

# FIRE VALVES



**LEDE<sup>®</sup> WEFLO**

**LPS**  
Leyon Piping System

**AP** Ningjin APC  
Industries

**CONTACT US**

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# Certificate

## CERTIFICATE OF COMPLIANCE

Certificate Number: 20180313-EX27773  
Report Reference: EX27773-20180310  
Issue Date: 2018-March-13

Issued to: Leyon Piping System Co., Ltd  
Suite 401 Building D No. 255 Meiqiang RD Minhang  
District 201104 Shanghai, CHINA

This is to certify that representative samples of FITTINGS, CAST IRON, DUCTILE IRON, MALLEABLE IRON AND BRONZE  
Fittings, Cast Iron, Ductile Iron, Malleable Iron Fittings  
Model - , 90, 92, 90R, 120, 130, 130R, 130A, 130C, 180, 180R, 241, 270, 240, 529, 280, 291, 301, 121, 220, 221 130S, 130T, 300, 90S

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate:

Standard(s) for Safety: EN 10242 - Threaded Pipe Fittings in Malleable Cast Iron  
ASME B16.3 - Malleable Iron Threaded Fittings  
ASME B16.14 - Ferrous Pipe Plugs, Bushings, and Locknuts with Pipe Threads

Additional information: See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

*Barry*  
Steve Macintosh, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/customer-service>



## CERTIFICATE OF COMPLIANCE

Certificate Number: 20221019 - EX28919  
Report Reference: EX28919-20221019  
Issue Date: 2022-October-19

Issued to: SGF ENERGY ENGINEERING TECH. INC.  
1201 N Orange St Ste 600  
Wilmington, DE 19801-1171  
United States

This is to certify that representative samples of FITTINGS, WELDED OUTLET Models:

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 213B WELDED OUTLET FITTINGS FOR FIRE PROTECTION,  
ULC/ORD C213 WELDED OUTLET FITTINGS

Additional information: See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

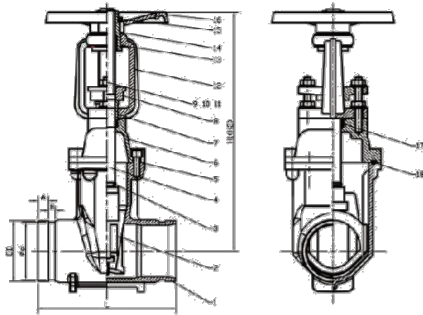
Look for the UL Certification Mark on the product.

*Barry*  
Steve Macintosh, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/customer-service>



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



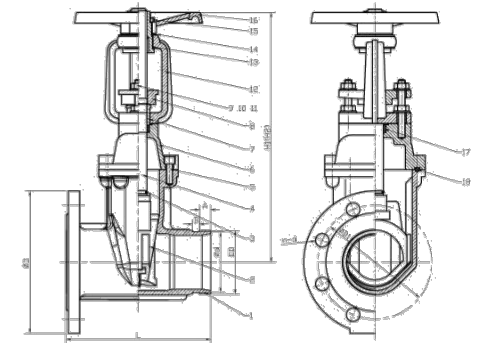
Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	O-Ring	NBR	EPDM
4	Stem	Stainless Steel	SS304, SS316, SS420, SS431
5	Nut	Carbon Steel Zinc Plated	SS304, SS316
6	Bonnet	EN-GJS-450-10	
7	Stem Bushing	Brass HPb59-1	
8	Gland	EN-GJS-450-10	
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 ZQSn6-5-5
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



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

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	

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



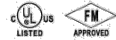
Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	O-Ring	NBR	EPDM
4	Stem	Stainless Steel	SS304, SS316, SS420, SS431
5	Bolt	Carbon Steel Zinc Plated	SS304, SS316
6	Bonnet	EN-GJS-450-10	
7	Stem Bushing	Brass HPb59-1	
8	Gland	EN-GJS-450-10	
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



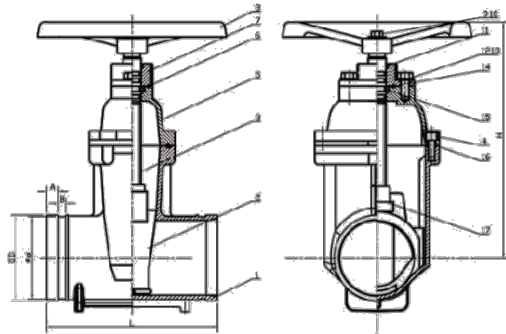
- Connection Ends: Flange to EN-1092-2:1997, Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C - 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

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	4-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	

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



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



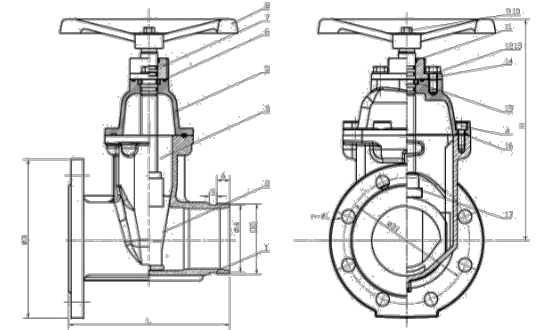
Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10-EPDM	
3	Stem	Stainless Steel	SS304, SS316, SS420, SS431
4	Nut	Carbon Steel Zinc Plated	SS304, SS316
5	Bonnet	EN-GJS-450-10	
6	O-Ring	NBR	EPDM
7	Gland	EN-GJS-450-10	
8	Handwheel	EN-GJS-450-10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

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	144.3	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	

## Flanged x Grooved Resilient NRS Gate Valve (PN10/16)UL/FM Approved



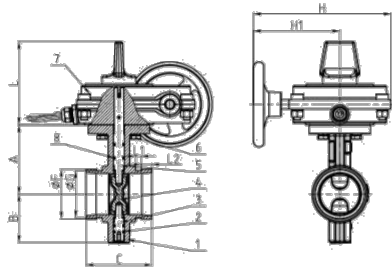
- Connection Ends: Flange to EN 1092-2:1997, Groove to ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C- 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



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

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	

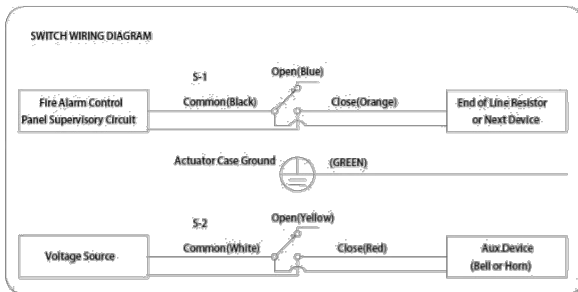
## Grooved Butterfly Valve with Tamper Switch (PN10/16)UL/FM Approved



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

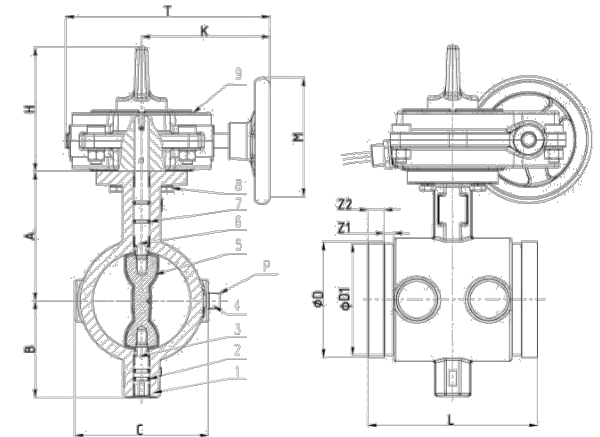


- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange standard: ISO 5211
- Stem drive by keys, parallel or diagonal square or flat head
- Working Pressure: PN10/16
- Temperature Range: 0°C - 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting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



DN		Dimensions(mm)										
Inch	mm	A	B	C	F	G	L	L1	L2	H1	H	
2"	50	89	65.00	81.00	60.3	57.15	122.5	7.93	15.88	127	202.2	
2.5"	65	102	71	97	73.0	69.09	122.5	7.93	15.88	127	202.2	
2.5"	65	102	71	97	76.1	69.09	122.5	7.93	15.88	127	202.2	
3"	80	109	81	97	88.9	84.94	122.5	7.93	15.88	127	202.2	
4"	100	128	95	116	114.3	110.08	122.5	9.53	15.88	127	202.2	
5"	125	141	111	148	139.7	137.03	122.5	9.53	15.88	127	202.2	
5"	125	141	111	148	141.3	137.03	122.5	9.53	15.88	127	202.2	
6"	150	153	133	148	165.1	163.96	122.5	9.53	15.88	127	202.2	
6"	150	153	133	148	166.3	163.96	122.5	9.53	15.88	127	202.2	
8"	200	184	133	184	219.1	214.40	122.5	11.10	19.05	195	260.2	
10"	250	216	196	159	273.1	268.28	122.5	12.70	19.05	195	260.2	
12"	300	254	226	165	323.9	318.29	132.0	12.70	19.05	202.5	297.5	

## Grooved Butterfly Valve with Tamper Switch

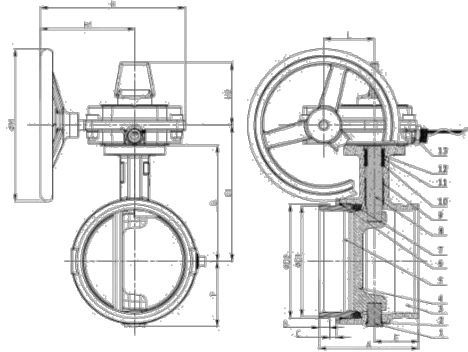


- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0°C - 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request

