FLOWBUS®

Electro Hydraulic Actuators

Heavy Duty Scotch Yoke Design

Key Advantages : Electro Hydraulic Actuators

FLOWBUS electro hydraulic actuators are specifically designed for use on quarter turn valves and dampers. The unit utilizes to operate from a single source either one or a number of valve actuators contemporaneously, guaranteeing the correct pressure and volume to stroke the actuators. Electro hydraulic units are the right solution for emergency shutdown and fail safe application. In case of loss of electrical power, the accumulator maintains reserve hydraulic power for a defined number of piston strokes.

Ambient Temperature

- **Standard :** -20°C to +80°C (-4°F to +176°F)
- **High :** -20°C to +177°C (-4°F to +350.6°F)
- **Low :** -48°C to +80°C (-54.4°F to +176°F)
- For higher and lower temperature applications, consult Flowbus.

01 Versatility

The self-contained electro hydraulic actuators consist of control, hydraulic, power modules, incorporating a motor driven pump with an integral hydraulic cylinder for minimum installation and maintenance costs. They are available in both double acting and spring return (clockwise or anticlockwise) configurations for quarter turn movement such as ball, butterfly, plug valves and dampers.

02 Manifold Control System

The components are connected by flange to the manifold. This allows having a very compact unit to reduce the number of connections by fittings and pipes and then to make the assembly and disassembly of each component easier and to minimize the risk of oil leakage also in case the system undergoes string vibrations. The actuators provide local open or close selector switches, local position indication, pressure indication, and manifold control piping as standard.

03 Rotary On-Off or Modulating Duty

The actuator service provides on-off or modulating. Actuator control can be local or remote by electric or hydraulic signals. The control system can be include devices for automatic operation or stay put in case of emergency conditions (electric or hydraulic supply failure, high temperature, low or high pipeline pressure etc,).

04 Accurate Selection of Control Valves

The overall design concept is a simplistic approach to high accuracy hydraulic control. Depending on customer requirements and process conditions, various ancillaries such as limit switches, solenoid valves, servo valves, poppet solenoid valves etc. are optimally selected to ensure the perfect valve operation.

05 Eliminating the High Installation & Maintenance Cost

Utilizing standard, state of the art industrial components, electro hydraulic is simple to operate, monitor and maintain. With simplicity in mind, the control system is easy to operate and the enclosed hydraulic system requires minimal maintenance.

06 High Torque and Safe Design

FLOWBUS electro hydraulic units are built using the highest quality material and hydraulic components. Every electro hydraulic power unit is custom engineered and manufactured to meet the most stringent requirement and project specifications. Electro hydraulic system is an electrical actuator that combines the benefits of hydraulic actuation with electrical reliability. This system is designed to provide high torque with pinpoint accuracy all in one complete robust package.

07 Customization

Electro Hydraulic actuators offer the flexibility to customize the actuator to suit specific applications and process conditions such as emergency shutdown (ESD), on-off modulating control, and partial stroking test with minimal effect on the process. The actuators are self-contained and utilize a higher internal pressure to drive a double acting or spring return scotch yoke drive.

08 Various Power Options

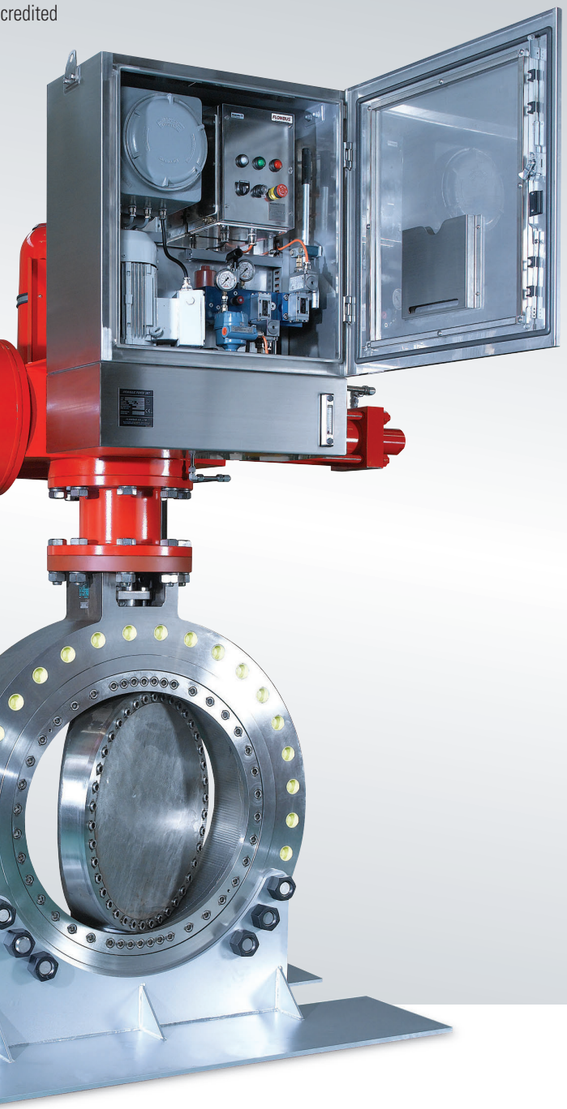
Specifically designed for safety critical applications the actuators accept various inputs signals as standard, filed bus communication via all major protocols can be provided for remote monitoring and control. The electro hydraulic actuators are available for use with various power supplies, single phase, three phases or 24 VDC.

09 Various Manual Overrides

The hydraulic override is integrated in the end cap of the actuator and can be fitted to all electro hydraulic units in both double acting and spring return configurations for emergency operation to be used either to recharge accumulator or to stroke the actuator. This manual override is the optimum solution for customer requiring a compact unit of minimum weight and size.

10 International Standard

- Actuators manufactured in conformity with **CE** certification to **PED 97/23/EC**
- Actuators certified to Explosion Protection Certificate
- Actuators certified to **IP66/IP67**
- Actuators designed and manufactured under a third party accredited



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