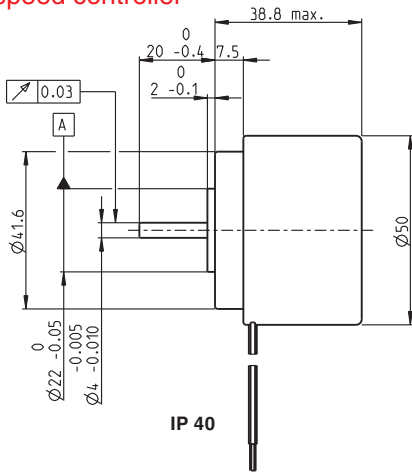


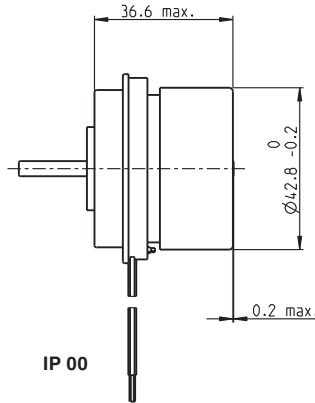
EC 45 flat brushless, 50 Watt, with integrated electronics

1-Q-speed controller

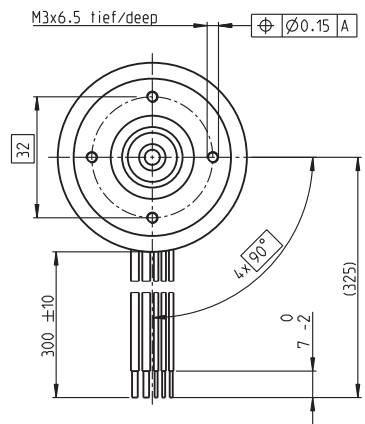
maxon flat motor



IP 40



IP 00



M 1:2

- Stock program
- Standard program
- Special program (on request)

IP 40 (with cover)
IP 00 (without cover)

Order Number		5 wire version				
		2 wire version	Enable	Direction		
IP 40 (with cover)	353526	350910	370427			
IP 00 (without cover)	353524	352887	370426			

Motor Data (provisional)							
Values at nominal voltage							
1	Nominal voltage	V	24	24	24	24	24
2	No load speed	rpm	3000	3000	4500	4500	4500
3	No load current	mA	127	127	192	192	192
4	Nominal speed	rpm	3000	3000	4500	4500	4500
5	Nominal torque (max. continuous torque)	mNm	66	123	71	116	116
6	Nominal current (max. continuous current)	A	1.2	2.4	2	3	3
33	Max. torque	mNm	154	154	154	154	154
34	Max. current	A	3.3	3.3	3.8	3.8	3.8
9	Max. efficiency	%	74	74	79	79	79
Characteristics							
35	Control variable	Speed	Speed	Speed	Speed	Speed	Speed
36	Supply voltage + V _{CC}	V	10 ... 28	10 ... 28	10 ... 28	10 ... 28	10 ... 28
37	Speed set value input	V	= V _{CC}	= V _{CC}	0.33 ... 10.8	0.33 ... 10.8	0.33 ... 10.8
38	Scale speed set value input	rpm/V	125	125	600	600	600
39	Speed range	rpm	1250 ... 3500	1250 ... 3500	200 ... 6480	200 ... 6480	200 ... 6480
40	Max. acceleration	rpm/s	3000	3000	6000	6000	6000

Specifications	
Thermal data	
17	Thermal resistance housing-ambient 5.8 (2.4) K / W
18	Thermal resistance winding-housing 4 K / W
19	Thermal time constant winding 27 s
20	Thermal time constant motor 290 (116) s
21	Ambient temperature -40 ... +85°C
22	Max. permissible winding temperature +125°C
41	Max. temperature of electronics +105°C
Mechanical data (preloaded ball bearings)	
16	Rotor inertia 193 gcm ²
24	Axial play at axial load < 7.0 N 0 mm
	> 7.0 N 0.14 mm
25	Radial play preloaded
26	Max. axial load (dynamic) 6.8 N
27	Max. force for press fits (static) 95 N
	(static, shaft supported) 1000 N
28	Max. radial loading, 7.5 mm from flange 54 N
Other specifications	
31	Weight of motor 260 g
32	Direction of rotation Clockwise (CW)

Values listed in the table are nominal.

Protective functions

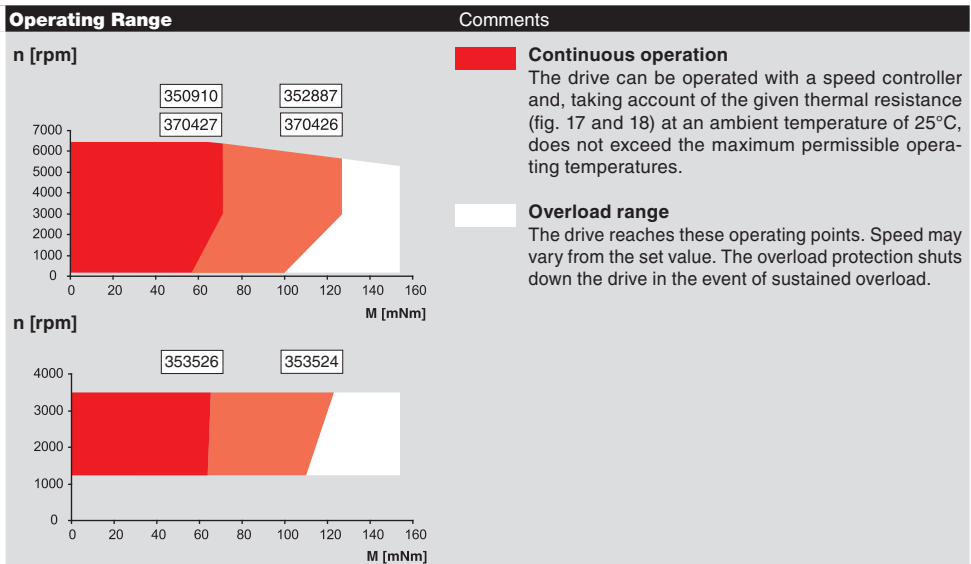
Overload protection, blockage protection, inverse-polarity protection, thermal overload protection, low/high voltage cut-off

Connection 2 wire version (Cable AWG 18/24)

red + V_{CC} 10 ... 28 VDC
black GND

Connection 5 wire version (Cable AWG 18/24)

red + V_{CC} 10 ... 28 VDC
black GND
white Speed set value input
green Monitor n (6 pulses per revolution)
grey Disable (Enable) or sense of direction change over (Direction)



maxon Modular System

Overview on page 16 - 21

Planetary Gearhead

Ø42 mm
3 - 15 Nm
Page 238

Spur Gearhead

Ø45 mm
0.5 - 2.0 Nm
Page 240

