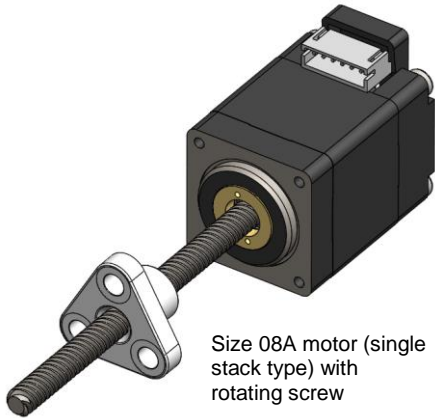


Specifications – ML08



Size 08A motor (single stack type) with rotating screw

Features and Benefits

- Higher torque density than the competition.
- NEMA 8 motor (size 21 mm).
- Rotating screw version only (Rotating Nut coming soon).
- Choose between a variety of inch and metric leads
- Recommended max. thrust force 10 lbs (44 N).
- Recommended max. lead screw length of 4 in (102 mm) for optimal performance. Longer length lead screws available see diagrams on page 24.

Motor Options

Motor Code	Holding Torque		Voltage / phase* [V]	Current / phase* [A]	Resistance [Ω]	Inductance [mH]	Power Draw [W]	Step angle [°]	Motor length, maximum (Lm)		Rotor inertia [oz-in ²]	Motor weight [lbs]
	[oz-in]	[N-m]							[in]	[mm]		
08A050	1.8	13	4.5	0.50	9	2	2.3	1.8	1.16	29.5	0.01	0.13
								1.8	1.16	29.5	0.01	0.13

*Applied voltage can be any value above this number as long as output current is controlled at the rated RMS current.

Inch Lead Screw Options

Screw Code	Diameter [in]	Lead [in]	Travel / step [in]
18-0050	∅ 0.188	0.050	0.00025
18-0100		0.100	0.00050
18-0200		0.200	0.00100
18-0400		0.400	0.00200

Metric Lead Screw Options

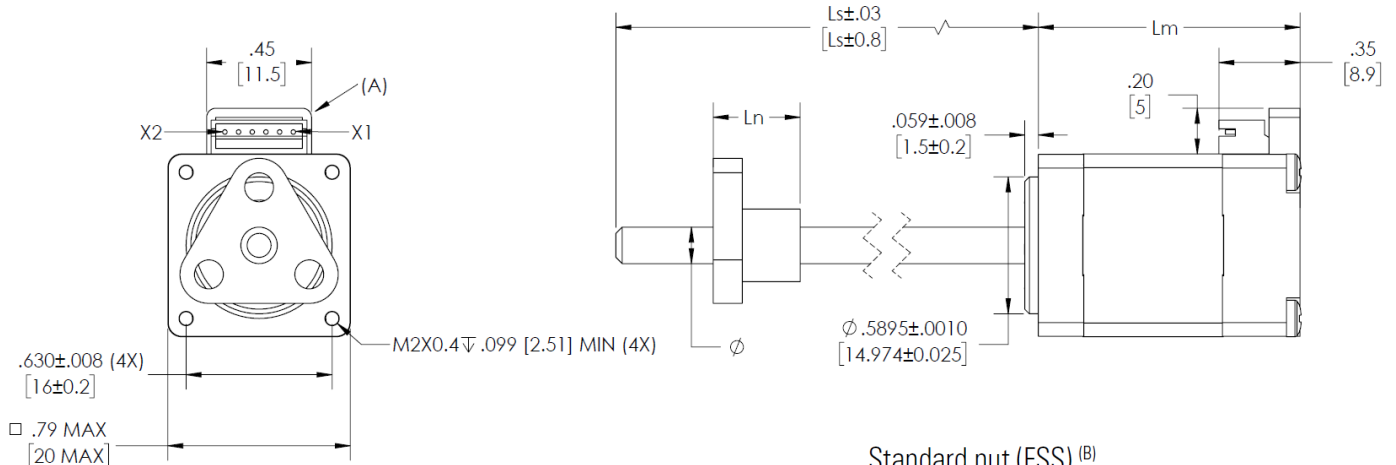
Screw Code	Diameter [in]	Lead [in]	Travel / step [in]
M04-01	∅ 4	1	0.00500
M04-04		4	0.02000
M04-08		8	0.04000

Note: Other diameters and leads available – please contact Thomson for more information about custom lead screw availability.

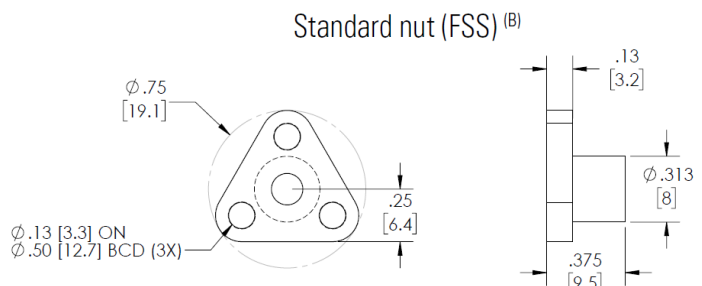
Dimensions – ML08

ML11xxxxxS (rotating screw)

Dimensions	Projection
Inch [mm]	



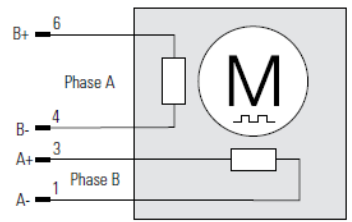
Maximum Stroke (Smax)
 $S_{max} = L_s - L_m - 0.06 \text{ in (1.6 mm)}$



(A) 6-pin connector as standard (X1 = pin 1, X6 = pin 6). Custom connection solutions possible. Contact Thomson for more information.
 (B) For dimensions and data on anti-backlash (FAS, TAS) and high-performance nuts (FSH), please contact Thomson for more information.

Motor Connection

Molex Connector *	
Pin	Phase
1	A-
2	not used
3	A+
4	B-
5	not used
6	B+



* JST connector p/n S6B-ZR (LF) (SN). Mates with JST connector p/n ZHR-6.

Standard Motor Connector Kit with Flying Leads

- Compatible with the above motor connector.
- Lead length 12.5 in (318 mm).
- 26 AWG lead wires.
- Part number MC08-001.
- Standard for ML08 motor.

