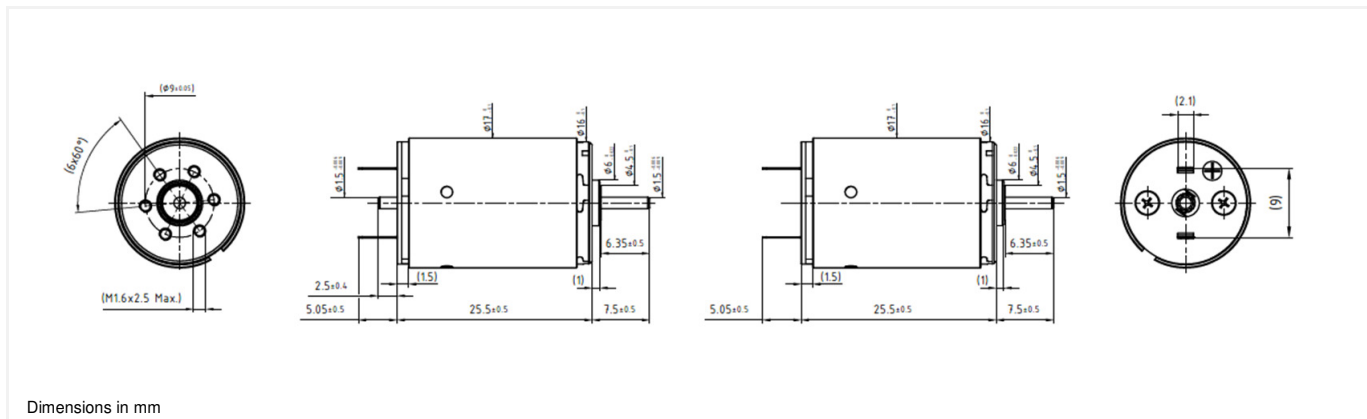


17DCT Athlonix™

Precious metal commutation

Ø17mm

6.14 mNm



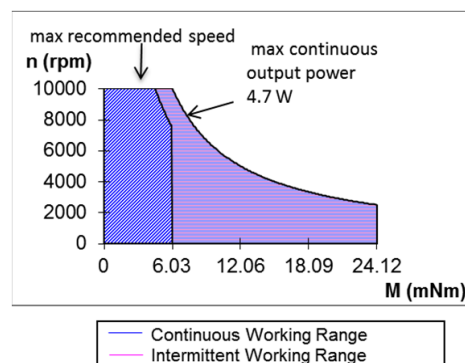
Dimensions in mm

17DCT 26P1/P2 \*\*\*\* .\*

Electrical Data	****	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	Ω
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 <sup>3</sup> /Nms
14 Friction Torque	$T_F$	0.08 (0.02)	0.08 (0.02)	0.08 (0.02)	0.08 (0.02)	0.08 (0.02)	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>
<b>General Data</b>							
17 Thermal Resistance (rotor/body)	$R_{th1} / R_{th2}$			6/25			°C/W
18 Thermal Time Constant (rotor/stator)	$t_{w1}/t_{w2}$			12/250			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			27 (0.96)			g (oz)

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

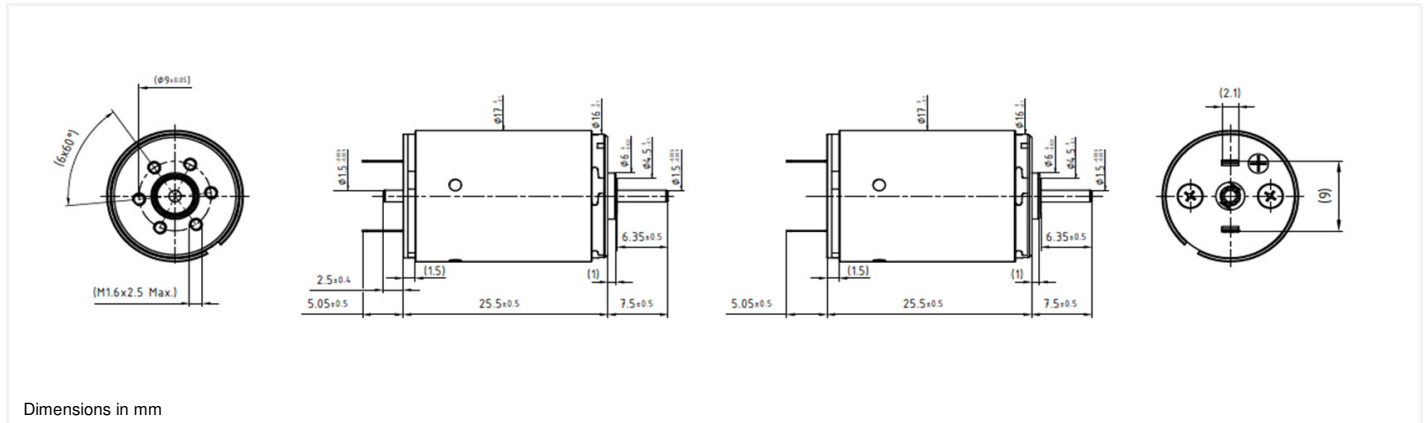


17DCT Athlonix™

Precious metal commutation

Ø17mm

6.14 mNm



Dimensions in mm

17DCT 26P1/P2 \*\*\*\* .\*

Electrical Data	****	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	$\eta_{max}$	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 (0.02)	0.08 (0.02)	0.08 (0.02)	0.08 (0.02)	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>
<b>General Data</b>						
17 Thermal Resistance (rotor/body)	$R_{th1} / R_{th2}$			6/25		°C/W
18 Thermal Time Constant (rotor/stator)	$t_{w1}/t_{w2}$			12/250		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			27 (0.96)		g (oz)

Execution Table			
Gearbox	Single Shaft	MR2	M Sense B
R16	1	2	Upon Request
B16	3	4	Upon Request
BA 16	3	4	Upon Request

Note:

P1:standard commutation

P2:special commutation for double shaft version

