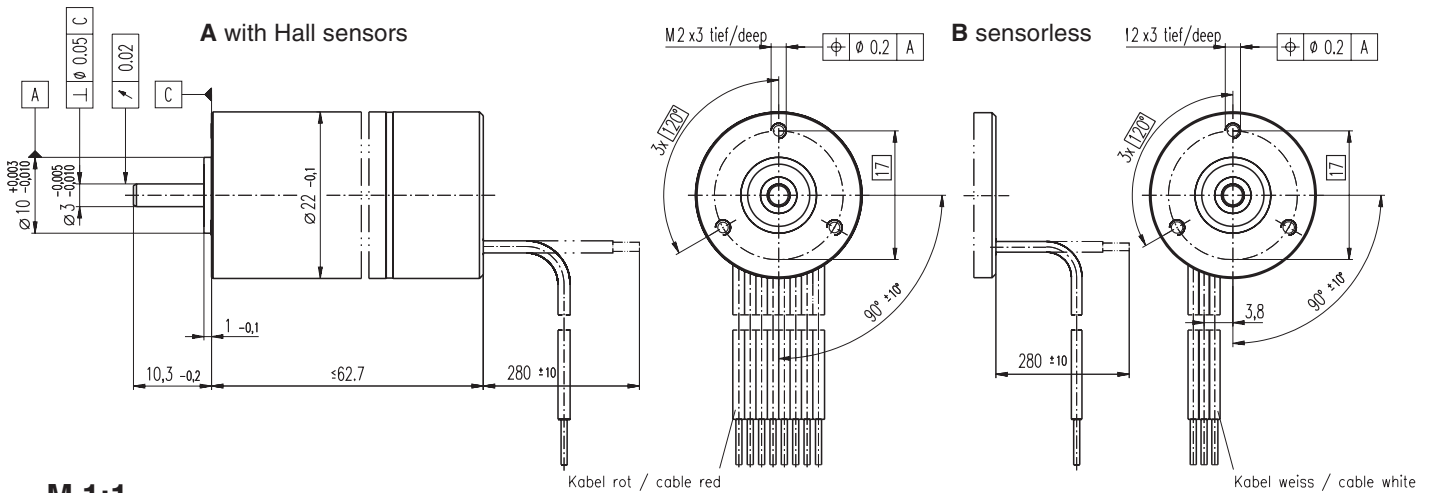


EC 22 Ø22 mm, brushless, 50 Watt, sterilisable



M 1:1

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

A with Hall sensors
B sensorless

Order Number

266520	264443
275312	254168

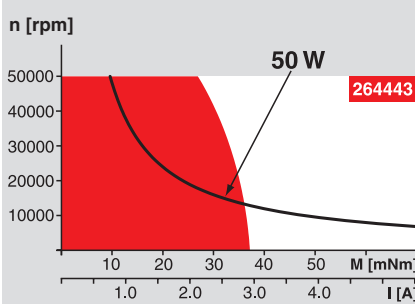
Motor Data (provisional)

Values at nominal voltage			
1	Nominal voltage	V	32.0
2	No load speed	rpm	41100
3	No load current	mA	364
4	Nominal speed	rpm	38900
5	Nominal torque (max. continuous torque)	mNm	28.6
6	Nominal current (max. continuous current)	A	4.18
7	Stall torque	mNm	652
8	Starting current	A	88.2
9	Max. efficiency	%	88
Characteristics			
10	Terminal resistance phase to phase	Ω	0.363
11	Terminal inductance phase to phase	mH	0.0490
12	Torque constant	mNm / A	7.39
13	Speed constant	rpm / V	1290
14	Speed / torque gradient	rpm / mNm	63.4
15	Mechanical time constant	ms	3.08
16	Rotor inertia	gcm ²	4.63

Specifications

Thermal data	
17	Thermal resistance housing-ambient
18	Thermal resistance winding-housing
19	Thermal time constant winding
20	Thermal time constant motor
21	Ambient temperature
22	Max. permissible winding temperature
Mechanical data (preloaded ball bearings)	
23	Max. permissible speed
24	Axial play at axial load < 5 N
25	Radial play
26	Max. axial load (dynamic)
27	Max. force for press fits (static)
28	Max. radial loading, 5 mm from flange
Other specifications	
29	Number of pole pairs
30	Number of phases
31	Weight of motor

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

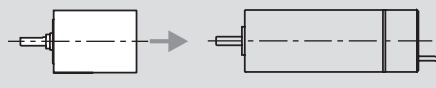
Sterilisation information

The motor can be sterilised at least 100 times in autoclave. No need to dismantle.

Hand tools that can be sterilised, such as bone saw, bone drilling and grinding machine	Sterilisation with steam
Dermatological and dental tools	Temperature
Infusion pumps	Compression pressure up to
ECG	Rel. humidity
Therapy aid, analysis and dialysis equipment	Cycle length

maxon-Baukastensystem

Planetary Gearhead
sterilisable
Ø22 mm
0.5 - 2.0 Nm
Page 233



Übersicht Seite 16 - 21

Recommended Electronics:
DECS 50/5 Page 284
DEC 24/3 285
DEC 50/5 285
DECV 50/5 286
Notes 20

Values listed in the table are nominal.

Connection A, Motor (Cable AWG 22)

- red Motor winding 1
- black Motor winding 2
- white Motor winding 3

Connection A, Sensoren (Cable AWG 26)

- green V_{Hall} + 5 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

Wiring diagram for Hall sensors see page 27