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

DN		Dimensions(mm)												
Inch	mm	A	B	C	ØD	ØD1	H	K	M	T	Z1	Z2	P	
													standard	optional
2.5	65	102	73	94±1.5	73	69.09	122.5	127	125	202	7.93	15.88	1/2	3/4
2.5	65	102	73	94±1.5	76.1	69.09	122.5	127	125	202	7.93	15.88	1/2	3/4
3	80	109	81	94±1.5	88.9	84.94	123.5	127	125	202	7.93	15.88	1/2	3/4
4	100	128	95	94±1.5	114.3	110.08	124.5	127	125	202	9.53	15.88	3/4	1/2
6	150	153	133	94±1.5	165.1	163.96	125.5	127	125	202	9.53	15.88	3/4	1/2
6	150	153	133	94±1.5	166.3	163.96	125.5	127	125	202	9.53	15.88	3/4	1/2
8	200	184	165	94±1.5	219.1	214.4	126.5	127	125	202	11.1	19.05	3/4	1/2

## Double Eccentric Grooved Butterfly Valve (PN10/16)



Part No.	Part	Standard Specification	Options
1	Upper Stem	Stainless Steel	SS304, SS316, SS420, SS431
2	O-Ring	NBR	EPDM
3	Right the body	EN-GJS-450-10	
4	Disc	SS316	
5	Left the 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	Zn/Sn/ptfe/zns	
12	O-Ring	NBR	EPDM
13	Gear Box	EN-GJS-450-10	

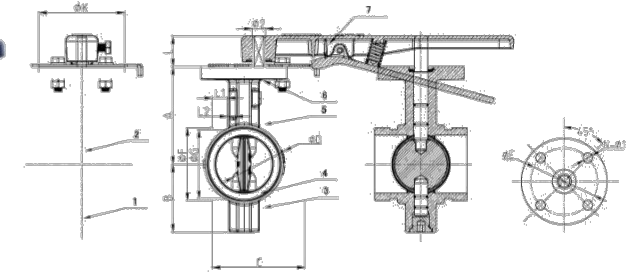
- Design Standard: BS EN 593
- Connection Ends: Groove to ISO 6182
- Top Flange standard: ISO 5211  
Stem drive by keys, parallel or diagonal square or flat head
- Working Pressure: PN10/16
- Temperature Range: 0°C- 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSIIAWWA C550 or painting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

DN		Dimensions(mm)													
Inch	mm	A	B	C	ØD1	ØD2	E	F	G	G1	ØM	H	H1	H2	L
2"	50	81	15.88	7.93	60.3	57.15	36.5	46	96.8	126.8	125	202.5	127	93	75
2.5"	65	96.8	15.88	7.93	73.0	69.09	45	53.3	108	138.0	125	202.5	127	93	75
2.5"	65	96.8	15.88	7.93	76.1	69.09	45	53.3	108	138.0	125	202.5	127	93	75
3"	80	96.8	15.88	7.93	88.9	84.94	45	59.7	114.3	144.3	125	202.5	127	93	75
4"	100	115.8	15.88	9.53	114.3	110.08	55.4	73.2	133.4	163.4	125	202.5	127	93	75
5"	125	147.6	15.88	9.53	139.7	137.03	65.5	84.8	158.8	188.8	125	202.5	127	93	75
5"	125	147.6	15.88	9.53	141.3	137.03	65.5	84.8	158.8	188.8	125	202.5	127	93	75
6"	150	147.6	15.88	9.53	165.1	163.96	65.5	97.3	171.5	201.5	225	216	139.5	93	75
6"	150	147.6	15.88	9.53	168.3	163.96	65.5	97.3	171.5	201.5	225	216	139.5	93	75
8"	200	133.4	19.05	11.10	219.1	214.40	59.2	127	203.2	233.2	225	273	197.5	93	75
10"	250	158.8	19.05	12.70	273.1	268.28	76.2	155.7	247.7	277.7	225	273	197.5	93	75
12"	300	165.1	19.05	12.40	323.9	318.29	76.2	181.1	273.1	303.1	225	298	202.5	97.5	87

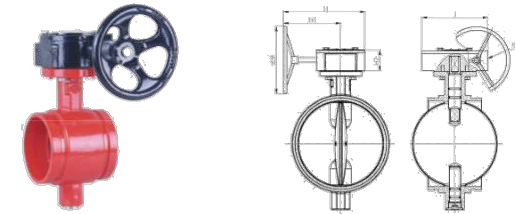
## Grooved Butterfly Valve (PN10/16)



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

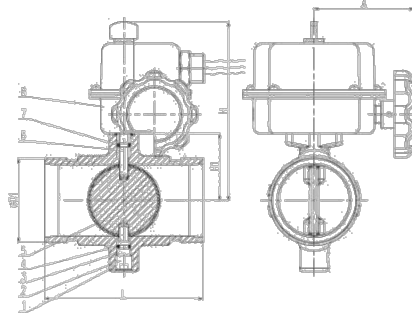


Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Disc	EN-GJS-450-10+EPDM	EN-GJS-450-10+NBR
3	O-Ring	NBR	EPDM
4	Stem	Stainless Steel	SS304, SS316, SS420, SS431
5	O-Ring	NBR	EPDM
6	Stem	Stainless Steel	SS304, SS316, SS420, SS431
7	Lever	EN-GJS-450-10	Aluminum
8	Gear Box	EN-GJS-450-10	



DN		Dimensions(mm)																		
Inch	mm	A	B	C	ØD	ØF	ØG	L1	L2	L	ØK	H	H1	H2	J	ØM	Ø2	ISO 5211	ØE	N-Ø1
2"	50	89	55	81	50.3	60.3	57.15	15.88	7.93	32	90	206	158	52	114	150	14	F07	70	4-Ø10
2.5"	65	102	71	97	60.8	73.0	69.09	15.88	7.93	32	90	206	158	52	114	150	14	F07	70	4-Ø10
2.5"	65	102	71	97	60.8	76.1	72.26	15.88	7.93	32	90	206	158	52	114	150	14	F07	70	4-Ø10
3"	80	109	81	97	76	88.9	84.94	15.88	7.93	32	90	206	158	52	114	150	14	F07	70	4-Ø10
4"	100	128	95	116	98.5	114.3	110.08	15.88	9.53	32	90	206	158	52	114	150	16	F07	70	4-Ø10
5"	125	141	111	148	122.6	139.7	135.48	15.88	9.53	32	90	206	158	52	114	150	16	F07	70	4-Ø10
5"	125	141	111	148	122.6	141.3	137.03	15.88	9.53	32	90	206	158	52	114	150	16	F07	70	4-Ø10
6"	150	133	133	148	148	159.0	154.50	15.88	9.53	32	90	206	158	52	114	150	20	F07	70	4-Ø10
6"	150	133	133	148	148	165.1	160.9	15.88	9.53	32	90	206	158	52	114	150	20	F07	70	4-Ø10
6"	150	133	133	148	148	168.3	163.96	15.88	9.53	32	90	206	158	52	114	150	20	F07	70	4-Ø10
8"	200	184	164	133	199	219.1	214.4	19.05	11.10	45	125	310	239	69	167	300	26	F10	102	4-Ø12
10"	250	216	196	169	252	273.0	268.28	19.05	12.70	45	125	310	239	69	167	300	26	F10	102	4-Ø12
12"	300	254	226	165	300.5	323.9	318.29	19.05	12.70	45	125	307	229	73	190	300	28	F10	102	4-Ø12
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

## Grooved Butterfly Valve with Tamper Switch



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

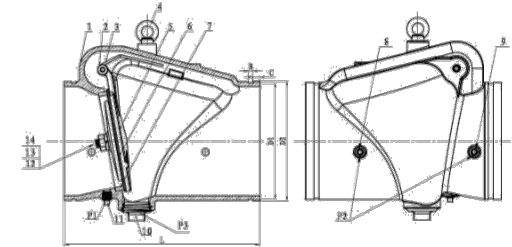
Part No.	Part	Standard Specification	Options
1	Valve body	EN-GJS-450-10	
2	Screw Plug	Carbon steel Zinc Pland	
3	Stub Shaft	Stainless Steel	SS304, SS316, SS420, SS431
4	O-Ring	NBR	EPDM
5	Disc	Carbon Steel+EPDM	
6	Drive Shaft	Stainless Steel	SS304, SS316, SS420, SS431
7	O-Ring	NBR	EPDM
8	Signal Gear	Carbon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

DN		Dimensions(mm)				
Inch	mm	A	ØD1	H	H1	L
2"	50	72	60.3	128.5	48	114.0

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



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



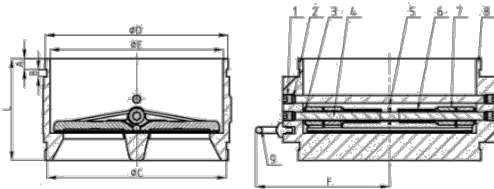
Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Hinge Pin	SS420	
3	Spring	SS304	SS316
4	Eye Bolt	Carbon Steel Zinc Plated	
5	Disc	DN50-100 SS304 DN150-300 EN-GJS-450-10	SS304
6	Disc Sealing Ring	EPDM	NBR
7	Seat Ring	ASTM B62 C83600 (Pressed Fit)	SS304, SS316 Pressed Fit or 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

