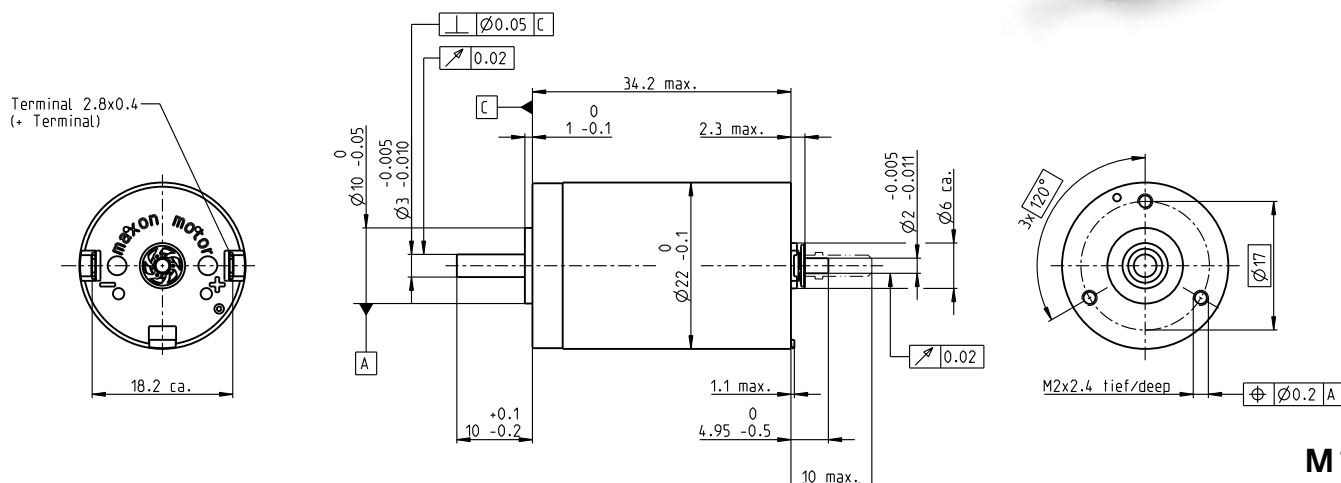


DCX 22 S Ø22 mm, precious metal brushes, DC motor

Key data: 6/10 W, 14.7 mNm, 7160 rpm



DCX



M 1:1

Motor data								
1_	Nominal voltage	V	6	12	18	24	36	48
2_	No load speed	rpm	6200	6200	6110	6340	6550	5890
3_	No load current	mA	39.2	19.6	12.8	10.1	7.09	4.55
4_	Nominal speed	rpm	4960	4670	4560	4700	4940	4240
5_	Nominal torque	mNm	10.7	14.7	14.5	13.6	13.8	13.6
6_	Nominal current (max. continuous current)	A	1.20	0.817	0.531	0.388	0.272	0.180
7_	Stall torque	mNm	53.7	59.7	57.5	52.7	56.5	48.6
8_	Stall current	A	5.85	3.25	2.06	1.47	1.08	0.63
9_	Max. efficiency	%	84	85	85	84	85	84
10_	Terminal resistance	Ω	1.02	3.69	8.75	16.3	33.3	76.2
11_	Terminal inductance	mH	0.058	0.231	0.535	0.881	1.86	4.08
12_	Torque constant	mNm/A	9.18	18.4	28.0	35.9	52.2	77.2
13_	Speed constant	rpm/V	1040	520	342	266	183	124
14_	Speed/torque gradient	rpm/mNm	116	104	107	121	117	122
15_	Mechanical time constant	ms	6.14	6.07	6.09	5.93	6.15	6.19
16_	Rotor inertia	gcm²	5.05	5.55	5.44	4.67	5.03	4.84
Thermal data			Operating range					
17_	Thermal resistance housing-ambient	K/W	16	n [rpm] Winding 18 V				
18_	Thermal resistance winding-housing	K/W	7					
19_	Thermal time constant winding	s	20					
20_	Thermal time constant motor	s	528					
21_	Ambient temperature ball bearings	°C	-40...85	20000				
	Ambient temperature sleeve bearings	°C	-30...85					
22_	Max. winding temperature	°C	100	15000				
Mechanical data ball bearings								
23_	Max. speed	rpm	7160	10000				
24_	Axial play	mm	0...0.1					
	Preload	N	2.5					
25_	Radial play	mm	0.02					
26_	Max. axial load (dynamic)	N	2.5					
27_	Max. force for press fits (static)	N	30					
	(shaft supported)	N	440					
28_	Max. radial load [mm from flange]	N	16 [5]					
Mechanical data sleeve bearings			Modular system			Details on catalog page 40		
23_	Max. speed	rpm	7160	Gear	Stages [opt.]	Sensor	Motor Control	
24_	Axial play	mm	0...0.2	390_GPX 22 A/C	1-2 [3-4]	507_ENX 10 EASY/QUAD	550_ESCON Module 24/2	
	Preload	N	0	391_GPX 22 LN/LZ	1-2 [3-4]	508_ENX 10 EASY XT	550_ESCON 36/2 DC	
25_	Radial play	mm	0.02	392_GPX 22 HP	2-3 [4]	509_ENX 16 EASY	551_ESCON Module 50/5	
26_	Max. axial load (dynamic)	N	0.1	394_GPX 22 UP	1-4	510_ENX 16 EASY XT	553_ESCON 50/5	
27_	Max. force for press fits (static)	N	80	396_GPX 26 A/C	3	511_ENX 16 EASY Abs.	557_ESCON2 Nano 24/2	
	(shaft supported)	N	440	397_GPX 26 LN/LZ	3	512_ENX 16 EASY Abs. XT	557_ESCON2 Micro 60/5	
28_	Max. radial load [mm from flange]	N	3 [5]	398_GPX 26 HP	4	518_ENX 22 EMT	563_EPOS4 Micro 24/5	
Other specifications								
29_	Number of pole pairs		1					
30_	Number of commutator segments		9					
31_	Weight of motor	g	66					
32_	Typical noise level	dBA	48					
			Configuration					
			Bearing: Ball bearings preloaded/sleeve bearings					
			Commutation: Precious metal brushes with or without CLL/ graphite brushes/EMI filter					
			Flange front/back: Standard flange/configurable flange/ no flange					
			Shaft front/back: Length/diameter/flat face					
			Electric connection: Terminals or cable/ alignment of connection/cable length/connector type					