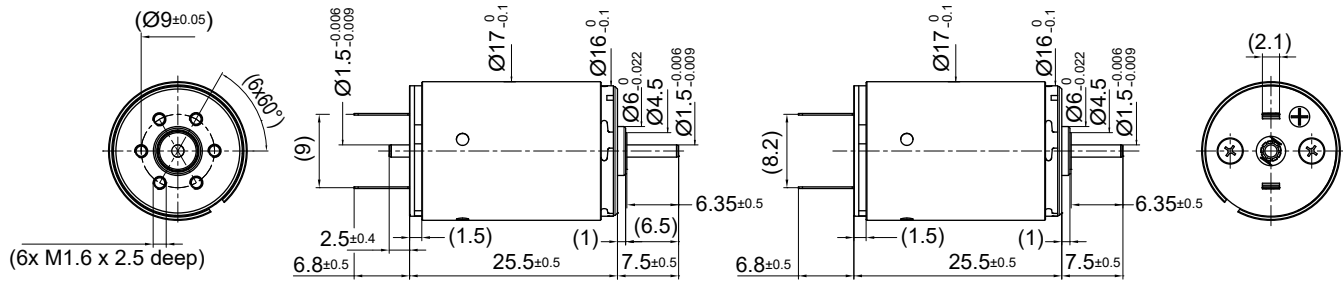


17DCT Athlonix™

Ø 17 mm • Precious metal commutation • 6.14 mNm



17DCT 26P2 .... 2

17DCT 26P1 .... 1

Dimensions in mm.

Electrical Data	Symbol	17DCT 26P1/P2 .... *					Unit
		216P	211P	209P	208P	207P	
1 Nominal Voltage	V	3	6	9	12	15	Volt
2 No-Load Speed	$n_0$	7838	7842	7645	8158	8358	rpm
3 No-Load Current	$I_0$	24.7	12.3	8.0	6.4	5.3	mA
4 Terminal Resistance	R	0.9	3.3	7.7	12.1	18.6	$\Omega$
5 Output Power	$P_{2max}$	4.6	4.7	4.8	4.7	4.7	W
6 Stall Torque	mNm	12.31 (1.75)	13.21 (1.88)	13.02 (1.85)	13.79 (1.96)	13.62 (1.93)	mNm (oz-in)
7 Efficiency	$\eta_{max}$	84	84	84	85	84	%
8 Max Continuous Speed	$n_{e max}$	10000	10000	10000	10000	10000	rpm
9 Max Continuous Torque	$M_{e max}$	5.81 (0.83)	6.02 (0.86)	6.05 (0.86)	6.03 (0.86)	5.92 (0.84)	mNm (oz-in)
10 Max Continuous Current	$I_{e max}$	1.63	0.84	0.55	0.44	0.35	A
11 Back-EMF Constant	$k_E$	0.38	0.76	1.17	1.46	1.78	mV/rpm
12 Torque Constant	$k_M$	3.63	7.26	11.16	13.96	17.03	mNm/A
13 Motor Regulation	$R/k^2$	66.64	62.15	61.45	61.92	64.25	$10^3/Nms$
14 Friction Torque	$T_F$	0.08 (0.011)	0.08 (0.011)	0.08 (0.011)	0.08 (0.011)	0.08 (0.011)	mNm (oz-in)
15 Mechanical Time Constant	$\tau_m$	7.01	6.41	6.30	6.27	6.25	ms
16 Rotor Inertia	J	1.05	1.03	1.02	1.01	0.97	g-cm <sup>2</sup>

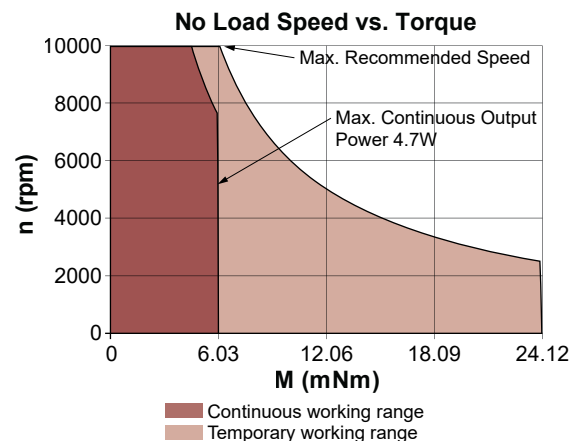
General Data				
18 Thermal Resistance (rotor/body)	$R_{th1}/R_{th2}$	6/25		$^{\circ}C/W$
19 Thermal Time Constant (rotor/stator)	$t_{W1}/t_{W2}$	12/250		S
20 Operating Temperature Range:	motor	-30°C to 85°C (-22°F to 185°F)		$^{\circ}C (^{\circ}F)$
	rotor			100°C (212°F)
21 Shaft Load Max.: (5 mm. from bearing)	-radial	With sleeve bearings		N (oz)
	-axial	1.5 (5.39)		N (oz)
22 Shaft Play:	-radial	0.03 (0.0012)		mm (inch)
	-axial	0.15 (0.0059)		mm (inch)
23 Weight	g	27 (0.96)		g (oz)

