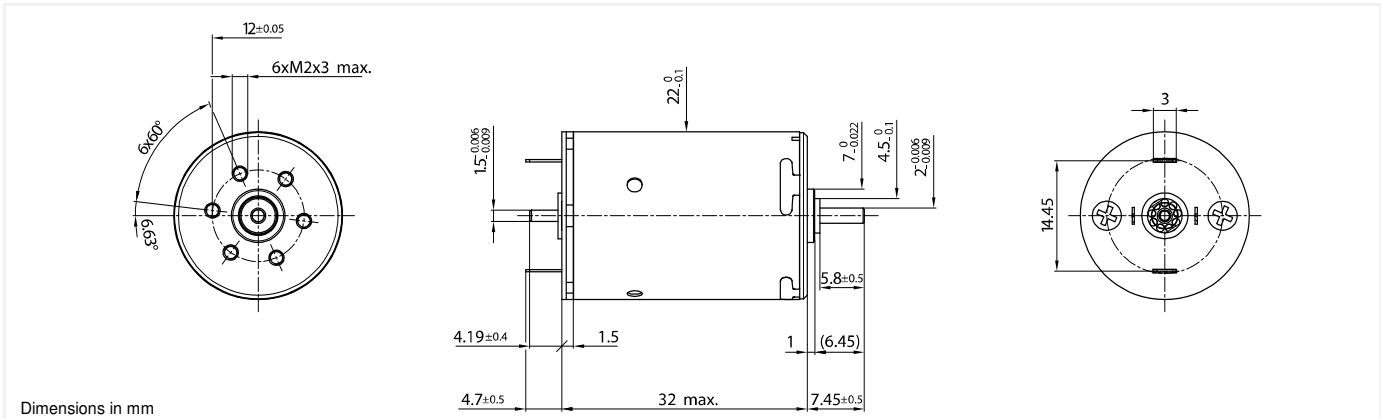


22DCP Athlonix™

Precious metal commutation

Ø22mm

6.5 mNm



22DCP 32P2 **** .2

Electrical Data	****	212E	211E	210E	209E	208E	
1 Nominal Voltage	V	21	24	30	36	48	Volt
2 No-Load Speed	n_0	10,357	10,465	10,806	10,281	11,049	rpm
3 No-Load Current	I_0	10.5	9.2	7.6	6.1	4.9	mA
4 Terminal Resistance	R	23.4	30.4	46.1	71.7	112.6	Ω
5 Output Power	P_{2max}	4.2	4.3	4.4	4.1	4.5	W
6 Stall Torque	mNm	16.95 (2.41)	16.89 (2.4)	16.85 (2.39)	16.39 (2.33)	17.28 (2.45)	mNm (oz-in)
7 Efficiency	η_{max}	80	80	80	79	80	%
8 Max Continuous Speed	$n_{e,max}$	10,000	10,000	10,000	10,000	10,000	rpm
9 Max Continuous Torque	$M_{e,max}$	6.08 (0.86)	6.04 (0.86)	5.93 (0.84)	6 (0.85)	5.94 (0.85)	mNm (oz-in)
10 Max Continuous Current	$I_{e,max}$	0.33	0.29	0.23	0.19	0.15	A
11 Back-EMF Constant	k_E	2.00	2.27	2.74	3.46	4.29	mV/rpm
12 Torque Constant	k_M	19.14	21.64	26.20	33.03	41.01	mNm/A
13 Motor Regulation	R/k^2	64.0	64.9	67.2	65.70	66.95	$10^3/Nms$
14 Friction Torque	T_F	0.2 (0.03)	0.2 (0.03)	0.2 (0.03)	0.2 (0.03)	0.2 (0.03)	mNm (oz-in)
15 Mechanical Time Constant	τ_m	30.1	30.0	30.0	30.0	30.0	ms
16 Rotor Inertia	J	4.70	4.63	4.47	4.56	4.48	$g.cm^2$
General Data							
17 Thermal Resistance (rotor/body)	R_{th1} / R_{th2}	6/22					$^{\circ}C/W$
18 Thermal Time Constant (rotor/stator)	t_{w1}/t_{w2}	9/550					S
19 Operating Temperature Range:	t_{w1}/t_{w2}	-30 $^{\circ}C$ to 85 $^{\circ}C$ (-22 $^{\circ}F$ to 185 $^{\circ}F$)					$^{\circ}C$ ($^{\circ}F$)
	rotor	100 $^{\circ}C$ (212 $^{\circ}F$)					$^{\circ}C$ ($^{\circ}F$)
20 Shaft Load Max.:		With sleeve bearings					
(5mm from bearing)	-radial	1.5 (5.4)					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	58 (2.05)					g (oz)

Execution			
Gearbox	Single Shaft	MR2	E9
R22	4	5	6
M22	1	2	3
K24	7	8	9
K27	1	2	3

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

