



The Isogate® WH series high pressure, heavy duty, slurry knife gate valve is specifically designed for tough, abrasive and corrosive applications.

A heavy duty knife gate valve designed for highly abrasive slurry applications

The Isogate® WH series valve is designed for those applications where high abrasion resistance is needed. The robust design and rugged heavy duty construction of the Isogate® WH series valve provides superior reliability and long life in heavy duty, highly abrasive, corrosive and coarse slurries.

Using materials proven by Weir Minerals' experience in abrasion and corrosion resistance, the Isogate® WH series heavy duty slurry knife gate valve combines a low maintenance design with a wide range of available materials making the valve suitable for a variety of applications.

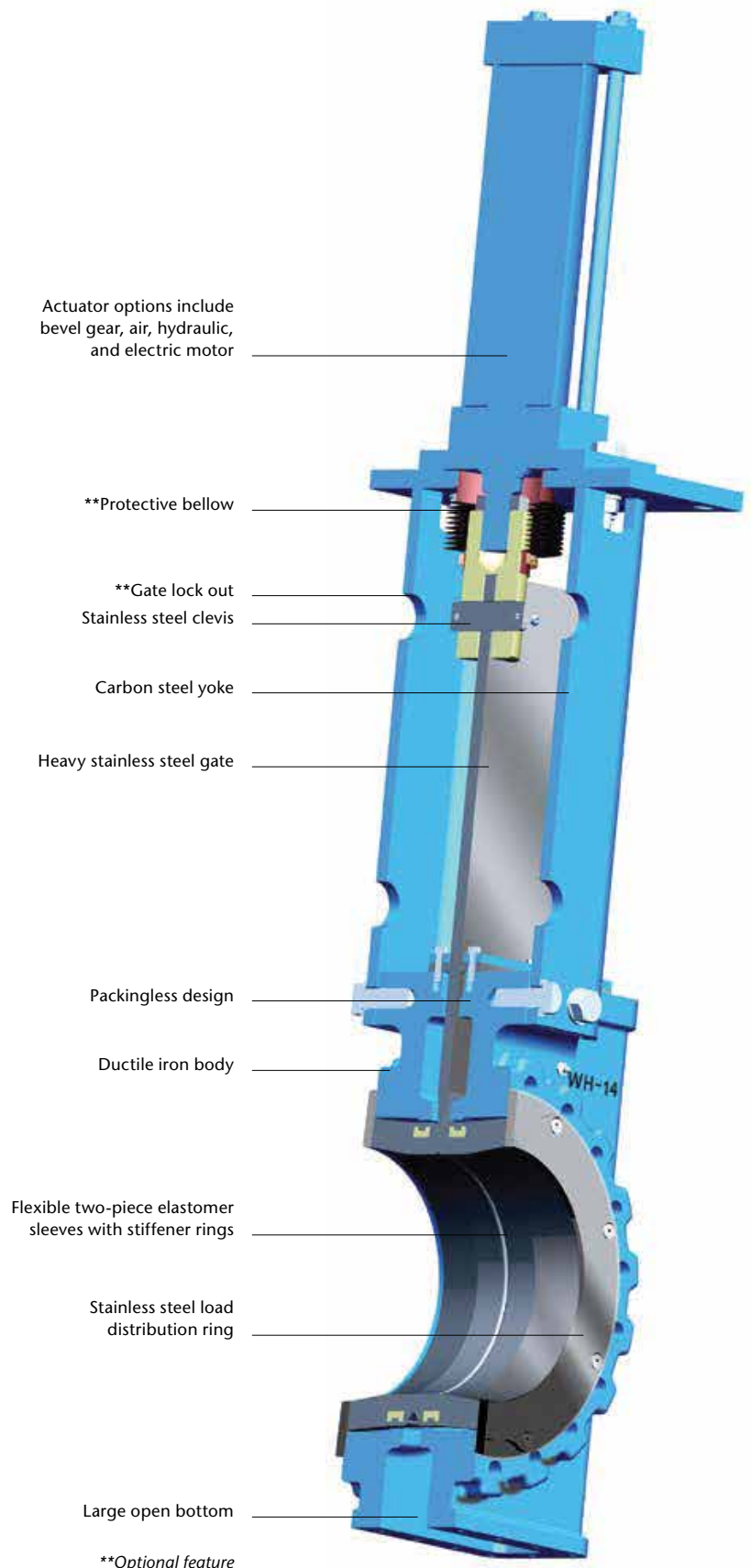
A heavy duty high pressure slurry knife gate valve with robust design and rugged construction ensures long valve life and superior reliability.

