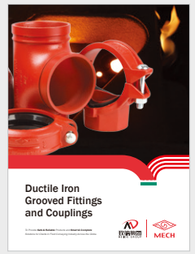
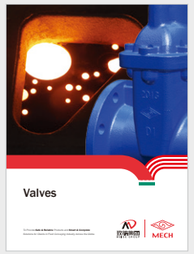
MECH FLOW SUPPLIES

















JINAN MEIDE CASTING CO., LTD.

Address: Meide Science & Technology Park,
Industrial Park Pingyin, Jinan, China 250400
Phone: (86)531 87856271 87879384 87885060
Fax: (86)531 87879387
Email: info@meide-casting.com
Http: //www.meide-casting.com

UPDATED 01/2019



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.*



Company Profile

Jinan Meide Casting Co. Ltd. was established in 1961. In the past decades, Jinan Meide has seized each opportunity to consolidate its strength, and has finally developed into what it is today, a large-scale enterprise group with advanced technology, equipment and strong comprehensive strength, known for its complete range of products, large producing capacity, high quality and strong R&D strength. The company owns altogether one main factory, three branch factories, two independent accounting steel pipe companys, and a science & technology park.

The company is the well-known manufacturer in the fitting industry with the most complete range of products, supplying malleable iron fittings, grooved fittings, grooved couplings, valves, cast iron fittings, ductile iron fittings, steel pipe nipples and couplings, stainless steel nipples, brass pipe nipples, cast bronze fittings, steel pipes, pipe hangers and supports, electric fittings, etc.

Over 50 years, Jinan Meide has been a trusted name in piping solutions by offering high-quality products, service and support to the PVF industry continuously. We provide expertise and product solutions for a wide range of applications, plumbing, mechanical, industrial, air-conditioning and refrigeration, mining, oil, gas, fire protection, equipment and power system. Many of the company's application technology are advanced in the world, with more than 20 patents registered each year, and the company has presided over and participated in the drafting of many important national standards of the industry.

We organize the whole production process in accordance with ISO 9001 and ISO 14001. It has also the most complete certificates in the PVF industry, including UL/FM/NSF of US, CRN/cUL of Canada, DVGW/TUV/CE/VdS of Germany, BSI/LPCB of UK, SII of Israel, JIS of Japan, ABNT of Brazil, GOST-R of Russia, CNBOP of Poland, KS of South Korea, TSE of Turkey, PSB of Singapore, SIRIM of Malaysia, SABS of South Africa etc. The products are well distributed in more than 130 countries and regions.

As an industry leader and key high-tech enterprise of the national torch plan, the company attaches great importance to environmental protection, energy-saving and emission-reduction. US-EEC recognizes MECH brand malleable iron pipe fittings as "the product to promote for the technology exchange of environmental protection". Protecting the environment is the duty of the company.

Customer satisfaction has always been the company's top objective, and we constantly stick to the principle: to provide customers with a value-added solution rather than simply delivering products.

Company History

1961 — Business Started from Grey Iron Pot

1970 — Malleable Iron Pipe Fittings

1987 — Export, Main Market: Southeast Asia

1990 — Conduit Body

1993 — Self Export, Developed US and European Market

1995 — Cast Iron Fittings

1997 — Steel Pipe Nipples
Red Brass Pipe Nipples

1998 — Malleable Iron Pipe Clamps

1999 — Pipe Hangers and Brackets

2000 — Ductile Iron Grooved Fittings and Couplings
Ball Valves

2001 — Ductile Iron Pipe Fittings

2003 — Bronze Fittings

2007 — Electric Power Fittings

2011 — Valves

2012 — Extra-heavy Brass Pipe Nipples

2013 — Steel Pipes

1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

State of the Art Equipment

High precision equipment is quality assurance.
Jinan Meide's 8 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


Melting



Sinto FCMX


DISA




Tokyu AMF-111055


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.



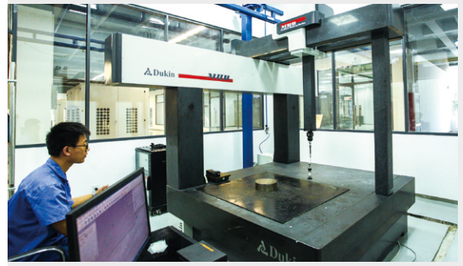
Metallurgical Microscope



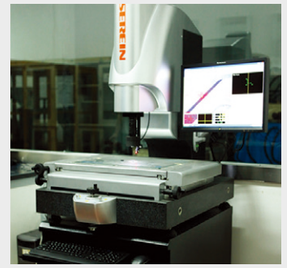
R & D



Spectrometer



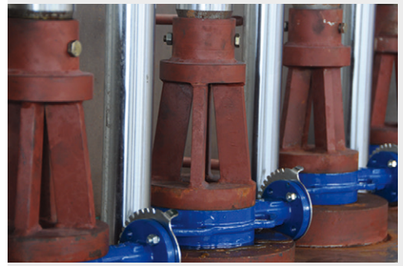
CMM



Projector



Pipe line



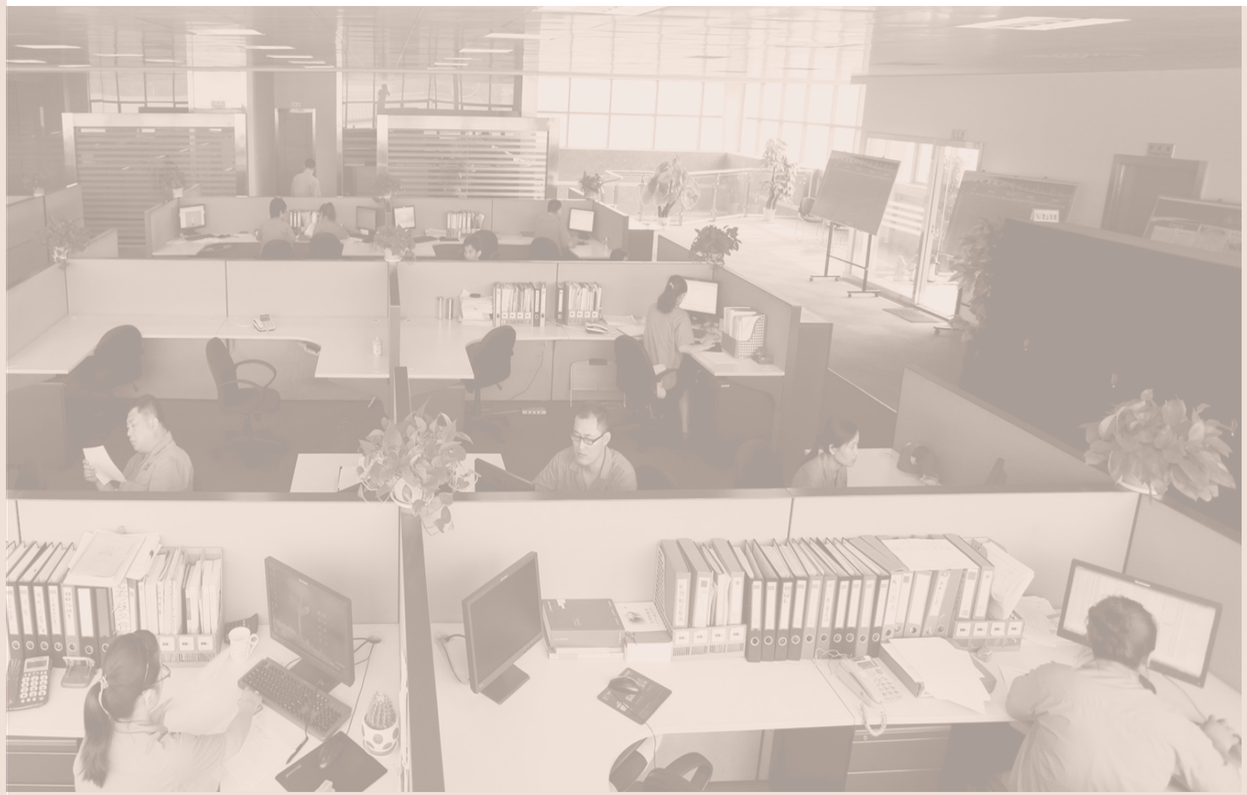
Valve Pressure Testing Machine (Vertical)



Endurance Test Machine

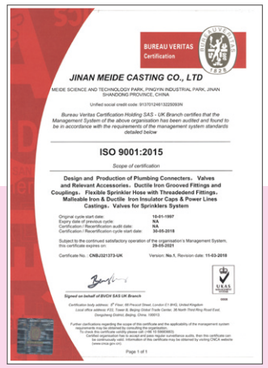


Valve Pressure Testing Machine (Horizontal)



