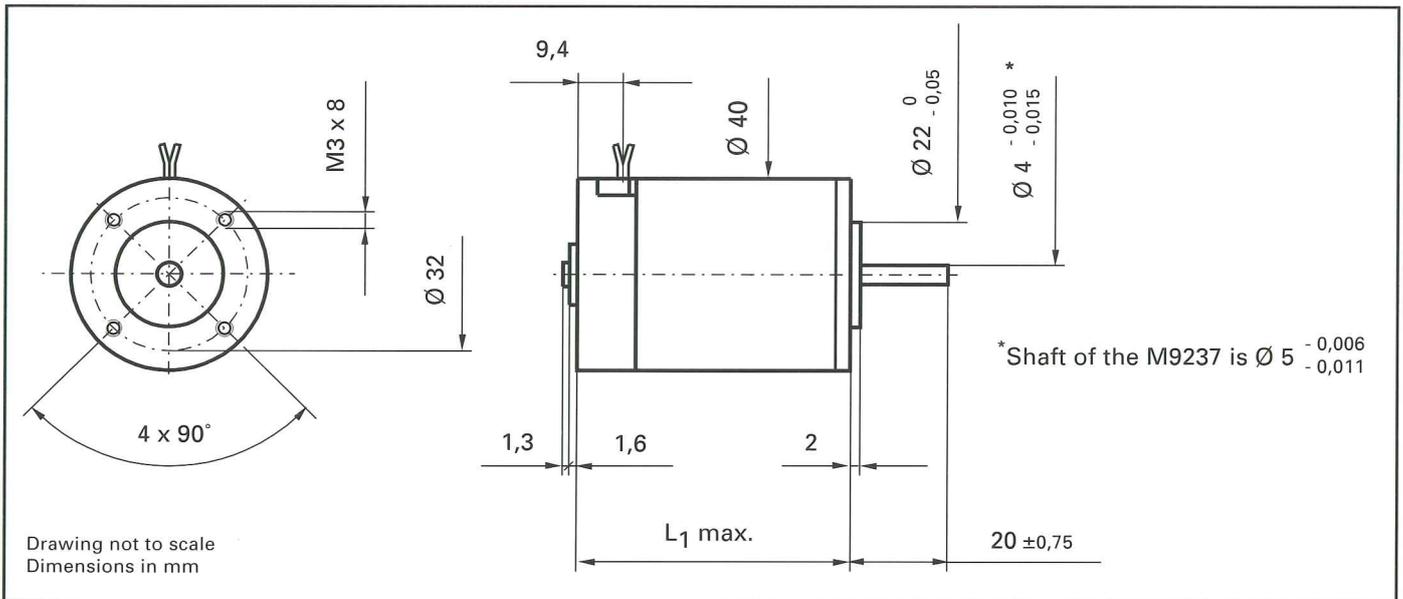


M 9000 Motor series Ø 40 mm

Motor specifications



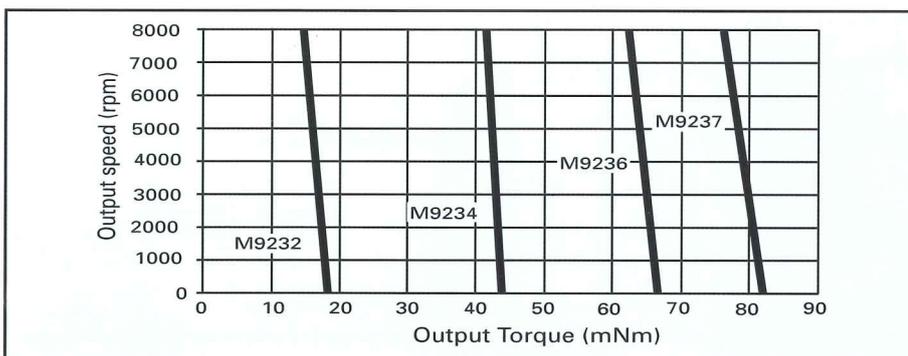
		M 9232			M 9234			M 9236			M 9237					
Rated torque ¹⁾	mNm	17			43			67			81					
Stall torque	mNm	100			300			440			560					
No-load speed	rpm	7000			6200			4900			5300					
Speed regulation constant	rpm/mNm	70			21			11			9					
Rotor inertia	kgm ² x 10 ⁻⁷	18.8			41.7			72.0			84.7					
Mechanical time constant	ms	14			9			9			9					
Thermal time constant	minutes	7.2			11.4			13.5			13.8					
Thermal resistance ²⁾	rotor-stator	° C/W			14.0			8.7			7.2			5.7		
	stator-ambient	° C/W			9.5			7.7			6.3			5.5		
Static friction torque	mNm	3.5			4.2			5.6			5.6					
Viscous damping constant	Nms x 10 ⁻⁶	1.83			2.61			3.54			3.71					
Motor weight	g	200			290			390			440					
Motor length L ₁	mm	46.4			61.0			77.5			85.2					
Measuring voltage ³⁾	V	12	24	48	12	24	48	12	24	48	12	24	48			
Torque constant	mNm/A	15.5	31.1	62.1	18.3	36.5	73.0	22.91	45.8	92.5	21.2	42.4	83.7			
Back-EMF constant	V/krpm	1.6	3.3	6.5	1.9	3.8	7.6	2.4	4.8	9.7	2.2	4.4	8.8			
Terminal resistance	ohm	1.9	7.4	29.2	0.8	3	11.5	0.7	2.5	9.7	0.6	1.9	7.0			
Inductance	mH	1.2	4.6	18.6	0.6	2.5	10	0.7	2.6	10.7	0.5	2	7.7			
No-load current	A	0.32	0.16	0.08	0.33	0.16	0.08	0.33	0.16	0.08	0.36	0.18	0.09			
Stall current	A	6.2	3.3	1.6	14.5	8.1	4.2	16.9	9.6	4.9	21.7	13.0	6.9			

- ¹⁾ Continuous torque rating at 3000 rpm
²⁾ Based on IEC 34, suspended in free air
³⁾ Other voltage ratings available

Iron core DC motor with 7 slots, skewed stack
 Standard version with self-aligning bronze bearings
 Maximum coil temperature 155° C
 Max. axial static force for press-fit 150 N

 Indicates the standard windings

Safe operation torque curves



Please refer to these curves to select the motor frame size for your load

A motor can operate continuously at any load point (torque and speed) on the left of the respective motor curve. The motors offer higher torque capabilities when mounted on a metal surface.