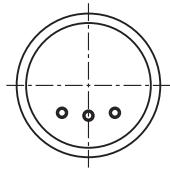
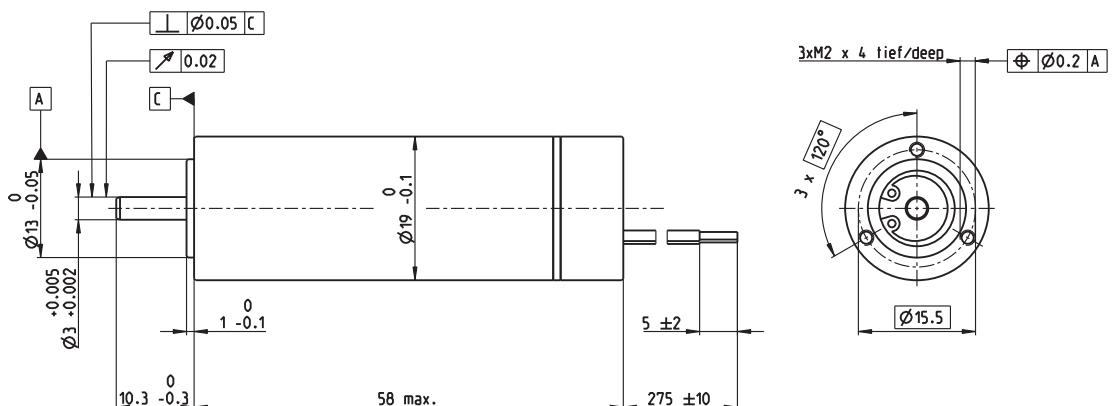


EC 19 Ø19 mm, brushless, 60 Watt

Lage des Kabelabgangs
zum Befestigungsbild $\pm 25^\circ$

alignment of cables
to mounting holes $\pm 25^\circ$



M 1:1

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

Part Numbers

sensorless	475529	475530	474510	477254				
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Motor Data (provisional)

Values at nominal voltage

1 Nominal voltage	V	18	24	30	36			
2 No load speed	rpm	67000	69500	65200	67100			
3 No load current	mA	406	324	232	203			
4 Nominal speed	rpm	64200	67000	62600	64500			
5 Nominal torque (max. continuous torque)	mNm	8.71	8.3	9.15	8.28			
6 Nominal current (max. continuous current)	A	3.77	2.82	2.29	1.8			
7 Stall torque	mNm	279	318	312	295			
8 Stall current	A	109	97	71.3	57.8			
9 Max. efficiency	%	88	89	89	89			
Characteristics								
10 Terminal resistance phase to phase	Ω	0.165	0.247	0.421	0.623			
11 Terminal inductance phase to phase	mH	0.018	0.03	0.053	0.073			
12 Torque constant	mNm/A	2.55	3.28	4.37	5.1			
13 Speed constant	rpm/V	3740	2910	2180	1870			
14 Speed/torque gradient	rpm/mNm	242	220	210	229			
15 Mechanical time constant	ms	4.15	3.77	3.61	3.93			
16 Rotor inertia	gcm^2	1.64	1.64	1.64	1.64			

Specifications

Thermal data

- 17 Thermal resistance housing-ambient 0.808 K/W
- 18 Thermal resistance winding-housing 2.67 s
- 19 Thermal time constant winding 557 s
- 20 Thermal time constant motor 120°C
- 21 Ambient temperature -20...+100°C
- 22 Max. winding temperature 14.0 K/W

Mechanical data (preloaded ball bearings)

- 23 Max. speed 80000 rpm
- 24 Axial play at axial load < 3 N 0 mm
- 25 Radial play max. 0.1 mm
- 26 Max. axial load (dynamic) preloaded 3.1 N
- 27 Max. force for press fits (static) 21 N
- 28 Max. radial load, 5 mm from flange 1400 N

Other specifications

- 29 Number of pole pairs 1
- 30 Number of phases 3
- 31 Weight of motor 98 g

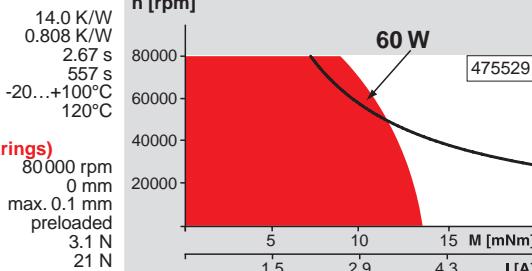
Values listed in the table are nominal.

Connection motor (Cable AWG 22)

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

Operating Range

n [rpm]



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

maxon Modular System

Overview on page 20–25

Recommended Electronics:

Notes Page 24
ESCON Mod. 50/4 EC-S 379