Certificates

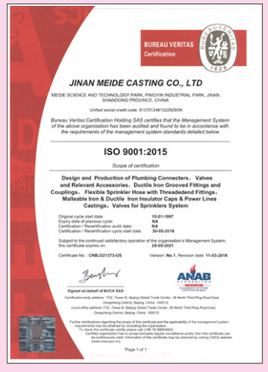












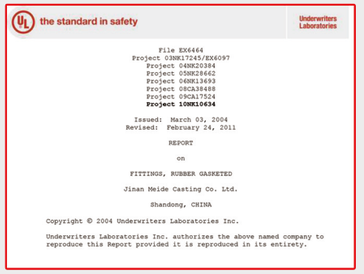






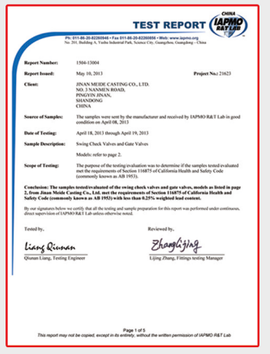
































- **XZ81X**

Grooved Resilient OS&Y Gate Valve



- **XZ41X**

BS 5163 Flanged Resilient OS&Y Gate Valve



- **XZ41X**

DIN F4 Flanged Resilient OS&Y Gate Valve



- **XZ51X**

Flanged x Grooved Resilient OS&Y Gate Valve



- **MXHQ**

Supervisory Switch for OS&Y Gate Valve



- **Z85X**

Grooved Resilient NRS Gate Valve



- **Z45XC**

BS Flanged Resilient NRS Gate Valve



- **Z45XC**

DIN F4 Flanged Resilient NRS Gate Valve



- **Z45XC-2**

BS Flanged Resilient NRS Gate Valve with Post Flange



- **Z45XC-2**

DIN F4 Flanged Resilient NRS Gate Valve with Post Flange



- **Z55X**

Flanged x Grooved Resilient NRS Gate Valve



- **IP**

Vertical Indicator Post



- **WP**

Wall Indicator Post



- **XD381X**

Grooved Butterfly Valve with Tamper Switch



- **XD381X-BL**

Grooved Butterfly Valve with Tamper Switch, with Long Neck



- **XD381XC**

Grooved Butterfly Valve with Tamper Switch



- **XD381X4-C**

Grooved Butterfly Valve with Tamper Switch



- **XD382X**

Double Eccentric Grooved Butterfly Valve with Tamper Switch



- **D81X4**

Grooved Butterfly Valve



- **XD371X**

Wafer Butterfly Valve with Tamper Switch



- **XD371XL**

Lugged Wafer Butterfly Valve with Tamper Switch



- **XD311X**

Threaded Buttefly Valve with Tamper Switch

NSF/ANSI 61 NSF/ANSI 372 ACS



- **H84X**

Grooved Resilient Swing Check Valve



- **DH87X**

Double Door Grooved Check Valve



- **H44X2**

Flanged Resilient Swing Check Valve



- **DH77X**

Double Door Wafer Check Valve



- **V8**

Grooved Y-Type Strainer



- **V4**

Flanged Y-Type Strainer



- **ZSFZ8X9**

Grooved Wet Alarm Check Valve



- **ZSFZ4X9**

Flanged Wet Alarm Valve



- **SK790X**

Deluge Alarm Valve



- **ZSJZYS**

Water Flow Indicator with Retard



- **ZSJZ**

Water Flow Indicator



- **YLKG**

Pressure Switch



- **ZXHQ**

Supervisory Switch for Indicator Post



- **SN**

Indoor Fire Hydrant



- **SA series**

Underground Fire Hydrant



- **XZ45W**

Dry Riser Landing Valve



- **XZ15W**

Dry Riser Landing Valve



- **XZ25W**

Dry Riser Landing Valve

- **ZSPM-80-DX**

Electric Inspector's Test Connection

- **ZSPM-80-SA**

Manual Inspector's Test Connection

- **XTQ1RF**

Flexible Rubber Joint Single Sphere Galvanized Carbon Steel Flange Connection

- **XTQ2RF**

Flexible Rubber Joint Twin Sphere Galvanized Carbon Steel Flange Connection

- **XTQ2L**

Flexible Rubber Joint Twin SphereUnion-Screw End Connection

- **HSB4X**

Backwater Valve

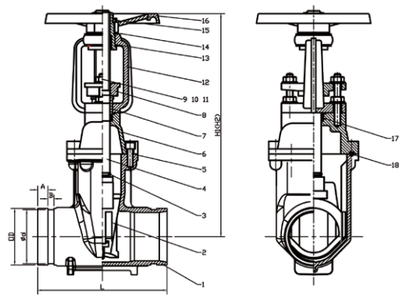
NSF/ANSI 61 NSF/ANSI 372 ACS

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℃- 100℃
- 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

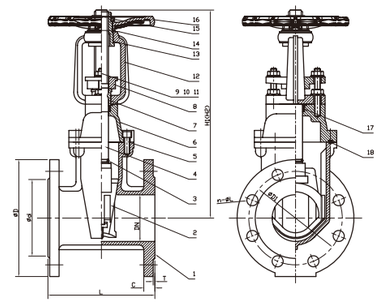
BS 5163 Flanged Resilient OS&Y Gate Valve, (XZ41X), PN10/16, UL/FM Approved



XZ41X

NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- 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)									
				TypeA		TypeB						
Inch	mm		L	H1 (Close)	H2 (Open)	H1 (Close)	H2 (Open)	D	D1	d	C	T	n-ΦL
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	1403	1817	1403	1817	520	460	429	26.5	4	16-Ø23
		16							470				16-Ø28
16"	400	10	406	1403	1817	1403	1817	580	515	480	28	4	16-Ø28
		16							525				16-Ø31
18"	450	10	432	1788	2308	1788	2308	640	565	530	30	4	20-Ø28
		16							585	548			20-Ø31
20"	500	10	457	1809	2329	1809	2329	715	620	582	31.5	4	20-Ø28
		16							650	609			20-Ø34
24"	600	10	508	2025	2649	2025	2649	840	725	682	36	5	20-Ø31
		16							770	720			20-Ø37

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



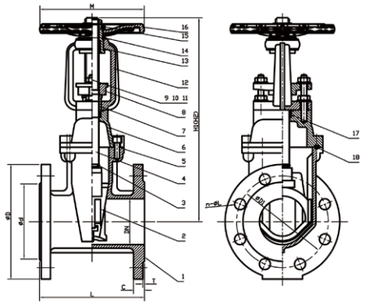
XZ41X

NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Flange to DIN EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



XZ41X-1



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.

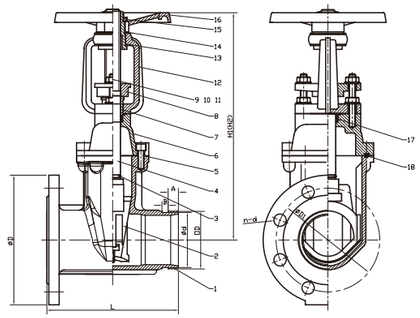
DN		PN	Dimensions(mm)										
Inch	mm		L (F4)	L (F5)	H1 (Close)	H2 (Open)	D	D1	d	C	T	M	n-ΦL
2"	50	10/16	150	250	323	373	165	125	99	19	3	180	4-Φ19
2.5"	65	10/16	170	270	343	408	185	145	118	19	3	180	4-Φ19
3"	80	10/16	180	280	370	450	200	160	132	19	3	200	8-Φ19
4"	100	10/16	190	300	442	542	220	180	156	19	3	254	8-Φ19
5"	125	10/16	200	325	540	665	250	210	184	19	3	280	8-Φ19
6"	150	10/16	210	350	608	758	285	240	211	19	3	305	8-Φ23
8"	200	10	230	400	720	920	340	295	266	20	3	350	8-Φ23
		16											12-Φ23
10"	250	10	250	450	940	1190	405	350	319	22	3	450	12-Φ23
		16						355					12-Φ28
12"	300	10	270	500	1065	1365	460	400	370	24.5	4	450	12-Φ23
		16						410					12-Φ28

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℃- 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



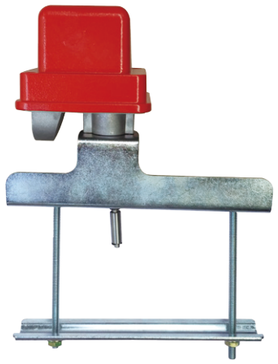
MATERIAL SPECIFICATION

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

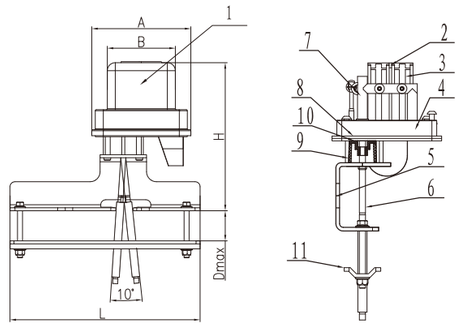
Supervisory Switch for OS&Y Gate Valve (MXHQ)



MXHQ

cULus LISTED

- Service Environment: Indoor or Outdoor use, all parts have corrosion resistant finishes
- Temperature Range: -10℃ - 80℃ (14° F- 176° F)
- 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).



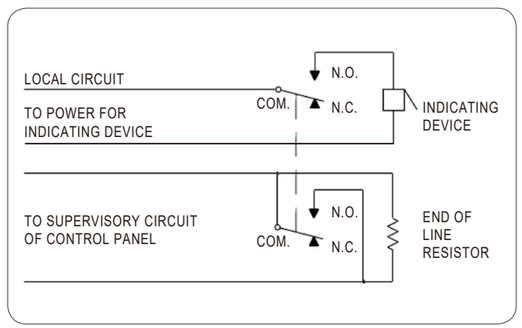
MATERIAL SPECIFICATION

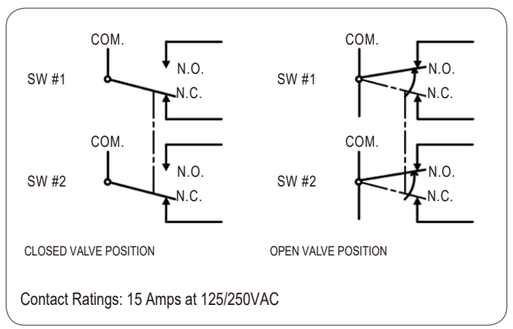
Part No.	Part	Standard Specification	Options
1	Outer Shell	ADC12	
2	Brace	Carbon Steel Q235	SS304, SS316
3	Micro Switch		
4	Base	ADC12	
5	Connection Plate	Carbon Steel Q235	SS304, SS316
6	Driving Lever	SS304	SS316
7	Axis	Nylon	
8	Sealing Gasket	CR Foam Cotton	
9	Pressing Sleeve	PTFE	
10	Rubber Ring	EPDM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





Contact Ratings: 15 Amps at 125/250VAC

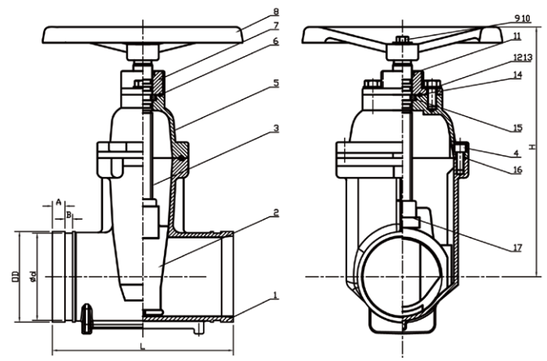
Grooved Resilient NRS Gate Valve (Z85X), PN10/16, UL/FM Approved



Z85X

cULus LISTED FM APPROVED

- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- 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

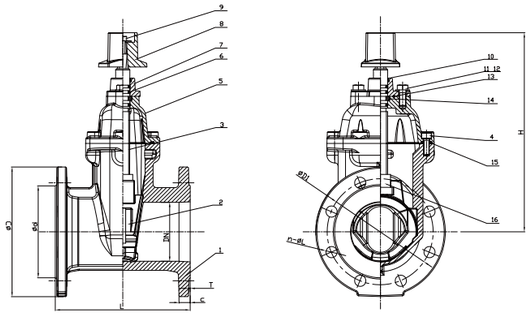
BS Flanged Resilient NRS Gate Valve (Z45XC), PN10/16, UL/FM Approved



Z45XC

NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- 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

DN		PN	Dimensions(mm)								
Inch	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

NSF/ANSI 61 NSF/ANSI 372 ACS

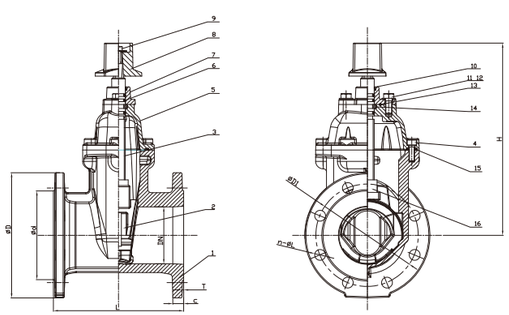
DIN F4 Flanged Resilient NRS Gate Valve (Z45XC), PN10/16, UL/FM Approved



Z45XC

NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Flange to DIN EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- 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.



