



HI-TECH'S

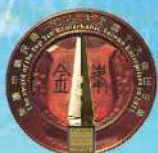
TAIWAN FIRST BRAND



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HI-TECH'S



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SHIE YU THERMOPLASTIC VALVE

2018

THERMOPLASTIC VALVE

The related products-pipes, fittings

UPVC, PP, CPVC, PPG and PVDF



Acid Proof
Alkali Proof



THE HI-TECH's, HI-QUALITY's PRODUCTS RANGE



Operation Philosophy

Since 1973, first thermoplastic valves manufacturer in Taiwan, SH has been specializing in the R&D, and production of valves. For the past 40 years, we've been in the lead in product quality with state-of-the-art technology and process. Our products, sold in more than 40 countries worldwide, are extensively used and applied in a wide variety of piping system, gaining a good reputation as a reliable supplier.



President TSAI TIEN-SHOU

SH people, committed to the five beliefs all the time---HONESTY, RELIABILITY, RESPONSIBILITY, COURTESY and HONOUR---working together as responsible and reliable team, are leaded by a group of resilient and determined leaders, and dedicated to design, innovation, and quality increase with business growth. In order to ensure high quality products, we have been successfully certified by NSF(American National Sanitation Federation),ISO9001 Lloyd's, China National Standard (CNS),Environmental marking quality assurances to provide the reliable industry products to the customers in the global world.



Based on the belief in providing more complete product line to the market, specially add the super large scaled auto specialized injection equipment, productivity on CPVC 126kgs per shot, run for the large size fittings.

We are continually expanding the related products to satisfy customers at one stop buying, covering the customers on the business of installation, whole-plant engineering, the full complete demanding service.

Self-encouraged SH people are always in pursuit of excellence for the sole purpose of total customer satisfaction. Besides, you are always welcome at our company at any time and we prize your highly valued opinions. We continue to be devoted to the R&D and innovation in this industry to win customer approval and receive customer compliments.

TIZEN TSAI



Kaohsiung Plant I



Kaohsiung Plant II



The Group photo of the leading colleagues in Shie Yu Group.

SHIE YU Milestones

- 1973 Founded in Ching-Shui town, Taichung Country, Taiwan covering an area of 1,600 square meters.
- 1980 Set up the export division and Taipei branch operation for North Taiwan and overseas markets.
- 1983 Signed long-term supply contracts with Formosa Plastic Group(FPG), the biggest industrial group in Taiwan.
- 1985 Set up Kaoshung branch operation.
- 1988 Established Kaoshung 1st plant, located in DA FA Industrial Zone, covering an area of 20,000 square meters.
- 1994 The first manufacturer in Taiwan to have the NSF listing on the PVC ball valves.
- 1997 Acquired ISO Quality Assurance Management System.
- 1999 Established Kaoshung 2nd plant, located in DA FA Industrial Zone, covering an area of 8,000 square meters.
- 2000 Began producing UPVC, CPVC SCH80 pipes and fittings.
- 2002 Established a manufacturing facility in Jang-Su, China.
- 2002 Purchased the advanced extrusion equipment from the globally known CINCINNATI Co. for production of UPVC, CPVC SCH80 pipes.
- 2003 Established a pipe plant in Taichung Harbor Export Processing Zone for production of UPVC, CPVC, HD-PE, PP-H, ABS, PVDF pipes and fittings, covering an area of 34,000² square meters.
- 2004 Purchased Germany made BATTENFELD HD-PE, PP-H, ABS, PVDF pipe extrusion equipments to enter into the manufacturing lines.

- 2004 Invested the super large computerized injection machine and successfully invented. Breakthrough the technique limitation in the past, we innovated the production of super large-sized UPVC and CPVC fittings, one shot molding on CPVC parts up to 126kg.
- 2005 Acquired a specialized tooling plant for full line of valve and fitting development and research capabilities.
- 2006 Successfully development on the super large & one-piece molded plastic butterfly valves from the size 700 ϕ (28") ~ 1200 ϕ (48")
- 2007 Successfully production on the large one-piece UPVC, CPVC SCH80 TEE, ELBOW, COUPLING, REDUCER UP TO 18" AND FLANGE TO 24".
- 2009 Equipped large & multi angles welding equipments for the producing of HD-PE, PP-H, PVDF fittings – tee, 90°elbow, 45°elbow, etc fabricated fittings up to 1200 and flange to 20".
- 2011 Acquired the Best-Products awards of Taiwan.
- 2012 Set up the engineering & installation team specialize on the whole-plant systems installation.
- 2013 Enlarge the installation team to cover the supply of the valves, pipes, fittings the entire products, system build-up and engineering consult services.
- 2015 Build the global distribution channels to enhance the worldwide sales service and activities.
- 2016 Gain the 17th worldwide Top 10 enterprises award (Golden Summit award)



Innovation and R&D



Innovation and R&D

The Shie Yu people based on the desire to provide better products, we continue to improve our existing products, and do R&D work on materials, innovation of product structure to meet the requirements for a wide variety of applications. We have our own in-house tooling department employing staff of experienced and skilled tool and die makers, and equipped with sophisticated and precise CAD/CAM machines for today's ever-changing market. In addition, we are dedicated to workforce performance and R&D work on related fitting to keep up with innovation.





8500T Computerized Auto-injection Equipment

Advanced Equipment

Our premium products are achieved with advanced and sophisticated equipment and through careful selection and analysis of materials in accordance with standards. With precision injection mold tooling and internationally famous brand of machining and injection molding equipment, we are able to control the physical structure and properties of materials. Our skilled engineers integrate distinctive design into equipment to meet the requirement for production of our quality products. Besides, our dedication to precise and good equipment distinguishes our quality products from our competitors.



Various precision mechanic equipments.

Quality Control

Based on our belief in quality first, we are certified by BSI 9001, CNS and NSF and use ISO 9001 as the basis of our quality management system into which technical specifications set up by our professional engineers for each stage of production procedures have been integrated. We take into consideration a total quality assurance program that includes material selection, self inspection, operation standard procedures improvement, spot inspection and 100% valve pressure test. All the manufactured pipes, fittings are complied with ASTM, ISO, DIN and CNS national standards. Our manufacturing facilities, personnel, processes and procedures are monitored by the total quality management system to ensure they are in conformance with applicable standards. Our current quality certifications are - CNS(China National Standards), NSF(American National Sanitary Federal) and Environmental mark certified, all of the products are inspected by the strict regulations.



Raw materials storage area.





Quality Control

Conference

Our dedicated quality assurance staff ensure reliable and quality products before they reach our customers by continually improving our quality control system.

In order to ensure that all our products are reliable and customer satisfaction is achieved, we have been dedicated to provide the premium quality for our customers for the past 30 years.



Falling hammer resistance device



Tension strength testing equipment

Customer Satisfaction

Based on long-term trust of our customers and our belief in the value of providing customers with satisfying products, SH has been dedicated to close and mutually beneficial relationships with our customers worldwide.

As one of the most important suppliers of thermoplastic valves, fittings, and pipes in the world, we continually enhance our core value of providing our customers with the best service through staff participation at all levels. As one of the most reliable business partner of our worldwide customers, we play an important and supporting role all the time when our customers encounter severe challenges and stiff competition. We believe that customer's success is our success. Thus, SH, committed to a spirit of working for customer's success, has been receiving customer's support and satisfaction for the past 30 years.

Chemical Industry

Electronic /
Semiconductor Industry

International
Exhibitors

Seawater
Wharf

HD-PE
Portable Water Refining

Sea Farming Industry

Thermal Power Plant



PERMISSIBLE WORKING TEMPERATURE RANGE FOR THE THERMO PLASTICS & RUBBERS

Abbreviation of Material	Material	Maximum Permissible Temperatures	
		°C	°F
UPVC	UNPLASTICIZED POLYVINYL CHLORIDE	0°~60°	32°~140°
CPVC	CHLORINATED POLYVINYL CHLORIDE	0°~90°	32°~210°
PP	POLYPROPYLENE	-20°~90°	-5°~210°
PPG(FRTP)	FIBER GLASS FORTIFIED POLYPROPYLENE	-20°~100°	5°~210°
PVDF	POLYVINYLIDENE FLUORIDE	-40°~120°	-45°~230°
PTFE	POLYTETRAFLUOROETHYLENE	Under 260°	Under 500°
ABS	ACRYLONITRILE BUTADIENE STYRENE	Under 95°	Under 200°
FPM	FLUORINE RUBBER (VITON)	Under 180°	Under 355°
EPT(EPDM)	ETHYLENEPROPYLENE RUBBER	Under 90°	Under 195°
NBR	NITRILE RUBBER	Under 60°	Under 140°
CR	CHLOROPRENE RUBBER (NEOPRENE)	Under 80°	Under 175°
IIR	ISOBUTHYLENE ISOPREN RUBBER	Under 90°	Under 195°
CSM	CHLORINE SULPHONYL POLYETHYLENE (HYPALON)	Under 90°	Under 195°

PHYSICAL PROPERTIES FOR THERMO PLASTICS

PROPERTIES	Unit	Test Method	UPVC	CPVC	PP	PVDF	PPG	PE-80	PE-100
Specific Gravity	g/cm ³	ASTM D792	1.3-1.4	1.49	0.92	1.76-1.78	1.12	0.94	0.95
Tensile Strength @yield	kg/cm ²	ASTM D638	478	518	280	530	850	180(min.)	250
@break	kg/cm ²	ASTM D638	452	515	450	350	1500	320(min.)	600<
Modulus of Elasticity in tension	kg/cm ²	ASTM D638	26900	25200	9700	25300	40600	8000	8000
Flexural Modulus	kg/cm ²	ASTM D638	36900	38200	11200	22260	58000	8000	9000
Izod (23degree C)	kg/cm ²	ASTM D638	14	32	13	6.5	12	10	17
Rockwall Hardness	R-Scale	ASTM D256	80	85	95	77	105	-	40
Deflection Temperature	C	ASTM D785	66	103	110	140	165	64	65
NSF Potable water approved		ASTM D648	YES	YES	YES	YES		YES	YES
Industry standard color			Dark Gray/ White	Light Gray	Cream/ Black	Natural		Black or Yellow	Black or Blue



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HIGH QUALITY PRODUCTS



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Professional



Diaphragm Valve

- Material: UPVC, PP, CPVC, PPG, PVDF
- Size: DN15~DN250

Hi-Tech'S, Hi-Quality'S



DIAPHRAGM VALVE-3 LAYERS TYPE

(with PVDF gas barrier diaphragm & high corrosion resistant metal)

DE300 PVDF 3 LAYERS DIAPHRAGM VALVE



DE Series

DE300
Size: DN15~DN250

Suitable to the protect diaphragm from the gas permeation
in the corrosion resistance and electrolytic chlorine gas.

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP, CPVC, PPG, PVDF	10	Name Plate	1	PVC
2	Bonnet	1	PPG, PVDF	11	Grease Nipple	1	SUS304 PTFE COATED
3	Compressor	1	15A-25A PVDF 40A-250A FC20 PTFE COATED	12	Stud Bolt & Nut	4 6 8 12 16 20	15A-25A 40A-50A 65A-125A 150A 200A 250A SUS304 PTFE COATED
4	Hand Wheel	1	ABS	13	Inserted Nut		BSBM PTFE COATED
5	Sleeve	1	15A-50A BSBM PTFE COATED 65A-250A FC25 PTFE COATED	14	Bolt Nut & Washer		SUS304 PTFE COATED
6	Stem	1	15A-50A BSBM PTFE COATED 65A-250A SS41 PTFE COATED	15	thrust Bearing	1	Standardized 80A-250A USED ONLY
7	Diaphragm	1	EPDM, HYPALON TEFLON PVDF 3 lays	16	Stopper	1	SS-41 BSBM SUS304 PTFE COATED
7-1	Upper Board	1	SUS304 PTFE COATED	17	Set Nut	1	SS41 BSBM SUS304 PTFE COATED
7-2	Down Board	2	SUS304 PTFE COATED	18	Gauge Cover	1	PC PTFE COATED
8	Cap	1	15A-25A BSBH PTFE COATED 40A-250A PVC	19	Sheet Ring	1	EPDM
9	Compressor Pin	1	SUS-304 PTFE COATED	20	Washer	1	SUS304 PTFE COATED

* The standard bonnet material on PVDF valve is PPG. Price will be requested if use PVDF bonnet.

The standard material to bonnet : PPG.

Optional PVDF bonnet material for PVDF diaphragm valve.

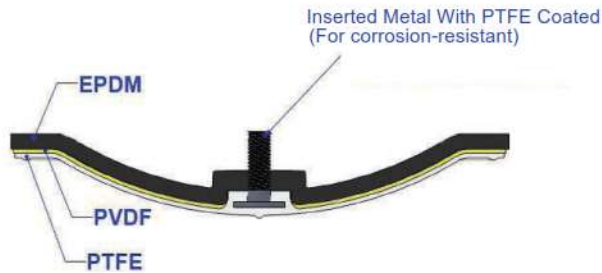
@VITON & TEFLON are trademarks of E.I. Du Pont

DIMENSIONS TABLE

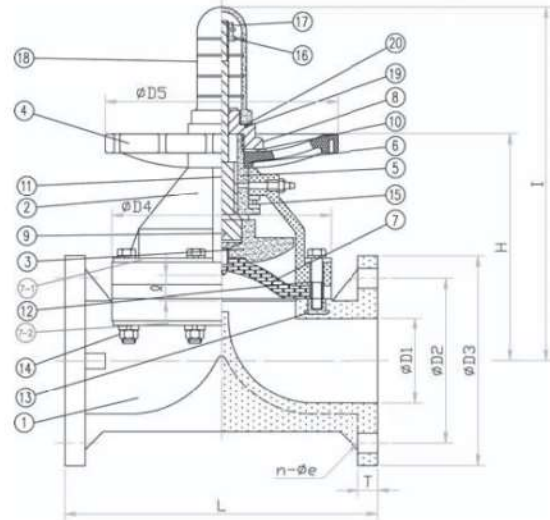
JIS													Unit: mm		PRESS Test for Assembly (at 20℃)																
Nom. Size mm(inch)	D1	D2	D3	e	n No. of holes	D4	D5	Lift ℓ	L	T	H	I	Test Pressure Unit: kgf/cm²																		
													Rubber Diaphragm					Teflon Diaphragm													
													UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF									
15(1/2")	16	70	91.5	15	4	58x51	94	13	110	15	101	140	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
20(3/4")	20	75	97	15	4	70x60	94	13	120	17	106	152	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
25(1")	25	90	125	19	4	79x65	94	14	130	17	113	158	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
40(1-1/2")	41	105	135	19	4	123	147	24	180	19	133	193	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
50(2")	52	120	151	19	4	148	147	28	210	19	145	210	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
65(2-1/2")	68	140	185	19	4	183	202	32	250	24	197	276	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
80(3")	78	150	183.5	19	8	201	202	34	280	23	218	293	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
100(4")	100	175	210	19	8	250	241	54	340	24	261	370	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
125(5")	125	210	250	23	8	321	274	72	410	26	308	412	10	7	7	10	10	10	7	7	7	7	7	7	7	7	7	7	7	7	7
150(6")	148	240	282	23	8	382	395	72	480	33	334	471	10	7	7	10	10	10	7	7	7	7	7	7	7	7	7	7	7	7	7

Part No.7

PVDF 3 lays Diaphragm



for corrosive/chlorine transport lines to prevent the permeation of gas barriers from the chemicals



DIMENSIONS TABLE

ANSI													PRESS Test for Assembly (at 20°C)									
Nom. Size m/m(inch)	D1	D2	D3	e	n No. of holes	D4	D5	Lift ℓ	L	T	H	I	Unit: inch									
													Test Pressure Unit: psi									
													Rubber Diaphragm					Teflon Diaphragm				
													UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF
15(1/2")	0.63	2.38	3.50	0.63	4	2.28x2	3.70	0.51	4.25	0.59	3.98	5.51	150	150	150	150	150	150	150	150	150	150
20(3/4")	0.79	2.76	3.86	0.63	4	2.76x2.36	3.70	0.51	5.90	0.63	4.17	5.98	150	150	150	150	150	150	150	150	150	150
25(1")	0.98	3.13	4.25	0.63	4	3.11x2.56	3.70	0.55	5.90	0.63	4.45	6.22	150	150	150	150	150	150	150	150	150	150
40(1-1/2")	1.61	3.88	5.00	0.63	4	4.84	5.79	0.94	6.95	0.67	5.24	7.60	150	150	150	150	150	150	150	150	150	150
50(2")	2.05	4.74	5.98	0.75	4	5.83	5.79	1.10	7.95	0.67	5.71	8.27	150	150	150	150	150	150	150	150	150	150
65(2-1/2")	2.68	5.49	7.01	0.75	4	7.20	7.95	1.26	9.85	0.87	7.76	10.87	150	150	150	150	150	150	105	105	150	150
80(3")	3.07	6.00	7.52	0.75	4	7.91	7.95	1.34	10.40	0.75	8.50	11.54	150	150	150	150	150	150	105	105	150	150
100(4")	3.94	7.50	9.17	0.75	8	9.84	9.49	2.13	12.95	0.91	10.28	14.57	150	150	150	150	150	150	105	105	150	150
125(5")	4.92	8.50	10.00	0.87	8	12.64	10.79	2.83	16.14	0.94	12.13	16.22	150	105	105	150	150	105	105	105	105	150
150(6")	5.83	9.51	10.98	0.87	8	15.04	15.55	2.83	18.90	1.18	13.15	18.54	150	105	105	150	150	105	105	105	105	150

DIN													PRESS Test for Assembly (at 20°C)									
Nom. Size m/m(inch)	D1	D2	D3	e	n No. of holes	D4	D5	Lift ℓ	L	T	H	I	Unit: mm									
													Test Pressure Unit: (bar)									
													Rubber Diaphragm					Teflon Diaphragm				
													UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF
15(1/2")	16	65	95	14	4	58x51	94	13	130	23	101	140	10	10	10	10	10	10	10	10	10	10
20(3/4")	20	75	105	14	4	70x60	94	13	150	23	106	152	10	10	10	10	10	10	10	10	10	10
25(1")	25	85	125	14	4	79x65	94	14	160	23	113	158	10	10	10	10	10	10	10	10	10	10
40(1-1/2")	41	110	150	18	4	123	147	24	200	23	133	193	10	10	10	10	10	10	10	10	10	10
50(2")	52	125	165	18	4	148	147	28	230	21	145	210	10	10	10	10	10	10	10	10	10	10
65(2-1/2")	68	145	185	18	4	183	202	32	290	22	197	276	10	10	10	10	10	10	7	7	10	10
80(3")	78	160	200	18	8	201	202	34	310	22	218	293	10	10	10	10	10	10	7	7	10	10
100(4")	100	180	210	18	8	250	241	54	350	25	261	370	10	10	10	10	10	10	7	7	7	10
125(5")	125	210	250	18	8	321	274	72	400	24	308	412	10	7	7	10	10	7	7	7	7	7
150(6")	148	240	285	23	8	382	395	72	480	30	334	471	10	7	7	10	10	7	7	7	7	7

※ The dimension table is calculated based on PVC material.
The flanged length tolerance is according to EN558-1:1995.

3-LAYERS DIAPHRAGM TRUE UNION VALVE

(with PVDF gas barrier diaphragm & high corrosion resistant metal)

DE100/DE200 PVDF 3 LAYERS DIAPHRAGM VALVE



DE Series

DE100 SOCKET / DE200 THREAD

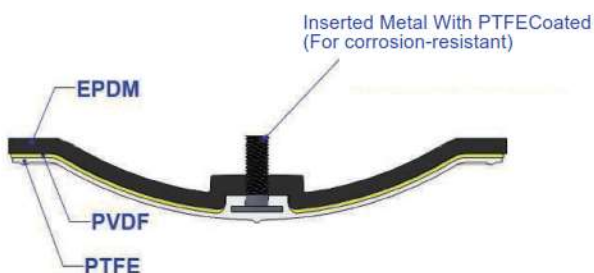
Suitable to the protect diaphragm from the gas permeation in the corrosion resistance and electrolytic chlorine gas.

MATERIALS OF CONSTRUCTION

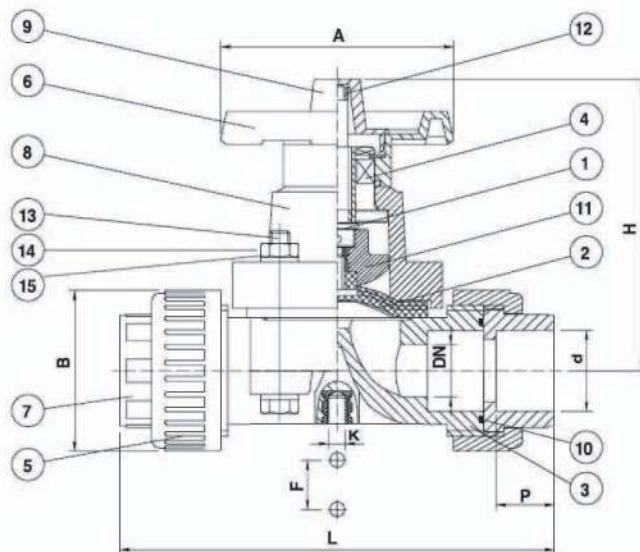
Item	Parts	Pcs	Materials	Item	Parts	Pcs	Materials
1	Shaft	1	BRASS PTFE COATED	9	Gauge Cover	1	PC
2	Diaphragm	1	EPDM, TEFLON, PVDF 3 LAYS	10	O'ring	2	EPDM, VITON
3	Body	1	UPVC, PP, CPVC, PVDF	11	Compressor	1	15A-25A PVDF 32A-50A PPG
4	Sleeve	1	BRASS PTFE COATED	12	Indicator	1	ABS
5	Union Nut	2	UPVC, PP, CPVC, PVDF	13	Bolt	4	SUS304 PTFE COATED
6	Handle	1	ABS	14	Nut	4	SUS304 PTFE COATED
7	End Connector	2	UPVC, PP, CPVC, PVDF	15	Washer spring washer	8	SUS304 PTFE COATED
8	Bonnet	1	UPVC, PP, CPVC, PVDF				
8-1	Bonnet Board	1	SUS304 PTFE COATED				

Part No.2

PVDF 3 lays Diaphragm



for corrosive/chlorine transport lines to prevent the permeation of gas barriers from the chemicals



DN15~DN50

DIMENSIONS TABLE

Standards Nom. Size	JIS										ANSI										DIN												
	Unit: mm										Unit: inch										Unit: mm												
	d		P	B	L	H	A	F	K	Test Press (kgf/cm ²)		d		P	B	L	H	A	F	K	Test Press (lb/in ²)		d		P	B	L	H	A	F	K	Test Press (bar)	
	Socket	Thread								Ptfe dia.	Rubber Dia.	Socket	Thread								Ptfe dia.	Rubber Dia.	Socket	Thread								Ptfe dia.	Rubber Dia.
15(1/2")	22	PT1/2	22.2	54	166	107.5	81	25	8	10	10	0.84	NPT1/2	0.875	2.126	6.53	4.23	3.189	0.984	0.315	150	150	20	R1/2	16.0	54	166	107.5	81	25	8	10	10
20(3/4")	26	PT3/4	25.4	54	166	107.5	81	25	8	10	10	1.05	NPT3/4	1.000	2.126	6.53	4.23	3.189	0.984	0.315	150	150	25	R1/4	18.5	54	166	107.5	81	25	8	10	10
25(1")	32	PT1	28.6	63	183	116	91	25	8	10	10	1.32	NPT1	1.125	2.480	7.2	4.567	3.583	0.984	0.315	150	150	32	R1	22.0	63	183	116	91	25	8	10	10
32(1-1/4")	38	PT1-1/4	31.8	89	238	142	117	45	8	10	10	1.66	NPT1-1/4	1.250	3.5	9.37	5.591	4.606	1.772	0.315	150	150	40	R1-1/4	26.0	89	238	142	117	45	8	10	10
40(1-1/2")	48	PT1-1/2	34.9	89	238	142	117	45	8	10	10	1.90	NPT1-1/2	1.375	3.5	9.37	5.591	4.606	1.772	0.315	150	150	50	R1-1/2	31.0	89	238	142	117	45	8	10	10
50(2")	60	PT2	38.1	101	273	176	150	45	8	10	10	2.38	NPT2	1.500	3.97	10.74	6.929	5.906	1.772	0.315	150	150	63	R2	37.5	101	273	176	150	45	8	10	10

※ Standard dimensions based on PVC material



DIAPHRAGM VALVE / Flanged type



DF Series

DF 300
Size: DN15~DN250

DE300 DIAPHRAGM VALVE-3 LAYERS TYPE

Suitable to the protect diaphragm from the gas permeation in the corrosion resistance and electrolytic chlorine gas.

MATERIALS OF CONSTRUCTION

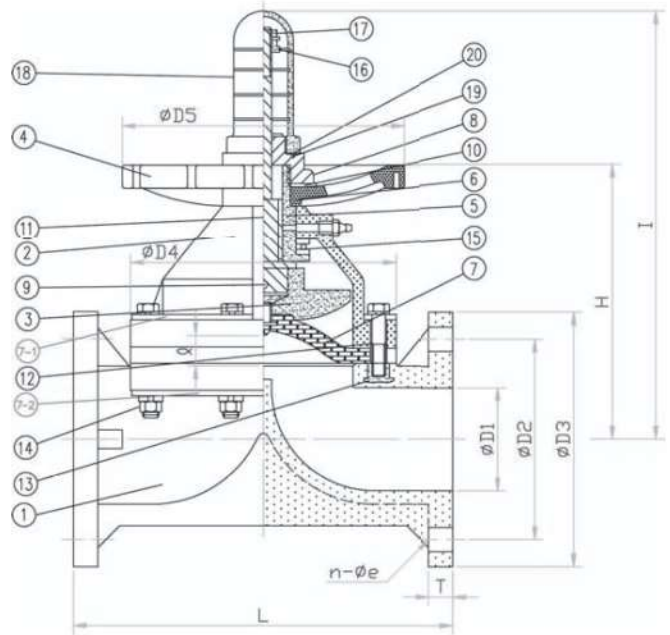
No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP, CPVC, PPG, PVDF	10	Name Plate	1	PVC
2	Bonnet	1	UPVC, CPVC, PPG, PVDF	11	Grease Nipple	1	SUS304
3	Compressor	1	15A-25A PVDF 40A-250A FC20	12	Stud Bolt & Nut	4 15A-25A 6 40A-50A 8 65A-125A 12 150A 16 200A 20 250A	SUS304 BSBM SUS304
4	Hand Wheel	1	ABS	13	Inserted Nut		
5	Sleeve	1	15A-50A BSBM 65A-250A FCD45	14	Bolt Nut & Washer		
6	Stem	1	15A-50A BSBM 65A-250A SUS304	15	thrust Bearing	1	Standardized 80A-250A USED ONLY
7	Diaphragm	1	EPDM, HYPALON TEFLON PVDF 3 lays	16	Stopper	1	SS-41 BSBM SUS304
7-1	Upper Board	1	SUS304	17	Set Nut	1	SS41 BSBM SUS304
7-2	Down Board	2	SUS304	18	Gauge Cover	1	PC
8	Cap	1	15A-25A BSBM 40A-250A PVC	19	Sheet Ring	1	EPDM
9	Compressor Pin	1	SUS-304	20	Washer	1	SUS304

Note : 1. SUS 304Stainless Steel AISI 304 2. SS 41Rolled steel for General Structure 3. BSBMFree Cutting Brass Bar
4. FC 20.....Gray Cast Iron 5. SUP.....Steel for Spring ASTM A-230-68
Part no. 3,5,6,12,14 material :SUS 304 or SUS316, price on request.
The standard bonnet material on PVDF valve is PPG. Price will be requested if use PVDF bonnet.
The standard material to bonnet : PPG.
Optional PVDF bonnet material for PVDF diaphragm valve.
Optional materials on request for part no. 4,5,6,12,14.: SUS 304 or SUS 316.

