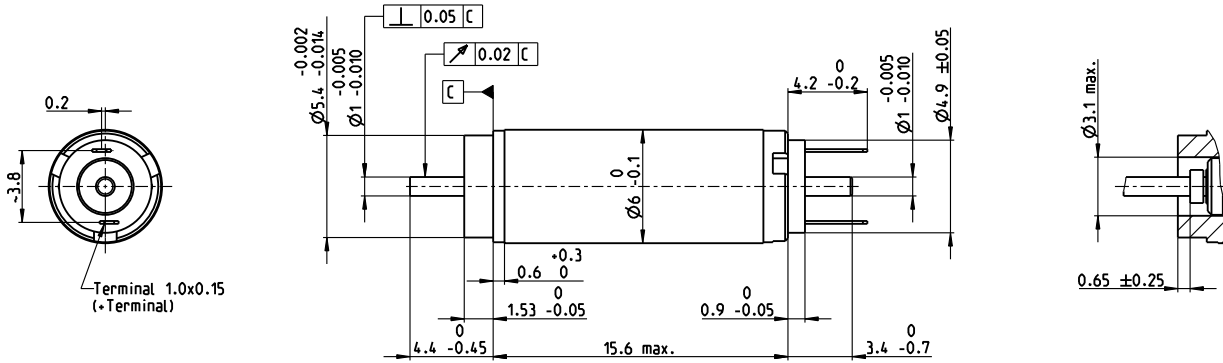


DCX 6 M $\varnothing 6$ mm, precious metal brushes, DC motor

Key Data: 0.3/0.56 W, 0.3 mNm, 17300 rpm



DCX



M 5:2

Motor Data

	V	1.5	3	4.5	6
1_ Nominal voltage	V	1.5	3	4.5	6
2_ No load speed	rpm	17300	17500	17400	17400
3_ No load current	mA	34.1	17.1	11.4	8.54
4_ Nominal speed	rpm	4950	5940	5730	5690
5_ Nominal torque	mNm	0.309	0.332	0.326	0.325
6_ Nominal current (max. continuous current)	A	0.425	0.228	0.149	0.111
7_ Stall torque	mNm	0.453	0.524	0.507	0.503
8_ Stall current	A	0.581	0.336	0.217	0.161
9_ Max. efficiency	%	58	61	60	60
10_ Terminal resistance	Ω	2.58	9.0	20.8	37.2
11_ Terminal inductance	mH	0.008	0.0316	0.0711	0.126
12_ Torque constant	mNm/A	0.779	1.560	2.34	3.12
13_ Speed constant	rpm/V	12300	6130	4090	3060
14_ Speed/torque gradient	rpm/mNm	40600	35100	36300	36600
15_ Mechanical time constant	ms	7.06	6.74	6.81	6.81
16_ Rotor inertia	gcm ²	0.017	0.0183	0.0179	0.018

Thermal data

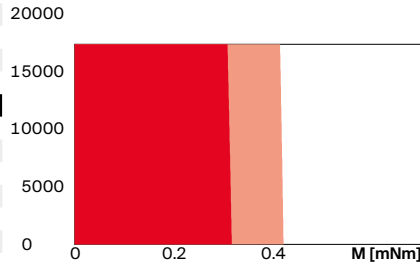
	K/W	s	s	°C	°C	°C
17_ Thermal resistance housing-ambient	K/W	105				
18_ Thermal resistance winding-housing	K/W	20				
19_ Thermal time constant winding	s	1.71				
20_ Thermal time constant motor	s	79				
21_ Ambient temperature ball bearings	°C	-30...+85				
21_ Ambient temperature sleeve bearings	°C	-30...+85				
22_ Max. winding temperature	°C	100				

Mechanical data ball bearings

	rpm	mm	N	N	N	N
23_ Max. speed	rpm	17300				
24_ Axial play	mm	0...0.1				
Preload	N	0.5				
25_ Radial play	mm	0.012				
26_ Max. axial load (dynamic)	N	0.1				
27_ Max. force for press fits (static)	N	8.8				
(static, shaft supported)	N	100				
28_ Max. radial load [mm from flange]	N	0.6 [5]				

Operating Range

n [rpm] Winding 4.5 V



- Continuous operation
- Continuous operation with reduced thermal resistance R_{th2} 50%
- Intermittent operation

Mechanical data sleeve bearings

	rpm	mm	N	N	N
23_ Max. speed	rpm	17300			
24_ Axial play	mm	0.02...0.1			
Preload	N	0			
25_ Radial play	mm	0.012			
26_ Max. axial load (dynamic)	N	0.1			
27_ Max. force for press fits (static)	N	10			
(static, shaft supported)	N	100			
28_ Max. radial load [mm from flange]	N	0.4 [5]			

Other specifications

29_ Number of pole pairs		1
30_ Number of commutator segments		5
31_ Weight of motor	g	2.4
32_ Typical noise level	dBA	-

Configuration

Bearing: Sleeve bearings/ball bearings preloaded
 Commutation: Precious metal brushes
 Flange front/back: Standard flange
 Shaft front/back: Length
 Electric connection: Terminals or cables (encoder always with Flex)