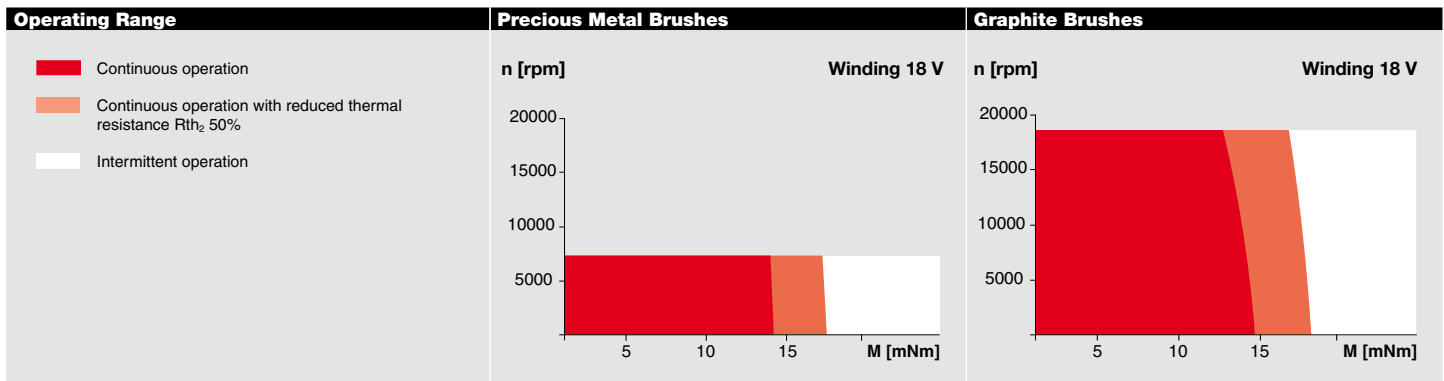


DCX 22 S brushed DC motor Ø22 mm

Configurable



Key Data	Precious Metal Brushes	Graphite Brushes
Typical Speed/torque gradient	rpm/mNm 115	112
Max. nominal torque	mNm 14.7	15.4
Max. permissible speed	rpm 7160	18000
Max. continuous output power/assigned power rating	W 10/5.5	24/14
Max. efficiency	% 85	86
Ambient temperature	°C -30 ... +85	-40 ... +100
Mech. time constant	ms 6.13	6.09
Therm. time constant winding	s 20.0	20.0
Rotor inertia	gcm ² 5.1	5.2
Max. axial loading (dynamic)	N Ball bearings: 2.5/Sleeve bearings: 0.1	Ball bearings: 2.5/Sleeve bearings: 0.1
Max. radial loading, 5 mm from flange	N Ball bearings: 16/Sleeve bearings: 3	Ball bearings: 16/Sleeve bearings: 3
Typical noise level	dBA 48	41
Weight	g 66	66



Specifications	Precious Metal Brushes							Graphite Brushes						
	6	12	18	24	36	48	6	12	18	24	36	48		
Nominal voltage	V													
No load speed	rpm 6200	6200	6110	6340	6550	5890	11400	12400	12400	12400	12200	12700		
No load current	mA 39.2	19.6	12.8	10.1	7.09	4.55	126	71.8	47.8	35.9	23.4	18.5		
Nominal current	A 1.20	0.817	0.531	0.381	0.272	0.180	3.00	1.67	1.13	0.871	0.552	0.398		
Torque constant	mNm/A 9.18	18.4	28.0	35.9	52.2	77.2	5.01	9.18	13.8	18.4	28.0	35.9		
Speed constant	rpm/V 1040	520	342	266	183	124	1910	1040	693	520	342	266		
Terminal resistance	Ω 1.02	3.69	8.75	17.0	33.3	76.2	0.285	1.01	2.19	3.67	8.94	17.2		
Terminal inductance	mH 0.058	0.231	0.535	0.881	1.86	4.08	0.017	0.058	0.130	0.231	0.535	0.881		

Configuration	dcx.maxonmotor.com
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

maxon Modular System	Page	Dimensions Standard Configuration	M 1:1
maxon gear			
GPX 22	68–69		
maxon sensor			
ENX 10 QUAD	74		
ENX 16 EASY	75		
ENC SCH16F	322		
ENC 30 HEDL 5540	330		
maxon motor control			
ESCON 36/2 DC	342		
ESCON 50/5, Module 50/5	343		
EPOS2 24/2 (DC/EC)	350		
EPOS2 Module 36/2	350		
EPOS2 24/5	351		
EPOS2 50/5	351		
EPOS2 P 24/5	354		
EPOS3 70/10 EtherCAT	357		
MAXPOS 50/5	360	Shortest configuration possible: 31.7 mm	