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DIMENSIONS TABLE

JIS											Unit: mm		PRESS Test for Assembly (at 20°C)																		
Nom. Size mm(inch)	D1	D2	D3	e	n No. of holes	D4	D5	Lift ℓ	L	T	H	I	Test Pressure Unit: kgf/cm ²																		
													Rubber Diaphragm					Teflon Diaphragm													
													UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF									
15(1/2")	16	70	91.5	15	4	58x51	94	13	110	15	101	140	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
20(3/4")	20	75	97	15	4	70x60	94	13	120	17	106	152	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
25(1")	25	90	125	19	4	79x65	94	14	130	17	113	158	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
40(1-1/2")	41	105	135	19	4	123	147	24	180	19	133	193	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
50(2")	52	120	151	19	4	148	147	28	210	19	145	210	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
65(2-1/2")	68	140	185	19	4	183	202	32	250	24	197	276	10	10	10	10	10	10	10	7	7	10	10	10	10	10	10	10	10	10	10
80(3")	78	150	183.5	19	8	201	202	34	280	23	218	293	10	10	10	10	10	10	10	7	7	10	10	10	10	10	10	10	10	10	10
100(4")	100	175	210	19	8	250	241	54	340	24	261	370	10	10	10	10	10	10	10	7	7	10	10	10	10	10	10	10	10	10	10
125(5")	125	210	250	23	8	321	274	72	410	26	308	412	10	7	7	10	10	10	7	7	7	7	7	7	7	7	7	7	7	7	7
150(6")	148	240	282	23	8	382	395	72	480	33	334	471	10	7	7	10	10	10	7	7	7	7	7	7	7	7	7	7	7	7	7
200(8")	198	290	337	23	12	431	395	96	570	33	419	625	7	5	5	7	7	5	5	5	5	5	5	5	5	5	5	5	5	5	5
250(10")	248	355	397	25	12	529	555	132	680	38	510	750	7	5	5	7	7	5	5	5	5	5	5	5	5	5	5	5	5	5	5



CV VALUE

CV [GMP/(1bf/in ²) ^{1/2}]	
Full Open: 100%	
SIZE	CV
1/2"	3.27
3/4"	5.29
1"	8.87
1-1/2"	31.09
2"	43.15
2-1/2"	90.68
3"	116.79
4"	186.78
6"	345.26

BOLTS TORQUE VALUE

SIZE	Kg.m	N.m
1/2"	90	8.83
3/4"	110	10.79
1"	110	10.79
1-1/2"	150	14.72
2"	220	21.58
2-1/2"	220	21.58
3"	280	27.47
4"	280	27.47
6"	280	27.47

1Kg.cm=0.0981N.m

DIMENSIONS TABLE

ANSI													PRESS Test for Assembly (at 20°C)										
Nom. Size n/m(inch)	D1	D2	D3	e	n No. of holes	D4	D5	Lift ℓ	L	T	H	I	Test Pressure Unit: psi										
													Rubber Diaphragm					Teflon Diaphragm					
													UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF	
15(1/2")	0.63	2.38	3.50	0.63	4	2.28x2	3.70	0.51	4.25	0.59	3.98	5.51	150	150	150	150	150	150	150	150	150	150	
20(3/4")	0.79	2.76	3.86	0.63	4	2.76x2.36	3.70	0.51	5.90	0.63	4.17	5.98	150	150	150	150	150	150	150	150	150	150	
25(1")	0.98	3.13	4.25	0.63	4	3.11x2.56	3.70	0.55	5.90	0.63	4.45	6.22	150	150	150	150	150	150	150	150	150	150	
40(1-1/2")	1.61	3.88	5.00	0.63	4	4.84	5.79	0.94	6.95	0.67	5.24	7.60	150	150	150	150	150	150	150	150	150	150	
50(2")	2.05	4.74	5.98	0.75	4	5.83	5.79	1.10	7.95	0.67	5.71	8.27	150	150	150	150	150	150	150	150	150	150	
65(2-1/2")	2.68	5.49	7.01	0.75	4	7.20	7.95	1.26	9.85	0.87	7.76	10.87	150	150	150	150	150	150	105	105	150	150	
80(3")	3.07	6.00	7.52	0.75	4	7.91	7.95	1.34	10.40	0.75	8.50	11.54	150	150	150	150	150	150	105	105	150	150	
100(4")	3.94	7.50	9.17	0.75	8	9.84	9.49	2.13	12.95	0.91	10.28	14.57	150	150	150	150	150	150	105	105	150	150	
125(5")	4.92	8.50	10.00	0.87	8	12.64	10.79	2.83	16.14	0.94	12.13	16.22	150	105	105	150	150	105	105	105	105	150	
150(6")	5.83	9.51	10.98	0.87	8	15.04	15.55	2.83	18.90	1.18	13.15	18.54	150	105	105	150	150	105	105	105	105	150	
200(8")	7.80	11.75	13.50	0.87	8	16.97	15.55	3.78	22.44	1.26	16.40	24.61	105	75	75	105	105	75	75	75	75	105	
250(10")	9.76	14.25	15.98	0.98	12	20.83	21.85	5.20	26.77	1.26	20.08	29.53	105	75	75	105	105	75	75	75	75	105	

DIN													PRESS Test for Assembly (at 20°C)									
Nom. Size n/m(inch)	D1	D2	D3	e	n No. of holes	D4	D5	Lift ℓ	L	T	H	I	Test Pressure Unit: (bar)									
													Rubber Diaphragm					Teflon Diaphragm				
													UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF
15(1/2")	16	65	95	14	4	58x51	94	13	130	23	101	140	10	10	10	10	10	10	10	10	10	10
20(3/4")	20	75	105	14	4	70x60	94	13	150	23	106	152	10	10	10	10	10	10	10	10	10	10
25(1")	25	85	125	14	4	79x65	94	14	160	23	113	158	10	10	10	10	10	10	10	10	10	10
40(1-1/2")	41	110	150	18	4	123	147	24	200	23	133	193	10	10	10	10	10	10	10	10	10	10
50(2")	52	125	165	18	4	148	147	28	230	21	145	210	10	10	10	10	10	10	10	10	10	10
65(2-1/2")	68	145	185	18	4	183	202	32	290	22	197	276	10	10	10	10	10	10	7	7	10	10
80(3")	78	160	200	18	8	201	202	34	310	22	218	293	10	10	10	10	10	10	7	7	10	10
100(4")	100	180	210	18	8	250	241	54	350	25	261	370	10	10	10	10	10	10	7	7	7	10
125(5")	125	210	250	18	8	321	274	72	400	24	308	412	10	7	7	10	10	7	7	7	7	7
150(6")	148	240	285	23	8	382	395	72	480	30	334	471	10	7	7	10	10	7	7	7	7	7
200(8")	198	295	340	23	8	431	395	96	600	32	419	625	7	5	5	7	7	5	5	5	5	5
250(10")	248	350	395	23	12	529	555	132	680	32	510	750	7	5	5	7	7	5	5	5	5	5

※ The dimension table is calculated based on PVC material.
※ The flanged length tolerance is according to EN558-1:1995.



VACUUM-PROOF DIAPHRAGM VALVE



DV Series

DV300

Size :80mm(3")~250mm(10")

MATERIALS : UPVC,PP,PPG.CPVC,PVDF

PATNET:NO, 18490

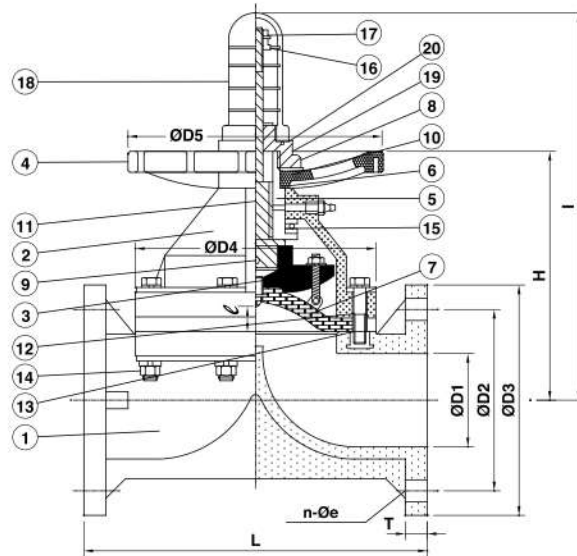
Note: Standard Type Diaphragm valve in size
15mm(1/2")-65mm(2 1/2")can be used under vacuum

FEATURES

- Concerning the standard diaphragm valve, the inserted metal of the diaphragm frequently comes out, when exposed to vacuum, therefore, the valve cannot function at all, S.H.VACUUM PROOF DIAPHRAGM VALVE has solved this problem and has won favorable valuation in various fields.
- S.H. VACUUM-PROOF DIAPHRAGM VALVE has more inserted metals of the diaphragm. The diaphragm is designed for being hanged from the compressor (Patent). This prevents the diaphragm from being drawn towards the valve seat (downwards) by vacuum. This valve can endure the perfect vacuum. (-760mm Hg)
- This VALVE can also be used under pressure. As both body and bonnet are thick and monobloc moldings with vacuum resistance, this can be used not only under vacuum but under pressure.
(3kg/cm² (40lb/in²) - 7kg/cm²(100lb/in²)

Reference(Unit: m/mHg)

Nom. Size m/m(inch)	STANDARD TYPE	VACUUM TYPE	Ball Valv
	Rubber Dia.	Rubbere dia.	
15(1/2")	-760	-	-760
20(3/4")	-760	-	-760
25(1")	-760	-	-760
40(1-1/2")	-760	-	-760
50(2")	-760	-	-760
65(2-1/2")	-760	-	-760
80(3")	-650 ~ -760	-760	-
100(4")	-500 ~ -600	-760	-
125(5")	-360 ~ -470	-760	-
150(6")	-250 ~ -360	-760	-
200(8")	-100 ~ -200	-760	-
250(10")	below -50	-760	-



DIMENSIONS TABLE

JIS												Unit: mm		PRESS Test for Assembly (at 20℃)				
Nom. Size m/m(inch)	D1	D2	D3	e	n No. of holes	D4	D5	Lift ℓ	L	T	H	I	Test Pressure Unit: kgf/cm ²					
													Rubber Diaphragm					
													UPVC	PP	PPG	CPVC	PVDF	
80(3")	78	150	185	19	8	215	202	34	280	22	218	293	10	10	10	10	10	
100(4")	100	175	210	19	8	255	241	54	340	22	261	370	10	10	10	10	10	
125(5")	125	210	250	23	8	320	274	72	410	24	308	412	10	7	7	10	10	
150(6")	148	240	280	23	8	385	395	72	480	30	334	471	10	7	7	10	10	
200(8")	198	290	330	23	12	430	395	96	570	30	419	625	7	5	5	7	7	
250(10")	248	355	400	25	12	540	555	132	680	32	510	750	7	5	5	7	7	

ANSI												Unit: inch		PRESS Test for Assembly (at 20°C)				
Nom. Size mm(inch)	D1	D2	D3	e	n No. of holes	D4	D5	Lift ℓ	L	T	H	I	Test Pressure Unit: psi					
													Rubber Diaphragm					
													UPVC	PP	PPG	CPVC	PVDF	
80(3")	3.07	6.00	7.52	0.75	4	8.46	7.95	1.34	10.40	0.75	8.50	11.54	150	150	150	150	150	
100(4")	3.94	7.50	9.02	0.75	8	10.04	9.49	2.13	12.95	0.91	10.28	14.57	150	150	150	150	150	
125(5")	4.92	8.50	10.00	0.87	8	12.60	10.79	2.83	16.14	0.94	12.13	16.22	150	105	105	150	150	
150(6")	5.83	9.51	10.98	0.87	8	15.16	15.55	2.83	18.90	1.18	13.15	18.54	150	105	105	150	150	
200(8")	7.80	11.75	13.50	0.87	8	16.93	15.55	3.78	22.44	1.26	16.40	24.61	105	75	75	105	105	
250(10")	9.76	14.25	15.98	0.98	12	21.26	21.85	5.20	26.77	1.26	20.08	29.53	105	75	75	105	105	

DIN												Unit: mm		PRESS Test for Assembly (at 20°C)				
Nom. Size mm(m/inch)	D1	D2	D3	e	n No. of holes	D4	D5	Lift ℓ	L	T	H	I	Test Pressure Unit: (bar)					
													Rubber Diaphragm					
													UPVC	PP	PPG	CPVC	PVDF	
80(3")	78	160	200	18	8	215	202	34	310	22	218	293	10	10	10	10	10	
100(4")	100	180	220	18	8	255	241	54	350	25	261	370	10	10	10	10	10	
125(5")	125	210	250	18	8	320	274	72	400	24	308	412	10	7	7	10	10	
150(6")	148	240	285	23	8	385	395	72	480	30	334	471	10	7	7	10	10	
200(8")	198	290	340	23	8	430	395	96	600	32	419	625	5	5	5	7	7	
250(10")	248	350	395	23	12	540	555	132	680	32	510	750	5	5	5	7	7	

* The dimension table is calculated based on PVC material.
* The flanged length tolerance is according to EN558-1:1995.



TRUE UNION DIAPHRAGM VALVE



DF Series

DF100 SOCKET / DF200 THREAD

DE100/DE200 3 LAYERS DIAPHRAGM TURE UNION VALVE

Suitable to the protect diaphragm from the gas permeation in the corrosion resistance and electrolytic chlorine gas.

● MATERIALS OF CONSTRUCTION

Item	Parts	Pcs	Materials	Item	Parts	Pcs	Materials
1	Shaft	1	BRASS	9	Gauge Cover	1	PC
2	Diaphragm	1	EPDM, TEFLON , PVDF 3 LAYS	10	O'ring	2	EPDM, VITON
3	Body	1	UPVC, PP, CPVC, PVDF	11	Compressor	1	15A-25A PVDF 32A-50A PPG
4	Sleeve	1	BRASS	12	Indicator	1	PE
5	Union Nut	2	UPVC, PP, CPVC, PVDF	13	Bolt	4	SUS304
6	Handle	1	ABS	14	Nut	4	SUS304
7	End Connector	2	UPVC, PP, CPVC, PVDF	15	Washer spring washer	8	SUS304
8	Bonnet	1	UPVC, PP, CPVC, PVDF				
8-1	Bonnet Board	1	SUS304				



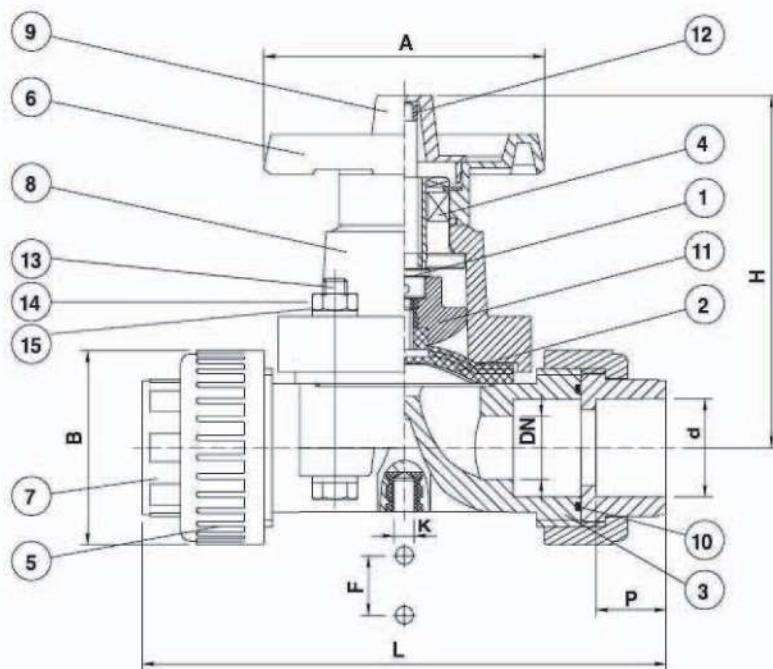
TORQUE VALUE

SIZE	Kg.cm	N.m
1/2"-3/4"	60	5.88
1"	100	9.81
1-1/2"	140	13.72
2"	210	20.58

1Kg.cm=0.0981N.m

CV VALUE

CV [GMP/(1lb/in ²) ^{1/2}]	
OPENING: 100%	
SIZE	CV
1/2"	3.27
3/4"	5.29
1"	8.87
1-1/2"	31.09
2	43.15



DN15~DN50

DIMENSIONS TABLE

Standards Nom. Size	JIS										ANSI										DIN												
	Unit: mm										Unit: inch										Unit: mm												
	d		P	B	L	H	A	F	K	Test Press (kgf/cm ²)	d		P	B	L	H	A	F	K	Test Press (lb/in ²)	d		P	B	L	H	A	F	K	Test Press (bar)			
																															Ptfe dia.	Rubber Dia.	Ptfe dia.
Socket	Thread										Socket	Thread										Socket	Thread								Ptfe dia.	Rubber Dia.	
15(1/2")	22	PT1/2	22.2	54	166	107.5	81	25	8	10	10	0.84	NPT1/2	0.875	2.126	6.53	4.23	3.189	0.984	0.315	150	150	20	R1/2	16.0	54	166	107.5	81	25	8	10	10
20(3/4")	26	PT3/4	25.4	54	166	107.5	81	25	8	10	10	1.05	NPT3/4	1.000	2.126	6.53	4.23	3.189	0.984	0.315	150	150	25	R1/4	18.5	54	166	107.5	81	25	8	10	10
25(1")	32	PT1	28.6	63	183	116	91	25	8	10	10	1.32	NPT1	1.125	2.480	7.2	4.567	3.583	0.984	0.315	150	150	32	R1	22.0	63	183	116	91	25	8	10	10
32(1-1/4")	38	PT11/4	31.8	89	238	142	117	45	8	10	10	1.66	NPT1-1/4	1.250	3.5	9.37	5.591	4.606	1.772	0.315	150	150	40	R1-1/4	26.0	89	238	142	117	45	8	10	10
40(1-1/2")	48	PT11/2	34.9	89	238	142	117	45	8	10	10	1.90	NPT1-1/2	1.375	3.5	9.37	5.591	4.606	1.772	0.315	150	150	50	R1-1/2	31.0	89	238	142	117	45	8	10	10
50(2")	60	PT2	38.1	101	273	176	150	45	8	10	10	2.38	NPT2	1.500	3.97	10.74	6.929	5.906	1.772	0.315	150	150	63	R2	37.5	101	273	176	150	45	8	10	10

※ Standard dimensions based on PVC material



Y-TYPE AUTOMATIC DIAPHRAGM VALVE (NORMAL OPEN TYPE)



YT Series

**YT100 SOCKET/YT200 THREAD
YT300 FLANGED
Size: 3/8"- 2"**

Y type diaphragm valve operation instructions:

1. Valve Close Operation :

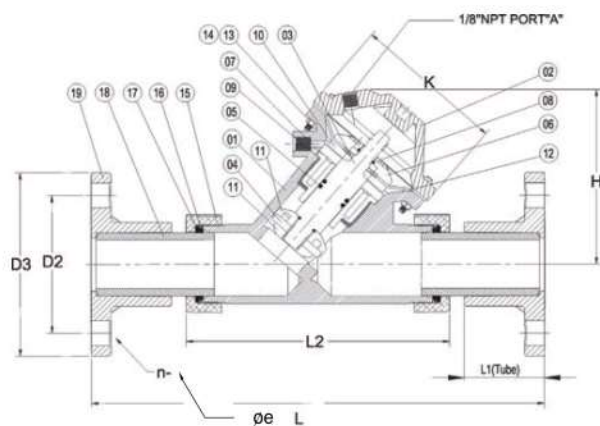
Air fill in from the cap's air hole and body's air hole clear out the air.

2. Valve Open Operation :

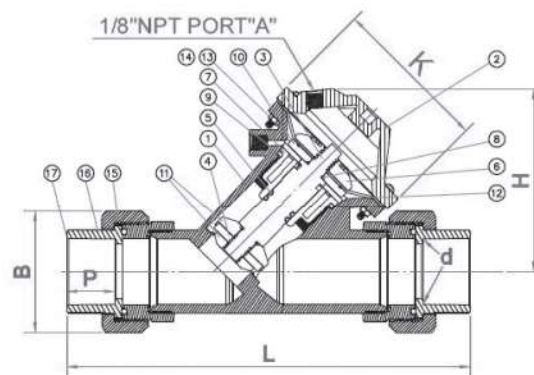
Fill air from the body's air hole and the cap's air hole clear out the air.

● MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	PPS	11	Plate Screw	1	PVDF
2	Bonnet	1	PPS	12	Diaphragm	1	EPDM
3	Disc Plate Screw	1	PVDF	13	Bolt	6/8/12	SUS304
4	Disc	1	EPDM	14	Hex Nut	6/8/12	SUS304
5	Dynamic O'ring	1	EPDM	15	End Seal	2	PPO
6	Shaft	1	PVDF	16	Split Ring	2	EPDM
7	Shaft Guide	1	PPG	17	Retainer Nut	2	PPG
8	Shaft Seal	1	EPDM	18	Tube	2	UPVC
9	Body Seal	1	EPDM	19	Flange	2	UPVC
10	Diaphragm Hader	1	PVDF				



FLANG TYPE



SOCKET & SCREW TYPE

Operation limits:

1. pressure : 3-8 kgf/cm²
2. 3 kgf/cm² air pressure can open the valve(from the body's air hole)
3. The max pressure place on the valve (fill air pressure + flow pressure) is 8 kgf/cm²
4. The inlet air preaaure from the cap's air hole must be higher than the flow pressure that can close the valve.

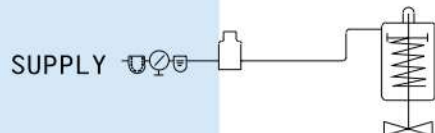
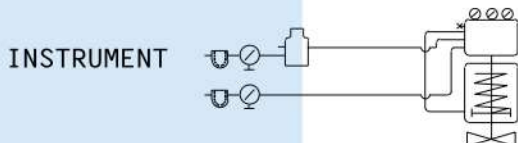
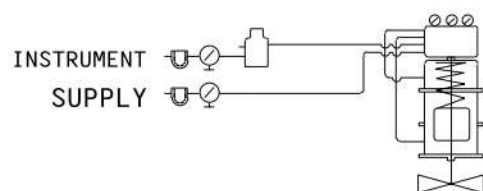
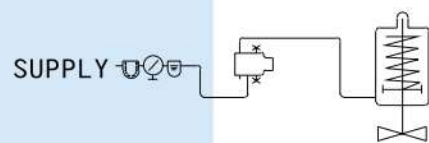
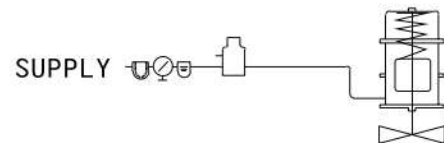
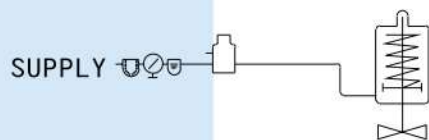
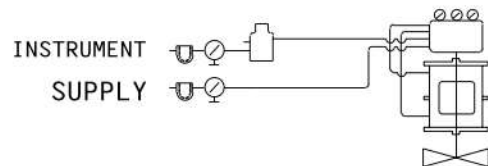
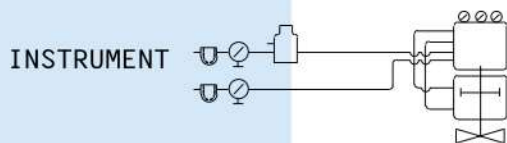
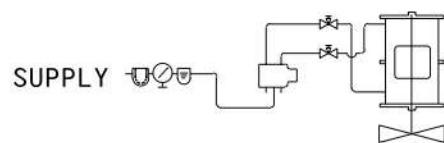
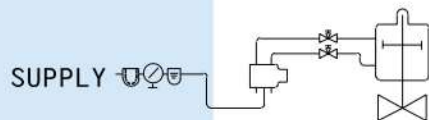
● DIMENSIONS TABLE

Nom. Size DN(inch)	L2	L1	L	H	K	JIS		Unit:mm		ANSI		Unit:inch		DIN		Unit:mm	
						D2	D3	n	øe	D2	D3	n	øe	D2	D3	n	øe
12(3/8")	100	70	198	65	63	65	90	4	15	2.38	3.50	4	0.63	60	90	4	14
15(1/2")	100	70	219	65	63	70	95	4	15	2.36	3.50	4	0.63	65	95	4	14
20(3/4")	100	80	238	65	63	75	100	4	15	2.75	3.88	4	0.63	75	105	4	14
25(1")	118	80	238	103	83	90	125	4	19	3.13	4.25	4	0.63	85	115	4	14
32(1-1/4")	118	90	332	103	83	100	135	4	19	3.50	4.63	4	0.63	100	140	4	18
40(1-1/2")	194	90	332	128	116	105	140	4	19	3.88	5.00	4	0.63	110	150	4	18
50(2")	194	90	350	128	116	120	155	4	19	4.75	6.00	4	0.75	125	165	4	18

※ Standard dimensions based on PVC material



The Installation Diagram Pictrure For the Pneumatic Diaphragm Valve



(SPARE PARTS)

EXH CYL	SUP	(VS3125)	U	(AF400)
CYL 1 2	EXH	(VS4125)	U	(AL400)
ESE			X	(AS400)
X U X				
P H P				
1 2				
		(AR300)	OUT1 OUT2 IN SUP	(IP300)



Diaphragm Valve Operation Temperature vs Pressure Chart

(MATERIAL)		(NOM.SIZE) mm(INCH)	15	20	25	32	40	50	65	80	100	125	150	200	250
(BODY)	(DIAPHRAGM)	working press °C(F)	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"	10"
U-PVC	Rubbers	(TEST PRESS)	10	10	10	10	10	10	10	10	10	10	10	7	7
		0°C-20(36-68)(Working)	7	7	7	7	7	7	7	7	7	7	7	5	5
		21-40(70-100)	7	7	7	7	7	7	7	7	7	7	7	5	5
		41-60(106-140)	6	6	6	6	6	6	6	6	6	6	6	4	4
	PTFE	(TEST PRESS)	10	10	10	10	10	10	10	10	10	7	7	5	5
		0°C-20(36-68)(Working)	7	7	7	7	7	7	7	7	7	5	5	3	3
		21-40(70-100)	7	7	7	7	7	7	7	7	7	5	5	2	2
		41-60(106-140)	6	6	6	6	6	6	6	6	6	4	4	2	2
	VITON	(TEST PRESS)	10	10	10	10	10	10	10	10	10	10	10	7	7
		21-40(70-100)	7	7	7	7	7	7	7	7	7	7	7	5	5
		21-40(70-100)	7	7	7	7	7	7	7	7	7	7	7	5	5
		21-40(70-100)	6	6	6	6	6	6	6	6	6	6	6	4	4
PP	Rubbers	(TEST PRESS)	10	10	10	10	10	10	10	10	10	7	7	5	5
		-20-40(-4-104)	7	7	7	7	7	7	7	7	7	5	5	3	3
		40-60(106-140)	7	7	7	7	7	7	7	7	7	5	5	2	2
		61-90(142-194)	6	6	6	6	6	6	6	6	6	4	4	2	2
	PTFE	(TEST PRESS)	10	10	10	10	10	10	7	7	7	7	7	5	5
		-20-40(-4-104)	7	7	7	7	7	7	5	5	5	5	5	3	3
		40-60(106-140)	7	7	7	7	7	7	5	5	5	5	5	2	2
		61-90(142-194)	6	6	6	6	6	6	4	4	4	4	4	2	2
	VITON	(TEST PRESS)	10	10	10	10	10	10	10	10	10	7	7	5	5
		-20-40(-4-104)	7	7	7	7	7	7	7	7	7	5	5	3	3
		40-60(106-140)	7	7	7	7	7	7	7	7	7	5	5	2	2
		61-90(142-194)	6	6	6	6	6	6	6	6	6	4	4	2	2
CPVC	Rubbers	(TEST PRESS)	10	10	10	10	10	10	10	10	10	10	10	7	7
		-20-40(-4-104)	7	7	7	7	7	7	7	7	7	7	7	5	5
		40-60(106-140)	7	7	7	7	7	7	7	7	7	7	7	5	5
		61-90(142-194)	6	6	6	6	6	6	6	6	6	6	6	4	4
	PTFE	(TEST PRESS)	10	10	10	10	10	10	10	10	10	7	7	5	5
		-20-40(-4-104)	7	7	7	7	7	7	7	7	7	5	5	3	3
		40-60(106-140)	7	7	7	7	7	7	7	7	7	5	5	2	2
		61-90(142-194)	6	6	6	6	6	6	6	6	6	4	4	2	2
	VITON	(TEST PRESS)	10	10	10	10	10	10	10	10	10	10	10	7	7
		-20-40(-4-104)	7	7	7	7	7	7	7	7	7	7	7	5	5
		40-60(106-140)	7	7	7	7	7	7	7	7	7	7	7	5	5
		61-90(142-194)	6	6	6	6	6	6	6	6	6	6	6	4	4
PPG (FRTP)	Rubbers	(TEST PRESS)	10	10	10	10	10	10	10	10	10	7	7	5	5
		-20-60(-4-140)	7	7	7	7	7	7	7	7	7	5	5	3	3
		61-90(142-194)	7	7	7	7	7	7	7	7	7	5	5	2	2
		91-120(196-248)	6	6	6	6	6	6	6	6	6	4	4	2	2
	PTFE	(TEST PRESS)	10	10	10	10	10	10	7	7	7	7	7	5	5
		-20-60(-4-140)	7	7	7	7	7	7	5	5	5	5	5	3	3
		61-90(142-194)	7	7	7	7	7	7	5	5	5	5	5	2	2
		91-120(196-248)	6	6	6	6	6	6	4	4	4	4	4	2	2
	VITON	(TEST PRESS)	10	10	10	10	10	10	10	10	7	7	7	4	4
		-20-60(-4-140)	7	7	7	7	7	7	7	7	5	5	5	3	3
		61-90(142-194)	7	7	7	7	7	7	7	7	7	5	5	2	2
		91-120(196-248)	6	6	6	6	6	6	6	6	6	4	4	2	2
PVDF	Rubbers	(TEST PRESS)	10	10	10	10	10	10	10	10	10	10	10	7	7
		-20-60(-4-140)	7	7	7	7	7	7	7	7	7	7	7	5	5
		61-90(142-194)	7	7	7	7	7	7	7	7	7	7	7	5	5
		91-120(196-248)	6	6	6	6	6	6	6	6	6	6	6	4	4
	PTFE	(TEST PRESS)	10	10	10	10	10	10	10	10	10	10	10	7	7
		-20-60(-4-140)	7	7	7	7	7	7	7	7	7	5	5	3	3
		61-90(142-194)	7	7	7	7	7	7	7	7	7	5	5	2	2
		91-120(196-248)	6	6	6	6	6	6	6	6	6	4	4	2	2
	VITON	(TEST PRESS)	10	10	10	10	10	10	10	10	10	10	10	7	7
		-20-60(-4-140)	7	7	7	7	7	7	7	7	7	7	7	5	5
		61-90(142-194)	7	7	7	7	7	7	7	7	7	7	7	5	5
		91-120(196-248)	6	6	6	6	6	6	6	6	6	6	6	4	4

UNIT: kgf/cm²(bar)



Ball Valve (True Union Type)

- Material: UPVC, PP, CPVC, PVDF
- Size: 1/2"~4"

Hi -Tech'S, Hi-Qualitly'S





SAFETY BLOCK (TRUE UNION) BALL VALVE



NSF certified listing

CB Series

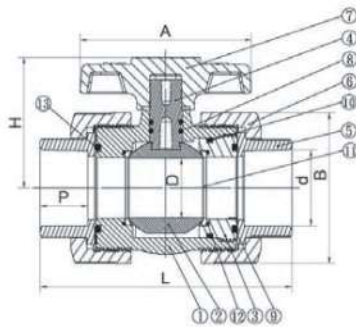
CB100 SOCKET/ CB200 THREAD/ CB300 FLANGED
Size: 1/2"- 4"

