



**MECH FLOW SUPPLIES**



Malleable Iron Pipe Fittings



Ductile Iron Grooved Fittings and Couplings



Valves



Cast Bronze Fittings



Electrical Power Fittings



Malleable Iron Pipe Clamps



Ductile Iron Pipe Fittings  
Cast Iron Pipe Fittings



Pipe Nipples



**JINAN MEIDE CASTING CO., LTD.**

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UPDATED 03/2022

# Valves For Fire Protection

**BS & DIN Standard**

To Provide **Safe & Reliable** Products and **Smart & Complete** Solutions for Clients in Fluid Conveying Industry Across the Globe.







# More than 60 years of Foundry Experience

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## Company Profile

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Meide Group is a high-tech enterprise specialized in supplying fittings and valves in fluid industry. The company has won more than 400 great honors, such as Single Champion Demonstration Enterprise, Green Manufacturing Enterprise, China's top 100 Light Industrial Enterprise, China's Leading Enterprise of Malleable Iron Pipe Fitting Production Base, National Enterprise with Good Creditworthiness and China's Famous Brand.

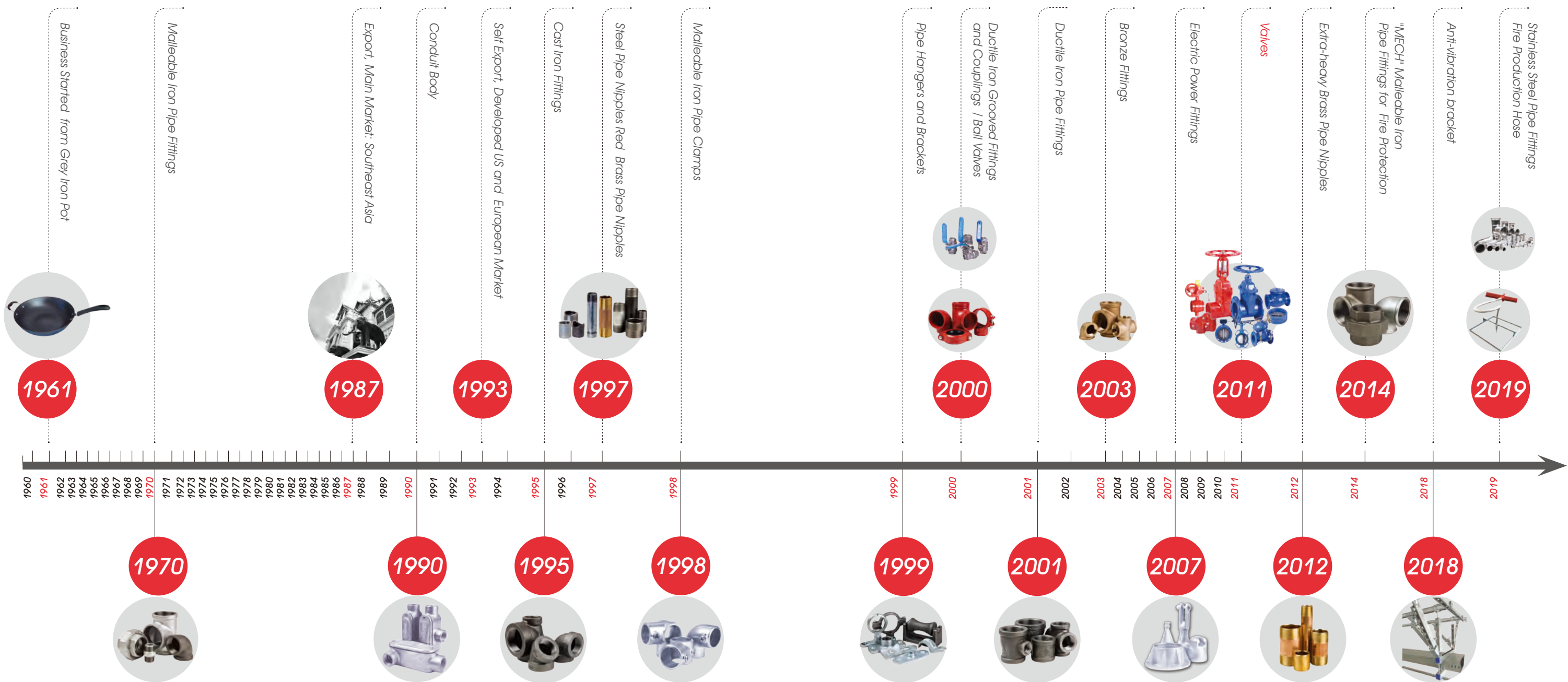
Inheriting the originality, and striving for excellence. "MECH" brand products are widely used in Burj Khalifa, Dubai, New WTC in New York, Shanghai Tower, UHV transmission lines and other landmark buildings and projects such as Beijing-Shanghai high-speed railway. Adhering to the customer-centered product development and innovation concept, to meet and guide the growing needs of users, to provide safe & reliable products and smart & complete solutions for clients in fluid industry across the globe, Meide Group has become the industry leader.

Using development innovation platform such as National Enterprise Technical Center and Post-Doctoral Research Center, Meide Group is promoting the transformation of technology innovation achievements into productive forces, has completed the transformation of production process from mechanization to automation and intelligence, management from experience to institutionalization and process, marketing is from selling products to offering solutions, steadily improve Meide Group's role in the global value chain.

Through the construction of three production bases, including Jinan, Linyi and Bangkok, Meide Group has formed a cross-regional, multi-base international development pattern. Meide Group never forgets the original intention, operates in compliance, keeps growing, insists on sharing development results with customers, employees, shareholders and the community, and strive to be a happy and respectable company.



# Company History





# State of the Art Equipment

High precision equipment is quality assurance. Jinan Meide's factories are all equipped with the most advanced facilities and equipment in the industry. The main production facilities include Sinto automatic molding line, Tokyu automatic molding line, Chinese 416 automatic vertical molding line, automatic molding sand mixers, cupola furnaces, electric furnaces, water-cooled longevous cupola furnaces, CNC vertical machining centers, CNC machines, NC vertical lathes, radial drills, Jinan Meide proprietary automatic machines, hot-dipped galvanization line, automatic box sealing line, stereoscopic warehouse and so on.



Pattern



Core Making



Sand Mulling



Tokyu AMF-111055



DISA



Sinto FCMX



Melting



Pouring



Machining



Epoxy Coating



Assembling



Warehouse





# Reliable Quality Assurance

Jinan Meide is honored as the National enterprise technical center and is capable and qualified to conduct full series of tests and inspections including chemical checking, etc.

Inspection facilities include: spectrometer, carbon sulfur analyzer, metallurgical microscope, tensile strength testing equipment, pressure testing equipment, adhesive force testing equipment, CMM, hardness tester, etc.

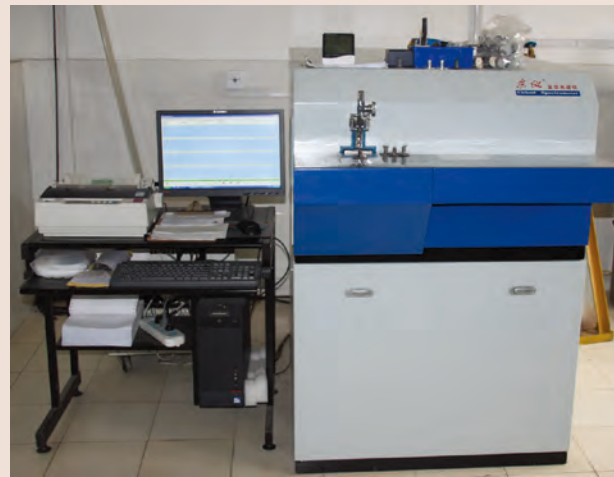
From incoming inspection to finished product, quality is checked and monitored in the whole process. Each step of the manufacturing process is carefully documented, regularly reviewed for revision control and updating standard. Quality procedures are constantly monitored and updated to assure that only the highest and most consistent quality products are supplied to our valued customers.



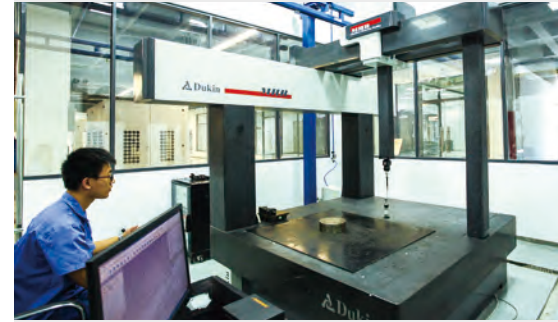
Metallurgical Microscope



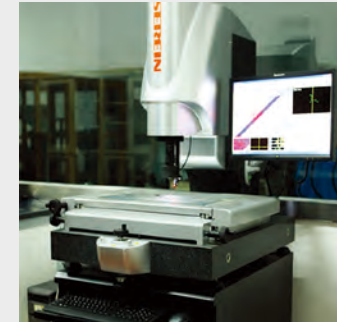
R & D



Spectrometer



CMM



Projector



Pipe line



Valve Pressure Testing Machine (Vertical)



Endurance Test Machine



Valve Pressure Testing Machine (Horizontal)


































































# Certificates





				
<b>• XZ21X</b> Grooved Resilient OS&Y Gate Valve	<b>• Z81XS</b> Grooved Resilient OS&Y Gate Valve	<b>• XZ41X</b> BS 5163 Flanged Resilient OS&Y Gate Valve	<b>• XZ41X</b> DIN F4 Flanged Resilient OS&Y Gate Valve	<b>• Z41XS</b> BS 5163 Flanged Resilient OS&Y Gate Valve
				
<b>• XZ51X</b> Flanged x Grooved Resilient OS&Y Gate Valve	<b>• MXHQ</b> Supervisory Switch for OS&Y Gate Valve	<b>• Z85X</b> Grooved Resilient NRS Gate Valve	<b>• Z85XS</b> Grooved Resilient NRS Gate Valve	<b>• Z45XC</b> BS Flanged Resilient NRS Gate Valve
				
<b>• Z45XC</b> DIN F4 Flanged Resilient NRS Gate Valve	<b>• Z45XC-2</b> BS Flanged Resilient NRS Gate Valve with Post Flange	<b>• Z45XC-2</b> DIN F4 Flanged Resilient NRS Gate Valve with Post Flange	<b>• Z45XS</b> BS 5163 Flanged Resilient NRS Gate Valve	<b>• Z55X</b> Flanged x Grooved Resilient NRS Gate Valve
				
<b>• IP</b> Vertical Indicator Post	<b>• WP</b> Wall Indicator Post	<b>• ZXHQ</b> Supervisory Switch for Indicator Post	<b>• XD381X</b> Grooved Butterfly Valve with Tamper Switch	<b>• XD381XG</b> Grooved Butterfly Valve with Normally Closed Tamper Switch
				
<b>• XD381XC</b> Grooved Butterfly Valve with Tamper Switch	<b>• XD381X4-C</b> Grooved Butterfly Valve with Tamper Switch	<b>• XD382X</b> Double Eccentric Grooved Butterfly Valve with Tamper Switch	<b>• D81X4</b> Grooved Butterfly Valve	<b>• D81XS4</b> Grooved Butterfly Valve
				
<b>• XD371X</b> Wafer Butterfly Valve with Tamper Switch	<b>• XD371XG</b> Wafer Butterfly Valve with Normally Closed Tamper Switch	<b>• XD371XL</b> Lugged Wafer Butterfly Valve with Tamper Switch	<b>• XD371XLG</b> Lugged Wafer Butterfly Valve with Normally Closed Tamper Switch	<b>• XD311X</b> Threaded Butterfly Valve with Tamper Switch

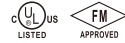
					
<b>• H84X</b> Grooved Resilient Swing Check Valve	<b>• DH87XP</b> Double Door Grooved Check Valve	<b>• H44X2</b> Flanged Resilient Swing Check Valve	<b>• DH77XSR</b> Double Door Wafer Check Valve	<b>• HSB4X</b> Backwater Valve	<b>• V8</b> Grooved Y-Type Strainer
					
<b>• V8S</b> Grooved Y-Type Strainer	<b>• V4</b> Flanged Y-Type Strainer	<b>• V4S</b> Flanged Y-Type Strainer	<b>• ZSFZ8X9</b> Grooved Wet Alarm Check Valve	<b>• ZSFZ4X9</b> Flanged Wet Alarm Valve	<b>• SK790X</b> Deluge Alarm Valve
					
<b>• Zone Control Valve Assembly</b>	<b>• Zone Control Valve Assembly</b>	<b>• Zone Control Valve Assembly</b>	<b>• Zone Control Valve Assembly</b>	<b>• ZSJZYS</b> Water Flow Indicator with Retard	<b>• ZSJZ</b> Water Flow Indicator
					
<b>• YLKG</b> Pressure Switch	<b>• SN</b> Indoor Fire Hydrant	<b>• SA series</b> Underground Fire Hydrant	<b>• XZ45W</b> Dry Riser Landing Valve	<b>• XZ15W</b> Dry Riser Landing Valve	<b>• XZ25W</b> Dry Riser Landing Valve
					
<b>• Test and Drain Valve</b>	<b>• ZSPM-80-DX</b> Electric Inspector's Test Connection	<b>• ZSPM-80-SA</b> Manual Inspector's Test Connection	<b>• XTQ1RF</b> Flexible Rubber Joint Single Sphere	<b>• XTQ2RF</b> Flexible Rubber Joint Twin Sphere	<b>• XTQ2L</b> Flexible Rubber Joint Twin Sphere
					
<b>• ZSQKFX1</b> Shotgun Riser Check Valve					



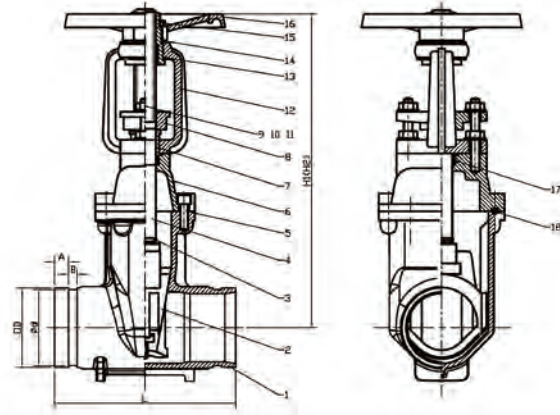
### Grooved Resilient OS&Y Gate Valve (XZ81X), PN10/16, UL/FM Approved



XZ81X



- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	O-Ring	NBR	EPDM
4	Stem	Stainless Steel	SS304, SS316, SS420, SS431
5	Nut	Carbon Steel Zinc Plated	SS304, SS316
6	Bonnet	EN-GJS-450-10	
7	Stem Bushing	Brass Hpb59-1	
8	Gland	EN-GJS-450-10	
9	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
10	Stud	Carbon Steel Zinc Plated	SS304, SS316
11	Nut	Carbon Steel Zinc Plated	SS304, SS316
12	Yoke	EN-GJS-450-10	
13	Stem Nut	Brass Hpb59-1	Bronze ZQSn5-5-5
14	Washer	Brass Hpb59-1	
15	Locknut	Carbon Steel Zinc Plated	
16	Handwheel	EN-GJS-450-10	Pressed Steel
17	Stem Packing	EPDM	NBR
18	Bonnet Gasket	EPDM	NBR

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

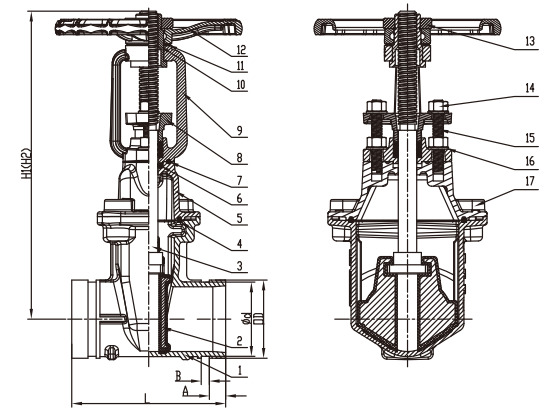
DN		Dimensions(mm)						
Inch	mm	L	H1(Close)	H2(Open)	OD	d	A	B
2"	50	178	323	373	60.3	57.15	15.88	7.92
2.5"	65	190	343	408	73	69.09	15.88	7.92
2.5"	65	190	343	408	76.1	72.26	15.88	7.92
3"	80	203	370	450	88.9	84.94	15.88	7.92
4"	100	229	442	542	114.3	110.08	15.88	9.52
5"	125	254	541	665	139.7	135.48	15.88	9.52
5"	125	254	541	665	141.3	137.03	15.88	9.52
6"	150	267	608	758	159.0	154.50	15.88	9.52
6"	150	267	608	758	165.1	160.90	15.88	9.52
6"	150	267	608	758	168.3	163.96	15.88	9.52
8"	200	292	720	920	219.1	214.40	19.05	11.13
10"	250	330	939	1193	273.0	268.28	19.05	12.70
12"	300	356	1065	1370	323.9	318.29	19.05	12.70

### Grooved Resilient OS&Y Gate Valve (Z81XS), PN10/16



Z81XS

- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	Stem	SS420	SS304, SS316
4	Bonnet Gasket	EPDM	NBR
5	Bonnet	EN-GJS-450-10	
6	O-Ring	NBR	EPDM
7	O-Ring	NBR	EPDM
8	Gland	EN-GJS-450-10	
9	Yoke	EN-GJS-450-10	
10	Stem Nut	EN-GJS-450-10	
11	Washer	CW617N	
12	Handwheel	EN-GJS-450-10	
13	Lock Nut	Carbon Steel Zinc Plated	
14	Gland Nut	Carbon Steel Zinc Plated	SS304, SS316
15	Stud	Carbon Steel Zinc Plated	SS304, SS316
16	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
17	Bolt	Carbon Steel Zinc Plated	SS304, SS316

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)						
Inch	mm	L	H1	H2	OD	d	A	B
2"	50	140	278	332	60.3	57.15	15.88	7.92
2.5"	65	150	300	366	76.1	72.26	15.88	7.92
3"	80	160	323	405	88.9	84.94	15.88	7.92
4"	100	178	391	491	114.3	110.08	15.88	9.52
5"	125	190	461	590	139.7	135.48	15.88	9.52
6"	150	210	530	680	165.1	160.9	15.88	9.52
8"	200	235	660	860	219.1	214.4	19.05	11.1



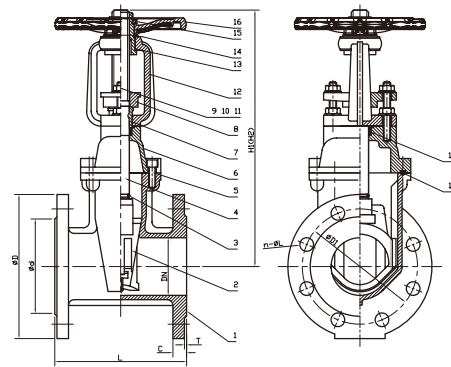
**BS 5163 Flanged Resilient OS&Y Gate Valve, (XZ41X), PN10/16, UL/FM Approved**



XZ41X

UL LISTED FM APPROVED NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	O-Ring	NBR	EPDM
4	Stem	Stainless Steel	SS304, SS316, SS420, SS431
5	Bolt	Carbon Steel Zinc Plated	SS304, SS316
6	Bonnet	EN-GJS-450-10	
7	Stem Bushing	Brass Hpb59-1	
8	Gland	EN-GJS-450-10	
9	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
10	Stud	Carbon Steel Zinc Plated	SS304, SS316
11	Nut	Carbon Steel Zinc Plated	SS304, SS316
12	Yoke	EN-GJS-450-10	
13	Stem Nut	Brass Hpb59-1	
14	Washer	Brass Hpb59-1	
15	Locknut	Carbon Steel Zinc Plated (Type A) Not available (Type B)	
16	Handwheel	EN-GJS-450-10	Pressed Steel
17	Stem Packing	EPDM	NBR
18	Bonnet Gasket	EPDM	NBR

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.



XZ41X-1

DN		PN	Dimensions(mm)										
Inch	mm		L	TypeA		TypeB		D	D1	d	C	T	n-φL
		H1 (Close)		H2 (Open)	H1 (Close)	H2 (Open)							
2"	50	10/16	178	323	373	348	400	165	125	99	19	3	4-Ø19
2.5"	65	10/16	190	343	408	373	440	185	145	118	19	3	4-Ø19
3"	80	10/16	203	370	450	408	490	200	160	132	19	3	8-Ø19
4"	100	10/16	229	442	542	471	573	200	180	156	19	3	8-Ø19
5"	125	10/16	254	541	665	541	665	250	210	184	19	3	8-Ø19
6"	150	10/16	267	608	758	593	743	285	240	211	19	3	8-Ø23
8"	200	10	292	720	920	774	975	340	295	266	20	3	8-Ø23
		16											12-Ø23
10"	250	10	330	940	1190	940	1190	405	350	319	22	3	12-Ø23
		16							355				12-Ø28
12"	300	10	356	1065	1370	1065	1370	460	400	370	24.5	4	12-Ø23
		16							410				12-Ø28
14"	350	10	381	1415	1780	1415	1780	516	460	429	26.5	4	16-Ø23
		16							470				16-Ø28
16"	400	10	406	1385	1790	1385	1790	575	515	480	28	4	16-Ø28
		16							525				16-Ø31
18"	450	10	432	1835	2290	1835	2290	635	565	530	30	4	20-Ø28
		16							585				20-Ø31
20"	500	10	457	1830	2380	1830	2380	710	620	582	31.5	4	20-Ø28
		16							650				20-Ø34
24"	600	10	508	2030	2830	2030	2830	836	725	682	36	5	20-Ø31
		16							770				20-Ø37

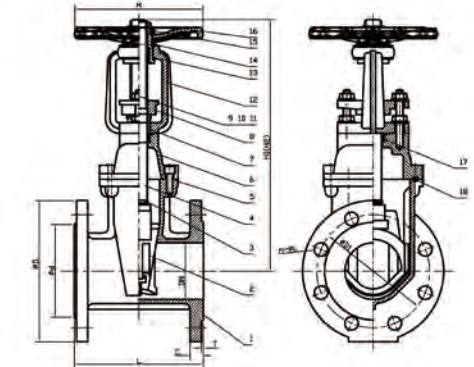
**DIN F4 Flanged Resilient OS&Y Gate Valve (XZ41X), PN10/16, UL/FM Approved**



XZ41X

Vds UL LISTED FM APPROVED NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Flange to DIN EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	O-Ring	NBR	EPDM
4	Stem	Stainless Steel	SS304, SS316, SS420, SS431
5	Nut	Carbon Steel Zinc Plated	SS304, SS316
6	Bonnet	EN-GJS-450-10	
7	Stem Bushing	Brass HPb59-1	
8	Gland	EN-GJS-450-10	
9	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
10	Stud	Carbon Steel Zinc Plated	SS304, SS316
11	Nut	Carbon Steel Zinc Plated	SS304, SS316
12	Yoke	EN-GJS-450-10	
13	Stem Nut	Brass HPb59-1	
14	Washer	Brass HPb59-1	SS304, SS316
15	Locknut	Carbon Steel Zinc Plated	
16	Handwheel	EN-GJS-450-10	Pressed Steel
17	Stem Packing	NBR	EPDM
18	Bonnet Gasket	EPDM	NBR

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.



