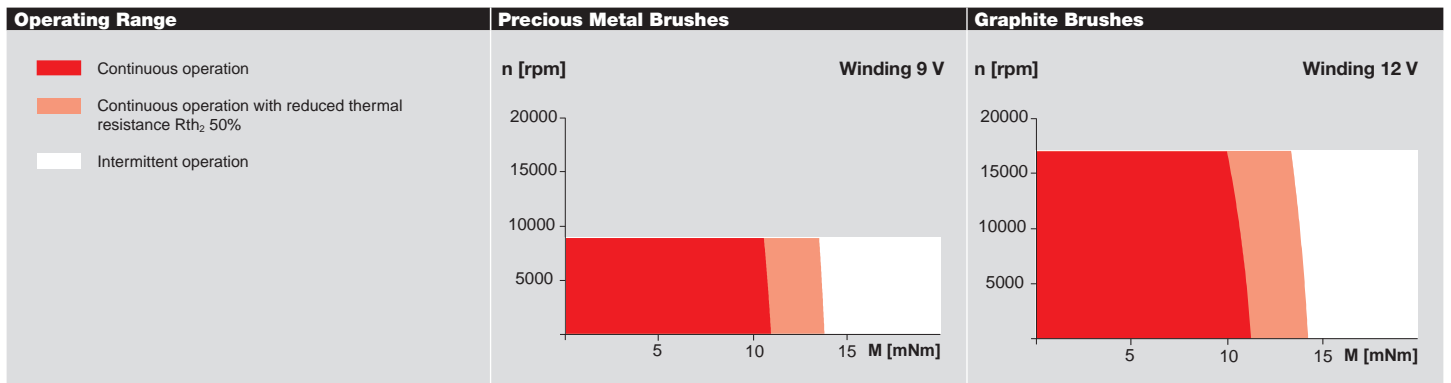


# DCX 16 L brushed DC motor Ø16 mm

Configurable



Key Data	Precious Metal Brushes	Graphite Brushes
Typical Speed/torque gradient	rpm/mNm 170	168
Max. nominal torque	mNm 11.5	12.8
Max. speed	rpm 8680	17000
Max. continuous output power/assigned power rating	W 9.7/4.5	19/10
Max. efficiency	% 85	88
Ambient temperature	°C -30 ... 85	-40 ... 100
Mech. time constant	ms 4.22	4.24
Therm. time constant winding	s 21.5	21.5
Rotor inertia	gcm <sup>2</sup> 2.39	2.42
Max. axial load (dynamic)	N Ball bearings: 0.8/Sinterlager: 0.1	Ball bearings: 0.8/Sleeve bearings: 0.1
Max. radial load, 5 mm from flange	N Ball bearings: 10/Sinterlager: 2	Ball bearings: 10/Sleeve bearings: 2
Typical noise level	dBA 44	40
Weight	g 42	42



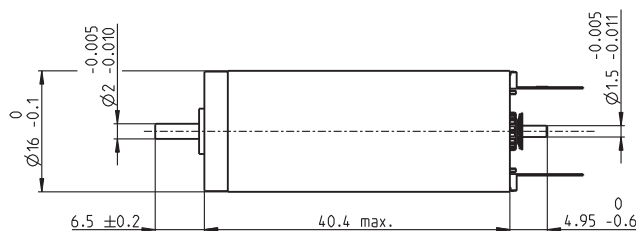
Specifications	Precious Metal Brushes						Graphite Brushes					
	3	6	9	12	18	24	6	9	12	18	24	36
Nominal voltage	V											
No load speed	rpm 6390	6630	6400	6400	6400	6560	12800	13100	13300	12800	12800	12800
No load current	mA 66.8	34.9	22.3	16.7	11.10	8.62	79	54.8	41.8	26.5	19.8	13.2
Nominal current	A 1.20	1.200	0.887	0.622	0.419	0.315	2.00	1.88	1.53	0.964	0.678	0.457
Torque constant	mNm/A 4.44	8.59	13.30	17.8	26.7	34.7	4.44	6.52	8.59	13.3	17.8	26.7
Speed constant	rpm/V 2150	1110	716	537	358	276	2150	1470	1110	716	537	358
Terminal resistance	Ω 0.39	1.13	2.87	5.8	12.9	22.7	0.394	0.753	1.13	2.88	5.84	12.9
Terminal inductance	mH 0.026	0.096	0.231	0.411	0.925	1.56	0.026	0.055	0.096	0.231	0.411	0.925

Configuration	dcx.maxonmotor.com
Bearing	Ball bearings preloaded/sleeve bearings
Commutation	Precious metal brushes with CLL/graphite brushes
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
<b>maxon gear</b>	Number of stages		
GPX 16	1-2	26-27	
GPX 19	3	28	

maxon sensor	
ENX 10 QUAD	38
ENX 10 EASY	38
ENX 16 EASY	39
ENX 16 EASY Absolute	40

maxon motor control	
ESCON 36/2 DC	44
EPOS2 24/2 (DC/EC)	44
EPOS2 Module 36/2	44
EPOS2 P 24/5	44
EPOS3 70/10 EtherCAT	44
MAXPOS 50/5	44



Shortest configuration possible: 38.8 mm