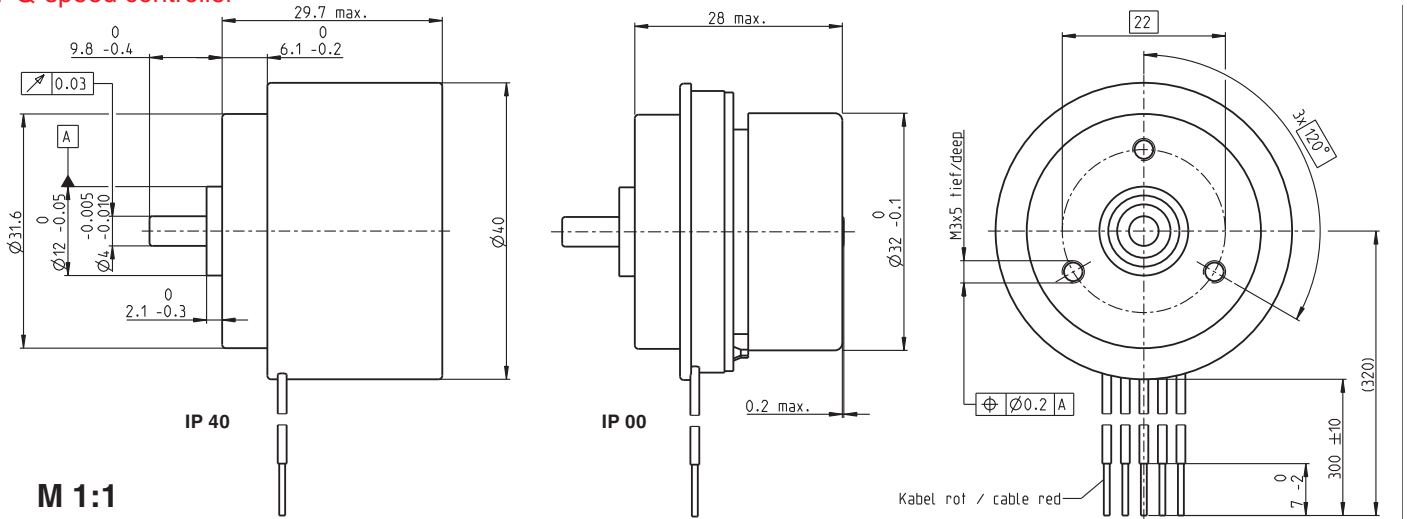


EC 32 flat brushless, 15 Watt, with integrated electronics

1-Q-speed controller



M 1:1

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

Order Number

	2 wire version		5 wire version	
			Enable	Direction
IP 40 (with cover)	353400	353401	353399	370418
IP 00 (without cover)	353324	353325	349801	370417

Motor Data

Values at nominal voltage					
1	Nominal voltage	V	24.0	24.0	24.0
2	No load speed	rpm	3000	6000	6000
3	No load current	mA	43	86	86
4	Nominal speed	rpm	3000	6000	6000
5	Nominal torque (max. continuous torque)	mNm	26.2	24	24
6	Nominal current (max. continuous current)	A	0.56	0.95	0.95
33	Max. torque	mNm	34.4	34	34
34	Max. current	A	1.2	1.6	1.6
9	Max. efficiency	%	54	64	64
Characteristics					
35	Control variable	Speed	Speed	Speed	Speed
36	Supply voltage + V _{CC}	V	10 ... 28	10 ... 28	10 ... 28
37	Speed set value input	V	= V _{CC}	= V _{CC}	0.33 ... 10.8
38	Scale speed set value input	rpm/V	125	250	600
39	Speed range	rpm	1250 ... 3500	2500 ... 7000	200 ... 6480
40	Max. acceleration	rpm/s	3000	6000	6000

Specifications

Thermal data		
17	Thermal resistance housing-ambient	7.6 K / W
18	Thermal resistance winding-housing	5.9 K / W
19	Thermal time constant winding	10.3 s
20	Thermal time constant motor	72.6 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	35 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)	70 N
	(static, shaft supported)	1000 N
28	Max. radial loading, 7.5 mm from flange	32 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)

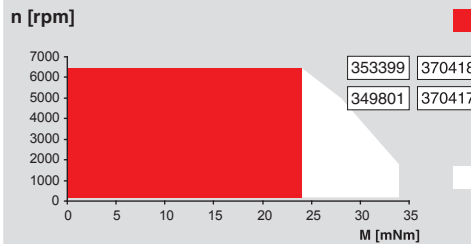
red + V_{CC} 10 ... 28 VDC
black GND

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 (Enable) or sense of direction change over (Direction)

Operating Range

Comments

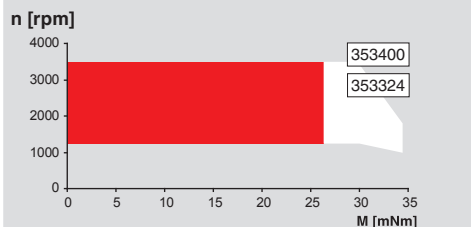


Continuous operation

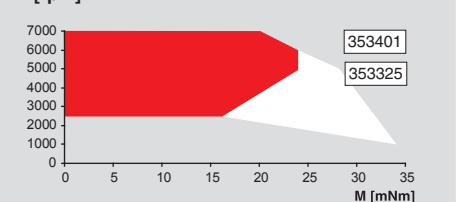
The drive can be operated with a speed controller and, taking account of the given thermal resistance (fig. 17 and 18) at an ambient temperature of 25°C, does not exceed the maximum permissible operating temperatures.

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.



n [rpm]



maxon Modular System

Overview on page 16 - 21

Planetary Gearhead

Ø32 mm
0.75 - 6 Nm
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Spur Gearhead

Ø38 mm
0.1 - 0.6 Nm
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