XZ41X-1

DN		PN	Dimensions(mm)										
Inch	mm		L (F4)	L (F5)	H1 (Close)	H2 (Open)	D	D1	d	C	T	M	n-φL
2"	50	10/16	150	250	323	373	165	125	99	19	3	180	4-Ø19
2.5"	65	10/16	170	270	343	408	185	145	118	19	3	180	4-Ø19
3"	80	10/16	180	280	370	450	200	160	132	19	3	200	8-Ø19
4"	100	10/16	190	300	442	542	220	180	156	19	3	254	8-Ø19
5"	125	10/16	200	325	540	665	250	210	184	19	3	280	8-Ø19
6"	150	10/16	210	350	608	758	285	240	211	19	3	305	8-Ø23
8"	200	10	230	400	720	920	340	295	266	20	3	350	8-Ø23
		16										355	12-Ø23
10"	250	10	250	450	940	1190	405	350	319	22	3	450	12-Ø23
		16						355				12-Ø28	
12"	300	10	270	500	1065	1365	460	400	370	24.5	4	450	12-Ø23
		16						410				12-Ø28	

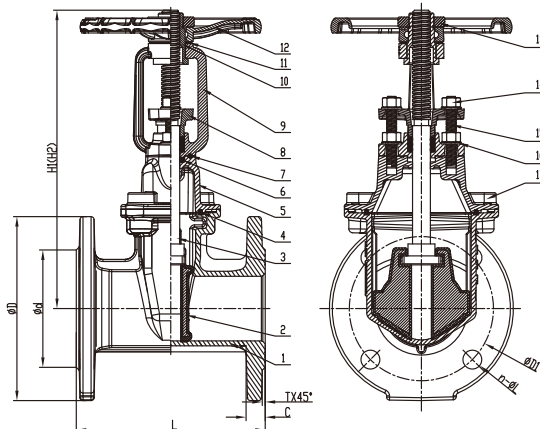


**BS 5163 Flanged Resilient OS&Y Gate Valve, (Z41XS), PN10/16**



Z41XS

- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	Stem	SS420	SS304, SS316
4	Bonnet Gasket	EPDM	NBR
5	Bonnet	EN-GJS-450-10	
6	O-Ring	NBR	EPDM
7	O-Ring	NBR	EPDM
8	Gland	EN-GJS-450-10	
9	Yoke	EN-GJS-450-10	
10	Stem Nut	EN-GJS-450-10	
11	Washer	CW617N	
12	Handwheel	EN-GJS-450-10	
13	Lock Nut	Carbon Steel Zinc Plated	
14	Gland Nut	Carbon Steel Zinc Plated	SS304, SS316
15	Stud	Carbon Steel Zinc Plated	SS304, SS316
16	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
17	Bolt	Carbon Steel Zinc Plated	SS304, SS316

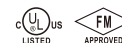
Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		PN	Dimensions(mm)									
Inch	mm		L	H1 (Close)	H2 (Open)	D	D1	d	C	T	n-ΦL	
2"	50	10/16	178	278	332	165	125	99	19	3	4-Φ19	
2.5"	65	10/16	190	300	366	185	145	118	19	3	4-Φ19	
3"	80	10/16	203	323	405	200	160	132	19	3	8-Φ19	
4"	100	10/16	229	391	491	220	180	156	19	3	8-Φ19	
5"	125	10/16	254	461	590	250	210	184	19	3	8-Φ19	
6"	150	10/16	267	530	680	285	240	211	19	3	8-Φ23	
8"	200	10	292	660	860	340	295	266	20	3	8-Φ23	
		16									12-Φ23	

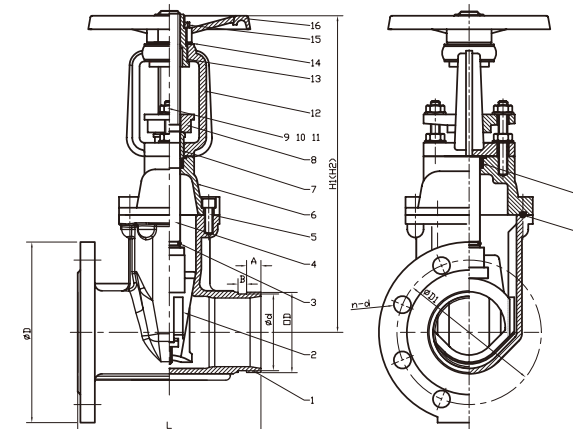
**Flanged x Grooved Resilient OS&Y Gate Valve (XZ51X), PN10/16, UL/FM Approved**



XZ51X



- Connection Ends: Flange to EN 1092-2:1997, Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

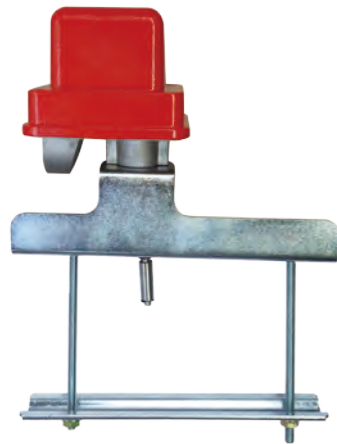
Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	O-Ring	NBR	EPDM
4	Stem	Stainless Steel	SS304, SS316, SS420, SS431
5	Bolt	Carbon Steel Zinc Plated	SS304, SS316
6	Bonnet	EN-GJS-450-10	
7	Stem Bushing	Brass HPb59-1	
8	Gland	EN-GJS-450-10	
9	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
10	Stud	Carbon Steel Zinc Plated	SS304, SS316
11	Nut	Carbon Steel Zinc Plated	SS304, SS316
12	Yoke	EN-GJS-450-10	
13	Nut	Brass HPb59-1	
14	Washer	Brass HPb59-1	
15	Locknut	Carbon Steel Zinc Plated	
16	Handwheel	EN-GJS-450-10	Pressed Steel
17	Stem Packing	EPDM	NBR
18	Bonnet Gasket	EPDM	NBR

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)										
Inch	mm	L	H1(Close)	H2(Open)	D	D1	n-d	OD	d	A	B	
2"	50	178	323	373	165	125	4-Φ19	60.3	57.15	15.88	7.92	
2.5"	65	190	343	408	185	145	4-Φ19	76.1	72.26	15.88	7.92	
3"	80	203	370	450	200	160	8-Φ19	88.9	84.94	15.88	7.92	
4"	100	229	442	542	220	180	8-Φ19	114.3	110.08	15.88	9.52	
5"	125	254	541	665	250	210	8-Φ19	139.7	135.48	15.88	9.52	
6"	150	267	608	758	285	240	8-Φ23	165.1	160.90	15.88	9.52	
6"	150	267	608	758	285	240	8-Φ23	168.3	163.96	15.88	9.52	
8"	200	292	720	920	340	295	12-Φ23	219.1	214.40	19.05	11.13	
10"	250	330	939	1193	405	355	12-Φ28	273.0	268.28	19.05	12.70	
12"	300	356	1065	1370	460	410	12-Φ28	323.9	318.29	19.05	12.70	



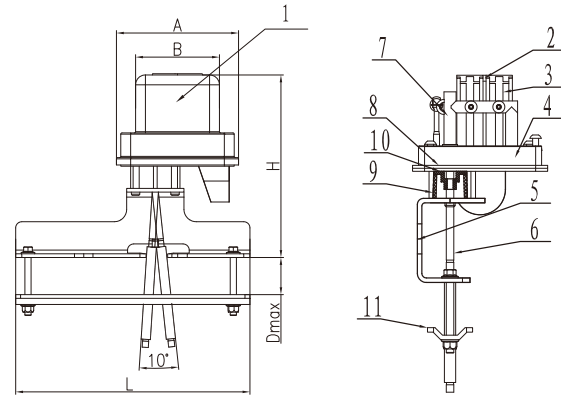
### Supervisory Switch for OS&Y Gate Valve (MXHQ)



MXHQ



- Service Environment: Indoor or Outdoor use, all parts have corrosion resistant finishes
- Temperature Range: 0°C - 80°C
- Cover Tamper: Tamper Resistant Screws  
Optional Cover Tamper Switch Available
- Electrical Ratings: 15 Amps at 125/250VAC
- Appliance Standards: NFPA-13, NFPA-13D, NFPA-13R, NFPA-72
- Statement: The Model MXHQ Supervisory Switch is used to monitor the open or close status of an OS&Y (outside screw and yoke) type gate valve. There are two sizes, the model MXHQ D50 serves the OS&Y Gate valves ranging in size from 2"-16"(50mm - 400mm), the other model MXHQ D450 is fit for the OS&Y Gate valves ranging in size from 18"-24"(450mm - 600mm).



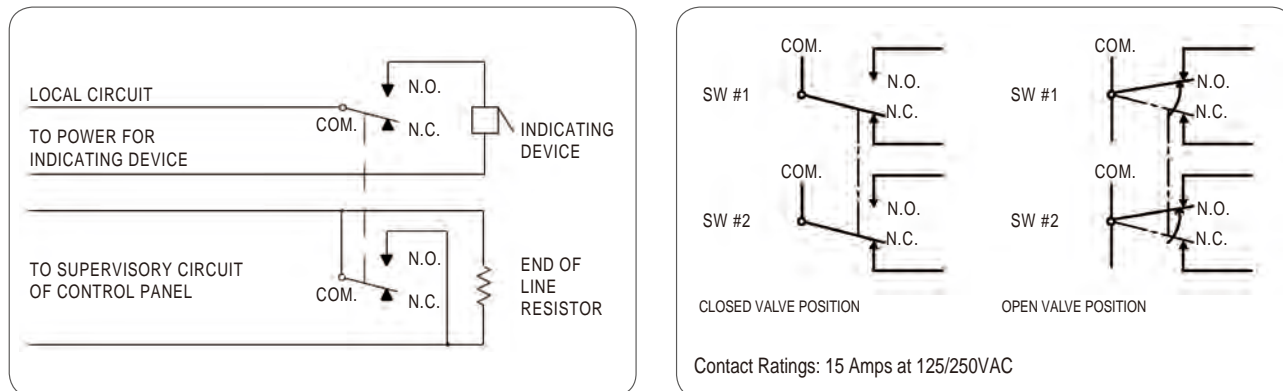
MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Outer Shell	ADC12	
2	Brace	Carbon Steel Q235	SS304, SS316
3	Micro Switch		
4	Base	ADC12	
5	Connection Plate	Carbon Steel Q235	SS304, SS316
6	Driving Lever	SS304	SS316
7	Axis	Nylon	
8	Sealing Gasket	CR Foam Cotton	
9	Pressing Sleeve	PTFE	
10	Rubber Ring	EPDM	
11	Clamp Plate	Carbon Steel Q235	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)				
Inch	mm	A	B	H	L	Dmax
2"-16"	50-400	99	68	148	200	105
18"-24"	450-600	99	68	148	360	135

TYPICAL ELECTRICAL CONNECTIONS



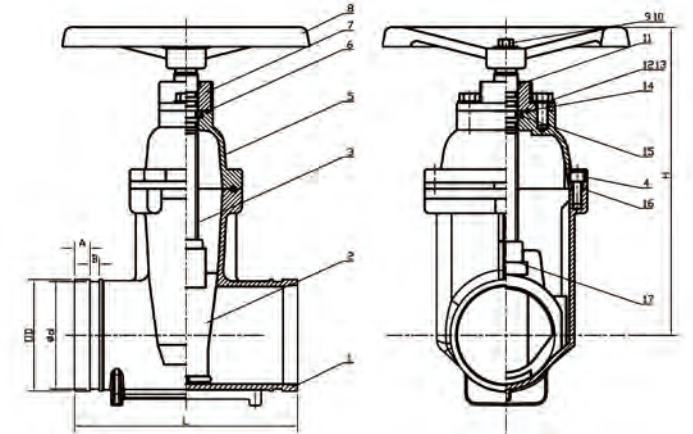
### Grooved Resilient NRS Gate Valve (Z85X), PN10/16, UL/FM Approved



Z85X



- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	Stem	Stainless Steel	SS304, SS316, SS420, SS431
4	Nut	Carbon Steel Zinc Plated	SS304, SS316
5	Bonnet	EN-GJS-450-10	
6	O-Ring	NBR	EPDM
7	Gland	EN-GJS-450-10	
8	Handwheel	EN-GJS-450-10	Pressed Steel
9	Bolt	Carbon Steel Zinc Plated	SS304, SS316
10	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
11	Ring Wiper	EPDM	NBR
12	Bolt	Carbon Steel Zinc Plated	SS304, SS316
13	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
14	O-Ring	NBR	EMDM
15	Washer	Brass HPb59-1	
16	Bonnet Gasket	EPDM	NBR
17	Wedge Nut	Brass HPb59-1	Bronze ZQSn5-5-5

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)					
Inch	mm	L	H	OD	d	A	B
2"	50	178	218	60.3	57.15	15.88	7.92
2.5"	65	190	230	73	69.09	15.88	7.92
2.5"	65	190	230	76.1	72.26	15.88	7.92
3"	80	203	281	88.9	84.94	15.88	7.92
4"	100	229	316	114.3	110.08	15.88	9.52
5"	125	254	393	139.7	135.48	15.88	9.52
5"	125	254	393	141.3	137.03	15.88	9.52
6"	150	267	420	159.0	154.50	15.88	9.52
6"	150	267	420	165.1	160.90	15.88	9.52
6"	150	267	420	168.3	163.96	15.88	9.52
8"	200	292	490	219.1	214.40	19.05	11.13
10"	250	330	626	273.0	268.28	19.05	12.70
12"	300	356	722	323.9	318.29	19.05	12.70

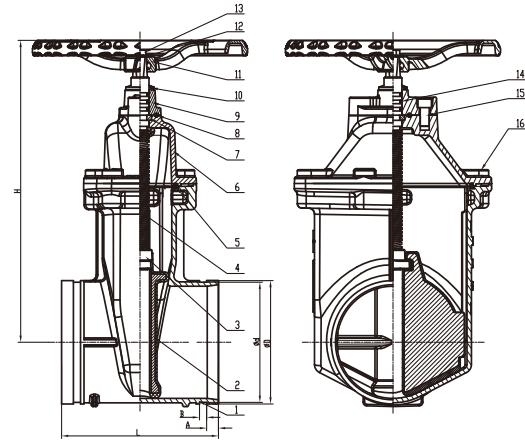


### Grooved Resilient NRS Gate Valve (Z85XS), PN10/16



Z85XS

- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	Stem Nut	EN-GJS-450-10	
4	Stem	SS420	SS304, SS316
5	Bonnet Gasket	EPDM	
6	Bonnet	EN-GJS-450-10	
7	Thrust Ring	HPb59-1	
8	O-Ring	NBR	EPDM
9	Gland	EN-GJS-450-10	
10	Ring Wiper	EPDM	NBR
11	Handwheel	EN-GJS-450-10	
12	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
13	Bolt	Carbon Steel Zinc Plated	SS304, SS316
14	O-Ring	NBR	EPDM
15	Bolt	Carbon Steel Zinc Plated	SS304, SS316
16	Bolt	Carbon Steel Zinc Plated	SS304, SS316

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)					
Inch	mm	L	H	OD	d	A	B
2"	50	140	210	60.3	57.15	15.88	7.92
2.5"	65	150	235	76.1	72.26	15.88	7.92
3"	80	160	260	88.9	84.94	15.88	7.92
4"	100	178	303	114.3	110.08	15.88	9.52
5"	125	190	357	139.7	135.48	15.88	9.52
6"	150	210	404	165.1	160.9	15.88	9.52
8"	200	235	482	219.1	214.4	19.05	11.1

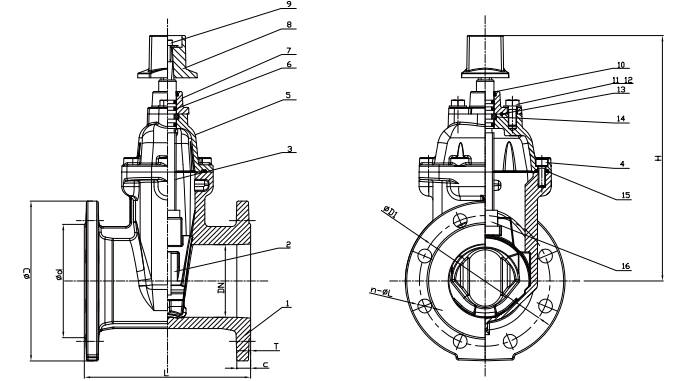
### BS Flanged Resilient NRS Gate Valve (Z45XC), PN10/16, UL/FM Approved



Z45XC



- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	Stem	Stainless Steel	SS304, SS316, SS420, SS431
4	Bolt	Carbon Steel Zinc Plated	SS304, SS316
5	Bonnet	EN-GJS-450-10	
6	O-Ring	NBR	
7	Gland	EN-GJS-450-10	
8	Stem Cap	EN-GJS-450-10	
9	Bolt	Carbon Steel Zinc Plated	SS304, SS316
10	Ring Wiper	EPDM	NBR
11	Bolt	Carbon Steel Zinc Plated	SS304, SS316
12	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
13	O-Ring	NBR	EPDM
14	Washer(Type A) Axis Guide (Type B)	Brass Hpb59-1	
15	Bonnet Gasket	EPDM	NBR
16	Wedge Nut	Brass Hpb59-1	Bronze ZQSn5-5-5

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.



Z45X

Z45X-1



XZ45X-1

XZ45X

XZ45X-2

Inch	mm	DN	PN	Dimensions(mm)								
				L	H		D	D1	d	C	T	n-d
					TypeA	TypeB						
2"	50	10/16	178	241	279	165	125	99	19	3	4-Ø19	
2.5"	65	10/16	190	255	297	185	145	118	19	3	4-Ø19	
3"	80	10/16	203	304	323	200	160	132	19	3	8-Ø19	
4"	100	10/16	229	337	376	200	180	156	19	3	8-Ø19	
5"	125	10/16	254	404	404	250	210	184	19	3	8-Ø19	
6"	150	10/16	267	436	457	285	240	211	19	3	8-Ø23	
8"	200	10	292	443	557	340	295	266	20	3	8-Ø23	
		16									12-Ø23	
10"	250	10	330	641	641	405	350	319	22	3	12-Ø23	
		16					355				12-Ø28	
12"	300	10	356	743	743	460	400	370	24.5	4	12-Ø23	
		16					410				12-Ø28	
14"	350	10	381	1364	928	520	460	429	26.5	4	16-Ø23	
		16					470				16-Ø28	
16"	400	10	406	1364	928	580	515	480	28	4	16-Ø28	
		16					525				16-Ø31	
18"	450	10	432	1364	1165	640	565	530	30	4	20-Ø28	
		16					585	548			20-Ø31	
20"	500	10	457	1364	1188	715	620	582	31.5	4	20-Ø28	
		16					650	609			20-Ø34	
24"	600	10	508	1364	1364	840	725	682	36	5	20-Ø31	
		16					770	720			20-Ø37	



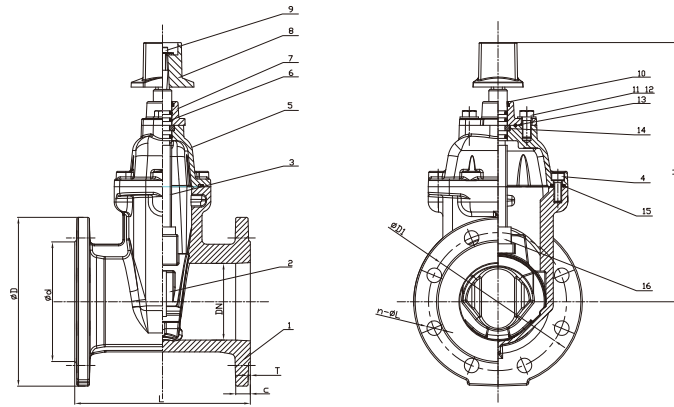
**DIN F4 Flanged Resilient NRS Gate Valve (Z45XC), PN10/16, UL/FM Approved**



Z45XC

Vds cULUS LISTED FM APPROVED NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Flange to DIN EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	Stem	Stainless Steel	SS304, SS316, SS420, SS431
4	Nut	Carbon Steel Zinc Plated	SS304, SS16
5	Bonnet	EN-GJS-450-10	
6	O-Ring	NBR	EPDM
7	Gland	EN-GJS-450-10	
8	Stem Cap	EN-GJS-450-10	
9	Bolt	Carbon Steel Zinc Plated	SS304, SS16
10	Ring Wiper	EPDM	NBR
11	Bolt	Carbon Steel Zinc Plated	SS304, SS316
12	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
13	O-Ring	NBR	EPDM
14	Thrust Washer	Brass HPb59-1	
15	Bonnet Gasket	EPDM	NBR
16	Wedge Nut	Brass HPb59-1	Bronze ZQSn5-5-5

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		PN	Dimensions(mm)							
Inch	mm		L	H	D	D1	d	C	T	n-ΦL
2"	50	10/16	150	241	165	125	99	19	3	4-Φ19
2.5"	65	10/16	170	255	185	145	118	19	3	4-Φ19
3"	80	10/16	180	304	200	160	132	19	3	8-Φ19
4"	100	10/16	190	337	220	180	156	19	3	8-Φ19
5"	125	10/16	200	414	250	210	184	19	3	8-Φ19
6"	150	10/16	210	436	285	240	211	19	3	8-Φ23
8"	200	10	230	506	340	295	266	20	3	8-Φ23
		16	230	506	340	295	266	20	3	12-Φ23
10"	250	10	250	644	405	350	319	22	3	12-Φ23
		16	250	644	405	355	319	22	3	12-Φ28
12"	300	10	270	739	460	400	370	24.5	4	12-Φ23
		16	270	739	460	410	370	24.5	4	12-Φ28



Z45X



Z45X-1



XZ45X-1



XZ45X



XZ45X-2

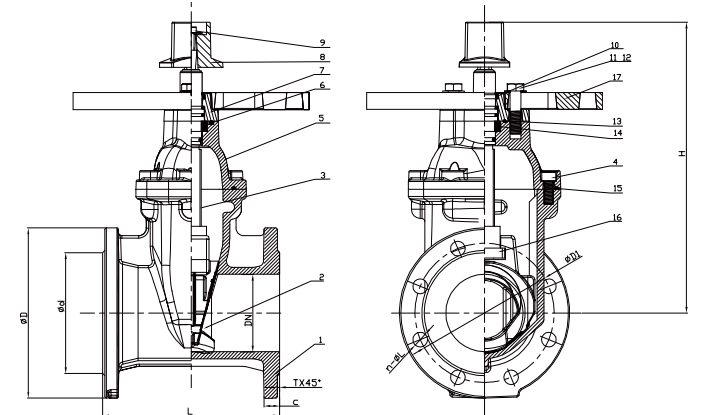
**BS Flanged Resilient NRS Gate Valve, with Post Flange (Z45XC-2), PN10/16, UL/FM Approved**



Z45XC-2

cULUS LISTED FM APPROVED

- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	Stem	Stainless Steel	SS304, SS316, SS420, SS431
4	Bolt	Carbon Steel Zinc Plated	SS304, SS316
5	Bonnet	EN-GJS-450-10	
6	O-Ring	NBR	EPDM
7	Gland	EN-GJS-450-10	
8	Stem Cap	EN-GJS-450-10	
9	Bolt	Carbon Steel Zinc Plated	SS304, SS316
10	Ring Wiper	NBR	
11	Bolt	Carbon Steel Zinc Plated	SS304, SS316
12	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
13	O-Ring	NBR	EPDM
14	Thrust Washer	Brass HPb59-1 (Type A) Not Available (Type B)	
15	Bonnet Gasket	EPDM	NBR
16	Wedge Nut	Brass HPb59-1	Bronze ZQSn5-5-5
17	Post Flange	EN-GJS-450-10	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		PN	Dimensions(mm)								
Inch	mm		L	H		D	D1	d	C	T	n-d
				TypeA	TypeB						
4"	100	10/16	229	347	395	220	180	156	19	3	8-Φ19
5"	125	10/16	254	432	432	250	210	184	19	3	8-Φ19
6"	150	10/16	267	443	475	285	240	211	19	3	8-Φ23
8"	200	10	292	518	585	340	295	266	20	3	8-Φ23
		16									12-Φ23
10"	250	10	330	656	656	405	350	319	22	3	12-Φ23
		16				355					12-Φ28
12"	300	10	356	751	751	460	400	370	25.4	4	12-Φ23
		16				410					12-Φ28
14"	350	10	381	952	952	520	460	429	26.5	4	16-Φ23
		16				470					16-Φ28
16"	400	10	406	952	952	580	515	480	28	4	16-Φ28
		16				525					16-Φ31

