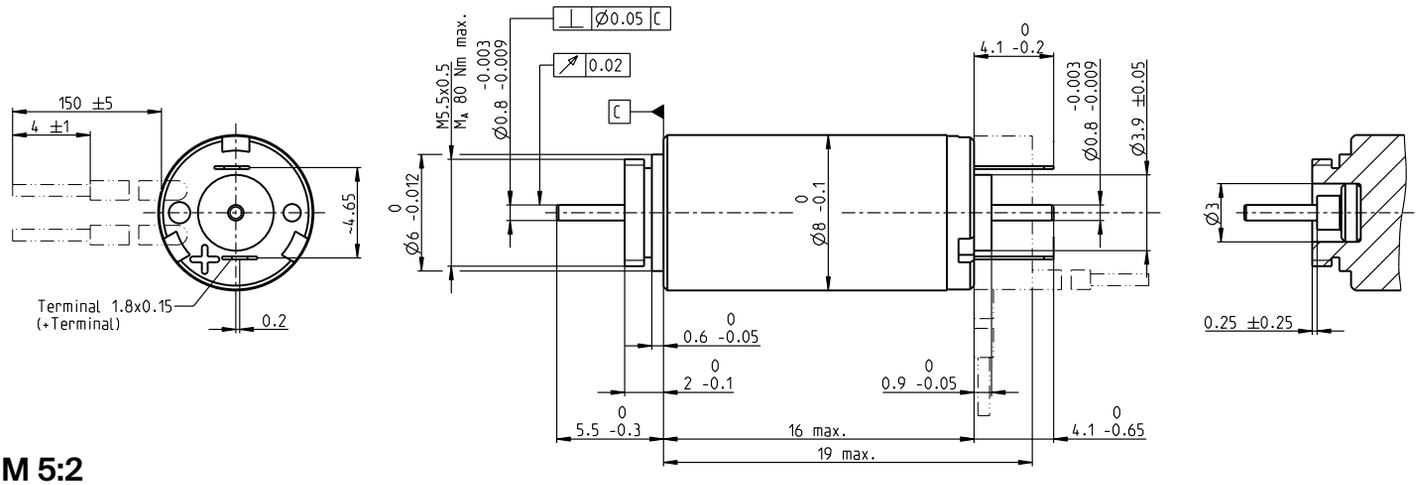
RE 8 ∅8 mm, precious metal brushes, 0.5 watt



M 5:2

Stock program
Standard program
Special program (on request)

	Part Numbers					
B with cables	462207	463219	463220	463221	463222	463223
A with terminals	347723	347724	347725	347728	347726	347727
Motor Data						
Values at nominal voltage						
1 Nominal voltage V	2.4	4.2	6	7.2	9	12
2 No load speed rpm	13900	14200	13300	14300	14400	15600
3 No load current mA	19.2	11.2	7.3	6.66	5.35	4.44
4 Nominal speed rpm	4320	4480	3500	4220	4760	5410
5 Nominal torque mNm	0.63	0.624	0.616	0.596	0.626	0.589
6 Nominal current (max. continuous current) A	0.412	0.237	0.155	0.134	0.113	0.0865
7 Stall torque mNm	0.925	0.932	0.857	0.866	0.957	0.925
8 Stall current A	0.581	0.34	0.207	0.187	0.166	0.13
9 Max. efficiency %	67	67	66	66	68	67
Characteristics						
10 Terminal resistance Ω	4.13	12.3	29	38.5	54.3	92.2
11 Terminal inductance mH	0.03	0.09	0.206	0.257	0.4	0.606
12 Torque constant mNm/A	1.59	2.74	4.15	4.63	5.77	7.11
13 Speed constant rpm/V	6000	3490	2300	2060	1650	1340
14 Speed/torque gradient rpm/mNm	15600	15700	16100	17200	15500	17400
15 Mechanical time constant ms	6.31	6.3	6.34	6.44	6.29	6.49
16 Rotor inertia gcm^2	0.0388	0.0383	0.0375	0.0358	0.0387	0.0355

Specifications

Thermal data

17 Thermal resistance housing-ambient	48 K/W
18 Thermal resistance winding-housing	22 K/W
19 Thermal time constant winding	2.96 s
20 Thermal time constant motor	21.3 s
21 Ambient temperature	-20...+65°C
22 Max. winding temperature	+85°C

Mechanical data (sleeve bearings)

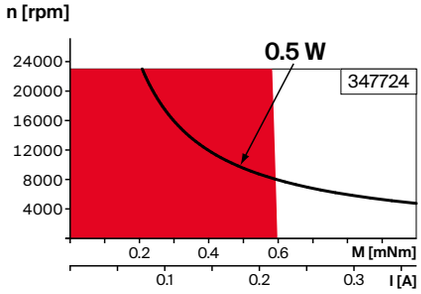
23 Max. speed	23000 rpm
24 Axial play	0.02 - 0.1 mm
25 Radial play	0.012 mm
26 Max. axial load (dynamic)	0.15 N
27 Max. force for press fits (static)	10 N
28 Max. radial load, 4 mm from flange	0.6 N

Other specifications

29 Number of pole pairs	1
30 Number of commutator segments	5
31 Weight of motor	4.0 g

Values listed in the table are nominal.
Explanation of the figures on page 90.

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

Modular System

Details on catalog page 44

Gear
395_GP 8 A
445_GP 8 S
446_GP 8 S

Sensor
505_Encoder MR 64–256 CPT
512_Encoder 8 OPT

Motor Control
532_ESCON Module 24/2
532_ESCON 36/2 DC
542_EPOS4 Module 24/1.5
544_EPOS4 Compact 24/1.5