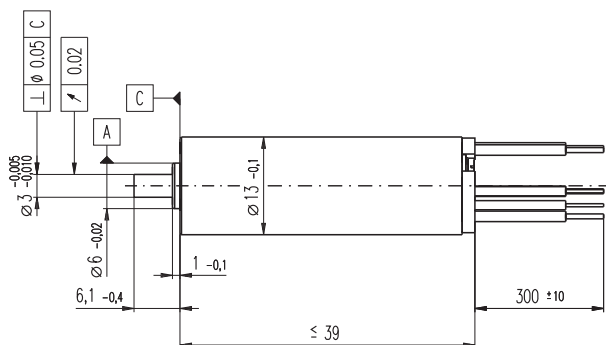
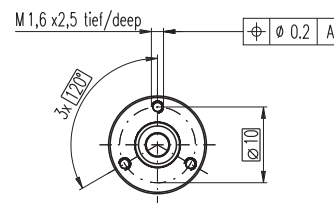




Befestigungsbohrbild zu Anschlusskabel nicht ausgerichtet



M 1:1

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

A with Hall sensors
B sensorless

Order Number

368851	368852	370540
371407	371408	371409

Motor Data (provisional)

Values at nominal voltage

		12	24	48
1 Nominal voltage	V	12	24	48
2 No load speed	rpm	71100	71200	82800
3 No load current	mA	196	98	63.3
4 Nominal speed	rpm	64200	64300	75700
5 Nominal torque (max. continuous torque)	mNm	4.68	4.84	4.52
6 Nominal current (max. continuous current)	A	3.06	1.58	0.869
7 Stall torque	mNm	55.2	59	62.5
8 Starting current	A	34.5	18.4	11.4
9 Max. efficiency	%	86	86	86

Characteristics

10 Terminal resistance phase to phase	Ω	0.348	1.3	4.22
11 Terminal inductance phase to phase	mH	0.018	0.072	0.213
12 Torque constant	mNm / A	1.6	3.2	5.5
13 Speed constant	rpm / V	5970	2980	1740
14 Speed / torque gradient	rpm / mNm	1300	1210	1330
15 Mechanical time constant	ms	3.47	3.24	3.56
16 Rotor inertia	gcm ²	0.255	0.255	0.255

Specifications

- Thermal data**
- 17 Thermal resistance housing-ambient 22.6 K / W
 - 18 Thermal resistance winding-housing 1.55 K / W
 - 19 Thermal time constant winding 1.12 s
 - 20 Thermal time constant motor 384 s
 - 21 Ambient temperature -40 ... +100°C
 - 22 Max. permissible winding temperature +155°C
- Mechanical data (preloaded ball bearings)**
- 23 Max. permissible speed 90000 rpm
 - 24 Axial play at axial load < 1 N 0 mm
 - 25 Radial play > 1 N max. 0.1 mm
 - 26 Max. axial load (dynamic) 1 N
 - 27 Max. force for press fits (static) 10 N
 - 28 Max. radial loading, 5 mm from flange 250 N

Other specifications

- 29 Number of pole pairs 1
- 30 Number of phases 3
- 31 Weight of motor 34 g

Values listed in the table are nominal.

Connection A (Cable AWG 22)
red Motor winding 1
black Motor winding 2
white Motor winding 3

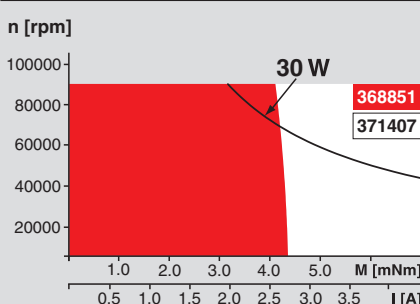
Connection A (Cable AWG 26)
green V_{Hall} 4.5...24 VDC
blue GND
red/grey Hall sensor 1
black/grey Hall sensor 2
white/grey Hall sensor 3

Connection B (Cable AWG 22)
red Motor winding 1
black Motor winding 2
white Motor winding 3

Option

Inch-version size 5 available as standard version.

Operating Range



Comments

Continuous operation
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit.

Short term operation
The motor may be briefly overloaded (recurring).

Assigned power rating

Application



Medicine / surgery / chemicals

Hand tools that can be sterilised, such as bone saw, bone drilling and grinding machine
Dermatological and dental tools
Infusion pumps
ECG
Therapy aid, analysis and dialysis equipment

Sterilisation information

In normal use, the motor can be sterilised 500 times in an autoclave. No need to dismantle.

Sterilisation with steam

Temperature	+134°C ± 4°C
Compression pressure up to	2.3 bar
Rel. humidity	100 %
Cycle length	20 minutes

maxon Modular System

Planetary Gearhead
sterilisable
Ø13 mm
0.1 - 0.15 Nm
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Recommended Electronics:
DECS 50/5 Page 288
DEC 24/1 288
DEC 24/3 289
DEC 50/5 289
DEC Module 24/2 289
DECV 50/5 295
Notes 20