Features and benefits

- Field replaceable thick elastomer sleeves are easily replaced without disassembling the valve
- Sleeves are available in a variety of materials to handle abrasive and corrosive applications
- Full port design reduces pressure drop and turbulence, thus minimizing wear
- Bi-directional, 100% bubble-tight shut off
- Packingless design; no gate or stem packing
- Open bottom allows for the purging of large solids, and solids in high concentration
- No seat cavities where solids can collect and cause gate interference
- Flush control option allows for periodic cleaning of the lower discharge vent and allows flushing as needed
- Robust design featuring a fabricated yoke
- Heavy duty ductile iron construction
- Corrosion resistant 17-4-PH™ stainless steel gates are standard, other gate options available
- Optional gate lock out and protective lower stem guard available
- Hand wheel and bevel gear actuators available for manual operation
- Pneumatic, hydraulic and electric motor actuators are available

Isogate® WH Valve— Specifications

Size	Maximum Working Pressure
3" to 30"	300 psi



**Optional feature

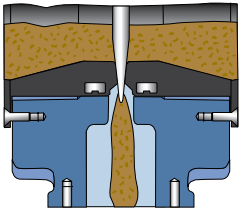
The Isogate® WH series high pressure knife gate valve is suitable for a wide range slurry applications where high abrasion resistance is needed

Applications

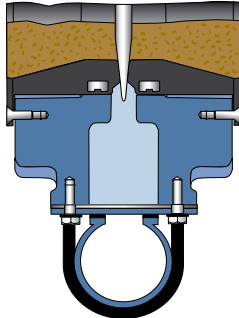
- Alumina
- Cement
- Coal
- Kaolin
- Mineral Sands
- Mining
- Phosphates
- Pulp and Paper
- Sand and Gravel
- Soda Ash
- Wet Flue Gas Desulphurization



Body options

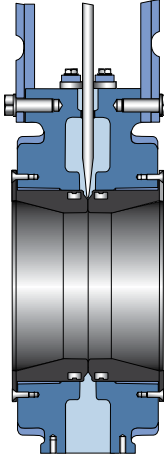


Open bottom
Open bottom allows for the purging of large solids, and solids in higher concentration. The purging of solids stops when the gate is in the full open or closed position.

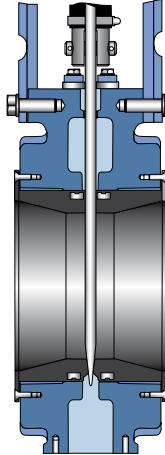


Flushing plate
Flushing plate option adds flexibility to the standard open bottom. This option also allows for periodic cleaning of the lower discharge vent and can allow flushing as needed.

Bi-directional double elastomer sleeve design



Open position
The two piece elastomer sleeves seal against each other.



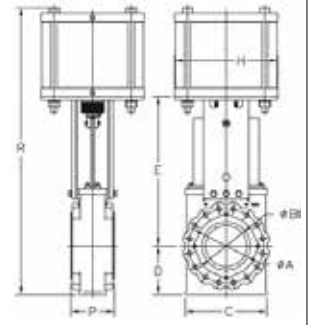
Closed position
The gate is between thick elastomer sleeves, with full tight shut-off.

Elastomer selection table

Sleeve Materials	General Service	Temperature Range		
		Continuous Min	Continuous Max	Intermittent Max
Natural rubber	General abrasive applications, FGD, water	-50°C/-60°F	+71°C/+160°F	+82°C/+180°F
EPDM	Pulp and paper, FGD	-50°C/-60°F	+135°C/+275°F	+148°C/+300°F

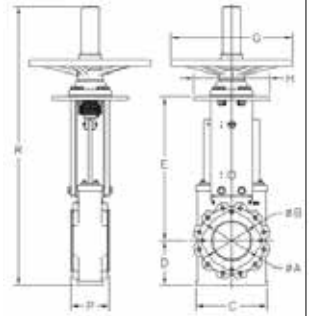
Air cylinder valve dimensions

Size	A		B		C		D		E		H		P		R		Weight	
in mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	kg	
3	75	2.79	71	2.40	61	6.69	170	5.11	130	12.63	321	7.28	185	6.77	172	26.69	678	60
4	100	3.89	99	3.38	86	8.11	206	5.90	150	16.22	412	8.50	216	6.92	176	32.67	830	80
6	150	6.26	159	5.74	146	12.00	305	7.44	189	22.67	576	12.99	330	7.17	182	45.19	1148	175
8	200	7.83	199	7.32	186	13.77	350	8.66	220	27.95	710	19.68	500	7.17	182	54.52	1385	380
10	250	10.00	254	8.62	219	16.61	422	9.84	250	31.06	789	21.02	534	8.74	222	59.25	1505	550
12	300	11.49	292	10.74	273	17.91	455	11.41	290	33.26	845	23.62	600	9.29	236	66.18	1681	725



