

Dyna 2000 & 2500 Linear Actuators



- All electric
- Fast response
- Small & compact
- Two moving parts
- Spring return to minimum fuel
- Mounts in any position
- Precise repeatability
- Meets INR & EMP for moderate tactical battlefield environment

DESCRIPTION

The Dyna 2000 and Dyna 2500 linear actuators provide accurate precise positioning with a minimal number of moving parts. Many of the moving parts normally associated with electric actuators are eliminated, prolonging the MTBF (mean time between failure).

The actuator design employs the principle of variable reluctance. This simple design of a proportional electric solenoid has a sliding armature whose magnetic force is proportional to the input coil current.

These actuators are easy to install by mounting near the fuel system and direct connecting to the fuel control rod or lever. In most installations, the normal rotary-to-rotary connection is eliminated, resulting in a more trouble-free and accurate control system.

The actuator is suitable for installation on diesel, gasoline, or natural gas engines with fuel system force requirements of less than 13 pounds (58 N) of force.

TYPICAL APPLICATIONS

- Speed governing
- Generator sets
- Forklift trucks
- Power carts
- Off-road vehicles
- Pump sets
- Pleasure boats
- Wood chippers

Available Models:

Dyna 2000—

- DYNC-10202-000-0-12—12 Vdc, 0.25 ft-lb (0.34 J) output
- DYNC-10202-000-0-24—24 Vdc, 0.25 ft-lb (0.34 J) output

Dyna 2500—

- DYNC-10502-000-0-12—12 Vdc, 0.50 ft-lb (0.68 J) output
- DYNC-10502-000-0-24—24 Vdc, 0.50 ft-lb (0.68J) output

SPECIFICATIONS

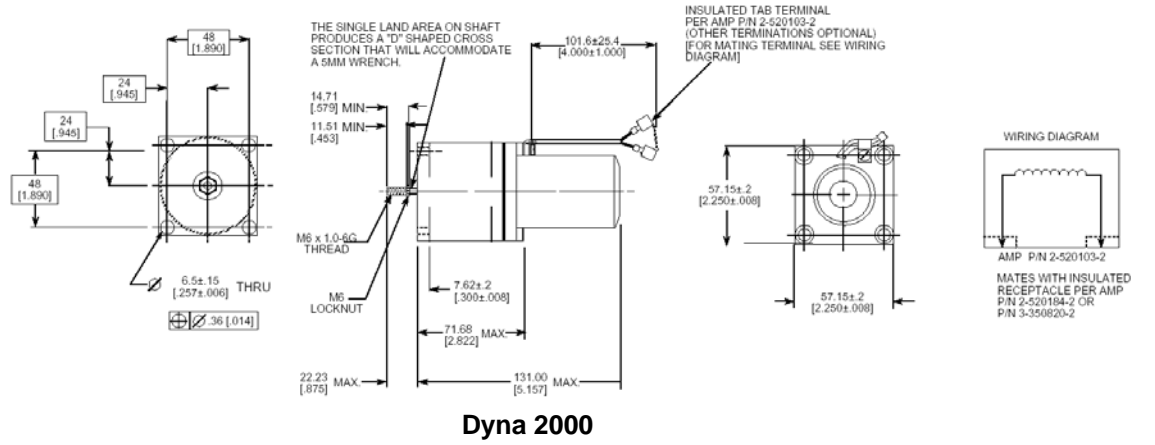
	Dyna 2000	Dyna 2500
Work	0.25 ft-lb (0.34 J)	0.50 ft-lb (0.68 J)
Force	6.5 lbF (28.9 N)	13.0 lbF (57.8 N)
Output Stroke	0.775–0.825 inch (19.68–20.96 mm)	
Weight	2.5 lb (1.1 kg)	3.8 lb (1.7 kg)
Nominal Steady State Current	2.5 A (12 Vdc), 1.0 A (24 Vdc)	2.5 A (12 Vdc), 1.0 A (24 Vdc)
Max. Current @ Stall @ 24 °C	5.4 A (12 Vdc), 3.0 A (24 Vdc)	5.9 A (12 Vdc), 3.0 A (24 Vdc)
Max. Current @ Stall @ 125 °C	3.9 A (12 Vdc), 2.0 A (24 Vdc)	4.2 A (12 Vdc), 2.0 A (24 Vdc)
Nominal Response Time to Travel 63% of Stroke:		
in ON Direction.....	0.05 second	
in OFF Direction.....	0.032 second	
Operating Voltage	12 or 24 Vdc ±20%	
Ambient Operating Temperature	–65 to +250 °F (–54 to 121 °C)	
Mechanical Vibration	5 to 500 Hz, Curve L, per US MIL-STD-810C	
Sealing	Oil, water, and dust resistant	
Connection	18 AWG (0.8 mm ²) leads with min. length of 3 inches (76 mm) with insulated tab terminal per AMP P/N 2-52013-2. Mates with insulated receptacle per AMP P/N 2-520184-2.	

