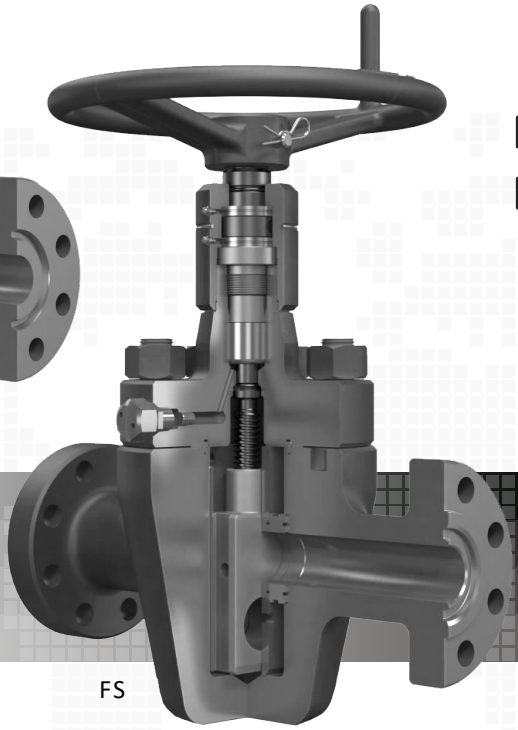
FORGED & CAST GATE VALVES

CX



FS

Model FS & CX

Manually Operated Slab and Expanding Gate Valves

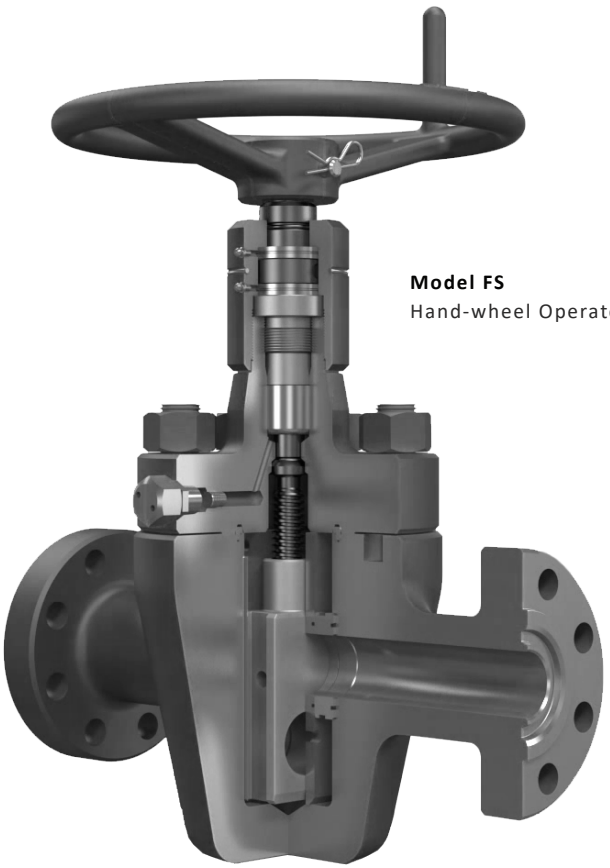
For API-6A Wellhead and other Energy Production, Distribution and Storage Applications.

- API 6A Monogrammed
- Highest Quality
- Delivered to Exact Customer Specifications
- Engineered for Years of Trouble Free Service

Model FS - Manual Forged Body Slab Gate Valve

Model FS Applications

Omni Model FS forged-body slab gate valves are designed for oil and natural gas wellhead or other critical service applications with operating pressures from **2,000 to 15,000 psi**. All Model FS slab gate valves are manufactured to the requirements of API 6A 21st Edition.



Model FS
Hand-wheel Operated Gate Valve

Features

Slab Gate

The single piece slab gate is field-replaceable and provides the valve with full bi-directional sealing capability at both high and low pressures.

Operating Temperatures

Model FS valves are available with API 6A Temperature ratings of L (-50 F) through Y (650 F). Valves for API Temperature ratings of X and Y are pressure de-rated as required per Annex G of API 6A 21st Edition.

Seat Design

The standard gate-to-seat and seat-to-body sealing interface is a two-piece design consisting of a seat ring and a body bushing, assisted by inserts in the rear of each piece. Metal-to-metal gate-to-seat interface is standard. Metal inserts are used for high-temperature applications.

