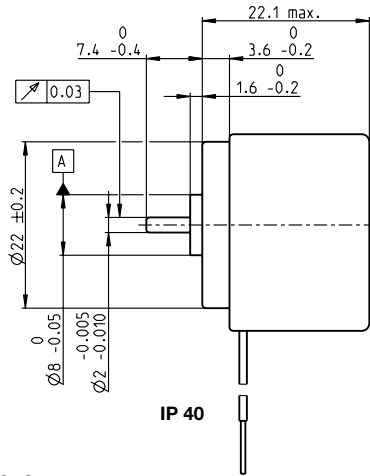
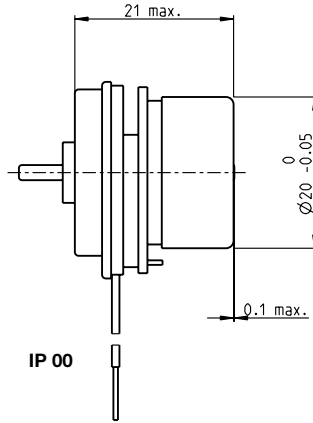


EC 20 flat brushless, 5 Watt, with integrated electronics

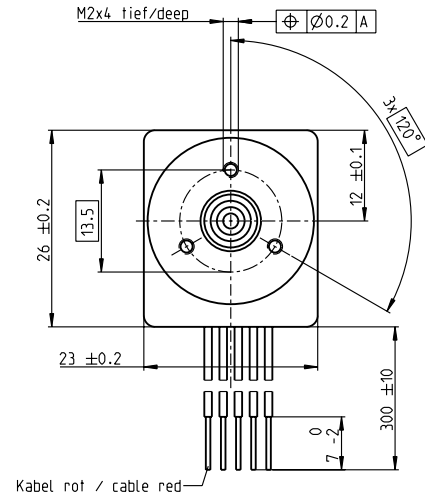
1-Q-Speed Controller



IP 40



IP 00



Kabel rot / cable red

M 1:1

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

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

Part Numbers

		5 wire version	
		Enable	Direction
2 wire version			
350834	350835	350806	370416
350804	350805	349731	370415

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	18.6	32.9	32.9	32.9
4 Nominal speed	rpm	3000	6000	6000	6000
5 Nominal torque (max. continuous torque)	mNm	7.45	7.31	7.31	7.31
6 Nominal current (max. continuous current)	A	0.263	0.377	0.377	0.377
33 Max. torque	mNm	13.2	13.2	13.2	13.2
34 Max. current	A	0.73	0.73	0.73	0.73
9 Max. efficiency	%	44	54	54	54
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 10.6 K/W
 - 18 Thermal resistance winding-housing 5.32 K/W
 - 19 Thermal time constant winding 3.66 s
 - 20 Thermal time constant motor 13.9 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 5.1 gcm²
 - 24 Axial play at axial load < 2.0 N 0 mm
 - > 2.0 N 0.14 mm
 - 25 Radial play preloaded 1.8 N
 - 26 Max. axial load (dynamic) 26 N
 - 27 Max. force for press fits (static) (static, shaft supported) 200 N
 - 28 Max. radial load, 5 mm from flange 12 N
- Other specifications**
- 31 Weight of motor 37 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

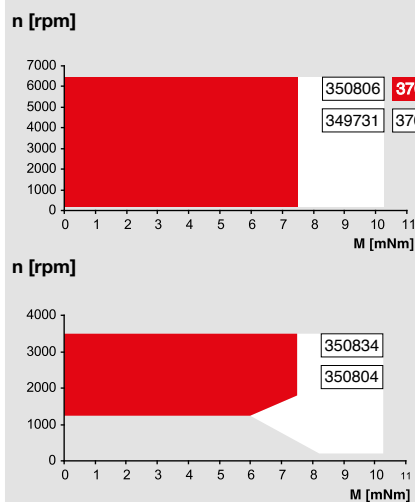
Connection 2 wire version (Cable AWG 28)

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

Connection 5 wire version (Cable AWG 28)

- 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

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

Details on catalog page 36

Planetary Gearhead

Ø22 mm
0.5 - 2.0 Nm
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