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 (PN10/16)



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



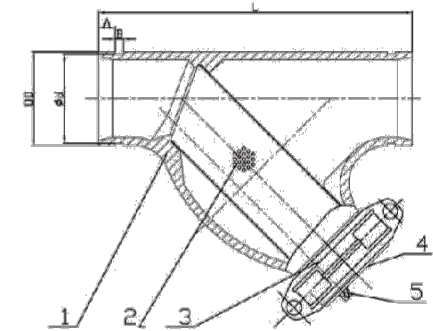
Part No.	Part	Standard Specification	Options
1	Countersunk Hex Head Screws	Carbon Steel Zinc Plated	
2	Seal Ring	EPDM	
3	Gasket	PTFE	
4	Shaft	SS420	SS304, SS316, SS431
5	Gasket	PTFE	
6	Spring	SS304	
7	Disc	SS304	SS316, QT450-10
8	Body	EN-GJS-450-10	
9	Eye Bolt	Carbon Steel Zinc Plated	

DN		Dimensions(mm)						
Inch	mm	A	B	C	D	E	F	L
8"	219.1	19.1	11.1	214.4	219	200	165	180
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

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



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



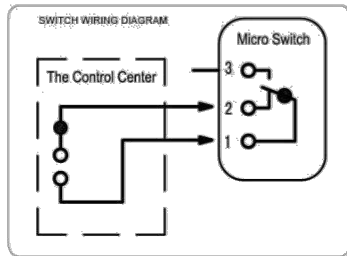
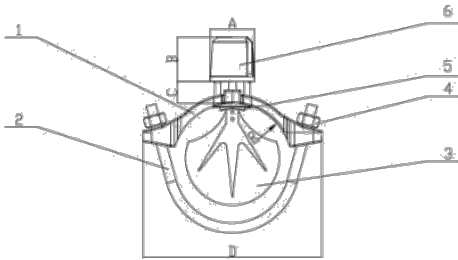
Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Screen	SS304	SS316
3	Rigid Coupling	EN-GJS-450-10	
4	Cap	EN-GJS-450-10	
5	Plug	Malleable Iron Galvanized	Bronze ASTM B594

DN		Sieve No.	Hole Dia.	Free Flow Area(%)
Inch	mm	mm	mm	%
2"-2.5"	50-65	25	4	48
3"-4"	80-100	19	5	59
5"	125	14	6	63
6"-12"	150-300	13	6.3	64

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



## Water Flow Indicator (PN10/16)

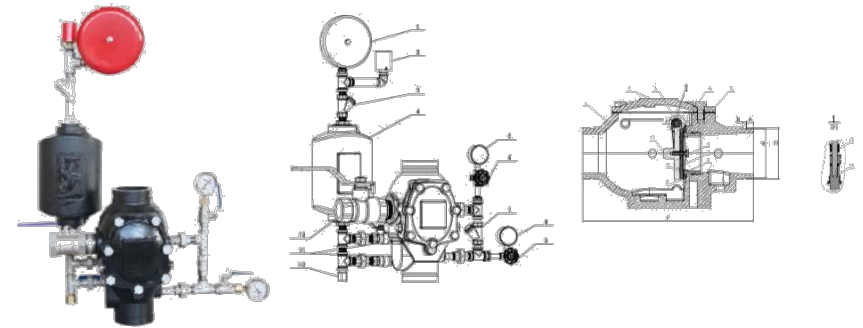


- Connection Ends: ISO 6182
- Working Pressure: PN10/16
- Temperature Range: 0°C - 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

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

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

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

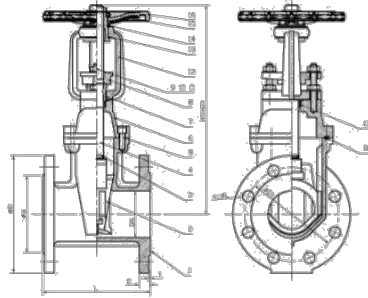


Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Bonnet	EN-GJS-450-10	
3	Pin	SS304	SS316
4	Hex Bolt	Carbon Steel Zinc Plated	
5	Gasket	EPDM	NBR
6	Hex Bolt	SS304	SS316
7	Gland	Brass H62	
8	Seat	Bronze ZQSn5-5-5	
9	O-Ring	NBR	EPDM
10	Gasket	EPDM	
11	Disc	Brass H62	
12	Plug	SS304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

DN		Dimensions(mm)					
Inch	mm	OD	A	B	ϕ d	ϕ 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	Drip valve

## Flanged Resilient OS&Y Gate Valve (PN10/16 UL/FM Approved)

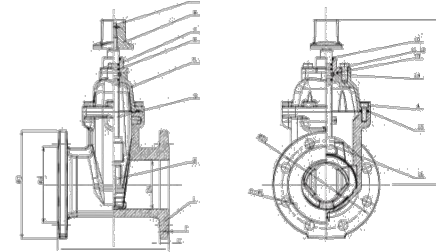


Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	O-Ring	NBR	EPDM
4	Stem	Stainless Steel	SS304, SS316, SS420, SS431
5	Bolt	Carbon Steel Zinc Plated	SS304, SS316
6	Bonnet	EN-GJS-450-10	
7	Stem Bushing	Brass Hpb59-1	
8	Gland	EN-GJS-450-10	
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

- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 100
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSIIAWWA C550

DN		PN	Dimensions(mm)										
Inch	mm		L	TypeA		TypeB		D	D1	d	C	T	n-φL
				H1 (Close)	H2 (Open)	H1 (Close)	H2 (Open)						
2"	50	10/16	178	323	373	348	400	165	125	99	19	3	4-Ø19
2.5"	65	10/16	190	343	408	373	440	185	145	118	19	3	4-Ø19
3"	80	10/16	203	370	450	408	490	200	160	132	19	3	8-Ø19
4"	100	10/16	229	442	542	471	573	200	180	156	19	3	8-Ø19
5"	125	10/16	254	541	665	541	665	250	210	184	19	3	8-Ø19
6"	150	10/16	267	608	758	593	743	285	240	211	19	3	8-Ø23
8"	200	10	292	720	920	774	975	340	295	266	20	3	8-Ø23
		16											12-Ø23
10"	250	10	330	940	1190	940	1190	405	350	319	22	3	12-Ø23
		16											12-Ø28
12"	300	10	366	1065	1370	1065	1370	460	400	370	24.5	4	12-Ø23
		16											12-Ø28
14"	350	10	381	1403	1817	1403	1817	520	460	429	26.5	4	16-Ø23
		16											16-Ø28
16"	400	10	406	1403	1817	1403	1817	580	515	480	28	4	16-Ø28
		16											16-Ø31
18"	450	10	432	1788	2308	1788	2308	640	565	530	30	4	20-Ø28
		16											20-Ø31
20"	500	10	457	1809	2329	1809	2329	715	620	582	31.5	4	20-Ø28
		16											20-Ø34
24"	600	10	508	2025	2649	2025	2649	840	725	682	36	5	20-Ø31
		16											20-Ø37

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



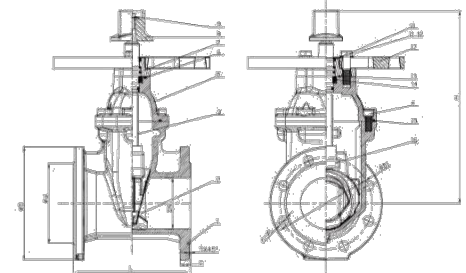
Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	Stem	Stainless Steel	SS304, SS316, SS420, SS431
4	Bolt	Carbon Steel Zinc Plated	SS304, SS316
5	Bonnet	EN-GJS-450-10	
6	O-Ring	NBR	
7	Gland	EN-GJS-450-10	
8	Stem Cap	EN-GJS-450-10	
9	Bolt	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 ZQSn6-5-5

- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSIIAWWA C550

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									12-Ø28		
12"	300	10	366	743	743	460	400	370	24.5	4	12-Ø23		
		16									12-Ø28		
14"	350	10	381	1364	928	520	460	429	26.5	4	16-Ø23		
		16									16-Ø28		
16"	400	10	406	1364	928	580	515	480	28	4	16-Ø28		
		16									16-Ø31		
18"	450	10	432	1364	1165	640	565	530	30	4	20-Ø28		
		16									20-Ø31		
20"	500	10	457	1364	1188	715	620	582	31.5	4	20-Ø28		
		16									20-Ø34		
24"	600	10	508	1364	1364	840	725	682	36	5	20-Ø31		
		16									20-Ø37		



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



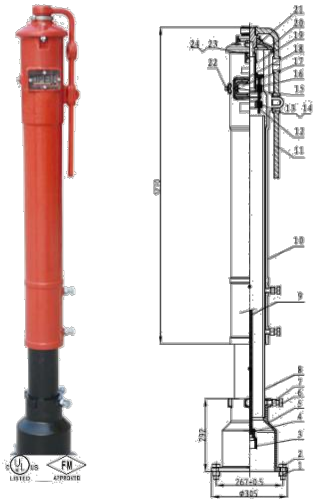
- Connection Ends: Flange to BS EN-1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C-100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSIIAWWA C550



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	

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	24.5	4	12-Φ23
		16					410				12-Φ28

