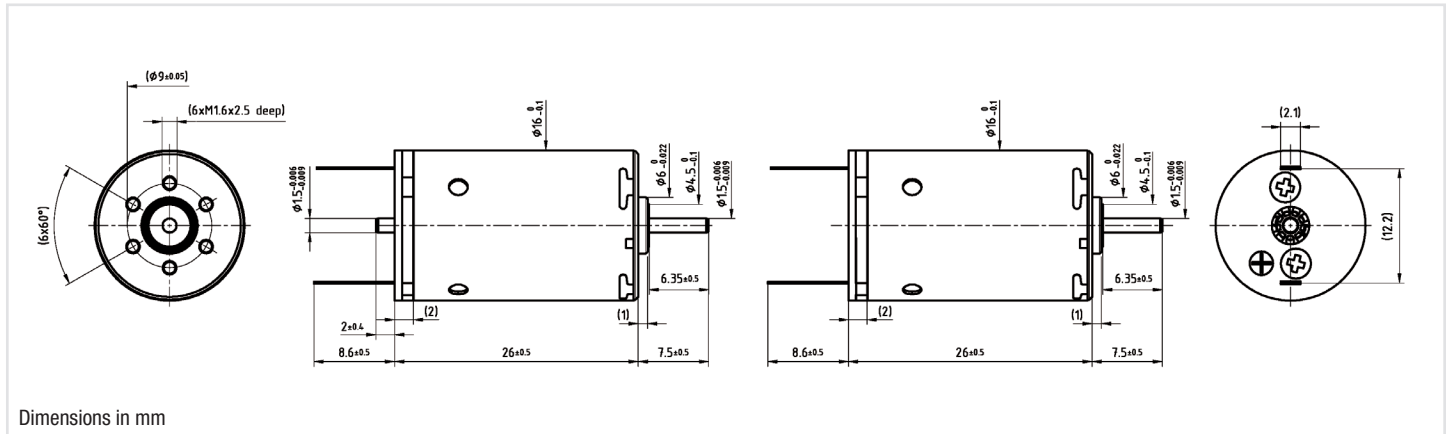


16DCT Athlonix™

Graphite-Copper commutation

Ø16mm

5.06mNm



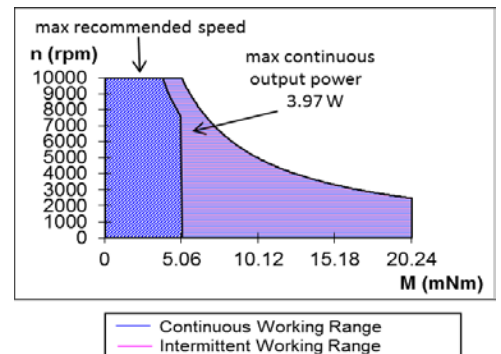
16DCT 26G1/G2 ** ***

Electrical Data	****	220P	213P	215E	213E	211E	
1 Nominal Voltage	V	3	6	9	12	15	Volt
2 No-Load Speed	n_0	9311	9798	9648	10427	9749	rpm
3 No-Load Current	I_0	150.3	78.7	51.7	41.9	31.4	mA
4 Terminal Resistance	R	0.6	2.0	4.8	7.6	13.9	Ω
5 Output Power	P_{2max}	3.3	3.5	4.0	3.9	3.9	W
6 Stall Torque	mNm	13.95 (1.98)	16.24 (2.3)	15.7 (2.23)	16.48 (2.34)	14.98 (2.13)	mNm (oz-in)
7 Efficiency	η_{max}	68	70	69	70	69	%
8 Max Continuous Speed	$n_{e max}$	10000	10000	10000	10000	10000	rpm
9 Max Continuous Torque	$M_{e max}$	4.21 (0.6)	4.45 (0.64)	5.06 (0.72)	4.98 (0.71)	4.9 (0.7)	mNm (oz-in)
10 Max Continuous Current	$I_{e max}$	1.56	0.86	0.64	0.51	0.38	A
11 Back-EMF Constant	k_E	0.31	0.60	0.91	1.12	1.49	mV/rpm
12 Torque Constant	k_M	2.98	5.69	8.66	10.70	14.27	mNm/A
13 Motor Regulation	R/k^2	69.88	63.14	64.34	66.22	68.15	10 ³ /Nms
14 Friction Torque	T_F	0.3 (0.042)	0.3 (0.042)	0.3 (0.042)	0.3 (0.042)	0.3 (0.042)	mNm (oz-in)
15 Mechanical Time Constant	τ_m	9.72	7.31	7.78	7.66	7.57	ms
16 Rotor Inertia	J	1.39	1.16	1.21	1.16	1.11	g.cm ²
General Data							
17 Thermal Resistance (rotor/body)	R_{th1} / R_{th2}		7/35				°C/W
18 Thermal Time Constant (rotor/stator)	t_{w1}/t_{w2}		6/380				S
19 Operating Temperature Range:	t_{w1}/t_{w2}		-30°C to 85°C (-22°F to 185°F)				°C (°F)
	rotor		100°C (212°F)				°C (°F)
20 Shaft Load Max.:			With sleeve bearings				
(5mm from bearing)	-radial		1.5 (5.39)				N (oz)
	-axial		100 (359.6)				N (oz)
21 Shaft Play:	-radial		0.03 (0.0012)				mm (inch)
	-axial		0.15 (0.0059)				mm (inch)
22 Weight	g		23 (0.82)				g (oz)

