

JFS

BEIJING JOINT FLOW SYSTEM CO.



SLEEVE VALVE



HORIZONTAL PATTERN SLEEVE VALVE

The horizontal pattern sleeve valve is designed to incorporate features that provide superior valve performance for inline flow control and pressure reduction application. This valve is able to control cavitation at pressure drops and flow rate capacities which produce severe cavitation damage in conventional control valves. And it can be built with a higher unit flow factor than conventional valves and pass large flow capacities with a very low differential head (Delta H) across the valve. The horizontal pattern sleeve valve applied to water treatment plant flow control, pump control, tank level control, metering vaults reservoir discharge and ground water recharge.

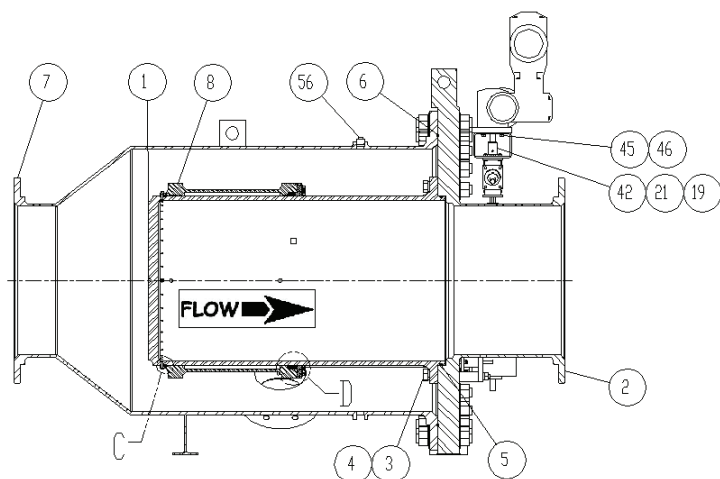


FEATURE AND BENIFIT

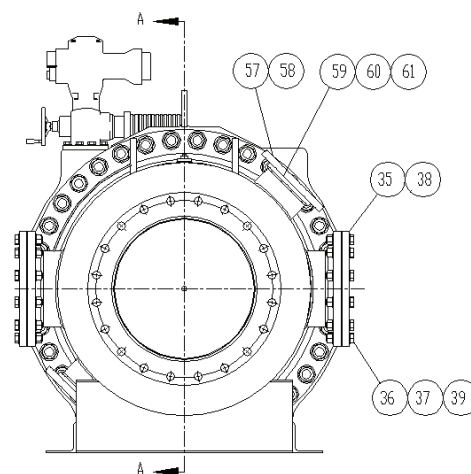
- External seat on sleeve
Provide drip tight shut off.
- Opposing tapered nozzle pattern
 - Balance the fluid forces and minimizes vibration.
 - Water flows through the nozzles and dissipates energy.
 - Provide better flow control over short stroke configuration by increasing the sleeve nozzle spacing.
- Linear flow pattern
Allow precise flow control over the stroke of the valve.
- Large access ports
Maintenance can be performed while the valve is in line.
- Stellite Hard-faced valve gate
 - Provide superior hard surface edge to reduce high velocity erosion of the seating and wear surfaces.
 - Provide leading edge hardness sufficient to shear debris within the nozzle.
- Customer's Valve Configuration
 - Allows for flange matching between valve and associated piping.
 - Multiple access options.
 - Valve material options (Carbon steel, Stainless Steel ,etc).