MATERIALS OF CONSTRUCTION

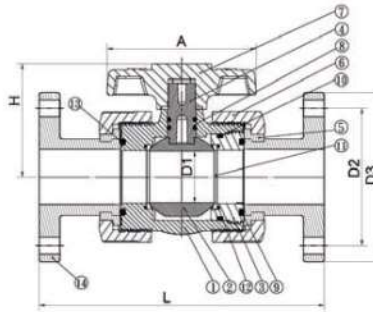
Item	Parts	Pcs	Materials	Item	Parts	Pcs	Materials
1	BODY	1	UPVC,PP,CPVC,PVDF	8	STEM O'RING	2	EPDM,VITON
2	BALL	1	UPVC,PP,CPVC,PVDF	9	END'S O'RING	1	EPDM,VITON
3	SEAT CARRIER	1	UPVC,PP,CPVC,PVDF	10	BODY O'RING	1	EPDM,VITON
4	STEM	1	UPVC,PP,CPVC,PVDF	11	SE AT	1	PTFE
5	END CONNECTOR	2	UPVC,PP,CPVC,PVDF	12	SOLID CARRIER O'RING	2	EPDM,VITON
6	UNION NUT	2	UPVC,PP,CPVC,PVDF	13	SOLID END O'RING	1	EPDM,VITON
7	HANDLE	1	ABS	14	FLANGE	2	UPVC,PP,CPVC,PVDF

DIMENSIONS TABLE

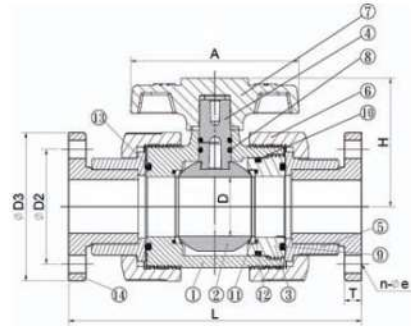
JIS																Unit:mm	
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			A	T	H	B	TestPress (kg/cm ²)	Working press (kg/cm ²)
				Socket	Thread				Socket	Thread	Flange						
15(1/2")	15	70	95	22	PT1/2	15	4	22.2	115	115	152	77	15	55	54	22.5	15
20(3/4")	19	75	100	26	PT3/4	15	4	25.4	126	126	164	85	16	60	65	22.5	15
25(1")	25	90	125	32	PT1	19	4	28.6	145	145	189	98	17	71	73	22.5	15
32(1-1/4")	38	100	135	38	PT1-1/4	19	4	31.8	167	167	211	109	17	75	81	22.5	15
40(1-1/2")	38	105	140	48	PT1-1/2	19	4	34.9	182	182	230	118	17	95	98	22.5	15
50(2")	48	120	155	60	PT2	19	4	38.1	202	202	254	137	20	104	120	22.5	15
65(2-1/2")	65	140	175	76	PT2-1/2	19	4	44.5	227	227	279	190	20	140	150	15	10
80(3")	78	150	185	89	PT3	19	8	47.6	273	273	328	230	23	165	184	15	10
100(4")	102	175	210	114	PT4	19	8	57.0	323	323	387	274	23	172	226	15	10



SOCKET & SCREW TYPE



15A-50A FLANGE TYPE



65A-100A FLANGE TYPE

DIMENSIONS TABLE

ANSI																	Unit:inch
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			A	T	H	B	Test Press (lb/in ²)	Working press (lb/in ²)
				Socket	Thread				Socket	Thread	Flange						
15(1/2")	0.59	2.375	3.500	0.848	NPT1/2	0.625	4	0.875	4.528	4.528	5.984	3.03	0.591	2.17	2.17	353	235
20(3/4")	0.748	2.750	3.875	1.058	NPT3/4	0.625	4	1.000	4.961	4.961	6.457	3.35	0.630	2.36	2.56	353	235
25(1")	0.98	3.125	4.250	1.325	NPT1	0.625	4	1.125	5.709	5.709	7.441	3.86	0.669	2.80	2.87	353	235
32(1-1/4")	1.496	3.500	4.625	1.670	NPT1-1/4	0.625	4	1.250	6.574	6.574	8.307	4.29	0.669	2.95	3.19	353	235
40(1-1/2")	1.496	3.875	5.000	1.912	NPT1-1/2	0.625	4	1.375	7.165	7.165	9.055	4.65	0.709	3.74	3.86	353	235
50(2")	1.89	4.750	6.000	2.387	NPT2	0.750	4	1.500	7.953	7.953	10.000	5.39	0.787	4.09	4.72	353	235
65(2-1/2")	2.56	5.500	7.000	2.889	NPT2-1/2	0.750	4	1.750	8.937	8.937	10.984	7.48	0.787	5.51	5.90	235	150
80(3")	3.07	6.000	7.500	3.515	NPT3	0.750	4	1.875	10.748	10.748	12.914	9.06	0.90	6.50	7.24	235	150
100(4")	4.01	7.500	9.000	4.518	NPT4	0.750	8	2.250	12.716	12.716	15.236	10.79	0.90	6.77	8.897	235	150

DIN																	Unit:mm
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			A	T	H	B	Test Press (bar)	Working press (bar)
				Socket	Thread				Socket	Thread	Flange						
15(1/2")	15	65	95	20	R1/2	14	4	16.0	115	115	152	77	15	55	54	24	16
20(3/4")	19	75	105	25	R3/4	14	4	18.5	126	126	164	85	16	60	65	24	16
25(1")	25	85	115	32	R1	14	4	22.0	145	145	189	98	17	71	73	24	16
32(1-1/4")	38	100	140	40	R1-1/4	18	4	26.0	167	167	211	109	17	75	81	24	16
40(1-1/2")	38	110	150	50	R1-1/2	18	4	31.0	182	182	230	118	18	95	98	24	16
50(2")	48	125	165	63	R2	18	4	37.5	202	202	254	137	20	104	120	24	16
65(2-1/2")	65	145	185	75	R2-1/2	18	4	43.5	227	227	279	190	20	140	150	15	10
80(3")	78	160	200	90	R3	18	8	51.0	273	273	328	230	23	165	184	15	10
100(4")	102	180	220	110	R4	18	8	61.0	323	323	387	274	23	172	226	15	10

The dimension table is calculated based on PVC material.
 ✱ The valve of test pressure is calculated based on PVC PVDF materials.
 The valve of test pressure for PP material is 70% based on the table.
 The flanged length tolerance is according to EN558-1:1995.



TRUE UNION (DOUBLE UNION) BALL VALVE



NSF certified listing

CD Series

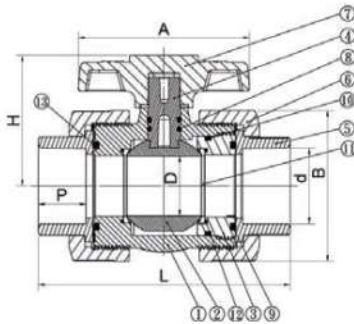
CD100 SOCKET/ CD200 THREAD/ CD300 FLANGE
Size: 1/2" - 4"

MATERIALS OF CONSTRUCTION

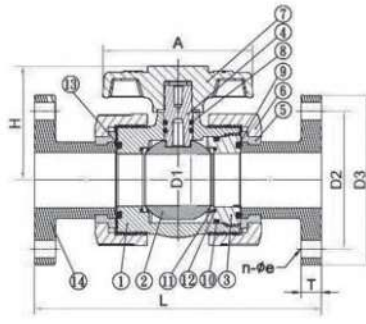
Item	Parts	Pcs	Materials	Item	Parts	Pcs	Materials
1	BODY	1	UPVC, PP, CPVC, PVDF	8	STEM O'RING	2	EPDM, VITON
2	BALL	1	UPVC, PP, CPVC, PVDF	9	END'S O'RING	1	EPDM, VITON
3	SEAT CARRIER	1	UPVC, PP, CPVC, PVDF	10	BODY O'RING	1	EPDM, VITON
4	STEM	1	UPVC, PP, CPVC, PVDF	11	SEAT	1	PTFE
5	END CONNECTOR	2	UPVC, PP, CPVC, PVDF	12	SOLID CARRIER O'RING	2	EPDM, VITON
6	UNION NUT	2	UPVC, PP, CPVC, PVDF	13	SOLID END O'RING	1	EPDM, VITON
7	HANDLE	1	ABS	14	FLANGE	2	UPVC, PP, CPVC, PVDF

DIMENSIONS TABLE

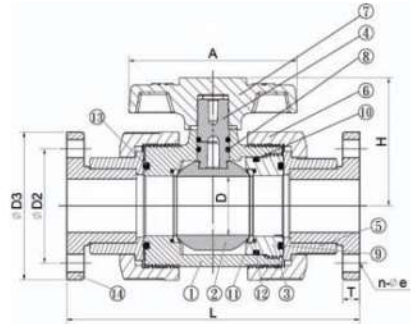
JIS																	Unit:mm
Nom Size DN-inch	D1	D2	D3	d		øe	n	P	L			A	T	H	B	Testpress (kgf/cm ²)	Working press (kgf/cm ²)
				Socket	Thread				Socket	Thread	Flange						
15(1/2")	15	70	95	22	PT1/2	15	4	22.2	112	112	152	82.5	15	61	47	22.5	15
20(3/4")	20	75	100	26	PT3/4	15	4	25.4	130	130	170	101	15	64	61	22.5	15
25(1")	25	90	125	32	PT1	19	4	28.6	144	144	189	111	17	65	70	22.5	15
32(1-1/4")	38	100	135	38	PT1-1/4	19	4	31.8	167	167	211	111	17	89	93	22.5	15
40(1-1/2")	38	105	140	48	PT1-1/2	19	4	34.9	185	185	232	128.3	17	88.7	93	22.5	15
50(2")	48	120	155	60	PT2	19	4	38.1	198	198	250	152.5	20	108.5	113	22.5	15
65(2-1/2")	65	140	175	76	PT2-1/2	19	4	44.5	228	228	279	190	20	140	150	15	10
80(3")	78	150	185	89	PT3	19	8	47.6	273	273	328	230	23	165	184	15	10
100(4")	102	175	210	114	PT4	19	8	57.2	323	323	387	274	23	172	226	15	10



SOCKET & SCREW TYPE



15A-50A FLANGE TYPE



65A-100A FLANGE TYPE

DIMENSIONS TABLE

ANSI															Unit:inch		
Nom Size DN-inch	D1	D2	D3	d		oe	n	P	L			A	T	H	B	TestPress (lb/in ²)	Working press (lb/in ²)
				Socket	Thread				Socket	Thread	Flange						
15(1/2")	0.591	2.375	3.500	0.848	NPT1/2	0.625	4	0.875	4.409	4.409	5.984	3.248	0.590	2.402	1.850	353	235
20(3/4")	0.78	2.750	3.875	1.058	NPT3/4	0.625	4	1.000	5.118	5.118	6.693	3.976	0.590	2.52	2.402	353	235
25(1")	0.984	3.125	4.250	1.325	NPT1	0.625	4	1.125	5.669	5.669	7.441	4.331	0.669	2.559	2.755	353	235
32(1-1/4")	1.496	3.500	4.625	1.670	NPT1-1/4	0.625	4	1.250	6.574	6.574	8.307	4.370	0.669	3.504	3.661	353	235
40(1-1/2")	1.496	3.875	5.000	1.912	NPT1-1/2	0.625	4	1.375	7.283	7.283	9.134	5.051	0.700	3.799	3.661	353	235
50(2")	1.89	4.750	6.000	2.387	NPT2	0.750	4	1.500	7.795	7.795	9.843	6.003	0.820	4.272	4.449	353	235
65(2-1/2")	2.56	5.500	7.000	2.889	NPT2-1/2	0.750	4	1.750	8.976	8.976	10.984	7.480	0.787	5.512	5.905	225	150
80(3")	3.071	6.000	7.500	3.515	NPT3	0.750	4	1.875	10.748	10.748	12.913	9.055	0.905	6.496	7.244	225	150
100(4")	4.01	7.500	9.000	4.518	NPT4	0.750	8	2.250	12.716	12.716	15.236	10.787	0.905	6.772	8.897	225	150

DIN															Unit:mm		
Nom Size DN-inch	D1	D2	D3	d		oe	n	P	L			A	T	H	B	TestPress (bar)	Working press (bar)
				Socket	Thread				Socket	Thread	Flange						
15(1/2")	15	65	95	20	R1/2	14	4	16.0	112	112	152	82	15	61	47	24	16
20(3/4")	20	75	105	25	R3/4	14	4	18.5	130	130	170	101	15	65	61	24	16
25(1")	25	85	115	32	R1	14	4	22.0	144	144	189	110	17	70	70	24	16
32(1-1/4")	38	100	140	40	R1-1/4	18	4	26.0	167	167	211	126	17	83	93	24	16
40(1-1/2")	38	110	150	50	R1-1/2	18	4	31.0	185	185	232	126	17	88.7	93	24	16
50(2")	48	125	165	63	R2	18	4	37.5	198	198	250	152	20	108.5	113	24	16
65(2-1/2")	65	145	185	75	R2-1/2	18	4	43.5	228	228	279	190	20	140	150	15	10
80(3")	78	160	200	90	R3	18	8	51.0	273	273	328	230	23	165	184	15	10
100(4")	102	180	220	110	R4	18	8	61.0	323	323	387	274	23	172	226	15	10

The dimension table is calculated based on PVC material.
 ✖ The valve of test pressure is calculated based on PVC PVDF materials.
 ✖ The valve of test pressure for PP material is 70% based on the table.
 The flanged length tolerance is according to EN558-1:1995.



TRUE UNION SAFETY BLOCK BALL VALVE WITH MOUNTING PADS

NSF certified listing



CH Series

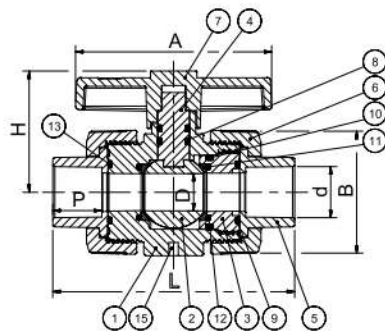
CH100 SOCKET/ CH200 THERAD/ CH300 FLANGED
Size:DN15-DN100

MATERIALS OF CONSTRUCTION

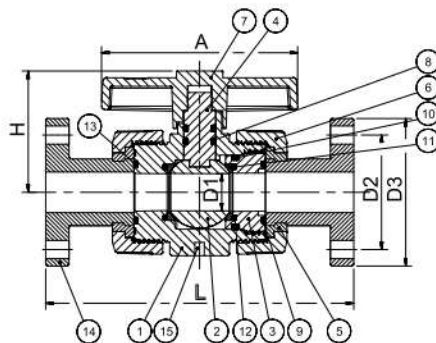
No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials
1	BODY	1	UPVC , PP , CPVC , PVDF	9	SOLID END O-RING	1	EPDM , VITON
2	BALL	1	UPVC , PP , CPVC , PVDF	10	SEAT	2	TEFLON
3	STEM	1	UPVC , PP , CPVC , PVDF	11	SEAT CARRIER O-RING	1	EPDM , VITON
4	SEAT CARRIER	1	UPVC , PP , CPVC , PVDF	12	BODY O-RING	1	EPDM , VITON
5	END CONNECTOR	2	UPVC , PP , CPVC , PVDF	13	SEAT O-RING	2	EPDM , VITON
6	UNION NUT	2	UPVC , PP , CPVC , PVDF	14	FLANGES	2	UPVC , PP , CPVC , PVDF
7	HANDLE	1	ABS	15	MOUNTING PAD (UP&DOWN)	15A-50A 4 65A-100A 8	BRASS , SUS304
8	SEAT O-RING	15A-50A 2 65A-100A 2	EPDM , VITON				

DIMENSIONS TABLE

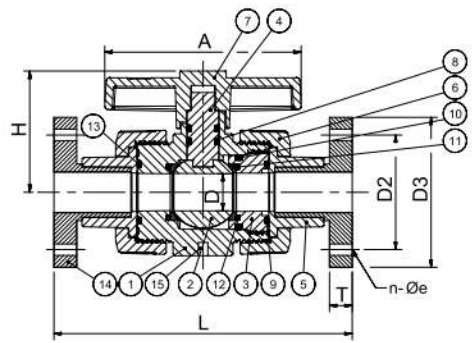
JIS																						Unit : mm
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			H	A	B	T	K	E	S	S1	Test press (kgf/cm ²)	Working press (kgf/cm ²)	
				Socket	Thread				Socket	Thread	Flange											
15(1/2")	15	70	95	22	PT 1/2"	15	4	22.2	115	115	153	51	82.7	53.2	15	31	—	4	4	22.5	15	
20(3/4")	19	75	100	26	PT 3/4"	15	4	25.4	126	126	165	63	101.2	63	15	37	—	6	4	22.5	15	
25(1")	25	90	125	32	PT 1"	19	4	28.6	144	144	189	72	111.8	72.2	17	40	—	6	4	22.5	15	
32(1-1/4")	38	100	135	38	PT 1-1/4"	19	4	31.8	181	181	226	86	121.4	97	17	55	—	8	4	22.5	15	
40(1-1/2")	38	105	140	48	PT 1-1/2"	19	4	34.9	181	181	226	86	121.4	97	19	55	—	8	4	22.5	15	
50(2")	48	120	155	60	PT 2"	19	4	38.1	202	202	252	100	149.3	118.9	21	68	—	8	4	22.5	15	
65(2-1/2")	65	140	175	76	PT 2-1/2"	19	4	44.5	227	227	281	140	190	150.1	21	80	41	8	8	15	10	
80(3")	78	150	185	89	PT 3"	19	8	47.6	275	275	330	165.1	230	183.9	22	80	41	8	8	15	10	
100(4")	102	175	210	114	PT 4"	19	8	57.2	321	321	387	172	274	226	22	121	50	8	8	15	10	



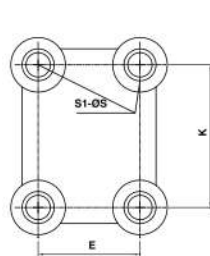
SOCKET & SCREW TYPE



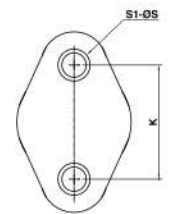
15A ~ 50A FLANGE TYPE



65A ~ 100A FLANGE TYPE



(ON SIZE DN65~DN100)



(ON SIZE DN15~DN50)

END VIEW

Bolts inserted pad pattern

DIMENSIONS TABLE

ANSI																					Unit : inch	
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			H	A	B	T	K	E	S	S1	Test press (kgf/cm ²)	Working press (lb/in ²)	
				Socket	Thread				Socket	Thread	Flange											
15(1/2")	0.59	2.375	3.500	0.848	NPT 1/2"	0.625	4	0.875	4.528	4.528	6.024	2.00	3.25	2.10	0.59	1.22	–	0.157	4	353	235	
20(3/4")	0.748	2.750	3.875	1.058	NPT 3/4"	0.625	4	1.000	4.960	4.960	6.496	2.48	3.98	2.48	0.59	1.45	–	0.236	4	353	235	
25(1")	0.98	3.125	4.250	1.325	NPT 1"	0.625	4	1.125	5.669	5.669	7.440	2.83	4.40	2.84	0.66	1.57	–	0.236	4	353	235	
32(1-1/4")	1.496	3.500	4.625	1.670	NPT 1-1/4"	0.625	4	1.125	7.126	7.126	8.898	3.38	4.78	3.82	0.66	2.16	–	0.315	4	353	235	
40(1-1/2")	1.496	3.875	5.000	1.912	NPT 1-1/2"	0.625	4	1.375	7.126	7.126	8.898	3.38	4.78	3.82	0.75	2.16	–	0.315	4	353	235	
50(2")	1.89	4.750	6.000	2.387	NPT 2"	0.750	4	1.500	7.953	7.953	9.921	3.93	5.88	4.68	0.83	2.67	–	0.315	4	353	235	
65(2-1/2")	2.56	5.500	7.000	2.889	NPT 2-1/2"	0.750	4	1.750	8.937	8.937	11.063	5.51	7.48	5.91	0.83	3.15	1.61	0.315	8	225	150	
80(3")	3.07	6.000	7.500	3.515	NPT 3"	0.750	4	1.750	10.826	10.826	12.992	6.50	9.06	7.24	0.866	3.15	1.61	0.315	8	225	150	
100(4")	4.01	7.500	9.000	4.518	NPT 4"	0.750	8	2.250	12.638	12.638	15.236	6.77	10.97	8.90	0.866	4.76	1.97	0.315	8	225	150	

DIN																					Unit : mm	
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			H	A	B	T	K	E	S	S1	Test press (bar)	Working press (bar)	
				Socket	Thread				Socket	Thread	Flange											
15(1/2")	15	65	95	20	R 1/2"	14	4	16.0	115	115	153	51	82.7	53.2	15	31	–	4	4	24	16	
20(3/4")	19	75	105	25	R 1/4"	14	4	18.5	126	126	165	63	101.2	63	15	37	–	6	4	24	16	
25(1")	25	85	115	32	R1"	14	4	22.0	144	144	189	72	111.8	72.2	17	40	–	6	4	24	16	
32(1-1/4")	38	100	140	40	R1-1/4"	18	4	26.0	181	181	226	86	121.4	97	17	55	–	8	4	24	16	
40(1-1/2")	38	110	150	50	R1-1/2"	18	4	31.0	181	181	226	86	121.4	97	19	55	–	8	4	24	16	
50(2")	48	125	165	63	R2"	18	4	37.5	202	202	253	100	149.3	118.9	21	68	–	8	4	24	16	
65(2-1/2")	65	145	185	75	R2-1/2"	18	4	43.5	227	227	281	140	190	150.1	21	80	41	8	8	15	10	
80(3")	78	160	200	90	R3"	18	8	51.0	275	275	330	165.1	230.1	183.9	22	80	41	8	8	15	10	
100(4")	102	180	220	110	R4"	18	8	61.0	321	321	387	172	274	226	22	121	50	8	8	15	10	

The dimension table is calculated based on PVC material.

✱ The valve of test pressure is calculated based on PVC PVDF materials.
The valve of test pressure for PP material is 70% based on the table.
The flanged length tolerance is according to EN558-1:1995.



TRUE UNION BALL VALVE (Butt Welding type)

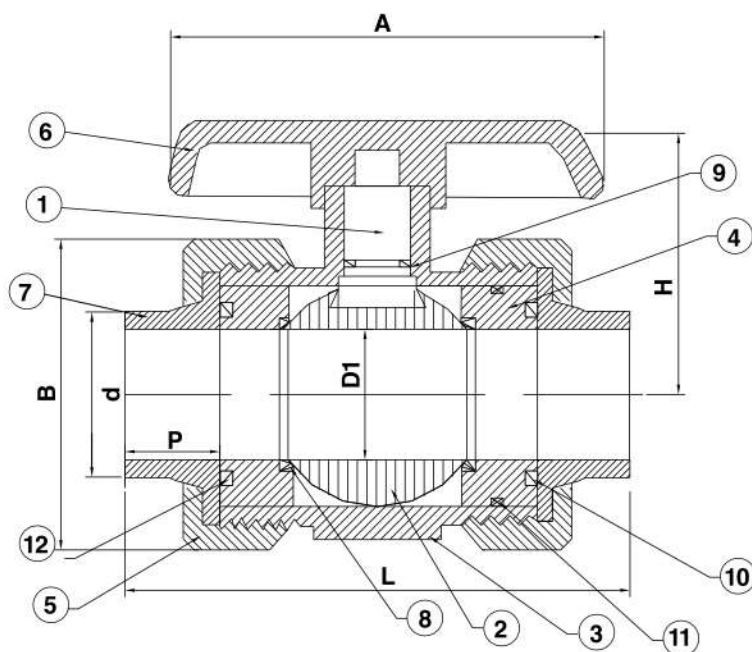


CW Series

CW100
Size: 1/2"-4"

● MATERIALS OF CONSTRUCTION

Item	Parts	Pcs	Material
1	STEM	1	PPG ,PVDF
2	BALL	1	PP,PVDF
3	BODY	1	PP,PVDF
4	SEAT CARRIER	1	PP,PVDF
5	UNION NUT	2	PP,PVDF
6	HANDLE	1	ABS
7	CONNECTOR	2	PP,PVDF
8	SEAT	2	PTFE
9	STEM O-RING	1.....DN15-50 2.....DN65-100	EPDM,VITON
10	SEAT CARRIER O-RING	1	EPDM,VITON
11	BODY O-RING	1	EPDM,VITON
12	SOLID END O-RING	1	EPDM,VITON



DN15~DN100

DIMENSIONS TABLE

DIN								Unit:mm	
Nom Size DN-inch	D1	d	P	L	A	H	B	Test Pressure	Working Pressure
								(bar)	
15(1/2")	14	20	16.0	163	82	51	47	15	10
20(3/4")	19	25	18.5	174	101	59	60	15	10
25(1")	25	32	22.0	182	111	70	68	15	10
32(1-1/4")	38	40	26.0	197	126	83	80	15	10
40(1-1/2")	38	50	31.0	191	126	83	92	15	10
50(2")	49	63	37.5	208	152	102	111	15	10
65(2-1/2")	67	75	43.5	212.5	190	140	148	10	7
80(3")	78	90	51.0	309	230	165	181	10	7
100(4")	101	110	61.0	358	274	169.3	222	10	7



NEW TRUE UNION (DOUBLE UNION) BALL VALVE

NSF certified listing



CK Series

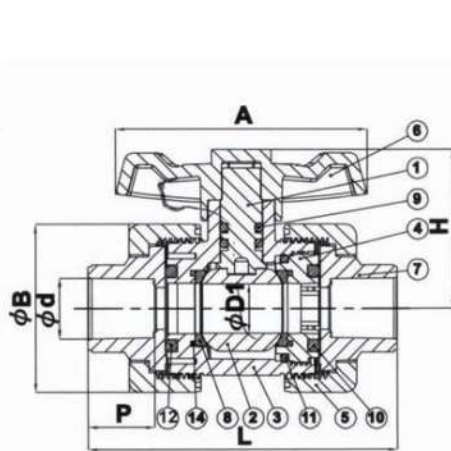
CK100 SOCKET / CK200 THREAD / CK300 FLANGE
SIZE: 1/2"~3"

MATERIALS OF CONSTRUCTION

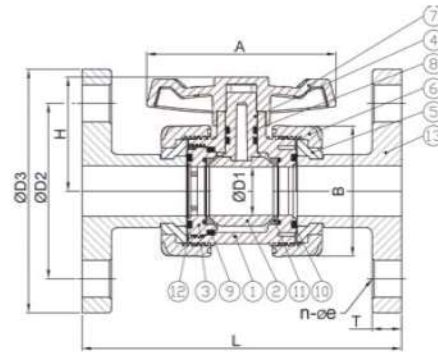
em	Parts	Pcs	Materials	em	Parts	Pcs	Materials
1	STEM	1	UPVC, CPVC	8	SEAT	2	TEFLON
2	BALL	1	UPVC, CPVC	9	STEM O-RING	2	EPDM, VITON
3	BODY	1	UPVC, CPVC	10	END CONNECTOR O-RING	1	EPDM, VITON
4	SEAT CARRIER	1	UPVC, CPVC	11	SEAT CARRIER O-RING	1	EPDM, VITON
5	UNION NUT	2	UPVC, CPVC	12	SOLID END O-RING	1	EPDM, VITON
6	HANDLE	1	ABS	13	FLANGE	2	UPVC, CPVC
7	END CONNECTOR	2	UPVC, CPVC	14	BODY O-RING	2	EPDM, VITON

DIMENSIONS TABLE

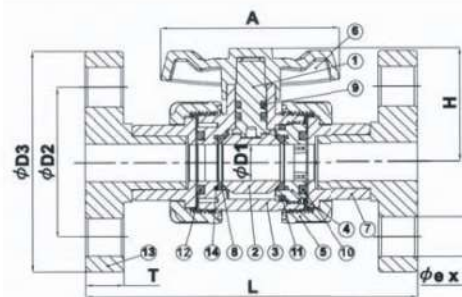
JIS													Unit:mm				
Nom Size DN-inch	D1	D2	D3	d		oe	n	P	L			A	T	H	B	TestPress (kgf/cm ²)	Working press (kgf/cm ²)
				Socket	Thread				Socket	Thread	Flange						
010(3/8")	14	70	95	18.25	PT3/8	15	4	19	88.5	95	130	72	15	46	48	22.5	15
015(1/2")	14	70	95	22	PT1/2	15	4	23	95	95	130	72	15	46	48	22.5	15
020(3/4")	20	75	100	26	PT3/4	19	4	25	106	106	146	85	15	53	59	22.5	15
025(1")	25	90	125	32	PT1	19	4	29	120	120	169	98	17	59	67	22.5	15
032(1-1/4")	32	100	135	38	PT1-1/4	19	4	32	135	135	190	102	17	69	78	22.5	15
040(1-1/2")	40	105	140	49	PT1-1/2	19	4	35	151	151	209	115	17	76	93	22.5	15
050(2")	50	120	155	61	PT2	19	4	39	173	173	250	142	20	92	113	22.5	15
065(2-1/2")	63	145	175	76.5	PT2-1/2	19	4	45	210	210	280	180	20	115	141	15	10
080(3")	75	150	185	89.5	PT3	19	8	48	244	244	300	208	23	135	168	15	10



SOCKET & THREAD TYPE



15A-50A FLANGE TYPE



65A-80A FLANGE TYPE

DIMENSIONS TABLE

ANSI																Unit:mm	
Nom Size DN-inch	D1	D2	D3	d		øe	n	P	L			A	T	H	B	Test Press (lb/in ²)	Working press (lb/in ²)
				Socket	Thread				Socket	Thread	Flange						
010(3/8")	0.567	2.374	3.500	0.687	NPT3/8	0.625	4	0.752	3.480	3.76	5.118	2.835	0.590	1.811	1.890	353	235
015(1/2")	0.567	2.374	3.500	0.848	NPT1/2	0.625	4	0.886	3.756	3.76	5.118	2.835	0.590	1.811	1.890	353	235
020(3/4")	0.780	2.752	3.874	1.058	NPT3/4	0.625	4	1.000	4.156	4.16	5.748	3.346	0.590	2.087	2.323	353	235
025(1")	0.988	3.126	4.248	1.325	NPT1	0.625	4	1.126	4.724	4.72	6.653	3.858	0.669	2.283	2.638	353	235
032(1-1/4")	1.254	3.500	4.626	1.670	NPT1-1/4	0.625	4	1.252	5.315	5.315	7.480	4.016	0.669	2.717	3.071	353	235
040(1-1/2")	1.559	3.913	5.000	1.912	NPT1-1/2	0.625	4	1.378	5.691	5.691	8.228	4.528	0.700	2.992	3.661	353	235
050(2")	1.969	4.752	6.000	2.387	NPT2	0.750	4	1.476	6.744	6.744	9.842	5.591	0.820	3.622	4.449	353	235
065(2-1/2")	2.563	5.500	6.969	2.889	NPT2-1/2	0.750	4	1.772	8.267	8.267	11.020	7.087	0.787	4.527	5.590	235	150
080(3")	3.031	6.000	7.500	3.516	NPT3	0.750	4	1.890	9.606	9.606	11.810	8.819	0.905	5.315	6.614	235	150

DIN																Unit:mm	
Nom Size DN-inch	D1	D2	D3	d		øe	n	P	L			A	T	H	B	Test Press (bar)	Working press (bar)
				Socket	Thread				Socket	Thread	Flange						
010(3/8")	14	65	95	16.2	R3/8	14	4	14.6	79.2	88	130	72	15	46	48	24	16
015(1/2")	14	65	95	20.1	R1/2	14	4	16	95	88	130	72	15	46	48	24	16
020(3/4")	20	75	105	25.2	R3/4	14	4	19	92	92	146	85	16	53	59	24	16
025(1")	25	85	115	32.2	R1	14	4	22	107	107	169	98	17	59	67	24	16
032(1-1/4")	32	100	140	40.2	R1-1/4	18	4	26	123	123	190	102	17	69	78	24	16
040(1-1/2")	40	110	150	50.2	R1-1/2	18	4	31	143	143	209	115	18	76	93	24	16
050(2")	50	125	185	63.2	R2	18	4	38	171	171	250	142	20	92	113	24	16
065(2-1/2")	63	145	185	75.2	R2-1/2	18	4	45	210	210	280	180	20	115	141	15	10
080(3")	75	160	200	90.2	R3	18	8	51	244	250	300	208	23	135	168	15	10

The dimension table is calculated based on PVC material.