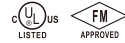
Note: UL/FM approved from 4" to 12"



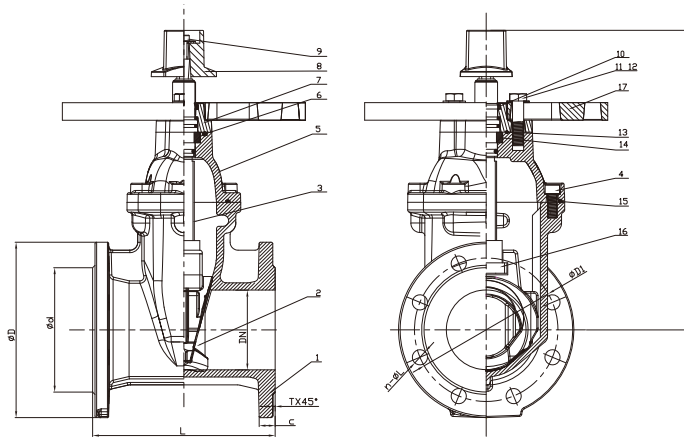
**DIN F4 Flanged Resilient NRS Gate Valve with Post Flange (Z45XC-2)**



Z45XC-2



- Connection Ends: Flange to DIN EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	Stem	Stainless Steel	SS304, SS316, SS420, SS431
4	Nut	Carbon Steel Zinc Plated	SS304, SS316
5	Bonnet	EN-GJS-450-10	
6	O-Ring	NBR	EPDM
7	Gland	EN-GJS-450-10	
8	Stem Cap	EN-GJS-450-10	
9	Bolt	Carbon Steel Zinc Plated	SS304, SS316
10	Ring Wiper	EPDM	NBR
11	Bolt	Carbon Steel Zinc Plated	SS304, SS316
12	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
13	O-Ring	NBR	EPDM
14	Thrust Washer	Brass HPb59-1	
15	Bonnet Gasket	EPDM	NBR
16	Wedge Nut	Brass HPb59-1	Bronze ZQSn5-5-5
17	Post Flange	EN-GJS-450-10	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

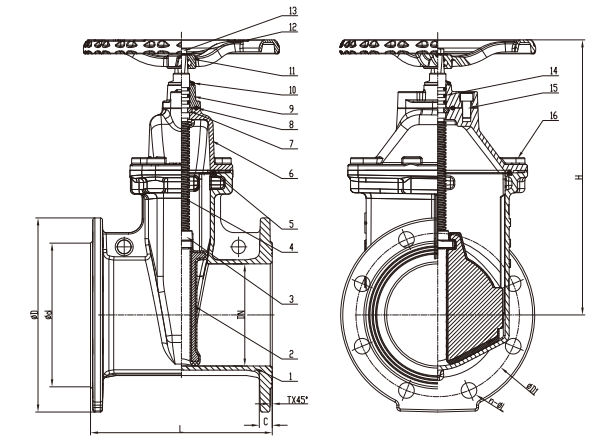
DN		PN	Dimensions(mm)							
Inch	mm		L	H	D	D1	d	C	T	n-ΦL
4"	100	10/16	190	347	220	180	156	19	3	8-Φ19
5"	125	10/16	200	415	250	210	184	19	3	8-Φ19
6"	150	10/16	210	443	245	240	211	19	3	8-Φ23
8"	200	10	230	518	340	295	266	20	3	8-Φ23
		16						20	3	12-Φ23
10"	250	10	250	665	405	350	319	22	3	12-Φ23
		16				355		22	3	12-Φ28
12"	300	10	270	751	460	400	370	24.5	4	12-Φ23
		16				410		24.5	4	12-Φ28

**BS 5163 Flanged Resilient NRS Gate Valve, (Z45XS), PN10/16**



Z45XS

- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	Stem Nut	EN-GJS-450-10	
4	Stem	SS420	SS304, SS316
5	Bonnet Gasket	EPDM	
6	Bonnet	EN-GJS-450-10	
7	Thrust Ring	HPb59-1	
8	O-Ring	NBR	EPDM
9	Gland	EN-GJS-450-10	
10	Ring Wiper	EPDM	NBR
11	Handwheel	EN-GJS-450-10	
12	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
13	Bolt	Carbon Steel Zinc Plated	SS304, SS316
14	O-Ring	NBR	EPDM
15	Bolt	Carbon Steel Zinc Plated	SS304, SS316
16	Bolt	Carbon Steel Zinc Plated	SS304, SS316

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		PN	Dimensions(mm)							
Inch	mm		L	H	D	D1	d	C	T	n-ΦL
2"	50	10/16	178	210	165	125	99	19	3	4-Φ19
2 1/2"	65	10/16	190	235	185	145	118	19	3	4-Φ19
3"	80	10/16	203	260	200	160	132	19	3	8-Φ19
4"	100	10/16	229	303	220	180	156	19	3	8-Φ19
5"	125	10/16	254	357	250	210	184	19	3	8-Φ19
6"	150	10/16	267	404	285	240	211	19	3	8-Φ23
8"	200	10	292	482	340	295	266	20	3	8-Φ23
		16								12-Φ23



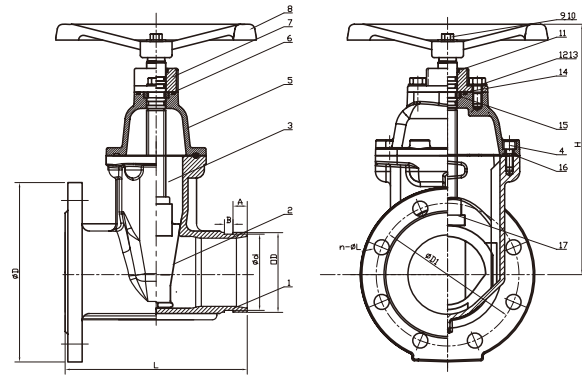
**Flanged x Grooved Resilient NRS Gate Valve (Z55X), PN10/16, UL/FM Approved**



Z55X



- Connection Ends: Flange to EN 1092-2:1997, Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	Stem	Stainless Steel	SS304, SS316, SS420, SS431
4	Bolt	Carbon Steel Zinc Plated	SS304, SS316
5	Bonnet	EN-GJS-450-10	
6	O-Ring	NBR	EPDM
7	Gland	EN-GJS-450-10	
8	Handwheel	EN-GJS-450-10	Pressed Steel
9	Bolt	Carbon Steel Zinc Plated	SS304, SS316
10	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
11	Ring Wiper	EPDM	NBR
12	Bolt	Carbon Steel Zinc Plated	SS304, SS316
13	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
14	O-Ring	NBR	EPDM
15	Washer	Brass HPb59-1	
16	Bonnet Gasket	EPDM	NBR
17	Wedge Nut	Brass HPb59-1	Bronze ZQSn5-5-5

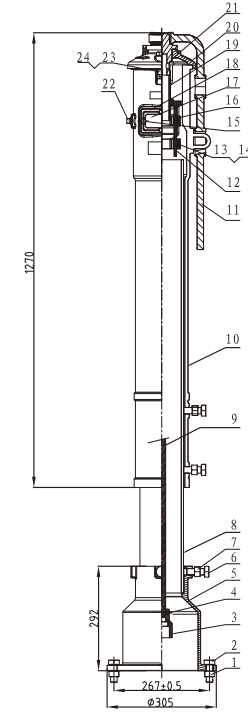
Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)									
Inch	mm	L	H	D	D1	n-d	OD	d	A	B	
2"	50	178	218	165	125	4-Φ19	60.3	57.15	15.88	7.92	
2.5"	65	190	230	185	145	4-Φ19	76.1	72.26	15.88	7.92	
3"	80	203	281	200	160	8-Φ19	88.9	84.94	15.88	7.92	
4"	100	229	316	220	180	8-Φ19	114.3	110.08	15.88	9.52	
5"	125	254	393	250	210	8-Φ19	139.7	135.48	15.88	9.52	
6"	150	267	420	285	240	8-Φ23	165.1	160.90	15.88	9.52	
6"	150	267	420	285	240	8-Φ23	168.3	163.96	15.88	9.52	
8"	200	292	490	340	295	12-Φ23	219.1	214.40	19.05	11.13	
10"	250	330	626	405	355	12-Φ28	273.0	268.28	19.05	12.70	
12"	300	356	722	460	410	12-Φ28	323.9	318.29	19.05	12.70	

**Vertical Indicator Post (IP), UL/FM Approved**



IP



- Statement: Vertical indicator post provides a means to operate a buried or otherwise inaccessible valve and able to indicate the open or shut position of the valve.
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Hex NUT	Carbon Steel Zinc Plated
2	Hex Bolt	Carbon Steel Zinc Plated
3	Socket	ASTM A536, 65-45-12
4	Cotter Pin	SS304
5	Base Flange	ASTM A536, 65-45-12
6	Hex Bolt	Carbon Steel Zinc Plated
7	Hex Nut	Carbon Steel Zinc Plated
8	Standpipe	Carbon Steel ASTM A53
9	Stem 1" Square	Carbon Steel AISI 1045
10	Body	ASTM A536, 65-45-12
11	Locking Wrench	ASTM A536, 65-45-12
12	Target Carrier Nut	SS304 (SIZE:100-400) Brass HPb59-1 (SIZE:450-600)
13	Hex Bolt	Carbon Steel Zinc Plated
14	Hex Nut	Carbon Steel Zinc Plated
15	Hex Bolt	Carbon Steel Zinc Plated
16	Instructs the plate	ASTM A536, 65-45-12
17	Window Glass	Plexiglass
18	Gasket	EPDM
19	Operating NUT	SS304
20	Top Section	ASTM A536, 65-45-12
21	Snap Ring	Stainless Steel AISI11066
22	Plug	Malleable iron Galvanized
23	Square Nut	Carbon Steel Zinc Plated
24	Hex Bolt	Carbon Steel Zinc Plated

Field Adjustment:

- 1.Remove the Top Section from the top of the Indicator Post assembly;
- 2.Cut the required stem length and adjust the Standpipe to match up to the ground line;
- 3.Set the "OPEN" and "SHUT" targets for the appropriate valve size;
- 4.Reattach the Top Section to the top of the Indicator Post assembly.



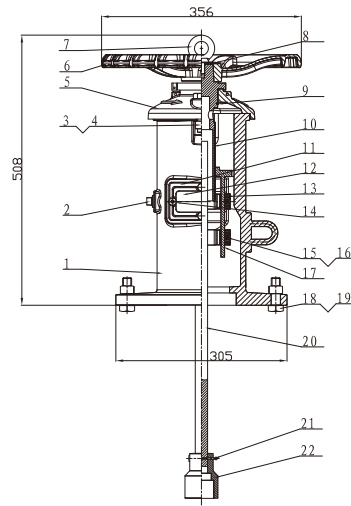
### Wall Indicator Post (WP), UL/FM Approved



WP



- **Statement:**  
Wall indicator post provides a means to operate a valve installed behind a wall and able to indicate the open or shut position of the valve.
- **Coating:**  
Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Body	Cast Iron EN-GJL-200
2	Plug	Malleable Iron
3	Square Nut	Carbon Steel Zinc Plated
4	Hex Bolt	Carbon Steel Zinc Plated
5	Cover	Cast Iron EN-GJL-200
6	Hand Wheel	EN-GJS-450-10
7	Eye Bolt	Carbon Steel Zinc Plated
8	Gasket	Carbon Steel Zinc Plated
9	Snap Ring	Spring Steel
10	Operating Nut	SS304
11	Gasket	EPDM
12	Window Glass	Plexiglass
13	Target	Cast Aluminum
14	Hex Bolt	Carbon Steel Zinc Plated
15	Hex Bolt	Carbon Steel Zinc Plated
16	Hex Nut	Carbon Steel Zinc Plated
17	Target Carrier Nut	SS304
18	Hex Nut	Carbon Steel Zinc Plated
19	Hex Bolt	Carbon Steel Zinc Plated
20	Stem 1" Square	Carbon Steel
21	Cotter Pin	SS304
22	Socket	ASTM A536, 65-45-12

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list;

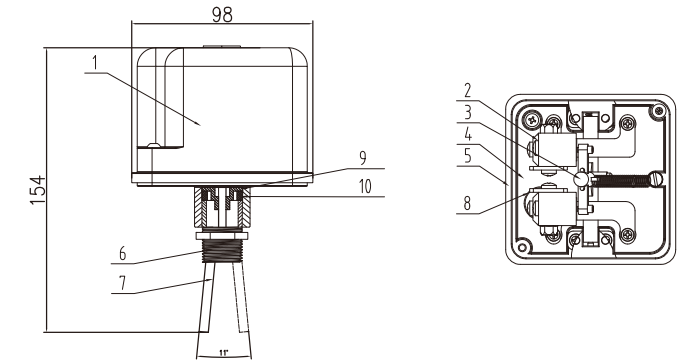
### Supervisory Switch for Indicator Post (ZXHQ)



ZXHQ



- **Service Environment:** Indoor or Outdoor use, all parts have corrosion resistant finishes
- **Temperature Range:** 0°C - 80°C
- **Cover Tamper:** Tamper Resistant Screws  
Optional Cover Tamper Switch Available
- **Electrical Ratings:** 15 Amps at 125/250VAC
- **Appliance Standards:** NFPA-13, NFPA-13D, NFPA-13R, NFPA-72
- **Statement:** The Model ZXHQ is a weather proof and tamper resistant switch for monitoring the open position of firesprinkler control valves of the post indicator.

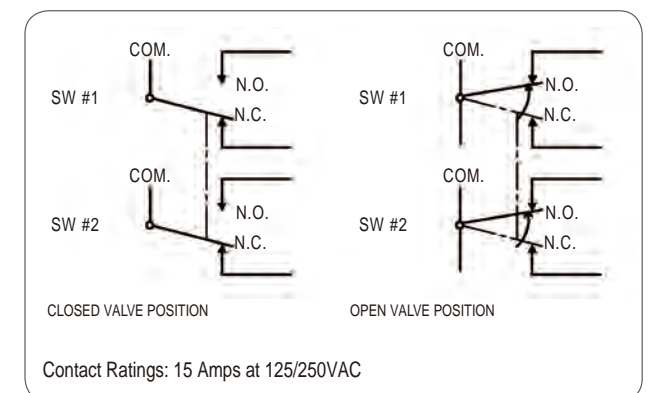
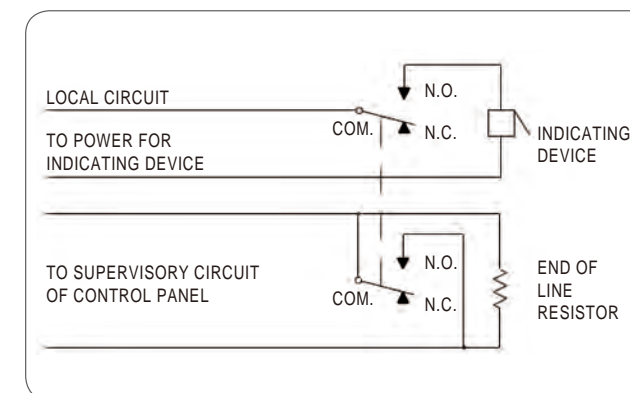


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Outer Shell	ADC12	
2	Micro Switch		
3	The Rotating Shaft	PA66+GF30	
4	Base	ADC12	
5	Sealing Gasket	CR foam cotton	
6	Connecting Pipe	SS304	SS316
7	Stem	SS304	SS316
8	Micro Stents	Q235	SS304, SS316
9	Rubber Ring	EPDM	
10	Pressing Sleeve	PTFE	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

TYPICAL ELECTRICAL CONNECTIONS



### Grooved Butterfly Valve with Tamper Switch (XD381X), UL/FM/VdS Approved



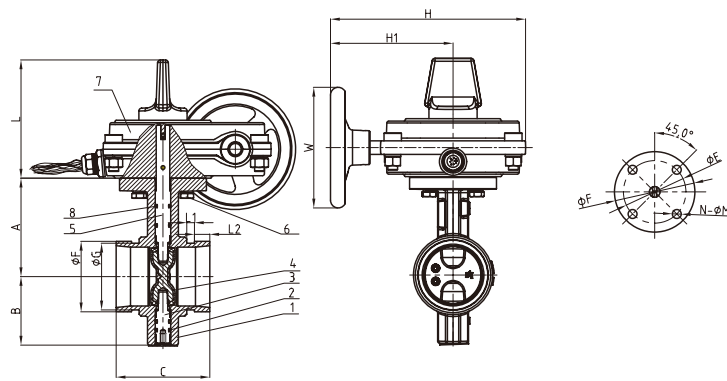
XD381X



- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



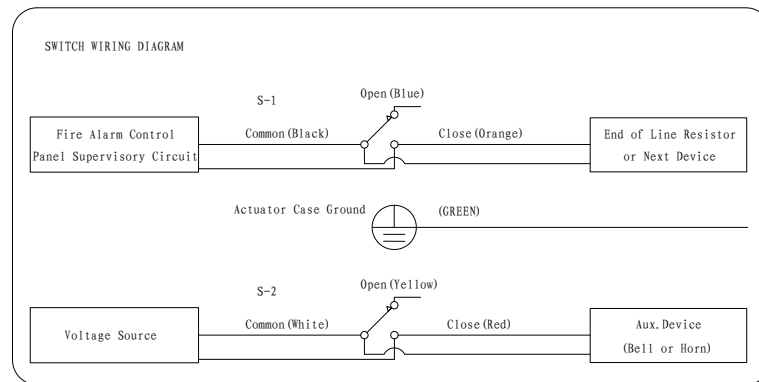
XD381X39



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Body	EN-GJS-450-10	
2	O-Ring	NBR	EPDM
3	Stub Shaft	SS431	
4	Disc	EN-GJS-450-10+EPDM	EN-GJS-450-10+NBR
5	Drive Shaft	SS431	
6	Hex Nut	Carbon Steel Zinc plated	
7	Signal Gearbox	Body:EN-GJS-450-10	
8	O-Ring	NBR	EPDM

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.



DN		Dimensions(mm)														
Inch	mm	A	B	C	F	G	L	L1	L2	H1	H	W	ΦE	ΦF	N-ΦM	ISO5211
2"	50	89	65	81	60.3	57.15	122.5	7.93	15.88	127	202.2	125	70	90	4-Φ10	F07
2.5"	65	102	71	97	73.0	69.09	122.5	7.93	15.88	127	202.2	125	70	90	4-Φ10	F07
2.5"	65	102	71	97	76.1	72.26	122.5	7.93	15.88	127	202.2	125	70	90	4-Φ10	F07
3"	80	109	81	97	88.9	84.94	122.5	7.93	15.88	127	202.2	125	70	90	4-Φ10	F07
4"	100	128	95	116	114.3	110.08	122.5	9.53	15.88	127	202.2	125	70	90	4-Φ10	F07
5"	125	141	111	148	139.7	135.48	122.5	9.53	15.88	127	202.2	125	70	90	4-Φ10	F07
5"	125	141	111	148	141.3	137.03	122.5	9.53	15.88	127	202.2	125	70	90	4-Φ10	F07
6"	150	153	133	148	165.1	160.90	122.5	9.53	15.88	139.5	215	225	70	90	4-Φ10	F07
6"	150	153	133	148	168.3	163.96	122.5	9.53	15.88	139.5	215	225	70	90	4-Φ10	F07
8"	200	184	164	133	219.1	214.40	122.5	11.10	19.05	198.5	274	225	102	125	4-Φ12	F10
10"	250	216	196	159	273.1	268.28	122.5	12.70	19.05	198.5	274	225	102	125	4-Φ12	F10
12"	300	254	226	165	323.9	318.29	132.0	12.70	19.05	198.5	293.5	225	102	125	4-Φ12	F10

Note: Valve must not be installed with disc in full open position. Disc must be partly closed so that no part is protruding beyond end of valve body.

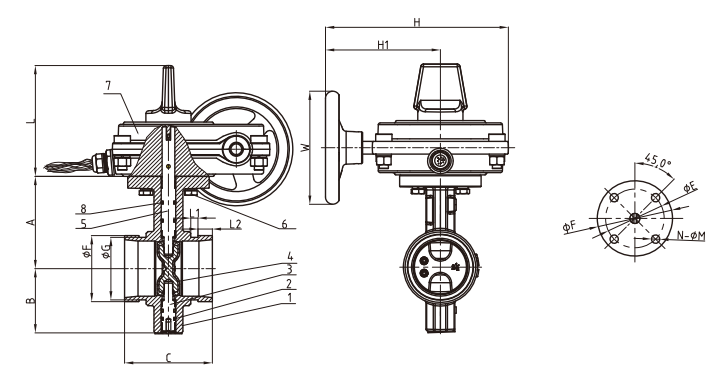
### Grooved Butterfly Valve with Normally Closed Tamper Switch (XD381XG)



XD381XG



- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



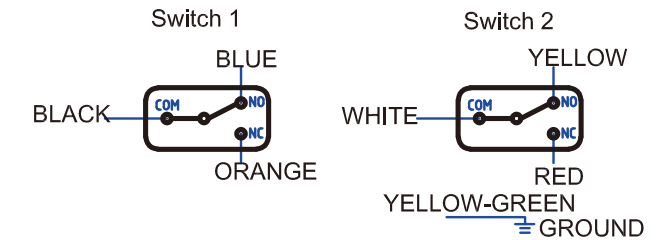
MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	BODY	EN-GJS-450-10	
2	O-Ring	NBR	EPDM
3	Stub Shaft	SS431	
4	Disc	EN-GJS-450-10+EPDM	EN-GJS-450-10+NBR
5	Drive Shaft	SS431	
6	Bolt	Carbon Steel Zinc plated	
7	Signal Gearbox	Body: EN-GJS-450-10	
8	O-Ring	NBR	EPDM

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

Signal description:

1. Switch parameters: 16A 1/2HP 125/250VAC
2. Wiring diagram:



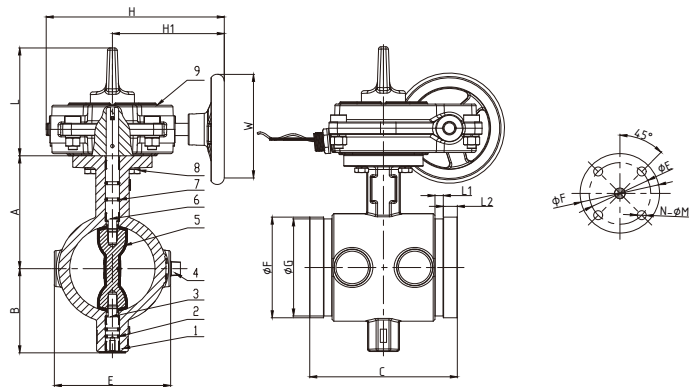
DN		Dimensions(mm)														
Inch	mm	A	B	C	F	G	L	L1	L2	H1	H	ΦW	ISO5211			
2"	50	89	65	81	60.3	57.15	122.5	7.93	15.88	127	202.2	125	F07			
2.5"	65	102	71	97	73.0	69.09	122.5	7.93	15.88	127	202.2	125	F07			
2.5"	65	102	71	97	76.1	72.26	122.5	7.93	15.88	127	202.2	125	F07			
3"	80	109	81	97	88.9	84.94	122.5	7.93	15.88	127	202.2	125	F07			
4"	100	128	95	116	114.3	110.08	122.5	9.53	15.88	127	202.2	125	F07			
5"	125	141	111	148	139.7	135.48	122.5	9.53	15.88	127	202.2	125	F07			
5"	125	141	111	148	141.3	137.03	122.5	9.53	15.88	127	202.2	125	F07			
6"	150	153	133	148	165.1	160.90	122.5	9.53	15.88	139.5	215	225	F07			
6"	150	153	133	148	168.3	163.96	122.5	9.53	15.88	139.5	215	225	F07			
8"	200	184	164	133	219.1	214.40	122.5	11.10	19.05	198.5	274	225	F10			
10"	250	216	196	159	273.1	268.28	122.5	12.70	19.05	198.5	274	225	F10			
12"	300	254	226	165	323.9	318.29	132.0	12.70	19.05	198.5	293.5	225	F10			



### Grooved Butterfly Valve with Tamper Switch (XD381XC)



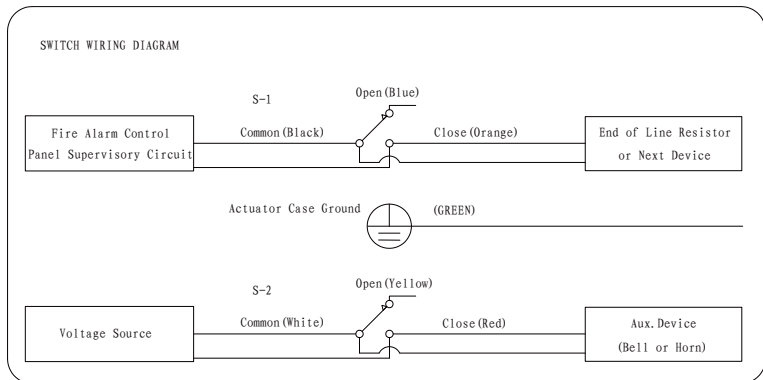
**Tapped Body**



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	O-Ring	NBR	EPDM
3	Stub Shaft	Stainless Steel,2Cr13	SS304, SS316, SS420, SS431
4	Plug	Bronze ASTM B584	Malleable Iron Galvanized
5	Disc	EN-GJS-450-10+EPDM	SS304, SS316
6	Drive Shaft	Stainless Steel,2Cr13	SS304, SS316, SS420, SS431
7	O-Ring	NBR	EPDM
8	Bolt and Nut	Carbon Steel Zinc Plated	SS304, SS316
9	Signal Gearbox	EN-GJS-450-10	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.