HORIZONTAL PATTERN SLEEVE VALVE

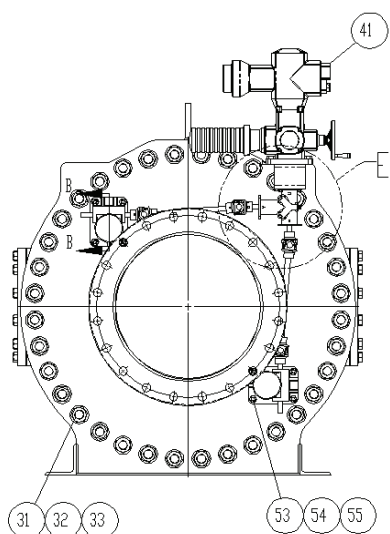
PARTS LIST & MATERIAL



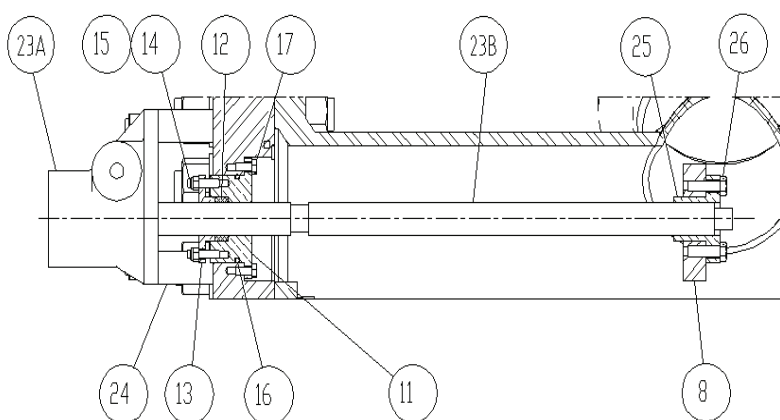
SECTION A-A



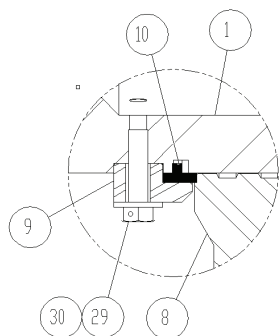
FRONT VIEW



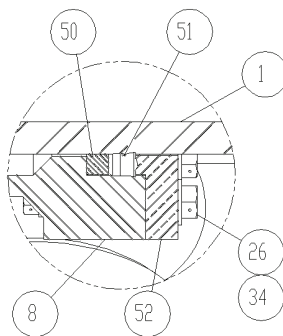
BACK VIEW



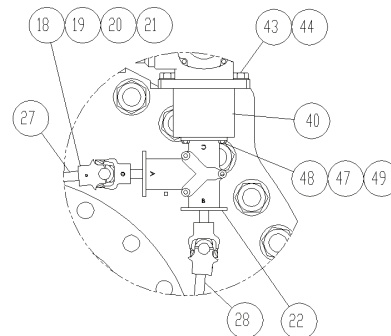
SECTION B-B



DETAIL C



DETAIL D



DETAIL E

HORIZONTAL PATTERN SLEEVE VALVE

Item	Parts Name	Material (standard)
1	Sleeve	Stainless Steel
2	Outlet Body	Carbon Steel
3	Bolt	Stainless Steel
4	Lock Washer	Stainless Steel
5	O-ring	NBR
7	Inlet Body	Carbon Steel
8	Valve Gate	Stainless Steel / Alloy steel
9	Seat Ring	Stainless Steel
10	Seat Seal	NBR
11	Stuffing Box	Copper
12	Packing	Stainless Steel
13	Gland	Copper
14	Bolt	Stainless Steel
15	Nut	Stainless Steel
18	U-joint	Carbon Steel
19	Key	Carbon Steel
20	Set Screw	Stainless Steel
22	Bevel Gear	Carbon Steel
23	Lifting Jack	Carbon Steel / Stainless Steel
24	Spacer	Carbon Steel
25	Lift nut	Bronze
27	Shaft	Carbon Steel
30	Flat Washer	Stainless Steel
35	Inspection Cover	Carbon Steel
40	Actuator Bracket	Carbon Steel / Cast iron
41	Electric actuator	
42	Stem Adapter	Stainless Steel
50	Scraper Ring	Stainless Steel
52	Gland	Stainless Steel
56	Pipe Plug	Stainless Steel
57	Inspection Cover	Carbon Steel

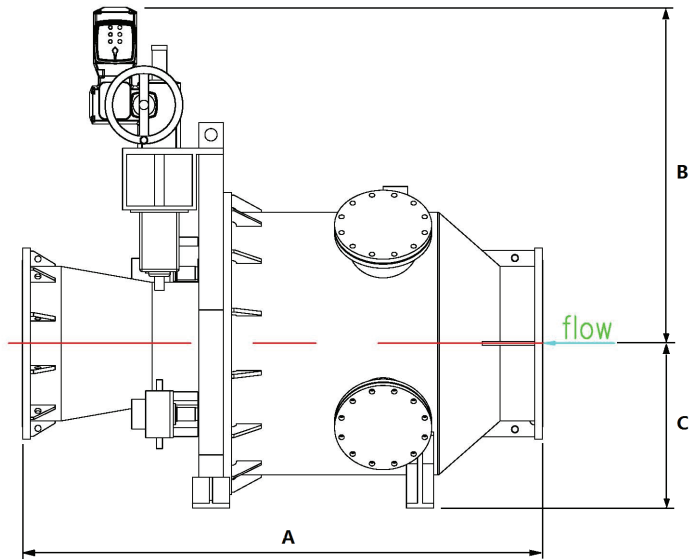
*More material specifications are available on request.

FORMULA

CAVITATION INDEX (σ)	$\sigma = \frac{P_1 - P_v}{P_1 - P_2} = \frac{P_2 + 14.2}{\Delta P}$ If $\sigma \leq \sigma_{cr}$, serious cavitation can occur.	
FLOW COEFFICIENT (Cv=1.167Kv)	The Cv value is the flow rate of pure water at 60°F passing through the valve when the disc is fully opened and the differential pressure between the two ends of the valve is 1 Lbf/in ² .	The Kv value is the flow rate of pure water at 15°C passing through the valve when the disc is fully opened and the differential pressure between the two ends of the valve is 1 bar.
	$C_v = \sqrt{V \frac{G}{\Delta P}}$	$K_v = \sqrt{Q \frac{G}{\Delta P}}$
	V: Max flow in US gal/min G: Specific gravity, 1 for water Δ P: Differential pressure in Lbf/in ²	Q: Max flow in m ³ /h G: Specific gravity, 1 for water Δ P: Differential pressure in bar

HORIZONTAL PATTERN SLEEVE VALVE

DIMENSION



Size		A		B		C	
in	mm	in	mm	in	mm	in	mm
200	8"	70	1778	18	457	15	381
250	10"	76	1930	20	508	17	432
300	12"	82	2083	22	559	19	483
350	14"	88	2235	23	584	20	508
400	16"	94	2388	24	610	21	533
450	18"	100	2540	24	610	22	559
500	20"	106	2692	25	635	24	610
600	24"	118	2997	27	686	26	660
750	30"	136	3454	30	762	29	737
900	36"	152	3861	34	864	36	914
1000	42"	170	4318	37	940	39	991
1200	48"	188	4775	40	1016	43	1092
1400	54"	206	5232	44	1118	47	1194
1500	60"	224	5690	50	1270	53	1346
1800	72"	260	6604	56	1422	60	1524

*More dimensions specifications are available on request.