

Brushless DC motor

with enhanced cooling

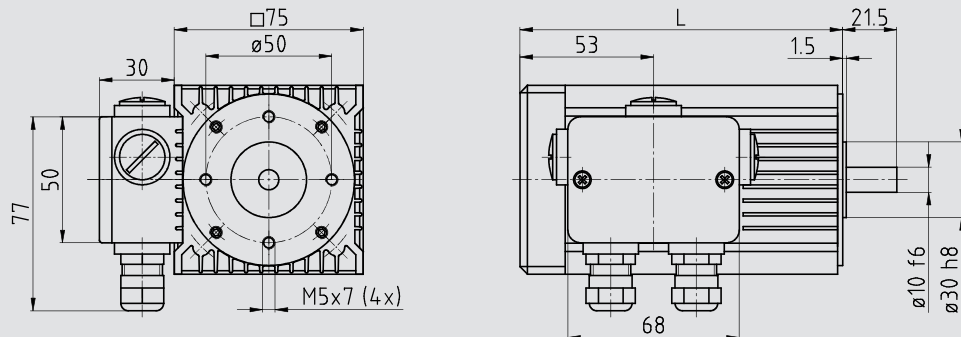
Properties:	Connection:	Operation on the external standard controller (block commutation)
	Rotor:	Rotor position sensing using 3 hall sensors. K4 terminal box for power supply and sensors 8-pole neodymium magnet, slight detent torque due to continual angular magnetization (no grades)
	Service life:	20,000 h, S1 duty
	Insulation mat. class:	F
	System of protection:	IP 44, optional up to IP 65
	Special model:	Design for short-time duty with high performance, additional voltages and speeds upon request
	Options:	Thermal protection, special shafts, special flanges, custom



Type	Name	U	Volt DC	MQ 737	MQ 767
	Nominal voltage			24	24
Rate	Nominal power	P ₂	W	185	277
	Nominal speed	n _{nom}	rpm	2850	2600
	Nominal torque	T _{nom}	Nm	0.62	1.02
	Nominal current	I _{nom}	A	12.2	17.7
	Nominal efficiency	η		0.70	0.74
Short-time duty (S2 5 min)	Torque	M _{S2}	Nm	0.8	1.02
	Speed	n _{S2}	rpm	2500	2500
	Current	I _{S2}	A	15.6	17.7
Idling	Idling speed	n _{l0}	rpm	4150	3800
	Idling current	I ₀	A	0.8	0.8
Connection	Terminal resistance	R	Ohm	0.24	0.11
	Phase – Phase				
Dynamics	Weight	m	kg	1.0	1.6
	Moment of inertia	J	gcm ²	450	750
Thermal	Adm. ambient temperature	T _u	°C	-20 to +40	-20 to +40
	Max. adm. stator temperature	T _{max}	°C	+155	+155
Coupling	Shaft diameter	d	mm	10	10
	Max. axial force	F _a	N	40	40
	Max. radial force	F _r	N	400	400

Dimensions

Type	L / mm
MQ 737	98
MQ 767	128



System technology

Recommended combinations other gears and extensions upon request	Worm gear	S 769	S 668	GS 3
	Spur gear	M 10		
	Planetary gear	PM 60		
	Rotary encoder	RV 30	RI 30	
	Brake	B 77		
	Electronics	UCE 24		