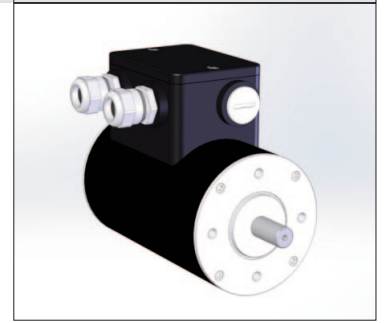


Brushless DC motor

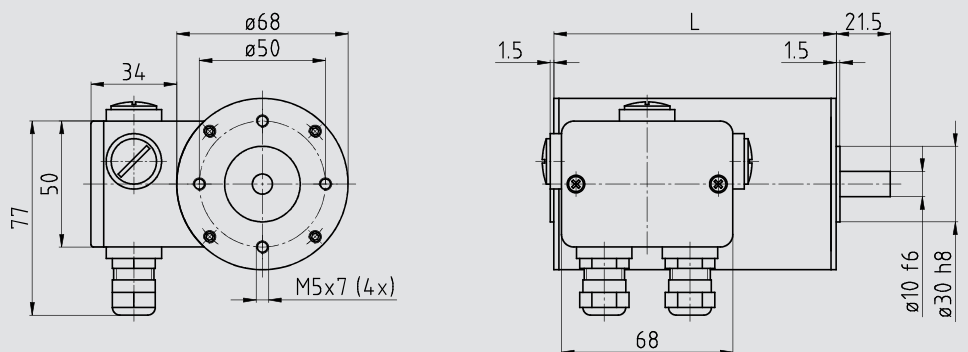


- Properties:**
- Operation: on the external standard controller (block commutation); Rotor position sensing by 3 hall sensors
 - Connection: K4 terminal box for power supply and sensors
 - Rotor: 8-pole neodymium magnet, low cogging torque due to continuous angular magnetization
 - Service life: 20,000 h, S1 duty
 - Insulation mat. class: F (155°C)
 - System of protection: IP 44, optional up to IP 65 (IP 69)
 - Special Versions: Design for short-time duty with higher performance, additional voltages and speeds upon request
 - Options: Thermal protection, special shafts, special flanges, stainless steel

				MQ 637	MQ 667		
Type	Name Nominal voltage	U	Volt DC	24	24		
Rate	Nominal power	P ₂	W	171	259		
	Nominal speed	n _{nenn}	rpm	3270	3090		
	Nominal torque	M _{nenn}	Nm	0.5	0.8		
	Nominal current	I _{nennDC}	A	9.1	13.5		
	Nominal efficiency	η		0.79	0.8		
	Input power	P ₁	W	218	324		
	Torque constant	k _M	Ncm/A	5.2	5.5		
	Max. current (2sec)	I _{max}	A	3 × I _{nennDC}	3 × I _{nennDC}		
	Max. torque	M _{max}	Nm	3 × M _{nenn}	3 × M _{nenn}		
	Cogging torque		mNm	-	-		
Idling	Idling speed	n ₀	rpm	4300	3850		
	Idling current	I ₀	A	0.5	0.8		
Short-time duty (S2 5min)	Speed	n _{nenn}	rpm	2750	2350		
	Torque	M _{nenn}	Nm	0.8	1.5		
	Current	I _{nennDC}	A	13.8	23.8		
Connection	Terminal resistance	R	mOhm	195	130		
	Terminal inductance	L	μH	660	425		
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 „ISO F“	+155 „ISO F“		
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 637	82
MQ 667	112



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	mcDSA-E25 or mcDSA-E45 (HC)		