✱ The valve of test pressure is calculated based on PVC PVDF materials.

The valve of test pressure for PP material is 70% based on the table.

The flanged length tolerance is according to EN558-1:1995.



Other Type Ball Valve

Hi -Tech'S, Hi-Qualitly'S

- Material: UPVC, PP, CPVC, PPG, PVDF
- Size: 1/2"~6"





SINGLE UNION BALL VALVE



CS Series

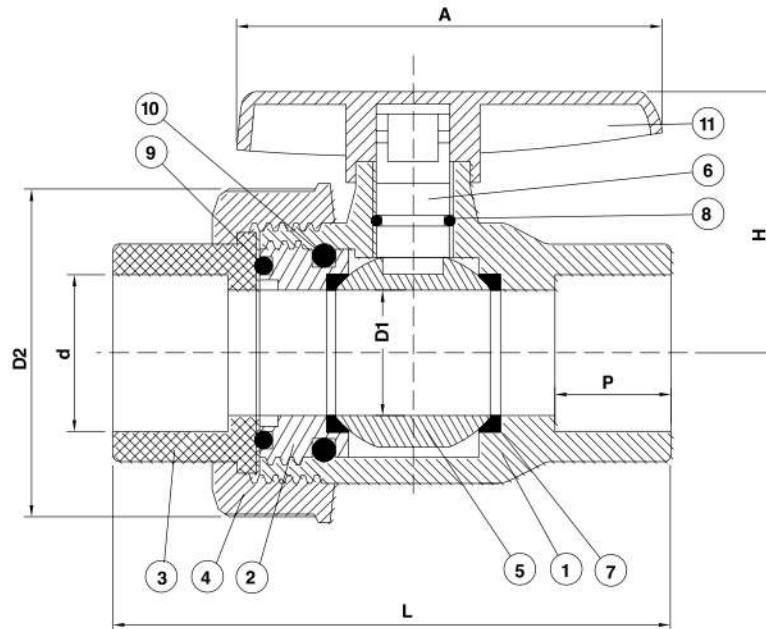
CS100 SOCKET / CS200 THREAD

MATERIALS OF CONSTRUCTION

Item	Parts	Pcs	Materials	Item	Parts	Pcs	Materials
1	Body	1	UPVC, PP	7	Seat	2	PTFE
2	Seat Carrier	1	UPVC, PP	8	Stem O-ring	1	EPDM,VITON
3	End Connector	1	UPVC, PP	9	Seat Carrier O-ring	1	EPDM,VITON
4	Union Nut	1	UPVC, PP	10	Body- O-ring	1	EPDM,VITON
5	Ball	1	UPVC, PP	11	Handle	1	ABS
6	Stem	1	UPVC, PP				

DIMENSIONS TABLE

JIS											Unit: mm	
Nom DN	Size inch	D1	d		D2	L		P	H	A	Testpress (kgf/cm ²)	Working press (kgf/cm ²)
			Socket	Thread		Socket	Thread					
15	1/2"	15	22	PT1/2"	53	97	97	22.2	51	66	15	10
20	3/4"	18	26	PT3/4"	64	111	111	25.4	65	75	15	10
25	1"	25	32	PT 1"	73	122	122	28.6	71	85	15	10
32	1-1/4"	39	38	PT1-1/4"	98	158	158	31.8	86	109	15	10
40	1-1/2"	39	48	PT1-1/2"	98	158	158	34.9	86	109	15	10
50	2"	48	60	PT 2"	117	173	173	38.1	104	134	15	10



DN15~DN50

DIMENSIONS TABLE

ANSI											Unit: inch	
Nom DN	Size inch	D1	d		D2	L		P	H	A	Test press (lb/in ²)	Working press (lb/in ²)
			Socket	Thread		Socket	Thread					
15	1/2"	0.59	0.840	NPT-1/2"	2.09	3.82	3.82	0.875	2.01	2.60	235	150
20	3/4"	0.71	1.050	NPT-3/4"	2.52	4.37	4.37	1.000	2.56	2.95	235	150
25	1"	0.98	1.315	NPT-1"	2.87	4.80	4.80	1.125	2.80	3.35	235	150
32	1 1/4"	1.54	1.660	NPT1-1/4"	3.86	6.22	6.22	1.250	3.39	4.29	235	150
40	1 1/2"	1.54	1.900	NPT1-1/2"	3.86	6.22	6.22	1.375	3.39	4.29	235	150
50	2"	1.89	2.375	NPT-2"	4.61	6.81	6.81	1.500	4.09	5.29	235	150

DIN											Unit: mm	
Nom DN	Size inch	D1	d		D2	L		P	H	A	Test press (bar)	Working press (bar)
			Socket	Thread		Socket	Thread					
15	1/2"	15	22	R1/2"	53	97	97	16	51	66	15	10
20	3/4"	18	25	R3/4"	64	111	111	18.5	65	75	15	10
25	1"	25	32	R 1"	73	122	122	22.0	71	85	15	10
32	1 1/4"	39	40	R1-1/4"	98	158	158	26.0	86	109	15	10
40	1 1/2"	39	50	R1-1/2"	98	158	158	31.0	86	109	15	10
50	2"	48	63	R 2"	117	173	173	37.5	104	134	15	10

✱ The dimension table is calculated based on PVC material.
 ✱ The valve of test pressure is calculated based on PVC materials.
 ✱ The valve of test pressure for PP material is 70% based on this table.



SINGLE UNION BALL VALVE(Simple Type)

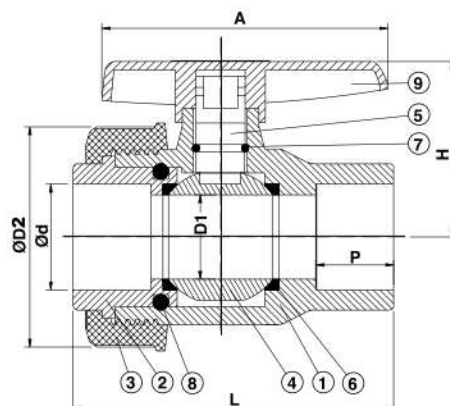


CP Series

CP100 SOCKET CP200 THREAD

MATERIALS OF CONSTRUCTION

Item	Parts	Pcs	Materials	Item	Parts	Pcs	Materials
1	Body	1	UPVC	6	Seat	2	PTFE
2	Connector	1	UPVC	7	Stem O-ring	1	EPDM
3	Union Nut	1	UPVC	8	Body- O-ring	1	EPDM
4	Ball	1	UPVC	9	Handle	1	ABS
5	Stem	1	UPVC				



DIMENSIONS TABLE

JIS											Unit: mm	
Nominal Pipe Size	Called Name	D1	d		D2	L		P	H	A	Test press (kg/cm ²)	Working press (kg/cm ²)
			Socket	Thread		Socket	Thread					
40 (1-1/2")		41	48	PT1-1/2"	95	121	121	34.9	84	109	15	10
50 (2")		50	60	PT 2"	133	133	133	38.1	101	134	15	10

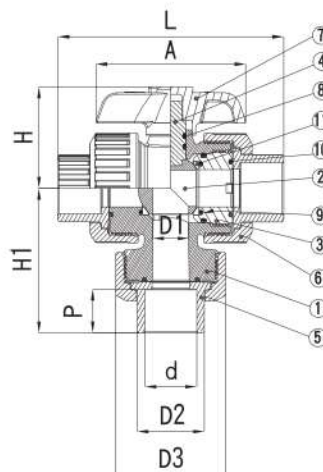
ANSI											Unit: inch	
Nominal Pipe Size	Called Name	D1	d		D2	L		P	H	A	Test press (lb/in ²)	Working press (lb/in ²)
			Socket	Thread		Socket	Thread					
40 (1-1/2")		1.614	1.900	NPT1-1/2"	3.740	4.764	4.764	1.375	3.307	4.291	235	150
50 (2")		1.969	2.375	NPT 2"	4.449	5.255	5.255	1.500	3.976	5.295	235	150

DIN											Unit: mm	
Nominal Pipe Size	Called Name	D1	d		D2	L		P	H	A	Test press (bar)	Working press (bar)
			Socket	Thread		Socket	Thread					
40 (1-1/2")		41	50	R1-1/2"	95	121	121	31	84	109	15	10
50 (2")		50	63	R2"	113	133	133	37.5	101	134	15	10



THREE-WAY BALL VALVE

The Vertical Diverter Type



MATERIALS OF CONSTRUCTION

No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials
1	Body	1	UPVC	5	End Connector	3	UPVC	9	Body O'ring	2	Seat
2	Ball	1	UPVC	6	Union Nut	3	UPVC	10	End O'ring	3	EPDM
3	Seat Carrier	1	UPVC	7	Handle	1	ABS	11	Seat	2	EPDM
4	Stem	1	UPVC	8	Stem O'ring	2	EPDM				

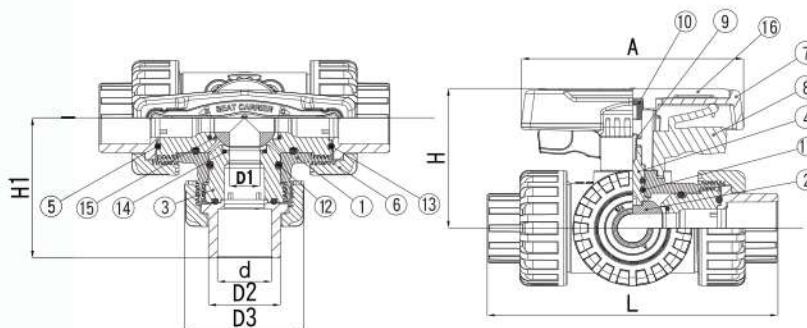
DIMENSIONS TABLE

Nom. Size DN (inch)	A	L	H	H1	D1	D2	D3	d			P			Working press (kgf/cm ²)
								JIS	ANSI	DIN	JIS	ANSI	DIN	
025(1")	100.0	149.0	67.0	95.5	25.0	44.5	72.5	32.3	33.65	32.3	28.6	28.6	22.0	10.0

CT Series

The Horizontal Type

CT100 SOCKET / CT200 THREAD



MATERIALS OF CONSTRUCTION

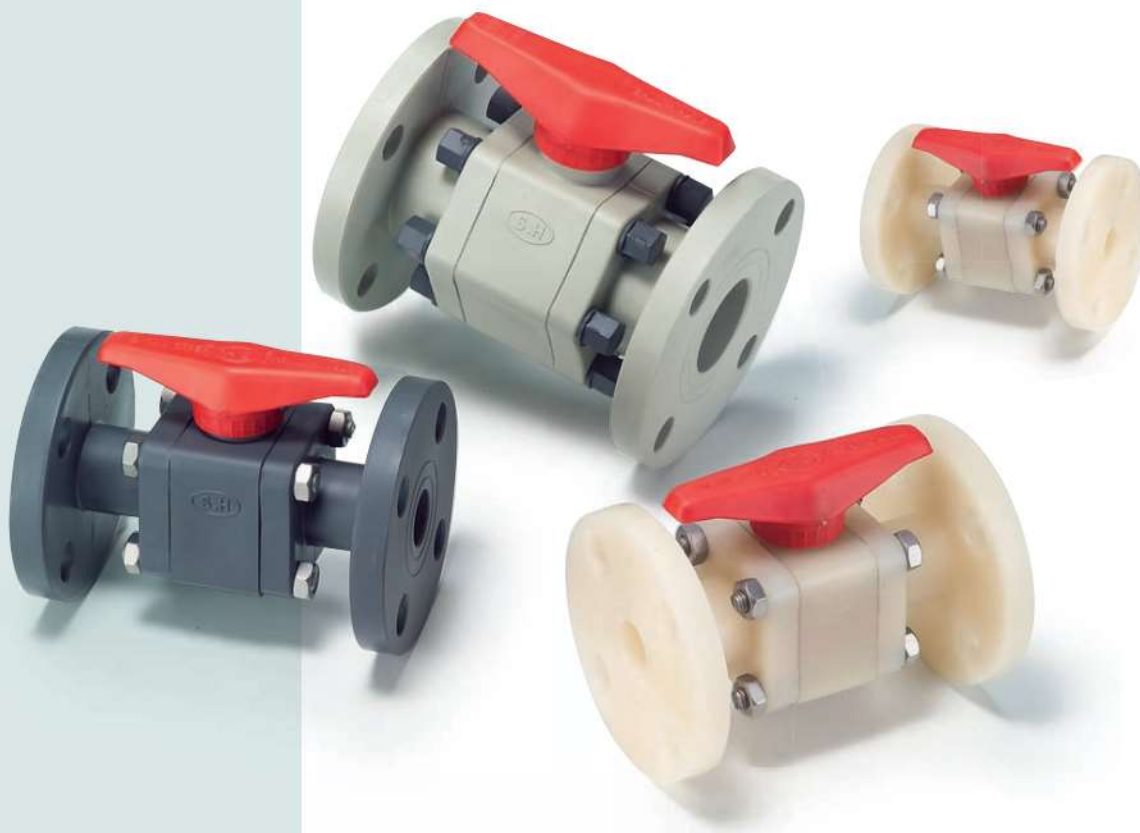
No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials
1	Body	1	UPVC	5	End Connector	3	UPVC	9	Screw	1	SUS304	13	End O'ring	3	EPDM
2	Ball	1	UPVC	6	Union Nut	3	UPVC	10	Cap	1	ABS	14	Body O'ring	3	EPDM
3	Seat Carrier	3	UPVC	7	Handle	1	ABS	11	Stem O'ring	2	EPDM	15	Seat	3	TEFLON
4	Stem	1	UPVC	8	Handle Fasteners	2	PP	12	Seat Carrier O'ring	3	EPDM	16	Handle on plate	1	ABS

DIMENSIONS TABLE

Nom. Size DN (inch)	A	H	H1	D3	JIS					ANSI					DIN					CNS					Working press (kgf/cm ²)(bar)	
					L	P	d	D1	D2	L	P	d	D1	D2	L	P	d	D1	D2	L	P	d	D1	D2		
020(3/4")	110.0	71.7	72.0	44.5	144.5	25.4	26.3	15.5	35.7	144.7	25.4	26.9	15.5	35.7	130.2	18.5	25.2	15.0	35.7	-	-	-	-	-	-	10.0
025(1")	110.0	79.0	79.8	67.3	160.0	28.6	32.3	18.4	44.0	160.0	28.6	33.7	18.4	44.0	146.4	22.0	32.3	18.4	44.0	160.0	28.6	34.3	35.1	18.4	44.0	10.0



STRONG UNION BALL VALVE

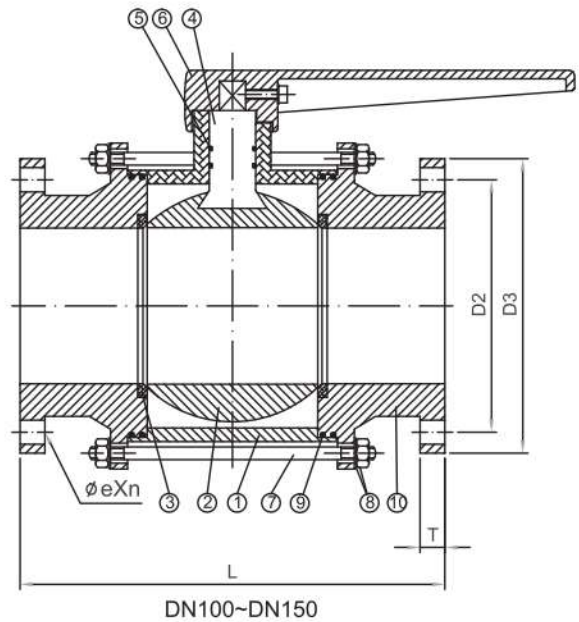
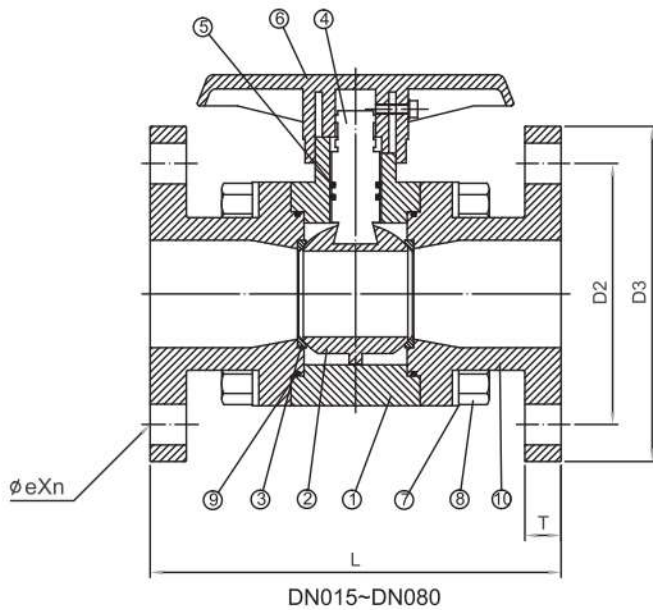


CG Series

CG300
Size: DN15-DN150

● MATERIALS OF CONSTRUCTION

No.	Parts	Pcs	Materials		No.	Parts	Pcs	Materials	
1	Body	1	UPVC, CPVC, PP, PVDF		6	Handle	1	15A~150A.....ABS	
2	Ball	1	UPVC, CPVC, PP, PVDF		7	Bolt	15A-32A 40A-80A 100A 150A	4 6 8 10	SUS-304
3	Seat	2	TEFLON		8	NUT&WASHER			40A-80A PVC COATED BRASS 15A-32A,100A-150A SUS-304
4	Shaft	1	UPVC, CPVC, PPG, PVDF		9	Flange O-Ring	15A-65A 80A-150A	2 4	EPDM, VITON
5	O-Ring	15A,20A 25A~150A	1 2	EPDM, VITON	10	Flange	2	UPVC, CPVC, PP, PVDF	



SPECIFICATIONS:

1. Test Press: ① {15mm-1/2"~65mm-2 1/2"}: 15kgf/cm ² (bar) (235 lb/in ²)	2. Working Press: ① {15mm-1/2"~65mm-2 1/2"}: 10kgf/cm ² (bar) (150 lb/in ²)
② {80mm-3"~150mm-6"}: 10kgf/cm ² (bar) (150 lb/in ²)	② {80mm-3"~150mm-6"}: 7kgf/cm ² (bar) (100 lb/in ²)

● DIMENSIONS TABLE

Standards Nom. size DN-inch	JIS						ANSI						DIN					
	Unit:mm						Unit:inch						Unit:mm					
	D3	D2	L Flange end	n	øe	T	D3	D2	L Flange end	n	øe	T	D3	D2	L Flange end	n	øe	T
15(1/2")	95	70	146	4	15	13	3.50	2.38	5.75	4	0.63	0.51	95	65	146	4	14	13
20(3/4")	100	75	152	4	15	15	3.88	2.76	5.98	4	0.63	0.59	105	75	152	4	14	15
25(1")	125	90	172	4	19	16	4.25	3.13	6.77	4	0.63	0.63	115	85	172	4	14	16
32(1-1/4")	135	100	175	4	19	16	4.62	3.50	6.89	4	0.71	0.63	140	100	175	4	18	16
40(1-1/2")	140	105	182	4	19	18	5.00	3.88	7.17	4	0.71	0.71	150	110	182	4	18	18
50(2")	155	120	189	4	19	18	6.00	4.74	7.44	4	0.71	0.71	165	125	189	4	18	18
65(2-1/2")	175	140	218	4	19	20	7.00	5.49	8.58	4	0.75	0.78	185	145	218	4	18	20
80(3")	185	150	244	8	19	20	7.50	6.00	9.61	4	0.75	0.78	200	160	244	8	18	20
100(4")	210	175	296	8	19	23	9.00	7.50	11.65	8	0.78	0.90	220	180	296	8	18	23
125(5")	250	210	390	8	23	24	10.00	8.50	15.35	8	0.87	0.94	250	210	390	8	18	24
150(6")	280	240	390	8	23	24	11.00	9.50	15.35	8	0.87	0.94	280	240	390	8	23	24

The dimension table is calculated based on PVC material.
 The valve of test pressure is calculated based on PVC PVDF materials.
 ※ The valve of test pressure for PP material is 70% based on this table.
 The flanged length tolerance is according to EN558-1:1995.



NEW STRONG UNION BALL VALVE

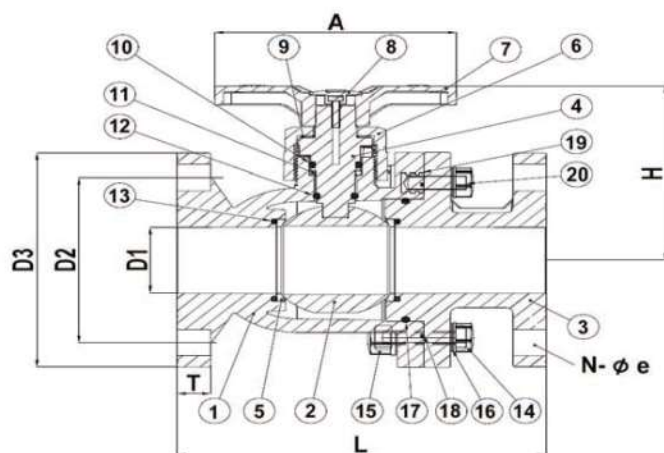


CF Series

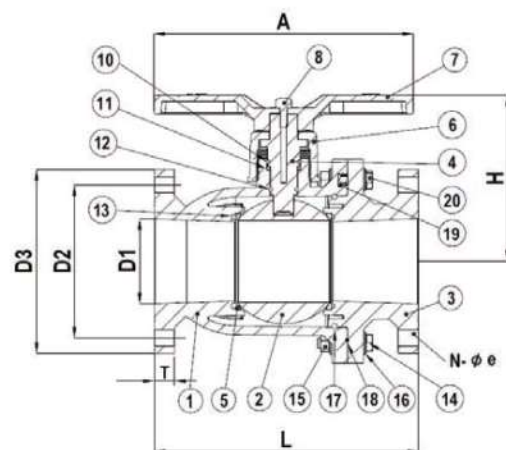
CF300
Size: DN15-DN150

● MATERIALS OF CONSTRUCTION

No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials
1	Body	1	UPVC/CPVC	11	Washer	1	PE	16	Washer	Washer10/Spring washer 10 (015~050)	SUS 304
2	Ball	1	UPVC/CPVC	12	Stem O-ring2	1	EPDM/VITON			Washer14/Spring washer 14 (065~080)	
3	Flange	1	UPVC/CPVC	13	Stem O-ring	2	EPDM/VITON			Washer16/Spring washer 16 (100)	
4	Sahft	1	UPVC/CPVC	14	Bolt 1	4(015~025)	SUS 304(UPVC)	17	Body O-ring	1	EPDM/VITON
5	Seat	2	TEFLON			4(030~050)/6(065~080)	SUS 304	18	Solid End O-ring	1	EPDM/VITON
6	Gland Nut	1	UPVC/CPVC	15	Nut	8(100)	SUS 304	19	Mounting Pad	2(100no)	SUS 304
7	Handle	1	ABS			4(015~025)	SUS 304(UPVC)	20	Bolt 2(stud bolts)	2(015~025)	SUS 304
8	Cap	1	ABS			8(030~050)/10(065~080)	SUS 304			2(030~080)(100no)	SUS 304(UPVC)
9	Gasket	1(065~100no)	PE			8(100)	SUS 304				
10	Stem O-ring1	1	EPDM/VITON								SUS 304



15A~50A



65A~100A

DIMENSIONS TABLE

JIS											
Nom. Size DN(inch)	L	A	H	N	e	D1	D2	D3	T	Test Press (kfg/cm ²)	Working Press (kfg/cm ²)
(15)1/2"	146.00	110.10	83.80	4	15.0	13.7	70.00	94.80	15.0	15	10
(20)3/4"	150.00	110.10	87.80	4	15.0	19.3	75.00	99.50	15.0	15	10
(25)1"	170.3	110.10	93.20	4	19.0	24.7	90.00	103.50	16.0	15	10
(32)1-1/4"	174.60	138.50	114.00	4	19.0	31.7	100.00	127.00	16.0	15	10
(40)1-1/2"	191.30	138.50	119.00	4	19.0	39.0	105.00	140.50	19.0	15	10
(50)2"	211.30	138.50	126.60	4	19.0	49.0	120.00	156.20	19.0	15	10
(65)2-1/2"	262.00	260.00	184.50	4	19.0	66.0	140.00	176.10	20.0	10	7
(80)3"	267.60	296.00	178.20	8	19.0	76.5	150.00	186.00	20.0	10	7
(100)4"	301.30	296.00	190.60	8	19.0	97.0	175.00	211.00	23.0	10	7

※ Standard dimensions based on PVC material



NATURE BALL VALVE

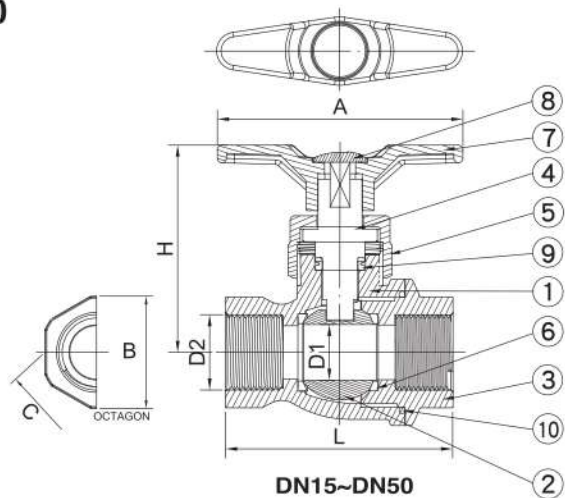


CN Series

THREAD CN200
Size: DN15~DN50

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials
1	Body	1	UPVC	6	Seat	1	TEFLON
2	Ball	1	UPVC	7	Handle	1	ABS
3	End Connector	1	UPVC	8	Cap	1	PP
4	Stem	1	UPVC	9	Stem O-ring	1	EPDM
5	Gland Nut	1	UPVC	10	Body O-ring	1	EPDM



DIMENSIONS TABLE

DIMENSIONS										Unit: mm	
Nom. Size. DN-inch	D1	D2			L	H	A	B	C	Testpress (kgf/cm ²) (bar)	Working press (kgf/cm ²) (bar)
		JIS	ANSI	DIN							
15(1/2")	13	PT1/2	NPT1/2	R1/2	80	77	88	35	32	15	10
20(3/4")	19	PT3/4	NPT3/4	R3/4	89	80	88	45	41	15	10
25(1")	25	PT1	NPT1	R 1	104	93	109	50	46	15	10
32(1-1/4")	25	PT1 1/4	NPT1 1/4	R1 1/4	117	93	109	60	55	15	10
40(1-1/2")	32	PT1 1/2	NPT1 1/2	R1 1/2	129	115	133	73	69	15	10
50(2")	39	PT2	NPT2	R 2	149	120	133	83	79	15	10



LABCOCK BALL VALVE

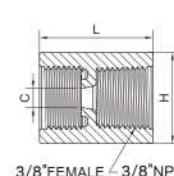
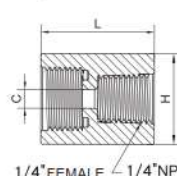
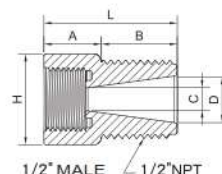
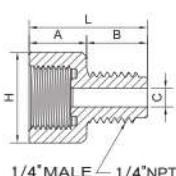
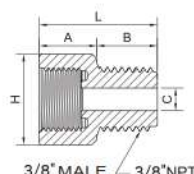
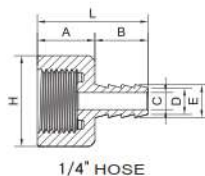
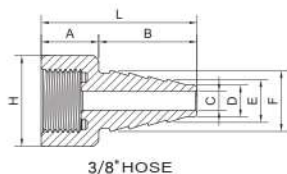
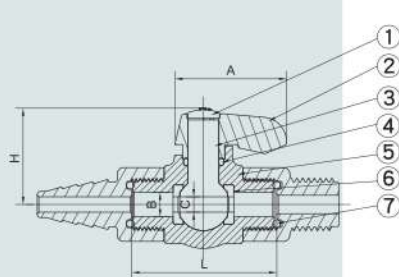


