

Bettis™ EHO Electro-Hydraulic Operator

A complete, proven solution ready for your ESD and fail-safe applications



BETTIS™

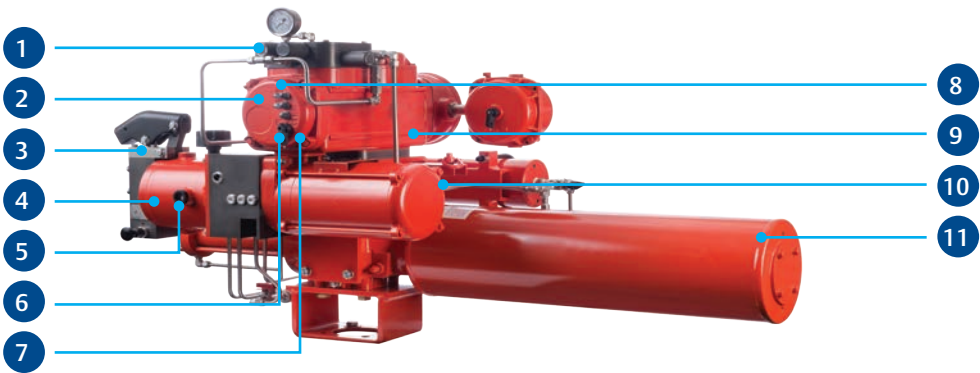

EMERSON™
Process Management

Emerson Process Management has developed the new Bettis EHO Electro-Hydraulic Operator drawing on the experience and integrating the advanced technologies of multiple Emerson Companies.

Executing Emergency Shutdown (ESD) out in the middle of a remote region requires ultra-reliable valve control, fast-stroking options and self-contained power. The Bettis EHO Electro-Hydraulic Operator utilizes a dependable spring-return actuator for the fail-safe stroke combined with an integral hydraulic power pack and electronic control module for remote valve operation.

The versatile Bettis EHO Electro-Hydraulic Operator is designed for the toughest environments and critical applications. With this product, you have an actuator system with field-proven technology and a single source of accountability.

When reliability becomes the essence of your critical application, rely on the Bettis™ EHO



No.	Description
1	Hydraulic Manifold
2	Local Open/Close/Stop push buttons
3	Hand Pump
4	Reservoir
5	Sight Level Gauge
6	Local lockable Remote/Local/Offline switch

No.	Description
7	Local Display and Operation
8	Local Open/Close light display
9	Control Enclosure
10	Motor
11	G-Series Hydraulic Spring-Return Actuator

Product Specifications:

Quarter Turn Torque Output:

Spring Return:

- 10,015 to 707,696 in-lbs

Double Acting:

- Up to 2,379,683 in-lbs

Maximum Operating Pressure:

- 3000 Psi (207 bar)

Operation Temperature:

- -20°F to +140°F (-29°C to +60°C)
- -40°F to +140°F (-40°C to +60°C) (optional)

Input Power:

- Multiple AC and 24V DC available

Remote Operation:

Input:

- Open, Close, Stop
- ESD

Output:

- Open, Close position feedback
- 4 – 20mA hydraulic pressure (optional)

Limit Switches:

- 2 SPDT (standard)
- 4 SPDT (optional)

Environmental Protection:

- Control enclosure: IP68
- Hydraulic Actuator: IP67M
- Motor: IP68
- Reservoir: IP54

Local Operation and Display:

- Open/Close/Stop push button
- Lockable Remote/Local/Offline selector switch
- Open/Close light display
- Local physical position indicator
- Hydraulic hand pump manual override

Hazardous Area Classification & SIL Certification

- CSA, Canadian Standard Association Certification Class I, Division I, Groups , C and D Group B configuration upon request
- FM, Factory Mutual Certification Class I, II and III, Groups C, D, E, F, G, Division I, T4 Group B configuration upon request
- ATEX Directive EExd IIB T4
- IECEx Certificate of Conformity Ex d IIB T4
- SIL II Certification

**Contact local sales office for updated list of certifications*

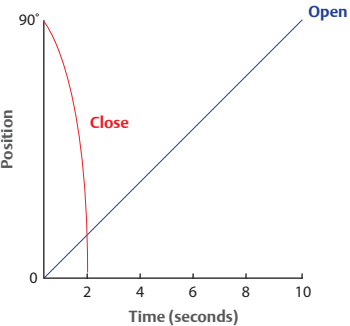
Spring power, utility power or solar power



Reliability is maximized by utilizing a spring-return actuator to stroke the valve after power failure or during an emergency event.



Solar panels are available for areas without electrical power. External hydraulic or pneumatic power sources are not required.



Fast-closing speed or precise speed control is obtained through field-adjustable flow control valves to meet application requirements.

Rugged hydraulic components promote ease of use



Solenoids, speed controls, pressure transducers and pressure switches are integrated in a compact manifold block eliminating external tubing and connections.

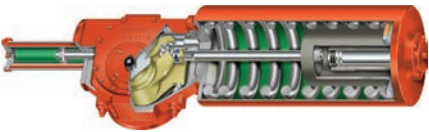


During an emergency power loss, the hydraulic hand pump can be used to stroke the actuator directly or recharge an accumulator.



Corrosion resistant materials ensure longevity. The control enclosure, hydraulic manifold and hand pump are constructed from marine grade aluminum with stainless steel trim.

Proven technology for critical applications



The **Bettis™ G-Series**, hydraulic actuator design enables safe field maintenance with reduced service time.



With the dual-sealed Separate Terminal Chamber (STC), installation wiring can be terminated and fuses can be replaced without exposing the internal control components to hostile environmental conditions.



BETTIS
1929

Shafer
1946

EIM
1949

Over 200 years of combined experience go into the Bettis EHO Electro-Hydraulic Operator. The solution unites veteran components: Bettis operator, EIM electric components and motor, and Shafer hydraulic control technology.



- A Valve Operating System (VOS) is only as good as its weakest link. A system made up with major components from multiple manufacturers can make problems harder to diagnose. The Bettis EHO Electro-Hydraulic Operator gives you a single source of design and accountability.
- The Bettis G-Series, spring-return actuator gives you the fail-safe reliability you need, validated in thousands of applications for more than 30 years.
- Emerson's Lifecycle services provide prompt response when you need it, where you need it.

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For complete technical and installation documentation, scan QR.

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