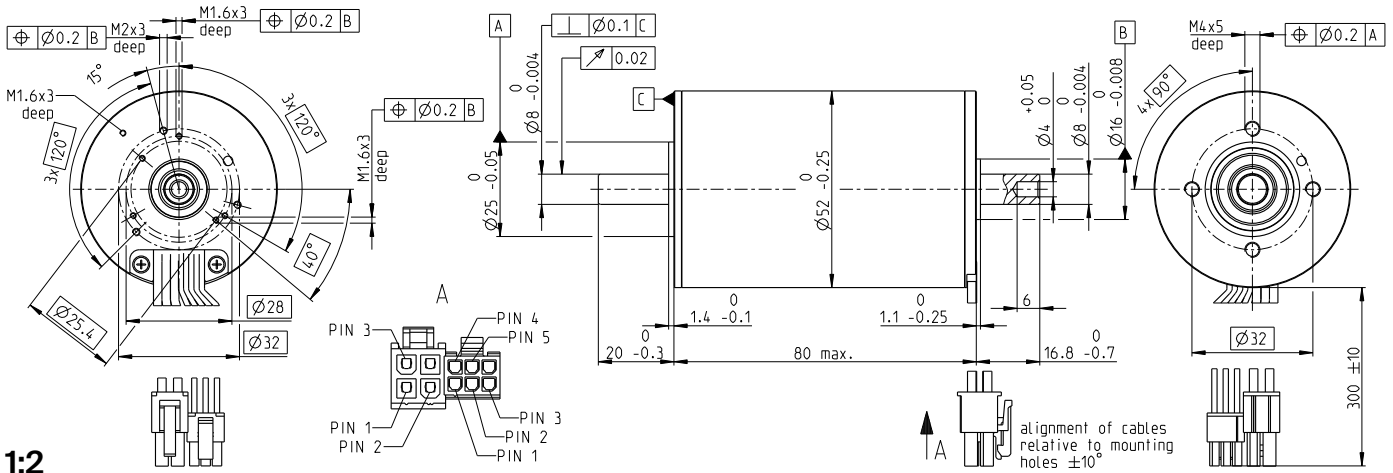


EC-i 52 Ø52 mm, brushless, 180 watt

High Torque

EC-i

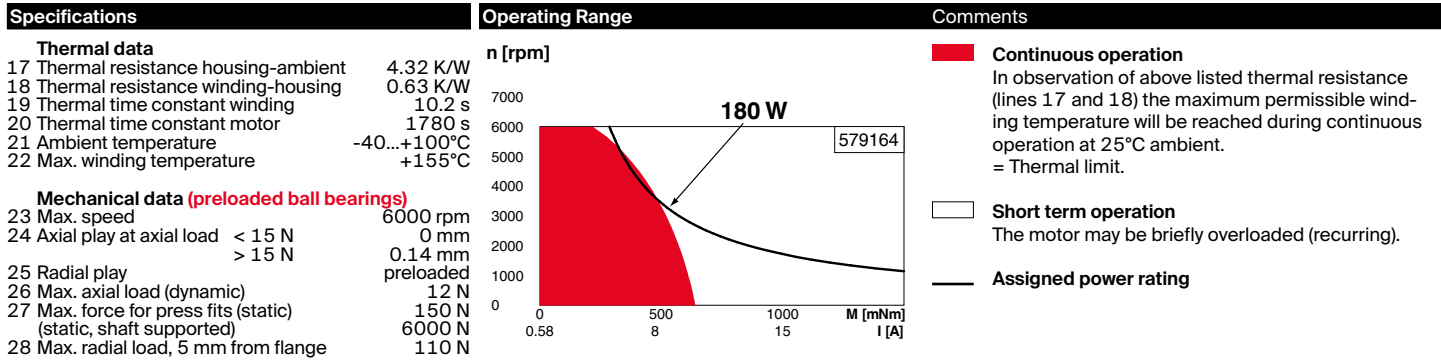
M 1:2



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

Part Numbers				
with Hall sensors	574740	574741	579164	579165

Motor Data (provisional)	with Hall sensors	574740	574741	579164	579165
Values at nominal voltage					
1 Nominal voltage	V	18	24	36	48
2 No load speed	rpm	4820	4680	4820	4900
3 No load current	mA	1010	726	507	390
4 Nominal speed	rpm	4360	4200	4360	4450
5 Nominal torque (max. continuous torque)	mNm	388	428	438	412
6 Nominal current (max. continuous current)	A	11.1	8.81	6.18	4.47
7 Stall torque ¹	mNm	11500	13000	15900	15700
8 Stall current	A	325	268	225	169
9 Max. efficiency	%	89.3	90	90.8	90.7
Characteristics					
10 Terminal resistance phase to phase	Ω	0.0555	0.0894	0.16	0.284
11 Terminal inductance phase to phase	mH	0.0643	0.122	0.257	0.443
12 Torque constant	mNm/A	35.3	48.6	70.6	92.7
13 Speed constant	rpm/V	270	197	135	103
14 Speed/torque gradient	rpm/mNm	0.425	0.362	0.306	0.316
15 Mechanical time constant	ms	0.756	0.645	0.544	0.562
16 Rotor inertia	gcm ²	170	170	170	170



- Other specifications**
- 29 Number of pole pairs 8
 - 30 Number of phases 3
 - 31 Weight of motor 823 g
- Values listed in the table are nominal.
- Connection motor** (Cable AWG 16)
 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 sensor** (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
¹ Calculation does not include saturation effect (p. 71/178)

maxon Modular System Details on catalog page 42

8
3
823 g **Planetary Gearhead**
 Ø52 mm
 4-30 Nm
 Page 411

Recommended Electronics:
Notes Page 42
 ESCON Mod. 50/8 (HE) 502
 ESCON 70/10 503
 EPOS4 Mod./Comp. 50/8 511
 EPOS4 Mod./Comp. 50/15 511
 EPOS4 70/15 515

- Encoder 16 EASY/XT**
128 - 1024 CPT, 3 channels
Page 465/467
- Encoder 16 EASY Absolute/XT**
4096 steps
Page 469/471
- Encoder 16 RIO**
1024 - 32768 CPT, 3 channels
Page 482
- Encoder AEDL 5810**
1024 - 5000 CPT, 3 channels
Page 485
- Encoder HEDL 5540**
500 CPT, 3 channels
Page 492