L-Series
Linear Valve Actuator

SHAFER™

EMERSON™
Process Management

APPLICATIONS

For operation of rising stem type valves.

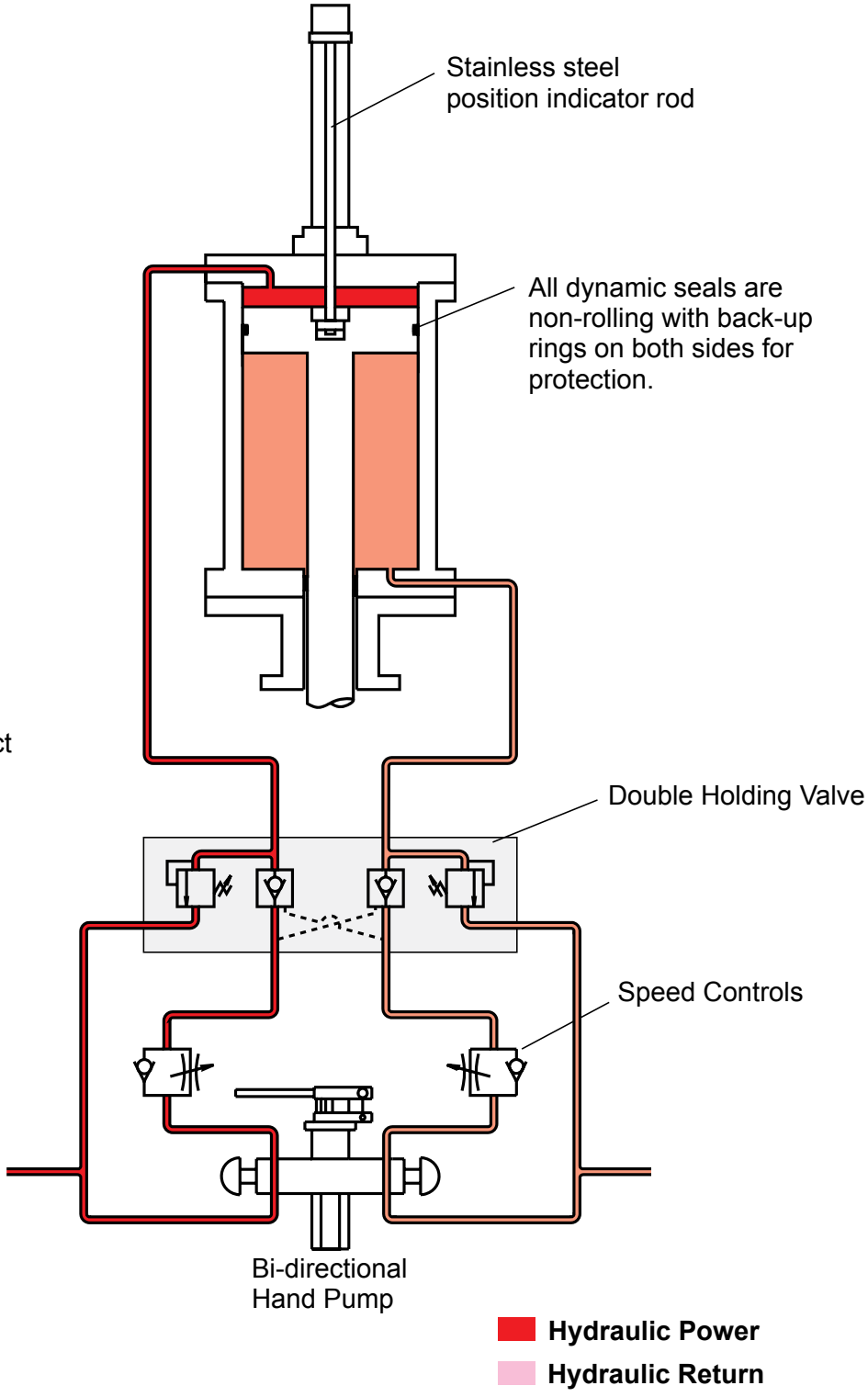
- Gate valve applications on natural gas pipelines. The actuators are powered by natural gas using gas over oil tanks.
  - Natural gas transmission lines
  - Emergency shutdown
  - Linebreak protection
- Gate valve applications on crude oil or products pipelines. The actuators are typically powered hydraulically or by nitrogen pressure vessels.
- Rising stem ball valves.
- Spring return or fail-safe applications.

