

DirectPower PRA 180-25

DATA SHEET



Description

DirectPower E-Bike Drives by HEINZMANN impress with their innovative technology and extreme flexibility.

Thanks to their independent control which is integrated in the battery box they can be used for a variety of systems. The power electronics is not build into the motor. The motor power rating is not affected by the heating of the electronics. Backwards travel is possible for special applications.

Optimised geometry of flanges allows to spoke rims from 20" up to 28" without crossing.

As front wheel or rear wheel drive – HEINZMANN e-bike drives adapt to your requirements. Customised design or colour of choice on request.

Features

Maintenance-free, noiseless

Brushless and gearless

Front or rear wheel option

Regeneration in front and rear wheel

Brake disc support

Built in cassette

Separate power electronics not affected by motor temperature ensuring maximum performance

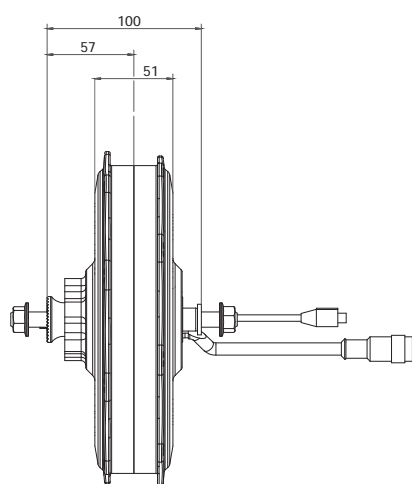
Optimised geometry of flanges, no crossed spoking, rim range 20" up to 28"

Technical data

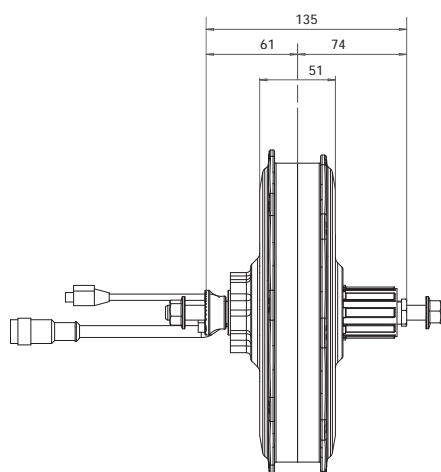
Motor												
Type	Pedelec			Pedelec 20"			Speed Pedelec*)			High Torque		
DC supply voltage	36 VDC											
Rated power	250 W			250 W			500 W			250 W		
Nominal speed	210 1/ min			275 1/ min			380 1/ min			180 1/ min		
Typical speed limit according to rim size *) Comply with the relevant legal requirements when using	20"	19 km/h		25 km/h			34 km/h			16.5 km/h		
	24"	23 km/h		31 km/h			43 km/h			20 km/h		
	26"	25 km/h		32 km/h			46 km/h			21 km/h		
	28"	28 km/h		35 km/h			50 km/h			23 km/h		
Weight	4.5 kg front wheel; 4.7 kg rear wheel											
Cooling	Ext. ventilation > 5 m/s											
Operating points												
Operational mode	S1	S2 10 min	S2 4 min	S1	S2 10 min	S2 4 min	S1	S2 10 min	S2 4 min	S1	S2 10 min	S2 4 min
Rated torque	11.4 Nm	30 Nm	40 Nm	8.7 Nm	30 Nm	40 Nm	12.6 Nm	30 Nm	40 Nm	13.3 Nm	30 Nm	40 Nm
Related AC current	9.3 A	25 A	33 A	11.6 A	40 A	55 A	17.5 A	40 A	55 A	8.4 A	20 A	26 A
Impulse torque	60 Nm											

Electrical data				
Type	Pedelec	Pedelec 20"	Speed Pedelec	High Torque
DC supply voltage	36 VDC			
Motor voltage	22.8 VAC	17.44 VAC	24.25 VAC	25.7 VAC
EMF constant	84.5 V/1000 min ⁻¹	51.7 V/1000 min ⁻¹	51.7 V/1000 min ⁻¹	105.7 V/1000 min ⁻¹
Torque constant	1.22 Nm/A	0.75 Nm/A	0.75 Nm/A	1.57 Nm/A
Resistance phase-phase	244 mΩ	88 mΩ	88 mΩ	385 mΩ
Winding inductance phase-phase	1.4 mH	0.36 mH	0.36 mH	1.69 mH
Moment of inertia	102 kg·cm ²			
System of protection	IP54			
Sensor system				
Motor feedback	Hall sensors			
Temperature sensor	KTY84-130			

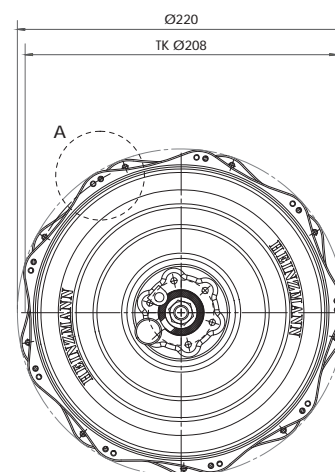
Dimensions



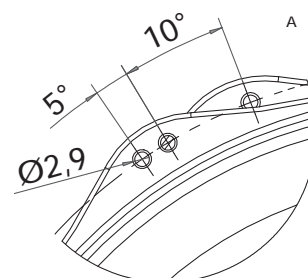
Front wheel



Rear wheel



With this drawing the regulations for copy right protection are effective.



Subject to alterations. ©HEINZMANN GmbH & Co. KG, 2014