Z45X



Z45X-1



XZ45X-1



XZ45X



XZ45X-2

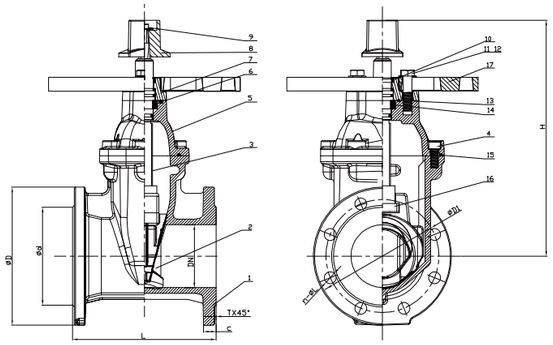
DN		PN	Dimensions(mm)							
Inch	mm		L	H	D	D1	d	C	T	n-ΦL
2"	50	10/16	150	241	165	125	99	19	3	4-Φ19
2.5"	65	10/16	170	255	185	145	118	19	3	4-Φ19
3"	80	10/16	180	304	200	160	132	19	3	8-Φ19
4"	100	10/16	190	337	220	180	156	19	3	8-Φ19
5"	125	10/16	200	414	250	210	184	19	3	8-Φ19
6"	150	10/16	210	436	285	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

NSF/ANSI 61 NSF/ANSI 372 ACS

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



Z45XC-2



- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- 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.

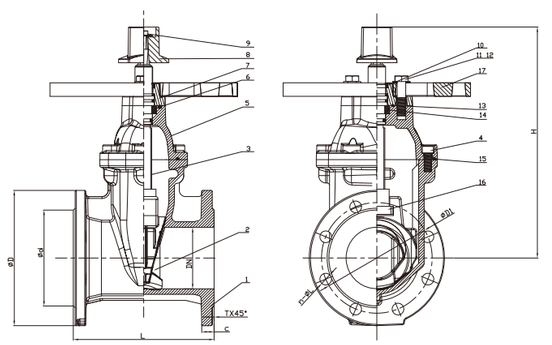
DN		PN	Dimensions(mm)								
Inch	mm		L	H		D	D1	d	C	T	n-d
				TypeA	TypeB						
4"	100	10/16	229	347	395	220	180	156	19	3	8-Φ19
5"	125	10/16	254	432	432	250	210	184	19	3	8-Φ19
6"	150	10/16	267	443	475	285	240	211	19	3	8-Φ23
8"	200	10	292	518	585	340	295	266	20	3	8-Φ23
		16									12-Φ23
10"	250	10	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" to12"

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℃- 100℃
- 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, 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.

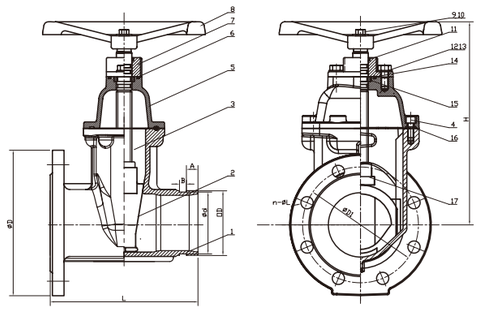
DN		PN	Dimensions(mm)							
Inch	mm		L	H	D	D1	d	C	T	n-ΦL
4"	100	10/16	190	347	220	180	156	19	3	8-Φ19
5"	125	10/16	200	415	250	210	184	19	3	8-Φ19
6"	150	10/16	210	443	245	240	211	19	3	8-Φ23
8"	200	10	230	518	340	295	266	20	3	8-Φ23
		16						20	3	12-Φ23
10"	250	10	250	665	405	350	319	22	3	12-Φ23
		16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

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℃- 100℃
- 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

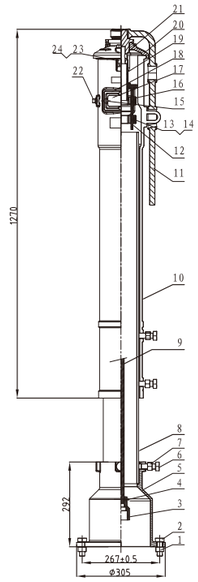
Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

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	EN-GJS-450-10
4	Cotter Pin	SS304
5	Base Flange	Cast Iron EN-GJL-200
6	Hex Bolt	Carbon Steel Zinc Plated
7	Hex Nut	Carbon Steel Zinc Plated
8	Standpipe	Carbon Steel
9	Stem 1" Square	Carbon Steel
10	Body	Cast Iron EN-GJL-200
11	Locking Wrench	EN-GJS-450-10
12	Target Carrier Nut	Cast Aluminum
13	Hex Bolt	Carbon Steel Zinc Plated
14	Hex Nut	Carbon Steel Zinc Plated
15	Hex Bolt	Carbon Steel Zinc Plated
16	Target	Cast Aluminum
17	Window Glass	Plexiglass
18	Gasket	EPDM
19	Operating Nut	SS304
20	Top Section	Cast Iron EN-GJL-200
21	Snap Ring	Spring Steel
22	Plug	Malleable Iron
23	Square Nut	Carbon Steel Zinc Plated
24	Hex Bolt	Carbon Steel Zinc Plated

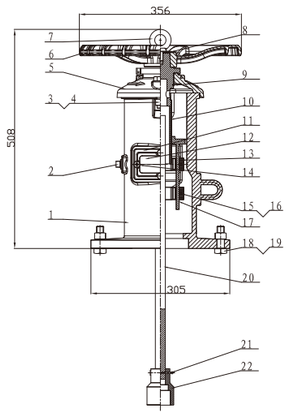
Field Adjustment:
1.Remove the Top Section from the top of the Indicator Post assembly;
2.Cut the required stem length and adjust the Standpipe to match up to the ground line;
3.Set the "OPEN" and "SHUT" targets for the appropriate valve size;
4.Reattach the Top Section to the top of the Indicator Post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

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



XD381X

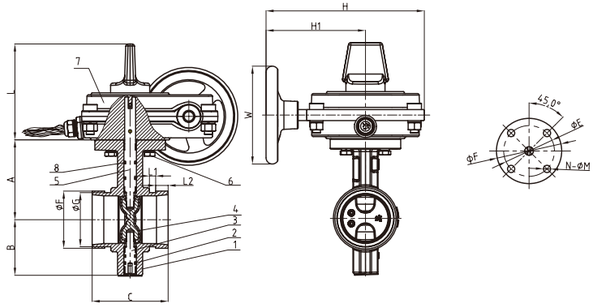
RoHS

- 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℃ - 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



RoHS

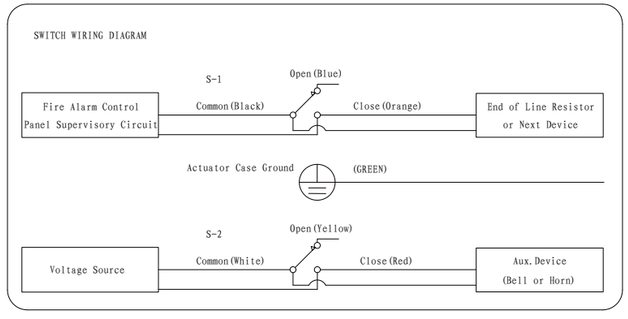
XD381X39



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

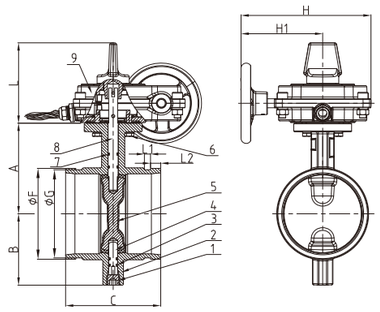
Note: Valve must not be installed with disc in full open position. Disc must be partly closed so that no part is protruding beyond end of valve body.