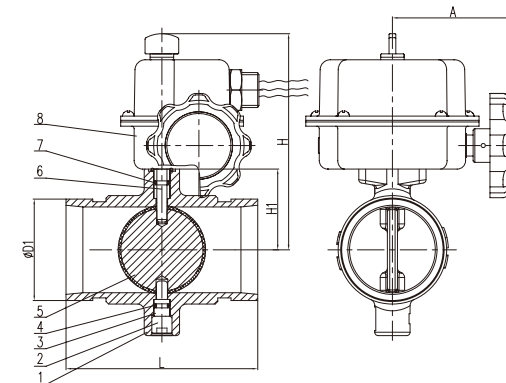
- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request

DN		Dimensions(mm)															
Inch	mm	A	B	C	E	F	G	L	L1	L2	H1	H	W	N-ΦM	ISO5211	P	
																standard	optional
2.5"	65	102	71	152.5	94±1.5	73	69.09	122.5	7.93	15.88	127	202	125	4-Φ10	F07	1/2	3/4
2.5"	65	102	71	152.5	94±1.5	76.1	69.09	122.5	7.93	15.88	127	202	125	4-Φ10	F07	1/2	3/4
3"	80	109	81	160.0	107±1.5	88.9	84.94	122.5	7.93	15.88	127	202	125	4-Φ10	F07	1/2	3/4
4"	100	128	95	167.6	132±1.5	114.3	110.08	122.5	9.53	15.88	127	202	125	4-Φ10	F07	3/4	1/2
6"	150	153	133	175.3	188±1.5	165.1	160.9	122.5	9.53	15.88	139.5	215	225	4-Φ10	F07	3/4	1/2
6"	150	153	133	175.3	188±1.5	168.3	163.96	122.5	9.53	15.88	139.5	215	225	4-Φ10	F07	3/4	1/2
8"	200	184	165	200.7	236±1.5	219.1	214.4	122.5	11.1	19.05	198.5	274	225	4-Φ12	F10	3/4	1/2

### Grooved Butterfly Valve with Tamper Switch (XD381X4-C)



**Compact Design**

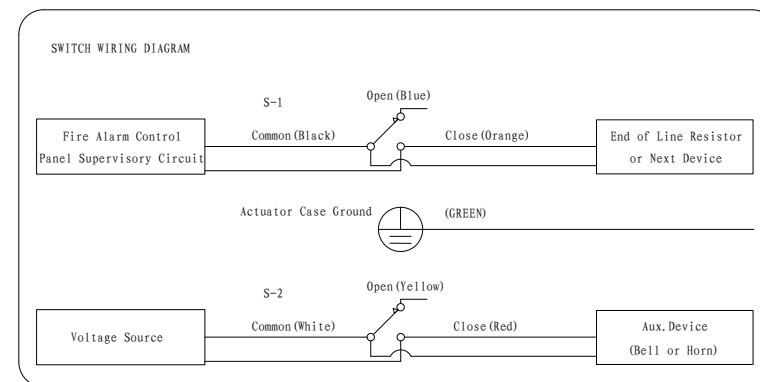


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Screw Plug	Carbon Steel Zinc Plated	
3	Stub Shaft	Stainless Steel	SS304, SS316, SS420, SS431
4	O-Ring	NBR	EPDM
5	Disc	Carbon Steel+EPDM	
6	Drive Shaft	Stainless Steel	SS304, SS316, SS420, SS431
7	O-Ring	NBR	EPDM
8	Signal Gearbox	Carbon Steel	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange Standard: ISO 5211
- Working Pressure: 1.2MPa
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



DN		Dimensions(mm)				
Inch	mm	A	ØD1	H	H1	L
2"	50	72	60.3	128.5	48	114.0
2.5"	65	72	73.0	132.5	52	114.0
2.5"	65	72	76.1	132.5	52	114.0

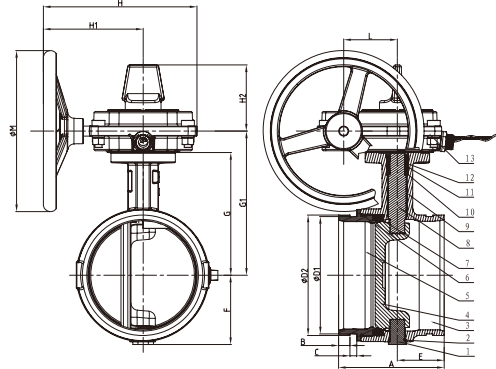
### Double Eccentric Grooved Butterfly Valve with Tamper Switch (XD382X), PN10/16



XD382X



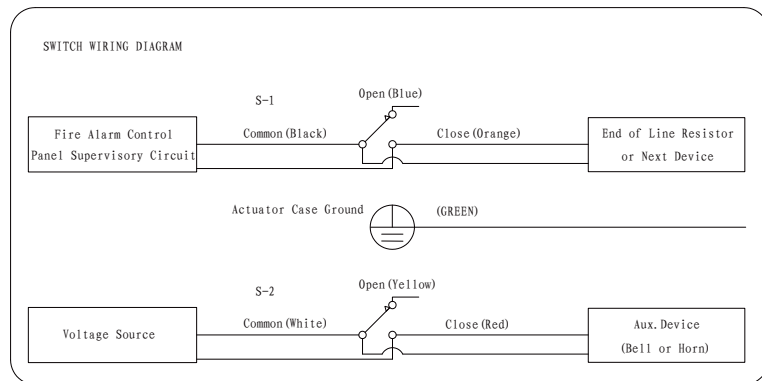
- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange Standard: ISO 5211  
Stem drive by keys, parallel or diagonal square or flat head
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Upper Stem	Stainless Steel	SS304, SS316, SS420, SS431
2	O-Ring	NBR	EPDM
3	Right Body	EN-GJS-450-10	
4	Disc	SS316	
5	Left Body	EN-GJS-450-10	
6	O-Ring	NBR	EPDM
7	Sealing Ring	EPDM	NBR
8	Lower Stem	Stainless Steel	SS304, SS316, SS420, SS431
9	Shaft Sleeve	SS304+PTFE	
10	O-Ring	NBR	EPDM
11	Stuffing Box	ZcuSn5pb5zn5	
12	O-Ring	NBR	EPDM
13	Signal Gearbox	EN-GJS-450-10	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.



DN		Dimensions(mm)													
Inch	mm	A	B	C	ØD1	ØD2	E	F	G	ØM	H	H1	H2	L	
2"	50	81	15.88	7.93	60.3	57.15	36.5	46	96.8	125	202.2	127	122.5	75	
2.5"	65	96.8	15.88	7.93	73.0	69.09	45	53.3	108	125	202.2	127	122.5	75	
2.5"	65	96.8	15.88	7.93	76.1	69.09	45	53.3	108	125	202.2	127	122.5	75	
3"	80	115.8	15.88	7.93	88.9	84.94	45	59.7	114.3	125	202.2	127	122.5	75	
4"	100	147.6	15.88	9.53	114.3	110.08	55.4	73.2	133.4	125	202.2	127	122.5	75	
5"	125	147.6	15.88	9.53	139.7	135.48	65.5	84.8	158.8	125	202.2	127	122.5	75	
5"	125	147.6	15.88	9.53	141.3	137.03	65.5	84.8	158.8	125	202.2	127	122.5	75	
6"	150	147.6	15.88	9.53	165.1	160.9	65.5	97.3	171.5	225	215	139.5	122.5	75	
6"	150	147.6	15.88	9.53	168.3	163.96	65.5	97.3	171.5	225	215	139.5	122.5	75	
8"	200	133.4	19.05	11.10	219.1	214.4	59.2	127	203.2	225	274	198.5	122.5	75	
10"	250	158.8	19.05	12.70	273.1	268.28	76.2	155.7	247.7	225	274	198.5	122.5	75	
12"	300	165.1	19.05	12.70	323.9	318.29	76.2	181.1	273.1	225	293.5	198.5	132	87	

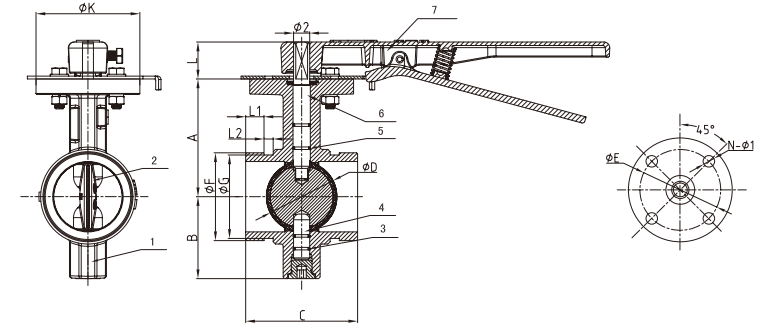
### Grooved Butterfly Valve (D81X4, D381X4), PN10/16



D81X4



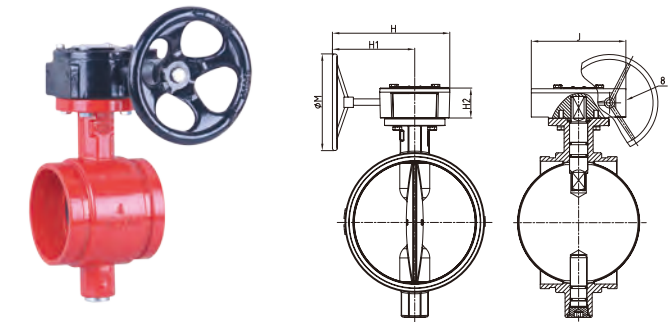
- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange Standard: ISO 5211  
Stem drive by keys, parallel or diagonal square or flat head
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Disc	EN-GJS-450-10+EPDM	EN-GJS-450-10+NBR
3	O-Ring	NBR	EPDM
4	Stem	Stainless Steel	SS304, SS316, SS420, SS431
5	O-Ring	NBR	EPDM
6	Stem	Stainless Steel	SS304, SS316, SS420, SS431
7	Lever	EN-GJS-450-10	Aluminum
8	Signal Gearbox	EN-GJS-450-10	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.



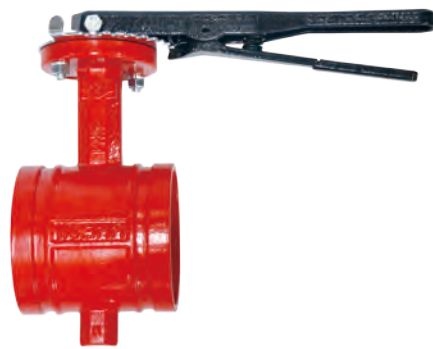
D381X4

DN		Dimensions(mm)																	
Inch	mm	A	B	C	ØF	ØG	L1	L2	L	ØK	H	H1	H2	J	ØM	Ø2	ISO 5211	ØE	N-Ø1
2"	50	89	65	81	60.3	57.15	15.88	7.93	32	90	206	158	52	114	150	14	F07	70	4-Ø10
2.5"	65	102	71	97	73.0	69.09	15.88	7.93	32	90	206	158	52	114	150	14	F07	70	4-Ø10
2.5"	65	102	71	97	76.1	72.26	15.88	7.93	32	90	206	158	52	114	150	14	F07	70	4-Ø10
3"	80	109	81	97	88.9	84.94	15.88	7.93	32	90	206	158	52	114	150	14	F07	70	4-Ø10
4"	100	128	95	116	114.3	110.08	15.88	9.53	32	90	206	158	52	114	150	16	F07	70	4-Ø10
5"	125	141	111	148	139.7	135.48	15.88	9.53	32	90	206	158	52	114	150	16	F07	70	4-Ø10
5"	125	141	111	148	141.3	137.03	15.88	9.53	32	90	206	158	52	114	150	16	F07	70	4-Ø10
6"	150	153	133	148	159.0	154.50	15.88	9.53	32	90	206	158	52	114	150	20	F07	70	4-Ø10
6"	150	153	133	148	165.1	160.9	15.88	9.53	32	90	206	158	52	114	150	20	F07	70	4-Ø10
6"	150	153	133	148	168.3	163.96	15.88	9.53	32	90	206	158	52	114	150	20	F07	70	4-Ø10
8"	200	184	164	133	219.1	214.4	19.05	11.10	45	125	310	239	69	167	300	26	F10	102	4-Ø12
10"	250	216	196	159	273.0	268.28	19.05	12.70	45	125	310	239	69	167	300	26	F10	102	4-Ø12
12"	300	254	226	165	323.9	318.29	19.05	12.70	45	125	307	229	73	190	300	28	F10	102	4-Ø12

Note: Valve must not be installed with disc in full open position. Disc must be partly closed so that no part is protruding beyond end of valve body.

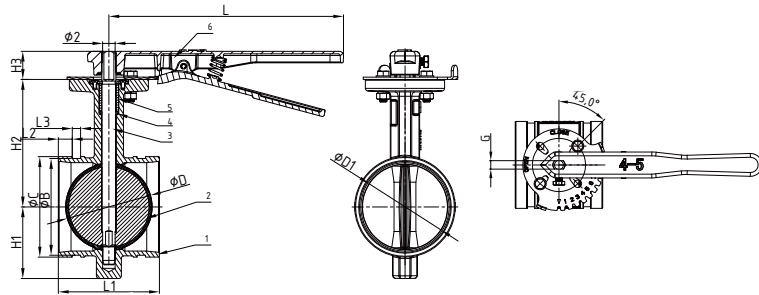


### Grooved Butterfly Valve (D81XS4, D381XS4), PN10/16



D81XS4

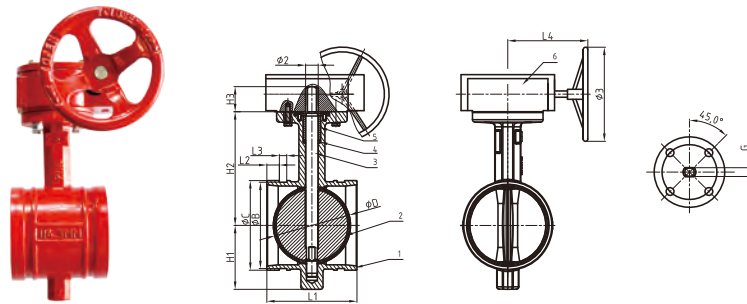
- Design Standard: BS EN 593
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Disc	EN-GJS-450-10+EPDM	EN-GJS-450-10+NBR
3	Stem	SS420	SS304, SS316
4	O-Ring	NBR	EPDM
5	Sleeve	Nylon	
6	Handle	EN-GJS-450-10	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.



D381XS4

DN		Dimensions(mm)															
Inch	mm	L1	L2	L3	ΦB	ΦC	ΦD	H1	H2	H3	Φ2	G	ISO5211	L4	Φ3	L	D1
2"	60.3	88	15.9	7.9	57.2	60	50	50	110	32	14	9.5	F07	158	150	267	49
2.5"	76.1	90	15.9	7.9	72.3	76	61	60	122	32	14	9.5	F07	158	150	267	59
3"	88.9	96	15.9	7.9	84.9	89	76	65	122	32	14	9.5	F07	158	150	267	74
4"	114.3	115	15.9	9.5	110	114	99	82	145	32	16	11	F07	158	150	267	97
5"	139.7	125	15.9	9.5	136	140	123	95	155	32	16	11	F07	158	150	267	121
6"	165.1	132	15.9	9.5	161	165	148	110	175	32	20	13	F07	158	150	267	146
8"	219.1	147	19.1	11	214	219	199	150	200	45	26	21	F10	239	300	356	201

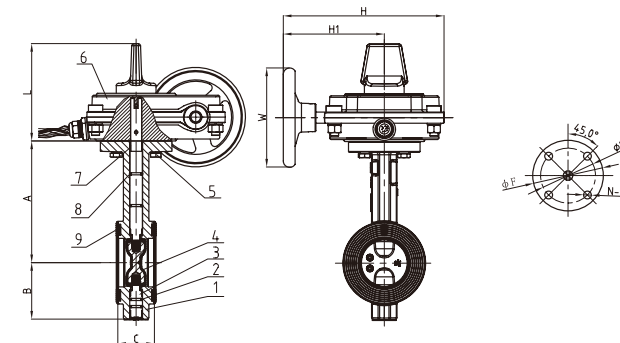
### Wafer Butterfly Valve with Tamper Switch (XD371X), PN10/16, UL/FM/VdS Approved



XD371X



- Design Standard: BS EN 593
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Flange Specification: BS EN 1092-2 PN10/PN16, ASME B16.1 CL125, ASME B16.5 CL150, JIS B2210 10K;



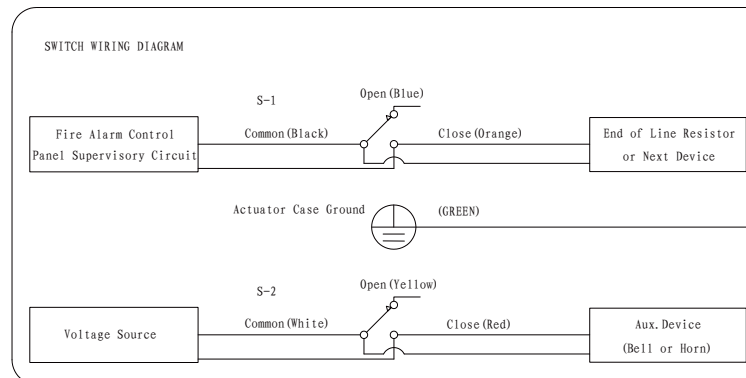
MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Body	EN-GJS-450-10	
2	O-Ring	NBR	EPDM
3	Stub Shaft	SS431	
4	Disc	EN-GJS-450-10+EPDM	EN-GJS-450-10+NBR
5	Hex Nut	Carbon Steel Zinc plated	
6	Signal Gearbox	Body: EN-GJS-450-10	
7	Drive Shaft	SS431	
8	O-Ring	NBR	EPDM
9	End Face Seal	EPDM	NBR

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.



