

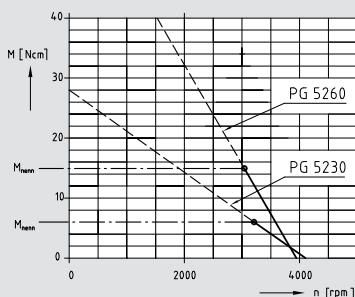
# DC motor with permanent magnet

<b>Properties:</b>	Connection:	Connection to the power supply, battery, PWM controller or control amplifier, residual ripple of the operating voltage max. 5% Cable connection, optional plug-in connector
	Commutation:	Mechanical commutation using a 12-part commutator
	Magnetic system:	2-pole permanent ferrite magnet
	Service life:	3,000 h, S1 duty
	Insulation mat. class:	B, optional F
	System of protection:	IP 40, optional IP 54
	Special model:	Design for short-time operation with high performance, additional voltages and speeds upon request
	Options:	Special shafts, custom designed

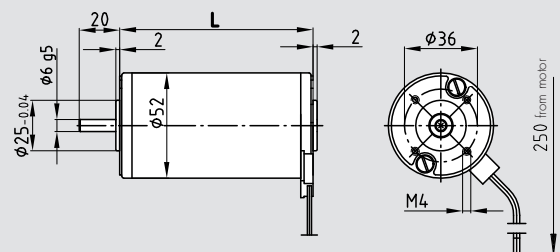


Type	Name			Pg 5230	Pg 5230	Pg 5260	Pg 5260
	Nominal voltage	U	Volt DC	12	24	12	24
<b>Rate</b>	Nominal power	P <sub>2</sub>	W	28.0	28	54.0	54.0
	Nominal speed	n <sub>nom</sub>	rpm	3000	3000	3000	3000
	Nominal torque	T <sub>nom</sub>	Ncm	9	9	17	17
	Nominal current	I <sub>nom</sub>	A	3.6	1.6	6.0	3.0
	Starting torque	T <sub>S</sub>	Ncm	45	45	90	90
	Idling speed	n <sub>idle</sub>	rpm	3930	3680	3650	3510
	No-load current	I <sub>0</sub>	A	0.58	0.26	0.61	0.30
<b>Characteristics</b>	Gradient speed torque curve	1 / k	mNm / rpm	0.13	0.13	0.24	0.28
	Speed constant	c <sub>n</sub>	rpm / V	250	133.3	244	127
	Torque constant	c <sub>T</sub>	Ncm / A	2.42	4.62	2.76	5.28
	Nominal efficiency	η		0.65	0.72	0.75	0.75
<b>Connection</b>	Terminal resistance	R	Ohm	0.5	3.4	0.5	3.9
	Rated input power	P <sub>1</sub>	W	43	39	72	72
<b>Dynamics</b>	Weight	m	kg	0.7	0.7	1.0	1.0
	Moment of inertia	J	gcm <sup>2</sup>	257	257	442	442
	Mech. time constant	τ <sub>M</sub>	ms	22	22	17	17
<b>Thermal</b>	Adm. ambient temperature	T	°C	-20 to +40	-20 to +40	-20 to +40	-20 to +40
	Max. adm. rotor temperature	T <sub>max</sub>	°C	+120	+120	+120	+120
<b>Coupling</b>	Shaft diameter	d	mm	6	6	6	6
	Max. axial force	F <sub>a</sub>	N	8	8	8	8
	Max. radial force	F <sub>r</sub>	N	100	100	100	100

## Dimensions - Characteristics



Type	L / mm
Pg 5230	95.5
Pg 5230	95.5
Pg 5260	125.5
Pg 5260	125.5



## System technology

### Recommended combinations

other gears and extensions upon request

Worm gear	GS 1	S 567
Spur gear	Z 5	
Planetary gear	PM 40	
Rotary encoder		
Brake	BFK 457	
Electronics	UCE 24	