Grooved Butterfly Valve with Tamper Switch, with Long Neck (XD381X-BL)

Long Neck Design



XD381X-BL

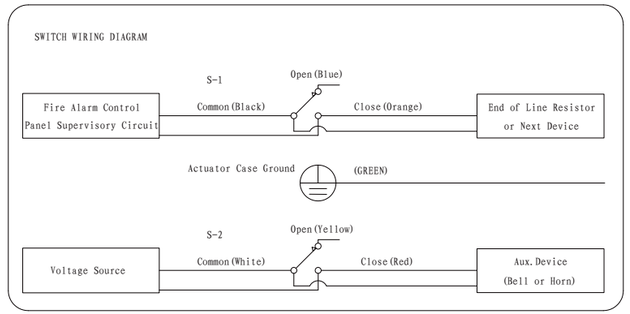


- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16/25
- Temperature Range: 0℃ - 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request

MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Tighten screw at flat end	Carbon Steel Zinc Pland	SS304, SS316
2	Valve Body	ASTM A536,65-45-12	
3	O-Ring	NBR	EPDM
4	Stub Shaft	Stainless Steel,2Cr13	SS304, SS316, SS420, SS431
5	Disc	ASTM A536,65-45-12+EPDM	
6	Bolt and Nut	Carbon Steel Zinc Pland	SS304, SS316
7	O-Ring	NBR	EPDM
8	Drive Shaft	Stainless Steel, 2Cr13	SS304, SS316, SS420, SS431
9	Signal Gearbox	ASTM A536,65-45-12	

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	ΦF	ΦG	L	L1	L2	H1	H
2"	50	110	65	81±1.5	60.3	57.15	122.5	7.93	15.88	127	202
2.5"	65	122	71	97±1.5	73.0	69.09	122.5	7.93	15.88	127	202
2.5"	65	122	71	97±1.5	76.1	72.26	122.5	7.93	15.88	127	202
3"	80	122	81	97±1.5	88.9	84.94	122.5	7.93	15.88	127	202
4"	100	145	95	116±1.5	114.3	110.08	122.5	9.53	15.88	127	202
5"	125	141	111	148±1.5	139.7	135.48	122.5	9.53	15.88	127	202
5"	125	141	111	148±1.5	141.3	137.03	122.5	9.53	15.88	127	202
6"	150	177	133	148±1.5	165.1	160.90	122.5	9.53	15.88	139.5	215
6"	150	177	133	148±1.5	168.3	163.96	122.5	9.53	15.88	139.5	215
8"	200	200	164	133±3.3	219.1	214.40	122.5	11.1	19.05	198.5	274
10"	250	280	196	159±3.3	273.0	268.28	122.5	12.7	19.05	198.5	274
12"	300	300	226	165±3.3	323.9	318.29	132.0	12.7	19.05	198.5	293.5

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.

NSF/ANSI 61 NSF/ANSI 372 ACS

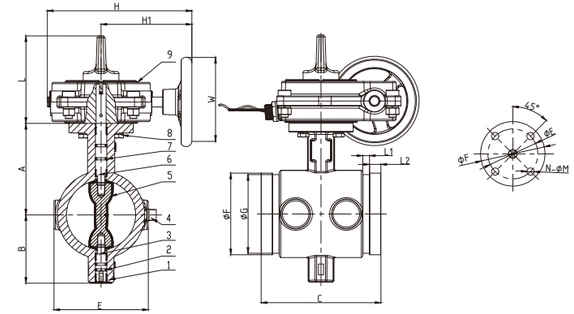
Grooved Butterfly Valve with Tamper Switch (XD381XC)

Tapped Body



XD381XC

CE

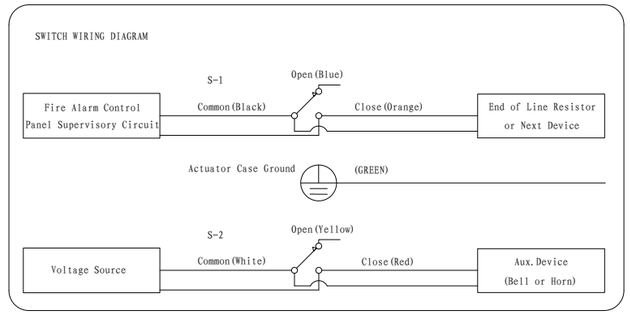


- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0℃ - 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request

MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	O-Ring	NBR	EPDM
3	Stub Shaft	Stainless Steel,2Cr13	SS304, SS316, SS420, SS431
4	Plug	Bronze ASTM B584	Malleable Iron Galvaized
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.



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

NSF/ANSI 61 NSF/ANSI 372 ACS

Grooved Butterfly Valve with Tamper Switch (XD381X4-C)

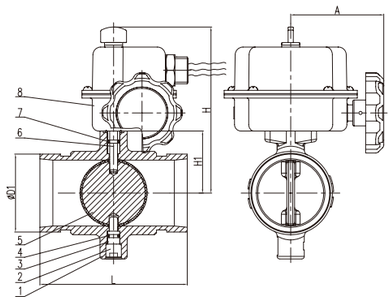


Compact Design

XD381X4-C

CE UL LISTED

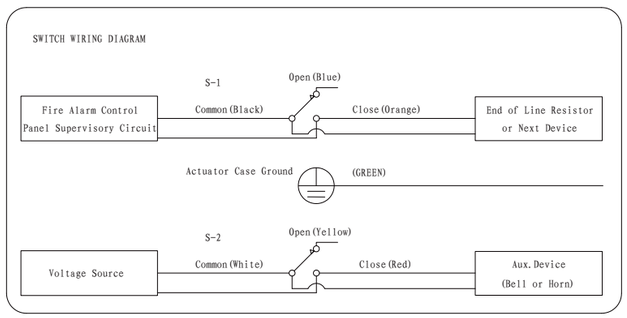
- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange Standard: ISO 5211
  Stem drive by keys and six-square
- Working Pressure: 1.2MPa
- Temperature Range: 0℃ - 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	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.



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

NSF/ANSI 61 NSF/ANSI 372 ACS

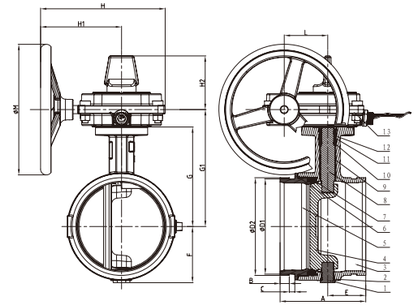
Double Eccentric Grooved Butterfly Valve with Tamper Switch (XD382X), PN10/16



XD382X

CE

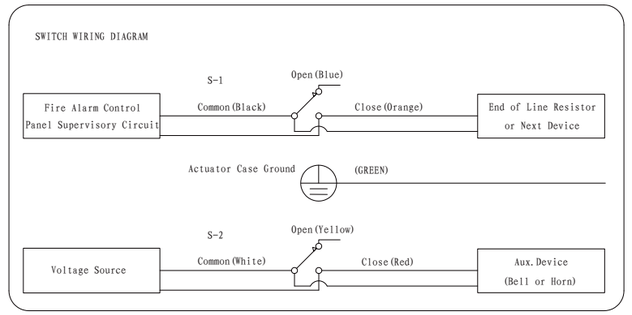
- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange Standard: ISO 5211
  Stem drive by keys, parallel or diagonal square or flat head
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting 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

NSF/ANSI 61 NSF/ANSI 372 ACS

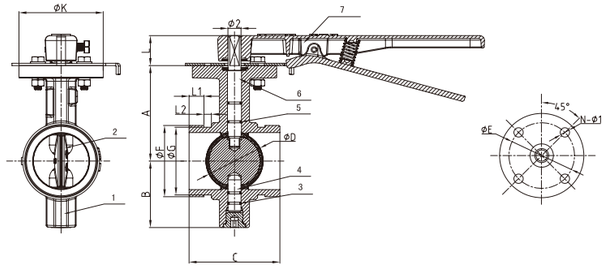
Grooved Butterfly Valve (D81X4, D381X4), PN10/16



D81X4

CE NSF/ANSI 61 NSF/ANSI 372

- 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℃- 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



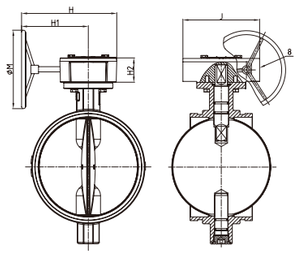
MATERIAL SPECIFICATION

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	ΦD	ΦF	ΦG	L1	L2	L	ΦK	H	H1	H2	J	ΦM	Φ2	ISO 5211	ΦE	N-Φ1
2"	50	89	65	81	50.3	60.3	57.15	15.88	7.93	32	90	206	158	52	114	150	14	F07	70	4-Φ10
2.5"	65	102	71	97	60.8	73.0	69.09	15.88	7.93	32	90	206	158	52	114	150	14	F07	70	4-Φ10
2.5"	65	102	71	97	60.8	76.1	72.26	15.88	7.93	32	90	206	158	52	114	150	14	F07	70	4-Φ10
3"	80	109	81	97	76	88.9	84.94	15.88	7.93	32	90	206	158	52	114	150	14	F07	70	4-Φ10
4"	100	128	95	116	98.5	114.3	110.08	15.88	9.53	32	90	206	158	52	114	150	16	F07	70	4-Φ10
5"	125	141	111	148	122.6	139.7	135.48	15.88	9.53	32	90	206	158	52	114	150	16	F07	70	4-Φ10
5"	125	141	111	148	122.6	141.3	137.03	15.88	9.53	32	90	206	158	52	114	150	16	F07	70	4-Φ10
6"	150	153	133	148	148	159.0	154.50	15.88	9.53	32	90	206	158	52	114	150	20	F07	70	4-Φ10
6"	150	153	133	148	148	165.1	160.9	15.88	9.53	32	90	206	158	52	114	150	20	F07	70	4-Φ10
6"	150	153	133	148	148	168.3	163.96	15.88	9.53	32	90	206	158	52	114	150	20	F07	70	4-Φ10
8"	200	184	164	133	199	219.1	214.4	19.05	11.10	45	125	310	239	69	167	300	26	F10	102	4-Φ12
10"	250	216	196	159	252	273.0	268.28	19.05	12.70	45	125	310	239	69	167	300	26	F10	102	4-Φ12
12"	300	254	226	165	300.5	323.9	318.29	19.05	12.70	45	125	307	229	73	190	300	28	F10	102	4-Φ12
14"	377	290	241	178	324	377	371.4	23.8	12.7	45	150	307	229	73	190	300	31.7	F12	125	4-Ø14

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.