XD371X39



DN		Dimensions(mm)											
Inch	mm	A	B	C	L	H1	H	W	ISO5211	ΦE	ΦF	N-ΦM	
2"	50	140.5	65	43	122.5	127	202.2	125	F07	70	90	4-Φ10	
2.5"	65	153	71	46	122.5	127	202.2	125	F07	70	90	4-Φ10	
3"	80	157.5	81	46	122.5	127	202.2	125	F07	70	90	4-Φ10	
4"	100	176	95	52	122.5	127	202.2	125	F07	70	90	4-Φ10	
5"	125	191	111	56	122.5	127	202.2	125	F07	70	90	4-Φ10	
6"	150	202.5	133	56	122.5	139.5	215	225	F07	70	90	4-Φ10	
8"	200	243.5	164	60	122.5	198.5	274	225	F10	102	125	4-Φ12	
10"	250	273	196	68	122.5	198.5	274	225	F10	102	125	4-Φ12	
12"	300	311	226	78	132	198.5	293.5	225	F10	102	125	4-Φ12	

Note: Not designed for dead end service

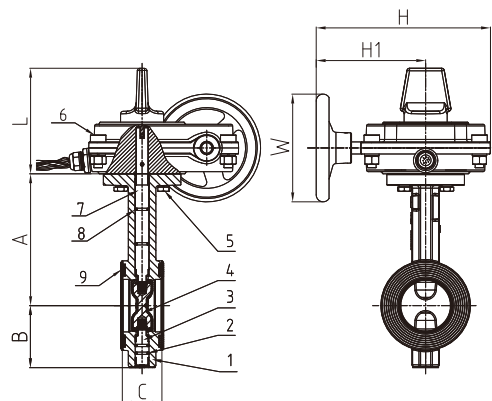
### Wafer Butterfly Valve with Normally Closed Tamper Switch (XD371XG), PN10/16



XD371XG



- Design Standard: BS EN 593
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Flange Specification: BS EN 1092-2 PN10/PN16



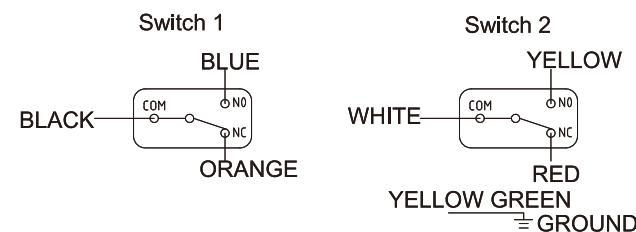
MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Body	EN-GJS-450-10	
2	O-Ring	NBR	EPDM
3	Stub Shaft	SS431	
4	Disc	EN-GJS-450-10+EPDM	EN-GJS-450-10+NBR
5	Bolt	Carbon Steel Zinc plated	
6	Signal Gearbox	Body: EN-GJS-450-10	
7	Drive Shaft	SS431	
8	O-Ring	NBR	EPDM
9	End Face Seal	EPDM	NBR

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

Signal description:

1. Switch parameters: 16A 1/2HP 125/250VAC
2. Wiring diagram:



DN		Dimensions(mm)								
Inch	mm	A	B	C	L	H1	H	ΦW	ISO5211	
2"	50	140.5	65	43	122.5	127	202.2	125	F07	
2.5"	65	153	71	46	122.5	127	202.2	125	F07	
3"	80	157.5	81	46	122.5	127	202.2	125	F07	
4"	100	176	95	52	122.5	127	202.2	125	F07	
5"	125	191	111	56	122.5	127	202.2	125	F07	
6"	150	202.5	133	56	122.5	139.5	215	225	F07	
8"	200	243.5	164	60	122.5	198.5	274	225	F10	
10"	250	273	196	68	122.5	198.5	274	225	F10	
12"	300	311	226	78	132.0	198.5	293.5	225	F10	

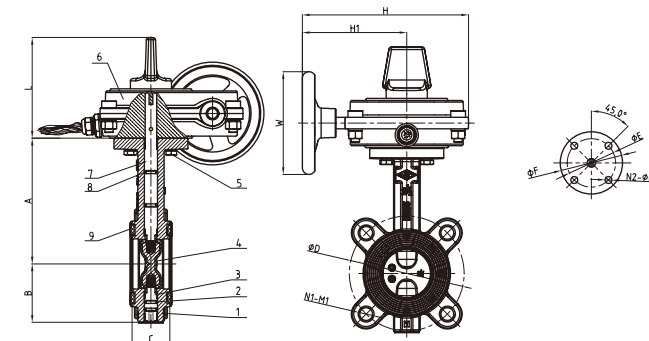
### Lugged Wafer Butterfly Valve with Tamper Switch (XD371XL), PN10/16, UL/FM/VdS Approved



XD371XL



- Design Standard: BS EN 593
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Flange Specification: BS EN 1092-2 PN10/PN16, ASME B16.1 CL125, ASME B16.5 CL150, JIS B2210 10K;

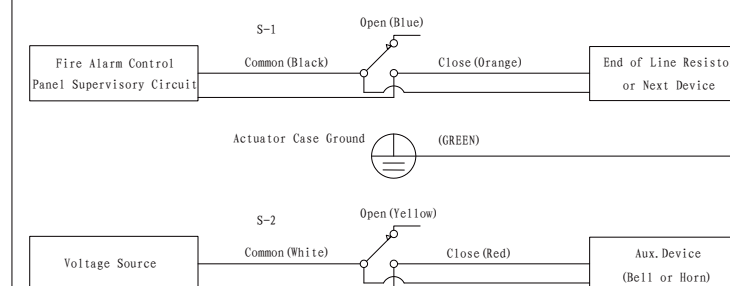


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Body	EN-GJS-450-10	
2	O-Ring	NBR	EPDM
3	Stub Shaft	SS431	
4	Disc	EN-GJS-450-10+EPDM	EN-GJS-450-10+NBR
5	Hex Nut	Carbon Steel Zinc plated	
6	Signal Gearbox	Body: EN-GJS-450-10	
7	Drive Shaft	SS431	
8	O-Ring	NBR	EPDM
9	End Face Seal	EPDM	NBR

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

SWITCH WIRING DIAGRAM



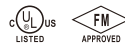
DN		Dimensions(mm)														
Inch	mm	A	B	C	L	H1	H	W	ØD		N1-M1		N2-M2	ISO5211	ΦE	ΦF
									PN10	PN16	PN10	PN16				
2"	50	140.5	65	43	122.5	127	202.2	125	125	125	4-M16	4-M16	4-φ10	F07	70	90
2.5"	65	153	71	46	122.5	127	202.2	125	145	145	4-M16	4-M16	4-φ10	F07	70	90
3"	80	157.5	81	46	122.5	127	202.2	125	160	160	8-M16	8-M16	4-φ10	F07	70	90
4"	100	176	95	52	122.5	127	202.2	125	180	180	8-M16	8-M16	4-φ10	F07	70	90
5"	125	191	111	56	122.5	127	202.2	125	210	210	8-M16	8-M16	4-φ10	F07	70	90
6"	150	202.5	133	56	122.5	139.5	215	225	240	240	8-M20	8-M20	4-φ10	F07	70	90
8"	200	243.5	164	60	122.5	198.5	274	225	295	295	8-M20	12-M20	4-φ12	F10	102	125
10"	250	273	196	68	122.5	198.5	274	225	350	355	12-M20	12-M24	4-φ12	F10	102	125
12"	300	311	226	78	132	198.5	293.5	225	400	410	12-M20	12-M24	4-φ12	F10	102	125



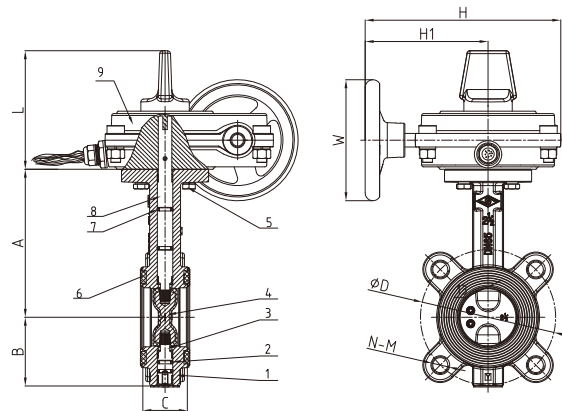
### Lugged Wafer Butterfly Valve with Normally Closed Tamper Switch (XD371XLG), PN10/16



XD371XLG



- Design Standard: BS EN 593
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Flange Specification: BS EN 1092-2 PN10/PN16



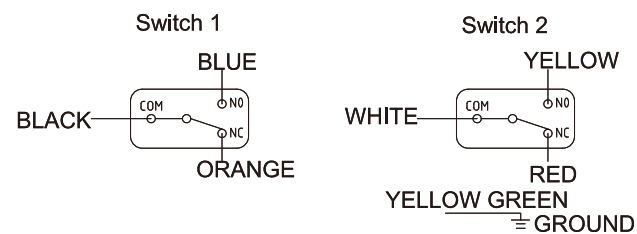
MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Body	EN-GJS-450-10	
2	O-Ring	NBR	EPDM
3	Stub Shaft	SS431	
4	Disc	EN-GJS-450-10+EPDM	EN-GJS-450-10+NBR
5	Bolt	Carbon Steel Zinc plated	
6	Signal Gearbox	Body: EN-GJS-450-10	
7	Drive Shaft	SS431	
8	O-Ring	NBR	EPDM
9	End Face Seal	EPDM	NBR

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

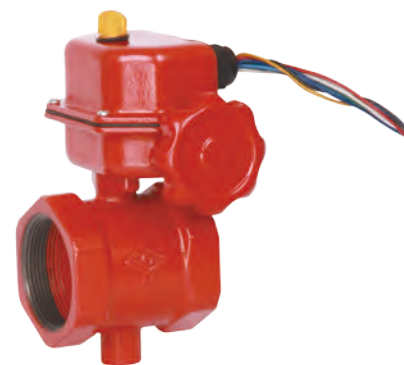
Signal description:

1. Switch parameters: 16A 1/2HP 125/250VAC
2. Wiring diagram:



DN		Dimensions(mm)										
Inch	mm	A	B	C	L	H1	H	ØD	N-M	H	ΦW	ISO5211
2"	50	140.5	65	43	122.5	127	202.2	125	4-M16	202.2	125	F07
2.5"	65	153	71	46	122.5	127	202.2	145	4-M16	202.2	125	F07
3"	80	157.5	81	46	122.5	127	202.2	160	8-M16	202.2	125	F07
4"	100	176	95	52	122.5	127	202.2	180	8-M16	202.2	125	F07
5"	125	191	111	56	122.5	127	202.2	210	8-M16	202.2	125	F07
6"	150	202.5	133	56	122.5	139.5	215	240	8-M20	215	225	F07
8"	200	243.5	164	60	122.5	198.5	274	295	12-M20	274	225	F10
10"	250	273	196	68	122.5	198.5	274	355	12-M24	274	225	F10
12"	300	311	226	78	132	198.5	293.5	410	12-M24	293.5	225	F10

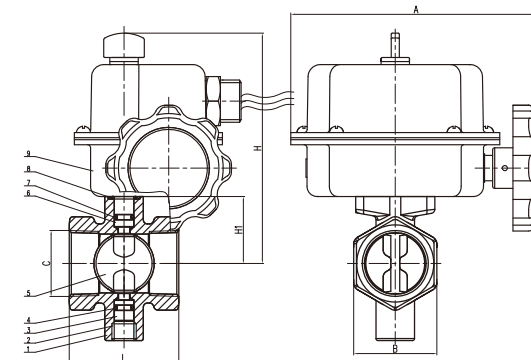
### Threaded Butterfly Valve with Tamper Switch (XD311X), PN10, UL/FM Approved



XD311X



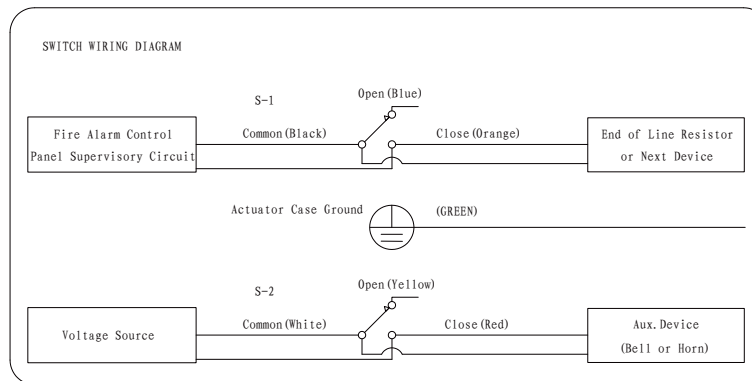
- Connection Ends: Thread to ISO 7-1
- Working Pressure: PN10
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or double coating of hot dipped galvanization plus electroplating



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Screw	Carbon Steel Zinc Plated	SS304, SS316
3	Stem	Stainless Steel	SS304, SS316, SS420, SS431
4	O-Ring	NBR	EPDM
5	Disc	Carbon Steel+EPDM	Carbon Steel+NBR
6	Stem	Stainless Steel	SS304, SS316, SS420, SS431
7	O-Ring	NBR	EPDM
8	O-Ring	NBR	EPDM
9	Signal Gearbox	Carbon Steel	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.



DN		Dimensions(mm)						
Inch	mm	L	H	H1	A	B	C(Rc)	
1"	25	54	115	33	125	41	1	
1.25"	32	67	117.5	37	125	49	11/4	
1.5"	40	73	121	40.5	125	55.5	11/2	
2"	50	82.5	131	48	125	71	2	

### Grooved Resilient Swing Check Valve (H84X), PN10/16, UL/FM/LPCB Approved



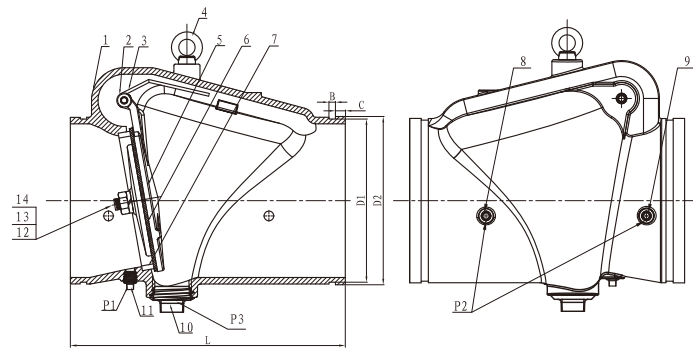
H84X



- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



H84XF4



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Hinge Pin	SS420	
3	Spring	SS304	SS316
4	Eye Bolt	Carbon Steel Zinc Plated	
5	Disc	DN50-100 SS304 DN150-300 EN-GJS-450-10	SS304
6	Disc Sealing Ring	EPDM	NBR
7	Seat Ring	ASTM B62 C83600 (Pressed Fit)	SS304, SS316 Pressed Fit or Threaded
8	Plug	Malleable Iron Galvanized	Bronze ASTM B584
9	Plug	Malleable Iron Galvanized	Bronze ASTM B584
10	Plug	Malleable Iron Galvanized	Bronze ASTM B584
11	Plug	Malleable Iron Galvanized	Bronze ASTM B584
12	Bolt	SS304	SS316
13	Washer	SS304	SS316
14	Nut	SS304	SS316

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)								
Inch	mm	L	D1	D2	B	C	P1	P3		P2
								Standard	Optional	
2"	50	171	57.15	60.3	7.93	15.88	1/2	1/2	1	3/8
2.5"	65	184	69.09	73	7.93	15.88	1/2	1/2	1 1/4	3/8
2.5"	65	184	72.26	76.1	7.93	15.88	1/2	1/2	1 1/4	3/8
3"	80	197	84.94	88.9	7.93	15.88	1/2	1/2	1 1/4	3/8
4"	100	210	110.08	114.3	9.53	15.88	1/2	1/2	2	1/2
5"	125	248	135.48	139.7	9.53	15.88	1/2	1/2	2	1/2
5"	125	248	137.03	141.3	9.53	15.88	1/2	1/2	2	1/2
6"	150	324	160.9	165.1	9.53	15.88	1/2	1/2	2	1/2
6"	150	324	163.96	168.3	9.53	15.88	1/2	1/2	2	1/2
8"	200	371	214.4	219.1	11.13	19.05	1/2	1/2	2	1/2
10"	250	457	268.28	273	12.7	19.05	1/2	1/2	2	1/2
12"	300	535	318.29	323.9	12.7	19.05	1/2	1/2	2	1/2

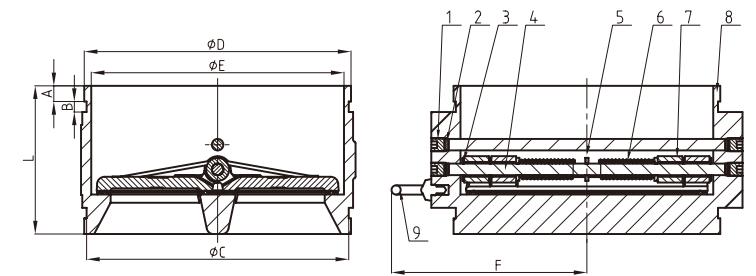
### Double Door Grooved Check Valve (DH87XP), PN10/16



DH87XP



- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Countersunk Hex Head Screws	Carbon Steel Zinc Plated	
2	Seal Ring	EPDM	
3	Gasket	PTFE	
4	Shaft	SS420	SS304, SS316, SS431
5	Gasket	PTFE	
6	Spring	SS304	
7	Disc	SS304	SS316, QT450-10
8	Body	EN-GJS-450-10	
9	Eye Bolt	Carbon Steel Zinc Plated	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)						
Inch	mm	A	B	C	D	E	F	L
8"	219.1	19.1	11.1	214.4	219	200	165	160
10"	273.0	19.1	12.7	268.28	273	253	203	180
12"	323.9	19.1	12.7	318.29	324	307	228	180
14"	377.0	23.8	12.7	371.1	377	354	258	200



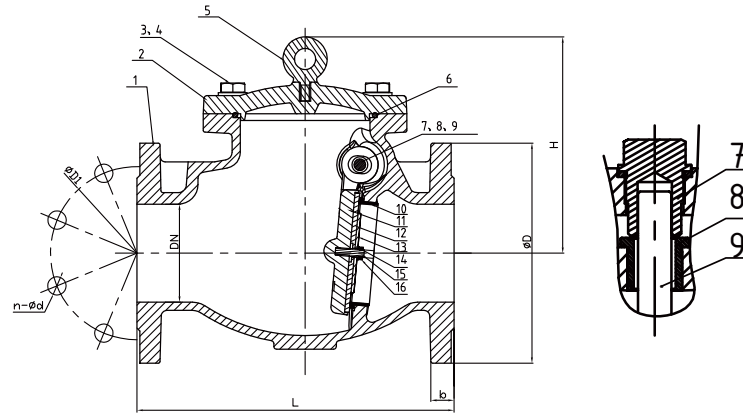
### Flanged Resilient Swing Check Valve (H44X2), PN10/16, UL/FM/LPCB Approved



H44X2

UL LISTED FM APPROVED LPCB NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Bonnet	EN-GJS-450-10	
3	Bolts	Carbon Steel Zinc Plated	
4	Flat Washer	Carbon Steel Zinc Plated	
5	Eye Bolt	Carbon Steel Zinc Plated	
6	O-Ring	EPDM	NBR
7	Plug	SS304	Bronze ASTM B584
8	Bushing	Brass CW617N	
9	Hinge Pin	SS420	SS304, SS316
10	Seat	Bronze C83600	
11	Disc	EN-GJS-450-10	
12	Disc Sealing Ring	EPDM	
13	Retainer Washer	SS420 (DN50-DN100) EN-GJS-450-10 (DN125-DN300)	
14	Washer	SS304	
15	Stud	SS304	
16	Nut	SS304	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		PN	Dimensions(mm)							
Inch	mm		L	D	D1	d	b	E	H	n-Φd
2"	50	10/16	203	165	125	99	19	3	133	4-Φ19
2.5"	65	10/16	216	185	145	118	19	3	150	4-Φ19
3"	80	10/16	241	200	160	132	19	3	150	8-Φ19
4"	100	10/16	292	220	180	156	19	3	218	8-Φ19
5"	125	10/16	330	250	210	184	19	3	245	8-Φ19
6"	150	10/16	356	285	240	211	19	3	290	8-Φ23
8"	200	10	495	340	295	266	20	3	330	8-Φ23
		16								12-Φ23
10"	250	10	622	405	350	319	22	3	350	12-Φ23
		16			355					12-Φ28
12"	300	10	698	460	400	370	24.5	4	376	12-Φ23
		16			410					12-Φ28

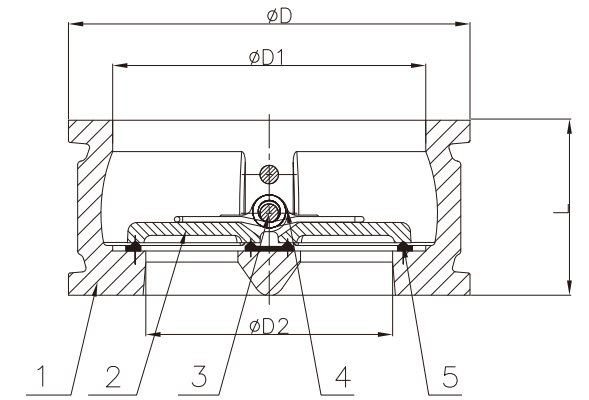
### Double Door Wafer Check Valve (DH77XSR), PN10/16



DH77XSR

UL LISTED FM APPROVED CE NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: BS EN 1092 PN10/PN16/PN25, AS 2129 TABLE E, JIS B2212 10K, BS 10 TABLE D/E
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



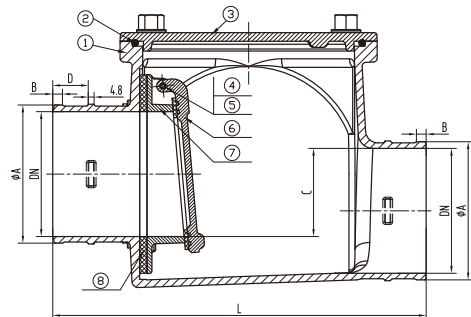
MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Disc	SS316	EN-GJS-450-10, SS304, AL-Bronze UNC 95400
3	Stem	SS420	SS304, SS316, SS416
4	Spring	SS304	SS316
5	Rubber Seat	EPDM	NBR

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)			
Inch	mm	L	D	D1	D2
2"	50	54	106	68	46
2.5"	65	60	127	78	60
3"	80	57	134	102	70
4"	100	67	162	117	84
5"	125	83	194	145	115
6"	150	95	218	170	134
8"	200	127	277	226	184
10"	250	140	336	265	220
12"	300	181	406	310	260
14"	350	184	447	360	302
16"	400	191	505	410	350

### Backwater Valve (HSB4X), PN10



HSB4X



- Connection Ends: ASTM A888
- Working Pressure: PN10
- Temperature Range: 0°C - 80°C
- Coating: Painting

MATERIAL SPECIFICATION

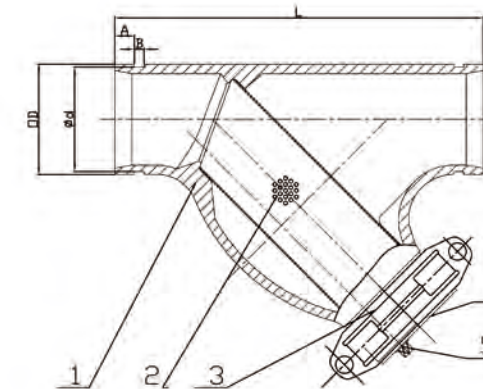
Part No.	Part	Standard Specification
1	Valve Body	EN-GJS-450-10
2	O-Ring	NBR
3	Bonnet	EN-GJS-450-10
4	Bolt	SS304
5	Nut	SS304
6	Disc	ASTM B62 C83600
7	Seat	ASTM B62 C83600
8	Disc Seat Ring	EPDM

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		PN	Dimensions(mm)				
Inch	mm		L	A±2.29	B	C (min)	D
2"	50	10	203	61.21	6.35	25	29
3"	80	10	241	86.61	6.35	38	29
4"	100	10	305	112.78	7.87	50	29
6"	125	10	394	161.54	7.87	76	38
8"	150	10	457	214.38	7.87	101	51

Note: Only 4" has been FM approved. Other dimensions are under application.

