

# Brushless Positioning drive

<b>Features:</b>	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, S1 duty
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 <sub>DC</sub>	MSA 523	MSA 543	MSA 563
				24	24	24
<b>Technical data</b>	Power output	P <sub>2</sub>	W	26	40	70
	Nominal speed	n <sub>nom</sub>	rpm	4150	3800	3800
	Nominal torque	M <sub>nom</sub>	cNm	6.0	10	18
	Starting torque	T <sub>S</sub>	Ncm	18	30	60
	Nominal current	I	A	1.7	2.4	3.75
	Nominal power input	P <sub>1</sub>	W	40.8	57.6	90
	Positioning resolution			0.02°	0.02°	0.02°
	Positioning accuracy			+/-1°	+/-1°	+/-1°
<b>Characteristics</b>	Gradient torque-speed	1 / K	mNm / rpm	0.14		
	Max. torque	M	cNm	35		
	Nominal efficiency	η		0.58		
<b>Dynamics</b>	Weight	m	kg	0.9	1.1	1.3
	Moment of inertia	J	gcm <sup>2</sup>	60	160	260
<b>Thermal cond.</b>	Ambient temperature	T <sub>u</sub>	°C	-20 to +40	-20 to +40	
	Max. stator temperature	T <sub>max</sub>	°C	+120	+120	
<b>Mechanical data</b>	Shaft diameter	d	mm	8	8	
	Max. axial force	F <sub>a</sub>	N	40	40	
	Max. radial force	F <sub>r</sub>	N	400	400	
<b>Communication</b>	Fieldbus	CANopen v. 2.0B		Profibus		
	Profile	DS-301 v. 4.02 DSP-305 v. 1.0		Profibus Nr. 3 version 2.0		
	Max. baud rate	1 Mbit/s		12 Mbit/s		
	Connector			see chapter connector		
<b>Dimension</b>	Type	L / mm				
	MSA 523	138				
	MSA 543	158				
	MSA 563	178				

## Recommended

### gear - combinations

other gears and  
extensions  
upon request

Worm gear  
Spur gear  
Planetary gear

S 567  
Z 6  
PM 40 PM 50