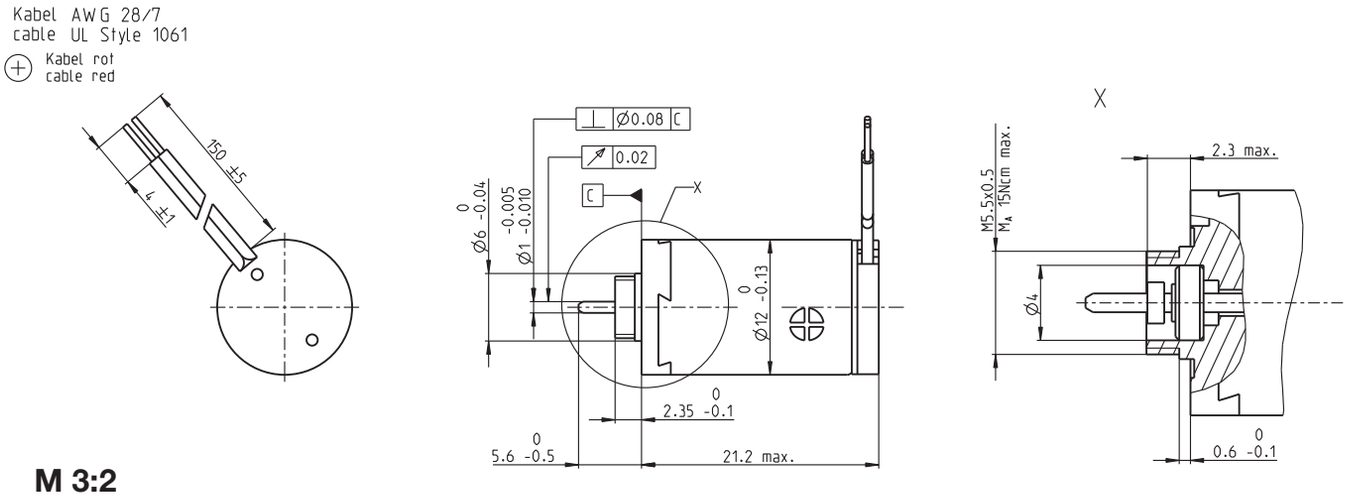
A-max 12 ∅12 mm, Precious Metal Brushes CLL, 0.75 Watt



M 3:2

Stock program
Standard program
Special program (on request)

Part Numbers

	200937	265374	265375	265376	265377	265378
Motor Data						
Values at nominal voltage						
1 Nominal voltage V	3	4.5	6	9	12	15
2 No load speed rpm	13900	11900	12800	12100	12300	13800
3 No load current mA	21.1	11.5	9.47	5.87	4.5	4.2
4 Nominal speed rpm	5980	4380	5260	4470	4610	5030
5 Nominal torque (max. continuous torque) mNm	0.897	0.961	0.948	0.941	0.931	0.804
6 Nominal current (max. continuous current) A	0.465	0.282	0.225	0.141	0.107	0.0836
7 Stall torque mNm	1.58	1.55	1.63	1.52	1.52	1.29
8 Stall current A	0.789	0.438	0.374	0.22	0.168	0.129
9 Max. efficiency %	70	71	71	70	70	68
Characteristics						
10 Terminal resistance Ω	3.8	10.3	16	40.9	71.6	116
11 Terminal inductance mH	0.085	0.264	0.403	1.01	1.74	2.13
12 Torque constant mNm/A	2.01	3.53	4.36	6.92	9.06	10
13 Speed constant rpm/V	4760	2710	2190	1380	1050	952
14 Speed / torque gradient rpm/mNm	9030	7880	8060	8170	8330	11000
15 Mechanical time constant ms	20.6	20.3	20.4	20.4	20.5	21.1
16 Rotor inertia gcm²	0.218	0.246	0.241	0.238	0.235	0.183

Specifications

Thermal data

17	Thermal resistance housing-ambient	44.5 K/W
18	Thermal resistance winding-housing	15 K/W
19	Thermal time constant winding	5.03 s
20	Thermal time constant motor	245 s
21	Ambient temperature	-30…+65°C
22	Max. winding temperature	+85°C

Mechanical data (sleeve bearings)

23	Max. speed	19000 rpm
24	Axial play	0.05 - 0.15 mm
25	Radial play	0.012 mm
26	Max. axial load (dynamic)	0.15 N
27	Max. force for press fits (static)	15 N
28	Max. radial load, 4 mm from flange	0.4 N

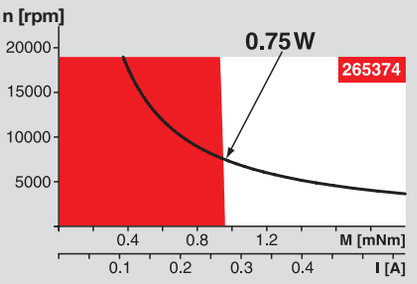
Other specifications

29	Number of pole pairs	1
30	Number of commutator segments	7
31	Weight of motor	11 g

CLL = Capacitor Long Life
Alignment of the electronic connections not specified.

Values listed in the table are nominal.
Explanation of the figures on page 151.

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

maxon Modular System

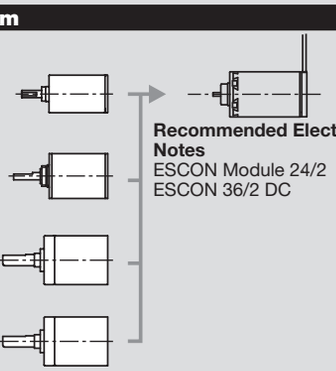
Overview on page 20–27

Planetary Gearhead
∅10 mm
0.01 - 0.15 Nm
Page 314

Spur Gearhead
∅12 mm
0.01 - 0.03 Nm
Page 315

Planetary Gearhead
∅13 mm
0.05 - 0.15 Nm
Page 316

Planetary Gearhead
∅13 mm
0.2 - 0.35 Nm
Page 317



Recommended Electronics:

Notes	Page **24**
ESCON Module 24/2	416
ESCON 36/2 DC	416