**Vertical Indicator Post** UL/FM Approved



**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

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 Aluminium
13	Hex Bolt	Carbon Steel Zinc Plated
14	Hex Nut	Carbon Steel Zinc Plated
15	Hex Bolt	Carbon Steel Zinc Plated
16	Target	Cast Aluminium
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

**Wall Indicator Post** UL/FM Approved

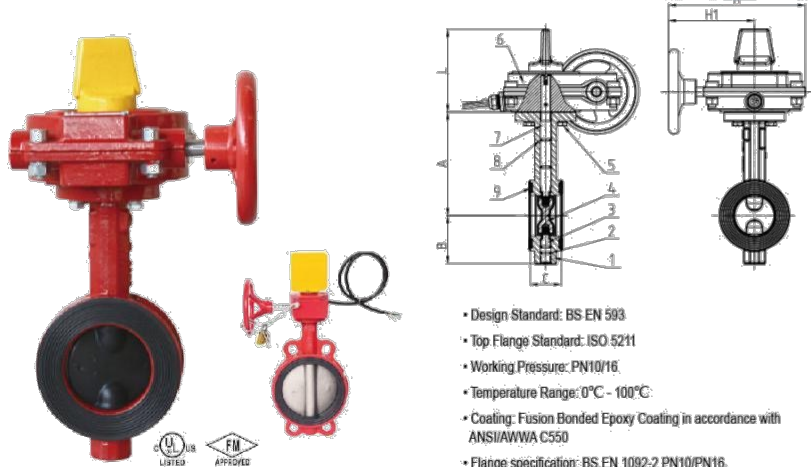


**Statement:**  
Wall indicator post provides a means to operate a valve installed behind a wall and able to indicate the open or shut position of the valve.

**Coating:**  
Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

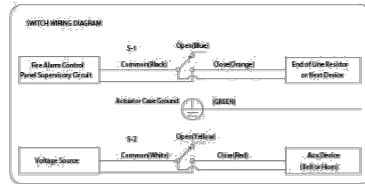
Part No.	Part	Standard Specification
1	Body	Cast Iron EN-GJL-200
2	Plug	Malleable Iron
3	Square Nut	Carbon Steel Zinc Plated
4	Hex Bolt	Carbon Steel Zinc Plated
5	Cover	Cast Iron EN-GJL-200
6	Hand Wheel	EN-GJS-450-10
7	Eye Bolt	Carbon Steel Zinc Plated
8	Gasket	Carbon Steel Zinc Plated
9	Snap Ring	Spring Steel
10	Operating Nut	SS304
11	Gasket	EPDM
12	Window Glass	Plexiglass
13	Target	Cast Aluminium
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

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



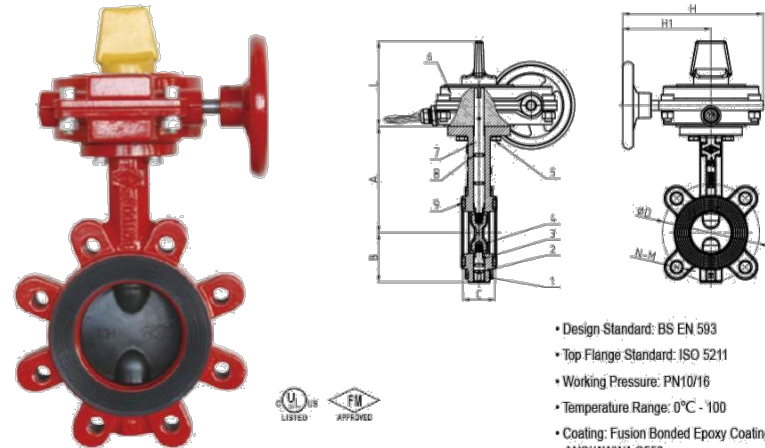
- Design Standard: BS EN 593
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0°C - 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Flange specification: BS EN 1092-2 PN10/PN16, ASME B16.1 CL125, ASME B16.5 CL150, JIS B2210 10K

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



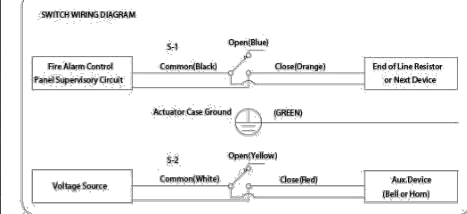
DN		Dimensions(mm)					
Inch	mm	A	B	C	L	H1	H
2"	50	140.5	65	43	122.5	127	202.2
2.5"	65	153	71	46	122.5	127	202.2
3"	80	157.5	81	46	122.5	127	202.2
4"	100	176	95	52	122.5	127	202.2
5"	125	191	111	56	122.5	127	202.2
6"	150	202.5	133	56	122.5	127	202.2
8"	200	243.5	164	60	122.5	185	260.2
10"	250	273	196	68	122.5	185	260.2
12"	300	311	226	78	132	202.5	297.5

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



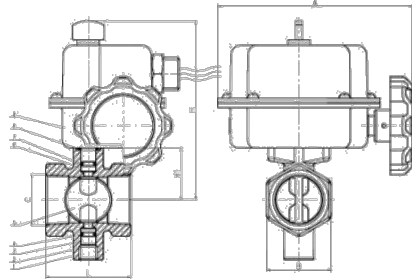
- Design Standard: BS EN 593
- Top Flange Standard: ISO 5211
- Working Pressure: PN10/16
- Temperature Range: 0°C - 100
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550
- Flange specification: BS EN 1092-2 PN10/PN16, ASME B16.1 CL125, ASME B16.5 CL150, JIS B2210 10K

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

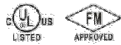


DN		Dimensions(mm)							
Inch	mm	A	B	C	ØD1	ØD2	E	F	G
2"	50	140.5	65	43	122.5	127	202.2	125	4-M16
2.5"	65	153	71	46	122.5	127	202.2	145	4-M16
3"	80	157.5	81	46	122.5	127	202.2	160	4-M16
4"	100	176	95	52	122.5	127	202.2	180	8-M16
5"	125	191	111	56	122.5	127	202.2	210	8-M16
6"	150	202.5	133	56	122.5	127	202.2	240	8-M20
8"	200	243.5	164	60	122.5	185	260.2	295	12-M20
10"	250	273	196	68	122.5	185	260.2	355	12-M24
12"	300	311	226	78	132	202.5	297.5	410	12-M24

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



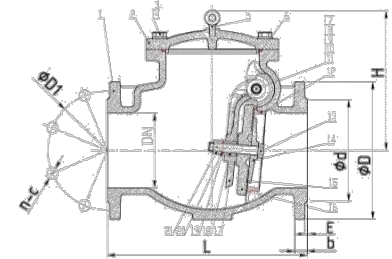
- Connection Ends: Thread to ISO 7-1
- Working Pressure: PN10
- Temperature Range: 0°C- 100°C.
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or double coating of hot dipped galvanization plus electroplating



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 Gear Box	Carbon Steel	

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	1 1/4
1.5"	40	73	121	40.5	125	55.5	1 1/2
2"	50	82.5	131	48	125	71	2

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



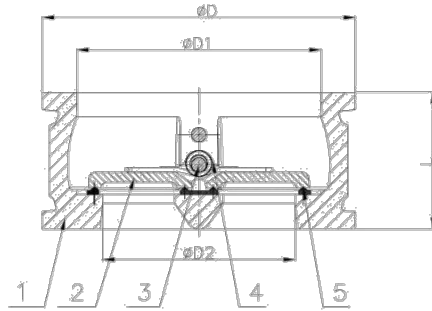
- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16.
- Temperature Range: 0°C- 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550



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

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								
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 (PN10/16 UL Listed)

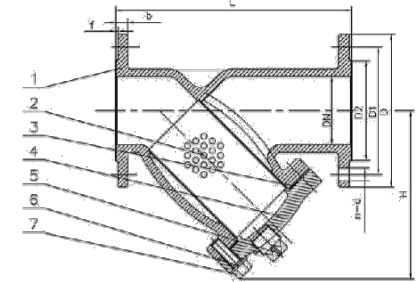


- Connection Ends: BS EN 1092 PN10/PN16/PN25, AS 2120 TABLE E, JIS B2212 10K, BS 10 TABLE D/E
- Working Pressure: PN10/16
- Temperature Range: 0°C- 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSIIAWWA C550

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Disc	SS316	EN-GJS-450-10, SS304, Al-Bronze-UNC 65400
3	Stem	SS420	SS304, SS316, SS416
4	Spring	SS304	SS316
5	Rubber Seal	EPDM	NBR

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	

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



- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: -10°C- 200°C graphite gasket  
0°C- 100°C rubber gasket
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSIIAWWA C550

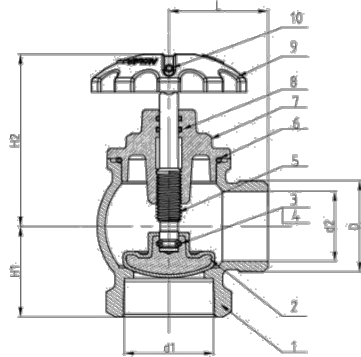
Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Screen	SS304 (Perforated)	SS304, SS316 (Perforated, Knitted, Double Screen)
3	Gasket	Graphite-Acarthopopye Plate	EPDM
4	Bonnet	EN-GJS-450-10	
5	Plug	Malleable Iron Galvanized	Bronze-ASTM B584
6	Bolt	Carbon Steel Zinc Plated	SS304,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

