

PRODUCT DATA SHEET, 2 1/16-10K M3000 ACTUATOR
--

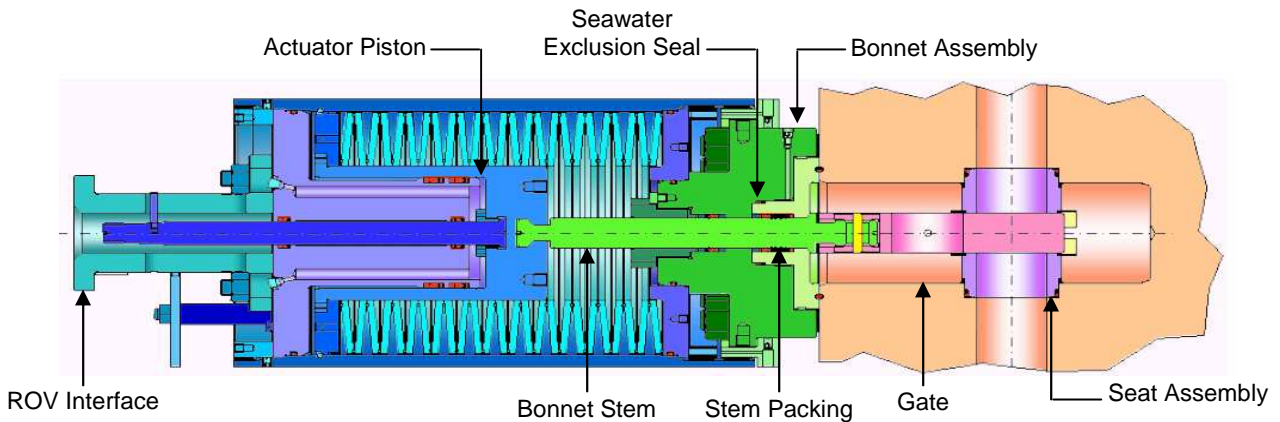
Rev	ECN No.	Date	Reviewed By	Approved By	Status
D	1114479	30-NOV-2006	Bui, Kevin	Wilson, Michael	RELEASED

Summary:

This product data sheet contains the key features, configuration and design rating of the 2 1/16-10K M3000 Actuator.

Product Data Sheet

2 1/16-10K M3000 Actuator



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
- Testable unidirectional seawater exclusion seal designed to prevent seawater hydrostatic pressure from acting on stem seals
- Industry's most thoroughly tested and qualified actuated gate valve assembly
- Tungsten carbide hard-facing on gate and seats

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 and corrosion
- Linear ROV override (No torque required)

Design Rating

- 10,000 ft (3,048 m) water depth rating based on typical control fluids
- Control line rated to 6,000 psi (414 bar), tested to 9,000 psi (621 bar) and can operate at 2,700 psi (186 bar)
- Compensation/Spring chamber rated to 600 psi (41 bar), tested to 900 psi (62 bar)
- Spring housing OD 11.0 in (279.4 mm)
- Length from valve centerline to end of ROV interface 45.14 in (1,146 mm)
- Weight without valve body 800 lbs (368 kg)
- Effective piston area 14.42 in² (93.0 cm²)
- Valve stroke 2.56 in (65.0 mm); Control fluid volume per stroke 37 in³ (.16 US gal), (.61 L)
- Compensation fluid volume per stroke 37 in³ (0.16 US gal), (0.61 L)
- Spring force - Preload 12,605 lbs (56.1 KN)
- Spring force - Compressed 15,027 lbs (66.8 KN)
- Maximum load to override 37,430 lbs (166.5 KN)
- Load to override at 5K differential 25,310 lbs (112.6 KN)
- Maximum allowable override load 138,600 lbs (616.5 KN)
- See performance calculation spreadsheet for crack open and hold open data

Installation / Interfaces

- Standard ISO 13628-8 Type B linear push interface
- Manipulator deployable Linear Override Tools (LOT) and Linear Override Lockout Assemblies (LOLA) available.
- Female SAE 37° flare fittings used on control ports
- Linear Override Lockout Assembly (LOLA) is a mechanical lock to maintain the overridden valve in the stroked position allowing the linear override tool to be removed.

Description**Data**

- FMC 2 1/16-10K M3000 Actuator
- Standard M3000 Actuated Gate Valve Kits may be found in PRODUCT INFORMATION.
- Actuator Part Number P207236
- http://ipd.houston.fmcweb.com/ipd/class/product_classification.html