

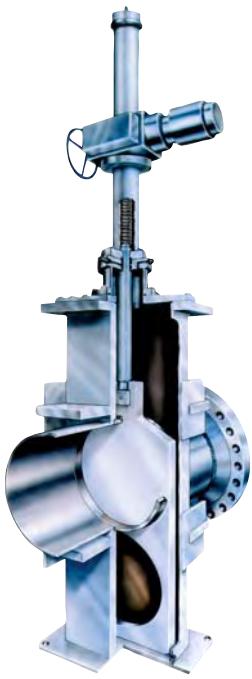
M&J VALVE

AN SPX BRAND

Product Overview



SPX[®]



M303

Thru-conduit Floating Slab Gate Valve 6"-84" API 6D
Fabricated design allows rapid delivery.

Major components of popular sizes maintained in stock.

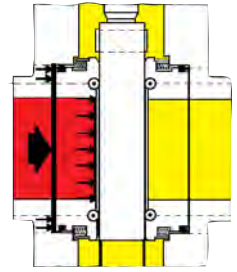
Pressure energized sealing for high pressures

The higher the pressure, the tighter the seal. M303 gate valves use increasing line pressure to force the floating-slab gate against the downstream seat even more securely.

Sealing to only 5 psig

Low-pressure sealing with spring-loaded seat rings.

This series of compressed springs around the seat ring creates a uniform force around the entire sealing surface. A patented nylon/elastomer primary seal is complemented by an optional secondary grease seal.



EG (Expanding gate) Gate Valves

A two-piece expanding gate (gate and matching "segment") provides tight mechanical seal for both high and low line pressure. The more this valve is torqued, the tighter it seals. The wedge-shaped gate and matching segment move relative to each other as the valve is completely opened or closed. This movement forces the gate and segment apart to seal very tightly against the gate seat.

Between open and closed, the gate and segment are centered for minimum wear during movement. The valve should be fully torqued closed or opened to achieve full mechanical seal.

- Cast body
- Chevron stem seal standard; options available
- Emergency sealant fitting
- Pressure relief provisions

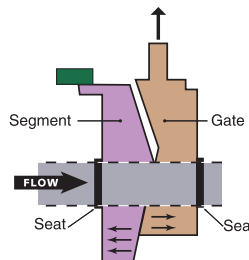
C303 Gate Valve

(Similar to M303 but with Cast Body 2"-20")

Model C303 gate valves offer all the features advantages of M303 designs except bodies are cast steel instead of fabricated. Both M303 and C303 valves meet API 6D specifications with a variety of trims including NACE sour crude / gas service.

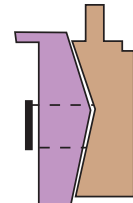


Expanding Gate Operation



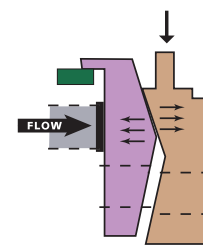
OPEN:

Movement of gate upward forces gate and segment apart for mechanical seal.



DURING TRAVEL:

Gate and seat centralized to reduce drag and wear.

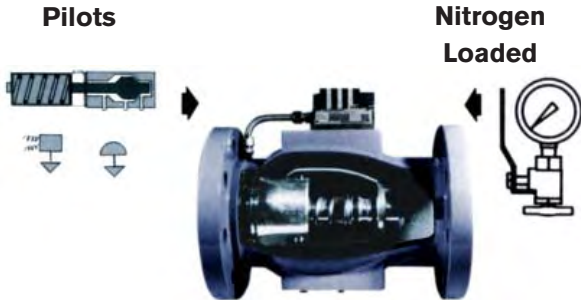


CLOSED:

Wedge action expands gate and segment for tight mechanical seal.

Danflo™ Control Valves

Control action in a DANFLO™ valve depends on how various valve ports are connected and what type pilot or regulator is used. Ports allow upstream/downstream pressure to be piped to the cavity “behind” the plug. Pilot-operated valves use line pressure or electronic/ pneumatic control signals to feed line fluid into selected ports for the desired control action. Special versions of the valve, using an integral hydraulic piston, are available for electrohydraulic/servo control.



