

IsoGate™ WS/WB/WH Series

Heavy Duty Knife Gate Valve

Wafer style heavy duty knife gate slurry valve specially designed for tough, abrasive slurry applications, upto 20 kg / cm² Pressure



- Good wear life
- Easy maintenance
- No leakage



■ Pneumatic



■ Manual



■ Gear Box



■ Hydraulic



■ Electric

- Hard rock mining
- Power utilities
- Pulp and paper

- Soda ash
- Alumina
- General industrial

- General chemical
- Phosphate
- Coal

- Sand and gravel
- Cement
- Mineral sands

- Kaolin

WS Series

Size Range

Available in sizes 50mm to 450mm*. with a maximum working pressure of 10kg/cm² (10 bar)

Materials/Material Codes

Body: Ductile iron as standard

Gate: 316 stainless steel as standard

Sleeves: Natural rubber as standard

Yoke: Mild steel fabricated

WH Series

Size Range

Available sizes: 80mm up to 500mm

Maximum working Pressure: 21kg/cm² (21 bar)

Materials

Body: Ductile iron as standard.

Other alternatives request

Gate: 17-4 PH stainless as standard

Liners

Natural rubber as standard. Other alternatives

such as: EPDM, Neoprene, Nitrile, Hypalon, Chlorobutyl and Fluoroelastomer.

Flanges

ANSI B16.5 class 300 # as standard. Other alternatives such as ANSI class 150 #, DIN Pn20 or PN 10 are request.

Actuators

Manual with Gear Box, Air cylinder, Hydraulic Cylinder or Electrical.

- Interchangeable Elastomer liners
- High pressure heavy duty slurry applications

WB Series

Size Range

Available in sizes 450mm to 1370mm

Maximum working pressure

Sizes 450mm to 600mm 7kg/cm² (7 bar)

Sizes 750 to 1370 : 2kg/cm² (2 bar)

Contact the factory for higher working pressures.

Materials

Body: Cast ductile iron as standard

Gate: 316 stainless steel as standard. Other materials such as 17-4 PH stainless steel, HastelloyTM c-276, alloy 2205, and alloy 20 are also available.

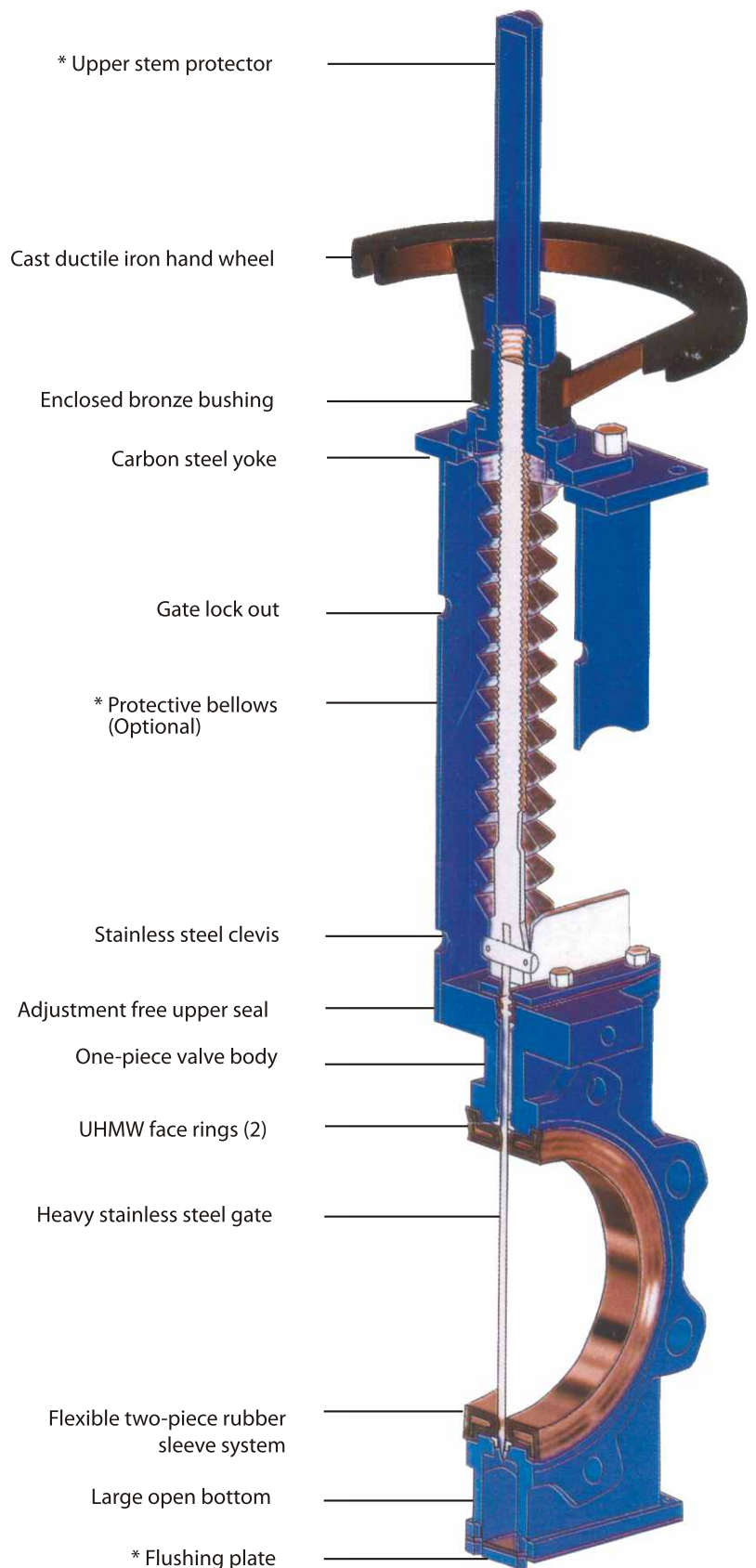
Sleeves: Natural rubber as standard. EPDM and other Materials are also available.

