



3100 Series Stepper Motors

Features

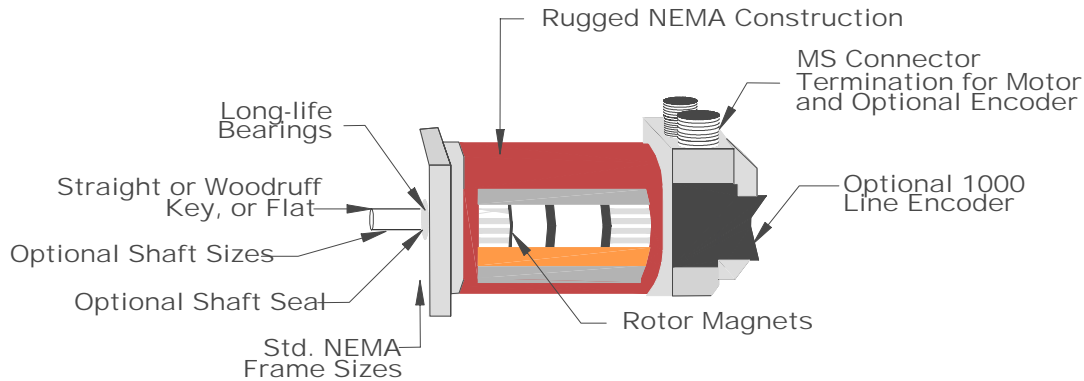
- Standard NEMA 23, 34, 42 Frame Sizes Fit Many Applications
 - Round Frame Configuration - NEMA 23
 - Square Frame Configuration - NEMA 34, 42
- High Efficiency, Low-loss Hybrid Stepper
- Industry Standard Windings w/ Holding Torques from 223 oz. in. up to 3105 oz. in. to Assure the Best Motor for Your Application
- Splash-proof Construction Available, Optional
- IP65-Seal w/ MS Connector, Standard
- Available with or without Encoder Feedback
- Shaft Keyways or Flats, Oversized Drive Shafts and Rear Shaft Extensions, Optional



High-Performance Motor Design

The 3100 series motors are I²T's high-performance stepper motors. These motors feature the highest torque per frame size in the industry. A rugged space saving enclosure plus a host of options mean these steppers offer industrial design, quality and performance for your application.

Our steppers allow you to tailor a motor to your in-plant or OEM application. Select from an array of capabilities to optimize your motion requirements -- from common "workhorse" applications to your most demanding velocity and positioning requirements. The 3100 series motors provide the high-speed capability required for rapid traverse applications.



3100 Series Stepper Motor Specifications

3100 Series Stepper Motors without Feedback							
Model	Units	3100-01	3100-02	3100-03	3100-04	3100-05	3100-06
Frame Size		NEMA 23	NEMA 34	NEMA 34	NEMA 34	NEMA 34	NEMA 42
Square Frame	in	2.3	3.38	3.38	3.38	3.38	4.2
Holding Torque – 1 Stack	oz-in	223	645	N/A	N/A	N/A	3105
	2 Stacks	N/A	N/A	1195	N/A	N/A	N/A
	3 Stacks	N/A	N/A	N/A	1710	N/A	N/A
	4 Stacks	N/A	N/A	N/A	N/A	2170	N/A
Winding / Leads		4 Lead Parallel	4 Lead Parallel	4 Lead Parallel	4 Lead Parallel	4 Lead Parallel	4 Lead Parallel
Rated Current / Phase	Amps DC	5	5.5	5.1	5	5.5	6.4
Winding Type		Max. Torque at Low Speed	Max. Torque at Low Speed	Max. Torque at Low Speed	Max. Torque at Low Speed	Max. Torque at Low Speed	Max. Torque at Low Speed
Rotor Type		Laminated	Laminated	Laminated	Laminated	Laminated	Laminated
Shaft Configuration		Single/Smooth	Single/Straight Key	Single/Straight Key	Single/Straight Key	Single/Straight Key	Single/Straight Key
Mounting Configuration		NEMA	NEMA	NEMA	NEMA	Heavy Duty NEMA	Heavy Duty NEMA
3100 Series Stepper Motors with Encoder (Incremental)							
Model	Units	3100-01E	3100-02E	3100-03E	3100-04E	3100-05E	3100-06E
Frame Size		NEMA 23	NEMA 34	NEMA 34	NEMA 34	NEMA 34	NEMA 42
Square Frame	in	2.3	3.38	3.38	3.38	3.38	4.2
Holding Torque – 1 Stack	oz-in	223	645	N/A	N/A	N/A	3105
	2 Stacks	N/A	N/A	1195	N/A	N/A	N/A
	3 Stacks	N/A	N/A	N/A	1710	N/A	N/A
	4 Stacks	N/A	N/A	N/A	N/A	2170	N/A
Winding / Leads		4 Lead Parallel	4 Lead Parallel	4 Lead Parallel	4 Lead Parallel	4 Lead Parallel	4 Lead Parallel
Rated Current / Phase	Amps DC	5	5.5	5.1	5	5.5	6.4
Winding Type		Max. Torque at Low Speed	Max. Torque at Low Speed	Max. Torque at Low Speed	Max. Torque at Low Speed	Max. Torque at Low Speed	Max. Torque at Low Speed
Rotor Type		Laminated	Laminated	Laminated	Laminated	Laminated	Laminated
Shaft Configuration		Single/Smooth	Single/Straight Key	Single/Straight Key	Single/Straight Key	Single/Straight Key	Single/Straight Key
Mounting Configuration		NEMA	NEMA	NEMA	NEMA	Heavy Duty NEMA	Heavy Duty NEMA

Note: Encoder provides: 1,000 Pulses per Revolution, +5V ±10% @ 85 mA max. Supply Voltage, Dual Channel Quadrature w/Complements and Index w/Complements Output Format, RS-422A Compatible Output Type.



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