

Brushless Positioning drive

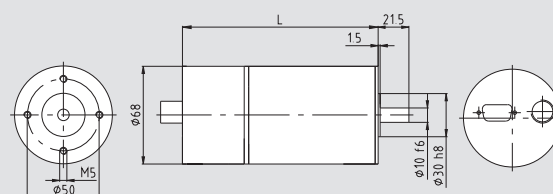
Features:	CANopen
	Profibus-DP
	Integrated 4 Q controller
	Sinus commutation
	Absolute multi-turn encoder, Run records programmable
Rotor:	4-pole neodym magnet, low cogging
Life time:	20,000 h, S1duty
Isolation class:	B, optional F
Protection class:	IP 44, optional up to IP 65
Ambient temperature:	-15°C ... 40°C
Protection:	Overtemperature protection, current limitation



Type	Nominal voltage	U	V _{DC}	MSA 643	MSA 663		
				24	24		
Technical data	Power output	P ₂	W	80	100		
	Nominal speed	n _{nom}	rpm	3500	3300		
	Nominal torque	M _{nom}	cNm	22	29		
	Starting torque	T _S	Ncm	60	90		
	Nominal current	I	A	5.8	5.7		
	Nominal power input	P ₁	W	139	137		
	Positioning resolution			0.02°	0.02°		
	Positioning accuracy			+/-1°	+/-1°		
Characteristics	Gradient torque-speed	1 / K	mNm / rpm	0.61			
	Max. torque	M	cNm	65			
	Nominal efficiency	η	%	73			
Dynamics	Weight	m	kg	1.6	2.3		
	Moment of inertia	J	gcm ²	588	760		
Thermal cond.	Ambient temperature	T _U	°C	-20 to +40	-20 to +40		
	Max. stator temperature	T _{max}	°C	+120	+120		
Mechanical data	Shaft diameter	d	mm	10	10		
	Max. axial force	F _a	N	40	40		
	Max. radial force	F _r	N	400	400		
Communication	Fieldbus Profile	CANopen v. 2.0B DS-301 v. 4.02 DSP-305 v. 1.0		Profibus Profibus Nr. 3 version 2.0			
	Max. baud rate	1 Mbit/s		12 Mbit/s			
	Connector			see chapter connector			

Dimension - Characteristics

Type	L / mm
MSA 643	136
MSA 663	156



Recommended gear - combinations

Worm gear	S 668
Spur gear	Z 8 M 7
Planetary gear	PM 50 PM 60
other gears and extensions upon request	