

Fabri-Valve®

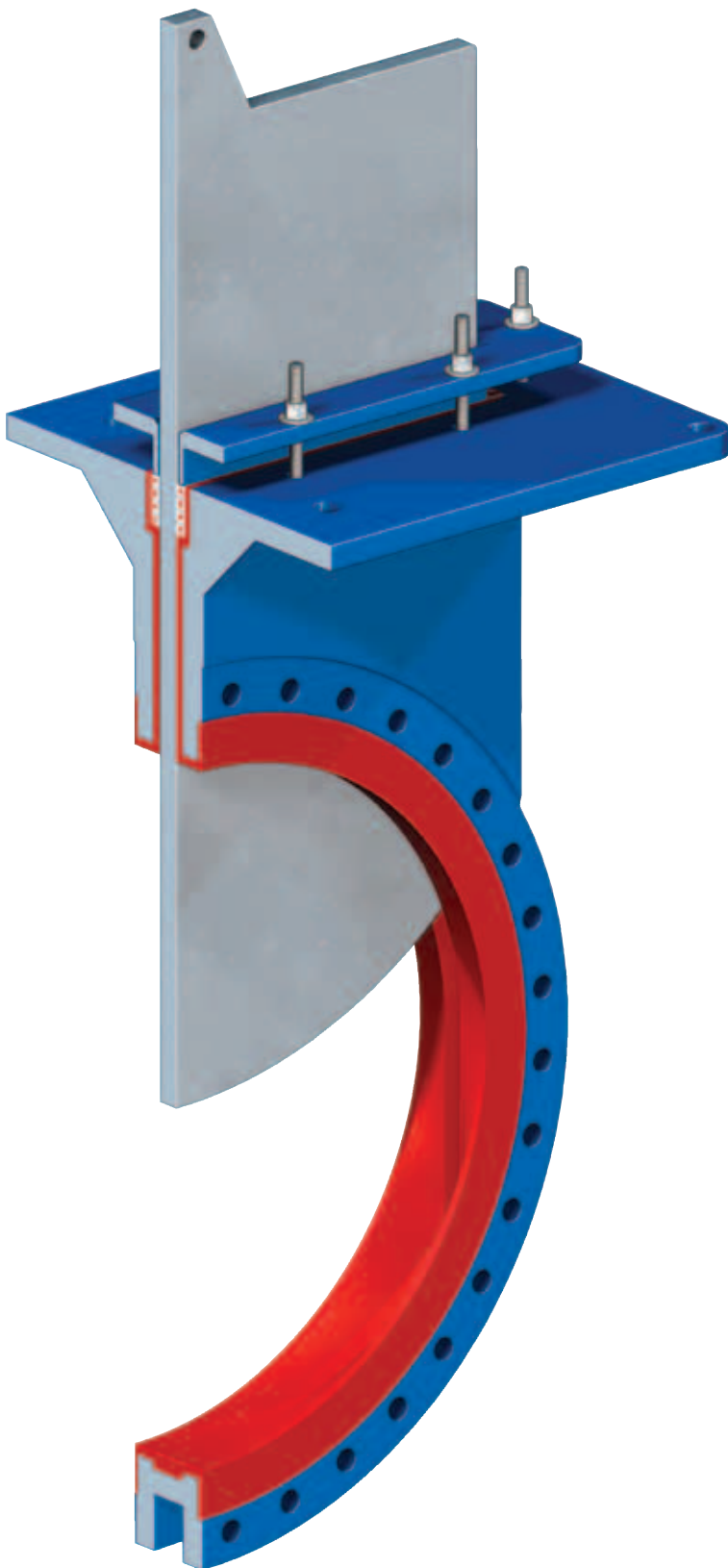
S16-ULV Urethane Lined  
Knife Gate Valve



**ITT**

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# S16-ULV Urethane Lined Knife Gate Valve



The Fabri-Valve® S16-ULV Urethane Lined Knife Gate Valve provides an economical solution for abrasive and corrosive applications requiring large diameter valves. The S16-ULV utilizes ITT's perimeter sealing technology that has been utilized for over 20 years. The S16-ULV features a robust perimeter sealing design that provides a no-discharge, bi-directional, drip tight shutoff.

