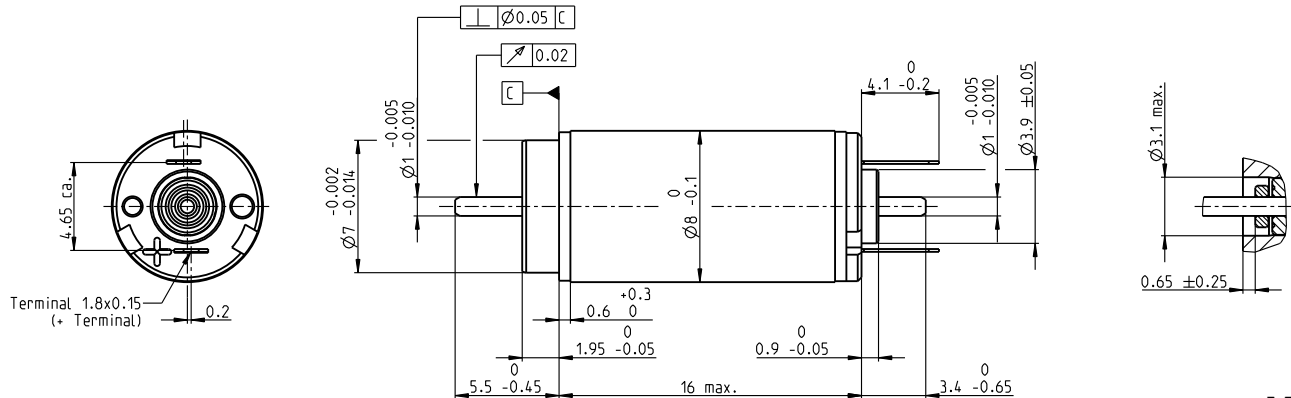


DCX 8 M Ø8 mm, precious metal brushes, DC motor

Key data: 0.5/1.0 W, 0.65 mNm, 17300 rpm



M 5:2

Motor data

1_	Nominal voltage	V	2.4	4.2	6	7.2	9	12
2_	No load speed	rpm	11500	11700	11000	11900	11900	12900
3_	No load current	mA	11.9	6.93	4.51	4.12	3.3	2.74
4_	Nominal speed	rpm	4780	4950	4190	4820	5190	5800
5_	Nominal torque	mNm	0.653	0.649	0.641	0.62	0.652	0.614
6_	Nominal current (max. continuous current)	A	0.345	0.199	0.13	0.113	0.0949	0.0728
7_	Stall torque	mNm	1.13	1.14	1.05	1.06	1.17	1.13
8_	Stall current	A	0.581	0.34	0.207	0.187	0.166	0.13
9_	Max. efficiency	%	74	74	73	73	74	74
10_	Terminal resistance	Ω	4.13	12	29	38.5	54.3	92.2
11_	Terminal inductance	mH	0.014	0.0411	0.0941	0.117	0.183	0.276
12_	Torque constant	mNm/A	1.95	3.360	5.08	5.67	7.07	8.71
13_	Speed constant	rpm/V	4900	2850	1880	1680	1350	1100
14_	Speed/torque gradient	rpm/mNm	10400	10500	10700	11400	10400	11600
15_	Mechanical time constant	ms	4.17	4.15	4.18	4.24	4.15	4.28
16_	Rotor inertia	gcm ²	0.038	0.0379	0.0372	0.035	0.038	0.035

Thermal data

17_	Thermal resistance housing-ambient	K/W	101	Operating range				
18_	Thermal resistance winding-housing	K/W	16.9	n [rpm] Winding 6 V				
19_	Thermal time constant winding	s	2.31					
20_	Thermal time constant motor	s	162					
21_	Ambient temperature ball bearings	°C	-30...+85					
21_	Ambient temperature sleeve bearings	°C	-30...+85					
22_	Max. winding temperature	°C	100					

Mechanical data ball bearings

23_	Max. speed	rpm	17300					
24_	Axial play	mm	0...0.1					
25_	Radial play	mm	0.012					
26_	Max. axial load (dynamic)	N	0.1					
27_	Max. force for press fits (static)	N	5					
27_	(shaft supported)	N	100					
28_	Max. radial load [mm from flange]	N	0.6 [5]					

Mechanical data sleeve bearings

23_	Max. speed	rpm	17300	Gear	Stages [opt.]	Sensor	Motor Control
24_	Axial play	mm	0.02...0.1				
	Preload	N	0	372_GPX 8 A	1-5	495_ENX 8 MAG	550_ESCON Module 24/2
25_	Radial play	mm	0.012				550_ESCON 36/2 DC
26_	Max. axial load (dynamic)	N	0.1				557_ESCON2 Nano 24/2
27_	Max. force for press fits (static)	N	10				564_EPOS4 Module 24/1.5
	(shaft supported)	N	100				566_EPOS4 Compact 24/1.5
28_	Max. radial load [mm from flange]	N	0.4 [5]				

Other specifications

29_	Number of pole pairs		1	Configuration				
30_	Number of commutator segments		5					
31_	Weight of motor	g	4.4					
32_	Typical noise level	dBA	-					

Bearing: Sleeve bearings/ball bearings preloaded
 Commutation: Precious metal brushes with or without CLL
 Flange front/back: Standard flange
 Shaft front/back: Length
 Electric connection: Terminals or cables (encoder always with Flex)