CL Series

Size: 1/4"- 3/8", Color: Grey or White

Other Available Combinations Choice:

- 1/4" Female x 1/4" Hose
- 1/4" Female x 3/8" Hose
- 3/8" Female x 1/4" Hose
- 3/8" Female x 3/8" Hose
- 1/4" Male x 1/4" Male
- 1/4" Male x 1/4" Hose
- 1/4" Male x 3/8" Hose
- 3/8" Male x 1/4" Hose
- 3/8" Male x 3/8" Hose
- 1/4" Hose x 1/4" Hose
- 3/8" Hose x 3/8" Hose



MATERIALS OF CONSTRUCTION

Item	Parts	Pcs	Materials
1	Cap	1	UPVC
2	Handle	1	ABS
3	Ball	1	UPVC
4	O'ring	1	EPDM
5	Body	1	UPVC
6	Seat	2	EPDM
7	Seat Carrier O-ring	1	EPDM

DIMENSIONS TABLE

DIMENSIONS									Unit: mm	
Nom. Size. DN-inch	L	H	A	B	C	D	E	F	Testpress (kgf/cm ²) (bar)	Working press (kgf/cm ²) (bar)
1/4" HOSE	37.68	25.04	29.04	6.4	4.0				15	10
3/8" HOSE	41.2	24	15.2	26	5	8.5	11.35	11.65	15	10
3/8" MPT	31.2	24	15.2	16	6				15	10
1/2" MPT	35.24	24	15.2	20.04	5.95	12.1			15	10
1/4" FPT	29.19	24	15.2	26	4.5	6.95	8.65		15	10
1/4" MPT	31.2	24	15.2	16	5				15	10
1/4" FPT	30	24			5				15	10
3/8" FPT	30	24			5.11				15	10



Plumbing Valve

Hi -Tech'S, Hi-Qualitly'S

- Material: UPVC, CPVC
- Size: 1/2"~6"





COMPACT BALL VALVE

NSF certified listing



CC Series

CC100 SOCKET/ CC200 THREAD Size:DN10~DN150

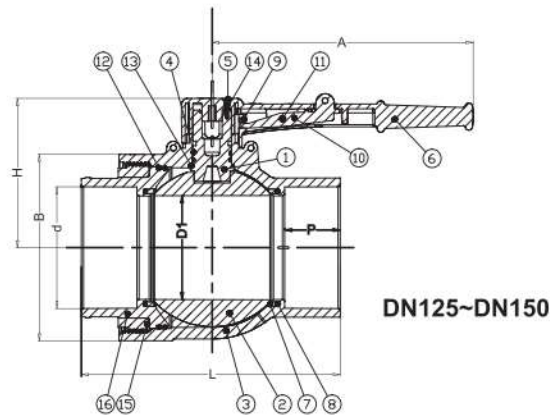
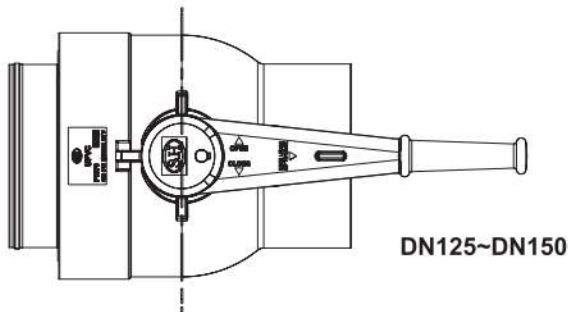
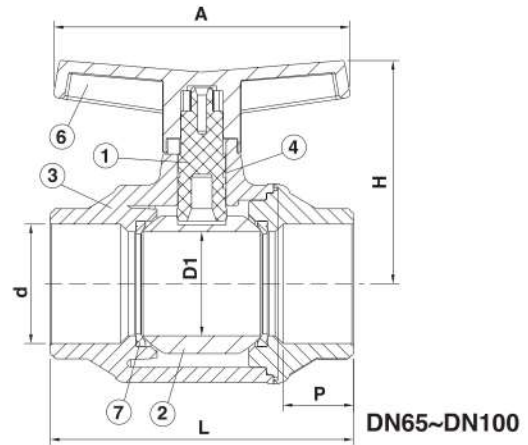
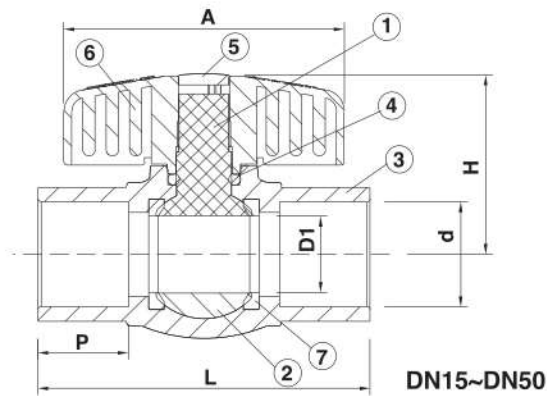
Compact Ball Valves Torque Value

SIZE	Torque Value(kgf/cm ²)			
	EPDM-SEAT		PTFE -SEAT	
	OPEN	CLOSE	OPEN	CLOSE
1/2"	12-22	12-22	10-20	20-30
3/4"	20-30	30-40	20-30	25-35
1"	26-36	43-53	30-40	30-40
1-1/4"	44-59	44-59	50-65	70-85
1-1/2"	50-65	60-75	47-62	60-75
2"	50-70	100-120	60-80	120-140
2-1/2"	80-100	70-90	-	-
3"	140-160	130-150	-	-
4"	160-180	150-170	-	-
5"	-	-	195-215	235-255
6"	-	-	195-215	235-255

1Kg.cm=0.0981N.m

MATERIALS OF CONSTRUCTION

Item	Parts	Pcs	Materials	Item	Parts	Pcs	Materials	Item	Parts	Pcs	Materials
1	Stem	1	UPVC	7	Seat	2	PTFE	13	Washer	1	PP
2	Ball	1	UPVC	8	Body O'ring	2	EPDM	14	Bolt (3/4" X 3/16")	1	SUS 304
3	Body	1	UPVC	9	Activities Jumper	1	PVDF	15	Seat Carrier	1	UPVC
4	Stem O'ring	2	EPDM	10	Handle Lever	1	P P	16	End Connector	1	UPVC
5	Cap	1	PP	11	Jumper	1	ABS				
6	Handle	1	ABS	12	Seat Carrier O'ring	2	EPDM				



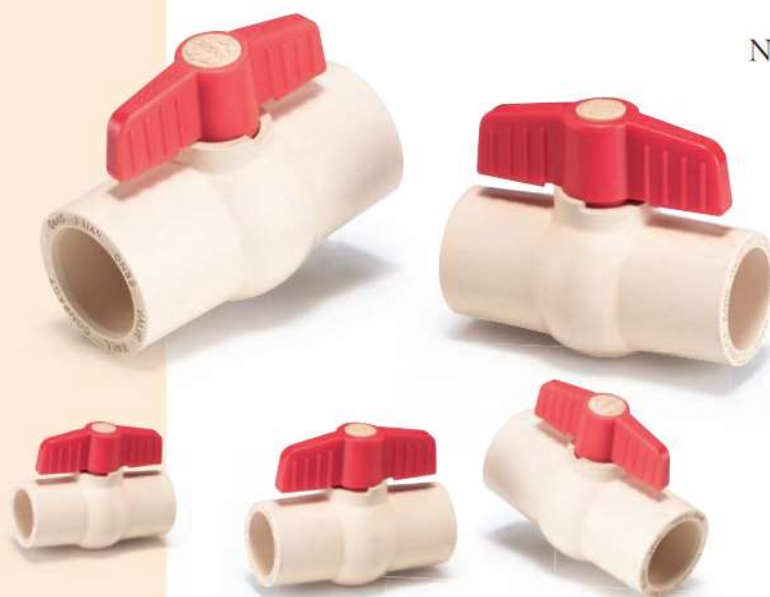
● DIMENSIONS TABLE

Standards	JIS									ANSI									DIN									
	Unit:mm									Unit:inch									Unit:mm									
	Nom.Size DN-inch	d			P	L	H	A	Test Press. (kgf/cm ²)	Working press (kgf/cm ²)	D1	d		P	L	H	A	Test Press. (lb/in ²)	Working press (kgf/cm ²)	D1	d		P	L	H	A	Test Press. (bar)	Working press (bar)
		Socket	Thread	Socket								Thread	Socket								Thread							
15(1/2")	15	22	PT1/2	22.2	79	47	70	15	10	0.591	0.840	NPT1/2	0.875	3.110	1.850	2.756	225	150	15	20	R1/2	16.0	79	47	70	15	10	
20(3/4")	20	26	PT 3/4	25.4	90.5	57	77	15	10	0.787	1.050	NPT3/4	1.000	3.562	2.244	3.031	225	150	20	25	R3/4	18.5	90.5	57	77	15	10	
25(1")	25	32	PT1	28.6	106.5	61	89	15	10	0.984	1.315	NPT1	1.125	4.173	2.402	3.504	225	150	25	32	R1	22.0	106.5	61	89	15	10	
32(1-1/4")	32	38	PT1-1/4	31.8	123	66	89	15	10	1.260	1.660	NPT1-1/4	1.250	4.842	2.598	3.504	225	150	32	40	R1-1/4	26.0	123	66	89	15	10	
40(1-1/2")	39	48	PT1-1/2	34.9	129	74	111	15	10	1.535	1.900	NPT1-1/2	1.375	5.098	2.913	4.370	225	150	39	50	R1-1/2	31.0	129	74	111	15	10	
50(2")	50	60	PT2	38.1	150.5	80	139	15	10	1.969	2.375	NPT2	1.500	5.925	3.150	5.472	225	150	50	63	R2	37.5	150.5	80	139	15	10	
*65(2-1/2")	66	76	PT2-1/2	44.5	194	141	190	15	10	2.598	2.875	NPT2-1/2	1.750	7.638	5.550	7.48	225	150	66	75	R2-1/2	43.5	194	141	190	15	10	
*80(3")	78	89	PT3	47.6	233	154	230	15	10	3.071	3.500	NPT3	1.875	9.173	6.063	9.005	225	150	78	90	R3	51.0	233	154	230	15	10	
*100(4")	100	114	PT4	57.6	280	170	274	15	10	3.94	4.500	NPT4	2.250	11.00	6.7	10.79	225	150	100	110	R4	61.0	280	170	274	15	10	
*125(5")	144.5	168.5	PT5	77	384.6	207	361.5	15	10	5.69	6.65	NPT5	3.03	15.14	7.17	8.15	225	150	144.5	166	R5	77	384.6	207	361.5	15	10	
*150(6")	144.5	168.5	PT6	77	357	207	361.5	15	10	5.69	6.65	NPT6	3.03	14.05	7.17	8.15	225	150	144.5	166	R6	77	357	207	361.5	15	10	



CPVC-CTS COMPACT BALL VALVE

NSF certified listing

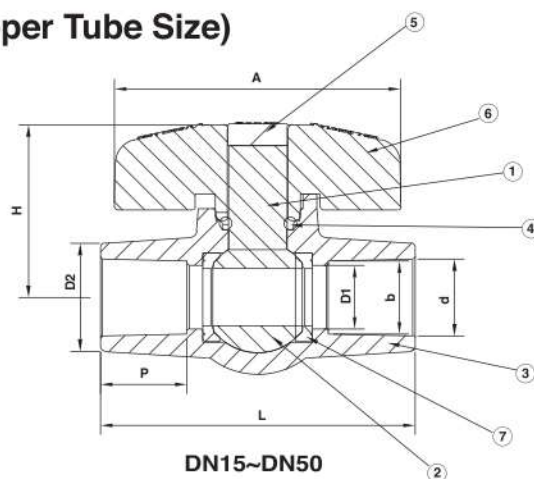


CTS Series

CTS100 SOCKET Size: 1/2" - 2" (Copper Tube Size)

MATERIALS OF CONSTRUCTION

Item	Parts	Pcs	Materials
1	Stem	1	CPVC
2	Ball	1	CPVC
3	Body	1	CPVC
4	Stem O'ring	2	EPDM
5	Cap	2	ABS
6	Handle	1	ABS
7	Seat	2	PTFE



DN15~DN50

DIMENSIONS TABLE

Standards Nom, Size DN-Inch	DIMENSIONS								Unit:inch
	A	H	L	d	b	P	D1	D2	
15(1/2")	2.441	1.327	2.701	0.633	0.619	0.709	0.504	0.965	
20(3/4")	2.809	1.791	3.120	0.884	0.870	0.882	0.742	1.248	
25(1")	2.988	2.185	3.551	1.135	1.121	1.020	0.756	1.512	
32(1-1/4")	3.528	2.402	4.024	1.386	1.372	1.102	0.961	1.740	
40(1-1/2")	4.098	2.539	4.598	1.640	1.622	1.299	1.260	2.134	
50(2")	4.378	2.894	5.110	2.141	2.123	1.496	1.496	2.563	



MALE THREADED COMPACT BALL VALVE

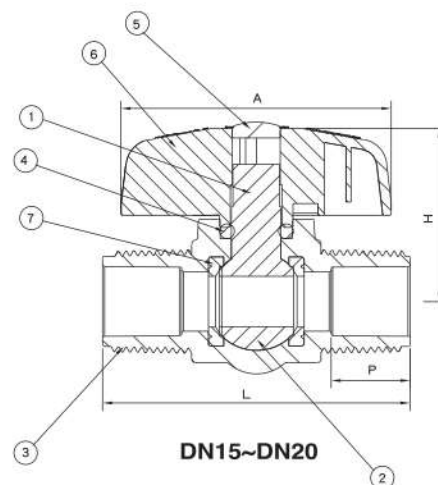


CM Series

CM200
Size: 1/2", 3/4"

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials
1	STEM	1	UPVC	5	CAP	1	ABS
2	BALL	1	UPVC	6	HANDLE	1	ABS
3	BODY	1	UPVC	7	SEAT	2	EPDM,PTFE
4	STEM O' ring	1	EPDM				



DIMENSIONS TABLE

Standards Nom. size DN-inch	JIS Unit: mm						ANSI Unit: inch						DIN Unit: mm						
	d	P	L	H	A		d	P	L	H	A		d	P	L	H	A	Test Press (Kg/cm²) (bar)	Working Press (kgf/cm²) (bar)
	Thread						Thread						Thread						
15(1/2")	PT1/2	-	-	47	70		NPT 1/2	0.875	3.110	1.850	2.756		R1/2	16.0	79	47	70	15	10
20(3/4")	PT3/4	-	-	57	77		NPT 3/4	1.000	3.543	2.244	3.031		R3/4	18.5	90	57	77	15	10



UNION

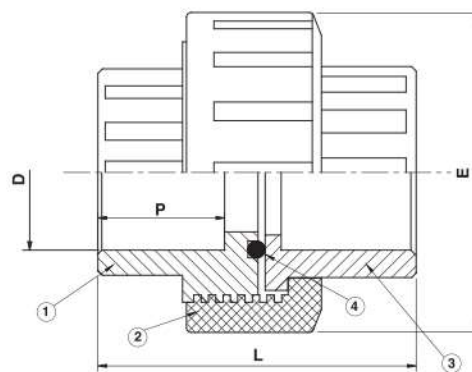
NSF certified listing



EU Series

EU 100:SOCKET / EU 200: THREAD
Size: 1/2" to 4"

No.	Parts	Materials	Pcs
1	BODY	UPVC, PP, CPVC, PVDF	1
2	UNION NUT	UPVC, PP, CPVC, PVDF	1
3	END CONNRCTOR	UPVC, PP, CPVC, PVDF	1
4	O'RING	EPDM,VITON	1



DN15~DN100

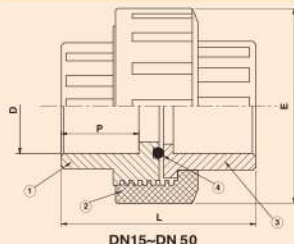
Nom.Size m/m(inch)	E	D			L		P		
		JIS	ANSI	DIN	S	TS	JIS	ANSI	DIN
15(1/2")	47	22	21.3	20	55	57	22.22	22.22	16.0
20(3/4")	61	26	26.7	25	68	64	25.40	25.40	18.5
25(1")	70	32	33.4	32	75	72	28.60	28.60	22.0
25(1")CNS	67	34	-	-	75	77	28.60	-	-
32(1-1/4")	81	38	42.2	40	81	81	31.70	31.70	26.0
32(1-1/4")CNS	89	42	-	-	92	92	31.70	-	-
40(1-1/2")	89	48	48.3	50	90	90	34.90	34.90	31.0
50(2")	101	60	60.3	63	102	102	38.10	38.10	37.5
65(2-1/2")	150	76	73.0	75	87	115	44.50	44.50	43.5
80(3")	184	89	88.9	90	118	136	47.60	47.60	51.0
100(4")	199	114	114.3	110	156	156	57.20	57.20	61.0

S:Screwed TS:Socket



UNION

ED Series



DN15~DN 50

ED 100:SOCKET / ED 200:THREAD
Size: 1/2 " to 2"

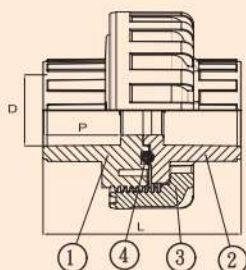


No.	Part s	Materials	Pcs
1	BODY	UPVC, PP,CPVC, PVDF	1
2	UNION NUT	UPVC, PP,CPVC, PVDF	1
3	END CONNRCTOR	UPVC, PP,CPVC, PVDF	1
4	O'RING	EPDM,VITON	1

Nom.Size m/m(inch)	E	D			L		P		
		JIS	ANS	DIN	S	TS	JIS	ANSI	DIN
15(1/2")	48	22	21.3	20	57	57	22.22	22.22	16.0
20(3/4")	62	26	26.7	25	67	67	25.40	25.40	18.5
25(1")	70	32	33.4	32	70	70	28.60	28.60	22.0
25(1")CNS	70	34	-	-	70	70	28.60	-	-
32(1-1/4")	82	38	42.2	40	82	82	31.75	31.75	26.0
32(1-1/4")CNS	82	42	-	-	82	82	31.75	-	-
40(1-1/2")	94	48	48.3	50	101	101	34.90	34.90	31.0
50(2")	113	60	60.3	60	100	100	38.10	38.10	37.5

S:Screwed TS:Socket

EK Series



DN10~DN80

EK 100:SOCKET / EK 200:THREAD
Size: 3/8" to 3"



No.	Part s	Materials	Pcs
1	BODY	UPVC, CPVC	1
2	UNION NUT	UPVC, CPVC	1
3	END CONNRCTOR	UPVC, CPVC	1
4	O'RING	EPDM,VITON	1

Nom.Size m/m(inch)	D			L		P		
	JIS	ANS	DIN	S	TS	JIS	ANSI	DIN
10(3/8")	18.25	17.50	16.20	48.25	48.25	19.05	19.05	14.60
15(1/2")	22.25	21.60	20.20	55.30	55.30	22.50	22.50	22.50
20(3/4")	26.30	26.92	25.25	60.60	60.60	25.40	25.40	18.50
25(1")	32.37	33.72	32.30	67.20	67.20	28.60	28.60	22.00
32(1-1/4")	38.33	42.50	40.28	75.60	75.60	31.80	31.80	26.00
40(1-1/2")	48.50	48.65	50.30	82.00	82.00	35.00	35.00	31.00
50(2")	60.60	60.73	63.30	90.50	90.50	38.10	38.10	37.50
65(2-1/2")	76.60	73.50	75.20	109.80	109.80	45.00	45.00	45.00
80(3")	89.60	89.40	90.30	127.90	127.90	48.00	48.00	51.00

S:Screwed TS:Socket



COMPRESSION COUPLING

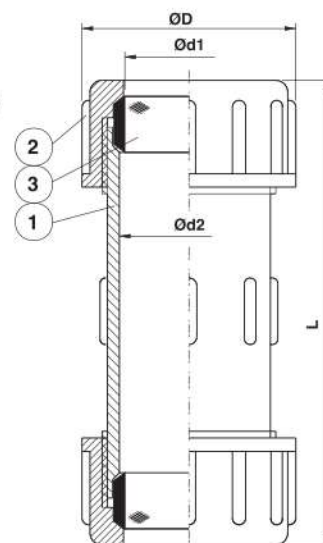


EC Series

EC100 Size: 1/2" to 4" (IPS)

Specification: Schedule 40 & Schedule 80

- For use in any general piping applications, metal, plastic or copper pipe.
- Easy to operate for instant and emergency piping.



DN15~DN100

MATERIALS OF CONSTRUCTION

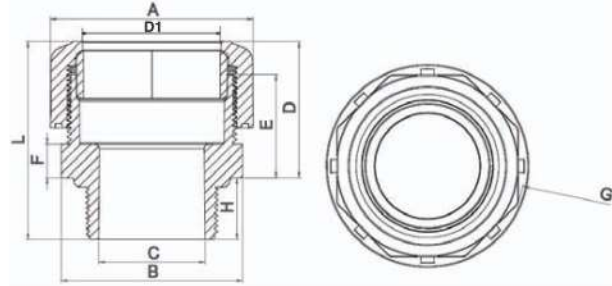
NO.	Parts	Materials	Pcs
1	BODY	UPVC	1
2	UNION NUT	UPVC	2
3	SEAL	NBR + EPDM	2

C.T.S DIMENSIONS

	1/2"	3/4"	1"
D	35.00	43.60	49.00
d1	16.08	22.45	28.83
d2	18.00	24.00	30.00
L	114.5	121.0	128.0

DIMENSIONS TABLE

SIZE Nom.	13mm (3/8")	15mm (1/2")	20mm (3/4")	25mm (1")	32mm (1-1/4")	40mm (1-1/2")	50mm (2")	65mm (2-1/2")	80mm (3")	100mm (4")
D	35.0	43.6	49.0	57.0	66.9	73.2	88.6	110.0	130.0	160.5
d1	JIS	18.0	21.4	25.5	32.2	38.0	48.3	60.3	75.2	89.1
	ANSI	18.0	21.4	26.7	33.5	42.2	48.3	60.3	73.2	89.1
	DIN	16.1	20.3	25.5	32.2	40.5	50.4	63.4	75.2	90.5
	BS	18.0	20.3	26.7	33.2	42.2	48.3	60.3	75.2	89.1
d2	19.2	22.7	27.7	34.9	43.3	49.2	63.8	76.8	92.4	116.3
L	114.0	121.0	128.0	133.0	151.0	168.0	175.0	252.0	277.0	310.0



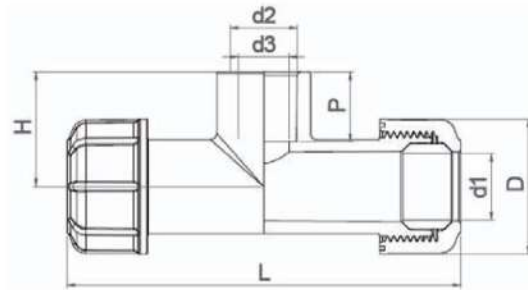
ES Series Male Compression Coupling

MATERIALS OF CONSTRUCTION

NO.	PART	MATERIAL	PCS
1	BODY	UPVC	1
2	UNION NUT	UPVC	2
3	SEAL	EPDM	2

DIMENSIONS TABLE

Nom. SIZE	A	B	C	D	E	F	G	H	L	d1
1/2"	43.6	38.0	12.5	48.3	29.7	15.0	40.6	17.2	70.5	21.0
3/4"	49.3	43.6	18.8	51.0	32.7	15.0	46.0	18.5	74.5	27.0
1"	57.5	50.5	23.5	54.2	33.3	15.0	53.0	23.5	83.02	33.0
1-1/4"	67.5	60.0	32.0	57.8	35.0	15.0	63.0	25.0	89.3	42.0
1-1/2"	74.0	65.8	37.5	61.4	36.3	15.0	69.0	26.0	94.5	48.0
2"	89.5	78.5	49.5	64.9	47.8	15.0	82.6	28.0	102.5	60.0



ET Series Tee Compression Coupling

MATERIALS OF CONSTRUCTION

NO.	PART	MATERIAL	PCS
1	BODY	UPVC	1
2	UNION NUT	UPVC	1
3	SEAL	EPDM	1

DIMENSIONS TABLE

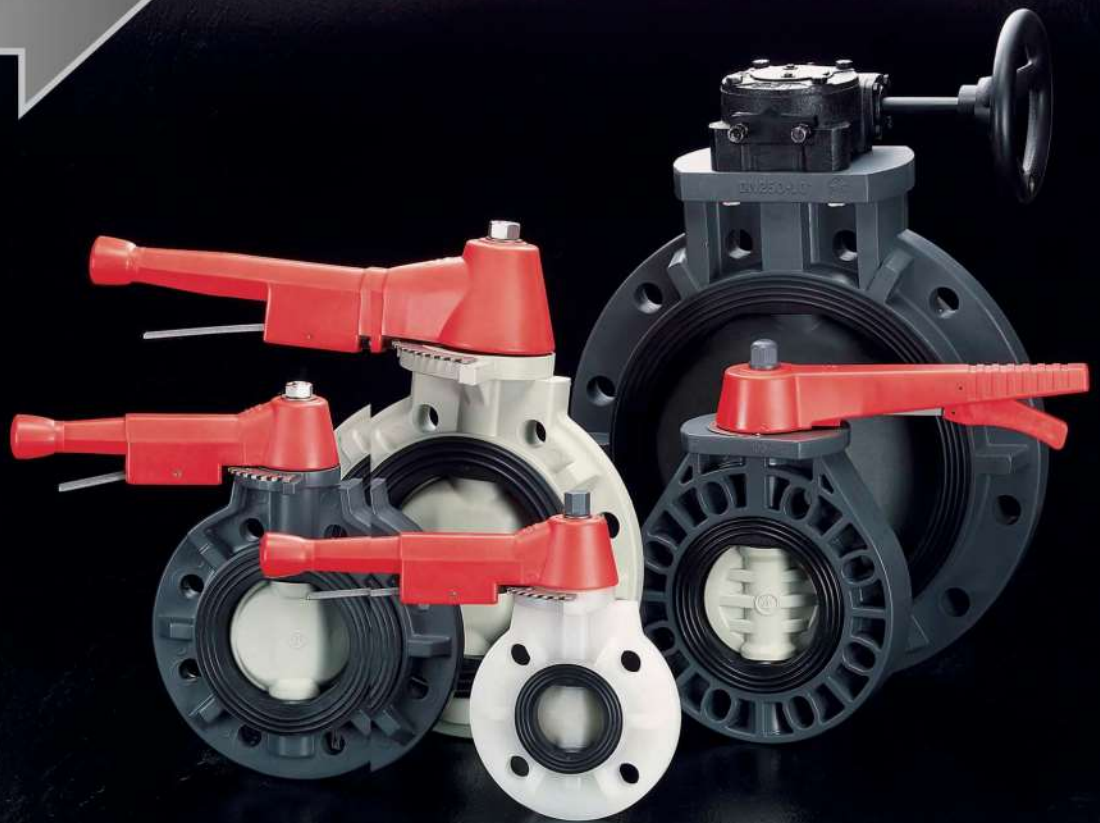
Nom. SIZE	D	d1	d2		d3	H	P	L
			Socket	Thread				
1/2"	43.6	21.0	21.4	NPT 1/2"	16.5	36.5	22.2	127.0
3/4"	49.0	27.0	26.9	NPT 3/4"	20.5	44.5	26.0	132.0
3/4**1/2"	49.0	27.0	21.4	NPT 1/2"	16.5	40.0	22.2	132.0
1"	57.0	33.0	33.7	NPT 1"	28.0	55.0	31.6	143.0
1-1/4"	67.0	42.0	42.4	NPT 1-1/4"	35.0	61.0	34.7	159.0
1-1/2"	73.0	48.0	48.6	NPT 1-1/2"	42.5	68.5	37.9	171.5
2"	88.6	60.0	63.6	NPT 2"	54.0	71.0	31.3	189.0



Butterfly Valve

Hi-Tech'S, Hi-Qualitly'S

- Material: UPVC, PP, CPVC, PPG, PVDF
- Size: 2"~24"





SUPER LARGE SIZED BUTTERFLY VALVE



BS Series

BS300

Size: Ø700(28") ~ Ø1200(48")

MATERIAL: UPVC, PP, CPVC, PPG, PVDF

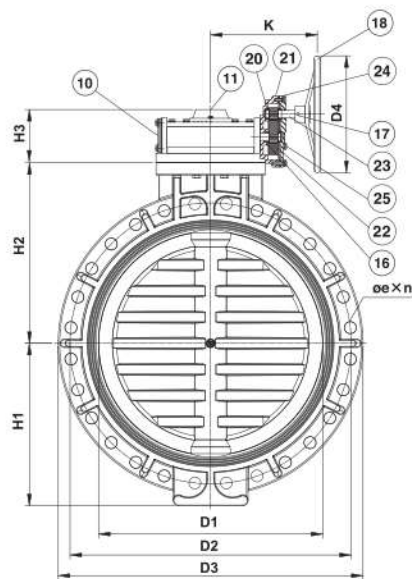
**MODEL: Gear operated type · Chaining type
Hydraulic type · Pneumatic type**

FEATURES:

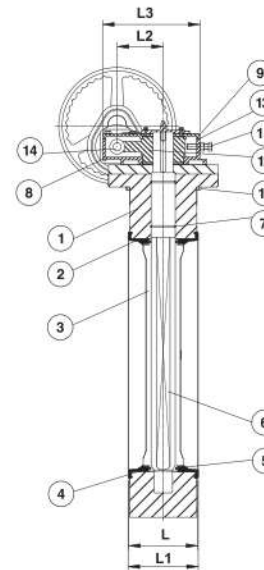
- Fullport allowing max. fluid flow.
- ECONOMIC EQUIPMENT: Fluid control plate consealed in piping system, space saved.
- EASY OPERATION-90° open and close, long duration.
- WIDE APPLICATION RANGE-Acid & alkali resistance, anti-corrosion, and suitable for fluid and air use.

● MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	PP, PPG	14	Bearing	1	STEEL
2	Seat	1	EPDM, VITON, NBR, HYPALON	15	Adjustable Bolt	2	STEEL
3	Disc	1	UPVC, PP, CPVC, PPG, PVDF	16	WORM SHAFT	1	STEEL
4	Disc O'ring(A)	2	EPDM, VITON	17	Set Pin	1	K7
5	Disc O'ring(B)	2	EPDM, VITON	18	Hand Wheel	1	CAST IRON
6	Stem	1	SUS410, SUS304, SUS316	19	Tightening Bolt	4	SUS304
7	Stem O'ring	2	EPDM, VITON	20	Bearing	4	COPPER
8	Gear Box	1	CAST IRON	21	SPUR GEAR BODY	1	CAST IRON
9	Gear Box Cap	1	CAST IRON	22	SPUR GEAR	1	STEEL
10	Side Cap	1	CAST IRON	23	SPUR GEAR SHAFT	1	STEEL
11	Indicator Plate	1	CAST IRON	24	SPUR GEAR COVER	1	CAST IRON
12	Gear	1	DUCTILE IRON	25	BOLT	6	STEEL
13	Oil Seal	1	EPDM				



DN700~DN1200



TORQUE VALUES (1Kgf/m=9.8 N.m)

BF-V'S Size	700(28")	800(32")	900(36")	1000(40")	1200(48")
Torque Under Without Any Water Pressure (Kgf/m)	4480	5850	7400	10300	10300

DIMENSIONS TABLE

JIS													Unit: mm	
Nom. size DN(inch)	D1	D2	D3	n	e	H1	H2	H3	K	D4	L	L1	Test Press (kgf/cm ²)	Working Press (kgf/cm ²)
700(28")	680	840	942	24	33	498	563	138	325	356	203	210	4	3
800(32")	780	950	1068	28	33	503	630	132	372	406	241	248	4	3
900(36")	870	1050	1185	28	33	621	694	132	372	406	241	248	4	3
1000(40")	970	1160	1290	28	39	683	762	210	471	508	300	307	4	3
1200(48")	1170	1380	1512	32	39	776	876	210	471	508	300	307	3	2

ANSI													Unit: inch	
Nom. size DN(inch)	D1	D2	D3	n	e	H1	H2	H3	K	D4	L	L1	Test Press (lb/in ²)	Working Press (lb/in ²)
700(28")	26.77	33.99	37.09	24	1.37	19.60	22.17	5.40	12.57	14.02	7.99	8.26	60	45
800(32")	30.70	38.50	42.05	24	1.61	19.80	24.80	5.18	14.59	15.98	9.48	9.76	60	45
900(36")	34.25	42.75	46.65	32	1.62	24.45	27.32	5.18	14.59	15.98	9.48	9.76	60	45
1000(40")	38.18	46.25	50.88	32	1.62	26.89	30.00	8.27	18.54	20	11.81	12.08	60	45
1200(48")	46.06	56.00	59.52	44	1.62	30.55	34.48	8.27	18.54	20	11.81	12.08	45	30

DIN													Unit: mm	
Nom. size DN(inch)	D1	D2	D3	n	e	H1	H2	H3	K	D4	L	L1	Test Press (bar)	Working Press (bar)
700(28")	680	840	942	24	30	498	563	138	325	356	203	210	4	3
800(32")	780	950	1068	24	33	503	630	132	372	406	241	248	4	3
900(36")	870	1050	1185	28	33	621	694	132	372	406	241	248	4	3
1000(40")	970	1175	1290	28	36	683	762	210	471	508	300	307	4	3
1200(48")	1170	1380	1512	32	39	776	876	210	471	508	300	307	3	2

※ Standard dimensions based on PP material.
The flanged length tolerance is according to EN558-1:1995.
※ L: The suggested length of the valve as installed on pipeline.



BUTTERFLY VALVE

Lever handle type

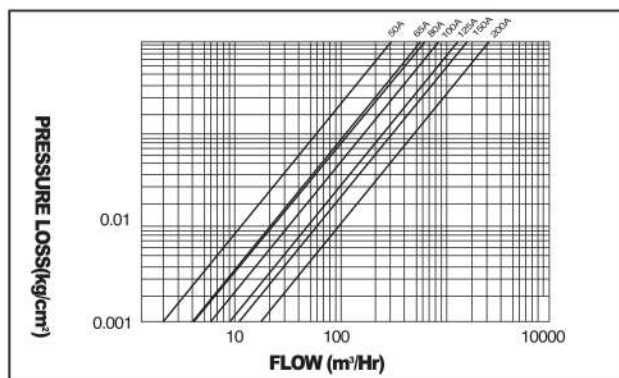
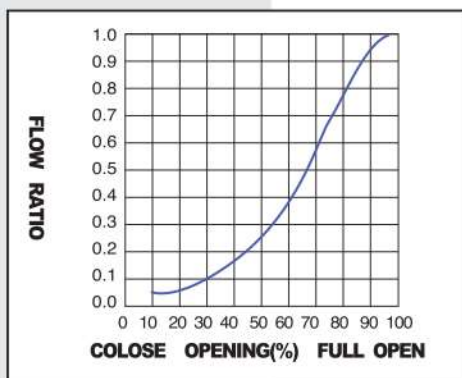


BB Series

BB300

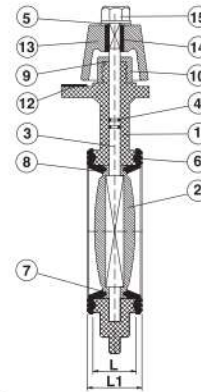
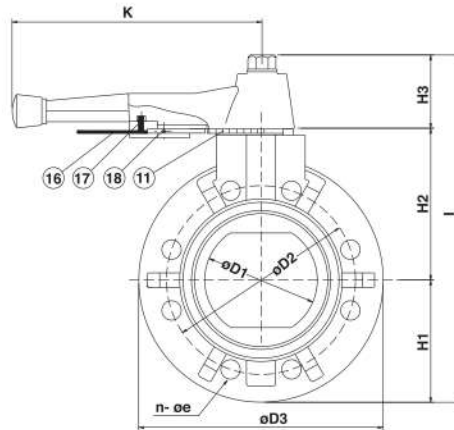
Size: 2"- 8"

options: 8"(DN200) GEAR OPERATOR TYPE



MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP, PPG, PVDF, CPVC	10	Reatainer Cap	1	UPVC, PP, PVDF
2	Disc	1	UPVC, PP, PPG, PVDF, CPVC	11	Positioner	1	SUS304
3	Stem	1	SUS410, SUS316, SUS304	12	Screw	3...DN50-200 4...DN200	SUS304
4	Stem O-ring	2	EPDM, VITON	13	Handle	1	ABS
5	Washer	1	SUS304	14	Inserted Metal Of Handle	1	FC0208
6	Seat	1	EPDM, VITON, NBR, HYPALON	15	Nut	1	PVC COATED BRASS, SUS304
7	Disc O'ring(1)	2	EPDM, VITON	16	Handle Lever	1	SUS304
8	Disc O'ring(2)	2	EPDM, VITON	17	Spring	1	SUS304
9	Stem Retainer	1	SUS304	18	Set Pin	1	BSBM



DN50~DN200

● TORQUE VALUES (1kgf/m=9.8N.m)

BF-V'S Size	Torque Under Without Any Water Pressure (Kgfm)	Under Water Testing Pressure(Kg/cm ²)			BF-V'S Size	Torque Under Without Any Water Pressure (Kgfm)	Under Water Testing Pressure(Kg/cm ²)		
		Water Pressure(Kg/cm ²)	Open Torque(Kgfm)	Close Torque(Kgfm)			Water Pressure(Kg/cm ²)	Open Torque(Kgfm)	Close Torque(Kgfm)
2"	1.5	15	0.5	0.5	10"	17.0	8	7	10
2-1/2"	1.5	15	0.5	0.5	12"	27.0	6	14	18
3"	2.0	15	1	1.5	14"	37.0	6	25	28
4"	2.0	12	1	1.5	16"	42.0	-	-	-
5"	5.0	12	2.5	4.5	18"	52.0	-	-	-
6"	6.5	12	4	7	20"	65.0	-	-	-
8"	10.0	10	6	8.5	24"	76.0	-	-	-

● DIMENSIONS TABLE

JIS														Unit: mm	
Nom. Size DN(inch)	D1	D2	D3	øe	n	L	L1	H1	H2	H3	I	K	Test Press (kgf/cm ²)		Working Press (kgf/cm ²)
													Body	Seat	
50(2")	57	120	165	19	4	36.5	40.5	82.5	102	63	253	220	15.0	12.0	10.0
65(2-1/2")	72	140	184	19	4	40.5	44.5	92	110	63	270	220	15.0	12.0	10.0
80(3")	80	150	200	19	8	40.5	44.5	100	118	63	286	220	15.0	12.0	10.0
100(4")	100	175	230	19	8	50.5	56.5	115	134	63	312	220	15.0	12.0	10.0
125(5")	130	210	256	23	8	60.5	66.5	128	160	96	391	310	15.0	12.0	10.0
150(6")	150	240	288	23	8	66	71	144	177	96	418	310	15.0	12.0	10.0
200(8")	203	290	348	23	12	82	87	174	204	93	476	414	15.0	12.0	10.0

ANSI														Unit: inch	
Nom. Size DN(inch)	D1	D2	D3	øe	n	L	L1	H1	H2	H3	I	K	Test Press (lb/in ²)		Working Press (lb/in ²)
													Body	Seat	
50(2")	2.24	4.75	6.50	0.75	4	1.44	1.59	3.25	4.01	2.48	9.96	8.66	235	180	150
65(2-1/2")	2.83	5.50	7.24	0.75	4	1.59	1.75	3.62	4.33	2.48	10.63	8.66	235	180	150
80(3")	3.15	6.00	7.87	0.75	4	1.59	1.75	3.94	4.64	2.48	11.26	8.66	235	180	150
100(4")	3.93	7.50	9.06	0.75	8	1.99	2.22	4.53	5.28	2.48	12.48	8.66	235	180	150
125(5")	5.12	8.50	10.07	0.87	8	2.38	2.62	5.00	6.30	3.78	15	12.20	235	180	150
150(6")	5.90	9.50	11.34	0.87	8	2.60	2.80	5.67	6.97	3.78	16.46	12.20	235	180	150
200(8")	7.99	11.75	13.70	0.87	8	3.23	3.43	6.85	8.03	3.66	18.74	16.30	235	180	150

DIN														Unit: mm	
Nom. Size DN(inch)	D1	D2	D3	øe	n	L	L1	H1	H2	H3	I	K	Test Press (bar)		Working Press (bar)
													Body	Seat	
50(2")	57	125	165	18	4	36.5	40.5	82.5	102	63	253	220	15.0	12.0	10.0
65(2-1/2")	72	145	184	18	4	40.5	44.5	92	110	63	270	220	15.0	12.0	10.0
80(3")	80	160	200	18	8	40.5	44.5	100	118	63	286	220	15.0	12.0	10.0
100(4")	100	180	230	18	8	50.5	56.5	115	134	63	312	220	15.0	12.0	10.0
125(5")	130	210	256	18	8	60.5	66.5	128	160	96	391	310	15.0	12.0	10.0
150(6")	150	240	288	23	8	66	71	144	177	96	418	310	15.0	12.0	10.0
200(8")	203	295	348	23	8	82	87	174	204	93	476	414	15.0	12.0	10.0

- ✖ Standard dimensions based on PVC material.
- ✖ The flanged length tolerance is according to EN558-1:1995.
- ✖ L: The suggested length of the valve as installed on pipeline.



BUTTERFLY VALVE-Universal Type (With actuator direct mounting pad) Lever Handle Type



BE Series

BE300

Size: 2" - 8"

End Type: Flanged

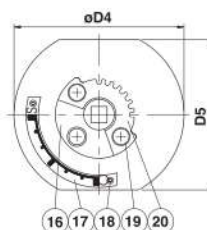
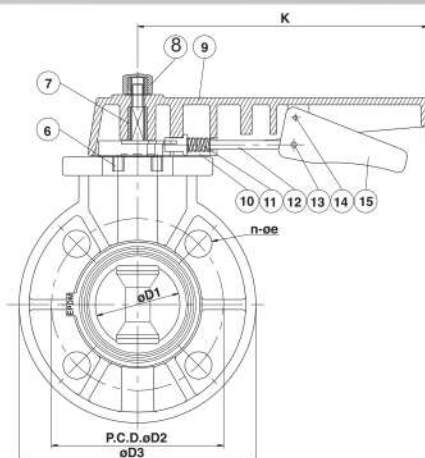
Test Pressure: 225 PSI

Working Pressure: 150 PSI

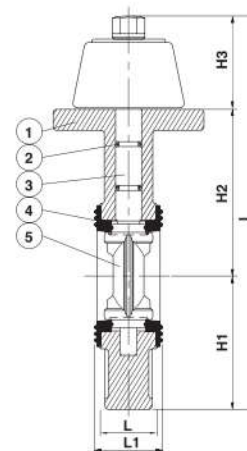
- Corrosion resistance.
- Excellent flow characteristics.
- Lower flow loss.
- Compact and lightweight designs in an energy-saving and cost-efficient Butterfly Valve.
- With clear indication of disc opening degree.
- Ideally suited for flow control in a minimum piping space.

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials
1	Body	1	UPVC, PP, CPVC, PVDF	11	Spring	1	SUS 304
2	Stem O'ring	2	EPDM, VITON	12	Lever	1	SUS 304
3	Stem	1	SUS 410, SUS 316	13	Setpin(Short)	1	SUS 304
4	Seat	1	EPDM, VITON, NBR	14	Setpin(Long)	1	SUS 304
5	Disc	1	UPVC, PP, CPVC, PVDF	15	Lever	1	ABS
6	Bolt	1	BRASS, SUS 304	16	Positioner	1	UPVC
7	Handle Insert	1	FC 0208	17	Indicator	1	SUS 304
8	Stem Bolt	1	UPVC, BRASS	18	Bolt	2	SUS 304
9	Handle	1	ABS	19	Bolt	3	SUS 304
10	Handle Cap	1	ABS	20	Teeth Plate	1	SUS 304



DN50~DN200



● The Torque Values

AT Water								
	W/O Pressure (Kgf.m)		Pressure at 50PSI (Kgf.m)		Pressure at 100PSI (Kgf.m)		Pressure at 150PSI (Kgf.m)	
	Open	Close	Open	Close	Open	Close	Open	Close
2"	0.80	0.80	0.80	1.00	0.80	1.00	1.00	1.00
3"	2.50	2.50	3.00	3.00	2.50	2.50	3.00	3.00
4"	2.50	3.00	3.00	3.00	3.00	3.00	3.00	3.00
6"	8.00	9.00	8.00	8.00	7.50	8.00	6.00	7.00
8"	10.00	11.00	11.00	11.00	10.50	10.50	9.50	9.50

● DIMENSIONS TABLE

JIS														Unit: mm		
Nom. size DN(inch)	D1	D2	D3	n	L	L1	D4	H1	H2	H3	I	K	D5	Test Press Body (kgf/cm ²)	Working Press Seat (kgf/cm ²)	Working Press (kgf/cm ²)
40(1-1/2")	44	105	149	4	36.1	43.5	105	73	98	63	234	202	93	15	12	10
50(2")	55	120	164	4	36.1	43.5	105	82.0	107	63	252	202	93	15	12	10
65(2-1/2")	69.6	140	185	4	40	46.4	105	92	115	63	270	202	95.5	15	12	10
80(3")	78	150	196	8	40	47.4	127	98	123	63	284	202	95	15	12	10
100(4")	100	175	225	8	48	52.4	134	112.5	139.5	68	320	253	100	15	12	10
125(5")	128	210	254	8	51.2	58.8	169.5	127	160	86	373	297	100.8	15	12	10
150(6")	152	240	286	8	51	57	170	143	178	86	407	297	101	15	12	10
200(8")	200	290	344	12	61	67.5	191	172	212	86	470	297	110	15	12	10

ANSI														Unit: inch		
Nom. size DN(inch)	D1	D2	D3	n	L	L1	D4	H1	H2	H3	I	K	D5	Test Press Body (lb/in ²)	Working Press Seat (lb/in ²)	Working Press (lb/in ²)
40(1-1/2")	1.73	3.88	5.87	4	1.42	1.71	4.13	2.87	3.86	2.48	9.21	7.95	3.66	235	180	150
50(2")	2.16	4.75	6.46	4	1.42	1.71	4.13	3.23	4.21	2.48	9.92	7.95	3.66	235	180	150
65(2-1/2")	2.74	5.5	7.28	4	1.57	1.83	5.04	3.62	4.53	2.48	10.63	7.95	3.76	235	180	150
80(3")	3.07	6.0	7.72	4	1.57	1.87	5.00	3.86	4.84	2.48	11.18	7.95	3.74	235	180	150
100(4")	3.94	7.5	8.85	8	1.89	2.06	5.27	4.43	5.49	2.68	12.60	9.96	3.94	235	180	150
125(5")	5.04	8.5	10.0	8	2.02	2.31	6.673	5.00	6.30	3.39	14.69	11.69	3.97	235	180	150
150(6")	5.98	9.5	11.26	8	2.01	2.24	6.69	5.63	7.00	3.39	16.02	11.69	3.98	235	180	150
200(8")	7.87	11.75	13.54	8	2.40	2.66	7.52	6.77	8.35	3.39	18.5	11.69	4.31	235	180	150

DIN														Unit: mm		
Nom. size DN(inch)	D1	D2	D3	n	L	L1	D4	H1	H2	H3	I	K	D5	Test Press Body (bar)	Working Press Seat (bar)	Working Press (bar)
40(1-1/2")	44	110	149	4	36.1	43.5	105	73	98	63	234	202	93	15	12	10
50(2")	55	125	164	4	36.1	43.5	105	82.0	107	63	252	202	93	15	12	10
65(2-1/2")	69.6	145	185	4	40	46.4	128	92	115	63	270	202	95.5	15	12	10
80(3")	78	160	196	8	40	47.4	127	98	123	63	284	202	95	15	12	10
100(4")	100	180	225	8	48	52.4	134	112.5	139.5	68	320	253	100	15	12	10
125(5")	128	210	254	8	51.2	58.8	169.5	127	160	86	373	297	100.8	15	12	10
150(6")	152	240	286	8	51	57	170	143	178	86	407	297	101	15	12	10
200(8")	200	295	344	8	61	67.5	191	172	212	86	470	297	110	15	12	10

※ Standard dimensions based on PVC material.
 ※ The flanged length tolerance is according to EN558-1:1995.
 ※ L: The suggested length of the valve as installed on pipeline.



BUTTERFLY VALVE GEAR OPER. FULL FLANGED TYPE



BH Series

BH 300 Size: 2"- 8"

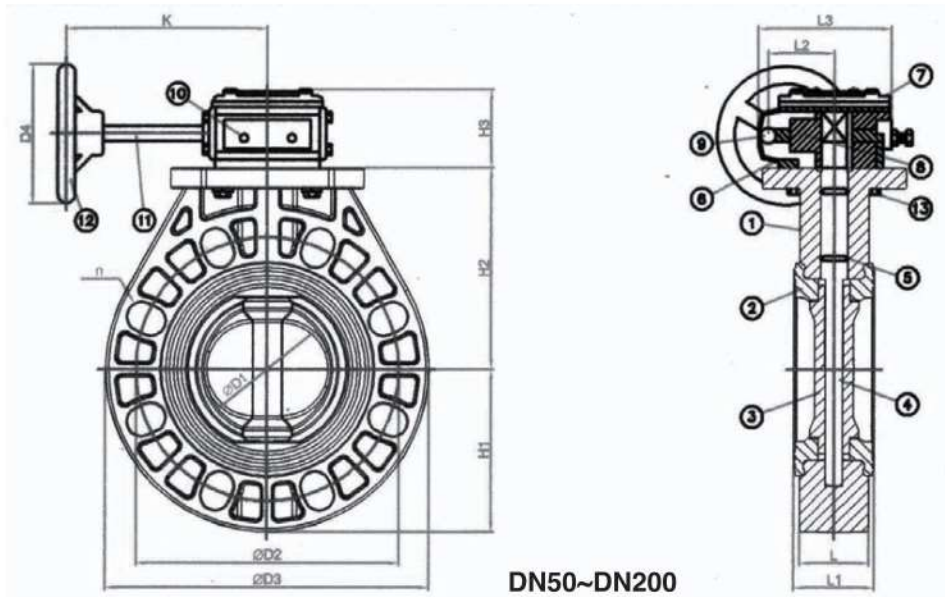
*OPTION: 2"~8"(DN200)Lever type.

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC,CPVC,PP,PVDF	8	Worm Gear	1	FCD450
2	Seat	1	EPDM,VITON,NBR	9	Bearing	1	SMCM220/420/810
3	Disc	1	UPVC,CPVC,PP,PVDF	10	Adjustable Bolt	2	SUS304
4	Stem	1	SUS410,SUS316,SUS304	11	Worm Shaft	1	S45C
5	Stem O'ring	2	EPDM,VITON	12	Hand Wheel	1	WCB
6	Gear Box	1	FC200	13	Tightening Bolt	4	SUS304,SCM3
7	Gear Box Cap	1	FC200				

Torque Values (1kgf/m=9.8N.m)

BF-V'S Size	Torque Under Without Any Water Pressure (Kgfm)	Under Water Testing Pressure(Kg/cm ²)			BF-V'S Size	Torque Under Without Any Water Pressure (Kgfm)	Under Water Testing Pressure(Kg/cm ²)		
		Water Pressure(Kg/cm ²)	Open Torque(Kgfm)	Close Torque(Kgfm)			Water Pressure(Kg/cm ²)	Open Torque(Kgfm)	Close Torque(Kgfm)
2"	1.5	15	0.5	0.5	12"	27.0	6	14	18
2-1/2"	1.5	15	0.5	0.5	14"	37.0	6	25	28
3"	2.0	15	1	1.5	16"	42.0	—	—	—
4"	2.0	12	1	1.5	18"	52.0	—	—	—
5"	5.0	12	2.5	4.5	20"	65.0	—	—	—
6"	6.5	12	4	7	24"	76.0	—	—	—
8"	10.0	10	6	8.5					
10"	17.0	8	7	10					



DIMENSIONS TABLE

JIS															Unit: mm		
Nom. Size DN(inch)	D1	D2	D3	n	øe	L	L1	H1	H2	H3	K	L2	L3	D4	Test Press (kgf/cm ²)		Working Press (kgf/cm ²)
															Body	Seat	
50(2")	55	120	164	4	19	36.1	43.5	82	107	66	132	44	125	150	15.0	12.0	10.0
65(2-1/2")	69.6	140	185	4	19	40	46.4	92	115	66	132	44	125	150	15.0	12.0	10.0
80(3")	78	150	196	8	19	40	47.4	98	123	66	132	44	125	150	15.0	12.0	10.0
100(4")	100	175	225	8	19	48	52.4	112.5	139.5	66	132	44	125	150	15.0	12.0	10.0
125(5")	128	210	254	8	23	52.2	58.8	127	160	66	132	44	125	150	15.0	12.0	10.0
150(6")	152	240	286	8	23	51	57	143	178	66	132	44	125	150	15.0	12.0	10.0
200(8")	200	290	344	12	26	61	67.5	172	212	108	175	95	162	180	15.0	12.0	10.0

ANSI															Unit: inch		
Nom. Size DN(inch)	D1	D2	D3	n	øe	L	L1	H1	H2	H3	K	L2	L3	D4	Test Press (lb/in ²)		Working Press (lb/in ²)
															Body	Seat	
50(2")	2.16	4.75	6.46	4	0.75	1.42	1.71	3.23	4.21	2.60	5.20	1.732	4.92	5.91	235	180	150
65(2-1/2")	2.74	5.5	7.28	4	0.75	1.57	1.83	3.62	4.53	2.60	5.20	1.732	4.92	5.91	235	180	150
80(3")	3.07	6.0	7.72	4	0.75	1.57	1.87	3.86	4.84	2.60	5.20	1.732	4.92	5.91	235	180	150
100(4")	3.94	7.5	8.85	8	0.75	1.89	2.06	4.43	5.49	2.60	5.20	1.732	4.92	5.91	235	180	150
125(5")	5.04	8.5	10.0	8	0.87	2.02	2.31	5.00	6.30	2.60	5.20	1.732	4.92	5.91	235	180	150
150(6")	5.98	9.5	11.26	8	0.87	2.01	2.24	5.63	7.00	2.60	5.20	1.732	4.92	5.91	235	180	150
200(8")	7.87	11.75	13.54	8	1.02	2.4	2.66	6.77	8.35	4.25	6.89	3.74	6.38	7.09	235	180	150

DIN															Unit: mm		
Nom. Size DN(inch)	D1	D2	D3	n	øe	L	L1	H1	H2	H3	K	L2	L3	D4	Test Press (bar)		Working Press (bar)
															Body	Seat	
50(2")	55	125	164	4	18	36.1	43.5	82	107	66	132	44	125	150	15.0	12.0	10.0
65(2-1/2")	69.6	145	185	4	18	40	46.4	92	115	66	132	44	125	150	15.0	12.0	10.0
80(3")	78	160	196	8	18	40	47.4	98	123	66	132	44	125	150	15.0	12.0	10.0
100(4")	100	180	225	8	18	48	52.4	112.5	139.5	66	132	44	125	150	15.0	12.0	10.0
125(5")	128	210	254	8	18	51.2	58.8	127	160	66	132	44	125	150	15.0	12.0	10.0
150(6")	152	240	286	8	23	51	57	143	178	66	132	44	125	150	15.0	12.0	10.0
200(8")	200	295	344	8	26	61	67.5	172	212	108	175	95	162	180	15.0	12.0	10.0

※ Standard dimensions based on PVC material.
The flanged length tolerance is according to EN558-1:1995.
※ L: The suggested length of the valve as installed on pipeline.



BUTTERFLY VALVE GEAR OPER. FULL FLANGED TYPE



BF Series

BF 300 Size: 8" - 24"

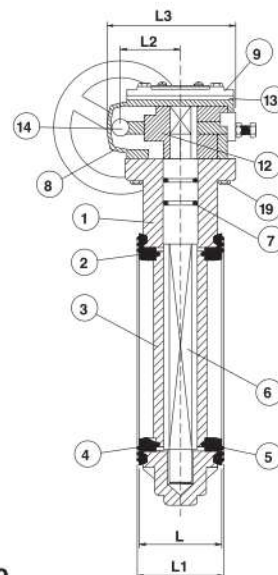
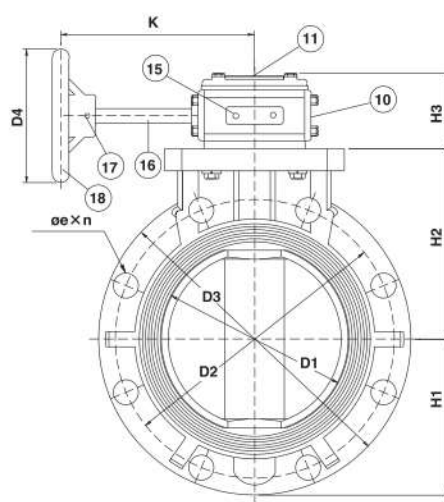
*OPTION: 8"(DN200)Lever type.