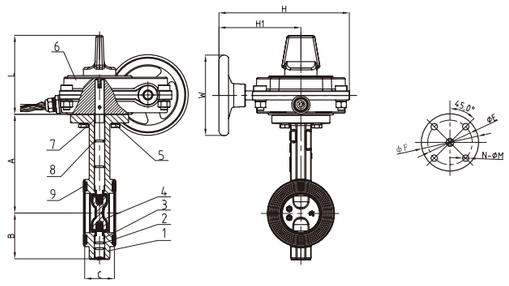
Wafer Butterfly Valve with Tamper Switch (XD371X), PN10/16, UL/FM/VdS Approved



XD371X

RoHS

- Design Standard: BS EN 593
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0℃ - 100℃
- 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

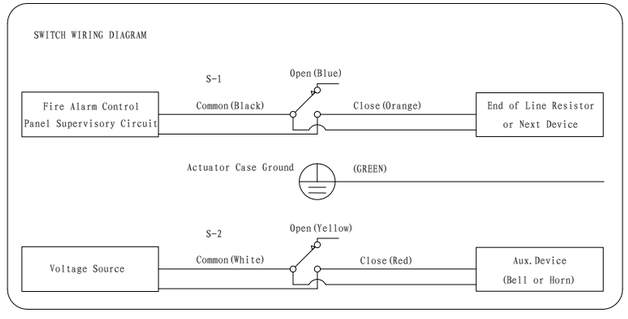
Part No.	Part	Standard Specification	Options
1	Body	EN-GJS-450-10	
2	O-Ring	NBR	EPDM
3	Stub Shaft	SS431	
4	Disc	EN-GJS-450-10+EPDM	EN-GJS-450-10+NBR
5	Hex Nut	Carbon Steel Zinc plated	
6	Signal Gearbox	Body:EN-GJS-450-10	
7	Drive Shaft	SS431	
8	O-Ring	NBR	EPDM
9	End Face Seal	EPDM	NBR

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



apsad RoHS

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

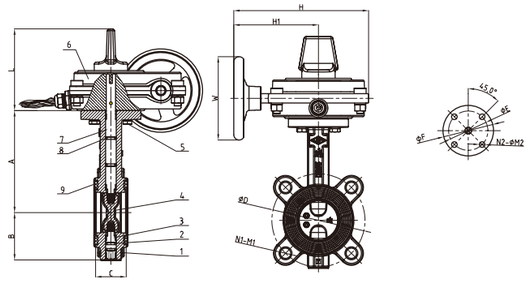
Lugged Wafer Butterfly Valve with Tamper Switch (XD371XL), PN10/16, UL/FM/VdS Approved



XD371XL

RoHS

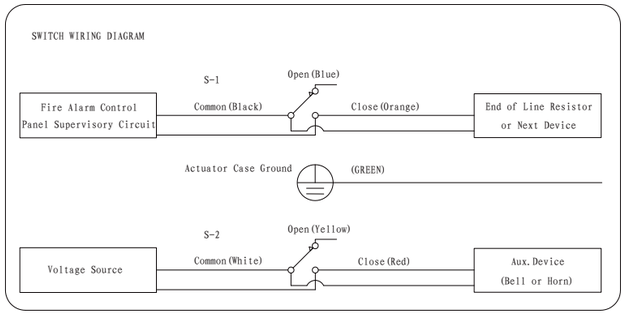
- Design Standard: BS EN 593
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0℃ - 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Flange Specification: BS EN 1092-2 PN10/PN16, ASME B16.1 CL125, ASME B16.5 CL150, JIS B2210 10K;



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.



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

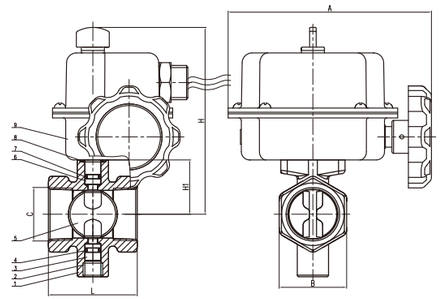
Threaded Buttefly Valve with Tamper Switch (XD311X), PN10, UL/FM Approved



XD311X

RoHS

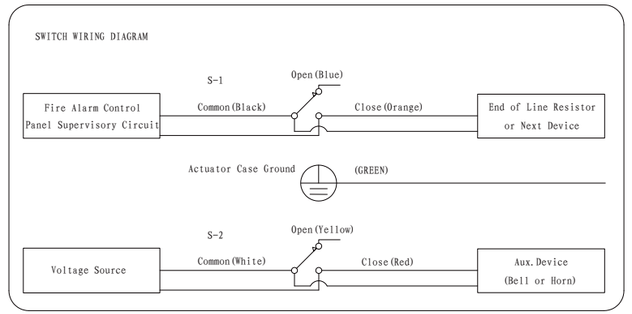
- Connection Ends: Thread to ISO 7-1
- Working Pressure: PN10
- Temperature Range: 0℃- 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or double coating of hot dipped galvanization plus electroplating



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

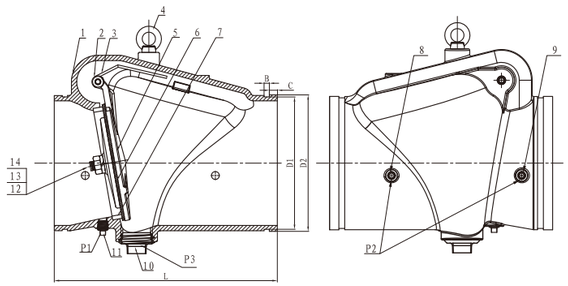
NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request



H84XF4

NSF/ANSI 61 NSF/ANSI 372



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.

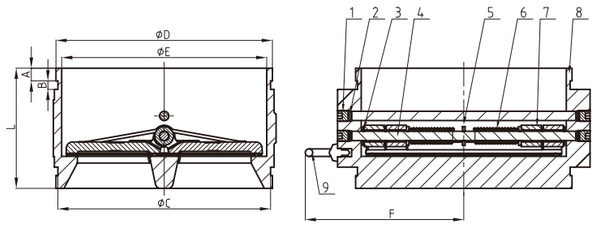
DN		Dimensions(mm)								
Inch	mm	L	D1	D2	B	C	P1	P3		P2
								Standard	Optional	
2"	50	171	57.15	60.3	7.93	15.88	1/2	1/2	1	3/8
2.5"	65	184	69.09	73	7.93	15.88	1/2	1/2	1 1/4	3/8
2.5"	65	184	72.26	76.1	7.93	15.88	1/2	1/2	1 1/4	3/8
3"	80	197	84.94	88.9	7.93	15.88	1/2	1/2	1 1/4	3/8
4"	100	210	110.08	114.3	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 (DH87X), PN10/16



DH87X

- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- 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

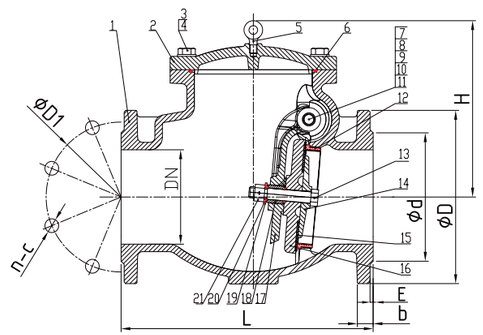
Flanged Resilient Swing Check Valve (H44X2), PN10/16, UL/FM/LPCB Approved



H44X2

NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- 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	Flat Washer	Carbon Steel Zinc Plated	
4	Bolts	Carbon Steel Zinc Plated	
5	Eye Bolt	Carbon Steel Zinc Plated	
6	O-Ring	EPDM	NBR
7	Plug	SS304	Bronze ASTM B584
8	O-Ring	EPDM	NBR
9	Hinge Pin	SS304	SS316
10	Washer	Brass ASTM B16 C36000/Hpb63-3	SS304
11	Hinge Bushing	Brass ASTM B16 C36000/Hpb63-3	SS304
12	Seat Ring	Bronze ASTM B62 C83600/ZQSn5-5-5(Pressed Fit)	SS304
13	Disc Seat Bolts	SS304	
14	Retainer Washer	Bronze ASTM B62 C83600/ZQSn5-5-5	
15	Disc Seat Ring	EPDM	NBR
16	Disc	EN-GJS-450-10	
17	Clapper Arm	EN-GJS-450-10	
18	Disc Bushing	Brass ASTM B16 C36000/Hpb63-3	
19	O-Ring	EPDM	NBR
20	Washer	Brass ASTM B16 C36000/Hpb63-3	SS304
21	Nut	Bronze ASTM B62 C83600/ZQSn5-5-5	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
6"	150	10	356	285	240	211	19	3	290	8-Φ23
		16								
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

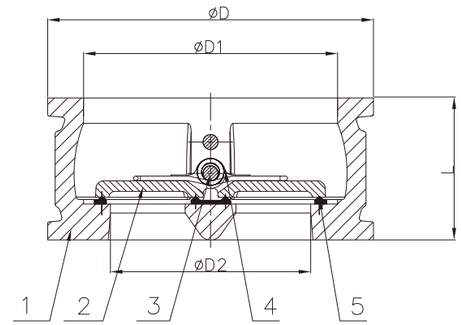
Double Door Wafer Check Valve (DH77X), PN10/16, UL Listed



DH77X

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℃- 100℃
- 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

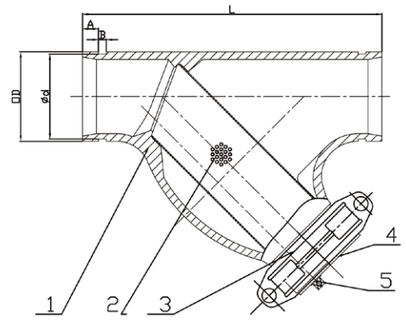
Grooved Y-Type Strainer (V8), PN10/16, UL Listed



V8

NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- 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

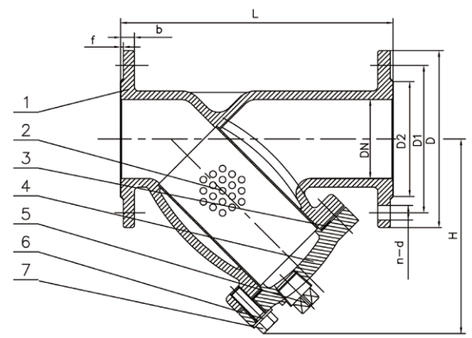
Flanged Y-Type Strainer (V4), PN10/16, UL Listed



V4

NSF/ANSI 61 NSF/ANSI 372

- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: -10℃- 200℃ graphite gasket
  0℃- 100℃ rubber gasket
- 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	548		20-Φ31		
20"	500	10	1250	715	620	582	31.5	20-Φ28	4	926
		16			650	609		20-Φ34		
24"	600	10	1450	840	725	682	36	20-Φ31	5	1057
		16			770	720		20-Φ37		