Yoke: Mild steel fabrication

Actuators

- Bevel gear
- Air cylinders
- Hydraulic cylinders
- Electric motor
- Other actuators available

Cross Sectional view of WS Series Valve



*Higher sizes available

A Unique maintenance minimizing design, features sleeves easily replaced without valve disassembly and an adjustment free packing less upper seal.

Bi-directional double elastomer sleeve design



Open position

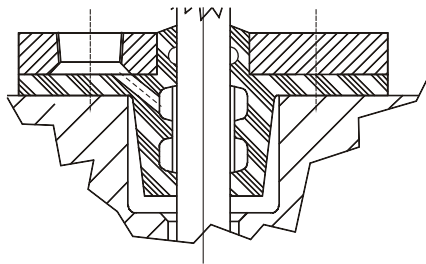
Only thick elastomer sleeves are in contact with slurry. No metal parts contacting the fluid



Closed position

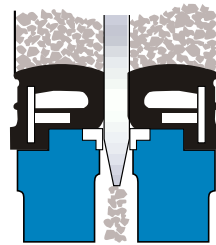
The gate is between thick elastomer sleeves, with full tight shut-off

Packing less upper seal

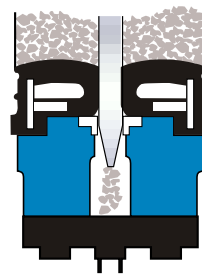


- Adjustment free
- Smooth gate accusation and increased sleeve life
- Self lubrication system
- Avoids leakage by the upper part of the valve

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.



Flush control option protects against fluids discharging from valve during opening and closing cycles and serves as a collection point that can be periodically cleaned or flushed or can be continuously drained

Design benefits

- Easily replaceable sleeves in variety of elastomers to suit abrasive & corrosive application.
- Bi-directional full port flow reduces pressure drop and turbulence, thus minimizing wear.
- Packing less design. No gate or stem packing.
- Open bottom allows for the purging of large solids, and solids in high concentration.
- Yoke design allows fitting for all designed actuators.
- No seat cavities where solids can collect and cause gate interference.
- Can be used in wet or dry application.
- Flush control option allows for periodic cleaning of the lower

Sample Installations



WS Series Valves

Manually Operated Valve Dimensions :

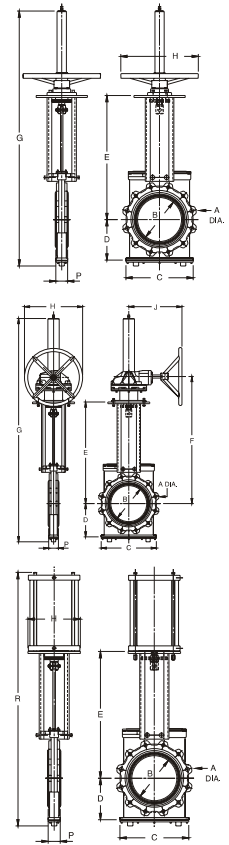
Inches	Sizes (mm)	A	B	C	D	E	G	H	P	R
2	50	152	48	130	91.5	157	574	200	51	
3	75	190	74	150	118	323	671	270	58	
4	100	228	100	184	136	377	745	270	58	
6	100	279	150	236	162	482	930	270	67	

Bevel Gear Operated Valve Dimensions :

Inches	Sizes (mm)	A	B	C	D	E	F	G	H	J	P
8	200	343	203	290	202	609	860	1310	457	250	80
10	250	406	249	365	230	758	945	1425	457	250	80
12	300	483	299	433	275	865	1066	1822	457	419	86
14	350	533	328	449	300	949	1150	1951	457	419	89

Pneumatically Operated Valve Dimensions :

Inches	Sizes (mm)	A	B	C	D	E	H	P	R
2	50	152	48	130	91.5	157	114	51	542
3	75	190	74	150	118	323	143	58	703
4	100	228	100	184	136	377	143	58	795
6	150	279	150	236	162	482	226	67	1028
8	200	343	203	290	202	609	226	80	1231
10	250	406	249	365	230	758	280	80	1560
12	300	483	299	433	275	865	330	86	1724
14	350	533	378	449	300	949	381	89	1848
16	400	597	374	550	337	1056	381	102	2061



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LEWIS PUMPS™
Vertical Chemical Pumps

WEIR MINERALS SERVICES™

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

Note 2 : Flanges are slotted to match ANSI B16.5 class 150# in sizes upto 24", and MSS Sp44 in sizes from 26" upto 54".
Other flange options are available upon request.

Note 3 : Due to continuous improvement, all specifications are subject to change without prior notice.

Note 4 : Dimensions for WB & WH series available on request.

Note 5 : Valve Sizes above 6" are supplied with Gear/Air Operated only.

Factory & Corporate Office:

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