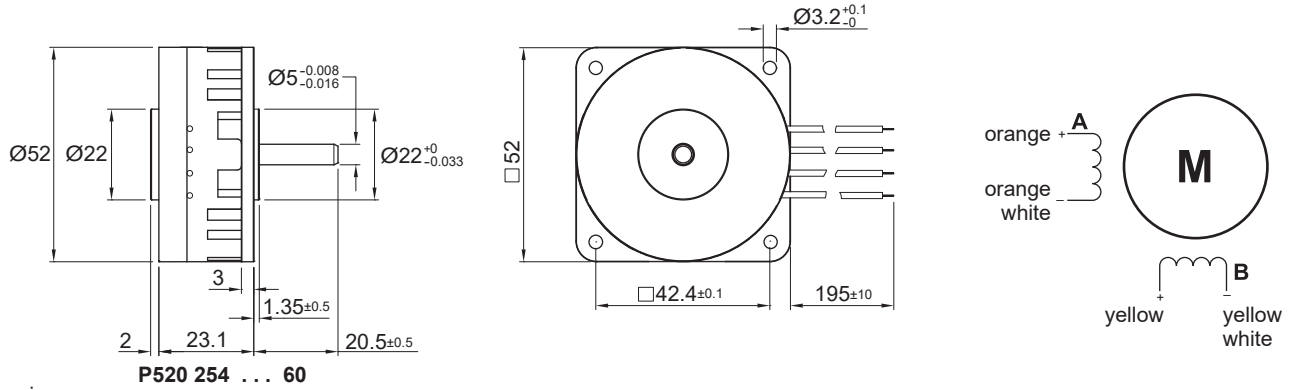


P520

Ø 52 mm • 120 mNm



Dimensions in mm.

Electrical Data	P520 254			Unit
	013 60	004 60	0.7 60	
1 Resistance per Phase, typ	13.5	4.4	0.7	Ohms
2 Inductance per Phase, typ	27.0	8.0	1.3	mH
3 Nominal Phase Current (2 ph. On)	0.50	0.90	2.30	A
4 Nominal Phase Current (1 ph. On)	0.75	1.30	3.30	A
5 Back EMF Amplitude	9.80	5.50	2.10	V/kstep/s
General Data				
6 Holding Torque, nominal current	120 (17)			mNm (oz-in)
7 Holding Torque, 1.5x nominal current (1)	170 (24)			mNm (oz-in)
8 Detent Torque	18 (2.55)			mNm (oz-in)
9 Rotor Inertia	12.000			kgm ² x 10 ⁻⁷
10 Step Angle	3.6			Degree
11 Absolute Accuracy 2 ph. On, Full step mode	+/- 5%			% Full Step
12 Steps Per Revolution	100			
13 Ambient Temperature Range (operating)	-20 to 50 (-4 to 122)			°C (°F)
14 Maximum Coil Temperature	130 (266)			°C (°F)
15 Thermal Resistance Coil-ambient (2)	9.5			°C/W
16 Natural Resonance Frequency (nominal current)	250			Hz
17 Electrical Time Constant	1.80			ms
18 Angular Acceleration (nominal current)	100,000			rad/s ²
19 Bearing Type	Ball			
20 Dielectric Withstanding Voltage	500 VRMS for 5 seconds			VAC
21 Radial Shaft Play	15@5N			µm
22 Axial Shaft Play	10@5N			µm
23 Maximum Radial Shaft Load	20 (72)			N (oz)
24 Maximum Axial Shaft Load (3)	30 (108)			N (oz)
25 Weight	180 (6.3)			g (oz)
26 Power Rate (nominal current)	12.0			kW/s

Notes:

1. Measured with 1 phase ON. The max coil temperature must be respected
2. Motor unmounted
3. Shaft must be supported when press-fitting a pulley or pinion