Note: UL listed from 2" to12"

SHORT STYLE

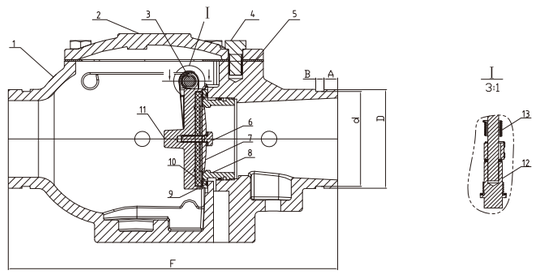
DN		PN	Dimensions(mm)							
Inch	mm		L	D	D1	D2	b	n-Φd	f	H
18"	450	10	850	640	565	530	30	20-Φ28	4	693
		16			585	548		20-Φ31		
20"	500	10	1000	715	620	582	31.5	20-Φ28	4	774
		16			650	609		20-Φ34		
24"	600	10	1100	840	725	682	36	20-Φ31	5	956
		16			770	720		20-Φ37		

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



ZSFZ8X9

- Connection Ends: Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- Coating: Painting or Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

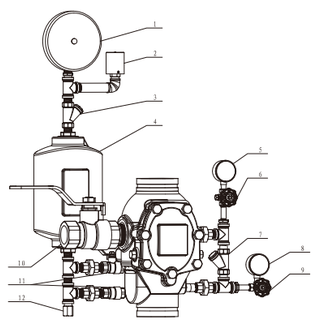


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Bonnet	EN-GJS-450-10	
3	Pin	SS304	SS316
4	Hex Bolt	Carbon Steel Zinc Plated	
5	Gasket	EPDM	NBR
6	Hex Bolt	SS304	SS316
7	Gland	SS304	
8	Seat	Bronze ZQSn5-5-5	
9	O-Ring	NBR	EPDM
10	Gasket	EPDM	
11	Disc	Brass H62	
12	Plug	SS304	SS316
13	Spring	SS304	

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

DN		Dimensions(mm)					
Inch	mm	OD	A	B	℄ d	℄ D	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
6"	150	165.1	15.88	9.53	160.9	165.1	406.4
6"	150	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
1	Alarm	7	Check Valve
2	Pressure Switch	8	Pressure Gauge
3	Strainer	9	Ball Valve
4	Decelerator	10	Ball Valve
5	Pressure Gauge	11	Ball Valve
6	Ball Valve	12	0rifice

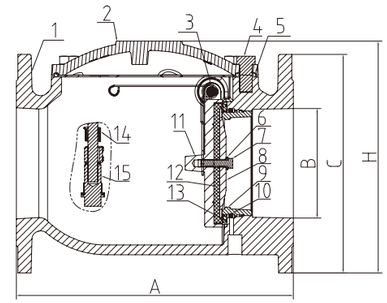
Flanged Wet Alarm Valve (ZSFZ4X9)



ZSFZ4X9

- Connection Ends: BS EN 1092-2:1997
- Working Pressure: 1.6MPa
- Temperature Range: 0℃- 100℃
- 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.

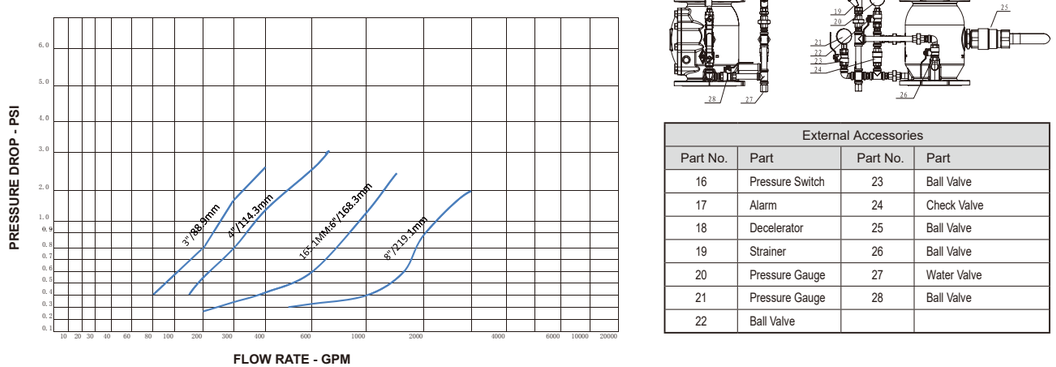


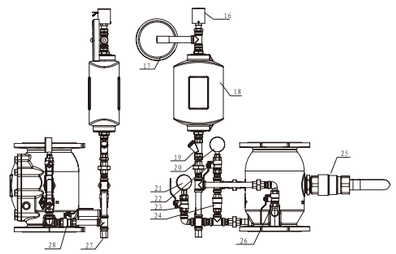
MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Valve Body	Ductile Iron EN-GJS-450-10	
2	Bonnet	Ductile Iron EN-GJS-450-10	
3	Pin	SS304	SS316
4	Hex Bolt	Carbon Steel Zinc Plated	
5	Gasket	EPDM	NBR
6	Spring Washer	SS304	
7	Hex Bolt	SS304	
8	Gland	Brass H62	
9	Seat	Bronze ZQSn5-5-5	
10	O-Ring	NBR	EPDM
11	Disc	Brass H62	
12	Gasket	EPDM	
13	O-Ring	NBR	
14	Spring	SS321	
15	Plug	SS304	

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	H
3"	80	241	80	200	235
4"	100	292	100	220	230
6"	150	356	150	285	298
8"	200	495	200	340	352





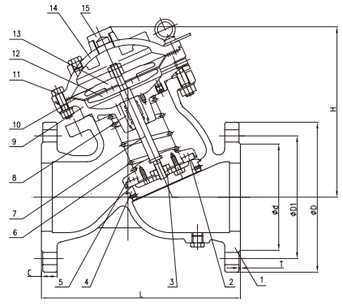
External Accessories			
Part No.	Part	Part No.	Part
16	Pressure Switch	23	Ball Valve
17	Alarm	24	Check Valve
18	Decelerator	25	Ball Valve
19	Strainer	26	Ball Valve
20	Pressure Gauge	27	Water Valve
21	Pressure Gauge	28	Ball Valve
22	Ball Valve		

Deluge Alarm Valve (SK790X), PN10/16



SK790X

- Connection Ends: BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0℃- 100℃
- 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.

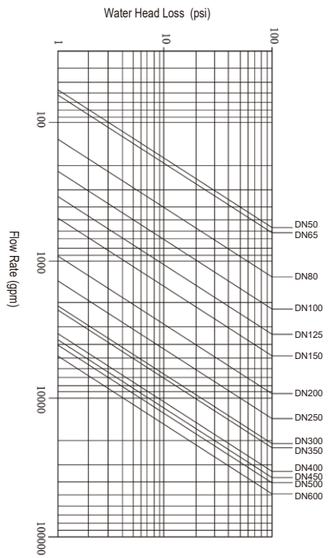


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification
1	Valve Body	EN-GJS-450-10
2	Main Gasket	EPDM
3	Gland of Main Disc	EN-GJS-450-10
4	Seat	SS304
5	Main Disc	EN-GJS-450-10
6	Spring	Stainless Steel 4Cr13
7	Stem	SS304
8	Bushing	Brass H62
9	Middle Bonnet	EN-GJS-450-10
10	Diaphragm	EPDM
11	Bolt	SS304
12	Up Gland	EN-GJS-450-10
13	Bottom Gland	EN-GJS-450-10
14	Up Bonnet	EN-GJS-450-10
15	Cap Plug	Brass H62

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



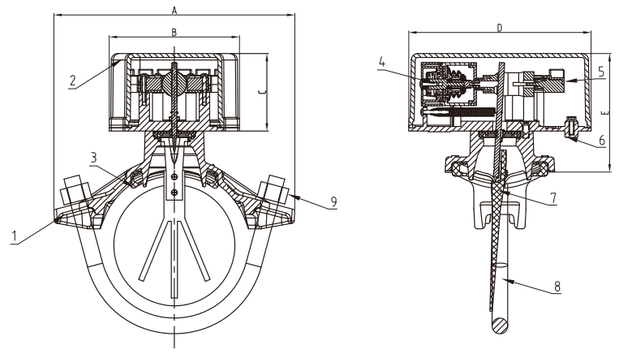
DN		PN	Dimensions(mm)							
Inch	mm		L	H	D	D1	d	C	T	n-ΦL
2"	50	10/16	203	170	165	125	99	19	3	4-Φ19
2.5"	65	10/16	216	195	185	145	118	19	3	4-Φ19
3"	80	10/16	241	215	200	160	132	19	3	8-Φ19
4"	100	10/16	292	255	220	180	156	19	3	8-Φ19
5"	125	10/16	330	290	250	210	184	19	3	8-Φ19
6"	150	10/16	356	360	285	240	211	19	3	8-Φ23
8"	200	10	495	450	340	295	266	20	3	8-Φ23
		16	495		340	295	266	20	3	12-Φ23
10"	250	10	622	550	405	350	319	22	3	12-Φ23
		16	622		405	355	319	22	3	12-Φ28
12"	300	10	698	645	460	400	370	24.5	4	12-Φ23
		16	698		460	410	370	24.5	4	12-Φ28
14"	350	10	787	700	505	460	429	24.5	4	16-Φ23
		16	787		520	470	429	26.5	4	16-Φ28
16"	400	10	914	790	565	515	480	24.5	4	16-Φ28
		16	914		580	525	480	28	4	16-Φ31
18"	450	10	978	850	615	565	530	25.5	4	20-Φ28
		16	978		640	580	548	30	4	20-Φ31
20"	500	10	978	900	670	620	582	26.5	4	20-Φ28
		16	978		715	625	609	31.5	4	20-Φ34
24"	600	10	1295	1030	780	725	682	30	5	20-Φ31
		16	1295		840	770	720	36	5	20-Φ37

