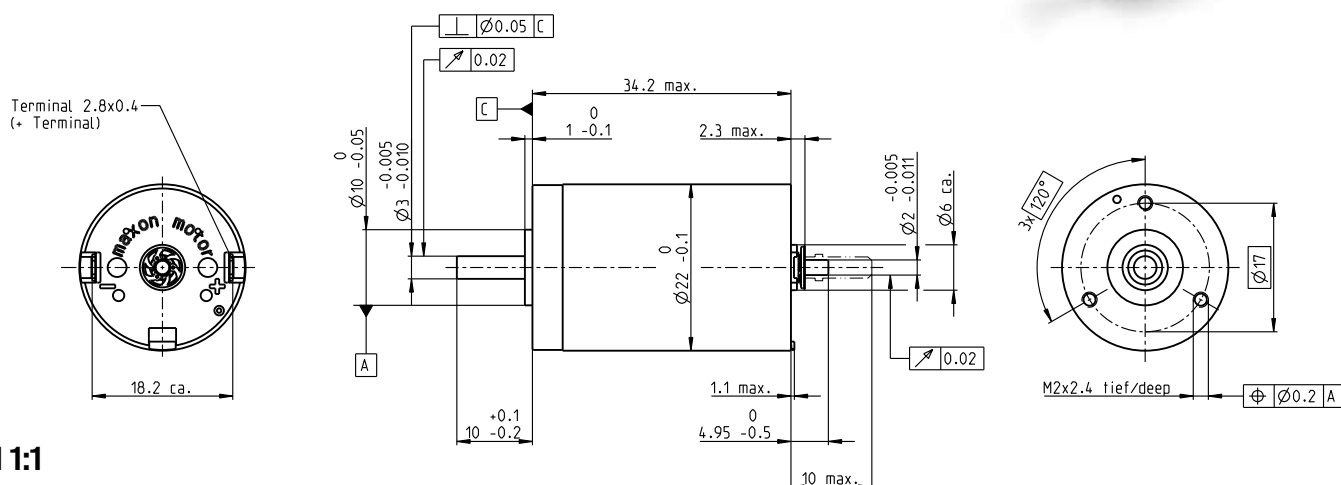
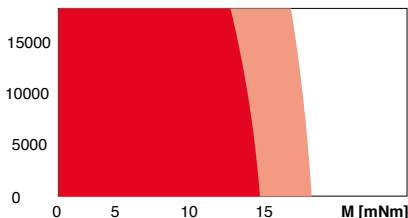


DCX

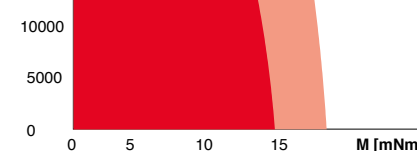


Motor Data								
1	Nominal voltage	V	6	12	18	24	36	48
2	No load speed	rpm	11400	12400	12400	12400	12200	12700
3	No load current	mA	126	71.7	47.8	35.9	23.4	18.5
4	Nominal speed	rpm	9700	10700	10800	10800	10500	10900
5	Nominal torque (max. continuous torque)	mNm	14.4	14.6	14.9	15.3	14.8	14.0
6	Nominal current (max. continuous current)	A	3.00	1.65	1.12	0.869	0.552	0.406
7	Stall torque	mNm	101	108	112	120	113	104
8	Stall current	A	20.2	11.8	8.15	6.51	4.03	2.90
9	Max. efficiency	%	85	85	85	86	85	84
10	Terminal resistance	Ω	0.297	1.02	2.21	3.69	8.94	16.6
11	Terminal inductance	mH	0.017	0.058	0.130	0.231	0.535	0.881
12	Torque constant	mNm/A	5.01	9.18	13.8	18.4	28.0	35.9
13	Speed constant	rpm/V	1910	1040	693	520	342	266
14	Speed/torque gradient	rpm/mNm	113	116	111	104	109	123
15	Mechanical time constant	ms	6.23	6.12	6.08	6.07	6.22	6.01
16	Rotor inertia	acm ²	5.27	5.05	5.22	5.55	5.44	4.67

Thermal data			Operating Range	
Thermal resistance housing-ambient	K/W	16	n [rpm]	Winding 18 V
Thermal resistance winding-housing	K/W	7		
Thermal time constant winding	s	20	20000	
Thermal time constant motor	s	528		
Ambient temperature ball bearings	°C	-40...+100	15000	
Ambient temperature sleeve bearings	°C	-30...+100		
Max. winding temperature	°C	125		



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

Mechanical data ball bearings						Continuous operation Continuous operation with reduced thermal resistance R_{th2} 50% Intermittent operation	
23_	Max. speed	rpm	18 000				
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				
	(static, shaft supported)	N	440				
28_	Max. radial load [mm from flange]	N	16 [5]				
Mechanical data sleeve bearings				maxon Modular System		Details on catalog page 34	
23_	Max. speed	rpm	18 000	maxon gear	Stages [opt.]	maxon sensor	maxon motor control
24_	Axial play	mm	0...0.2	349_GPX 22 A/C	1-2 [3-4]	447_ENX 10 EASY	500_ESCON Module 24/2
	Preload	N	0	350_GPX 22 LN/LZ	1-2 [3-4]	447_ENX 10 QUAD	500_ESCON 36/2 DC
25_	Radial play	mm	0.02	351_GPX 22 HP	2-3 [4]	448_ENX 10 EASY XT	501_ESCON Module 50/5
26_	Max. axial load (dynamic)	N	0.1	352_GPX 22 UP	1-4	450_ENX 16 EASY	503_ESCON 50/5
27_	Max. force for press fits (static)	N	80	354_GPX 26 A/C	3	451_ENX 16 EASY XT	509_EPOS4 Micro 24/5
	(static, shaft supported)	N	440	355_GPX 26 LN/LZ	3	452_ENX 16 EASY Abs.	510_EPOS4 Mod./Comp. 24/1.5
28_	Max. radial load [mm from flange]	N	3 [5]	356_GPX 26 HP	4	453_ENX 16 EASY Abs. XT	510_EPOS4 Mod./Comp. 50/5
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	41				
				Configuration			
						458_ENX 16 RIO	511_EPOS4 Comp. 24/5 3-axes
						485_ENC AEDL 5810	515_EPOS4 50/5
						486_ENC 30 HEDS 5540	516_EPOS4 Disk 60/8
						492_ENC 30 HEDL 5540	520_EPOS2 P 24/5

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