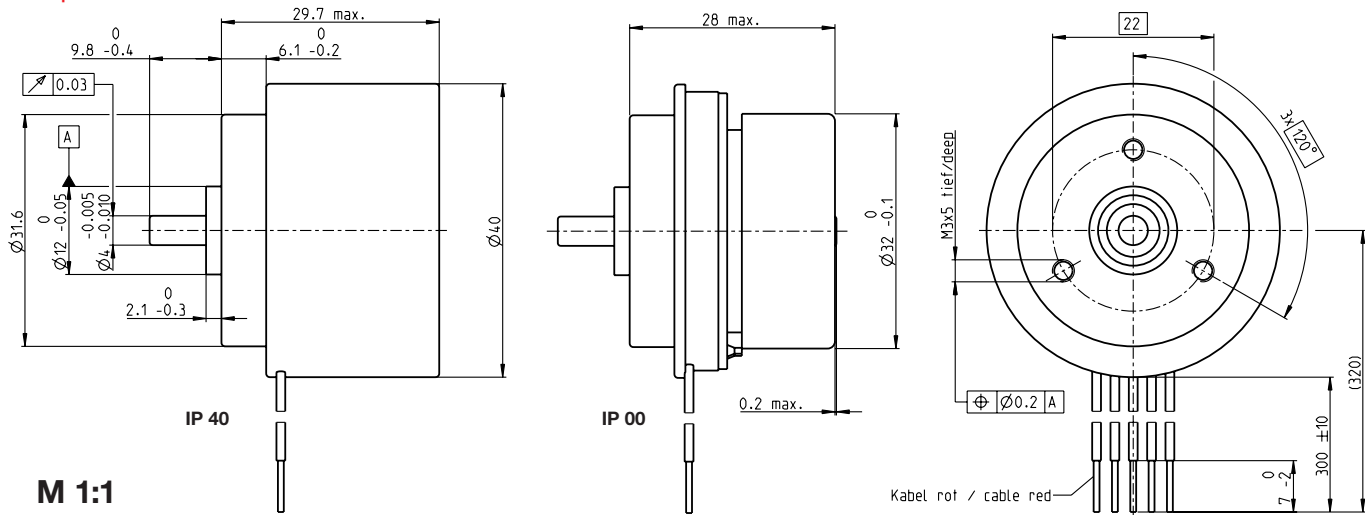


EC 32 flat brushless, 15 Watt, with integrated electronics

1-Q-speed controller

maxon flat motor



M 1:1

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

Part Numbers

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

		5 wire version			
		2 wire version	Enable	Direction	
		353400	353401	353399	370418
		353324	353325	349801	370417

Motor Data

Values at nominal voltage					
1 Nominal voltage	V	24	24	24	24
2 No load speed	rpm	3000	6000	6000	6000
3 No load current	mA	44.8	84.6	84.6	84.6
4 Nominal speed	rpm	3000	6000	6000	6000
5 Nominal torque (max. continuous torque)	mNm	18.8	18.6	18.6	18.6
6 Nominal current (max. continuous current)	A	0.44	0.741	0.741	0.741
33 Max. torque	mNm	35.8	35.8	35.8	35.8
34 Max. current	A	1.6	1.6	1.6	1.6
9 Max. efficiency	%	58	66	66	66
Characteristics					
35 Type of control		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	250	600	600
39 Speed range	rpm	1250...3500	2500...7000	200...6480	200...6480
40 Max. acceleration	rpm/s	3000	6000	6000	6000

Specifications

- Thermal data**
- 17 Thermal resistance housing-ambient 7.24 K/W
 - 18 Thermal resistance winding-housing 4.99 K/W
 - 19 Thermal time constant winding 8.69 s
 - 20 Thermal time constant motor 80.5 s
 - 21 Ambient temperature -40...+85°C
 - 22 Max. winding temperature +125°C
 - 41 Max. temperature of electronics +105°C
- Mechanical data (preloaded ball bearings)**
- 16 Rotor inertia 35 gcm²
 - 24 Axial play at axial load < 5.0 N 0 mm
 - > 5.0 N 0.14 mm
 - 25 Radial play preloaded 6.8 N
 - 26 Max. axial load (dynamic) 95 N
 - 27 Max. force for press fits (static) (static, shaft supported) 1000 N
 - 28 Max. radial load, 5 mm from flange 37 N
- Other specifications**
- 31 Weight of motor 91 g
 - 32 Direction of rotation Clockwise (CW)

Values listed in the table are nominal.

Protective functions

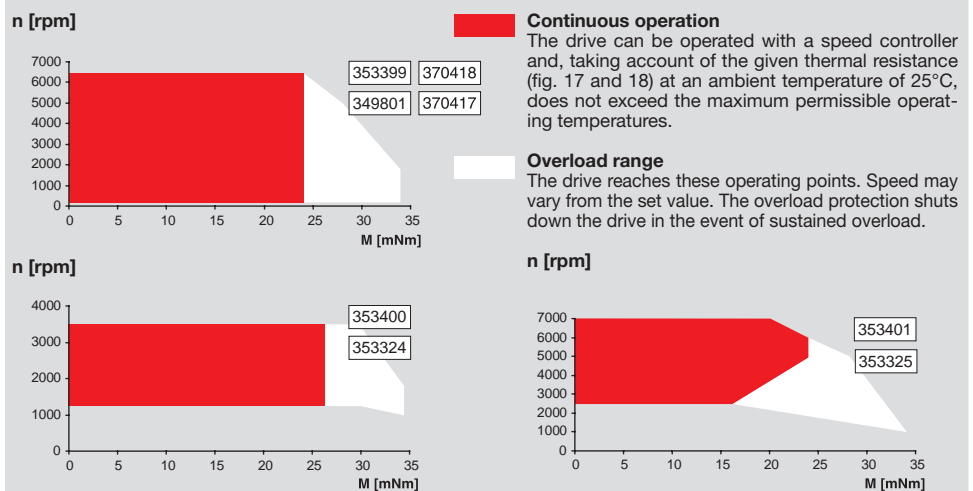
Overload protection, blockage protection, inverse-polarity protection, thermal overload protection, low/high voltage cut-off

Connection 2 wire version (Cable AWG 24)
red +V_{CC} 10...28 VDC
black GND

Connection 5 wire version (Cable AWG 24)
red +V_{CC} 10...28 VDC
black GND
white Speed set value input
green Monitor n (6 pulses per revolution)
grey Disable (Type Enable) or sense of direction (Type Direction)

Operating Range

Comments



maxon Modular System

Overview on page 20-27

Planetary Gearhead

Ø32 mm
0.75 - 6 Nm
Page 340/343

Spur Gearhead

Ø38 mm
0.1 - 0.6 Nm
Page 348