DN		Sieve No.	Hole Dia. mm	Free Flow Area(%)
2"-2.5"	50-65	25	.4	48
3"-4"	80-100	19	.5	59
5"	125	14	.6	63
6"-12"	150-300	13	.63	64

DN		PN	Dimensions(mm)							
Inch	mm		L	D	D1	D2	b	n- $\phi d$	f	H
18"	450	10	850	640	565	530	30	20- $\phi 28$	4	693
		16			585	548		20- $\phi 31$		
20"	500	10	1000	715	620	582	31.5	20- $\phi 28$	4	774
		16			650	609		20- $\phi 34$		
24"	600	10	1100	840	725	682	36	20- $\phi 31$	5	956
		16			770	720		20- $\phi 37$		

DN		PN	Dimensions(mm)							
Inch	mm		L	D	D1	D2	b	n- $\phi d$	f	H
2"	50	10/16	230	165	125	99	19	4- $\phi 19$	3	140
2.5"	65	10/16	290	185	145	118	19	4- $\phi 19$	3	175
3"	80	10/16	310	200	160	132	19	8- $\phi 19$	3	198
4"	100	10/16	350	220	180	156	19	8- $\phi 19$	3	229
5"	125	10/16	400	250	210	184	19	8- $\phi 19$	3	287
6"	150	10/16	480	285	240	211	19	8- $\phi 23$	3	304
		10						8- $\phi 23$		
8"	200	16	600	340	295	266	20	12- $\phi 23$	3	370.5
		10						12- $\phi 23$		
10"	250	16	730	405	350	319	22	12- $\phi 28$	3	469
		10			355			12- $\phi 28$		
12"	300	10	850	460	400	370	24.5	12- $\phi 23$	4	540
		16			410			12- $\phi 28$		
18"	450	10	1200	640	565	530	30	20- $\phi 28$	4	862
		16			585	548		20- $\phi 31$		
20"	500	10	1250	715	620	582	31.5	20- $\phi 28$	4	926
		16			650	609		20- $\phi 34$		
24"	600	10	1450	840	725	682	36	20- $\phi 31$	5	1057
		16			770	720		20- $\phi 37$		

**Landing Valve (PN10/16 UL Listed)**

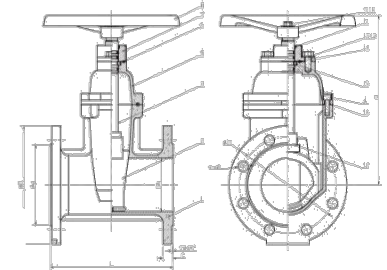


- Thread: ISO 7-1
- Working Pressure: PN10/16
- Temperature Range: 0°C - 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

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

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	2 1/2	58	2 1/2

**Flanged Resilient NRS Gate Valve (PN10/16)**



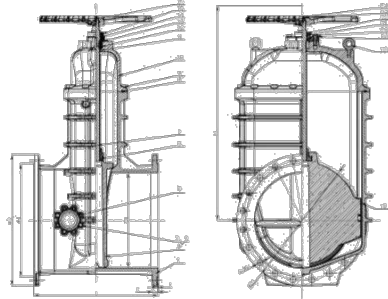
- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C - 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

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, SS16,
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, SS16,
10	Flat Washer	Carbon Steel Zinc Plated	SS304, SS16,
11	Ring Wiper	NBR	EPDM
12	Bolt	Carbon Steel Zinc Plated	SS304, SS16,
13	Flat Washer	Carbon Steel Zinc Plated	SS304, SS16,
14	O-Ring	NBR	EPDM
15	Thrust Washer	Brass HPb59-1 (Type A) Not Available (Type B)	
16	Bonnet Gasket	EPDM	NBR
17	Wedge nut	Brass HPb59-1	Bronze ZQSn5-5-5

DN		PN	L	H		Dimensions(mm)					
Inch	mm			Type A	Type B	D	D1	d	C	T	n-φL
2"	50	10/16	176	218	254	165	125	96	19	.3	4-φ19
2.5"	65	10/16	190	232	275	185	145	118	19	.3	4-φ19
3"	80	10/16	203	281	301	200	160	132	19	.3	8-φ19
4"	100	10/16	226	316	355	220	180	156	19	.3	8-φ19
5"	125	10/16	254	363	393	250	210	184	19	.3	8-φ19
6"	150	10/16	267	420	448	285	240	211	19	.3	8-φ23
8"	200	10	292	480	548	340	295	268	20	.3	8-φ23
		16									12-φ23
10"	250	10	330	626	625	405	350	320	22	.3	12-φ23
		16					355				12-φ28
12"	300	10	356	722	722	460	400	370	24.5	.4	12-φ23
		16					410				12-φ28
14"	350	10	381	800	800	520	460	429	26.5	.4	16-φ23
		16					470				16-φ28
16"	400	10	406	870	870	580	515	480	28	.4	16-φ28
		16					525				16-φ31
18"	450	10	432	1108	1108	640	565	530	30	.4	20-φ28
		16					585	548			20-φ31
20"	500	10	457	1130	1130	715	620	582	31.5	.4	20-φ28
		16					650	609			20-φ34
24"	600	10	508	1311	1311	840	725	682	36	.5	20-φ31
		16					770	720			20-φ37
28"	700	10	610	1311	1311	895	840	794	32.5	.5	24-φ31
		16					960	901			24-φ34



## Flanged Resilient NRS Gate Valve with Bypass Outlet (PN10/16)

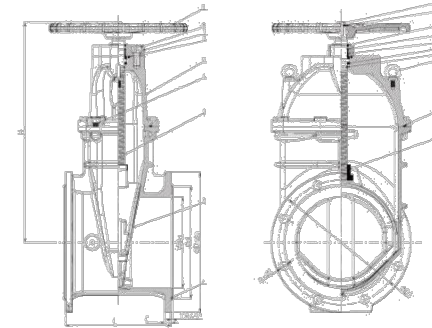


- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSIIAWWA C550

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge Disc	EN-GJS-450-10+EPDM	
3	Bolt	Carbon Steel Zinc Plated	SS304, SS316
4	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
5	By-pass Valve Cover	EN-GJS-450-10	
6	Wedge Nut	Brass HPb59-1	
7	Stem	Stainless Steel	SS304/316/420/431
8	Bonnet Gasket	EPDM	NBR
9	Bolt	Carbon Steel Zinc Plated	SS304, SS316
10	Bonnet	EN-GJS-450-10	
11	O-Ring	NBR	EPDM
12	Thrust Washer	Carbon Steel Zinc Plated	SS304, SS316
13	O-Ring	NBR	EPDM
14	Axis Guide	Brass HPb59-1	
15	Gland	EN-GJS-450-10	
16	Handwheel	EN-GJS-450-10	Pressed Steel
17	Guide Sleeve	EPDM	
18	Eye Bolt	Carbon Steel Zinc Plated	
19	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
20	Bolt	Carbon Steel Zinc Plated	SS304, SS316
21	O-Ring	NBR	EPDM
22	Ring Wiper	EPDM	NBR
23	Flat Washer	Carbon Steel Zinc Plated	SS304, SS316
24	Bolt	Carbon Steel Zinc Plated	SS304, SS316

DN		PN	Dimensions(mm)							
Inch	mm		L	H	D	D1	d	C	T	n-φL
18"	450	10	650	1108	640	565	530	30	4	20-Φ28
		16				585	548			20-Φ31
20"	500	10	700	1130	715	620	582	31.5	4	20-Φ28
		16				650	609			20-Φ34
24"	600	10	800	1311	840	725	682	36	5	20-Φ31
		16				770	720			20-Φ37

## Flanged Resilient NRS Gate Valve (PN16)

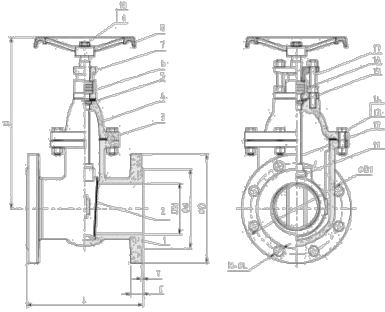


- Connection Ends: Flange to AS4087/AS2129
- Working Pressure: PN16
- Temperature Range: 0°C- 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with AS4158

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 flange	EN-GJS-450-10	
8	Bolt	Carbon Steel Zinc Plated	SS304, SS316
9	Handwheel	EN-GJS-450-10	Pressed Steel
10	Bolt	SS304	SS316
11	Flat Washer	SS304	SS316
12	Ring Wiper	EPDM	NBR
13	O-Ring	NBR	EPDM
14	Axis guide	Brass C22000	
15	Washer	Brass C22000	
16	O-Ring	NBR	EPDM
17	Rings	Carbon Steel Zinc Plated	
18	Bonnet Gasket	EPDM	NBR
19	Wedge nut	Bronze C95400	Bronze ZQSn5-5-5

DN		Dimensions(mm)								
Inch	mm	L	H	ΦD	ΦD1	Φd	C	T	n-ΦL	
3"	80	203	301	185	146	122	18	3	4-Φ18	
4"	100	229	355	215	178	154	20	3	4-Φ18	
6"	150	267	448	280	235	211	23	3	8-Φ18	
8"	200	292	548	335	292	268	23	3	8-Φ18	
10"	250	330	626	405	356	328	24	3	8-Φ22	
12"	300	356	722	455	406	378	30	4	12-Φ22	

