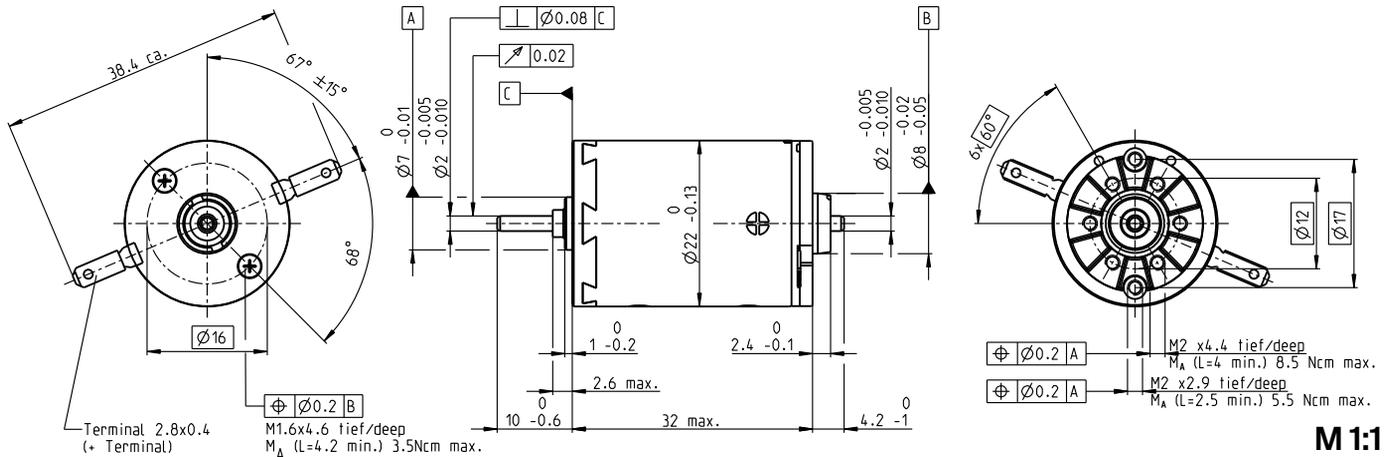


DC-max 22 S $\varnothing 22$ mm, precious metal brushes, DC motor

Key Data: 5/9.6 W, 10.4 mNm, 9000 rpm



DC-max



M 1:1

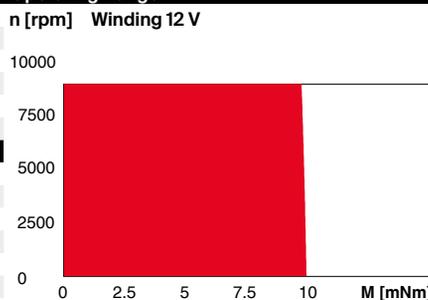
Motor Data

1_	Nominal voltage	V	6	12	24
2_	No load speed	rpm	5480	5890	5090
3_	No load current	mA	20.8	11.7	4.62
4_	Nominal speed	rpm	4280	4240	3440
5_	Nominal torque (max. continuous torque)	mNm	8.54	10.3	10.4
6_	Nominal current (max. continuous current)	A	0.840	0.543	0.236
7_	Stall torque	mNm	39.0	36.9	33.3
8_	Stall current	A	3.75	1.91	0.721
9_	Max. efficiency	%	85.7	85.2	84.9
10_	Terminal resistance	Ω	1.60	6.28	33.3
11_	Terminal inductance	mH	0.119	0.413	2.21
12_	Torque constant	mNm/A	10.4	19.3	44.8
13_	Speed constant	rpm/V	919	494	213
14_	Speed/torque gradient	rpm/mNm	141	160	159
15_	Mechanical time constant	ms	8.44	8.36	8.39
16_	Rotor inertia	gcm ²	5.70	4.98	5.05

Thermal data

17_	Thermal resistance housing-ambient	K/W	20
18_	Thermal resistance winding-housing	K/W	6
19_	Thermal time constant winding	s	16.8
20_	Thermal time constant motor	s	538
21_	Ambient temperature	$^\circ\text{C}$	-30...65
22_	Max. winding temperature	$^\circ\text{C}$	85

Operating Range



Mechanical data ball bearings

23_	Max. speed	rpm	9000
24_	Axial play	mm	0.05...0.15
	Preload	N	0
25_	Radial play	mm	0.025
26_	Max. axial load (dynamic)	N	3.3
27_	Max. force for press fits (static) (static, shaft supported)	N	45
28_	Max. radial load [mm from flange]	N	420

Mechanical data sleeve bearings

23_	Max. speed	rpm	9000
24_	Axial play	mm	0.05...0.15
	Preload	N	0
25_	Radial play	mm	0.012
26_	Max. axial load (dynamic)	N	1
27_	Max. force for press fits (static) (static, shaft supported)	N	80
28_	Max. radial load [mm from flange]	N	420

maxon Modular System

maxon gear	Stages [opt.]	maxon sensor
349_GPX 22 A/C	1-2 [3-4]	447_ENX 10 QUAD
350_GPX 22 LN/LZ	1-2 [3-4]	447_ENX 10 EASY
354_GPX 26 A/C	3	
355_GPX 26 LN/LZ	3	

Details on catalog page 34

maxon motor control
500_ESCON Module 24/2
500_ESCON 36/2 DC
509_EPOS4 Micro 24/5
510_EPOS4 Mod./Comp. 24/1.5
511_EPOS4 Comp. 24/5 3-axes

Other specifications

29_	Number of pole pairs		1
30_	Number of commutator segments		9
31_	Weight of motor	g	53.8

Configuration

Bearing: Sleeve bearings/ball bearings
 Commutation: Precious metal brushes with CLL/Graphite Brushes
 Shaft front/back: Length
 Electric connection: Terminals/cable