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP,CPVC, PPG, PVDF	11	Indicator Plate	1	UPVC
2	Seat	1	EPDM, VITON, NBR, HYPALON	12	Gear	1	FCD45
3	Disc	1	UPVC, PP,CPVC, PPG, PVDF	13	Oil Seal	1	EPDM
4	Disc O'ring(A)	2	EPDM, VITON	14	Bearing	1	SMCM220/420/810
5	Disc O'ring(B)	2	EPDM, VITON	15	Adjustable Bolt	2	SS41
6	Stem	1	SUS410, SUS304, SUS316	16	Gearing	1	SS41
7	Stem O'ring	2	EPDM, VITON	17	Set Pin	1	K7
8	Gear Box	1	FC25	18	Hand Wheel	1	FCD45
9	Gear Box Cap	1	FC25	19	Tightening Bolt	4	SCM3,SUS304
10	Side Cap	1	FC25				

Torque Values (1kgf/m=9.8N.m)

BF-V'S Size	Torque Under Without Any Water Pressure (Kgf/m)	Under Water Testing Pressure(Kg/cm ²)			BF-V'S Size	Torque Under Without Any Water Pressure (Kgf/m)	Under Water Testing Pressure(Kg/cm ²)		
		Water Pressure(Kgf/cm ²)	Open Torque(Kgf/m)	Close Torque(Kgf/m)			Water Pressure(Kgf/cm ²)	Open Torque(Kgf/m)	Close Torque(Kgf/m)
2"	1.5	15	0.5	0.5	12"	27.0	6	14	18
2-1/2"	1.5	15	0.5	0.5	14"	37.0	6	25	28
3"	2.0	15	1	1.5	16"	42.0	—	—	—
4"	2.0	12	1	1.5	18"	52.0	—	—	—
5"	5.0	12	2.5	4.5	20"	65.0	—	—	—
6"	6.5	12	4	7	24"	76.0	—	—	—
8"	10.0	10	6	8.5					
10"	17.0	8	7	10					



DN200~DN600

DIMENSIONS TABLE

JIS														Unit: mm			
Nom. Size DN(inch)	D1	D2	n	øe	D3	L	L1	H1	H2	H3	K	L2	L3	D4	Test Press (kgf/cm ²)		Working Press (kgf/cm ²)
															Body	Seat	
200(8")	203	290	12	23	348	82	87	174	2112	108	175	51	136	180	15.0	12.0	10.0
250(10")	255	355	12	25	412	102	108	206	2427	83	195	51	136	180	15.0	12.0	10.0
300(12")	312	400	16	25	493	120	126	247	289	110	210	72	189	305	12.0	10.0	8.0
350(14")	355	445	16	25	540	123	129	270	305	110	210	72	189	305	10.5	8.5	7.0
400(16")	398	510	16	27	615	163	170	307.5	353	130	330	72	189	356	9.0	7.0	6.0
450(18")	451	565	20	27	640	175	182	325	365	130	330	116	285	406	9.0	6.0	5.0
500(20")	500	620	20	27	730	183	190	373	405	130	330	116	285	457	9.0	6.0	5.0
600(24")	600	730	24	33	844	205	218	435	460	175	350	116	285	508	7.5	6.0	5.0

ANSI														Unit: inch			
Nom. Size DN(inch)	D1	D2	n	øe	D3	L	L1	H1	H2	H3	K	L2	L3	D4	Test Press (lb/in ²)		Working Press (lb/in ²)
															Body	Seat	
200(8")	7.99	11.75	8	0.88	13.70	3.23	3.43	6.85	8.31	4.25	6.89	2.01	5.35	7.09	225	180	150
250(10")	10	14.25	12	0.98	16.22	4.02	4.25	8.11	9.56	3.27	7.68	2.01	5.35	7.09	225	180	150
300(12")	12.28	17.00	12	0.98	19.41	4.72	4.96	9.72	11.38	4.33	8.27	2.83	7.44	12.01	180	150	120
350(14")	13.97	18.75	12	1.14	21.26	4.84	5.08	10.63	12.01	4.33	8.27	2.83	7.44	12.01	155	125	105
400(16")	15.69	21.25	16	1.14	24.21	6.42	6.69	12.11	13.90	5.12	12.99	2.83	7.44	14.02	133	100	88
450(18")	17.75	22.75	16	1.26	25.20	6.89	7.17	12.80	14.37	5.12	12.99	4.57	11.22	15.98	133	90	75
500(20")	19.70	25.00	20	1.26	28.74	7.20	7.48	14.69	15.94	5.12	12.99	4.57	11.22	17.99	133	90	75
600(24")	23.66	29.50	20	1.38	33.23	8.07	8.58	17.13	18.11	6.89	13.78	4.57	11.22	20.00	111	90	75

DIN														Unit: mm			
Nom. Size DN(inch)	D1	D2	n	øe	D3	L	L1	H1	H2	H3	K	L2	L3	D4	Test Press (bar)		Working Press (bar)
															Body	Seat	
200(8")	203	295	8	23	348	82	87	174	211.2	108	175	51	136	180	15.0	12.0	10.0
250(10")	255	350	12	25	412	102	108	206	242.7	83	195	51	136	180	15.0	12.0	10.0
300(12")	312	400	12	25	493	120	126	247	289	110	210	72	189	305	12.0	10.0	8.0
350(14")	355	460	16	25	540	123	129	270	305	110	210	72	189	305	10.5	8.5	7.0
400(16")	398	515	16	27	615	163	170	307.5	363	130	330	72	189	356	9.0	7.0	6.0
450(18")	451	565	20	27	640	175	182	325	365	130	330	116	285	406	9.0	6.0	5.0
500(20")	500	620	20	27	730	183	190	373	405	130	330	116	285	457	9.0	6.0	5.0
600(24")	600	725	20	30	844	205	218	435	460	175	350	116	285	508	7.5	6.0	5.0

※ Standard dimensions based on PVC material.
The flanged length tolerance is according to EN558-1:1995.
※ L: The suggested length of the valve as installed on pipeline.



Check Valve

Hi -Tech'S, Hi-Qualitly'S

Ball Check Valve
Swing Check Valve
Wafer Check Valve

- Material: UPVC, PP, CPVC, PPG, PVDF
- Ball Check Valve
Size: 1/2"~10"
- Swing Check Valve
Size: 1/2"~8"
- Wafer Check Valve
Size: 1/2"~20"





CHECK VALVE / HORIZONTAL TYPE



JW Series

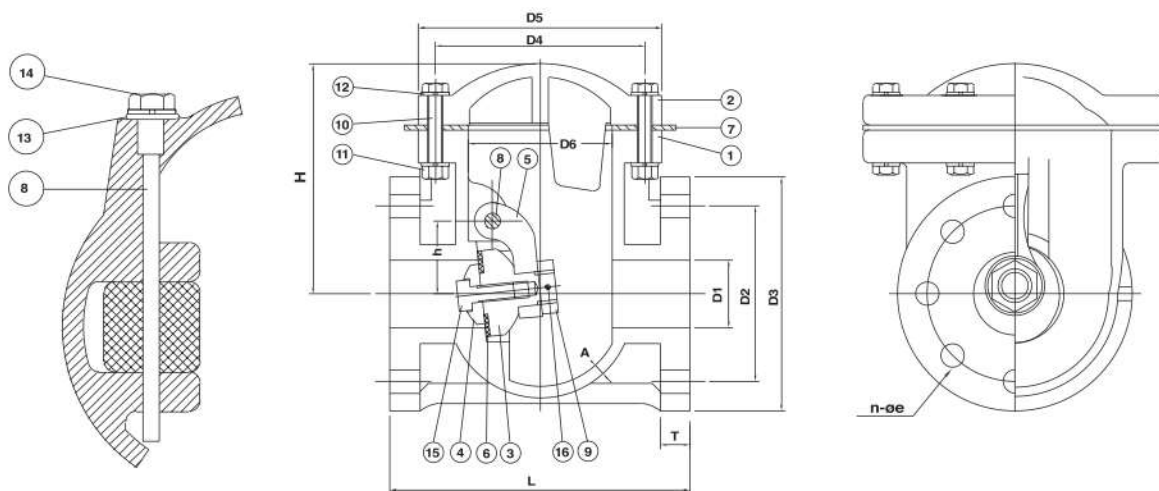
JW300
SIZE: 1"-8"

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP, CPVC, PPG, PVDF	9	Disc Holder	1	PP,PVDF
2	Bonnet	1	UPVC, CPVC, PPG, PVDF	10	Bolts	6...DN15-50 8...DN65-125 10...DN150 12...DN200	SUS304
3	Disc	1	UPVC, PP, CPVC, PPG, PVDF	11	Nuts		SUS304
4	Sheet Gasket Holder	1	UPVC, PP, CPVC, PPG, PVDF	12	Washers		SUS304
5	Swing Arms	1	UPVC, PP, CPVC, PPG, PVDF	13	O'ring	1	EPDM,VITON
6	Disc Gasket	1	EPDM, VITON , TEFLON	14	Shaft Holder	1	PVDF
7	Bonnet Gasket	1	EPDM, VITON , TEFLON	15	Set Bolts	1...DN15-80 3...DN100-125 4...DN150-200	PVDF
8	Shoft	1	PP, PVDF	16	Set Pin	1	SUS304 1/2"~1-1/2" PVDF 2" ~ 8"

DIMENSIONS TABLE

JIS															Unit: mm		
Nom. Size DN (inch)	D1	D2	D3	e	n No. of holes	D4	D5	D6	L	T	A	h	H	D	Test Press (kgf/cm ²)	Working Press (kgf/cm ²)	Mini Back Pressure Rates (kgf/cm ²)
25(1")	25	90	126	19	4	110	130	75	160	15	6	40	129	8	15	10	0.34
40(1-1/2")	41	105	151	19	4	125	145	85	180	18	8	45	141	8	15	10	0.50
50(2")	52	120	166	19	4	155	180	105	200	18	8	55	165	10	15	10	0.50
65(2-1/2")	80	140	187	19	4	181	205	130	260	20	9	70	180	12	15	10	0.6
80(3")	80	150	201	19	8	181	205	130	260	20	9	70	180	12	15	10	0.6
100(4")	100	175	232	19	8	235	265	170	300	24	10	90	216	16	10	7	0.68
125(5")	125	210	254	23	8	285	330	210	350	24	14	110	239.5	18	10	7	0.68
150(6")	150	240	288	23	8	330	370	250	400	30	16	135	273	20	10	7	0.84
200(8")	200	290	348	23	12	390	425	300	500	30	18	170	310	20	10	7	0.84



DN25~DN200

DIMENSIONS TABLE

ANSI															Unit: inch		
Nom. Size DN (inch)	D1	D2	D3	e	n No. of holes	D4	D5	D6	L	T	A	h	H	D	Test Press (lb/in ²)	Working Press (lb/in ²)	Mini Back Pressure Rates (PSI)
25(1")	1.00	3.13	4.96	0.63	4	4.34	5.13	2.97	6.31	0.59	0.24	1.56	5.07	0.31	222	150	5
40(1-1/2")	1.63	3.88	5.94	0.63	4	4.94	5.72	3.34	7.09	0.70	0.31	1.78	5.55	0.31	222	150	7.5
50(2")	2.06	4.75	6.54	0.75	4	6.09	7.09	4.13	7.88	0.70	0.31	2.16	6.50	0.41	222	150	7.5
65(2-1/2")	3.15	5.50	7.36	0.75	4	7.13	8.06	5.13	10.25	0.79	0.35	2.75	7.09	0.47	222	150	8.5
80(3")	3.15	6.00	7.91	0.75	4	7.13	8.06	5.13	10.25	0.79	0.35	2.75	7.09	0.47	222	150	8.5
100(4")	3.94	7.50	9.13	0.75	8	9.25	10.44	6.69	11.82	0.94	0.39	3.53	8.50	0.63	222	150	10
125(5")	4.94	8.50	10.0	0.88	8	11.22	13.00	8.28	13.78	0.94	0.55	4.34	9.43	0.72	150	100	10
150(6")	5.90	9.50	11.33	0.88	8	13.00	14.56	9.84	15.75	1.18	0.63	5.31	10.75	0.78	150	100	12.5
200(8")	7.88	11.75	13.70	0.88	8	15.31	16.71	11.81	19.69	1.18	0.71	6.69	12.21	0.78	150	100	12.5

DIN															Unit: mm		
Nom. Size DN (inch)	D1	D2	D3	e	n No. of holes	D4	D5	D6	L	T	A	h	H	D	Test Press (bar)	Working Press (bar)	Mini Back Pressure Rates (bar)
25(1")	25	85	126	14	4	110	130	75	160	15	6	40	129	8	15	10	0.34
40(1-1/2")	41	110	151	18	4	125	145	85	180	18	8	45	141	8	15	10	0.5
50(2")	52	125	166	18	4	155	180	105	200	18	8	55	165	10	15	10	0.5
65(2-1/2")	80	145	187	18	4	181	205	130	260	20	9	70	180	12	15	10	0.6
80(3")	80	160	201	18	8	181	205	130	260	20	9	70	180	12	15	10	0.6
100(4")	100	180	232	18	8	235	265	170	300	24	10	90	216	16	15	10	0.68
125(5")	125	210	254	18	8	285	330	210	350	24	14	110	239.5	18	10	7	0.68
150(6")	150	240	288	23	8	330	370	250	400	30	16	135	273	20	10	7	0.84
200(8")	200	295	348	23	8	390	425	300	500	30	18	170	310	20	10	7	0.84

The dimension table is calculated based on PVC material.
 ✖ The valve of test pressure is calculated based on PVC PVDF materials.
 The valve of test pressure for PP material is 70% based on the table.
 The flanged length tolerance is according to EN558-1:1995.



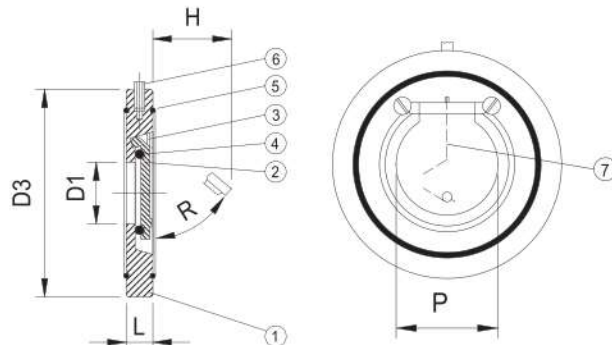
WAFER CHECK VALVE



(W/O Spring)
JT 300



(W/ Spring)
JT 300S



JT Series

SIZE: DN40 ~ DN600

Applications :

- Water and waste water treatment
- Chemical Industrial
- Environmental Industrial
- Process Industrial
- Systems engineering

Features :

- Require little space in piping system
- Economical - Simple and durable construction
- Easy Installation- Wafer Body to slip between standard flanges
- Light Weight
- Chemical Resistant
- No corrosion

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC,PP,CPVC,PVDF	5	Packing	2	EPDM,VITON
2	Flapper	1	UPVC,PP,CPVC,PVDF	6	Installation device	1	SUS304, SUS316
3	Flapper mounting screw	2	PP,PVDF	7	Spring	1	SUS304, SUS316
4	O'ring	1	EPDM,VITON				

DIMENSIONS TABLE

Nom. Size DN (inch)	JIS Unit:mm					ANSI Unit:inch					DIN Unit:mm					Test press (kgf/cm ²) (bar)	Work press (kgf/cm ²) (bar)	Mini Back Pressure Rates psi	
	D1	D3	P	L	H	D1	D3	P	L	H	D1	D3	P	L	H				
40(1-1/2")	23	86	35	16	25	0.89	3.25	1.38	0.63	0.99	23	92	35	16	25	15	10	0.2	0.3
50(2")	32	101	47	20	46	1.26	4.00	1.85	0.79	1.80	32	107	47	20	46	15	10	0.2	0.3
65(2-1/2")	40	121	57	20	51	1.57	4.75	2.24	0.79	2.00	40	127	57	20	51	15	10	0.2	0.3
80(3")	54	131	72	20	74	2.13	5.25	2.83	0.79	2.90	54	142	72	20	74	15	10	0.25	0.3
100(4")	70	156	90	22	91	2.76	6.75	3.54	0.87	3.60	70	162	90	22	91	15	10	0.25	0.3
125(5")	92	187	114	22	96	3.64	7.63	4.48	0.87	3.77	92	187	114	22	96	15	10	0.25	0.3
150(6")	112	217	134	26	147	4.40	8.63	5.27	1.02	5.80	112	217	134	26	147	15	10	0.25	0.3
200(8")	150	267	179	35	191	5.90	10.88	7.04	1.38	7.50	150	272	179	35	191	10	7	0.3	0.3
250(10")	190	330	226	40	229	7.48	13.27	8.89	1.57	9.00	190	327	226	40	229	9	6	0.3	0.3
300(12")	216	375	264	45	259	8.62	16.01	10.39	1.77	10.20	216	375	264	45	259	9	6	0.3	0.3
350(14")	266	420	311	49	245	10.47	17.61	12.24	1.93	9.64	266	430	311	49	245	9	6	0.5	0.5
400(16")	310	483	354	65	285	12.20	20.11	13.93	2.56	11.22	310	488	354	65	285	7	5	0.7	0.6
450(18")	350	538	396	68	330	13.78	21.49	15.59	2.67	13.00	350	538	396	68	330	5	3.5	1.0	0.8
500(20")	400	593	437	78	385	15.75	23.74	17.2	3.07	15.15	400	593	437	78	385	5	3.5	1.1	1.0

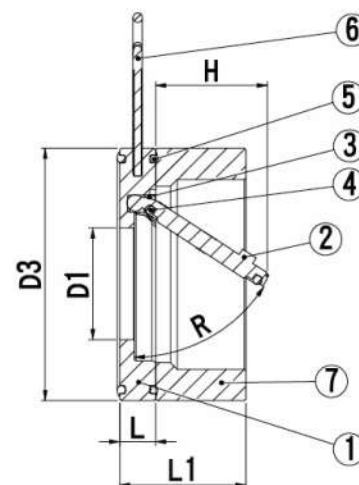
The dimension table is calculated based on PVC material.

✱ The valve of test pressure is calculated based on PVC PVDF materials.
The valve of test pressure for PP material is 70% based on the table.

The flanged length tolerance is according to EN558-1:1995.



SPACER CONNECTOR



JJ Series

MATERIALS OF CONSTRUCTION

Item	Parts	Pcs	Material
1	Body	1	UPVC, CPVC, PP, PVDF
2	Flapper	1	UPVC, CPVC, PP, PVDF
3	Flapper Mounting Screw	2	UPVC, CPVC, PVDF
4	O'ring	1	EPDM, VITON
5	Body O'ring	2	EPDM, VITON
6	Installation Device	1	SUS 316(350-600 NO)
7	Adaptors	1	UPVC, CPVC, PP, PVDF(350-600 NO)
8	Spring	1	SUS 316

DIMENSIONS TABLE

Nom. Size	JIS (DIN)							ANSI						
	D1	D3	P	L	H	L1	R	D1	D3	P	L	H	L1	R
40(1-1/2")	23	82	35	16	25	38.2	56.0	0.90	3.23	1.38	0.63	0.98	1.50	56.0
50(2")	32	101	45	20	46	46.2	45.0	1.26	3.98	1.77	0.79	1.81	1.82	45.0
65(2-1/2")	38	119	60	20.2	51	59.4	38.0	1.50	4.69	2.36	0.80	2.00	2.34	38.0
80(3")	54	129	72	20	74	67.2	57.0	2.13	5.08	2.83	0.79	2.91	2.65	57.0
100(4")	68	154.4	90	22	91	77.2	57.0	2.68	6.08	3.54	0.87	3.58	3.04	57.0
125(5")	90	187	109	22	96	90.7	45.0	3.54	7.36	4.29	0.87	3.78	3.57	45.0
150(6")	110	210	132	26	113	110.2	45.0	4.33	8.27	5.20	1.02	4.45	4.34	45.0
200(8")	150	262	176	35	153	118.2	45.0	5.90	10.30	6.96	1.38	6.02	4.65	45.0
250(10")	190	321.4	222	42	188	175.2	45.0	7.48	12.65	8.74	1.65	7.40	6.90	45.0
300(12")	216	376	260	45	259	186.2	62.0	8.50	14.80	10.24	1.77	10.20	7.33	62.0



BALL CHECK VALVE (VERTICAL TYPE)

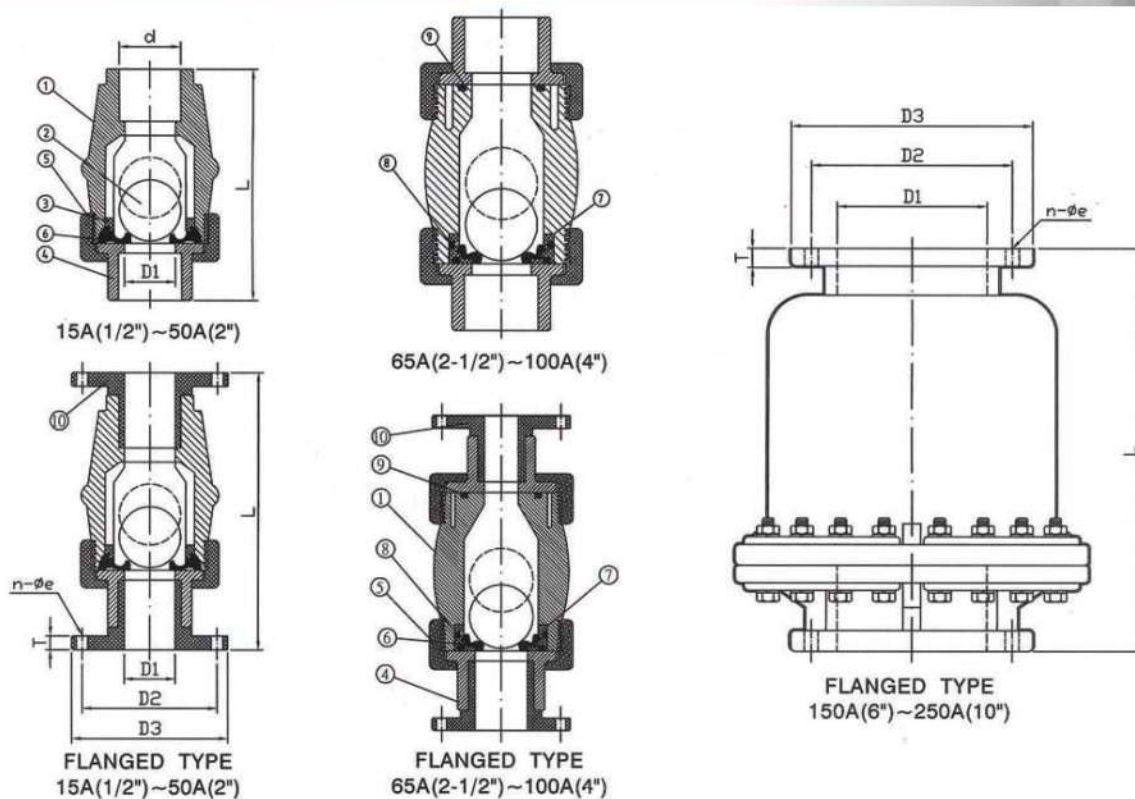


JB Series

SOCKET JB100 / THREAD JB200 / FLANGED JB300
SIZE: 1/2"-10"

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	Min. Open Close Pressure kgf/cm ² (bar)		
				Size	Open	Close
1	Body	1	UPVC, PP, CPVC, PVDF	1/2"	0.05	0.2
2	Ball	1	UPVC, CPVC, PVDF, PPG	3/4"	0.05	0.3
3	Washer	1	UPVC, PP, CPVC, PVDF	1"	0.05	0.3
4	End Connector	1...DN15-50 2...DN65-100	UPVC, PP, CPVC, PVDF	1-1/4"	0.1	0.3
5	Union Nut	1...DN15-50 2...DN65-100	UPVC, PP, CPVC, PVDF	1-1/2"	0.1	0.3
6	Seat	1	EPDM, VITON	2"	0.1	0.3
7	Seat Carrier	1	UPVC, PP, CPVC, PVDF	2-1/2"	0.1	0.3
8	Seat Carrier O'ring	1	EPDM, VITON	3"	0.1	0.2
9	Solid End O'ring	1	EPDM, VITON	4"	0.1	0.2
10	Flanged End	2...DN15-100 1...DN150-250	UPVC, PP, CPVC, PVDF	6"		
11	Reinforcement Plate	4...DN150 8...DN250	SUS304(150A-250A)	10"		
12	Bolts on Reinforcement Plate	10...DN150 20...DN250	SUS304			



SPECIFICATIONS:

1. Test Press: ① {15mm(1/2'')~100mm(4'') : 15kgf/cm ² (bar){225lb/in ² }}	2. Working Press: ① {15mm(1/2'')~100mm(4'') : 10kgf/cm ² (bar){150lb/in ² }}
② {150mm(6'') : 10kgf/cm ² (bar) (150lb/in ²) }	② {150mm(6'') : 7kgf/cm ² (bar) (100lb/in ²) }
③ {250mm(10'') : 5kgf/cm ² (bar) (75lb/in ²) }	③ {250mm(10'') : 3kgf/cm ² (bar) (45lb/in ²) }

● DIMENSIONS TABLE

Nom. Size DN-inch	JIS										Unit:mm										ANSI										Unit:inch										DIN										Unit:mm									
	D1	d		D2	D3	n	øe	L			T	D1	d		D2	D3	n	øe	L			T	D1	d		D2	D3	n	øe	L			T																											
		Screw	Socket					Screw	Socket	Flange			Screw	Socket					Screw	Socket	Flange			Screw	Socket					Screw	Socket	Flange		Screw	Socket	Flange																								
15(1-2")	15	PT	22	70	95	4	15	96	96	135	15	0.59	NPT	0.84	2.375	3.500	4	0.63	3.78	3.78	5.32	0.59	15	R1/2	20	65	95	4	14	96	96	135	15																											
20(3/4")	20	PT	26	75	100	4	15	118	118	157	16	0.79	NPT	1.05	2.750	3.785	4	0.63	4.65	4.65	6.18	0.59	20	R3/4	25	75	105	4	14	118	118	157	15																											
25(1")	26	PT	32	90	125	4	19	124	124	167	17	0.98	NPT	1.32	3.125	4.250	4	0.63	4.88	4.88	6.58	0.66	26	R1	32	85	115	4	14	124	124	167	17																											
32(1-1/4")	36	PT	38	100	135	4	19	151	151	197	16	1.42	NPT	1.67	3.500	4.625	4	0.63	5.94	5.94	7.77	0.67	36	R1-1/4	40	100	140	4	18	151	151	197	17																											
40(1-1/2")	36	PT	48	105	145	4	19	151	151	199	18	1.57	NPT	1.91	3.875	5.000	4	0.63	5.94	5.94	7.84	0.7	36	R1-1/2	50	110	150	4	18	151	151	199	17																											
50(2")	50	PT	60	120	155	4	19	180	180	231	21	1.96	NPT	2.38	4.750	6.000	4	0.75	7.09	7.09	9.09	0.78	50	R2	63	125	165	4	18	180	180	231	20																											
65(2-1/2")	65	PT	76	140	175	4	19	222	222	275	20	2.36	NPT	2.88	5.500	7.000	4	0.75	8.74	8.74	10.83	0.8	65	R2-1/2	75	145	185	4	18	222	222	275	20																											
80(3")	80	PT	89	150	185	8	19	275	275	330	23	3.15	NPT	3.51	6.000	7.500	4	0.75	10.83	10.83	12.99	0.91	80	R3	90	160	200	8	18	275	275	330	23																											
100(4")	100	PT	114	175	210	8	19	361	361	415	20	3.74	NPT	4.51	7.500	9.000	8	0.75	14.21	14.21	16.34	0.92	100	R4	110	180	220	8	18	361	361	415	20																											
150(6")	150	-	-	240	280	8	23	-	-	485	23	-	-	-	9.500	11.000	8	0.88	-	-	19.09	0.87	150	-	-	240	285	8	23	-	-	485	23																											
250(10")	250	-	-	355	400	12	25	-	-	668	25	-	-	-	14.250	16.000	12	1.00	-	-	26.3	0.94	250	-	-	350	395	12	23	-	-	668	25																											

The dimension table is calculated based on PVC material.
 ✖ The valve of test pressure is calculated based on PVC PVDF materials.
 The valve of test pressure for PP material is 70% based on the table.
 The flanged length tolerance is according to EN558-1:1995.



TRUE UNION BALL CHECK VALVE (VERTICAL TYPE)

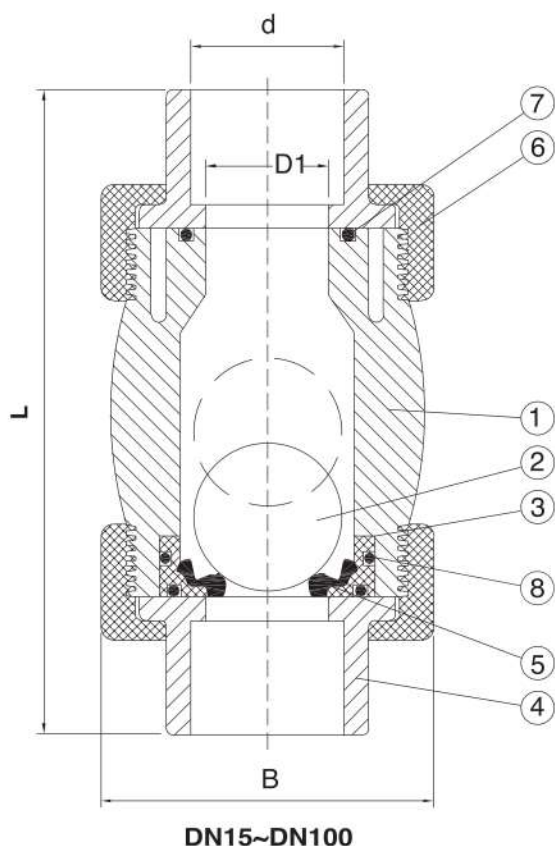


JX Series

**SOCKET JX100 / THREAD JX200
SIZE: 1/2"-4"**

● MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials
1	Body	1	UPVC,PP,CPVC,PVDF
2	Ball	1	UPVC,CPVC,PVDF,PPG
3	Seat Carrier	1	UPVC,PP,CPVC,,PVDF
4	End Connector	2	UPVC,PP,CPVC,PVDF
5	Seat	1	EPDM,VITON
6	Union Nut	2	UPVC,PP,CPVC,PVDF
7	O'ring	1	EPDM,VITON
8	Seat Carrier O-Ring	65A-100A	EPDM,VITON



Min. Open & Close Pressure (kgf/cm)² (bar)

	Open	Close
1/2"	0.05	0.2
3/4"	0.05	0.3
1"	0.05	0.30
1-1/4"	0.10	0.30
1-1/2"	0.10	0.30
2"	0.10	0.30
2-1/2"	0.10	0.30
3"	0.10	0.20
4"	0.10	0.20

DIMENSIONS TABLE

Nom. Size DN (inch)	JIS Unit:mm						ANSI Unit:inch						DIN Unit:mm						Test Press	Working Press
	D1	d		L		B	D1	d		L		B	D1	d		L		B	(kgf/cm ²) (bar)	(kgf/cm ²) (bar)
		Socket	Thread	Socket	Thread			Socket	Thread	Socket	Thread			Socket	Thread	Socket	Thread			
15(1/2")	15	22	PT	104	104	53.5	0.598	0.848	NPT	4.09	4.09	2.016	15	20	R1/2	104	104	53.5	15	10
20(3/4")	19.5	26	PT	120	120	63.3	0.771	1.058	NPT	4.72	4.72	2.492	19.5	25	R3/4	120	120	63.3	15	10
25(1")	25	32	PT	136	136	73	0.984	1.325	NPT	5.35	5.35	2.874	25	32	R1	136	136	73	15	10
32(1-1/4")	32	38	PT	173	173	97.5	1.259	1.670	NPT	6.81	6.81	3.842	32	40	R1-1/4	173	173	97.5	15	10
40(1-1/2")	40	48	PT	174	174	97.5	1.574	1.912	NPT	6.85	6.85	3.842	40	50	R1-1/2	174	174	97.5	15	10
50(2")	50	60	PT	195	195	120.5	1.968	2.387	NPT	7.68	7.68	4.744	50	63	R2	195	195	120.5	15	10
65(2-1/2")	62.5	76	PT	222	222	150	2.46	2.889	NPT	8.74	8.74	5.9	62.5	75	R2-1/2	222	222	150	10	7
80(3")	76	89	PT	274	274	184	3	3.515	NPT	10.71	10.71	7.24	76	90	R3	274	274	184	10	7
100(4")	100	114	PT	361	361	199	3.94	4.518	NPT	14.21	14.21	7.83	100	110	R4	361	361	199	10	7

※ The dimension table is calculated based on PVC material.
The valve of test pressure is calculated based on PVC PVDF materials.
The valve of test pressure for PP material is 70% based on the table.
The flanged length tolerance is according to EN558-1:1995.