## Cast Iron Flanged Metal Seated NRS Gate Valve (PN10/16)

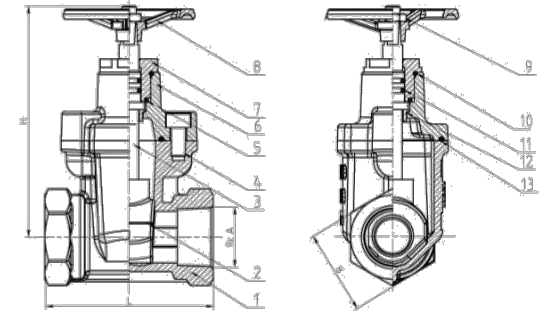


- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 200°C
- Coating: Painting

Part No.	Part	Standard Specification	Options
1	Valve Body	Cast Iron EN-GJL-200 + Copper Alloy	
2	Disc	Cast Iron EN-GJL-200 + Copper Alloy	
3	Bonnet Gasket	Asbestos	
4	Bonnet	Cast Iron EN-GJL-200	
5	Thrust Washer	Carbon Steel	
6	Packing	Cast Iron EN-GJL-200	
7	Gland	Cast Iron EN-GJL-200	
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	Stud	Carbon Steel Zinc Plated	SS304, SS316
12	Nut	Carbon Steel Zinc Plated	SS304, SS316
13	Stem Packing	Graphite	
14	Gasket	Asbestos	
15	Stem	Stainless Steel	SS304, SS316, SS420, SS431
16	Bolt	Carbon Steel Zinc Plated	SS304, SS316
17	Nut	Carbon Steel Zinc Plated	SS304, SS316
18	Wedge Nut	EN-GJS-450-10	

DN		PN	Dimensions(mm)							
Inch	mm		L	H	D	D1	d	C	T	n-φ L
2"	50	10/16	178	232	160	125	98	.20	3	4-φ 19
2.5"	65	10/16	190	275	180	145	118	.20	3	4-φ 19
3"	80	10/16	203	300	195	160	132	.22	3	8-φ 19
4"	100	10/16	229	330	215	180	156	.24	3	8-φ 19
5"	125	10/16	254	392	245	210	184	.26	3	8-φ 19
6"	150	10/16	267	430	280	240	211	.26	3	8-φ 23
		10	292	572	335	295	266	.26	3	12-φ 23
8"	200	10	292	572	335	295	266	.30	3	12-φ 23
		16	330	663	395	350	319	.28	3	12-φ 23
10"	250	10	330	663	405	355	319	.32	3	12-φ 28
		16	356	745	445	400	370	.28	4	12-φ 23
12"	300	10	356	745	460	410	370	.32	4	12-φ 28
		16								

## Threaded Resilient NRS Gate Valve (PN10/16)

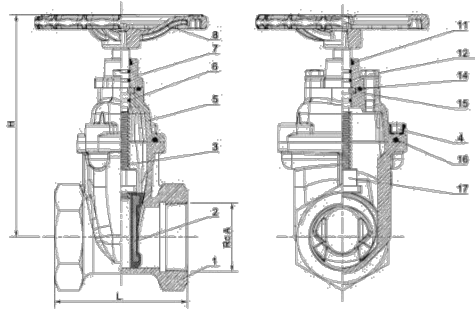


- Connection Ends; Thread to ISO 7-1
- Working Pressure: PN10/16
- Temperature Range: 0°C- 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

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	Sealing ring	NBR	EPDM
6	Bonnet	EN-GJS-450-10	
7	Gland	EN-GJS-450-10	
8	Handwheel	Carbon Steel	
9	Nut	Carbon Steel Zinc Plated	SS304, SS316
10	O-Ring	NBR	EPDM
11	O-Ring	NBR	EPDM
12	Axis guide	Brass HPb59-1	Bronze ZQSn5-5-5
13	Gasket	NBR	EPDM

DN		Dimensions(mm)			
Inch	mm	L	H	A	B
1/2"	15	65	86	1/2	27
3/4"	20	70	96	3/4	35
1"	25	80	116	1	41
1-1/4"	32	90	127	1-1/4	51
1-1/2"	40	100	150	1-1/2	58.5
2"	50	110	170	2	72

## Threaded Joint Resilient NRS Gate Valve (PN10/16)

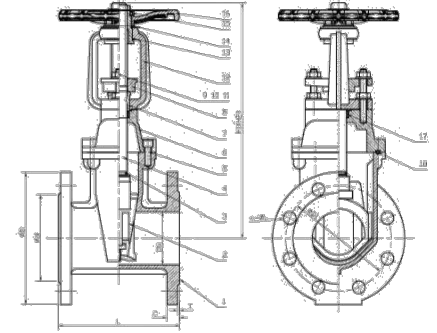


- Connection Ends: ISO 7-1
- Working Pressure: PN10/16
- Temperature Range: 0°C- 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550 or painting upon request

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Resilient Wedge disc	EN-GJS-450-10+EPDM	
3	Stem	SS420	SS304, SS316, 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	
9	Ring Wiper	NBR	EPDM
10	Bolt	Carbon Steel Zinc Plated	SS304, SS316
11	O-Ring	NBR	EPDM
12	Thrust Washer	Brass HPb59-1	
13	Bonnet Gasket	NBR	EPDM
14	Wedge nut	Brass HPb59-1	

DN		Dimensions(mm)		
Inch	mm	L	H	A
2"	50	127	210	Rc 2
2.5"	65	140	232	Rc 2 1/2
3"	80	150	281	Rc 3
4"	100	190	316	Rc 4
5"	125	210	367	Rc 5
6"	150	230	420	Rc 6

## Flanged Resilient OS&Y Gate Valve (PN10/16)

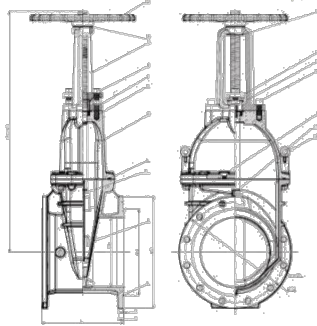


- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

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

DN		PN	Dimensions(mm)										
Inch	mm		TypeA		TypeB		D	D1	d	C	T	n-φL	
			H1(Close)	H2(Open)	H1(Close)	H2(Open)							
2"	50	10/16	176	323	373	346	400	165	125	89	19	3	4-φ19
2.5"	65	10/16	190	343	408	373	440	185	145	118	19	3	4-φ19
3"	80	10/16	209	370	450	408	490	200	160	132	19	3	8-φ19
4"	100	10/16	228	442	542	471	573	220	180	156	19	3	8-φ19
5"	125	10/16	254	541	665	541	665	250	210	184	19	3	8-φ19
6"	150	10	267	608	750	593	743	285	240	211	19	3	8-φ23
8"	200	10	292	720	900	774	975	340	395	266	20	3	8-φ23
		16							355				12-φ23
10"	250	10	330	940	1190	940	1190	405	350	319	22	3	12-φ23
		16							365				12-φ26
12"	300	10	356	1065	1370	1065	1370	460	400	370	24.5	4	12-φ23
		16							410				12-φ26
14"	350	10	391	1210	1560	1210	1560	520	460	429	26.5	4	16-φ23
		16							470				16-φ26
16"	400	10	406	1280	1690	1280	1680	580	515	480	28	4	16-φ29
		16							525				16-φ31
18"	450	10	432	1780	2210	1780	2210	640	565	530	30	4	20-φ28
		16							585				20-φ31
20"	500	10	457	1780	2280	1780	2280	715	620	562	31.5	4	20-φ28
		16							650				20-φ34
24"	600	10	508	1950	2550	1950	2550	840	725	682	36	5	20-φ31
		16							770				20-φ37

## Flanged Resilient OS&Y Gate Valve (PN16)

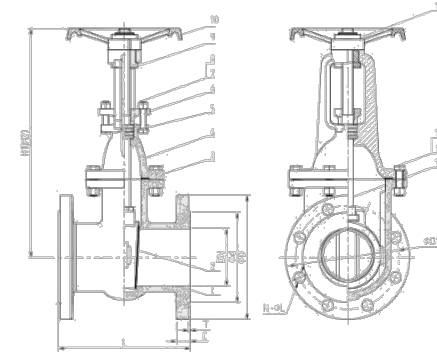


- Connection Ends: Flange to AS4087/AS2129.
- Working Pressure: PN16
- Temperature Range: 0°C- 100°C
- Coating: Fusion Bonded Epoxy Coating in according with AS4158

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	Bonnet Gasket	EPDM	NBR
5	Bonnet	EN-GJS-450-10	
6	Stud	SS304	SS316, Carbon Steel Zinc Plated
7	Flat Washer	SS304	SS316, Carbon Steel Zinc Plated
8	Gland Nut	SS304	SS316, Carbon Steel Zinc Plated
9	YOKE	EN-GJS-450-10	
10	Washer	Brass C22000	
11	Handwheel	EN-GJS-450-10	Pressed Steel
12	Stem nut	Bronze C95400	Bronze ZQSn5-5-5
13	Gland flange	EN-GJS-450-10	
14	Stem	Brass C22000	
15	Bolt	SS304	SS316, Carbon Steel Zinc Plated
16	Bolt	Carbon Steel Zinc Plated	SS304, SS316
17	O-Ring	NBR	EPDM
18	Eyebolt	Carbon Steel Zinc Plated	