\*Also available with ball bearing

Execution Table

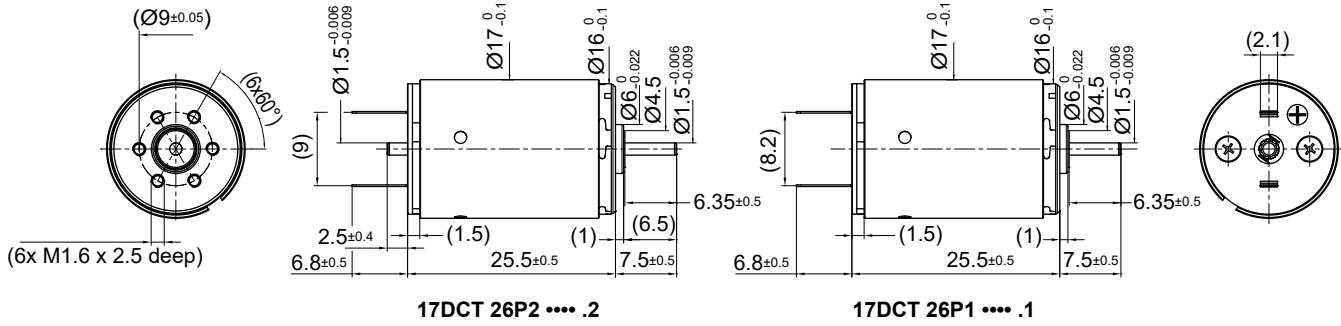
Gearbox	Single Shaft	MR2	M Sense B
R16	1	2	Upon Request
B16	3	4	Upon Request
BA16	3	4	Upon Request

Note:  
P1: standard commutation  
P2: special commutation for double shaft version



17DCT Athlonix™

Ø 17 mm • Precious metal commutation • 6.14 mNm



Dimensions in mm.

Electrical Data	Symbol	17DCT 26P1/P2 .... *				Unit
		209E	205P	107P	205E	
1 Nominal Voltage	V	18	24	36	48	Volt
2 No-Load Speed	$n_0$	8030	7769	9800	8145	rpm
3 No-Load Current	$I_0$	4.2	3.1	2.6	1.6	mA
4 Terminal Resistance	R	30.7	51.4	76.0	208.1	Ω
5 Output Power	$P_{2max}$	4.5	4.8	4.7	4.6	W
6 Stall Torque	mNm	12.36 (1.76)	13.6 (1.93)	16.43 (2.33)	12.8 (1.82)	mNm (oz-in)
7 Efficiency	$h_{max}$	84	84	86	84	%
8 Max Continuous Speed	$n_{e max}$	10000	10000	10000	10000	rpm
9 Max Continuous Torque	$M_{e max}$	5.75 (0.82)	6.14 (0.87)	6 (0.85)	5.8 (0.83)	mNm (oz-in)
10 Max Continuous Current	$I_{e max}$	0.27	0.21	0.17	0.11	A
11 Back-EMF Constant	$k_E$	2.23	3.07	3.65	5.85	mV/rpm
12 Torque Constant	$k_M$	21.25	29.31	34.89	55.88	mNm/A
13 Motor Regulation	$R/k^2$	68.01	59.79	62.45	66.62	10 <sup>3</sup> /Nms
14 Friction Torque	$T_F$	0.08 (0.011)	0.08 (0.011)	0.08 (0.011)	0.08 (0.011)	mNm (oz-in)
15 Mechanical Time Constant	$\tau_m$	7.06	6.23	6.22	7.04	ms
16 Rotor Inertia	J	1.04	1.04	1.00	1.06	g-cm <sup>2</sup>

General Data				
18 Thermal Resistance (rotor/body)	$R_{th1}/R_{th2}$	6/25		°C/W
19 Thermal Time Constant (rotor/stator)	$t_{W1}/t_{W2}$	12/250		S
20 Operating Temperature Range:	motor	-30°C to 85°C (-22°F to 185°F)		°C (°F)
	rotor	100°C (212°F)		°C (°F)
21 Shaft Load Max.: (5 mm. from bearing)	-radial -axial	With sleeve bearings		
		1.5 (5.39)		N (oz)
		100 (359.6)		N (oz)
22 Shaft Play:	-radial	0.03 (0.0012)		mm (inch)
	-axial	0.15 (0.0059)		mm (inch)
23 Weight	g	27 (0.96)		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:  
P1: standard commutation  
P2: special commutation for double shaft version