### Grooved Y-Type Strainer (V8), PN10/16, UL Listed



V8



- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request

MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Screen	SS304	SS316
3	Rigid Coupling	EN-GJS-450-10	
4	Cap	EN-GJS-450-10	
5	Plug	Malleable Iron Galvanized	Bronze ASTM B584

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)				
Inch	mm	L	OD	d	A	B
2"	50	247.5	60.3	57.15	15.88	7.92
2.5"	65	273	73	69.09	15.88	7.92
2.5"	65	273.0	76.1	72.26	15.88	7.92
3"	80	298.5	88.9	84.94	15.88	7.92
4"	100	362.0	114.3	110.08	15.88	9.52
5"	125	419.0	139.7	135.48	15.88	9.52
5"	125	419	141.3	137.03	15.88	9.52
6"	150	470.0	159.0	154.50	15.88	9.52
6"	150	470.0	165.1	160.90	15.88	9.52
6"	150	470.0	168.3	163.96	15.88	9.52
8"	200	609.5	219.1	214.40	19.05	11.13
10"	250	686.0	273.0	268.28	19.05	12.70
12"	300	762.0	323.9	318.29	19.05	12.70

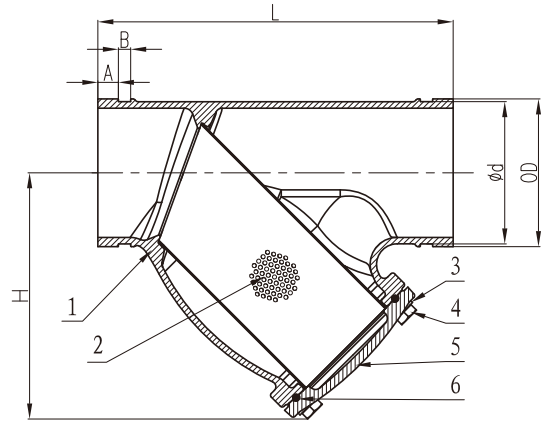


### Grooved Y-Type Strainer (V8S), PN10/16



V8S

- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Screen	SS304	SS316
3	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
4	Bolt	Carbon Steel Zinc Plated	SS304, SS316
5	Cap	EN-GJS-450-10	
6	O-Ring	NBR	EPDM

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)					
Inch	mm	H	L	OD	d	A	B
2"	50	118	185.0	60.3	57.15	15.88	7.93
2.5"	65	136	210.0	76.1	72.26	15.88	7.93
3"	80	161	245.0	88.9	84.94	15.88	7.93
4"	100	191	275.0	114.3	110.08	15.88	9.53
5"	125	242	340.0	139.7	135.48	15.88	9.53
6"	150	274	385.0	165.1	160.90	15.88	9.53
8"	200	357	490.0	219.1	214.40	19.05	11.10

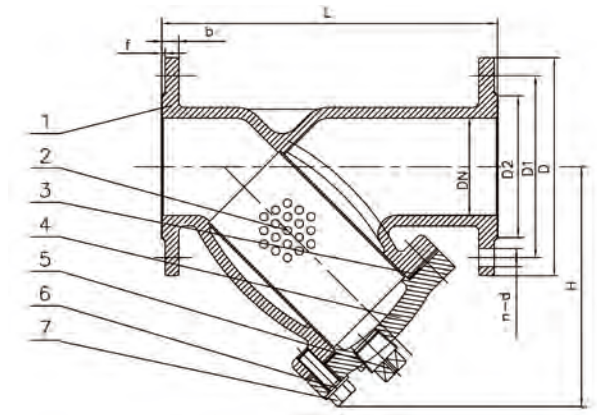
### Flanged Y-Type Strainer (V4), PN10/16, UL Listed



V4

UL LISTED NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Screen	SS304 (Perforated)	SS304, SS316 (Perforated, Knitted, Double Screen)
3	Gasket	Graphite+Acanthopore Plate	EPDM
4	Bonnet	EN-GJS-450-10	
5	Plug	Malleable Iron Galvanized	Bronze ASTM B584
6	Bolt	Carbon Steel Zinc Plated	SS304, SS316
7	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		PN	Dimensions(mm)							
Inch	mm		L	D	D1	D2	b	n-Φd	f	H
2"	50	10/16	230	165	125	99	19	4-Φ19	3	140
2.5"	65	10/16	290	185	145	118	19	4-Φ19	3	175
3"	80	10/16	310	200	160	132	19	8-Φ19	3	198
4"	100	10/16	350	220	180	156	19	8-Φ19	3	229
5"	125	10/16	400	250	210	184	19	8-Φ19	3	287
6"	150	10/16	480	285	240	211	19	8-Φ23	3	304
8"	200	10	600	340	295	266	20	8-Φ23	3	370.5
		16						12-Φ23		
10"	250	10	730	405	350	319	22	12-Φ23	3	469
		16			355			12-Φ28		
12"	300	10	850	460	400	370	24.5	12-Φ23	4	540
		16			410			12-Φ28		
18"	450	10	1200	640	565	530	30	20-Φ28	4	862
		16			585			20-Φ31		
20"	500	10	1250	715	620	582	31.5	20-Φ28	4	926
		16			650			20-Φ34		
24"	600	10	1450	840	725	682	36	20-Φ31	5	1057
		16			770			20-Φ37		

Note: UL listed from 2" to 12"

SHORT STYLE

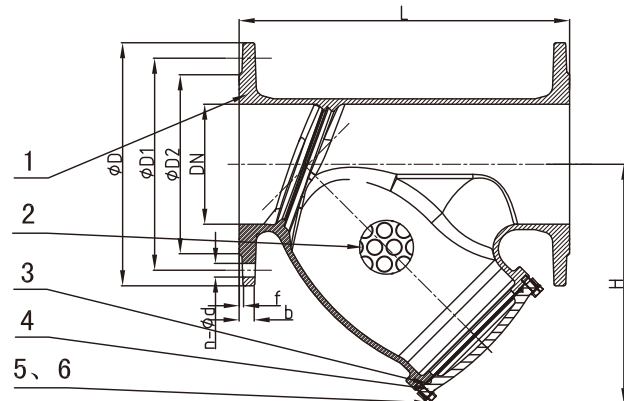
DN		PN	Dimensions(mm)							
Inch	mm		L	D	D1	D2	b	n-Φd	f	H
18"	450	10	850	640	565	530	30	20-Φ28	4	693
		16			585			20-Φ31		
20"	500	10	1000	715	620	582	31.5	20-Φ28	4	774
		16			650			20-Φ34		
24"	600	10	1100	840	725	682	36	20-Φ31	5	956
		16			770			20-Φ37		

### Flanged Y-Type Strainer (V4S), PN10/16



V4S

- Connection Ends: BS EN 1092-2
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Screen	SS304	SS316
3	Gasket	EPDM	NBR
4	Bonnet	EN-GJS-450-10	
5	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
6	Bolt	Carbon Steel Zinc Plated	SS304, SS316

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		PN	Dimensions(mm)							
Inch	mm		L	D	D1	D2	b	n-Φd	f	H
2"	50	10/16	195	165	125	99	19	4-Φ19	3	118
2.5"	65	10/16	210	185	145	118	19	4-Φ19	3	136
3"	80	10/16	255	200	160	132	19	8-Φ19	3	161
4"	100	10/16	285	220	180	156	19	8-Φ19	3	191
5"	125	10/16	340	250	210	184	19	8-Φ19	3	242
6"	150	10/16	390	285	240	211	19	8-Φ23	3	274
8"	200	10	490	340	295	266	20	8-Φ23	3	356
		16						12-Φ23	3	
10"	250	10	540	405	350	319	22	12-Φ23	3	385
		16			355			12-Φ28	3	
12"	300	10	650	460	400	370	24.5	12-Φ23	4	486
		16			410			12-Φ28		

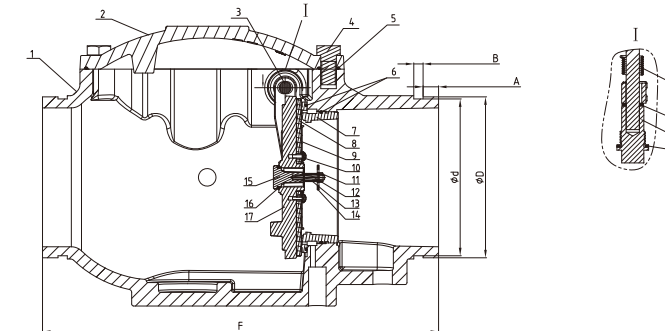
### Grooved Wet Alarm Check Valve (ZSFZ8X9), PN10/16



ZSFZ8X9



- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Painting or Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

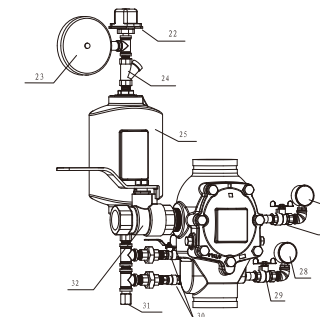


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Valve Body	EN-GJS-450-10
2	Bonnet	EN-GJS-450-10
3	Pin	SS304
4	Hex Bolt	Carbon Steel Zinc Plated
5	Body Gasket	EPDM
6	O-Ring	NBR
7	Seat	C83600
8	Gasket	EPDM
9	Disc Gland	SS304
10	Slotted Screw	SS304
11	Hexagonal Nut	SS304
12	Adjusting Screw	SS304
13	Core Tube	SS304
14	Core Board	SS304
15	Disc Core	C89833
16	O-Ring	NBR
17	Disc	C83600
18	Spring	SS304
19	Sealing Fillet Gasket	PTFE
20	Sealing Plug	SS304
21	Sealing Fillet Gasket	PTFE

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		OD	Dimensions(mm)				
Inch	mm		A	B	Φd	ΦD	F
3"	80	88.9	15.88	7.93	84.94	88.9	320.3
4"	100	114.3	15.88	9.53	110.08	114.3	382
		159	15.88	9.53	154.5	159	406.4
6"	150	165.1	15.88	9.53	160.9	165.1	406.4
		168.3	15.88	9.53	163.96	168.3	406.4
8"	200	219.1	19.05	11.1	214.4	219.1	446



External Accessories			
Part No.	Part	Part No.	Part
22	Pressure Switch	28	Pressure Gauge
23	Alarm	29	Ball Valve
24	Strainer	30	Drip Valve
25	Retard Chamber	31	Locking Balve
26	Pressure Gauge	32	Check Ball Valve
27	Ball Valve		



### Flanged Wet Alarm Valve (ZSFZ4X9)

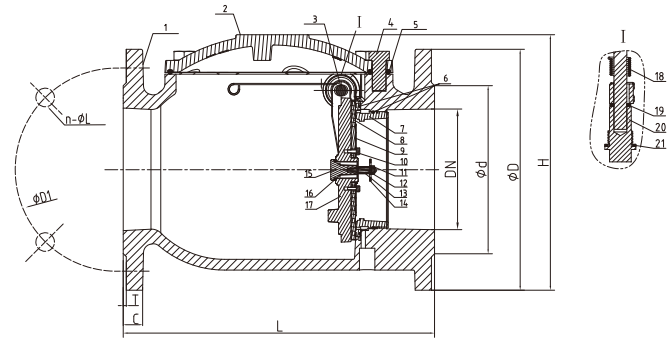
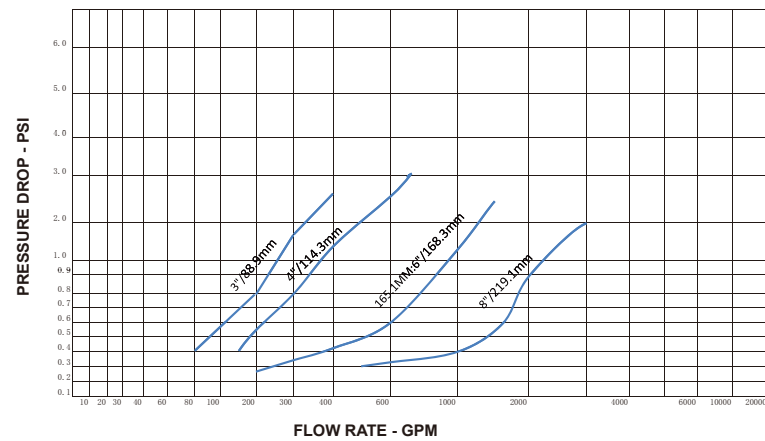


ZSFZ4X9



- Connection Ends: BS EN 1092-2:1997
- Temperature Range: 0°C - 80°C
- Coating: Painting or Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Statement: The alarm check valve works as a check valve by preventing the reverse flow of water from the system piping to the water supply. The valve is trimmed with a water bypass line, which has an in-line swing check valve. The bypass line allows pressure surges to enter the system and to be trapped above the alarm check valve's clapper without the clapper lifting and causing false alarms.

When a significant flow of water occurs, such as from an open sprinkler, the alarm valve's clapper lifts and allows water to enter the system. Simultaneously, water enters an intermediate chamber, which allows the water to activate an alarm either through a water motor alarm or through a water pressure alarm. These alarms continue to sound until the flow of water is stopped.

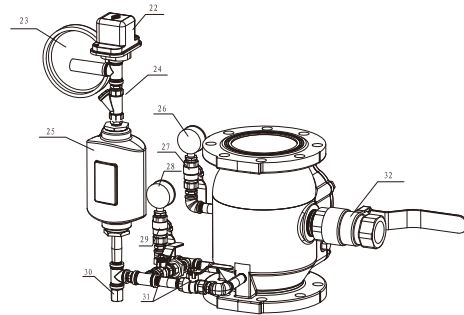


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Valve Body	EN-GJS-450-10
2	Bonnet	EN-GJS-450-10
3	Pin	SS304
4	Hex Bolt	Carbon Steel Zinc Plated
5	Body Gasket	EPDM
6	O-Ring	NBR
7	Seat	C83600
8	Gasket	EPDM
9	Disc Gland	SS304
10	Slotted Screw	SS304
11	Hexagonal Nut	SS304
12	Adjusting Screw	SS304
13	Core Tube	SS304
14	Core Board	SS304
15	Disc Core	C89833
16	O-Ring	NBR
17	Disc	C83600
18	Spring	SS304
19	Sealing Fillet Gasket	PTFE
20	Sealing Plug	SS304
21	Sealing Fillet Gasket	PTFE

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

Inch	mm	DN	PN	Dimensions (mm)						
				L	D	D1	d	n-ΦL	C	T
3"	80	10/16	10	241	200	160	132	8-Φ19	19	3
4"	100	10/16	16	292	220	180	156	8-Φ19	19	3
6"	150	10/16	10	356	285	240	211	8-Φ23	19	3
8"	200	10	16	495	340	295	266	8-Φ23	20	3
			16	495	340	295	266	12-Φ23	20	3



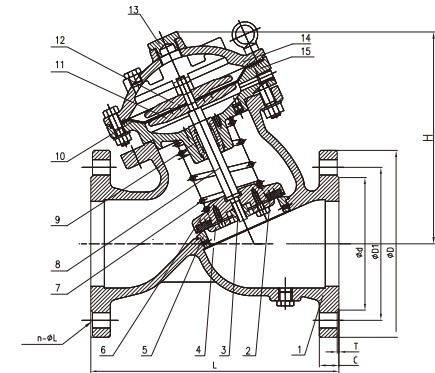
External Accessories			
Part No.	Part	Part No.	Part
22	Pressure Switch	28	Pressure Gauge
23	Alarm	29	Ball Valve
24	Strainer	30	Drip Valve
25	Retard Chamber	31	Locking Balve
26	Pressure Gauge	32	Check Ball Valve
27	Ball Valve		

### Deluge Alarm Valve (SK790X), PN10/16



SK790X

- Connection Ends: BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Statement: SK790X Deluge Alarm Valve is a diaphragm type of hydraulic control valve driven by the hydraulic pressure within the piping system, functioning as flow control and alarming device in the sprinkler and pre-action system, i.e. to start the sprinkler system for quenching of the fire and send out fire alarm through the fire bell when there is fire detected.

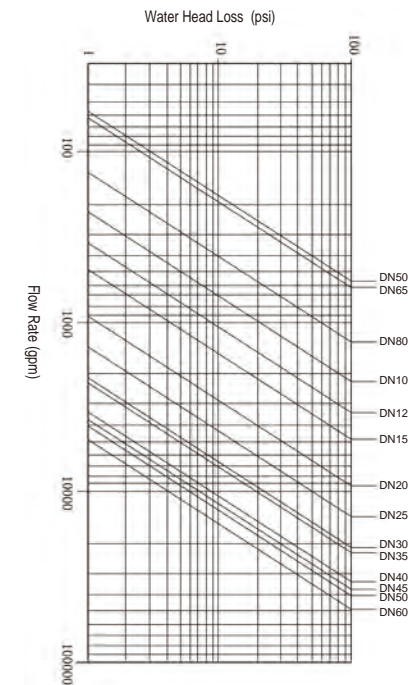


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Valve Body	EN-GJS-450-10
2	Main Gasket	EPDM
3	Disc head	SS304
4	Gland of Main Disc	EN-GJS-450-10
5	Seat	SS304
6	Main Disc	EN-GJS-450-10
7	Spring	SS304
8	Stern	SS304
9	Bushing	C89833
10	Diaphragm	EPDM
11	Bottom Gland	EN-GJS-450-10
12	Up Gland	EN-GJS-450-10
13	Cap Plug	SS304
14	Up Bonnet	EN-GJS-450-10
15	Middle Bonnet	EN-GJS-450-10

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600
Kv	41	53	105	175	285	402	730	1160	1400	1770	3010	3225	3395	4272



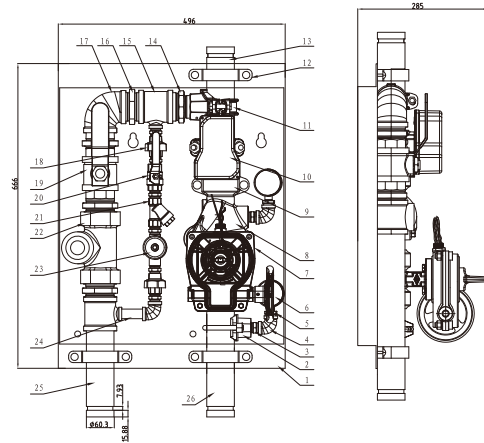
Inch	mm	DN	PN	Dimensions (mm)							n-ΦL
				L	H	D	D1	d	C	T	
2"	50	10/16	10	203	170	165	125	99	19	3	4-Φ19
2.5"	65	10/16	16	216	195	185	145	118	19	3	4-Φ19
3"	80	10/16	10	241	215	200	160	132	19	3	8-Φ19
4"	100	10/16	16	292	255	220	180	156	19	3	8-Φ19
5"	125	10/16	10	330	290	250	210	184	19	3	8-Φ19
6"	150	10/16	16	356	360	285	240	211	19	3	8-Φ23
			10	495	450	340	295	266	20	3	8-Φ23
8"	200	10	16	495	450	340	295	266	20	3	12-Φ23
			10	622	550	405	350	319	22	3	12-Φ23
10"	250	16	10	622	550	405	355	319	22	3	12-Φ28
			10	698	645	460	400	370	24.5	4	12-Φ23
12"	300	16	10	698	645	460	410	370	24.5	4	12-Φ28

### Zone Control Valve Assembly (ZSQKF), PN10/16



Zone Control Valve Assembly

- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Statement: The zone control valve assembly is mainly applied in fire protection system control modules integrated test and drain valve, butterfly valve, check valve, flow switch and pressure gauge



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Fixed Box	Q235B
2	Mechanical Tee	
3	Hexagon Nipple	KTH350-10
4	Elbow 90°	KTH350-10
5	Pressure Tapping	SS304
6	Pressure Gauge	
7	Butterfly Valve	
8	Check Valve	
9	Flexible Pipe Clamp	
10	Water Flow Indicator	
11	Mechanical Tee	
12	Pipe Clamp	Q235B
13	Grooved Tube	Q235
14	Reducing Hexagon Nipple	KTH350-10
15	Hexagon Nipple	KTH350-10
16	Reducing Tee	KTH350-10
17	Elbow 90°	KTH350-10
18	Conical Joint Union	KTH350-10
19	Ball Valve	
20	Ball Valve	
21	Strainer	
22	Endoscopic	
23	Solenoid Valve	Q235
24	Rebar Tube	Q235
25	Rebar Tube	Q235
26	Grooved Tube	Q235

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

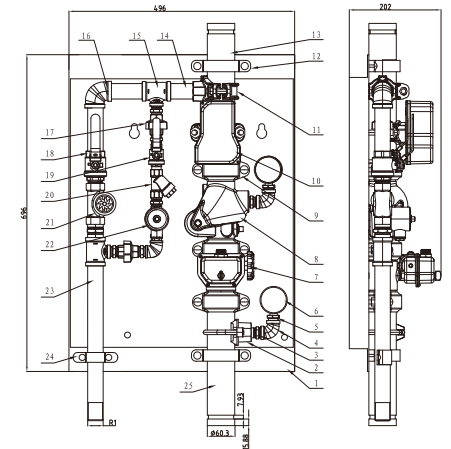
DN		Outline Dimension(mm)
Inch	mm	Length X Width X Height
2"	50	670X560X278
2.5"	65	740X572X296
3"	80	750X600X320
4"	100	840X650X350
5"	125	913X685X375
6"	150	1000X713X410

### Zone Control Valve Assembly (ZSQKF1), PN10/16



Zone Control Valve Assembly

- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Statement: The zone control valve assembly is mainly applied in fire protection system control modules integrated test and drain valve, butterfly valve, check valve, flow switch and pressure gauge



MATERIAL SPECIFICATION

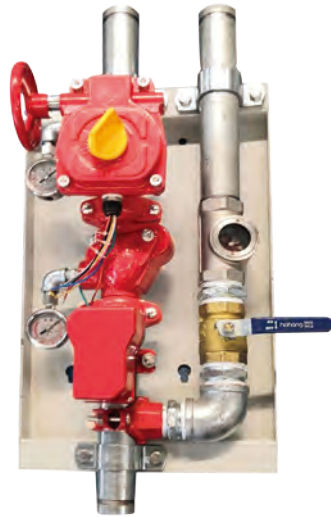
Part No.	Part	Standard Specification	Options
1	Fixed Box	Carbon Steel	
2	Mechanical Tee	EN-GJS-450-10	
3	Hexagon Nipple	Malleable Iron Galvanized	
4	Elbow 90°	Malleable Iron Galvanized	
5	Pressure Gauge Connector	SS304	SS316
6	Pressure Gauge		
7	Control Butterfly Valve	EN-GJS-450-10	
8	Check Valve	EN-GJS-450-10	
9	Flexible Coupling	EN-GJS-450-10	
10	Water Flow Indicator	EN-GJS-450-10	
11	Mechanical Tee	Malleable Iron Galvanized	
12	Fixed Pipe Clamp	Carbon Steel	
13	Steel Pipe	Carbon Steel	
14	Steel Pipe	Carbon Steel	
15	Reducing Tee	Malleable Iron Galvanized	
16	Elbow 90°	Malleable Iron Galvanized	
17	Union	Malleable Iron Galvanized	
18	Lockable Ball Valve	Brass	
19	Lockable Ball Valve	Brass	
20	Strainer	Brass	
21	Glass	SS304	SS316
22	Solenoid Valves	SS304	SS316
23	Steel Pipe	Carbon Steel	
24	Fixed Pipe Clamp	Carbon Steel	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Outline Dimension(mm)
Inch	mm	Length X Width X Height
2"	50	696 X 496 X 202

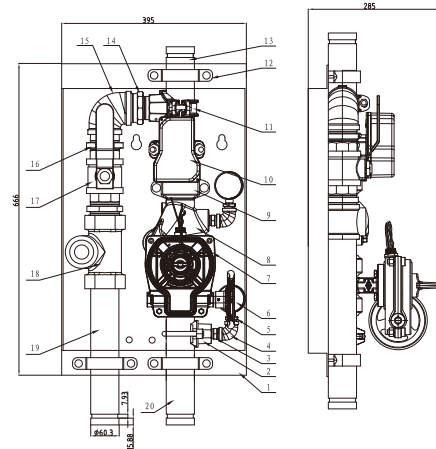


### Zone Control Valve Assembly (ZSQKFS), PN10/16



Zone Control Valve Assembly

- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Statement: The zone control valve assembly is mainly applied in fire protection system control modules integrated test and drain valve, butterfly valve, check valve, flow switch and pressure gauge



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Fixed Box	Carbon Steel	
2	Mechanical Tee	EN-GJS-450-10	
3	Nexagon Nipple	Malleable Iron Galvanized	
4	Elbow 90°	Malleable Iron Galvanized	
5	Pressure Gauge Connector	SS304	SS316
6	Pressure Gauge		
7	Control Butterfly Valve	EN-GJS-450-10	
8	Check Valve	EN-GJS-450-10	
9	Flexible Coupling	EN-GJS-450-10	
10	Water Flow Indicator	EN-GJS-450-10	
11	Mechanical Tee	Malleable Iron Galvanized	
12	Fixed Pipe Clamp	Carbon Steel	
13	Steel Pipe	Carbon Steel	
14	Hexagon Nipples Reducing	Malleable Iron Galvanized	
15	Elbow 90°	Malleable Iron Galvanized	
16	Nexagon Nipple	Malleable Iron Galvanized	
17	Ball Valve	Brass	
18	Glass	SS304	SS316
19	Steel Pipe	Carbon Steel	
20	Steel Pipe	Carbon Steel	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

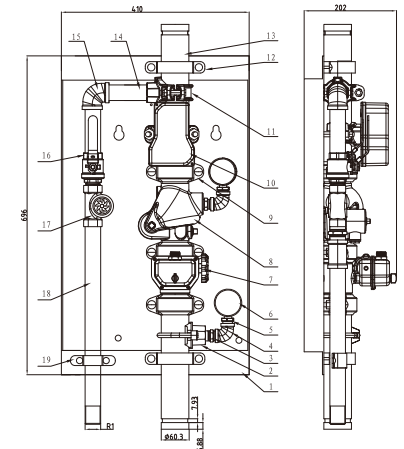
DN		Outline Dimension(mm)	
Inch	mm	Length X Width X Height	
2"	50	666 X 395 X 285	

