

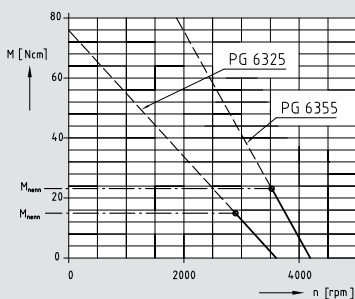
# DC motor with permanent magnet

<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

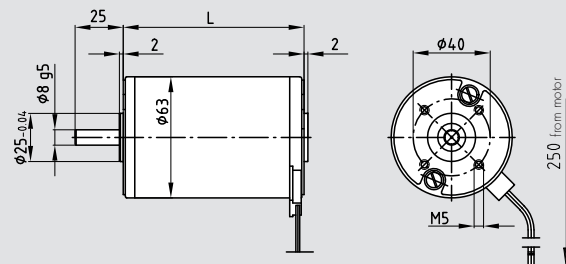


Type	Name	U	Volt DC	Pg 6325	Pg 6325	Pg 6355	Pg 6355
	Nominal voltage			12	24	12	24
<b>Rate</b>	Nominal power	P <sub>2</sub>	W	44	44	85	85
	Nominal speed	n <sub>nom</sub>	rpm	3000	3000	3000	3000
	Nominal torque	T <sub>nom</sub>	Ncm	14	14	27	27
	Nominal current	I <sub>nom</sub>	A	5.1	2.75	10.0	5
	Starting torque	T <sub>S</sub>	Ncm	80	90	180	230
	Idling speed	n <sub>idle</sub>	rpm	3590	3750	3600	3300
	No-load current	I <sub>0</sub>	A	1.0	0.6	1.1	0.5
	<b>Characteristics</b>	Gradient speed torque curve	1 / k	mNm / rpm	0.23	0.28	0.54
Speed constant		c <sub>n</sub>	rpm / V	256.6	121	245.4	147.4
Torque constant		c <sub>T</sub>	Ncm / A	2.45	5.48	2.67	5.0
Nominal efficiency		η		0.72	0.67	0.71	0.71
<b>Connection</b>	Terminal resistance	R	Ohm	1.3	1.7	0.8	0.7
	Rated input power	P <sub>1</sub>	W	61	66	120	120
<b>Dynamics</b>	Weight	m	kg	1.1	1.1	1.6	1.6
	Moment of inertia	J	gcm <sup>2</sup>	563	563	1020	1020
	Mech. time constant	τ <sub>M</sub>	ms	27	27	20	20
<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	8	8	8	8
	Max. axial force	F <sub>a</sub>	N	20	20	20	20
	Max. radial force	F <sub>r</sub>	N	220	220	220	220

## Dimensions - Characteristics



Type	L / mm
Pg 6325	94
Pg 6325	94
Pg 6355	124
Pg 6355	124



## System technology

<b>Recommended combinations</b> other gears and extensions upon request	Worm gear	GS 3		
	Spur gear	Z 6	Z 8	M 7
	Planetary gear	PM 50		
	Rotary encoder	RV 30	RI 30	
	Brake	B 77		
	Electronics	UCE 24		

Last modified: 10/2016