DN		PN	Dimensions(mm)								
Inch	mm		L	H1(Close)	H2(Open)	D(min)	D1	d	C	T	n-φL
3"	80	16	203	408	490	185	146	122	18	3	4-φ18
4"	100	16	229	471	573	215	178	154	20	3	4-φ18
6"	150	16	287	583	743	280	235	211	23	3	8-φ18
8"	200	16	292	774	975	335	292	268	23	3	8-φ18
10"	250	16	330	940	1190	405	356	328	24	3	8-φ22
12"	300	16	356	1085	1370	455	406	378	30	4	12-φ22

## Cast Iron Flanged Metal Seated OS&Y Gate Valve (PN10/16)

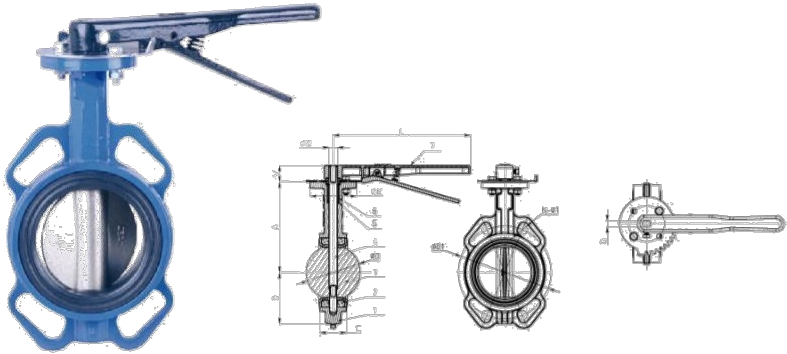


- Connection Ends: Flange to BS EN 1092-2:1997
- Working Pressure: PN10/16
- Temperature Range: 0°C- 200°C
- Coating: Painting

Part No.	Part	Standard Specification	Options
1	Valve Body	Cast Iron EN-GJL-200 + Copper Alloy	
2	Disc	Cast Iron EN-GJL-200 + Copper Alloy	
3	Bonnet Gasket	Asbestos	
4	Bonnet	Cast Iron EN-GJL-200	
5	Stem Packing	Graphite	
6	Gland	Cast Iron EN-GJL-200	
7	Bolt	Carbon Steel Zinc Plated	SS304, SS316
8	Nut	Carbon Steel Zinc Plated	SS304, SS316
9	Wedge Nut	EN-GJS-450-10	
10	Handwheel	EN-GJS-450-10	Pressed Steel
11	Locknut	Carbon Steel Zinc Plated	
12	Stem	Stainless Steel	SS304, SS316, SS420, SS431
13	Bolt	Carbon Steel Zinc Plated	SS304, SS316
14	Nut	Carbon Steel Zinc Plated	SS304, SS316

DN		PN	Dimensions(mm)								
Inch	mm		L	H1(Close)	H2(Open)	D	D1	d	C	T	n-φL
2"	50	10/16	178	260	315	160	125	9	20	3	4-φ19
2.5"	65	10/16	190	300	370	180	145	118	20	3	4-φ19
3"	80	10/16	203	390	450	195	160	132	22	3	8-φ19
4"	100	10/16	229	390	500	215	180	156	24	3	8-φ19
5"	125	10/16	254	472	606	245	210	184	26	3	8-φ19
6"	150	10/16	267	530	690	280	240	211	26	3	8-φ23
						335	295	266	26	3	12-φ23
8"	200	16	292	719	929	335	295	266	30	3	12-φ23
						1110	335	295	266	30	3
10"	250	16	330	855	1110	395	350	319	28	3	12-φ23
						405	405	355	319	32	3
12"	300	16	356	994	1305	445	400	370	28	4	12-φ23
						460	460	410	370	32	4

## Wafer Butterfly Valve (PN10/16)

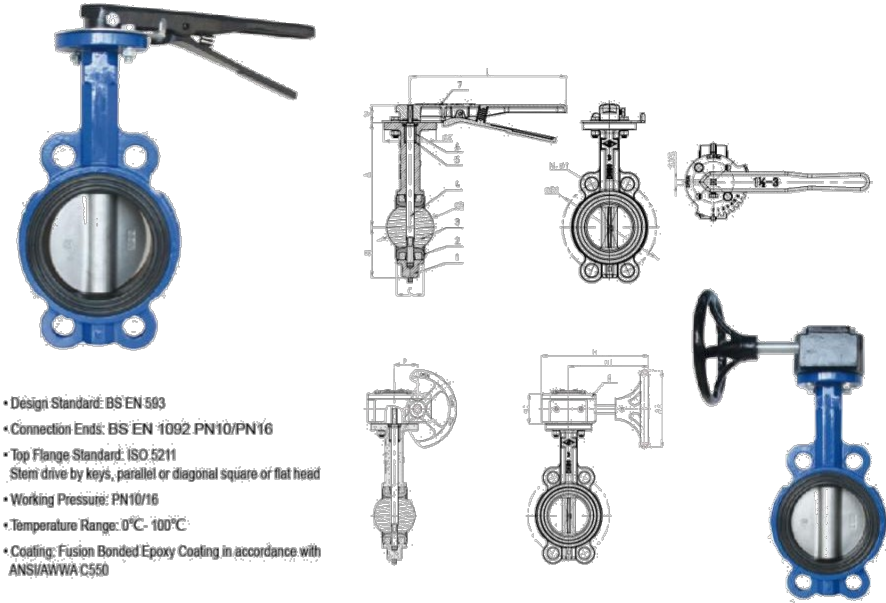


- Design Standard: BS EN 583
- Connection Ends: Universal Flange to BS EN 1092 PN10/PN16, AS 2129 TABLE E, JIS B2212 10K, BS 10 TABLE D/E
- Top Flange Standard: ISO 5211  
Stem drive by keys, parallel or diagonal square or flat head
- Working Pressure: PN10/16
- Temperature Range: 0°C - 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-430-10	
2	Seat	DN40-80: EPDM & Backing DN450-900: EPDM Vulcanized on Valve Body	NBR/Fluororubber&Backing EPDM/NBR Vulcanized on Valve Body Soft Seat in EPDM/NBR
3	Disc	EN-GJS-430-10	SS304, SS316, AL-Bronze C95400
4	Stem	DN40-80: Stainless Steel, One-Piece Stem Design DN400-900: Stainless Steel, Two-Piece Stem Design	SS304, SS316, SS416, SS431
5	O-Ring	NBR	EPDM
6	Bushing	DN40-350: Nylon 1010 DN400-900: Lubricating Bronze	PTFE
7	Lever	EN-GJS-430-10	Aluminum
8	Shaft Cover (DN400-900)	EN-GJS-450-10	
9	Gear Box	EN-GJS-450-10	

DN		Dimensions(mm)																
Inch	mm	A	B	V	C	ØD	Ø2	ØK	G	L	ØD1	N-Ø1	ISO 5211	Ø3	H	H1	H2	P
1.5"	40	138	64.5	32	33	43.9	14	90	9.45	267	110	4-Ø19	F07	150	206	158	52	43.5
2"	50	140.5	64.5	32	43	53.9	14	90	9.53	267	125	4-Ø19	F07	150	206	158	52	43.5
2.5"	65	163	72	32	46	65.2	14	90	9.53	267	145	4-Ø19	F07	150	206	158	52	43.5
3"	80	157.5	86	32	46	79.7	14	90	9.53	267	160	8-Ø19	F07	150	206	158	52	43.5
4"	100	176	100	32	52	105	16	90	11.14	267	180	8-Ø19	F07	150	206	158	52	43.5
5"	125	191	112	32	56	130	16	90	11.14	267	210	8-Ø19	F07	150	206	158	52	43.5
6"	150	202.5	128	32	56	156	20	90	12.7	267	240	8-Ø23	F07	150	206	158	52	43.5
8"	200	243.5	162	45	60	206.7	26	125	20.6	356	295	12-Ø28	F10	300	310	239	69	62.5
10"	250	273	194	45	68	253.3	26	125	20.6	490	355	12-Ø28	F10	300	310	239	69	62.5
12"	300	311	223	45	78	301.9	28	125	22.1	490	410	12-Ø28	F10	300	307	229	73	77.5
14"	350	340	267	48	78	333.9	31.6	150	22.1	-	470	16-Ø28	F12	300	307	229	73	77.5
16"	400	400	319.5	48	102	389.6	33.2	175	27	-	525	16-Ø31	F14	360	418	288	110	120
18"	450	422	345.4	48	114	441	38.1	175	27	-	585	20-Ø31	F14	360	418	288	110	120
20"	500	460	380	70.2	127	492.4	41.2	210	-	-	650	20-Ø34	F16	380	465	215	123	165
24"	600	562	441	70.2	154	592.8	50.6	210	-	-	770	20-Ø37	F16	380	500	215	123	165
Inch	mm	A	B	V	C	ØD	Ø2	ØK	G	L	ØD1	N-Ø1	ISO 5211	Ø3	H	H1	H2	P
28"	700	575	505	70.2	165	695	63.4	300	-	-	840	24-Ø31	F25	380	543	213	132	218
30"	750	660	550	70.2	165	744	63.4	300	-	-	900	24-Ø34	F25	380	543	213	132	218
32"	800	667	577	70.2	190	795.7	63.4	300	-	-	950	24-Ø34	F25	380	543	213	132	218

