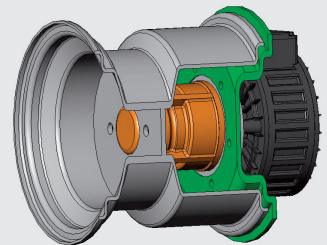
No axle needed

2- and 4-wheel drives

Huge starting torque, high overload factor

Maintenance-free

- Energy recuperation
- High efficiency
- Low noise



### Applications

- ➔ Turf applications, lawn tractors
- ➔ Harvester
- ➔ Forklift trucks
- ➔ Lifters
- ➔ Floor care machinery
- ➔ Municipal vehicles
- ➔ Commercial vehicles
- ➔ Electric cars and NEV
- ➔ Mining vehicles
- ➔ Replacement for hydraulic drives



# Dimensions

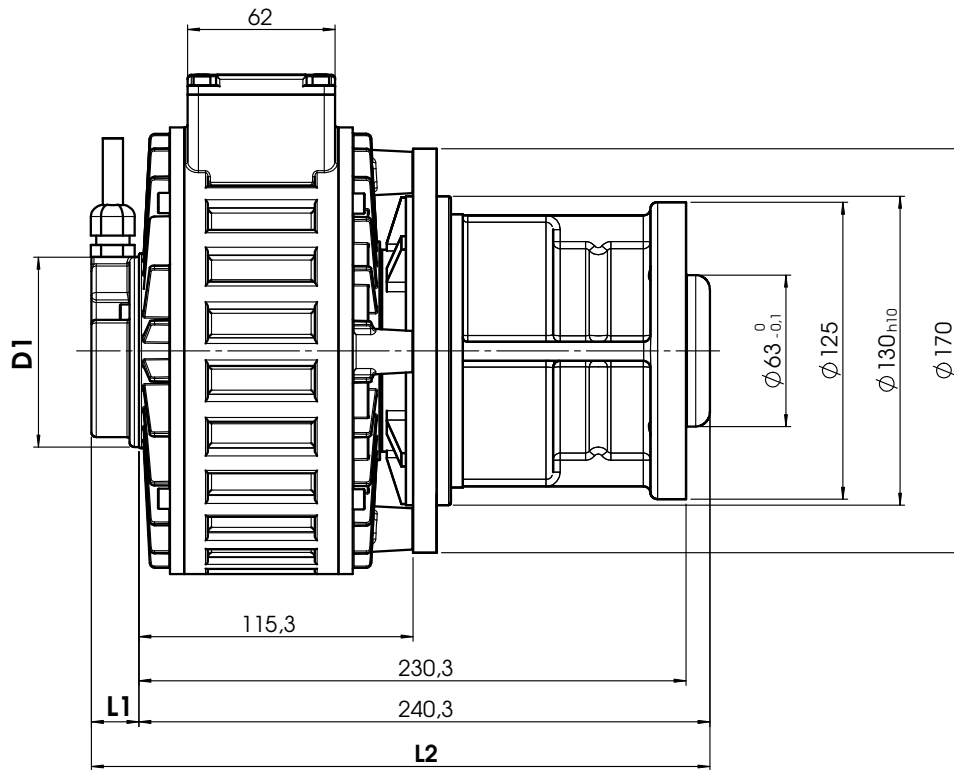
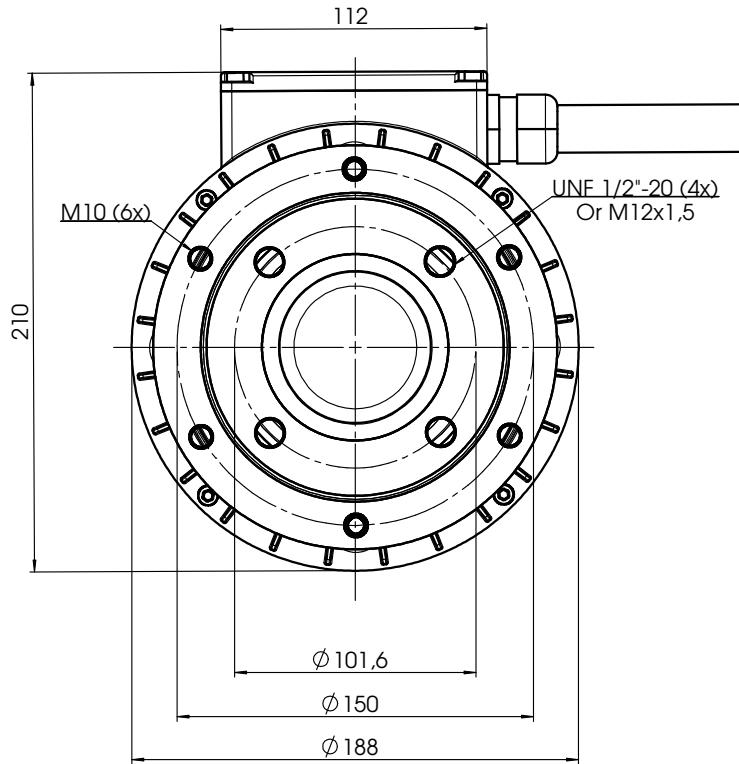
**Note:**

Dimensions of each particular drive system depends on the different motor/gearbox-combination

In this example:

PMSG 100-500 (Motor PMS 100, 2.2 kW, 48 V, 6000 rpm , gear with reduction ratio 1:24, 2 step, max. peak torque 500 Nm

(Drawings of other motor/gearbox combinations on request)



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