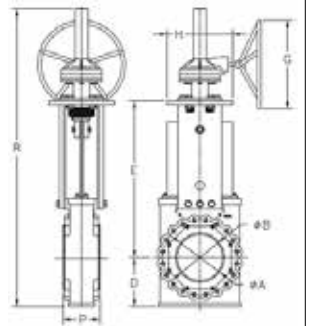
Handwheel valve dimensions

Size	A		B		C		D		E		G		H		P		Weight	
in mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	kg	
3	7.5	2.79	71	2.40	61	6.69	170	5.11	130	12.63	321	24.21	615	7.28	185	6.77	172	50
4	100	3.89	99	3.38	86	8.11	206	5.90	150	16.22	412	32.08	815	8.50	216	6.92	176	76
6	150	6.26	159	5.74	146	12.00	305	7.44	189	22.67	576	46.02	1169	12.99	330	7.17	182	151



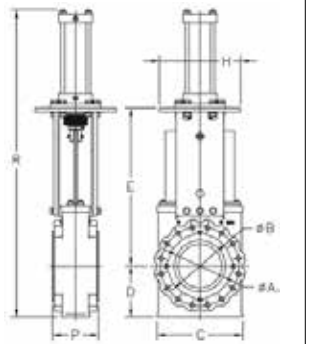
Bevel gear valve dimensions

Size	A		B		C		D		E		G		H		P		R		Weight	
in mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	kg	
8	200	7.83	199	7.32	186	13.77	350	8.66	220	27.95	710	16	406.4	19.68	500	7.17	182	54.40	1382	290
10	250	10.00	254	8.62	219	16.61	422	9.84	250	31.06	789	16	406.4	21.02	534	8.74	222	59.25	1505	320
12	300	11.49	292	10.74	273	17.91	455	11.41	290	33.26	845	18	458	23.62	600	9.29	236	65.19	1656	500



Hydraulic cylinder valve dimensions

Size	A		B		C		D		E		H		P		R		Weight	
in mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	kg	
3	75	2.79	71	2.40	61	6.69	170	5.11	130	12.63	321	7.28	185	6.77	172	26.69	678	45
4	100	3.89	99	3.38	86	8.11	206	5.90	150	16.22	412	8.50	216	6.92	176	32.67	830	65
6	150	6.26	159	5.74	146	12.00	305	7.44	189	22.67	576	12.99	330	7.17	182	45.19	1148	130
8	200	7.83	199	7.32	186	13.77	350	8.66	220	27.95	710	19.68	500	7.17	182	54.52	1385	180
10	250	10.00	254	8.62	219	16.61	422	9.84	250	31.06	789	21.02	534	8.74	222	59.25	1505	286
12	300	11.49	292	10.74	273	17.91	455	11.41	290	33.26	845	23.62	600	9.29	236	65.19	1656	382
14	350	13.26	337	12.48	317	22.24	565	13.18	335	41.92	1065	17.71	450	9.69	246	78.46	1993	560
16	400	14.72	374	14.21	361	24.56	624	13.97	355	45.66	1160	19.68	500	11.02	280	85.82	2180	740
18	450	17.00	432	15.00	381	25.35	644	15.74	400	48.81	1240	24.60	625	12.01	305	95.03	2414	980
20	500	18.50	470	16.57	421	28.54	725	16.92	430	55.11	1400	24.60	625	14.33	364	102.95	2615	1362
24	600	22.72	577	21.18	538	33.66	855	20.07	510	62.79	1595	25.59	650	14.02	356	125.74	3194	1896
30	760	28.97	736	26.7	679	41.33	1050	23.62	600	71.85	1825	25.59	650	16.02	407	137.00	3480	2641



Note 1: Dimensions provided are indicative only. Certified drawings are recommended prior to construction.

Note 2: Flanges drilled and tapped to match ANSI B16.5 class 150 mating flanges. Other flange options are available upon request.

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