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



ZSJZYS

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

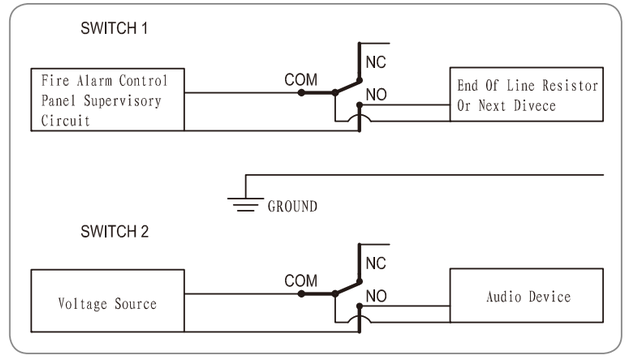


MATERIAL SPECIFICATION

Part No.	Part	Standard Specification	Options
1	Body	EN-GJS-450-10	
2	Cover	Aluminum Alloy	
3	Gasket	EPDM	NBR
4	Delay Device	Plastic	
5	Signal Connection	N/A	
6	Connection Plate	Aluminum Alloy	
7	Vane	Plastic	
8	U-Bolts	Carbon Steel Zinc Plated	SS304, SS316
9	Nut	Carbon Steel Zinc Plated	SS304, SS316

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	B	C	D	E	Hole Dia.
2"	50	60.3	116	100	59.5	140	79.5	29
2.5"	65	73	120	100	59.5	140	79.5	29
2.5"	65	76.1	120	100	59.5	140	79.5	29
3"	80	88.9	145	100	59.5	140	80.9	51
4"	100	114.3	185	100	59.5	140	98.5	51
5"	125	139.7	212	100	59.5	140	82.6	51
5"	125	141.3	212	100	59.5	140	82.6	51
6"	150	165.1	254	100	59.5	140	90.4	51
6"	150	168.3	254	100	59.5	140	90.4	51
8"	200	219.1	298	100	59.5	140	90.5	51

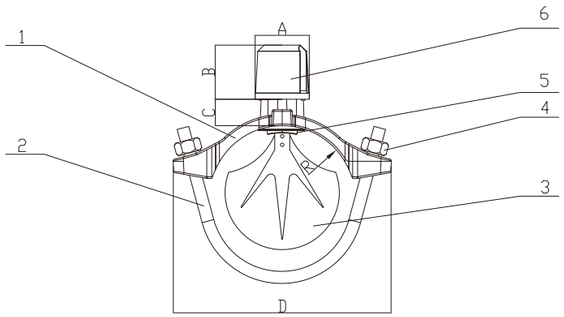
Water Flow Indicator (ZSJZ), PN10/16



ZSJZ

CE

- Connection Ends: ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0℃ - 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

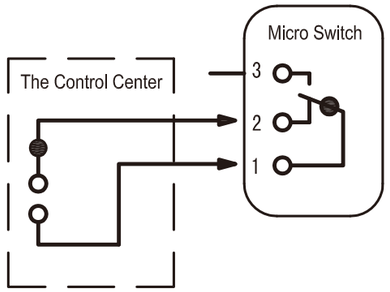


MATERIAL SPECIFICATION

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

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	R	A	B	C	D	Hole Dia.
2"	50	60.3	62	48	36	120	32
2.5"	65	73	62	48	31	130	32
2.5"	65	76.1	62	48	31	130	32
3"	80	88.9	62	48	36.5	145	51
4"	100	114.3	62	48	30.5	185	51
5"	125	139.7	62	48	36.5	221.5	51
5"	125	141.3	62	48	36.5	221.5	51
6"	150	165.1	62	48	33	254	51
6"	150	168.3	62	48	33	254	51
8"	200	219.1	62	48	36.5	300	51

Pressure Switch (YLKG)

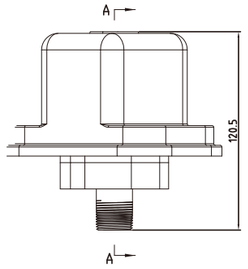


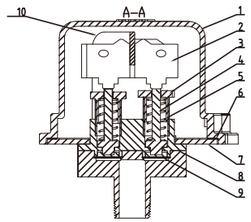
YLKG

c UL us LISTED

- Service Environment: Indoor or Outdoor Use, all parts have corrosion resistant finishes
- Temperature Range: -10℃ - 80℃ (14° F - 176° F)
- 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).



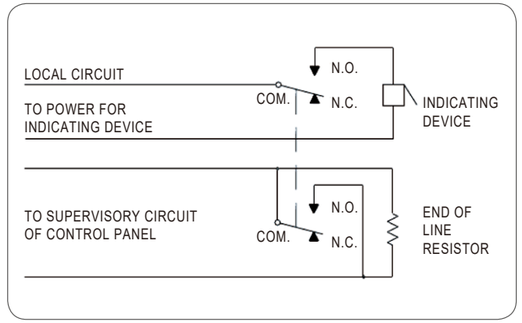


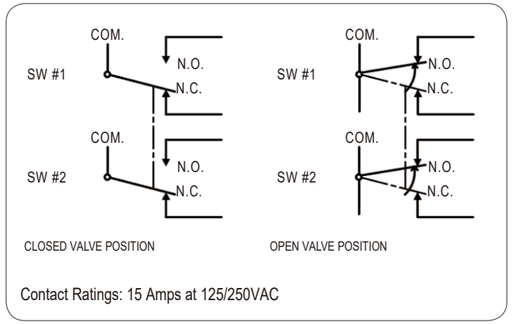
MATERIAL SPECIFICATION

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



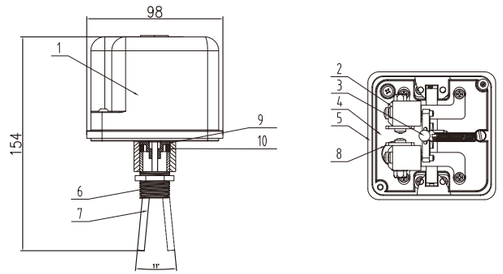


Contact Ratings: 15 Amps at 125/250VAC

Supervisory Switch for Indicator Post (ZXHQ)



ZXHQ



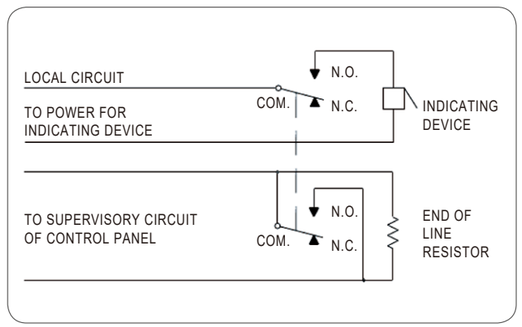
- Service Environment: Indoor or Outdoor use, all parts have corrosion resistant finishes
- Temperature Range: -10℃ - 80℃ (14° F - 176° F)
- Cover Tamper: Tamper Resistant Screws
  Optional Cover Tamper Switch Available
- Electrical Ratings: 15 Amps at 125/250VAC
- Appliance Standards: NFPA-13, NFPA-13D, 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, butterfly and other types.

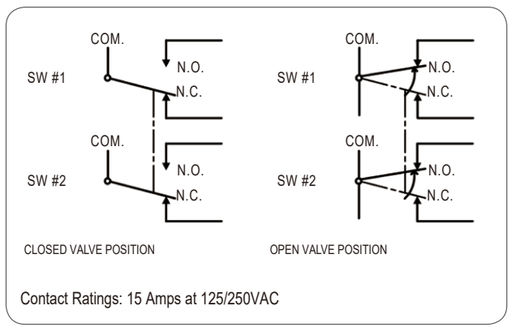
MATERIAL SPECIFICATION

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



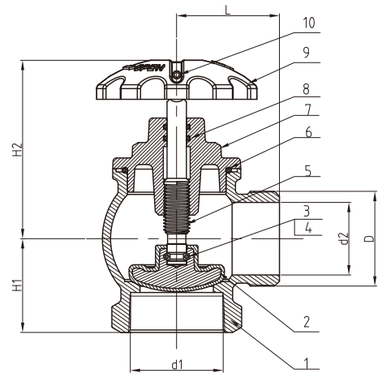


Contact Ratings: 15 Amps at 125/250VAC

Indoor Fire Hydrant(SN), PN10/16



SN



- Thread: ISO 7-1
- Working Pressure: PN10/16
- Temperature Range: 0℃ - 100℃
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

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	Inner Hex Screw	SS304
5	Stem	SS420
6	O-Ring	NBR
7	Bonnet	EN-GJS-450-10
8	O-Ring	NBR
9	Handwheel	ABS
10	Screw	SS304

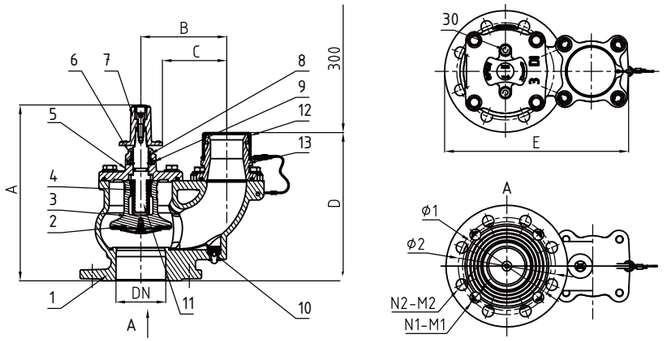
Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

DN		Dimensions(mm)					
Inch	mm	H1	H2	L	d1(Rc)	d2	D(R)
2"	50	57.5	109.5	63	2	44.5	2
2.5"	65	71	109.3	71	2½	58	2½

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℃ - 80℃
  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

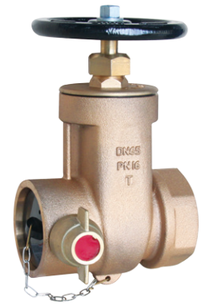
DN		Dimensions(mm)										
Inch	mm	Model	PN	A	B	C	D	E	Ø1	Ø2	N1-M1	N2-M2
3"	DN80	SA1	10/16	289.5	141.5	106	241	303	146	160	4-Φ18	8-Φ19
3"	DN80	SA2	10/16	289.5	141.5	106	235	303	146	160	4-Φ18	8-Φ19
3"	DN80	SA3	10/16	289.5	141.5	106	228	303	146	160	4-Φ18	8-Φ19
3"	DN80	SA4	10/16	289.5	141.5	106	260	303	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	HPb59-1	4	With Buckle Lug Connector		SA4	EN-JS1040