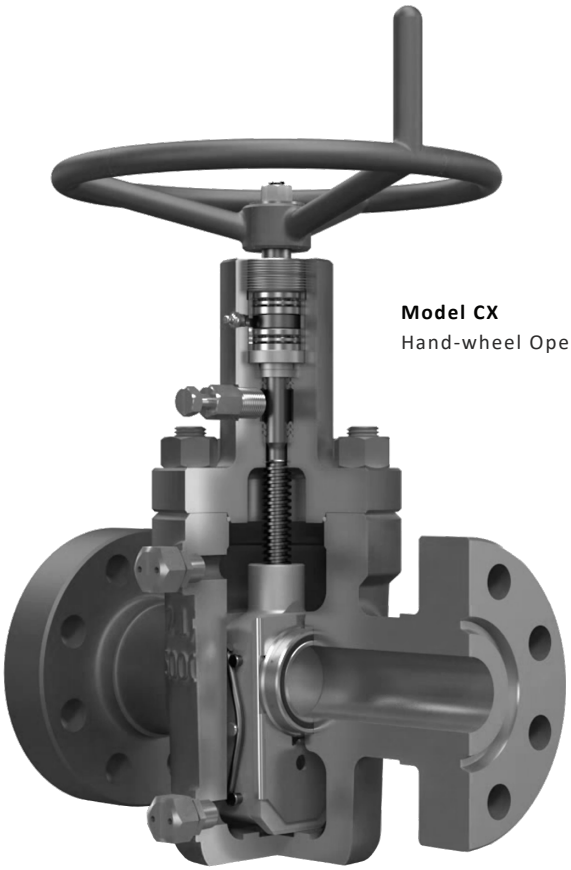
Corrosion Protection

All Model FS valves have body cavity lubrication appropriate for the material class and temperature rating of the valve. This ensures smooth operation of the valve under pressure and prevents corrosion during storage.

Model CX - Cast Body Expanding Gate Valve

Model CX Applications

Omni Model CX cast-body expanding gate valves are designed for oil and natural gas wellhead or other critical service applications with operating pressures from **2,000 to 5,000 psi**. All Model CX expanding gate valves are manufactured to the requirements of API 6A 21st Edition.



Model CX
Hand-wheel Operated Gate Valve

Features

Expanding Gate

The expanding gate is field-replaceable and provides a tight mechanical seal that does not rely on line pressure. This ensures seal integrity at both high and low pressure.

Operating Temperatures

Model FS valves are available with API 6A Temperature ratings of L (-50 F) through Y (650 F). Valves for API Temperature ratings of X and Y are pressure de-rated as required per Annex G of API 6A 21st Edition.

Packing Design

Chevron style stem packing is replaceable and can be re-energized by injection between the packing stacks. This ensures efficient sealing for the life of the valve. Graphite packing is used for high-temperature applications.

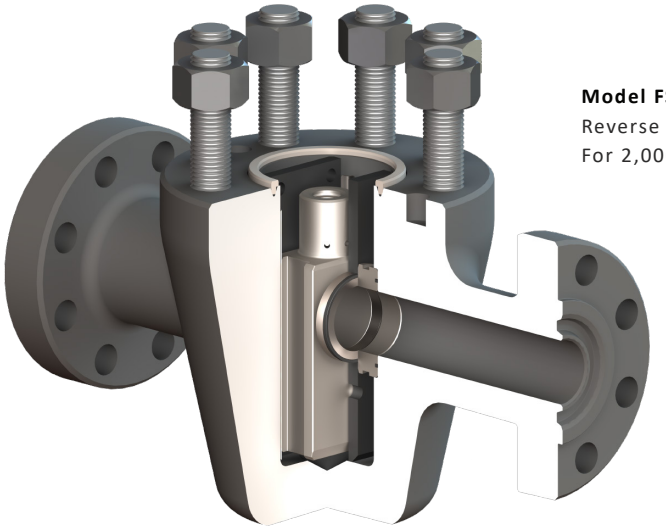
Body Lubricant

All Model CX valves are shipped with body filler grease appropriate for the material class and temperature rating of the valve to ensure smooth operation of the valve under pressure and to prevent corrosion during storage prior to deployment.

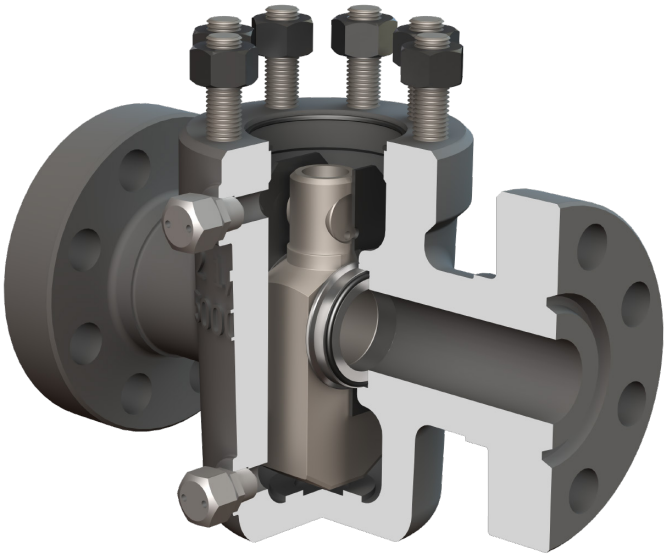
FS-R & **CS-R** - Gate Valves for Actuation