PO Box 1519
 Fort Collins CO, USA
 80522-1519
 1000 East Drake Road
 Fort Collins CO 80525
 Ph: +1 (970) 482-5811
 Fax: +1 (970) 498-3058

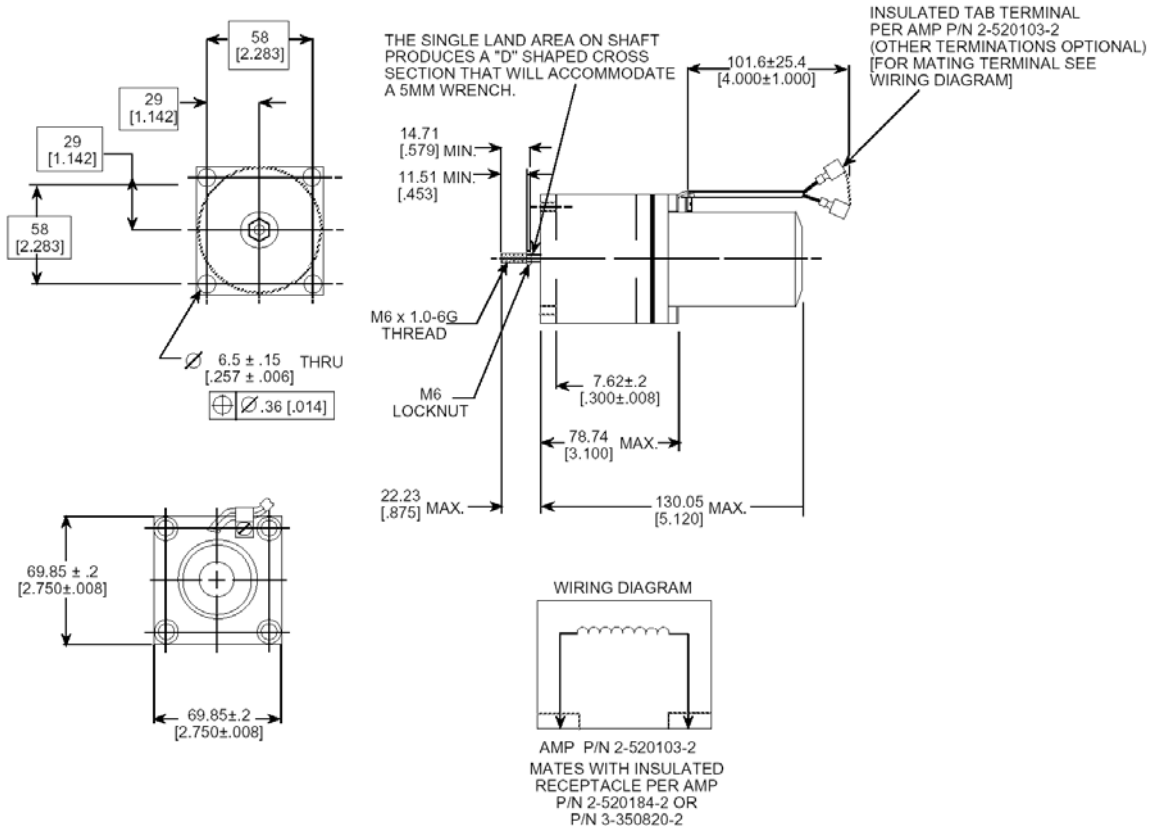
Distributors & Service
 Woodward has an international network of distributors and service facilities. For your nearest representative, call the Fort Collins plant or see the Worldwide Directory on our website.

Corporate Headquarters
 Rockford IL, USA
 Ph: +1 (815) 877-7441

www.woodward.com



Dyna 2000



Dyna 2500

This document is distributed for informational purposes only. It is not to be construed as creating or becoming part of any Woodward Governor Company contractual or warranty obligation unless expressly stated in a written sales contract.

© Woodward 2003
 All Rights Reserved

04/7/F

For more information contact:

