



Weatherford Split-Gate Valve (WSG)

Weatherford's WSG split-gate valve provides well control and features a parallel expanding gate that obtains a seal against the upstream and downstream seats, simultaneously. This seating force is entirely mechanical and unaffected by line-pressure fluctuations or vibrations. In the fully *open* position, the WSG valve allows full flow through the valve with seat faces protected from the flowstream.

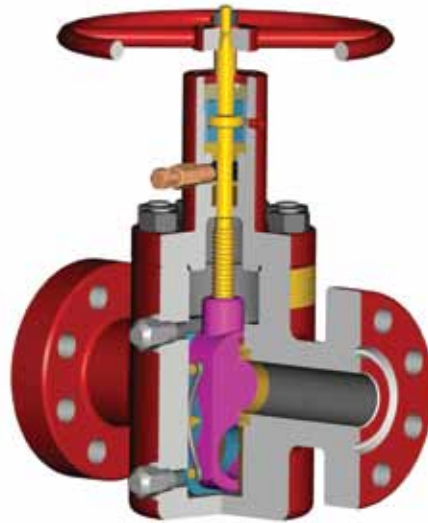
The WSG split-gate valve is offered in working pressures from 2,000 to 5,000 psi (13.8 to 34.5 MPa) in both cast and forged designs with bore sizes from 2-1/16 through 4-1/16 in.

The through-conduit design of the WSG split-gate valve provides a full round bore through the valve. Destructive turbulence is eliminated, and flow is isolated from the valve body when the valve is fully opened.

The WSG split-gate valve is engineered and manufactured to meet the highest quality standards and is manufactured per API specifications, qualifying it to bear the API-6A monogram.

Applications

- Used in wellhead systems, Christmas trees, and manifolds in drilling and production applications
- Provides a reliable low-pressure seal while maintaining capability to seal at higher pressures



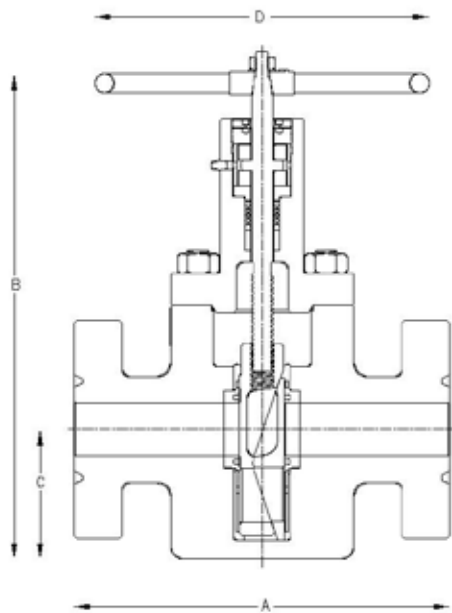
Features, Advantages and Benefits

- Seats are fully protected from flow in both *open* and *closed* positions, promoting exceptionally long service.
- Lubrication can be employed through two safety-capped grease fittings, allowing for easy internal part lubrication and increasing longevity.
- The WSG split-gate valve has two sets of stem-roller thrust bearings for low-torque operation, regardless of line pressure.
- Externally re-energizable stem packing provides for reliable service with zero leakage during the service life of the valve.



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Specifications for Handwheel Operated



Nominal Sizes (in./mm)	Working Pressure (psi/MPa)	Dimensions (in./mm)					Estimated Flanged Weight (lb/kg)	Number of Turns to Open/Close
		A (Thread)	A (Flanged)	B	C	D		
2-1/16 52.3875	2,000 13.8	9.750 247.650	11.625 295.275	24.063 611.200	4.813 122.250	11 279.4	155 70.3	13.0
	3,000 20.7		14.625 371.475	24.938 633.425	5.063 128.600	13 330.2		
	5,000 34.5							
2-9/16 65.0875	2,000 13.8	10.500 266.700	13.125 333.375	25.813 655.650	5.625 142.875	13 330.2	210 95.3	15.5
	3,000 20.7		16.625 422.275	26.375 669.925	5.938 150.825	16 406.4		
	5,000 34.5							
3-1/8 79.3750	2,000 13.8	11.375 288.925	14.125 358.775	29.438 747.725	6.938 176.225	13 330.2	270 122.5	20.0
	3,000 20.7		17.125 434.975	30.063 763.600	7.313 185.750	16 406.4		
	5,000 34.5		18.625 473.075					
4-1/16 103.1875	2,000 13.8	13.000 330.200	17.125 434.975	34.563 877.900	8.625 219.075	16 406.4	380 172.4	24.5
	3,000 20.7		20.125 511.175	35.438 900.125	9.063 230.200	20 508.0		
	5,000 34.5		21.625 549.275					



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Specifications for Handwheel Operated (continued)

Trim Materials

Material class designation	AA	BB	CC	DD	EE	FF
Body/bonnet	Alloy steel	Alloy steel	Stainless steel	Alloy steel	Alloy steel	Stainless steel
Gate	Alloy steel nitrided	Stainless steel nitrided	Stainless steel nitrided	Alloy steel nitrided	Stainless steel nitrided	Stainless steel hard-faced
Seat	Alloy steel	Stainless steel nitrided	Stainless steel nitrided	Alloy steel nitrided	Stainless steel nitrided	Stainless steel hard-faced
Stem	Alloy steel nitrided or QPQ	Stainless steel nitrided or QPQ	Stainless steel nitrided or QPQ	Alloy steel nitrided or QPQ	Stainless steel nitrided or QPQ	Stainless steel nitrided or QPQ

Trim materials shown are for 0.5 percent maximum H₂S service.

Additional products are available. For more information, contact your local Weatherford representative.