

**PRODUCT DATA SHEET, 7-10K M3000 FAIL-AS-IS DOUBLE ACTING  
ACTUATED GV W/ LINEAR OVERRIDE**

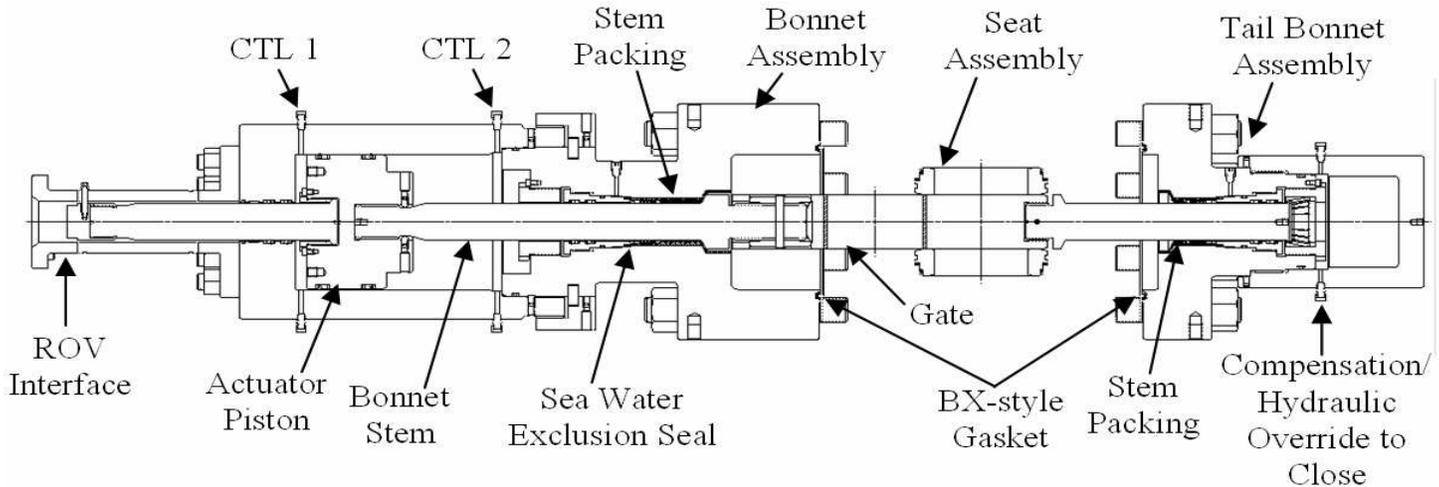
Rev	ECN No.	Date	Reviewed By	Approved By	Status
B	1120103	07-JUN-2007	Dach, Kevin	Wilson, Michael	RELEASED

## Summary:

7"-10K M3000 Fail-As-Is Double Acting Actuated Gate Valve product specifications will include features and design ratings. This valve is designed to operate at full differential.

**Product Data Sheet**

**7" 10,000 psi M3000 Fail-As-Is Actuated Gate Valve**



**Key Features**

- Bi-directional metal-to-metal sealing slab gate valve design
- Metal to metal sealing bonnet-body interface via BX style bonnet gasket
- FMC patented UV stem packing sealing at bonnet-stem interface
- Balanced Stem Gate Valve Design with boost piston capabilities on tail bonnet
- Industry's most thoroughly tested and qualified actuated gate valve assembly
- Testable uni-directional seawater exclusion seal designed to prevent seawater hydrostatic pressure from acting on stem seals

**Configuration**

- Rising stem is a single piece design featuring backseat capability
- Non-elastomeric 'UV' stem packing is suitable for all service environments
- Upper actuator stem isolated from the CP system to prevent calcium carbonate build-up and stem material prevents marine growth
- Linear ROV override (no torque required)

**Design Rating – for 7.06" Thru-Bore at Max Conditions**

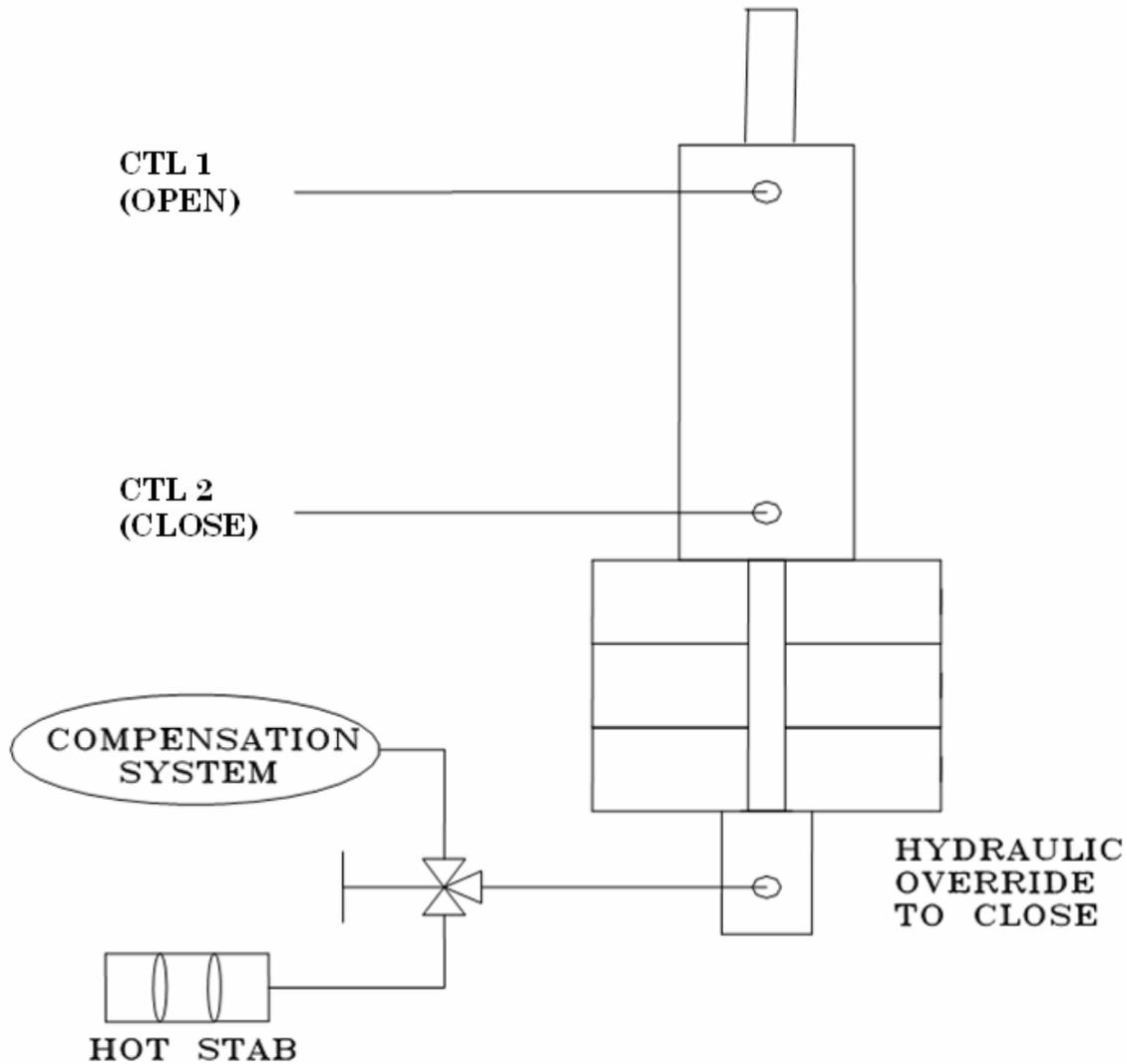
- 10,000 ft (3,048m) Water Depth based on typical control fluids
- Control line rated to 6,000 psi (414 bar), tested to 9,000 psi (621 bar). Actuator designed to Fully Close valve at 1683 psi (116 bar) at 10,000-psi valve differential pressure (10.0-ksi Upstream / 0-psi Downstream).
- Valve Stroke: 8.00 in (203 mm)
- Max Actuator OD: 14.0 in (355 mm)
- Total Overall Length: 100.5 in (2,553 mm)
- Length from Valve Centerline to End of ROV Interface: 71.5 in (1,816 mm)
- Approx. Weight without Valve Body: 2,650 lbs (1,199 kg)
- Effective Actuator Piston Area: 56.55 in<sup>2</sup> (365 cm<sup>2</sup>)
- Actuator Control Port 1 Fluid Volume per Stroke: 452 in<sup>3</sup> (1.96 US gal) (7.41 L)
- Actuator Control Port 2 Fluid Volume per Stroke: 452 in<sup>3</sup> (1.96 US gal) (7.41 L)
- Hydraulic Override to Close Piston Effective Piston Area: 7.07 in<sup>2</sup> (46 cm<sup>2</sup>)
- Hydraulic Override to Close Piston Fluid Volume per Stroke: 56.5 in<sup>3</sup> (0.24 US gal) (0.93 L)
- Max Allowable Override Load to open: 250,000 lbs (1112 KN)
- Hydraulic Override to Close line rated at 9,000 psi (621 bar), tested to 13,500 psi (931 bar). (Caution: see note on tubing below.)

**Interfaces / Installation**

- Standard ISO 13628-8 Type B linear push interface
- Manipulator deployable Linear Override Tool (LOT).
- SAE 37° flare fittings used on control ports.
- CAUTION: If the hydraulic override functionality is going to be used, caution should be exercised while designing the tail bonnet control line tubing as it must at least be rated to the working pressure of the Hydraulic Override to Close line.

## Plumbing Schematic

- Typical Hydraulic Connections:



### Description

### Data

- | Description  | Data                                    |
|--|---|
| • FMC 7"-10K Model 3000 Fail As Is Actuated Gate Valve | <a href="#">P1000036160</a> (7.06 Bore) |
| • FMC 7"-10K Actuator Interface Flange Kit Assy        | <a href="#">P1000035547</a>             |