## Advantages

- Specifically designed for Gypsum / Limestone Slurry (FGD Applications).
- Zero discharge
- Perimeter sealing
- Smooth bottom (No groove)
- Minimized chest area and close tolerances prevent media packing.
- Ease of Installation:
- Does not require load distribution rings between the valve & mating flanges.
- Performance of the S16-ULV is not affected by the choice of compressible gaskets, variations in the pipe's internal diameter or imperfectly assembled welded pipe flanges.

## Design

- Robust gate reduces the possibility of bent or warped gates, which lead to premature valve failure.
- A taper is added to the liner's internal diameter to eliminate the possibility of material collecting at the bottom of the port and preventing proper closure. The taper ensures automatic "clean-out" and "flushing".
- Minimized chest area and close tolerances prevent media packing.
- Urethane liner is chemically bonded to the body providing excellent liner support.
- Unrestricted straight-through flow design provides true full port design.
- Standard actuation includes a 3000 psi heavy duty hydraulic cylinder.
- Lifting eyes in the chest flange aid rigging and installation.
- Standard hydraulic actuation

## Specifications

### Size Range

30", 36", 42", 48", 54", and 60"  
(DN750, DN900, DN1050, DN1200, DN1350,  
and DN1500)

### Pressure Rating

30", 36" and 42": 110 psig (CWP) maximum  
DN750, DN900, and DN1050: 7.6 Bar  
48", 54", and 60": 50 psig (CWP) maximum  
DN1200, DN1350, and DN1500: 3.4 Bar

### Temperature Rating

170°F (77°C) maximum

### Flange Drilling

Flange drilling: ASME B16.47 (Class 150 flat face).  
Consult factory for alternate flange drilling.

## Testing

Every Fabri-Valve® S16-ULV Valve is fully tested prior to shipment. Testing includes a body shell test, a seat leakage test, and a cycling test to insure proper functioning of moving parts. Additional testing is also available. Please let us know your requirements.

### Standard Shell test:

Hydro test at 1.5 times the rated CWP (cold working pressure).

- Zero allowable leakage

### Standard Seat test:

Hydro test at 15 psi (1 bar) and rated CWP.

- Zero allowable leakage

### Available in a Wide Choice of Materials for a Broad Range of Applications

- To meet specific application requirements, a variety of body, yoke and gate materials are offered. Please contact the factory with your specific needs.

