

DiscPower



General



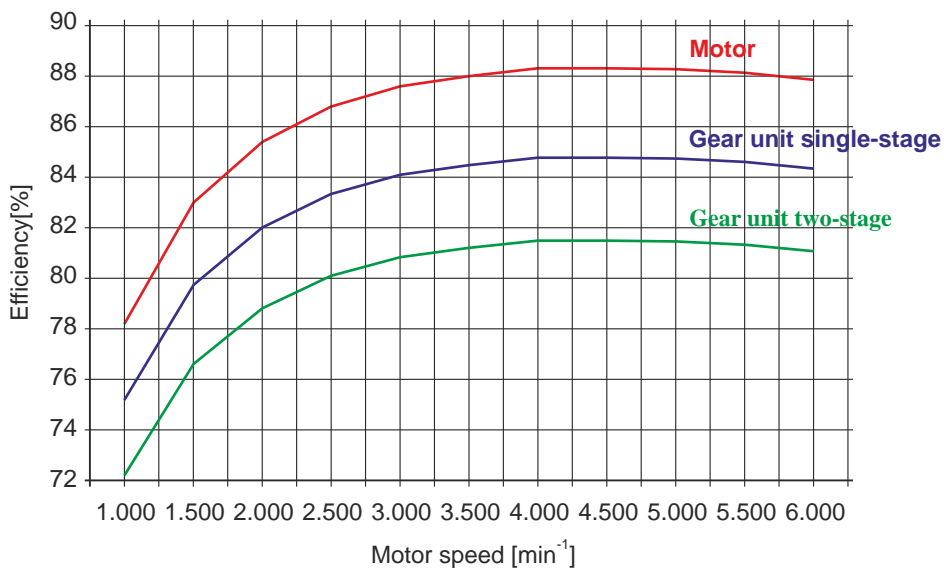
Patented rotor technology

With the *DISC*Power model series comes movement in the most diverse sectors of vehicular and drive technology. The usage capabilities range from wheel drives in electrical vehicles and vehicles for the handicapped via boat and bow thruster drives through to cleaning machines and automatic guided vehicles.



Low-backlash epicyclic gear units in many transmissions

Synchronous disc motor, DP series
Efficiency as a function of motor speed (without controlling means)



Sample Applications



Wheel drive

Overview of advantages:

- High dynamics
- Startup at full load
- High torque / Extensive overload capacity
- High efficiency
- Low weight coefficient
- Low noise level
- Flat and compact design
- High variability in system voltage (AC and DC)
- Extensive transmission program
- Maintenance free



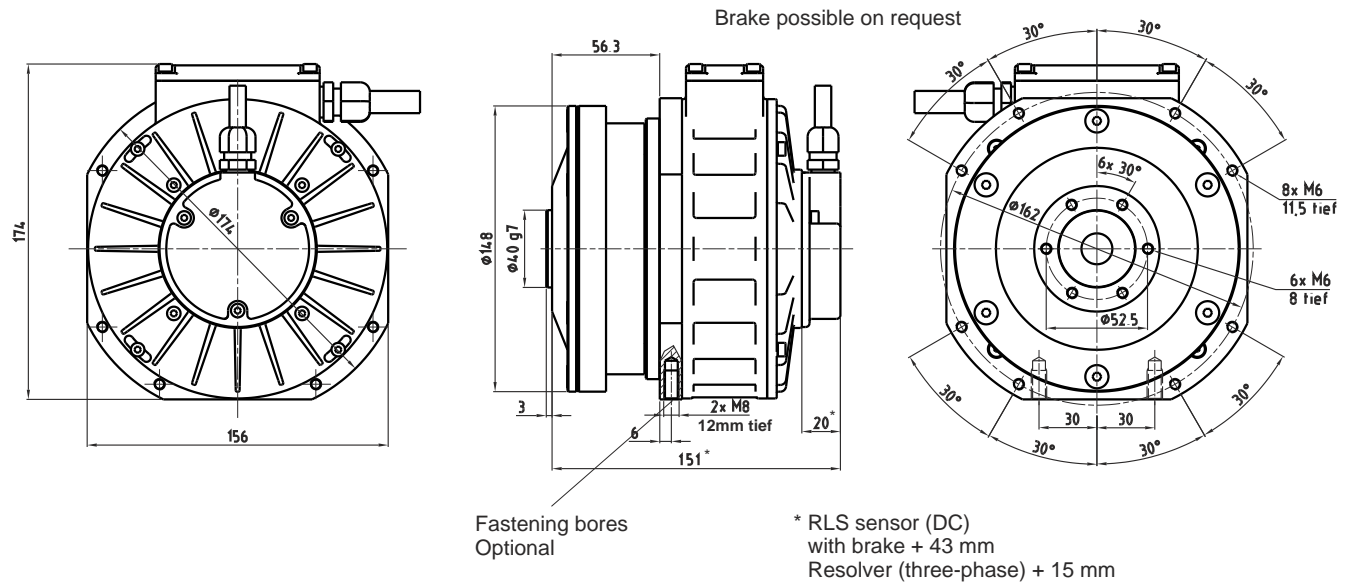
Automatic guided vehicles



Tool changing system

Dimensions

DP080 / DP080A



General technical specs

Motortype	Permanent excited synchronous-Disc (pancake) motor
Cooling	Aircooling with a min airstream of 5 m/s
Operation mode	S1 (continous)
Polpairs	4
Magnet material	Neodymium-Iron-Bor
Insulation Class	Class F according VDE 0530
Electrical strength	VDE 0530 - 2000 V / 10 s
Protection class	IP 54
Environmental temperature	-10 °C to + 40 °C
Demagnetization temperature	> 5 x I _N
Max. Peak torque at intermittent Duty	1,5-times of rated torque for about 15 seconds
Max. pulse-torque	3-times of rated torque for max. 0,5 seconds
Motorfeedback	Resolver 2-poles, Encoder or Analog Hallsensors with sin/cos output
Temperature sensor	KTY84-130 or PTC (NAT=120°C)

Output Diagram

Type	Motor output [kW]	Motor speed (preferred) [min ⁻¹]	Transmissions **	Output speed [min ⁻¹]	Output torque (100% ED) [Nm]	Short-term torque [Nm]
DP 080 A	0,42 - 0,55	3000 / 4500	(5:1); 10:1; 15:1; 25:1	120 - 600 (900)	max. 40	max. 100
DP 080	0,73 - 1,03 ***	3000 / 4500	10:1; 15:1; 25:1	120 - 600 (900)	max. 65	max. 100

**other transmissions possible on request.

*** Extraneous ventilation available