### Zone Control Valve Assembly (ZSQKFS1), PN10/16



Zone Control Valve Assembly

- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Statement: The zone control valve assembly is mainly applied in fire protection system control modules integrated test and drain valve, butterfly valve, check valve, flow switch and pressure gauge



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Fixed Box	Carbon Steel	
2	Mechanical Tee	EN-GJS-450-10	
3	Nexagon Nipple	Malleable Iron Galvanized	
4	Elbow 90°	Malleable Iron Galvanized	
5	Pressure Gauge Connector	SS304	SS316
6	Pressure Gauge		
7	Control Butterfly Valve	EN-GJS-450-10	
8	Check Valve	EN-GJS-450-10	
9	Flexible Coupling	EN-GJS-450-10	
10	Water Flow Indicator	EN-GJS-450-10	
11	Mechanical Tee	Malleable Iron Galvanized	
12	Fixed Pipe Clamp	Carbon Steel	
13	Steel Pipe	Carbon Steel	
14	Steel Pipe	Carbon Steel	
15	Elbow 90°	Malleable Iron Galvanized	
16	Lockable Ball Valve	SS304	SS316
17	Glass	SS304	SS316
18	Steel Pipe	Carbon Steel	
19	Steel Pipe	Carbon Steel	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)			
Inch	mm	A	B	H	D
2"	50	696	410	202	60.3
2.5"	65	760	450	240	76.1
3"	80	800	480	328	88.9
4"	100	1002	480	360	114.3
5"	125	1060	500	390	139.7
6"	150	1147	500	438	165.1

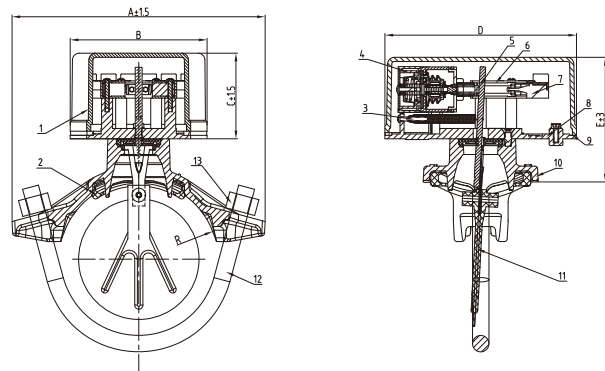
### Water Flow Indicator with Retard (ZSJZYS), PN10/16/25



ZSJZYS



- Connection Ends: ISO 6182
- Working Pressure: PN10/16/25
- Temperature Range: 0°C - 68°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Electrical Ratings: 125/250VAC 5A 24/30VDC 3A
- Minimum Flow Rate For Alarm: 15- 37.5L/min

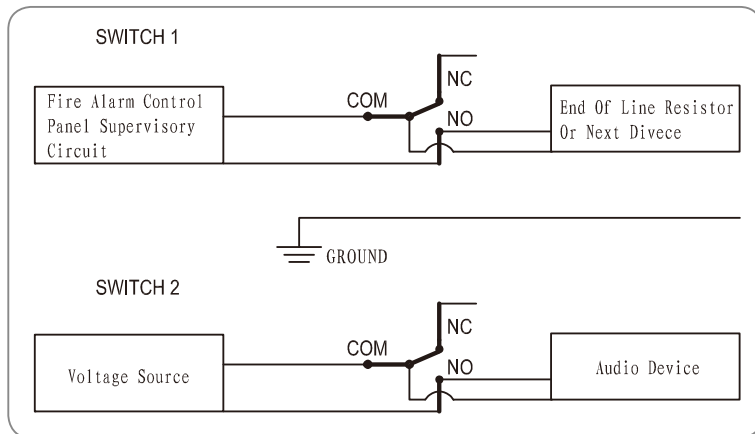


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Cover	ASTM B85-96 383.0E
2	Body Gasket	EPDM
3	Spring	SS304
4	Air Delay Device	PC GV3410R
5	Stem Seal Assembly	SS304+NBR
6	Connecting Rod	POM 500P
7	Switch Assembly	PC GV3410R
8	Connection Plate	ASTM B85-96 383.0E
9	Connection Plate Seal	NBR
10	Body	ASTM A536,65-45-12
11	Vane Assembly	PE
12	U-Bolts	Carbon Steel Zinc Plated
13	Nuts	Carbon Steel Zinc Plated

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

WIRING DIAGRAM



DN		Dimensions(mm)							
Inch	mm	R	A±1.5	B	C±1.5	D	E±3	Hole Dia. +1.6/0	Certificate
2"	50	60.3	116	100	63	140	83.5	30	UL/FM
2.5"	65	73	120	100	63	140	83.5	30	UL/FM
2.5"	65	76.1	122	100	63	140	83.5	30	UL/FM
3"	80	88.9	145	100	63	140	94	51	UL/FM
4"	100	114.3	185	100	63	140	94.5	51	UL/FM
5"	125	139.7	212	100	63	140	94.5	51	UL/FM
5"	125	141.3	212	100	63	140	94.5	51	UL/FM
6"	150	165.1	254	100	63	140	95	51	UL/FM
6"	150	168.3	254	100	63	140	95	51	UL/FM
8"	200	219.1	298	100	63	140	95	51	UL/FM
10"	250	273.0	381	100	63	140	97.5	70	—

Note: Size 10" is not UL/FM listed.

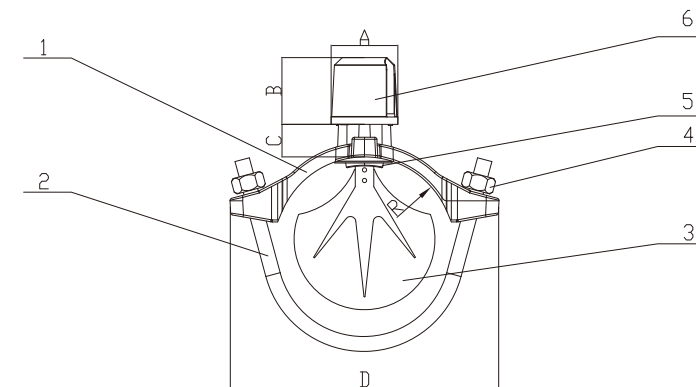
### Water Flow Indicator (ZSJZ), PN10/16



ZSJZ



- Connection Ends: ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

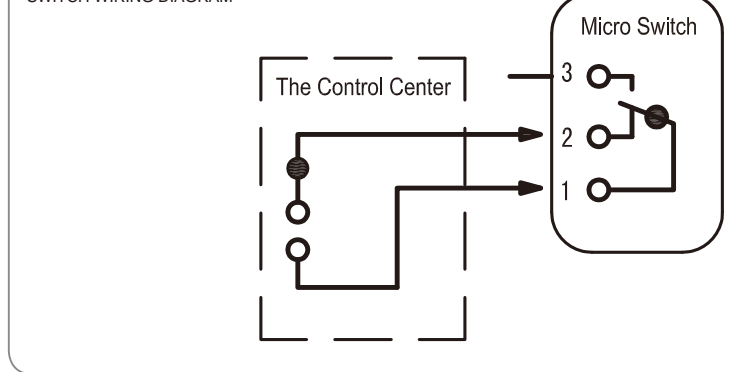


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Body	EN-GJS-450-10	
2	Bolt	Carbon Steel Zinc Plated	SS304, SS316
3	Lodicule	Plastic	
4	Nut	Carbon Steel Zinc Plated	SS304, SS316
5	Gasket	EPDM	NBR
6	Shell	Plastic	

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

SWITCH WIRING DIAGRAM



DN		Dimensions(mm)					Hole Dia
Inch	mm	R	A	B	C	D	+1.6/0
2"	50	60.3	62	48	36	120	30
2.5"	65	73	62	48	31	130	30
3"	80	88.9	62	48	36.5	145	51
4"	100	114.3	62	48	30.5	185	51
5"	125	141.3	62	48	36.5	221.5	51
6"	150	168.3	62	48	33	254	51
8"	200	219.1	62	48	36.5	300	51



### Pressure Switch (YLKG)

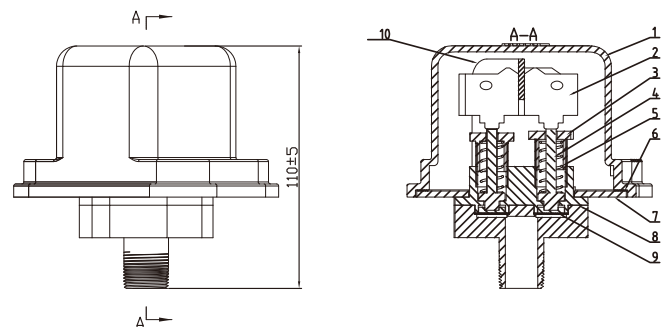


YLKG



- Service Environment: Indoor or Outdoor Use, all parts have corrosion resistant finishes
- Temperature Range: 0°C - 80°C
- Cover Tamper: Tamper Resistant Screws  
Optional Cover Tamper Switch Available
- Connection: 1/2-14NPT Thread
- Electrical Ratings: 125/250VAC 15A

Different pressure springs are selected according to the difference between the power range of the Pressure Switch (0-20 psi, 0-60 psi, 0-120 psi).

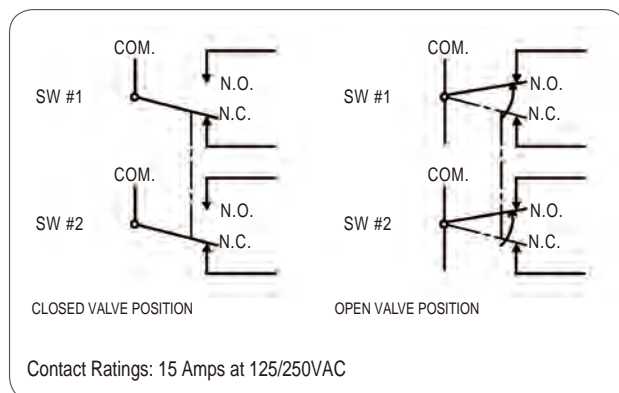
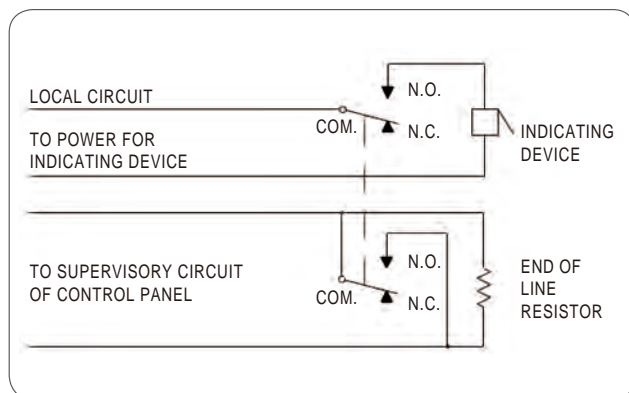


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Outer Shell	ADC12	
2	Micro Switch		
3	Regulating Accessories	PA66+GF30	
4	Stem	PA66+GF30	
5	Compression Spring	65#	
6	Sealing Washer	PA66+GF30	
7	Back Shell	ADC12	
8	Pressure parts	PA66+GF30	
9	Pressure Diaphragm	EPDM	
10	Micro Stents	Carbon Steel Q235	SS304

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

TYPICAL ELECTRICAL CONNECTIONS



### Indoor Fire Hydrant(SN), PN10/16



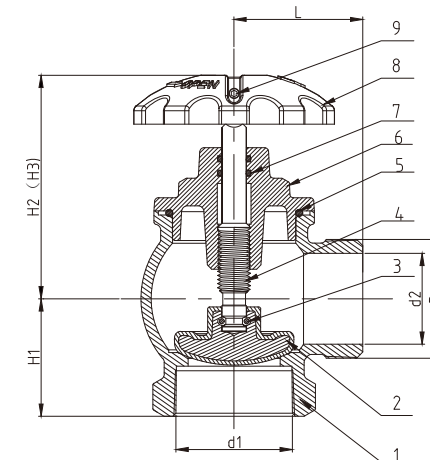
SN

- Thread: ISO 7-1
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



SNT

- Statement:Manufacturer could provide connectors according to client's detailed request.



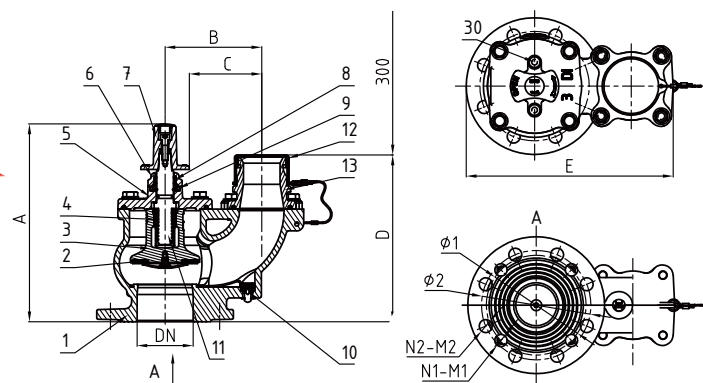
MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Body	EN-GJS-450-10
2	Disc	EN-GJS-450-10+EPDM
3	Steel Ball	SS304
4	Stem	SS420
5	O-Ring	NBR
6	Bonnet	EN-GJS-450-10
7	O-Ring	NBR
8	Handwheel	ABS
9	Screw	SS304

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)						
Inch	mm	H1	H2 (Close)	H3 (Open)	L	d1(Rc)	d2	D(R)
2"	50	57.5	109.5	128	63	2"	44.5	2"
2.5"	65	71	109.5	128	71	2 1/2"	58	2 1/2"

### Underground Fire Hydrant (SA1,SA2,SA3,SA4), PN16



SA1



- Standard: BS750, EN1074-6, BS EN14339
- Working Pressure: PN16
- Multi Standard Flange: EN1092-2, BS10 Table D/E Auto-frost Drain Valve as Standard.
- Medium: Water and Neutral Liquids
- Working Temperature: 0°C - 80°C  
Kv=116 2400L/min

MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Body	EN-JS1040
2	Sealing Pad	EPDM
3	Clapper	EN-JS1040
4	Stem Nut	CW602N-H070
5	Bonnet	EN-JS1040
6	Gland	EN-JS1040
7	Stem Cap	EN-JS1040
8	Axle Sleeve	PA66
9	Positioning Ring	SS304
10	Auto-frost Valve	PA66
11	Stem	SS304
12	Outlet Cap	EPDM
13	Outlet	C36000

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.



SA2



SA3



SA4

DN		Dimensions(mm)										
Inch	mm	Model	PN	A	B	C	D	E	Ø1	Ø2	N1-M1	N2-M2
3"	DN80	SA1	10/16	289.5	141.5	106	241	303	146	160	4-Φ18	8-Φ19
3"	DN80	SA2	10/16	289.5	141.5	106	235	303	146	160	4-Φ18	8-Φ19
3"	DN80	SA3	10/16	289.5	141.5	106	228	303	146	160	4-Φ18	8-Φ19
3"	DN80	SA4	10/16	289.5	141.5	106	260	303	146	160	4-Φ18	8-Φ19

Part No.	Type	Product	Model	Material	Part No.	Type	Product	Model	Material
1	With British Connector		SA1	C36000	3	With Inner thread Connector		SA3	SS304
2	With Round Thread Connector		SA2	SS304	4	With Buckle Lug Connector		SA4	EN-JS1040

### Dry Riser Landing Valve



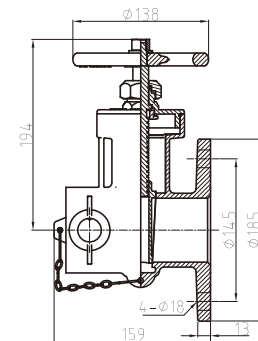
XZ45W



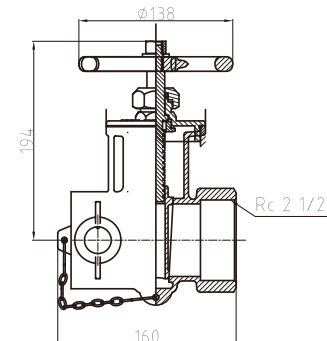
XZ15W



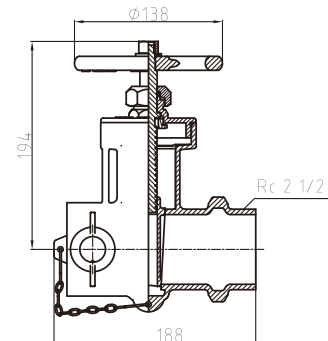
XZ25W



XZ45W



XZ15W



XZ25W

### Description

- Dry Riser Landing Valve Flanged (XZ45W), DN65
- Dry Riser Landing Valve Threaded (XZ15W / XZ25W), DN65
- Valve Standard: Manufactured in accordance with BS 5041 : Part 2 : 1987 and to BS 5154 : 1991 standards
- Working Pressure: PN16

### Features

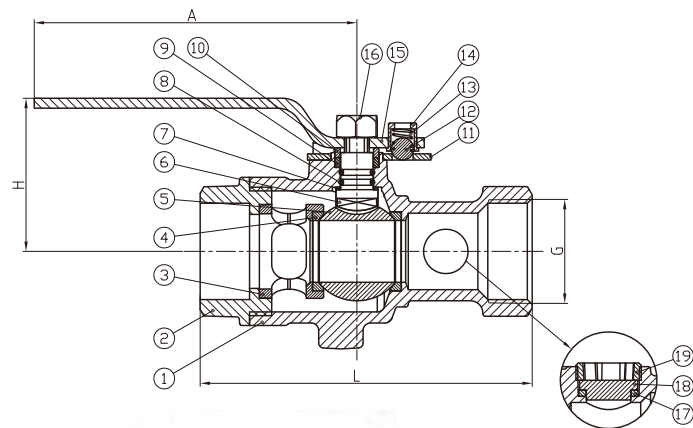
- Compact design with excellent flow characteristics
- High quality casting finishes
- Precise machining for metal to metal leak proof seating
- Corrosion resistant
- Maintenance free
- Leather strap and padlock available

MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Lock	HPb59-1
2	Disc	HPb59-1
3	Valve Body	Gunmetal
4	Bonnet	HPb59-1
5	Stem	HPb59-1
6	Handwheel	EN-GJS-450-10



### Test and Drain Valve



- Design Standard: FM1625, UL258
- Connection standard: ASME B1.20.1  
BS EN 10226-2 ( ISO 7-1 )
- Working Pressure: 300PSI
- Working Temperature: 0°C - 80°C
- Orifice Diameter: K-5.6.

MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Body	CW617N	
2	Bonnet	CW617N	
3	Bonnet Extension	CW612N	
4	Ball Seat	PTFE	
5	Ball	CW617N	
6	Stem	CW612N	
7	Stem Seal	PTFE	
8	O-Ring	NBR	
9	Stem Seal	PTFE	
10	Ring	CW612N	
11	Label Plate	SS304	SS316
12	Bearing Ball	SS304	SS316
13	Spring	SS304	SS316
14	Bearing Ball Centering	CW612N	
15	Lever	SS304	SS316
16	Nut With Fiber		
17	Sight Glass Seal	EPDM	
18	Sight Glass	PMMA	
19	Sight Glass Gasket	CW612N	

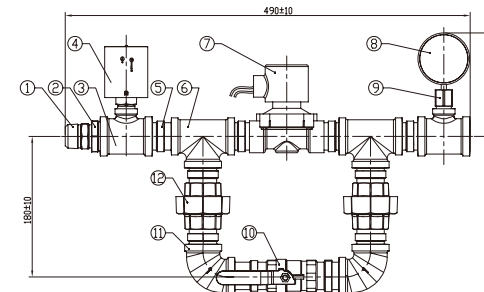
Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)			
Inch	mm	L	H	A	G
1"	25	134.5mm	63.5mm	130mm	BSPT 1"/NPT 1"
1 1/4"	32	135.5 mm	64.5 mm	132.5 mm	BSPT 1 1/4"/NPT 1 1/4"
1 1/2"	40	163.5 mm	79 mm	152 mm	BSPT 1 1/2"/NPT 1 1/2"
2"	50	167 mm	79 mm	152 mm	BSPT 2"/NPT 2"

### Electric Inspector's Test Connection (ZSPM-80-DX)



ZSPM-80-DX



MATERIAL SPECIFICATION

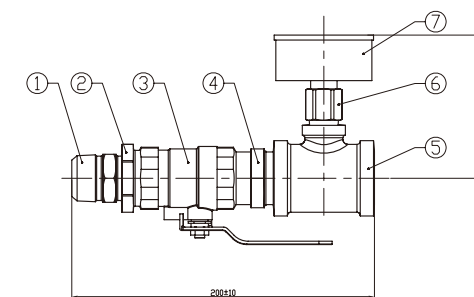
Part No.	Part	Standard Specification
1	Test Nozzle	SS304
2	Outside Hex Bushing	Malleable Iron Galvanized
3	Reducing Tee	Malleable Iron Galvanized
4	Pressure Switch	
5	Nexagon Nipple,Equal	Malleable Iron Galvanized
6	Reducing Tee	Malleable Iron Galvanized
7	Solenoid Valves	Brass
8	Pressure Gauge	
9	Connector	Brass
10	Ball Valve	SS304
11	90° Elbow	Malleable Iron Galvanized
12	Union With Brass Seat	Malleable Iron Galvanized

Note: 1.For special material request other than standard specification, please indicate clearly on the inquiry or order list.  
2.Threads connection options available includes: ASME B1.20.1, ISO 7-1

### Manual Inspector's Test Connection (ZSPM-80-SA)



ZSPM-80-SA



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Test Nozzle	SS304
2	Outside Hex Bushing	Malleable Iron Galvanized
3	Ball Valve	SS304
4	Nexagon Nipple,Equal	Malleable Iron Galvanized
5	Reducing Tee	Malleable Iron Galvanized
6	Connector	Brass
7	Pressure Gauge	

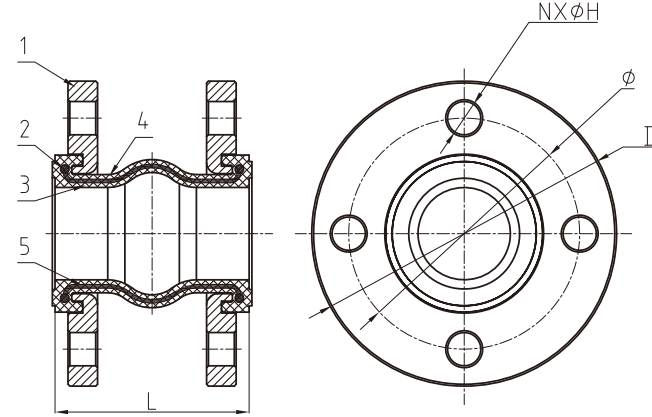
Note: 1.For special material request other than standard specification, please indicate clearly on the inquiry or order list.  
2.Threads connection options available includes: ASME B1.20.1, ISO 7-1

### Flexible Rubber Joint Single Sphere Electroplated Carbon Steel Flange Connection (XTQ1RF), PN10/16



XTQ1RF  
CE

- Connection Ends: Flange Drilling to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Vacuum Capacity: 700MM/HG

