

## MX09 Hazardous Duty 90mm Frame Size



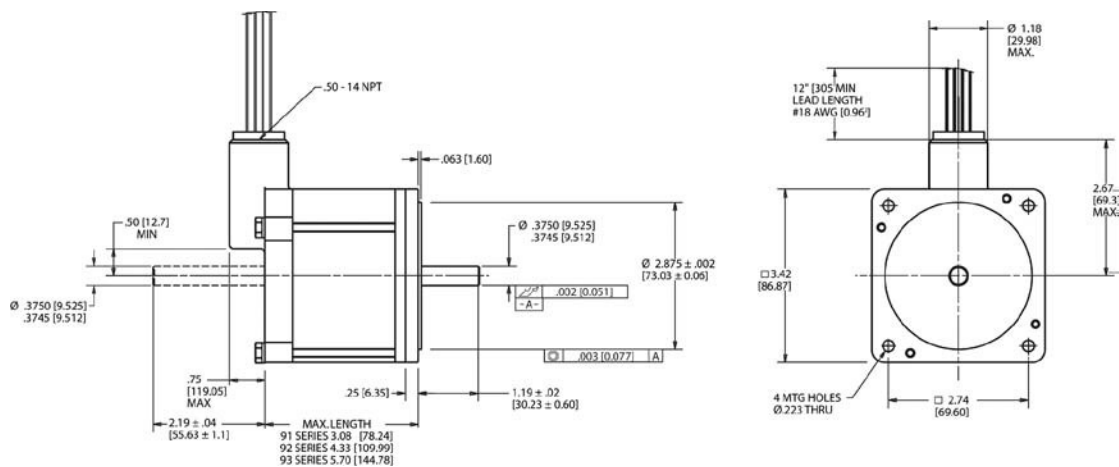
- Up to 150% rated torque reserve capacity
- $\pm 3\%$  typical step accuracy
- Hazardous Duty:  
UL Class 1, Division 1, Group D



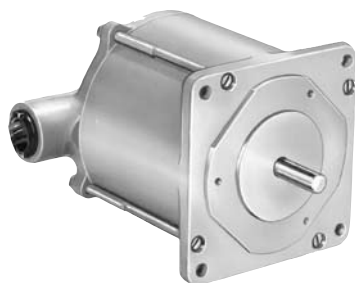
4-CONNECTION STEP MOTORS										
*Model Number	Min. Holding Torque Bipolar 2 $\emptyset$ on oz-in (N-cm)	Winding Specifications				Rotor Inertia oz-in-s <sup>2</sup> (kg-cm <sup>2</sup> )	Weight -Ship lb (kg)	Maximum Shaft Load		Min. Residual Torque oz-in (N-cm)
		Voltage (VDC)	Current (amperes)	Resistance (ohms)	Inductance (mH)			Overhang lb (kg)	Thrust lb (kg)	
MX91-FF-206U	180 (127)	3.0	3.0	1.0	10	0.0095 (0.67)	6 (2.7)	25 (11)	50 (23)	2.0 (1.4)
MX91-FF-402U		2.9	4.0	0.72	6.0					
MX91-FF-403U		1.1	6.0	0.18	1.5					
MX92-FF-206U	370 (261)	4.0	4.0	1.0	11	0.0174 (1.23)	9 (4.1)	25 (11)	50 (23)	4.0 (2.8)
MX92-FF-401U		1.9	7.0	0.28	2.8					
MX93-FF-206U	550 (388)	3.9	4.0	0.90	13	0.0265 (1.87)	11 (5)	25 (11)	50 (23)	7.0 (4.9)
MX93-FF-401U		3.2	5.0	0.65	8.0					
MX93-FF-402U		1.1	7.0	0.16	2.0					

\* Change U to EU for double-ended shaft

NOTE: Refer to MOTIONEERING® for speed torque curves



## MX11 Hazardous Duty 110mm Frame Size



- Up to 200% rated torque reserve capacity
- ± 5% typical step accuracy
- Hazardous Duty:  
UL Class 1, Division 1, Group D



4-CONNECTION STEP MOTORS											
*Model Number	Min. Holding Torque Bipolar 2Ø on oz-in (N-cm)	Winding Specifications				Rotor Inertia oz-in-s <sup>2</sup> (kg-cm <sup>2</sup> )	Weight - Ship		Maximum Shaft Load		Min. Residual Torque oz-in (N-cm)
		Voltage (VDC)	Current (amperes)	Resistance (ohms)	Inductance (mH)		lb (kg)	Overhang lb (kg)	Thrust lb (kg)		
MX111-FF-401U	850 (600)	3.8	1.1	3.6	16	0.055 (3.93)	10 (4.5)	25 (11.3)	50 (22.7)	6 (4.24)	
MX112-FF-401U	1390 (981)	1.7	2.7	0.64	2.5	0.114 (8.06)	18 (8.2)	25 (11.3)	50 (22.7)	12 (8.47)	

\* Change U to EU for double-ended shaft

NOTE: Refer to MOTIONEERING® for speed torque curves

### Dimensions

