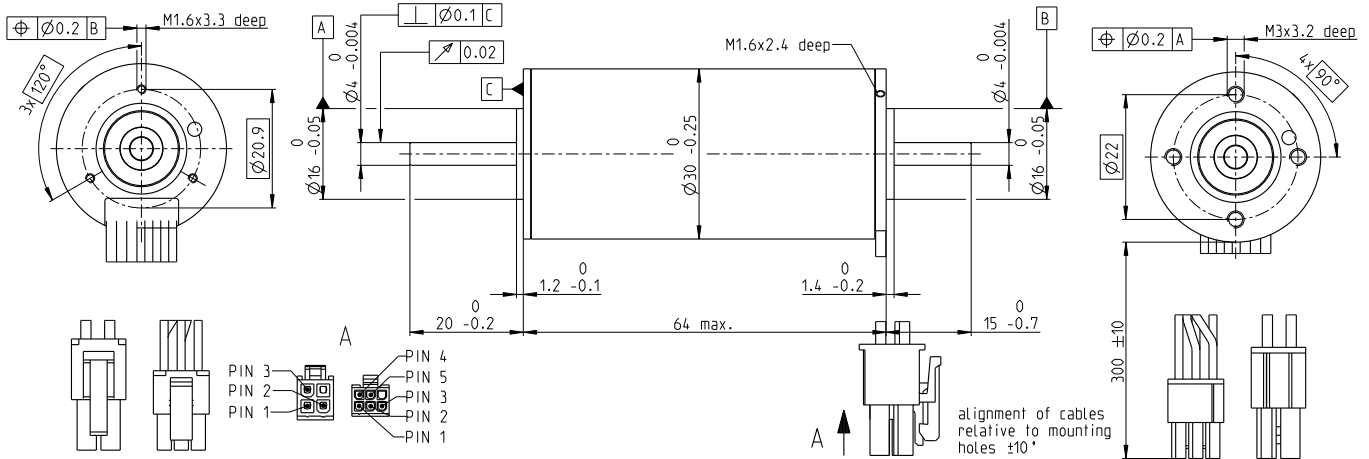


EC-i 30 Ø30 mm, brushless, 50 watt

EC-i

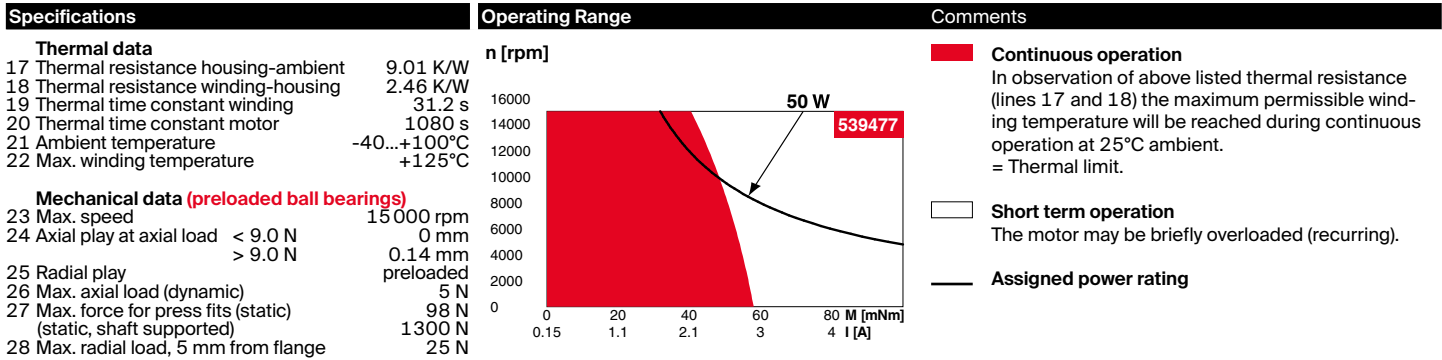


M 3:4

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

Part Numbers				
with Hall sensors	539476	539477	539478	539479

Motor Data (provisional)					
Values at nominal voltage					
1 Nominal voltage	V	12	24	36	48
2 No load speed	rpm	9950	9960	10300	10200
3 No load current	mA	337	169	117	86.8
4 Nominal speed	rpm	8750	8840	9160	9110
5 Nominal torque (max. continuous torque)	mNm	55.6	55.5	53.1	58.4
6 Nominal current (max. continuous current)	A	4.98	2.48	1.64	1.33
7 Stall torque ¹	mNm	682	768	762	909
8 Stall current	A	59.8	33.7	23	20.4
9 Max. efficiency	%	85.7	86.5	86.3	87.5
Characteristics					
10 Terminal resistance phase to phase	Ω	0.201	0.713	1.57	2.35
11 Terminal inductance phase to phase	mH	0.119	0.475	1.01	1.82
12 Torque constant	mNm/A	11.4	22.8	33.2	44.6
13 Speed constant	rpm/V	837	418	288	214
14 Speed/torque gradient	rpm/mNm	14.7	13.1	13.6	11.3
15 Mechanical time constant	ms	2.13	1.89	1.96	1.63
16 Rotor inertia	gcm ²	13.8	13.8	13.8	13.8



- Values listed in the table are nominal.
- Connection motor** (Cable AWG 20)
 red Motor winding 1 Pin 1
 black Motor winding 2 Pin 2
 white Motor winding 3 Pin 3
 N.C. Pin 4
- Connector Article number**
 Molex 39-01-2040
- Connection sensors** (Cable AWG 26)
 yellow Hall sensor 1 Pin 1
 brown Hall sensor 2 Pin 2
 grey Hall sensor 3 Pin 3
 blue GND Pin 4
 green V_{Hall} 4.5...24 VDC Pin 5
 N.C. Pin 6
- Connector Article number**
 Molex 430-25-0600
 Wiring diagram for Hall sensors see p. 59
¹Calculation does not include saturation effect (p. 71/178)

maxon Modular System Details on catalog page 42

2 Planetary Gearhead Ø32 mm 1.0-6.0 Nm Page 269

3 Screw Drive Ø32 mm Page 426-434

Recommended Electronics: Page 42

ESCON 36/3 EC	501	Encoder 16 EASY/XT 128-1024 CPT, 3 channels Page 465/467
ESCON Mod. 50/4 EC-S	501	Encoder 16 RIO 1024-32768 CPT, 3 channels Page 482
ESCON Mod. 50/5	501	Encoder HEDL 5540 500 CPT, 3 channels Page 485
ESCON 50/5	503	Encoder AEDL 5810 1024-5000 CPT, 3 channels Page 492
DEC Module 50/5	505	
EPOS4 Micro 24/5	509	
EPOS4 Mod./Comp. 50/5	510	
EPOS4 Comp. 24/5 3-axes	511	
EPOS4 50/5	515	
EPOS2 P 24/5	520	