Reverse Acting Slab Gate Valve for Actuation

Omni Models FS-R and CS-R reverse acting slab gate valves are designed to be used as surface safety valves for oil and natural gas wellhead, manifold or other critical service applications. An appropriate pneumatic, hydraulic or electric actuator is required in conjunction with a body or **can be used with actuators from many other manufacturers**.



Model FS-R
Reverse Acting Gate Valve
For 2,000 & 15,000 psi Service



Model CS-R
Reverse Acting Gate Valve
For 2,000 to 5,000 psi Service

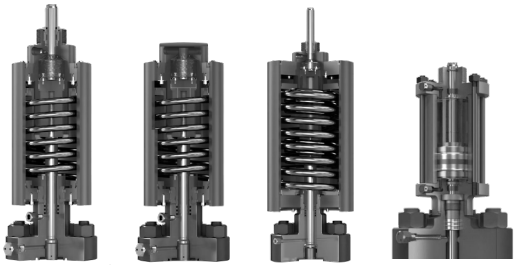
Features

The reverse acting slab gate has the conduit opening on the upper portion of the gate. This means that the valve will be open when the gate is in the down position. The gate is moved to the down position by application of adequate control pressure to the actuator. Upon loss of control pressure, acting on the gate and stem will cause the valve to close automatically. Under zero bore pressure conditions, valve closure is assisted by a spring contained in the actuator/bonnet assembly.

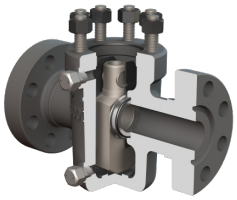
FS-R & CS-R Serviced by Omni Actuators

Valve Body Specifications

- Model CS-R and FS-R surface safety valves with Omni actuators are available in most API 6A material classes, PSL, PR and Temperature Ratings.
- Omni actuator/bonnet assemblies are built to customer specifications and are also available in most API 6A Material Classes. PSL, PR and Temperature Ratings.
- All Model CS-R and FS-R surface safety valves with Omni actuators are API 6A 21st Edition monogrammed equipment.
- All Model CS-R and FS-R surface safety valves with Omni actuators have successfully passed the API 6AV1 - Validation of Safety and Shutdown Valves for Sandy Service test and can be designated as API 6A-SSV Class 1 or Class 2 for use in Federal Offshore Waters.

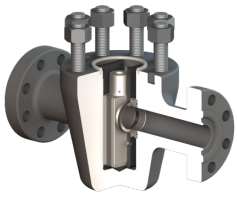


Model HX | **Model HXN** | **Model HWX** | **Model HDX**



Model CS-R
Gate Valve

Bore Size	Pressure (psi)	API Ring #
2 1/16"	2,000	R23
	3-5,000	R24
2 9/16"	2,000	R26
	3-5,000	R27
3 1/8"	2-3,000	R31
	5,000	R35
4 1/16"	2-3,000	R37
	5,000	R39
5 1/8"	2-3,000	R41
	5,000	R44
7 1/8"	2-3,000	R45
	5,000	R46



Model FS-R
Gate Valve

Bore Size	Pressure (psi)	API Ring #
1 13/16"	10,000	BX151
	15,000	BX151
2 1/16"	10,000	BX152
	15,000	BX152
2 9/16"	10,000	BX153
	15,000	BX153
3 1/16"	10,000	BX154
	15,000	BX154
4 1/16"	10,000	BX155

API-6A Specifications			
PSL-1 / PSL-2	(All Bore Sizes)	PSL-1 / PSL-2 / PSL-3 / PSL-3G	(All Bore Sizes 10,000 psi)
PSL-3 / PSL-3G	(Bore Sizes 2 1/16" - 4 1/16" only)	6A PSL-3 / PSL-3G	(All Bore Sizes 15,000 psi)
SSV Class 1	(All Bore Sizes)	6A SSV Class 1	(All Bore Sizes 10,000 or 15,000 psi)
SSV Class 2 - Sandy Service	(All Bore Sizes)	6A SSV Class 2 - Sandy Service	(All Bore Sizes 10,000 or 15,000 psi)

