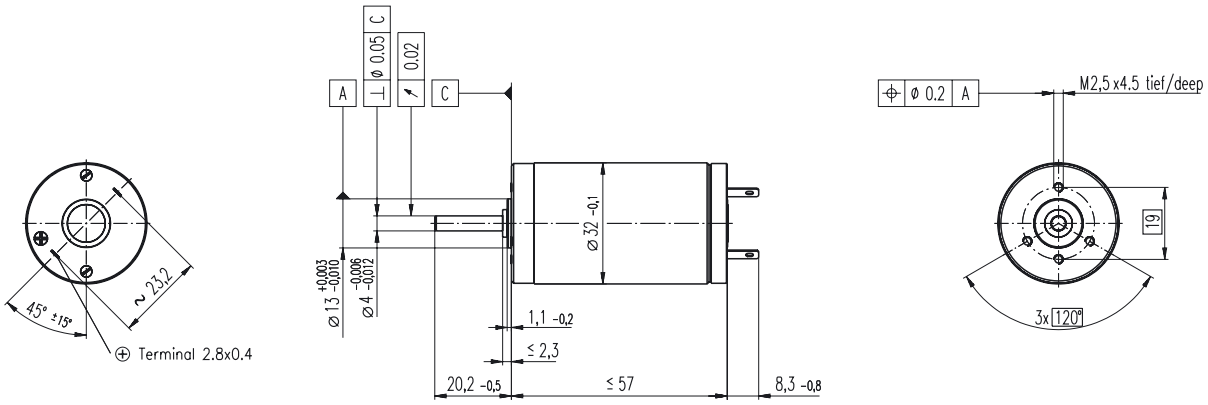
S 2332 ∅32 mm, Graphite Brushes, 15 Watt, CE approved



M 1:1

Stock program
Standard program
Special program (on request!)

Order Number

2332. ... -12.216-200 (Insert winding number)

			Winding number	960	963	994	965	966	967	968	969	970	971	972	973
Motor Data															
1	Assigned power rating	W		15	15	15	15	15	15	15	15	15	15	15	15
2	Nominal voltage	Volt		6.0	9.0	12.0	12.0	12.0	18.0	24.0	30.0	36.0	42.0	48.0	48.0
3	No load speed	rpm		5810	5310	6650	5870	4880	5380	5750	6000	5710	5270	4860	3950
4	Stall torque	mNm		89.1	91.1	116	104	85.6	109	119	122	118	106	97.1	78.2
5	Speed / torque gradient	rpm / mNm		68.2	60.0	58.8	57.9	58.2	50.2	49.0	49.6	49.1	50.3	50.6	51.1
6	No load current	mA		110	64	65	55	42	32	26	22	17	13	10	8
7	Starting current	mA		9450	5790	6860	5420	3720	2460	3020	2590	1970	1410	1040	682
8	Terminal resistance	Ohm		0.635	1.56	1.75	2.21	3.22	5.21	7.94	11.6	18.2	29.9	46.1	70.4
9	Max. permissible speed	rpm		9200	9200	9200	9200	9200	9200	9200	9200	9200	9200	9200	9200
10	Max. continuous current	mA		1500	1500	1500	1470	1230	968	786	652	520	408	328	266
11	Max. continuous torque	mNm		14.1	23.6	25.3	28.0	28.3	30.5	30.9	30.8	31.0	30.7	30.6	30.5
12	Max. power output at nominal voltage	mW		11700	11700	18900	15100	10400	14800	17500	18900	17300	14400	12200	7990
13	Max. efficiency	%		73	77	79	79	78	81	82	82	82	81	81	80
14	Torque constant	mNm / A		9.43	15.7	16.9	19.1	23.0	31.5	39.3	47.2	59.6	75.3	93.3	115
15	Speed constant	rpm / V		1010	607	566	500	415	303	243	202	160	127	102	83.3
16	Mechanical time constant	ms		23	17	16	15	15	14	14	13	13	13	13	13
17	Rotor inertia	gcm²		32.0	26.4	25.7	25.4	24.5	26.7	26.6	25.9	25.9	25.1	24.8	24.5
18	Terminal inductance	mH		0.09	0.25	0.28	0.36	0.53	0.98	1.54	2.22	3.53	5.64	8.65	13.10
19	Thermal resistance housing-ambient	K / W		13	13	13	13	13	13	13	13	13	13	13	13
20	Thermal resistance rotor-housing	K / W		1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
21	Thermal time constant winding	s		13	10	10	10	10	10	10	10	10	10	10	10

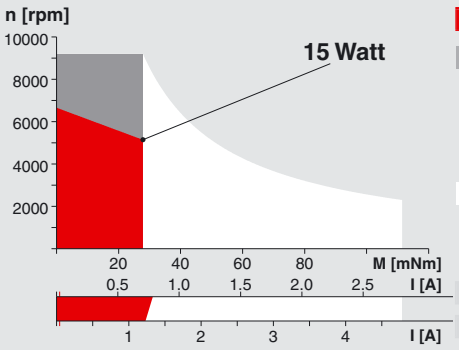
Specifications

- Axial play 0.05 - 0.15 mm
- Max. **ball bearing** loads
  axial (dynamic)
  not preloaded 5.6 N
  preloaded 2.4 N
  radial (5 mm from flange) 28 N
  Force for press fits (static) 113 N
- Radial play **ball bearing** 0.025 mm
- Ambient temperature range -20 ... +100°C
- Max. rotor temperature +125°C
- Number of commutator segments 13
- Weight of motor 230 g
- Values listed in the table are nominal.
  For applicable tolerances see page 43.

- Options: Sleeve bearings in place of ball bearings and pigtails in place of terminals.

Operating Range

Comments Details on page 49



Recommended operating range

Continuous operation
In observation of above listed thermal resistances (lines 19 and 20) the maximum permissible rotor temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit.

Short term operation
The motor may be briefly overloaded (recurring).

968 Motor with high resistance winding

966 Motor with low resistance winding

maxon Modular System

Planetary Gearhead
∅32 mm
0.75 - 4.5 Nm
Details page 218

Planetary Gearhead
∅32 mm
0.4 - 2.0 Nm
Details page 222