## Wafer Butterfly Valve (PN10/16)

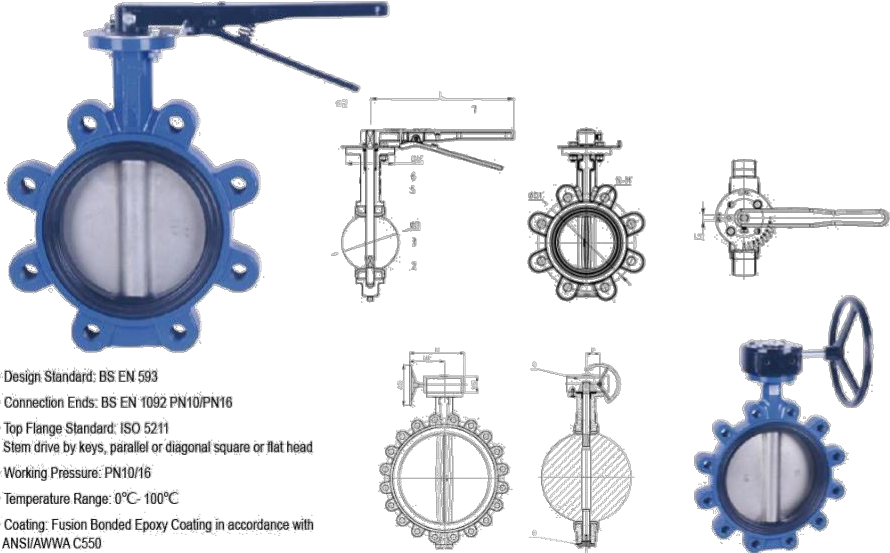


- Design Standard: BS EN 583
- Connection Ends: BS EN 1092 PN10/PN16
- Top Flange Standard: ISO 5211  
Stem drive by keys, parallel or diagonal square or flat head
- Working Pressure: PN10/16
- Temperature Range: 0°C - 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Seat	EPDM & Backing	NBR/Fluororubber&Backing; EPDM/NBR Vulcanized on Valve Body; Soft Seat in EPDM/NBR;
3	Disc	EN-GJS-450-10	SS304, SS316, AL-Bronze 95400
4	Stem	SS420, One-Piece Stem Design	SS304, SS316, SS416, SS431
5	O-Ring	NBR	EPDM
6	Bushing	Nylon 1010	PTFE
7	Lever	EN-GJS-450-10	Aluminum
8	Gear box	EN-GJS-450-10	

DN		Dimensions(mm)															
Inch	mm	A	B	V	C	ØD	SXS	ØK	L	ØD1	N-Ø1	ISO5211	Ø3	H	H1	H2	P
2"	50	159	64.5	30	43	53.9	9x9	90	267	125	4-Ø19	F07	150	206	158	52	43.5
2.5"	65	173	72	30	46	65.2	9x9	90	267	145	4-Ø19	F07	150	206	158	52	43.5
3"	80	179	86	30	46	79.7	9x9	90	267	160	8-Ø19	F07	150	206	158	52	43.5
4"	100	198	100	30	52	105	11x11	90	267	180	8-Ø19	F07	150	206	158	52	43.5
5"	125	211	112	30	56	130	14x14	90	267	210	8-Ø19	F07	150	206	158	52	43.5
6"	150	224	128	30	56	155.8	14x14	90	267	240	8-Ø23	F07	150	206	158	52	43.5
8"	200	243.5	162	40	60	207	17x17	125	356	295	12-Ø23	F10	300	310	239	69	62.5
10"	250	273	194	40	68	253.3	22x22	125	490	355	12-Ø28	F10	300	310	239	69	62.5
12"	300	311	223	40	78	301.9	22x22	125	490	410	12-Ø28	F10	300	307	229	73	77.5

## Lugged Wafer Butterfly Valve (PN10/16)



- Design Standard: BS EN 593
- Connection Ends: BS EN 1092 PN10/PN16
- Top Flange Standard: ISO 5211  
Stem drive by keys, parallel or diagonal square or flat head
- Working Pressure: PN10/16
- Temperature Range: 0°C- 100°C
- Coating: Fusion Bonded Epoxy Coating in accordance with ANSI/AWWA C550

Part No.	Part	Standard Specification	Options
1	Valve Body	EN-GJS-450-10	
2	Seat	DN40~150: EPDM & Backing DN200~800: EPDM Vulcanized on Valve Body	NBR/Fluororubber&Backing EPDM/NBR Vulcanized on Valve Body Soft Seat in EPDM/NBR
3	Disc	EN-GJS-450-10	SS304, SS316, AL-Bronze C95400
4	Stem	DN40~350: Stainless Steel, One-Piece Stem Design DN400~800: Stainless Steel, Two-Piece Stem Design	SS304, SS316, SS420, SS431
5	O-Ring	NBR	EPDM
6	Bushing	DN40~350: Nylon 1010 DN400~800: Lubricating Bronze	PTFE
7	Lever	EN-GJS-450-10	Aluminum
8	Shaft Cover (DN400~800)	EN-GJS-450-10	
9	Gear Box	EN-GJS-450-10	

DN		Dimensions(mm)																	
Inch	mm	A	B	V	C	ØD	Ø2	ØK	G	L	ØD1	N-M	ISO 5211	Ø3	H	H1	H2	P	
PN16																			
1.5"	40	138	84.6	32	33	43.5	14	90	9.45	267	110	4-M16	F07	100	200	150	50	48.5	
2"	50	140.5	84.6	32	43	53.9	14	90	9.53	267	125	4-M16	F07	100	200	150	52	48.5	
2.5"	65	183	72	32	46	69.2	14	90	9.53	267	145	4-M16	F07	100	200	150	62	43.9	
3"	80	167.5	68	32	46	79.7	14	90	9.53	267	160	8-M16	F07	100	200	150	52	43.9	
4"	100	179	100	32	52	105	16	90	11.14	267	160	8-M16	F07	150	200	150	52	43.9	
5"	125	181	112	32	56	130	16	90	11.14	267	210	8-M16	F07	100	200	150	52	43.9	
6"	150	202.5	128	32	66	158	20	90	12.7	267	240	8-M20	F07	100	200	150	52	43.9	
8"	200	243.5	162	45	60	208.7	26	125	20.6	356	295	12-M20	F10	300	910	239	66	62.5	
10"	250	273	194	45	66	253.3	26	125	20.6	460	352	12-M24	F10	300	310	239	69	62.5	
12"	300	311	223	45	76	301.8	28	125	22.1	490	410	12-M24	F10	300	307	239	73	77.5	
14"	350	340	267	48	76	333.6	31.8	150	22.1	-	470	16-M24	F12	300	307	239	73	77.5	
16"	400	400	319.5	48	102	339.6	33.2	175	27	-	525	16-M27	F14	380	418	283	110	120	
18"	450	422	345.4	48	114	441	38.1	175	27	-	585	20-M27	F14	380	418	283	110	120	
20"	500	480	380	70.2	127	452.4	41.2	210	-	-	650	20-M30	F16	380	465	215	123	165	
24"	600	562	441	70.2	164	552.8	50.8	210	-	-	770	20-M30	F16	380	500	215	129	165	
PN10																			
Inch	mm	A	B	V	C <td>ØD <td>Ø2 <td>ØK <td>G <td>L <td>ØD1 <td>N-M <td>ISO 5211 <td>Ø3 <td>H <td>H1 <td>H2 <td>P </td></td></td></td></td></td></td></td></td></td></td></td></td>	ØD <td>Ø2 <td>ØK <td>G <td>L <td>ØD1 <td>N-M <td>ISO 5211 <td>Ø3 <td>H <td>H1 <td>H2 <td>P </td></td></td></td></td></td></td></td></td></td></td></td>	Ø2 <td>ØK <td>G <td>L <td>ØD1 <td>N-M <td>ISO 5211 <td>Ø3 <td>H <td>H1 <td>H2 <td>P </td></td></td></td></td></td></td></td></td></td></td>	ØK <td>G <td>L <td>ØD1 <td>N-M <td>ISO 5211 <td>Ø3 <td>H <td>H1 <td>H2 <td>P </td></td></td></td></td></td></td></td></td></td>	G <td>L <td>ØD1 <td>N-M <td>ISO 5211 <td>Ø3 <td>H <td>H1 <td>H2 <td>P </td></td></td></td></td></td></td></td></td>	L <td>ØD1 <td>N-M <td>ISO 5211 <td>Ø3 <td>H <td>H1 <td>H2 <td>P </td></td></td></td></td></td></td></td>	ØD1 <td>N-M <td>ISO 5211 <td>Ø3 <td>H <td>H1 <td>H2 <td>P </td></td></td></td></td></td></td>	N-M <td>ISO 5211 <td>Ø3 <td>H <td>H1 <td>H2 <td>P </td></td></td></td></td></td>	ISO 5211 <td>Ø3 <td>H <td>H1 <td>H2 <td>P </td></td></td></td></td>	Ø3 <td>H <td>H1 <td>H2 <td>P </td></td></td></td>	H <td>H1 <td>H2 <td>P </td></td></td>	H1 <td>H2 <td>P </td></td>	H2 <td>P </td>	P	
2"	70	575	505	70.2	105	595	63.4	300	-	-	940	24-M27	F25	380	543	213	132	218	
3"	750	650	550	70.2	155	744	63.4	300	-	-	920	24-M30	F25	380	543	213	132	218	
3.2"	800	667	577	70.2	190	766.7	63.4	300	-	-	950	24-M30	F25	380	543	213	132	218	