Dry Riser Landing Valve



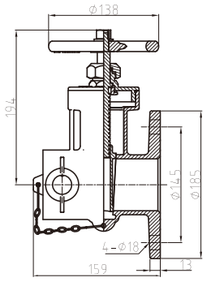
XZ45W



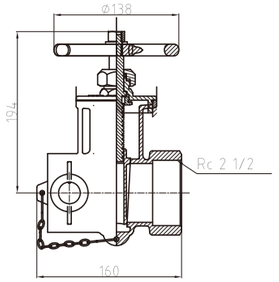
XZ15W



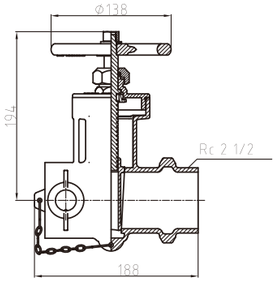
XZ25W



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

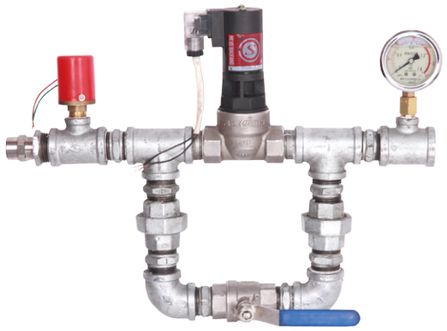
Features

- 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

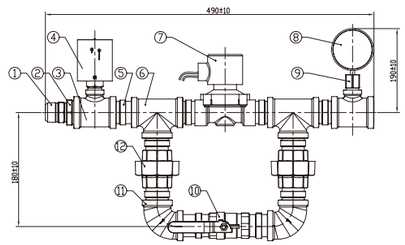
MATERIAL SPECIFICATION

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

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



ZSPM-80-DX



MATERIAL SPECIFICATION

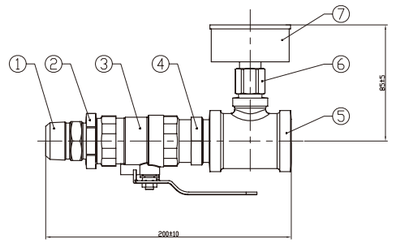
Part No.	Part	Standard Specification
1	Test Nozzle	SS304
2	Outside Hex Bushing	Malleable Iron Galvanized
3	Reducing Tee	Malleable Iron Galvanized
4	Pressure Switch	
5	Nexagon Nipple,Equal	Malleable Iron Galvanized
6	Reducing Tee	Malleable Iron Galvanized
7	Solenoid Valves	Brass
8	Pressure Gauge	
9	Connector	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 oder 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 oder list.
2.Threads connection options available includes: ASME B1.20.1, ISO 7-1

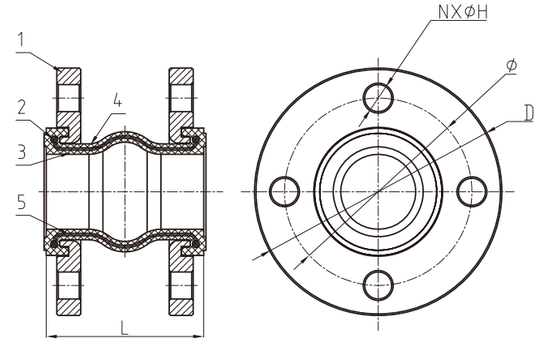
Flexible Rubber Joint Single Sphere Galvanized Carbon Steel Flange Connection (XTQ1RF), PN10/16



XTQ1RF

CE

- Connection Ends: Flange Drilling to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: -10℃- 115℃
- Vacuum Capacity: 700MM/HG

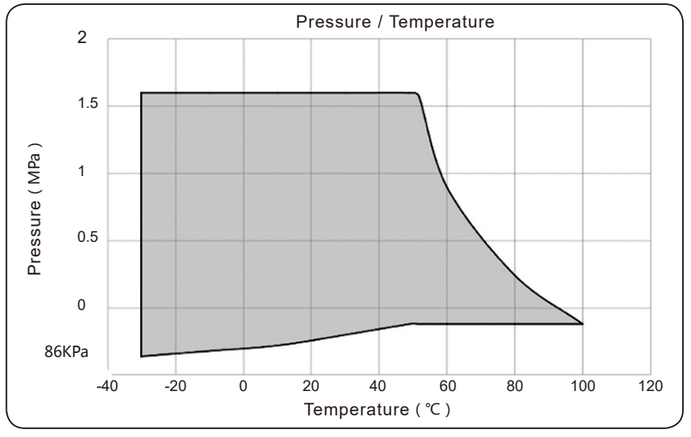


MATERIAL SPECIFICATION

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	Compression		
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

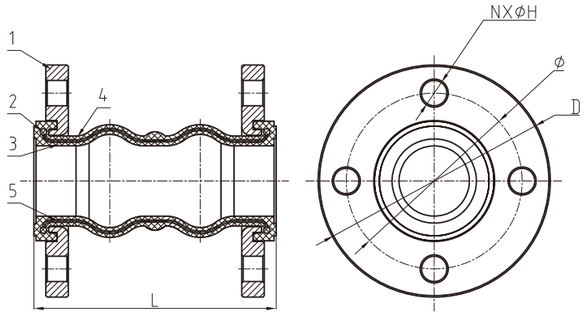


Flexible Rubber Joint Twin Sphere Galvanized Carbon Steel Flange Connection (XTQ2RF), PN10/16



XTQ2RF

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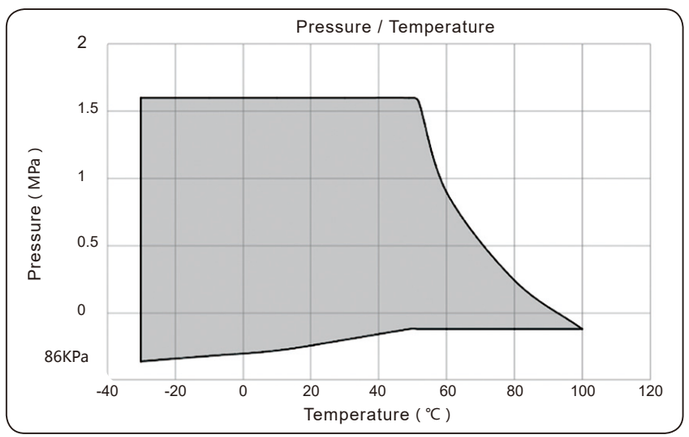
- Connection Ends: Flange Drilling to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: -10℃ - 115℃
- Vacuum Capacity: 650MM/HG

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	Compression		
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

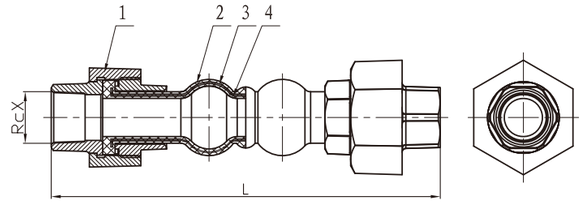


Flexible Rubber Joint Twin Sphere Union-Screw End Connection(XTQ2L), PN10/16



XTQ2L

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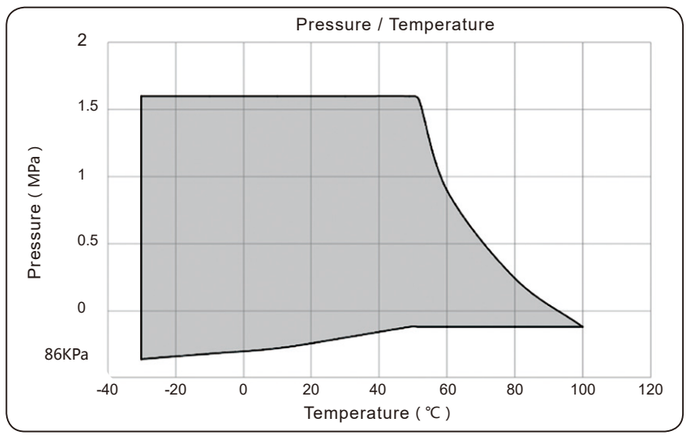
- Thread: ISO 7-1
- Working Pressure: PN10/16
- Temperature Range: -10℃ -115℃
- Vacuum Capacity: 500MM/HG

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	Elongation	Compression		
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 11/4	6	22	22	40
1 1/2"	40	200	Rc 11/2	6	22	22	40
2"	50	200	Rc 2	6	22	22	40
2 1/2"	65	240	Rc 21/2	6	22	22	40
3"	80	240	Rc 3	6	22	22	40

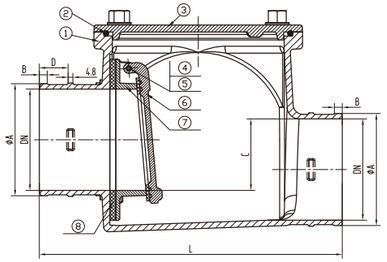


Backwater Valve (HSB4X), PN10



HSB4X

- Connection Ends: ASTM A888
- Working Pressure: PN10
- Temperature Range: 0℃ - 80℃
- 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

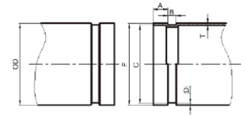
Note: For special material request other than standard specification, please indicate clearly on the inquiry or order list.

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

Roll Groove Dimensions

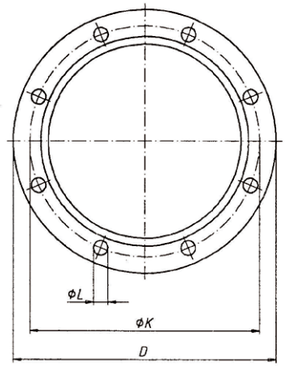


Roll Grooving Machine



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	Tolerence mm/in				Basic mm/in	Tolerence 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 1¼	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 1½	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 2½	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 2½	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

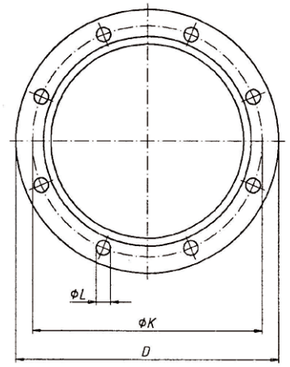
Flange Dimensions



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	-