API-6A Non-NACE Trims				API-6A NACE Trims						
API Mat'l Class	AA	BB	CC	DD	EE-0,5	EE-1,5	EE	FF-0,5	FF-1,5	FF
Service	General	General	General	Sour	Sour	Sour	Sour	Sour	Sour	Sour
Trim	Standard	SS Trim	Full SS	Standard	SS Trim	SS Trim	SS Trim	Full SS	Full SS	Full SS
Corrosive	No	Slightly	Moderate	No	Moderate	Moderate	Moderate	Highly	Highly	Highly
Avail API Temp	L to X	L to X	P to X	L to X	L to X	L to X	L to X	P to X	P to X	P to X

Technical Notes

1	Nitriding is standard on all gates and seats. Tungsten Carbide, HF6 or other hard-facing techniques are also available.
2	Corrosion resistant alloy per NACE MR0175/ISO 15156.
3	Valves with API Temp Rating of X or Y will have the working pressure de-rated as per API 6A, Annex G
4	Teflon inserts on seat faces are standard in Omni valves. Metal-to-metal seats are available upon request.
5	Charpy impact test results are provided as required by API according to the temperature rating and material class.
6	Materials for sour service trims conform to latest edition of NACE MR0175. The acceptable limit of H2S should be noted after the trim level designation. Materials of construction for 0,5 and 1,5 are shown in the chart above however other partial pressure limits up to and including No Limit are available upon request. If an acceptable level is not noted in the valve trim/API Material Class designation it is understood to be "No Limit". 0,5 = 0.5 psi maximum limit of partial pressure of hydrogen sulfide 1,5 = 1.5 psi maximum limit of partial pressure of hydrogen sulfide
7	Omni reserves the right to use material class ZZ when customers request materials of construction that do not comply with current NACE MR0175/ISO standards.
8	Valves with API Temp Rating of X or Y will have high-temperature graphite packing and metal-to-metal sealing.

Surface Safety & Isolation Valve Solutions

FORGED & CAST GATE VALVES

Omni Valve

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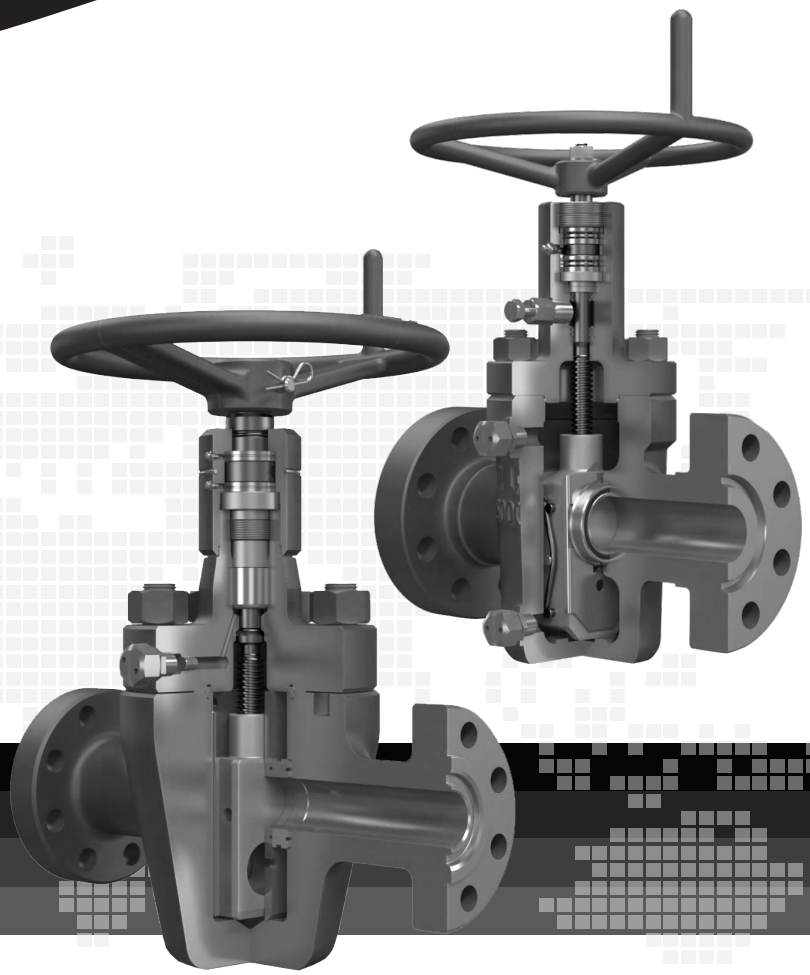

RFQ REQUEST FOR QUOTE

omnivalve.com/rfq.php

Product Warranty

All products quoted are subject to omni valve's limited product warranty available at: omnivalve.com/warranty.php