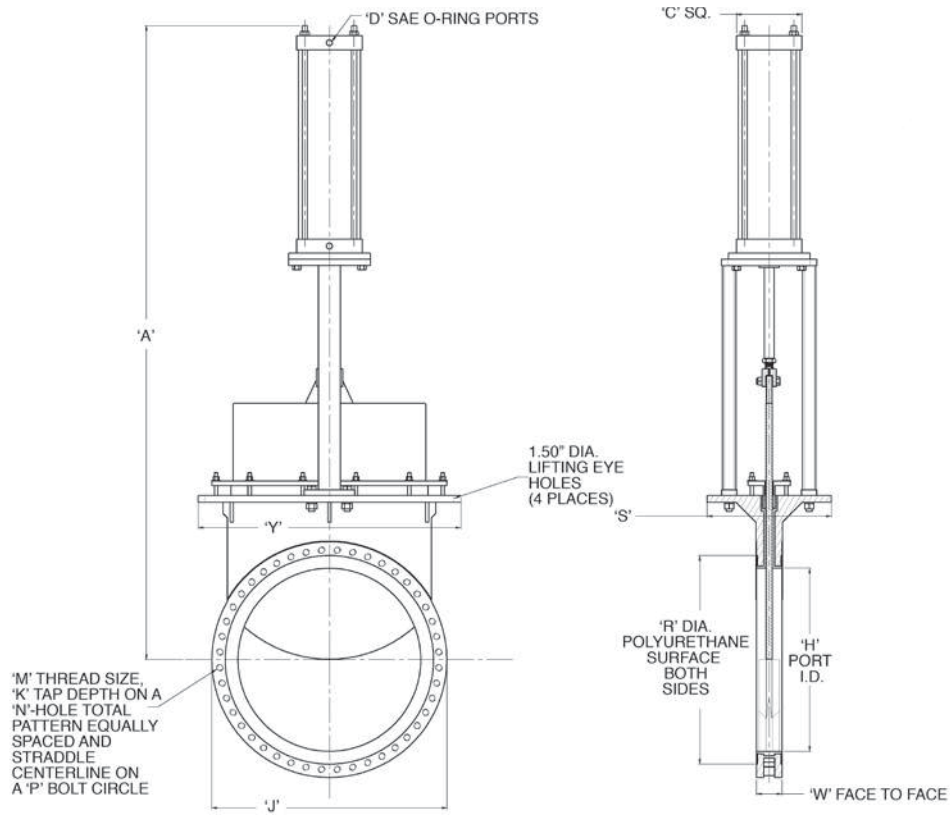
## Flow Coefficients

The Cv values below represent the U.S. gallons per minute of 60°F water through a 100% open valve at a pressure drop of 1 psi. The metric equivalent, Kv, is the flow of water at 16°C through the valve in cubic meters per hour at a pressure drop of 1 kg/cm<sup>2</sup>. To convert Cv to Kv, multiply the Cv by 0.8569.

Valve Size	C <sub>v</sub>
30	64800
36	93312
42	127008
48	165888
54	209952
60	259200

## Available Options

- Actuation
  - Electric operation
  - Bevel gear or hand wheel
  - Other options are available upon request
- Gate Material
  - Other materials are available upon request
- Body, Packing Gland, & Yoke Materials
  - Other materials are available upon request
  - Self supporting yoke
- Lockouts
  - Gate lockable in the open and closed position
- Limit switches and positioners
  - Custom per customer's requirements
- Alternate flange drilling
  - Others available upon request



VALVE SIZE		Dimensions for S16 - Inches (mm) - with Hydraulic Cylinder													
IN	DN	A	C	D	H	J	K	M	N	P	R	S	W	Y	CYLINDER BORE
30	750	105.38 (2677)	6.50 (165)	1 1/16-12	29.25 (743)	38.75 (984)	1.27 (32)	1 1/4 - 7 NC	28	36.00 (914)	33.25 (845)	20.00 (508)	5.25 (133)	41.75 (1060)	5
36	900	124.00 (3150)	7.50 (191)	1 3/16-12	35.25 (895)	46.00 (1168)	1.27 (32)	1 1/2 - 6 NC	32	42.75 (1086)	39.75 (1010)	24.00 (610)	5.50 (140)	49.00 (1245)	6
42	1050	141.25 (3588)	8.50 (216)	1 5/8-12	41.25 (1048)	53.00 (1346)	1.40 (35)	1 1/2 - 6 NC	36	49.50 (1257)	46.50 (1181)	28.00 (711)	5.75 (146)	56.00 (1422)	7
48	1200	156.69 (3980)	7.50 (191)	1 3/16-12	47.25 (1200)	59.50 (1511)	1.27 (32)	1 1/2 - 6 NC	44	56.00 (1422)	53.00 (1346)	20.00 (508)	5.25 (133)	61.00 (1549)	6
48	1200	158.38 (4023)	8.50 (216)	1 5/8-12	47.25 (1200)	59.50 (1511)	1.27 (32)	1 1/2 - 6 NC	44	56.00 (1422)	53.00 (1346)	24.00 (610)	5.50 (140)	62.00 (1575)	7
54	1350	174.38 (4429)	8.50 (216)	1 5/8-12	53.25 (1353)	66.25 (1683)	1.27 (32)	1 3/4 - 5 NC	44	62.75 (1594)	59.00 (1499)	22.00 (559)	5.50 (140)	69.00 (1753)	7
60	1500	191.13 (4855)	8.50 (216)	1 5/8-12	59.25 (1505)	73.00 (1854)	1.52 (39)	1 3/4 - 5 NC	52	69.25 (1759)	65.50 (1664)	24.00 (610)	6.25 (159)	75.00 (1905)	7



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Form S16-ULV