* Also available with ball bearing

Gearbox	Single Shaft	MR2	M Sense B
R16	1	2	Upon Request
B16	3	4	Upon Request
BA16	3	4	Upon Request

Note:
 G1: standard commutation
 G2: special commutation for double shaft version
 *Special ball bearing system available for high radial load requirements

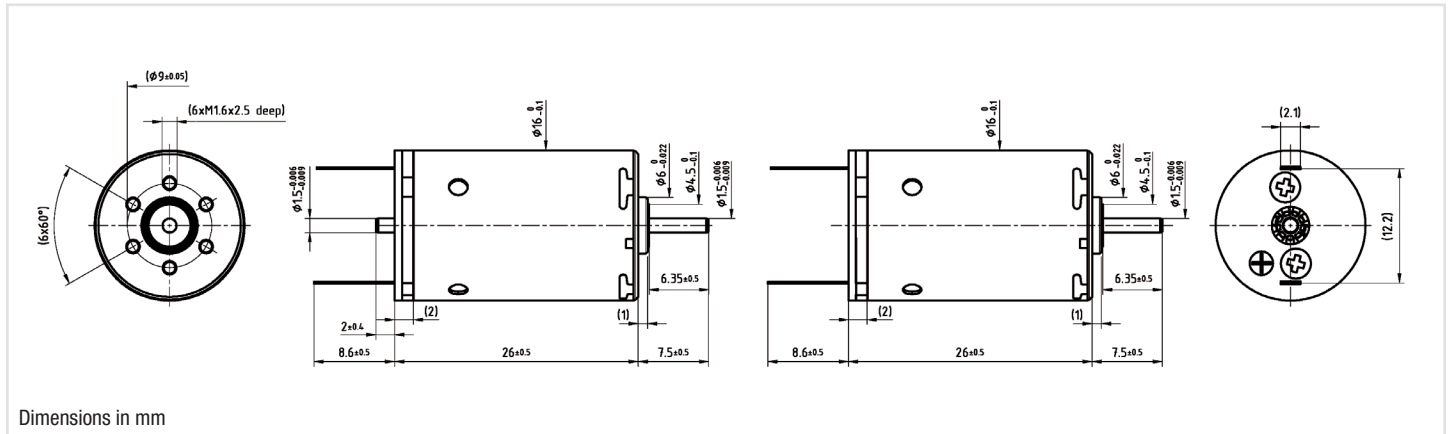


16DCT Athlonix™

Graphite-Copper commutation

Ø16mm

5.06mNm



Dimensions in mm

16DCT 26G1/G2 ** ***

Electrical Data	****	207P	209F	207E	205E	
1 Nominal Voltage	V	18	24	36	48	Volt
2 No-Load Speed	n_0	10096	10053	9845	8145	rpm
3 No-Load Current	I_0	27.1	20.2	13.2	8.3	mA
4 Terminal Resistance	R	19.3	33.1	81.0	208.2	Ω
5 Output Power	P_{2max}	3.8	3.9	3.8	3.8	W
6 Stall Torque	mNm	15 (2.13)	15.62 (2.22)	14.61 (2.07)	12.06 (1.71)	mNm (oz-in)
7 Efficiency	η_{max}	69	69	68	66	%
8 Max Continuous Speed	$n_{e max}$	10000	10000	10000	10000	rpm
9 Max Continuous Torque	$M_{e max}$	4.81 (0.69)	4.93 (0.7)	4.81 (0.69)	4.8 (0.68)	mNm (oz-in)
10 Max Continuous Current	$I_{e max}$	0.32	0.24	0.16	0.10	A
11 Back-EMF Constant	k_E	1.73	2.32	3.55	5.68	mV/rpm
12 Torque Constant	k_M	16.53	22.16	33.88	54.26	mNm/A
13 Motor Regulation	R/k^2	70.47	67.36	70.55	70.70	10 ³ /Nms
14 Friction Torque	T_F	0.3 (0.042)	0.3 (0.042)	0.3 (0.042)	0.3 (0.042)	mNm (oz-in)
15 Mechanical Time Constant	T_m	6.66	7.51	7.48	7.47	ms
16 Rotor Inertia	J	0.95	1.11	1.06	1.06	g.cm ²
General Data						
17 Thermal Resistance (rotor/body)	R_{th1} / R_{th2}		7/35			°C/W
18 Thermal Time Constant (rotor/stator)	t_{w1} / t_{w2}		6/380			S
19 Operating Temperature Range:	t_{w1} / t_{w2}		-30°C to 85°C (-22°F to 185°F)			°C (°F)
	rotor		100°C (212°F)			°C (°F)
20 Shaft Load Max.:			With sleeve bearings			
(5mm from bearing)	-radial		1.5 (5.39)			N (oz)
	-axial		100 (359.6)			N (oz)
21 Shaft Play:	-radial		0.03 (0.0012)			mm (inch)
	-axial		0.15 (0.0059)			mm (inch)
22 Weight	g		23 (0.82)			g (oz)

* Also available with ball bearing

Execution Table			
Gearbox	Single Shaft	MR2	M Sense B
R16	1	2	Upon Request
B16	3	4	Upon Request
BA16	3	4	Upon Request

Note:
 G1: standard commutation
 G2: special commutation for double shaft version
 *Special ball bearing system available for high radial load requirements