Liquid Surge Relief with a Danflo™ Valve

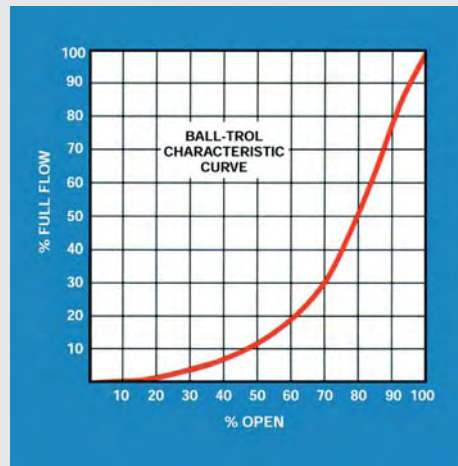
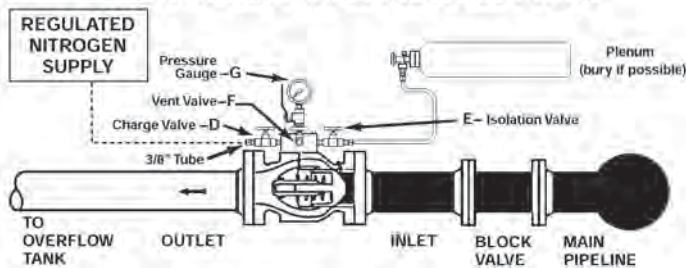
Surge relief for a liquid line is achieved by “loading” the plug cavity from a regulated nitrogen source. A line pressure surge above the nitrogen set point immediately opens the valve. The transient surge pressure is reduced as the extra surge volume is relieved. The plug tracks line pressure until equilibrium is re-established and the valve closes.

All Danflo™ Valves Offer

Superior Performance

- Axial “straight-path” smooth flow pattern
- Large annular flow area for high pressure recovery, low pressure drop, and high flow coefficients
- Large selection of hookup options for various control functions
- Low-noise and anti-cavitation trims available

TYPICAL INSTALLATION

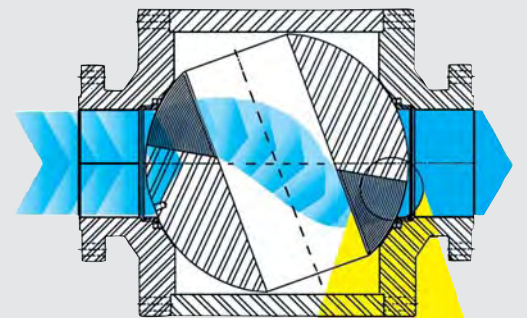


Ball-trol™ Rotary Control Valve

Ideal for controlling varying flow rates of gas, steam, and liquids. Twin “V” grooves in the ball provide nearly equal percentage flow characteristics from closed to 70% open; flow then gradually changes to full-port without any obstructions. There are no protruding shafts to interfere with flow or add pressure drop.

Optional trim prevents cavitation and reduces noise. Multiple plates stage pressure drop and reduce flow velocity.

- Bidirectional, quarter turn
- 1” to 20”, 150 to 2500 ANSI
- Fire test qualified
- Positively retained stem; change actuator with valve pressurized
- Spring-loaded seat rings for low pressures; high-pressure seal enhanced by differential area of seat ring



A full-open ball valve and control valve with rangeability 350:1 or greater—all in one valve.



Check Valves

M&J check valves, based on over thirty years experience, are ideal for pipelines, transmission and distribution, subsea, and general industrial applications.

- Closes to prevent backflow in a fraction of a second without any external power.
- Valve extremely reliable with clapper only moving part.
- Maintenance, when required, is fast and easy.
- For protection of environment at river crossings, personnel on offshore platforms, and equipment at steam turbines.
- Full-opening; permit passage of intelligent pigs, scrapers and spheroids. Minimum pressure drop across open valve.
- Sizes 2" through 36". Carbon steel standard, stainless steel available.
- Pressure ratings ANSI class 150 through 1500. Flanged and/or weld-end connections.
- Available with metal-to-metal seal and ring joint cover seal. Removable seats optional. Wide range of additional options.



4-Way Diverter Valves

For bi-directional meter provers. Automatic pressure-gauge indication of double-block-and-bleed seal. All seals can be replaced in the field. The valve provides fast, frequent, tight shutoff. Available in 3"-24" sizes.



Flow Loop

A full-scale, fully instrumented flow loop allows all M&J valves to be tested under actual operating conditions—including surge tests for surge-relief systems. A line valve can close within one second to generate transient pressure surges over 1100psi. This gives M&J a decided edge in perfecting designs for all of its valves.



The M&J Valve plant was designed and created specifically to manufacture valves in all sizes up to 84". State-of-the-art technology and equipment, plus complete support services for customers, keeps us among the best in the business.



No other valve manufacturer can match the reliability, delivery response, customer support and value delivered by M&J Valve. We always welcome your inquiry about any special requirements.

SPX[®]
FLOW CONTROL

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For more information about our worldwide locations, approvals, certifications, and local representatives, please visit www.spxfc.com.

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