CAPABILITIES

- Double acting or spring return operation.
- Thrust output range 900 to 600,000 lbs. (408 to 272,155 kg).
- Linear motion range to 72 inches (182.9 cm).
- Power supply pressure range 50 to 3,000 psi (3.4 to 207 bars).
  - Hydraulic, gas/hydraulic, pneumatic
- Ambient temperature range:
  - -20°F to 250°F (-29°C to 121°C) Standard
  - -50°F to 250°F (-45°C to 121°C) Optional

FEATURES

- The hydraulic piston generates dependable and efficient thrust which acts directly on the valve stem.
- The linear motion is always smooth, even at rapid operating speeds.
- The actuator is mounted directly on the valve, centered on the valve stem for rigid support and precise alignment. The piston is threaded directly to the valve stem which permits installation on new or in-service valves.
- The actuator absorbs all end of stroke thrust to protect the valve.
- Operating speed is easily controlled. Hydraulic snubbers are used to slow the speed, at the end of stroke, on wedge type gate valves.
- The double holding valve hydraulically locks the actuator in any desired position, without drift.



Double holding valve, speed control and hand pump assembly.

DOUBLE HOLDING VALVE

The “Double Holding Valve” is a double pilot operated check valve combined with double thermal relief valves. To maintain precise valve position, the “Double Holding Valve” locks-in hydraulic fluid on both sides of the linear actuator piston and also provides thermal relief protection.

CONTROLS AND ACCESSORIES

L-Series linear actuators can be operated locally, remotely, or automatically by a variety of sensory and control devices. Shafer has developed over 4000 individual control systems to meet the many requirements of our customers.

- Manual hydraulic hand pump for emergency operation.
- Poppet type, positive seal, control valves.
- Double holding control valve.
- Hydraulic snubbers.
- Adjustable speed controls.
- Limit Switches.

World Area Configuration Centers (WACC) offer sales support, service, inventory and commissioning to our global customers. Choose the WACC or sales office nearest you:

NORTH & SOUTH AMERICA

19200 Northwest Freeway
Houston TX 77065
USA
T +1 281 477 4100
F +1 281 477 2809

Av. Hollingsworth
325 Iporanga Sorocaba
SP 18087-105
Brazil
T +55 15 3238 3788
F +55 15 3228 3300

ASIA PACIFIC

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

No. 1 Lai Yuan Road
Wuqing Development Area
Tianjin 301700
P. R. China
T +86 22 8212 3300
F +86 22 8212 3308

MIDDLE EAST & AFRICA

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

P. O. Box 10305
Jubail 31961
Saudi Arabia
T +966 3 340 8650
F +966 3 340 8790

24 Angus Crescent
Longmeadow Business Estate East
P.O. Box 6908 Greenstone
1616 Modderfontein Extension 5
South Africa
T +27 11 451 3700
F +27 11 451 3800

EUROPE

Berenyi u. 72- 100
Videoton Industry Park
Building #230
Székesfehérvár 8000
Hungary
T +36 22 53 09 50
F +36 22 54 37 00

For complete list of sales and manufacturing sites, please visit
www.emersonprocess.com/valveautomationlocations
Or contact us at info.valveautomation@emerson.com

©2016 Emerson Process Management. All rights reserved.

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

Bulletin L-01293

SHAFER™

EMERSON™
Process Management