G Series Direct Gas Actuator

The solution to manual gearbox automation







The answer to the industry's need for an inexpensive, simple, reliable and durable gas actuator

The EIM G Series pneumatic actuator from Emerson is a multi turn gas driven actuator that is perfect for applications using linear, rising stem or rotating stem valves. The G Series direct gas actuator is the first actuator to utilize direct natural gas pressure to actuate a pipeline valve. Fundamentally, it simply replaces a gearbox handwheel with a gas-driven actuator that is capable of producing up to 900 ft/lb of torque.

The G Series was installed on nearly all major pipeline systems worldwide long before other current brands were even conceived. Its compact, lightweight design ensures easy installation, versatility and simple maintenance. And thanks to the unique gear train, there's no need to use reservoir bottles filled with hydraulic fluid, and no need for complex control panels.

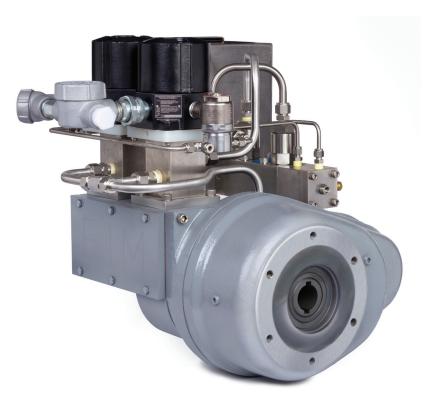
The G Series can handle virtually any local or remote control system requirement. A variety of standard single or double acting pneumatic and electric remote control configurations are available. Valve position can be coupled to direct-mounted limit switches for remote electrical valve position indication. These switches meet all required area classifications.

G Series is distinctive

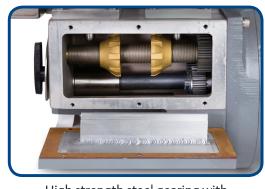
- Direct-power gas driven gear motor
- Single housing size with optional gear ratios for torque and speed changes
- Gear assisted handwheel drive for easy manual operation
- Easily adjusted, gear driven limit valves for reliable shutoff
- Interchangeable limit cam gearing to match any valve stroke time
- No hydraulic tanks or control panels required

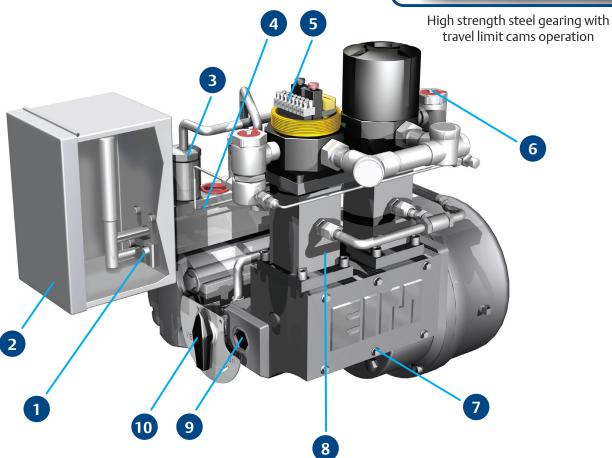
G Series offers numerous benefits

- Adaptable to most existing bevel or worm gears
- Corrosion resistant controls throughout
- Travel limit cams are in step with valve stroke during handwheel operation
- Cast iron gear housing
- Manual selector lever located in stainless steel padlockable box
- No power gas regulator required



EIM G Series Features





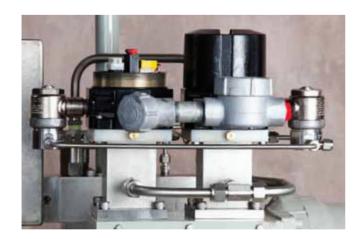
EIM G Series Features

- 1 On/off selector valve assembly
- DOT-compliant stainless steel padlockable control box
- 3 Poppet valve assembly
- 4 Auto-close and ESD-compatible piston module
- 5 Optional limits switches

- 6 Optional solenoids for remote operation
- 7 Cast iron gear case (see inset)
- 8 Adjustable, end-of-stroke limit valves
- 9 Manual handwheel operation standard
- Block and bleed power gas supply valve lockable in on or off position

G Series control details and options

- G Series power supply range 400-1480 psi (27-102 Bar)
- Remote indication using hermetically sealed, explosion proof micro switch assemblies. Limit switch certification rating: Cl 1, Div 1, Gps B, C & D; Class II, Divisions 1 & 2, Groups E,F,& G; NEMA Type 4, 4X
- Electric remote operation using explosion proof solenoids. Solenoid certification rating: Cl 1, Div 1, Gps C & D; Class II, Div 1, Groups E,F,& G; Div II, Groups C,D,E,F & G; NEMA Type 3
- Custom control schemes available
- Local control function using manually operated selector valve
- Padlockable stainless steel power gas block and bleed valve



Contact Us: Emerson Process Management, Valve Automation facilities at your nearest location:

NORTH AMERICA

13840 Pike Road Missouri City, Texas 77489 USA T+1 281 499 1561 (Toll Free USA) T+1 281 499 1561 F+1 281 499 8445 info.missouricity@emerson.com

MIDDLE EAST & AFRICA

P. O. Box 17033 Dubai United Arab Emirates T+971 4 811 8100 F+971 4 886 5465

EUROPE

Asveldweg 11 7556 BR Hengelo (O) The Netherlands T+31 74 256 1010 F+31 74 291 0938

Via Montello 71/73 20038 Seregno (Milan) Italy T +39 0362 2285 207 F +39 0362 2436 55

ASIA PACIFIC

No. 9 Gul Road #01-02 Singapore 629361 T +65 6501 4600 F +65 6268 0028

1277 Xin Jin Qiao Road Jin Qiao Export Processing Zone Shanghai 201206 P.R.China T+86 21 2892 9000 F+86 21 2892 9001

For technical data and local representation, please check our website: www.eim-co.com

© 2011 Emerson Process Management. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. "Brand mark listing" are marks of one of the Emerson Process Management family of companies. All other marks are property of their respective owners.

The contents of this publication are presented for information purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.



