



Stoneridge, Inc., Control Devices Division

Electric Wastegate Actuator - Rotary Design

Brushed DC Motor

Preliminary Data Sheet

Features / Benefits

- Provides precise control of the wastegate for greater position accuracy over pneumatic wastegate valves
- Field proven gear train
- High temperature non-contact position sensing technology
- Lightweight materials with high temperature capability
- Rotary actuation (linear optional)
- Compact package
- Fully sealed version is available



Performance Characteristics

Electrical

Supply Voltage: 9 - 16 VDC

Holding Current at 2.7Nm Torque <1.5 Amps

Max. Operating Current: <5.0 Amps

Rotational Travel: 120°
Linear travel Up to 16 mm

Mechanical

Peak Torque (12.6VDC, 25°C): 5.4 Nm

Loaded (5.4Nm) Full Travel <200 ms (12.6 VDC)

Hold Torque along Rod/Arm Up to 2.7Nm at 160°C

Mounting Features: Customer specified

Connector: Customer specified

Envelope: Customer specified

Durability

Strokes >7 Mill, Full load Power

Strokes (Incremental) Targeting >10 Mill.

Environmental

Vibration: Random - 15 g, 50 hrs./plane

Mechanical Shock: 30 g, 10 ms half-sine pulse

Operational Temperature Range: -40°C to 160°C

Thermal Shock: -50°C to 160°C

Humidity: 95% RH @ 30° - 80°C, 9 days

Solvent Resistance: All normal under hood fluids

Salt Fog: ASTM-B117 340 hrs. (240 hrs, no red rust)



Electric Wastegate Actuator

Brushed DC Motor

Dimensions

CONTACT US:

Stoneridge Inc.

Control Devices Division

300 Dan Road
Canton, MA 02021 USA
Tel: 781-830-0340
sales@stoneridge.com

North America Sales:

Stoneridge Inc.
28001 Cabot Drive
Suite 100
Novi, MI 48377 USA
Tel: 248-489-9300

European Sales:

Stoneridge GmbH
Paradiesweg 11
73733 Esslingen, Germany
Tel: +49 711 9933820

Asia-Pacific Sales:

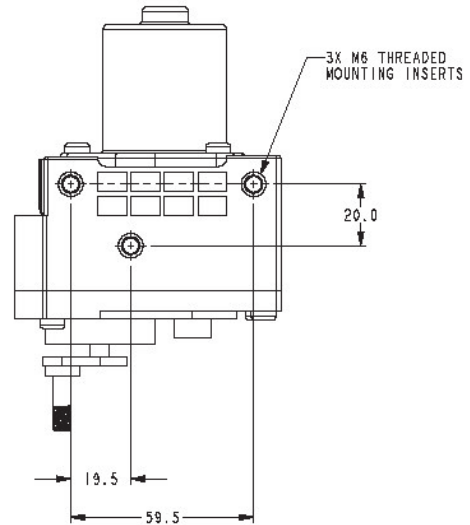
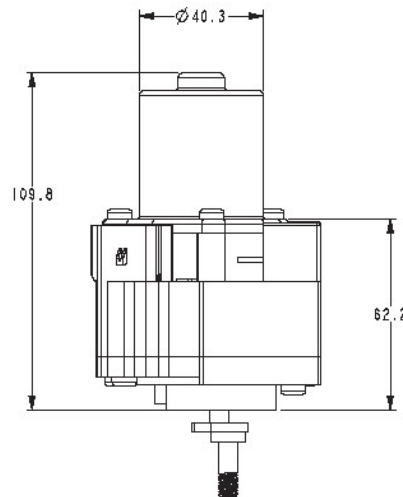
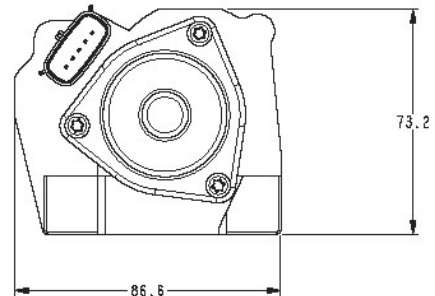
Stoneridge Asia Pacific
Electronics (Suzhou) Co., Ltd.
Shanghai Branch
Room 805 INNOV Tower
1801 Hongmei Road,
Xuhui District, Shanghai
200233
P.R. China
Tel: +86 21 3395 0304
Fax: +86 21 3395 0387

Stoneridge Korea

#807 Hangang Posville
33-1, Dangsandong-5ga
Yeongdungpo-gu, Seoul
150-045 Korea
Tel: +82-2-2633-0672
Fax: +82-2-2633-0673

Stoneridge Japan

3-21-2 Helios Kannai Bld.
4F Motohama-cho,
Yokohama city, Kanagawa
Japan 231-0004
Tel: +81(0) 45-222-8317
FAX: +81(0) 45-222-8283



Stoneridge is an independent designer and manufacturer of highly engineered electrical and electronic components, modules and systems principally for the automotive, light/medium/heavy-duty truck, agricultural and off-highway vehicle markets. Our products provide engineered solutions that improve the efficiency and performance of electric and electronic systems.

The **Control Devices Group** focuses on products that sense, switch and control a specific function. Our key technologies include:

- Electromechanical Actuators
- Customer Actuated Switches
- Emissions Sensors
- Solenoid Coil Valves
- Powertrain Switches and Sensors
- Pressure Switches and Sensors
- Speed Sensors
- Temperature Sensors
- Position Sensors
- Torque Sensors