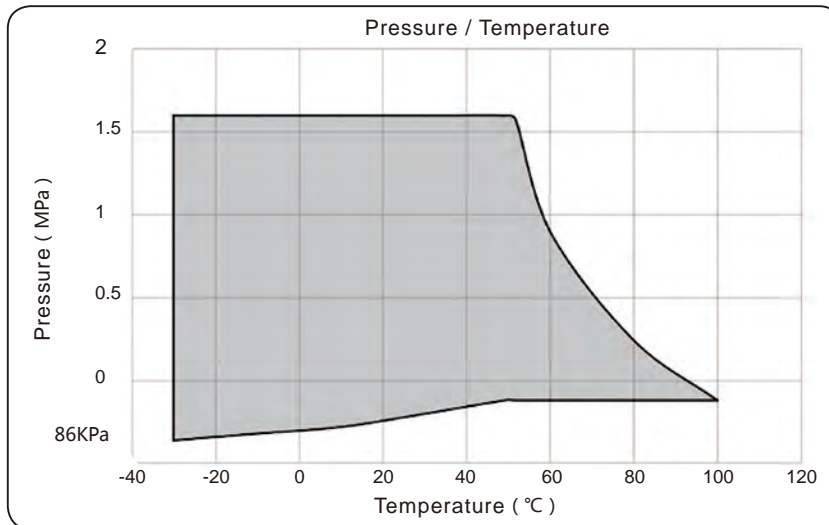


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Flange	Galvanized Carbon Steel
2	Reinforcing Ring	Carbon Steel
3	Rubber (Inner)	EPDM
4	Rubber (Outer)	EPDM
5	Reinforcing Fabric	Nylon Fabric

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN	Neutral Length(mm)					Axial(mm)		Transverse Movement(mm)	Angular Deflection Deg.
	Inch	mm	L	D	Ø	N-ØH	Elongation		
1 1/4"	32	95	140	100	4X18	6	10	10	25
1 1/2"	40	95	150	110	4X18	6	10	10	25
2"	50	105	165	125	4X18	6	10	10	25
2 1/2"	65	115	185	145	8X18	8	15	12	25
3"	80	135	200	160	8X18	8	15	12	25
4"	100	150	220	180	8X18	12	20	16	15
5"	125	165	250	210	8X18	12	20	16	15
6"	150	180	285	240	8X22	12	20	16	15
8"	200	210	340	295	12X22	12	20	16	15
10"	250	230	405	355	12X26	14	30	25	8
12"	300	230	460	410	12X26	14	30	25	8
14"	350	265	520	470	12X26	14	30	25	8
16"	400	265	580	525	16X30	14	30	25	8
18"	450	265	640	585	20X30	14	30	25	8
20"	500	265	715	650	20X33	14	30	25	8
24"	600	265	840	770	20X36	14	30	25	8

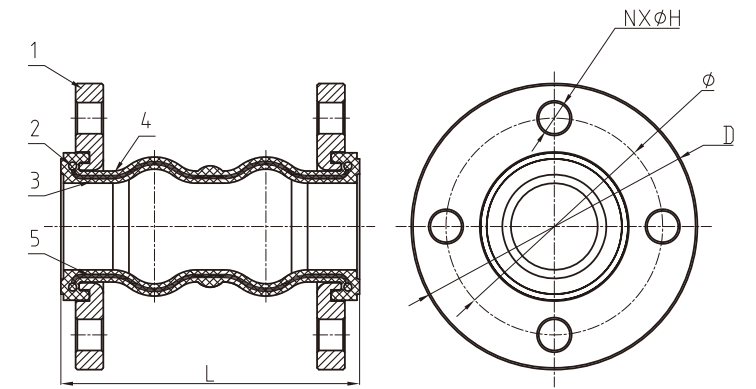


### Flexible Rubber Joint Twin Sphere Electroplated Carbon Steel Flange Connection (XTQ2RF), PN10/16



XTQ2RF  
CE

- Connection Ends: Flange Drilling to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Vacuum Capacity: 650MM/HG

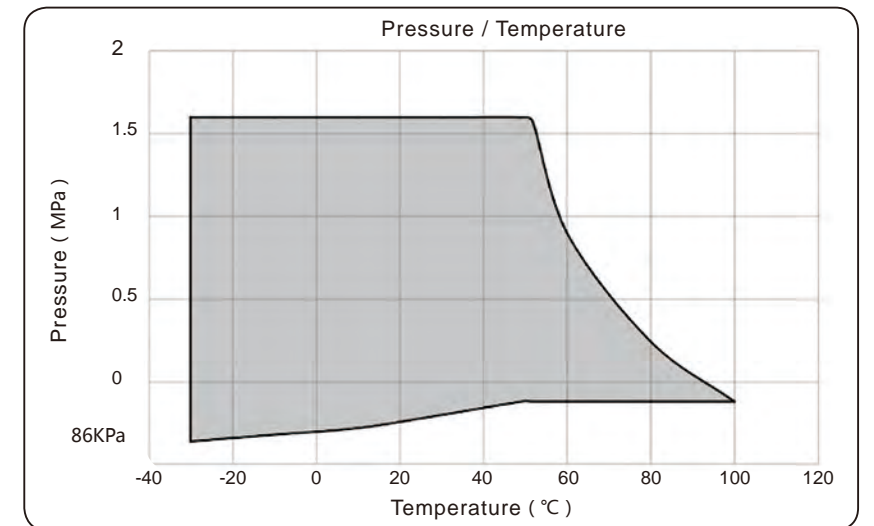


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Flange	Galvanized Carbon Steel
2	Reinforcing Ring	Carbon Steel
3	Rubber (Inner)	EPDM
4	Rubber (Outer)	EPDM
5	Reinforcing Fabric	Nylon Fabric

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN	Neutral Length(mm)					Axial(mm)		Transverse Movement(mm)	Angular Deflection Deg.
	Inch	mm	L	D	Ø	N-ØH	Elongation		
1 1/4"	32	175	140	100	4X18	30	45	45	45
1 1/2"	40	175	150	110	4X18	30	45	45	45
2"	50	175	165	125	4X18	30	45	45	45
2 1/2"	65	175	185	145	8X18	30	45	45	45
3"	80	175	200	160	8X18	35	50	40	30
4"	100	225	220	180	8X18	35	50	40	30
5"	125	225	250	210	8X18	35	50	40	30
6"	150	225	285	240	8X22	35	60	35	15
8"	200	325	340	295	12X22	35	60	35	15
10"	250	325	405	355	12X26	35	60	35	15
12"	300	325	460	410	12X26	35	60	35	15
14"	350	350	520	470	12X26	35	60	35	15



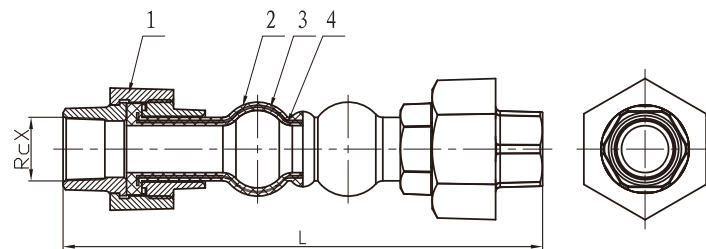


### Flexible Rubber Joint Twin Sphere Union-Screw End Connection(XTQ2L), PN10/16



XTQ2L  
CE

- Thread: ISO 7-1
- Working Pressure: PN10/16
- Temperature Range: 0°C - 80°C
- Vacuum Capacity: 500MM/HG

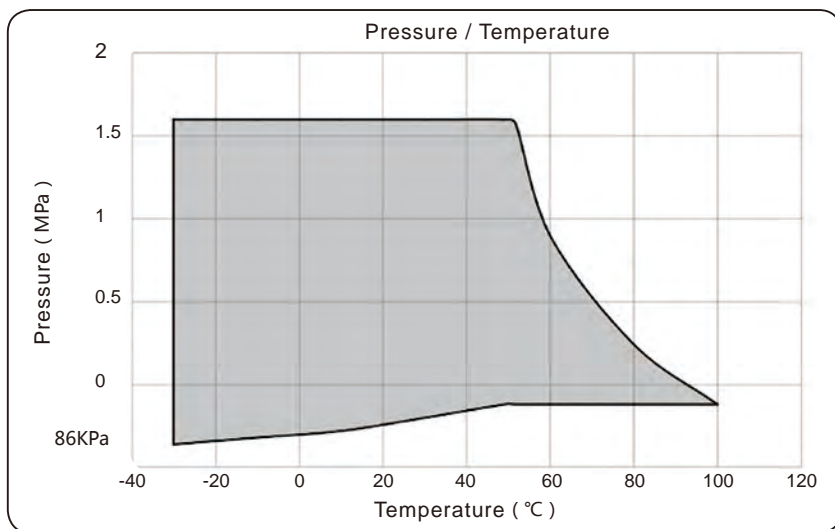


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Union	Malleable iron
2	Rubber (Outer)	EPDM
3	Reinforcing Fabric	Nylon Fabric
4	Rubber (Inner)	EPDM

Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN	Neutral Length(mm)		Thread	Axial(mm)		Transverse Movement(mm)	Angular Deflection Deg.
	Inch	mm		L	Rc X		
1/2"	15	200	Rc 1/2	6	22	22	40
3/4"	20	200	Rc 3/4	6	22	22	40
1"	25	200	Rc 1	6	22	22	40
1 1/4"	32	200	Rc 1 1/4	6	22	22	40
1 1/2"	40	200	Rc 1 1/2	6	22	22	40
2"	50	200	Rc 2	6	22	22	40
2 1/2"	65	240	Rc 2 1/2	6	22	22	40
3"	80	240	Rc 3	6	22	22	40

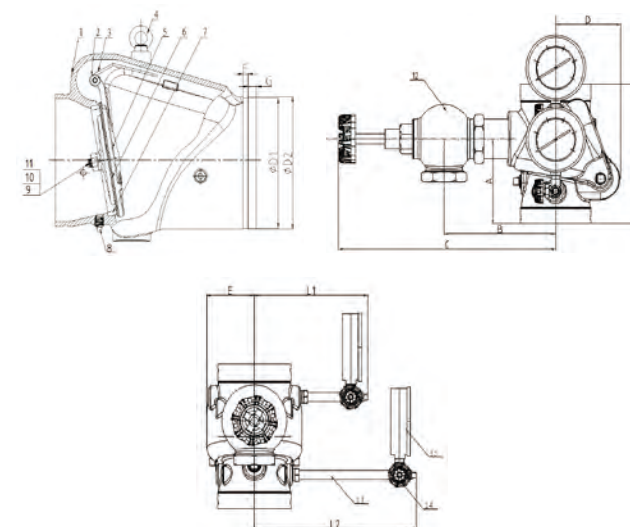


### Shotgun Riser Check Valve (ZSQKFX1), PN10/16



ZSQKFX1

- Design Standard: UL312, FM1210
- Grooved Specification: ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C- 80°C
- Coating: Fusion Bonded Epoxy Coating Complies with ANSI/AWWA C550



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Hinge Pin	SS420	
3	Spring	SS304	SS316
4	Eye Bolt	Carbon Steel Zinc Plated (8")	
5	Disc	SS304 (2"-4") EN-GJS-450-10(5"-8")	
6	Seal Ring	EPDM	NBR
7	Seat	ASTM B62 C83600	
8	Plug	Malleable Iron Galvanized	
9	Stud Bolt	SS304	SS316
10	Washer	SS304	SS316
11	Nuts	SS304	SS316
12	Drain Valve	Brass HPb59-1	
13	Nipple	Carbon Steel Zinc Plated	
14	Isolation Valve	Brass HPb59-1	
15	Pressure Gauge		

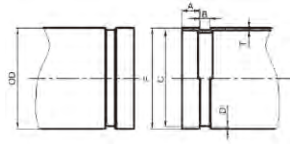
Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)													
Inch	mm	H	A	B	C1 (Open)	C2 (Close)	D	E	L1	L2	ΦD1	ΦD2	F	G	
2 1/2"	65	184	96.5	117.5	252	240	85.5	57.2	156	266	72.26	76.1	7.93	15.88	
3"	80	197	102.6	122	257	245	93.7	63	163	273	84.94	88.9	7.93	15.88	
4"	100	206	125	162	325	286	108	75.6	189	286	110.08	114.3	9.53	15.88	
5"	125	248	131.7	169	331	292	118	86.4	195	254	135.48	139.7	9.53	15.88	
6"	150	324	159	191	355	316	172.8	108.3	218.5	268	160.9	165.1	9.53	15.88	
8"	200	371	176.3	212	375	336	202	131.3	233	294	214.4	219.1	11.1	19.05	

### Roll Groove Dimensions

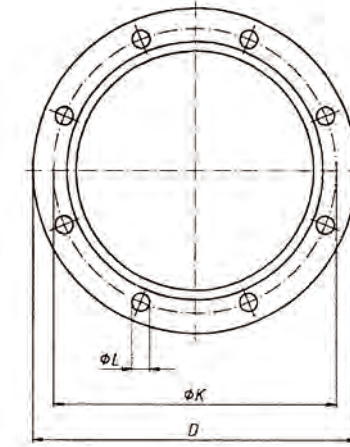


Roll Grooving Machine



Nominal Size mm/in	Pipe OD			Gasket seat A ±0.76/±0.03 mm/in	Groove Width B ±0.76/±0.03 mm/in	Groove Dia C		Groove Depth D(ref) mm/in	Max Allow Flare Dia F mm/in	Min. Allow wall thickness T mm/in
	Basic mm/in	Tolerance mm/in				Basic mm/in	Tolerance mm/in			
25 1	33.7 1.327	+0.41 +0.016	-0.68 -0.026	15.88 0.625	7.14 0.281	30.23 1.190	-0.38 -0.015	1.60 0.063	34.5 1.358	1.8 0.071
32 1 1/4	42.4 1.669	+0.50 +0.020	-0.60 -0.023	15.88 0.625	7.14 0.281	38.99 1.535	-0.38 -0.015	1.60 0.063	43.3 1.705	1.8 0.071
40 1 1/2	48.3 1.900	+0.44 +0.017	-0.52 -0.020	15.88 0.625	7.14 0.281	45.09 1.779	-0.38 -0.015	1.60 0.063	49.4 1.945	1.8 0.071
50 2	60.3 2.375	+0.61 +0.024	-0.61 -0.024	15.88 0.625	8.74 0.344	57.15 2.250	-0.38 -0.015	1.60 0.063	62.2 2.449	1.8 0.071
65 2 1/2	73.0 2.875	+0.74 +0.029	-0.74 -0.029	15.88 0.625	8.74 0.344	69.09 2.720	-0.46 -0.018	1.98 0.078	75.2 2.961	2.3 0.091
65 2 1/2	76.1 3.000	+0.76 +0.030	-0.76 -0.030	15.88 0.625	8.74 0.344	72.26 2.845	-0.46 -0.018	1.99 0.078	77.7 3.059	2.3 0.091
80 3	88.9 3.500	+0.89 +0.035	-0.79 -0.031	15.88 0.625	8.74 0.344	84.94 3.344	-0.46 -0.018	1.98 0.078	90.6 3.567	2.3 0.091
100 4	108.0 4.250	+1.07 +0.042	-0.79 -0.031	15.88 0.625	8.74 0.344	103.73 4.084	-0.51 -0.020	2.11 0.083	109.7 4.319	2.3 0.091
100 4	114.3 4.500	+1.14 +0.045	-0.79 -0.031	15.88 0.625	8.74 0.344	110.08 4.334	-0.51 -0.020	2.11 0.083	116.2 4.575	2.3 0.091
125 5	133.0 5.250	+1.32 +0.052	-0.79 -0.031	15.88 0.625	8.74 0.344	129.13 5.084	-0.51 -0.020	2.11 0.083	134.9 5.311	2.9 0.114
125 5	139.7 5.500	+1.40 +0.055	-0.79 -0.031	15.88 0.625	8.74 0.344	135.48 5.334	-0.51 -0.020	2.11 0.083	141.7 5.579	2.9 0.114
125 5	141.3 5.563	+1.42 +0.056	-0.79 -0.031	15.88 0.625	8.74 0.344	137.03 5.395	-0.56 -0.022	2.13 0.084	143.5 5.650	2.9 0.114
150 6	159.0 6.250	+1.60 +0.063	-0.79 -0.031	15.88 0.625	8.74 0.344	154.50 6.083	-0.56 -0.022	2.16 0.085	161.0 6.339	2.9 0.114
150 6	165.1 6.500	+1.60 +0.063	-0.79 -0.031	15.88 0.625	8.74 0.344	160.8 6.330	-0.56 -0.022	2.16 0.085	167.1 6.579	2.9 0.114
150 6	168.3 6.625	+1.60 +0.063	-0.79 -0.031	15.88 0.625	8.74 0.344	163.96 6.455	-0.56 -0.022	2.16 0.085	170.7 6.720	2.9 0.114
200A 8	216.3 8.516	+1.60 +0.063	-0.79 -0.031	19.05 0.750	11.91 0.469	211.60 8.331	-0.64 -0.025	2.35 0.093	219.8 8.653	2.9 0.114
200 8	219.1 8.625	+1.60 +0.063	-0.79 -0.031	19.05 0.750	11.91 0.469	214.40 8.441	-0.64 -0.025	2.34 0.092	221.5 8.720	2.9 0.114
250A 10	267.4 10.528	+1.60 +0.063	-0.79 -0.031	19.05 0.750	11.91 0.469	262.60 10.339	-0.69 -0.027	2.40 0.095	270.9 10.665	3.6 0.142
250 10	273.0 10.750	+1.60 +0.063	-0.79 -0.031	19.05 0.750	11.91 0.469	268.28 10.562	-0.69 -0.027	2.39 0.094	275.4 10.842	3.6 0.142
300A 12	318.5 12.539	+1.60 +0.063	-0.79 -0.031	19.05 0.750	11.91 0.469	312.90 12.319	-0.76 -0.030	2.77 0.109	322.0 12.677	4.0 0.158
300 12	323.9 12.750	+1.60 +0.063	-0.79 -0.031	19.05 0.750	11.91 0.469	318.29 12.531	-0.76 -0.030	2.77 0.109	326.2 12.842	4.0 0.158
350 14	377.0 14.842	+1.60 +0.063	-0.79 -0.031	23.83 0.938	11.91 0.469	371.44 14.623	-0.76 -0.030	2.77 0.109	379.5 14.941	4.5 0.177
400 16	426.0 16.772	+1.60 +0.063	-0.79 -0.031	23.83 0.938	11.91 0.469	420.46 16.553	-0.76 -0.030	2.77 0.109	428.5 16.870	4.5 0.177
500 20	529.0 20.827	+1.60 +0.063	-0.79 -0.031	25.40 1.000	11.91 0.469	523.46 20.608	-0.76 -0.030	2.77 0.109	533.0 20.984	5.0 0.197

### Flange Dimensions

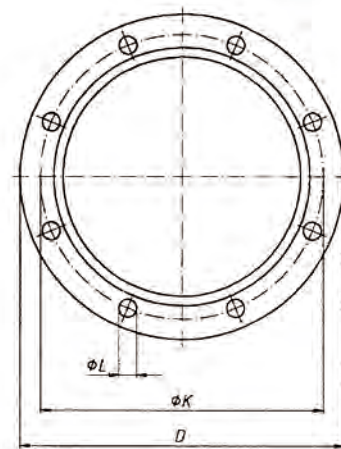


Dimensions of PN10 flanges (BS EN 1092-2:1997)

(mm)

DN (mm)	Mating dimensions					Flange thickness		
	Outside diameter of flange D	Diameter of bolt circle K	Diameter of bolt hole L	Bolts		C		
				Number n	Nominal size	Grey Iron	Ductile Iron	Malleable Iron
10	90	60	14	4	M12	14	14	14
15	95	65	14	4	M12	14	14	14
20	105	75	14	4	M12	16	16	16
25	115	85	14	4	M12	16	16	16
32	140	100	19	4	M16	18	18	18
40	150	110	19	4	M16	18	19	18
50	165	125	19	4	M16	20	19	20
65	185	145	19	4	M16	20	19	20
80	200	160	19	8	M16	22	19	20
100	220	180	19	8	M16	24	19	22
125	250	210	19	8	M16	26	19	22
150	285	240	23	8	M20	26	19	24
200	340	295	23	8	M20	26	20	24
250	395	350	23	12	M20	28	22	26
300	445	400	23	12	M20	28	24.5	26
350	505	460	23	16	M20	30	24.5	-
400	565	515	28	16	M24	32	24.5	-
450	615	565	28	20	M24	32	25.5	-
500	670	620	28	20	M24	34	26.5	-
600	780	725	31	20	M27	36	30	-
700	895	840	31	24	M27	40	32.5	-
800	1015	950	34	24	M30	44	35	-
900	1115	1050	34	28	M30	46	37.5	-
1000	1230	1160	37	28	M33	50	40	-
1200	1455	1380	41	32	M36	56	45	-
1400	1675	1590	44	36	M39	62	46	-
1600	1915	1820	50	40	M45	68	49	-
1800	2115	2020	50	44	M45	70	52	-
2000	2325	2230	50	48	M45	74	55	-

## Flange Dimensions



Dimensions of PN16 flanges (BS EN 1092-2:1997)

(mm)

DN (mm)	Mating dimensions					Flange thickness		
	Outside diameter of flange D	Diameter of bolt circle K	Diameter of bolt hole L	Bolts		C		
				Number n	Nominal size	Grey Iron	Ductile Iron	Malleable Iron
10	90	60	14	4	M12	14	14	14
15	95	65	14	4	M12	14	14	14
20	105	75	14	4	M12	16	16	16
25	115	85	14	4	M12	16	16	16
32	140	100	19	4	M16	18	18	18
40	150	110	19	4	M16	18	19	18
50	165	125	19	4	M16	20	19	20
65	185	145	19	4	M16	20	19	20
80	200	160	19	8	M16	22	19	20
100	220	180	19	8	M16	24	19	22
125	250	210	19	8	M16	26	19	22
150	285	240	23	8	M20	26	19	24
200	340	295	23	12	M20	30	20	24
250	405	355	28	12	M24	32	22	26
300	460	410	28	12	M24	32	24.5	28
350	520	470	28	16	M24	36	26.5	-
400	580	525	31	16	M27	38	28	-
450	640	585	31	20	M27	40	30	-
500	715	650	34	20	M30	42	31.5	-
600	840	770	37	20	M33	48	36	-
700	910	840	37	24	M33	54	39.5	-
800	1025	950	41	24	M36	58	43	-
900	1125	1050	41	28	M36	62	46.5	-
1000	1255	1170	44	28	M39	66	50	-
1200	1485	1390	50	32	M45	-	57	-
1400	1685	1590	50	36	M45	-	60	-
1600	1930	1820	57	40	M52	-	65	-
1800	2130	2020	57	44	M52	-	70	-
2000	2345	2230	62	48	M56	-	75	-

## EXCEPTIONS

Due to the continuous optimization of performance, there may be discrepancies between the actual product and the photo, Please refer to the actual product for details.

Before installation, please carefully check whether the product information is consistent with the working conditions., if there is any difference, please consult before use; please be sure to specify the special working conditions such as high salt and high humidity environment and corrosive environment, and customize according to the working conditions.

During installation, the force of opening and closing the valve should be steady, and the threaded drive valve should be reversed a little after it is fully opened to avoid loosening or damage to the thread;

Valves in use should be regularly maintained. Generally flexible operation, inspection and drainage of valves should be carried out at least once a month. Equipment with filtering functions or used in environments containing sundry medium should increase the frequency of maintenance, and check and clean up at least once a week, so as not to affect the function;

When the weather is cold, if the valve is normally closed, drain the accumulated water and pay attention to anti-freezing; it is forbidden to knock, stand on or support heavy objects on the valve in operation;

Please refer to the instructions strictly or consult in advance, otherwise, our company will not bear the related losses and liabilities;