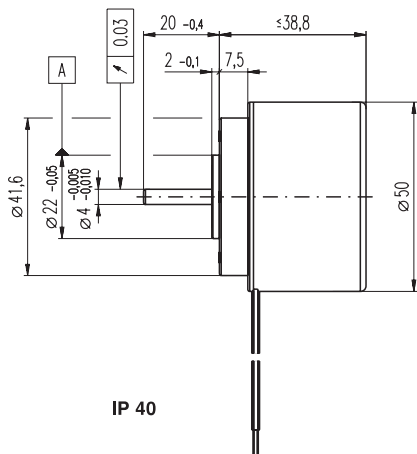


EC 45 flat brushless, 50 Watt, with integrated electronics

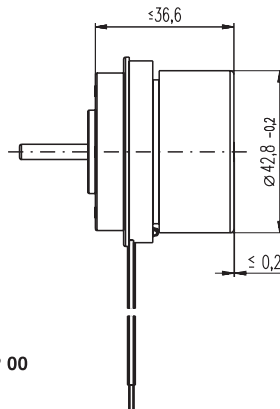
1-Q-speed controller

NEW

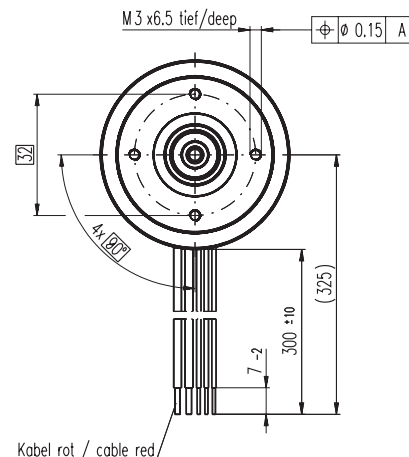
maxon flat motor



IP 40



IP 00



Kabel rot / cable red

M 1:2

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

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

Order Number

2 wire version		5 wire version	
IP 40 (with cover)	353526	IP 40 (with cover)	350910
IP 00 (without cover)	353524	IP 00 (without cover)	352887

Motor Data (provisional)

Values at nominal voltage		IP 40 (with cover)		IP 40 (with cover)		IP 00 (without cover)		IP 00 (without cover)	
1	Nominal voltage	V	24	24	24	24			
2	No load speed	rpm	3000	3000	4500	4500			
3	No load current	mA	127	127	192	192			
4	Nominal speed	rpm	3000	3000	4500	4500			
5	Nominal torque (max. continuous torque)	mNm	66	123	71	116			
6	Nominal current (max. continuous current)	A	1.2	2.4	2	3			
33	Max. torque	mNm	154	154	154	154			
34	Max. current	A	3.3	3.3	3.8	3.8			
9	Max. efficiency	%	74	74	79	79			
Characteristics									
35	Control variable	Speed	Speed	Speed	Speed				
36	Supply voltage + V _{CC}	V	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			
38	Scale speed set value input	rpm / V	125	125	600	600			
39	Turning speed range	rpm	1250 ... 3500	1250 ... 3500	200 ... 6480	200 ... 6480			
40	Max. acceleration	rpm / s	3000	3000	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 gcm²
 - 24 Axial play at axial load < 2 N 0 mm
 - > 2 N 0.14 mm
 - 25 Radial play preloaded
 - 26 Max. axial load (dynamic) 6.8 N
 - 27 Max. axial load (static) 95 N
 - (static, shaft supported) 1000 N
 - 28 Max. radial loading, 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

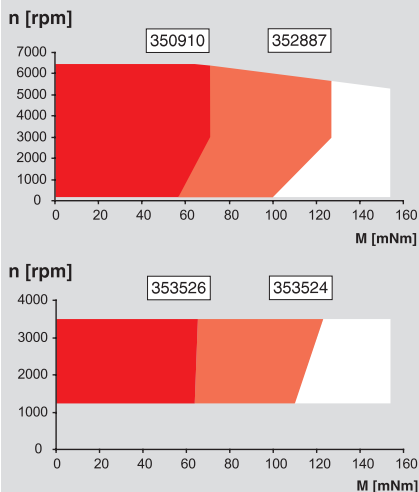
Connection 2 wire version (Cable AWG 18/24)

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 (2.4 ... 28 VDC)

Operating Range



Comments

Continuous operation
The drive can be operated with a speed controller and, taking account of the given thermal resistance (fig. 17 and 18) at an ambient temperature of 25°C, does not exceed the maximum permissible operating temperatures.

Overload range
The drive reaches these operating points. Speed may vary from the set value. The overload protection shuts down the drive in the event of sustained overload.

maxon Modular System

Overview on page 16 - 21

Planetary Gearhead

Ø42 mm
3 - 15 Nm
Page 244

Spur Gearhead

Ø45 mm
0.5 - 2.0 Nm
Page 246