IN-LINE SPRING CHECK VALVE



JC Series

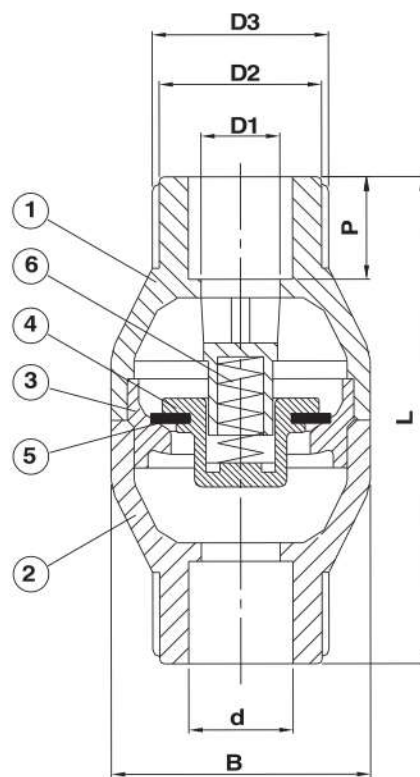
SOCKET JC100 / THREAD JC200
Size: 1/2" - 2"

TEST PRESSURE: 225 PSI ; 15 kgf/cm² (bar)

WORKING PRESSURE: 150 PSI ; 10 kgf/cm² (bar)

● MATERIALS OF CONSTRUCTION

NO	PART	MATERIAL	PCS
1	UPPER BODY	UPVC	1
2	LOWER BODY	UPVC	1
3	CONNECTOR	UPVC	1
4	SPIGOT	UPVC	1
5	SEAL	EPDM	1
6	SPRING	SUS 304	1



DN15~DN50

DIMENSIONS TABLE

Nom \ SIZE			15mm (1/2")	20mm (3/4")	25mm (1")	32mm (1-1/4")	40mm (1-1/2")	50mm (2")
d	JIS (mm)	Socket	22	26	32	38	48	60
		Thread	PT1/2	PT3/4	PT1	PT1-1/4	PT1-1/2	PT2
	ANSI (inch)	Socket	0.840	1.050	1.315	1.660	1.900	2.375
		Thread	NPT1/2	NPT3/4	NPT1	NPT1-1/4	NPT1-1/2	NPT2
	DIN (mm)	Socket	20	25	32	40	50	63
		Thread	R1/2	R3/4	R1	R1-1/4	R1-1/2	R2
P		JIS(mm)	22.2	25.4	28.6	31.8	34.9	38.1
		ANSI(inch)	0.875	1.000	1.125	1.250	1.375	1.500
		DIN(mm)	16.0	18.5	22.0	26.0	31.0	37.5
D1			17	21	28	35	40	52
D2			35	35	45	52	60	73
D3			37	37	47	54	62	75
B			56	56	73	91	91	107
L			105	105	134	157	157	178



Foot Valve

- Material: UPVC, PP, CPVC, PPG, PVDF
- Size: DN15~DN250

Hi -Tech'S, Hi-Qualitly'S





BALL FOOT VALVE (VERTICAL TYPE)

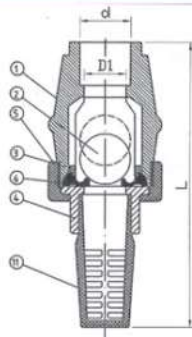


JF Series

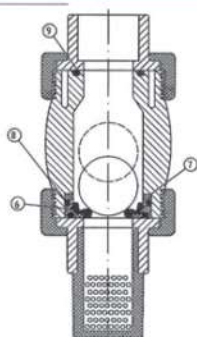
**SOCKET JF100/THREAD JF200/FLANGED JF300
SIZE: 1/2"-10"**

● MATERIALS OF CONSTRUCTION

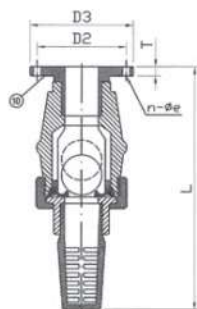
No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP, PPG, CPVC, PVDF
2	Ball	1	UPVC, PPG, CPVC, PVDF
3	Washer	1	UPVC, PP, CPVC, PVDF
4	Connector	1/2	UPVC, PP, CPVC, PVDF
5	Union Nut	1/2	UPVC, PP, CPVC, PVDF
6	Seat	1	EPDM, VITON
7	Seat Carrier	1	UPVC, PP, CPVC, PVDF
8	Seat Carrier O'ring	1	EPDM, VITON
9	Solid End O'ring	1	EPDM, VITON
10	Flanged End	1	UPVC, PP, PPG, CPVC, PVDF
11	Screen	1	UPVC, PP, CPVC, PVDF



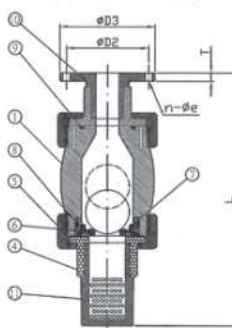
15A(1/2")~50A(2")



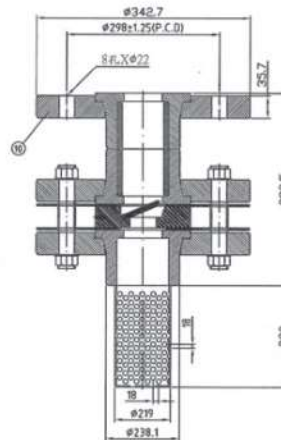
65A(2-1/2")~100A(4")



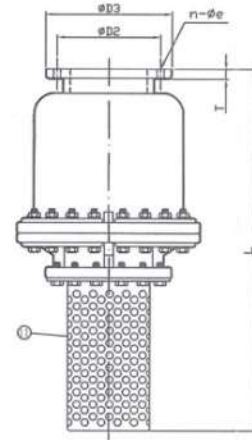
FLANGED TYPE
15A(1/2")~50A(2")



FLANGED TYPE
65A(2-1/2")~100A(4")



FLANGED TYPE
200A(8")



FLANGED TYPE
150A(6") , 250A(10")

SPECIFICATIONS:

1. Test Press: ① {15mm(1/2")~100mm(4") : 10.5kgf/cm ² (bar) (150lb/in ²) }	2. Working Press: ① {15mm(1/2")~100mm(4") : 7kgf/cm ² (bar) (100lb/in ²) }
② {150mm(6") : 7kgf/cm ² (bar)(105lb/in ²) }	② {150mm(6") : 4.9kgf/cm ² (bar) (75lb/in ²) }
③ {200mm(8") : 5kgf/cm ² (bar)(75lb/in ²) }	③ {200mm(10") : 3.5kgf/cm ² (bar) (52lb/in ²) }
④ {250mm(10") : 3.5kgf/cm ² (bar)(52.8lb/in ²) }	④ {250mm(10") : 2.1kgf/cm ² (bar) (31lb/in ²) }

DIMENSIONS TABLE

Standards Nom. size DN-inch	JIS Unit:mm										ANSI Unit:inch										DIN Unit:mm												
	D1	d		D2	D3	n	øe	L			T	D1	d		D2	D3	n	øe	L			T	D1	d		D2	D3	n	øe	L			T
		Screw	Socket					Screw	Socket	Flange			Screw	Socket					Screw	Socket	Flange			Screw	Socket					Flange	Screw	Socket	
15(1-2")	15	PT	22	70	95	4	15	138	138	175	16	0.59	NPT	0.84	2.375	3.500	4	0.63	5.43	5.43	6.89	0.62	15	R1/2	20	65	95	4	14	138	138	175	16
20(3/4")	20	PT	26	75	100	4	15	164	164	202	16	0.79	NPT	1.05	2.750	3.875	4	0.63	6.45	6.45	7.95	0.62	20	R3/4	25	75	105	4	14	164	164	202	16
25(1")	26	PT	32	90	125	4	19	180	180	224	16	1.02	NPT	1.32	3.125	4.250	4	0.63	7.08	7.08	8.82	0.62	26	R1	32	85	115	4	14	180	180	224	16
32(1-1/4")	36	PT	38	100	135	4	19	226	226	271	18	1.42	NPT	1.67	3.500	4.625	4	0.63	8.89	8.89	10.67	0.70	36	R1-1/4	40	100	140	4	18	226	226	271	18
40(1-1/2")	36	PT	48	105	145	4	19	226	226	272	18	1.42	NPT	1.91	3.875	5.000	4	0.63	8.89	8.89	10.71	0.70	36	R1-1/2	50	110	150	4	18	226	226	272	18
50(2")	40	PT	60	120	155	4	19	254	254	306	21	1.58	NPT	2.38	4.750	6.000	4	0.75	10.0	10.0	12.05	0.82	40	R2	63	125	165	4	18	254	254	306	21
65(2-1/2")	65	PT	76	140	175	4	19	305	305	359	20	2.56	NPT	2.88	5.500	7.000	4	0.75	12.0	12.0	14.13	0.78	65	R2-1/2	75	145	185	4	18	305	305	359	20
80(3")	80	PT	89	150	185	8	19	373	373	429	23	3.15	NPT	3.51	6.000	7.500	4	0.75	14.68	14.68	16.89	0.90	80	R3	90	160	200	8	18	373	373	429	23
100(4")	100	PT	114	175	210	8	19	488	488	546	23	3.94	NPT	4.51	7.500	9.000	8	0.75	19.21	19.21	21.5	0.90	100	R4	100	180	220	8	18	488	488	546	23
150(6")	150	-	-	240	280	8	23	-	-	790	23	-	-	-	9.500	11.000	8	0.88	-	-	31.10	0.90	150	-	-	240	285	8	23	-	-	790	23
200(8")	200	-	-	290	330	12	23	-	-	783.5	35.7	-	-	-	13.490	13.500	8	0.88	-	-	30.84	-	-	-	-	295	330	8	23	-	-	783.5	35.7
250(10")	250	-	-	355	400	12	25	-	-	1190	25	-	-	-	14.250	16.000	12	1.00	-	-	46.85	0.98	250	-	-	350	395	12	25	-	-	1190	25

※ The dimension table is calculated based on PVC material.
The valve of test pressure is calculated based on PVC PVDF materials.
The valve of test pressure for PP material is 70% based on the table.
The flanged length tolerance is according to EN558-1:1995.



IN-LINE SPRING FOOT VALVE



JD Series

SOCKET JD100 / THREAD JD200

Size: 1/2" - 2"

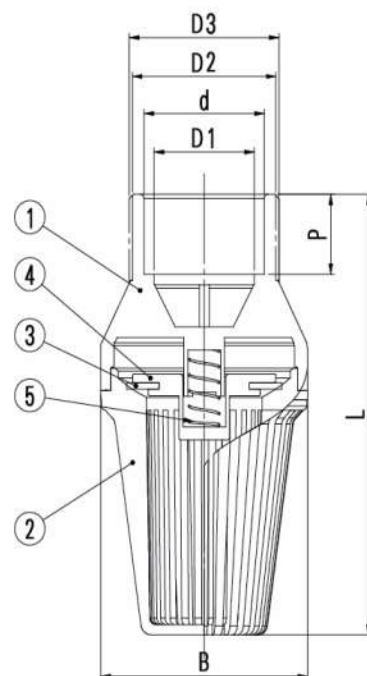
Test Press: 15kgf/cm² (bar) Working Press: 10kgf/cm² (bar)
225psi 150psi

MATERIALS OF CONSTRUCTION

No	Part	Material	PCS
1	UPPER BODY	UPVC	1
2	FILTER	UPVC	1
3	SEAL	EPDM	1
4	SPIGOT	UPVC	1
5	SPRING	SUS 304	1

DIMENSIONS TABLE

Nom		SIZE	15mm (1/2")	20mm (3/4")	25mm (1")	32mm (1-1/4")	40mm (1-1/2")	50mm (2")
d	JIS (mm)	Socket	20	26	32	38	48	60
		Thread	PT1/2	PT3/4	PT1	PT1-1/4	PT1-1/2	PT2
	ANSI (inch)	Socket	0.840	1.050	1.315	1.660	1.900	2.375
		Thread	NPT1/2	NPT3/4	NPT1	NPT1-1/4	NPT1-1/2	NPT2
	DIN (mm)	Socket	20	25	32	40	50	63
		Thread	R1/2	R3/4	R1	R1-1/4	R1-1/2	R2
P	JIS(mm)		22.2	25.4	28.6	31.8	34.9	38.1
	ANSI(inch)		0.875	1.000	1.125	1.250	1.375	1.500
	DIN(mm)		16.0	18.5	22.0	26.0	31.0	37.5
D1			17	21	28	35	40	52
D2			35	35	45	52	60	73
D3			37	37	47	54	62	75
B			56	56	71	102	102	114
L			129	129	149	173	173	211





POOL & SPA VALVE



EP Series

SOCKET EP100 / THREAD EP200 Size: 1 1/2" - 2" (2-WAY & 3-WAY)

Introduction

The Pool & Spa valve incorporates the latest thinking in full flow valve design. The self locking handle makes it easier to use and adjust and the lock ring closure allows quick, easy maintenance without the use of special tools. Port sizes use PVC or ABS pressure pipe.

Installation

A partial stop is provided on the lid of all valves, although this can be by-passed by fully depressing the handle and rotating. On 2-way valves the valve should be installed with the stop facing the water flow.

On 3-way valves the stop is usually positioned opposite the centre port-or opposite the port feeding directly to the pump. The stop can be adjusted by unscrewing the lock ring and rotating the lid assembly.

Use the correct PVC pressure pipe adhesive carefully following the manufacture's instructions.

Coat the valve port and the pipe with adhesive. Avoid excessive adhesive inside the valve port. A lip is provided in the valve to stop excessive adhesive getting into the valve internals. Damage due to adhesive inside the valve is not covered by the warranty.

Allow 30 minutes before testing and 12 hours before testing under pressure.

Servicing

Every valve is assembled lubricated with a waterproof silicon grease.

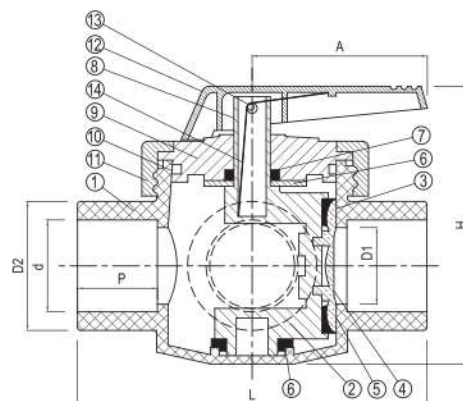
Valves that are used frequently will operate freely with the water acting as a lubricat. Valves left for long periods tend to stick and may need some extra force to operate. To avoid this regular greasing with a silicone based grease is recommended. DO NOT USE PETROLEUM BASED LUBRICANTS.

MATERIALS OF CONSTRUCTION

No.	Part	Pcs.	Material	No.	Part	Pcs.	Material
1	Body (2 Way or 3 Way)	1	UPVC, ABS	8	Rotor Shaft		PPG
2	Rotor Gate	1	PPG	9	Lid	1	UPVC, ABS
3	Seal Retaining Plate	1	PPG	10	Lid O'ring	1	EPDM
4	Retaining Plate Screw	2	SUS304	11	Lid Lock Ring	1	ABS
5	Rotor Seal	1	EPDM	12	Handle	1	ABS
6	Bearing	2	POM	13	Set Pin	1	BRASS
7	Rotor O'ring	1	EPDM	14	Spring	1	SUS304

DIMENSIONS TABLE

Nom Size DN-inch	Dimensions								Unit:mm
	Flow		d	D1	D2	D3	L	H	
40(1-1/2")	2-Way	SOCKET	THREAD	45	60	107	164	155	88
	3-Way	SOCKET	THREAD	45	60	107	164	155	88
50(2")	2-Way	SOCKET	THREAD	56	71	125	189	160	88
	3-Way	SOCKET	THREAD	56	71	125	189	160	88



DN40~DN50



Sediment Strainers

Hi -Tech'S, Hi-Qualitly'S

- Material: UPVC, PP, PPG, CPVC, PVDF
- Size: 1"~8"





T-TYPE SEDIMENT STRAINERS

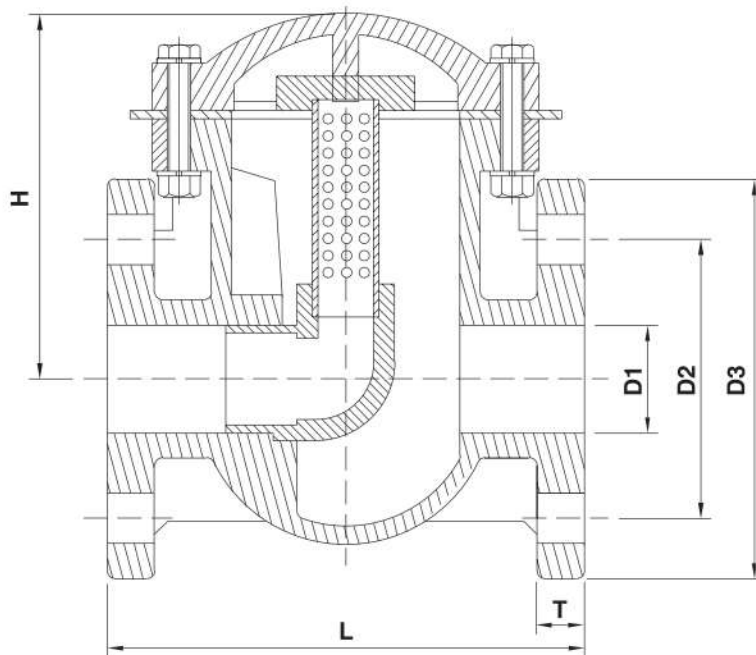


JS Series

JS 300
Size: 1/2" - 8"

● MATERIALS OF CONSTRUCTION

MATERIAL	U-PVC, PP, CPVC, PPG, PVDF
SIZES	1/2", 3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 8"
END CONNECTIONS	Flange ends with in JIS; DIN; ANSI; BS STANDARD
WORKING TEMP	U-PVC: 0°C~60°C, PP: -20°C~90°C, PPG: -20°C~100°C, CPVC: 0°C~90°C, PVDF: -40°C~120°C



DN15~DN200

DIMENSIONS TABLE

Nom. Size DN-inch	D1	L	D2			D3			T	H	SCREEN (mm)	Test Press		Working Press	
			JIS	DIN	ANSI (inch)	JIS	DIN	ANSI (inch)				kg/cm ² (bar)	lb/in ²	kg/cm ² (bar)	lb/in ²
15(1/2")	25	160	70	65	2.38	95	95	3.50	15	129	2.5	15	225	10	150
20(3/4")	25	160	75	75	2.76	100	105	3.86	15	129	2.5	15	225	10	150
25(1")	25	160	90	85	3.13	125	125	4.25	15	129	2.5	15	225	10	150
32(1-1/4")	41	180	100	100	3.50	135	135	4.60	18	141	2.5	15	225	10	150
40(1-1/2")	41	180	105	110	3.88	150	150	5.91	18	141	2.5	15	225	10	150
50(2")	52	200	120	125	4.74	155	155	6.10	18	165	2.5	15	225	10	150
65(2-1/2")	80	260	140	145	5.49	175	175	6.88	22	180	2.5	15	225	10	150
80(3")	80	260	150	160	6.00	185	190.5	7.87	22	180	2.5	15	225	10	150
100(4")	100	300	175	180	7.50	234	234	9.21	24	216	2.5	10	150	7	105
125(5")	125	350	210	210	8.50	250	250	9.84	24	239.5	2.5	10	150	7	105
150(6")	150	400	240	240	9.51	289	289	11.38	30	273	2.5	10	150	7	105
200(8")	200	500	290	295	11.75	330	330	12.99	30	310	2.5	10	150	7	105

The dimension table is calculated based on PVC material.
 ✱ The valve of test pressure is calculated based on PVC PVDF materials.
 The valve of test pressure for PP material is 70% based on the table.
 The flanged length tolerance is according to EN558-1:1995.



Y-SEDIMENT STRAINERS



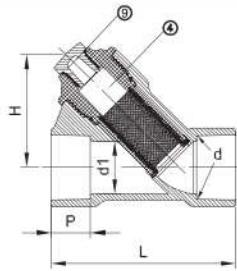
EY Series

SOCKET EY100 / THREAD EY200 / FLANGE EY300
Size: 1/2" - 4"

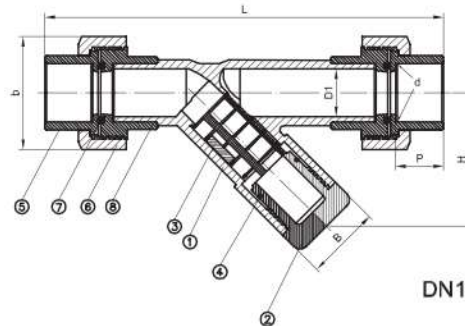
Color: Clear & gray

● MATERIALS OF CONSTRUCTION

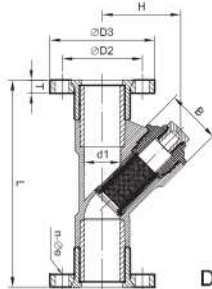
No.	Parts	Pcs.	Materials
1	Body	1	UPVC, CPVC
2	Lid	1	UPVC, CPVC
3	Screen	1	PE
4	Body O'ring	1	EPDM, VITON
5	Connector	2	UPVC, CPVC
6	Union Nut	2	UPVC, CPVC
7	Union O'ring	2	EPDM, VITON
8	Flange	2	UPVC, CPVC
9	Bolt O'ring	1	EPDM, VITON



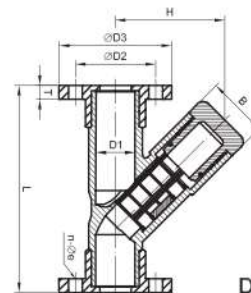
DN65~DN100 (ANSI)



DN15~DN100



DN65~DN100



DN15~DN50

DIMENSIONS TABLE

JIS																Unit:mm	
Nom. Size DN-inch	D1	D2	D3	d		Øe	n	P	L			B	T	H	b	Test Press (kgf/cm²)	Working Press (kgf/cm²)
				SOCKET	THREAD				SOCKET	THREAD	FLANGE						
15(1/2")	15.0	70	95	22	PT 1/2"	15	4	22.2	205.0	205.0	146.0	35.0	15	70.0	46	15	10
20(3/4")	20.0	75	100	26	PT 3/4"	15	4	25.4	234.0	234.0	170.0	39.0	15	80.0	61	15	10
25(1")	26.0	90	125	32 (CNS) 34	PT 1"	19	4	28.6	250.0	250.0	174.0	47.0	17	95.0	70 67	15	10
32(1-1/4")	32.0	100	135	38 (CNS) 42	PT 1-1/4"	19	4	31.8	283.0	283.0	200.0	55.0	17	110.0	81 89	15	10
40(1-1/2")	40.0	105	140	48	PT 1-1/2"	19	4	34.9	312.0	312.0	218.0	70.0	17	132.0	89	15	10
50(2")	50.0	120	155	60	PT 2"	19	4	38.1	352.0	352.0	238.0	81.0	20	155.0	101	15	10
65(2-1/2")	60.6	140	175	76	PT 2-1/2"	19	4	44.5	445.0	445.0	312.0	89.5	20	137.1	150	15	10
80(3")	80.0	150	185	89	PT 3"	19	8	47.6	516.0	516.0	360.0	109.3	23	163.8	184	15	10
100(4")	100.0	175	210	114	PT 4"	19	8	57.1	602.0	602.0	408.0	136.1	23	199.2	199	15	10

ANSI																Unit:inch	
Nom. Size DN-inch	D1	D2	D3	d		Øe	n	P	L			B	T	H	b	Test Press (lb/in²)	Working Press (lb/in²)
				SOCKET	THREAD				SOCKET	THREAD	FLANGE						
15(1/2")	0.59	2.38	3.50	0.84	NPT 1/2"	0.63	4	0.88	8.07	8.07	5.75	1.37	0.59	2.76	1.81	235	150
20(3/4")	0.79	2.75	3.88	1.05	NPT 3/4"	0.63	4	1.00	9.21	9.21	6.69	1.53	0.63	3.15	2.40	235	150
25(1")	1.02	3.13	4.25	1.31	NPT 1"	0.63	4	1.13	9.84	9.84	6.85	1.85	0.67	3.74	2.76	235	150
32(1-1/4")	1.26	3.50	4.63	1.66	NPT 1-1/4"	0.63	4	1.25	11.14	11.14	7.87	2.16	0.67	4.33	3.19	235	150
40(1-1/2")	1.57	3.88	5.00	1.89	NPT 1-1/2"	0.63	4	1.38	12.28	12.28	8.58	2.75	0.71	5.20	3.50	235	150
50(2")	1.97	4.75	6.00	2.37	NPT 2"	0.75	4	1.50	13.86	13.86	9.37	3.18	0.79	6.10	3.98	235	150
65(2-1/2")	2.39	5.50	7.00	2.87	NPT 2-1/2"	0.75	4	1.75	8.25	8.25	12.28	3.52	0.79	5.40	5.91	235	150
80(3")	3.15	6.00	7.50	3.49	NPT 3"	0.75	4	1.88	9.63	9.63	14.17	4.30	0.90	6.45	7.24	235	150
100(4")	3.94	7.50	9.00	4.49	NPT 4"	0.75	8	2.25	11.69	11.69	16.06	5.36	0.90	7.84	7.83	235	150

DIN																Unit:mm	
Nom. Size DN-inch	D1	D2	D3	d		Øe	n	P	L			B	T	H	b	Test Press (bar)	Working Press (bar)
				SOCKET	THREAD				SOCKET	THREAD	FLANGE						
15(1/2")	15.0	65	95	20	R 1/2"	14	4	16.0	205.0	205.0	146.0	35.0	15	70.0	46	15	10
20(3/4")	20.0	75	105	25	R 3/4"	14	4	18.5	234.0	234.0	170.0	39.0	16	80.0	61	15	10
25(1")	26.0	85	115	32	R 1"	14	4	22.0	250.0	250.0	174.0	47.0	17	95.0	70	15	10
32(1-1/4")	32.0	100	140	40	R 1-1/4"	18	4	26.0	283.0	283.0	200.0	55.0	17	110.0	81	15	10
40(1-1/2")	40.0	110	150	50	R 1-1/2"	18	4	31.0	312.0	312.0	218.0	70.0	17	132.0	88	15	10
50(2")	50.0	125	165	63	R 2"	18	4	37.5	352.0	352.0	238.0	81.0	20	155.0	101	15	10
65(2-1/2")	60.6	145	185	75	R 2-1/2"	18	4	43.5	445.0	445.0	312.0	89.5	20	137.1	150	15	10
80(3")	80.0	160	200	90	R 3"	18	8	51.0	516.0	516.0	360.0	109.3	23	163.8	184	15	10
100(4")	100.0	180	220	110	R 4"	18	8	61.0	602.0	602.0	408.0	136.1	23	199.2	199	15	10

※ The flanged length tolerance is according to EN558-1:1995.



Electric / Pneumatic Actuated Valve

Hi-Tech'S, Hi-Qualitly'S

Electric Actuated Butterfly Valve
Electric Actuated Ball Valve
Pneumatic Actuated Butterfly Valve
Pneumatic Actuated Ball Valve

- Material: UPVC, PP, PPG, CPVC, PVDF
- Electric Actuated Butterfly Valve
Size: 2"~14"
- Electric Actuated Ball Valve
Size: 1/2"~4"
- Pneumatic Actuated Butterfly Valve
Size: 2"~24"
- Pneumatic Actuated Ball Valve
Size: 1/2"~4"





PNEUMATIC ACTUATED BALL VALVE (DOUBLE ACTION TYPE)



C0 Series

SOCKET C0100 / THREAD C0200 / FLANGED C0300
Size: 1/2"-4"

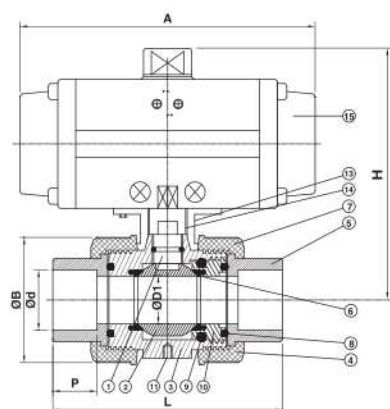
MATERIALS OF CONSTRUCTION

No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials
1	STEM	1	UPVC, PP, CPVC, PVDF	9	BODY O-RING	2	EPDM, VITON
2	BALL	1	UPVC, PP, CPVC, PVDF	10	SEAT CARRIER	1	UPVC, PP, CPVC, PVDF
3	BODY	1	UPVC, PP, CPVC, PVDF	11	BRASS INSERTS	4...15-50 8...65-100	BRASS
4	UNION NUT	2	UPVC, PP, CPVC, PVDF	12	FLANGE	2	UPVC, PP, CPVC, PVDF
5	END CONNECTOR	2	UPVC, PP, CPVC, PVDF	13	MOUNTING BRACKET	1	SU304
6	SEAT	2	PTFE	14	STEM TRANSMIT HOUSING	1	SU304
7	STEM O-RING	1..15-50 2..65-100	EPDM,VITON	15	PNEUMATIC ACTUATORS	1	ECRLD ALLUMINUM ALLOY
8	SEAT CARRIER O-RING	1	EPDM,VITON				

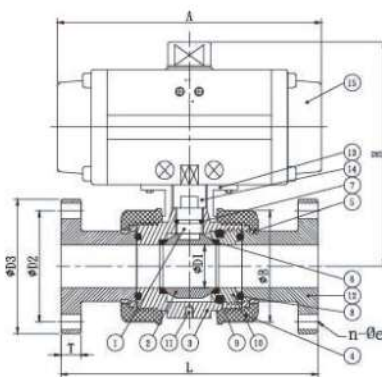
Air Force(actuation) : Mini.5kg/cm²
Max.8kg/cm²

DIMENSIONS TABLE

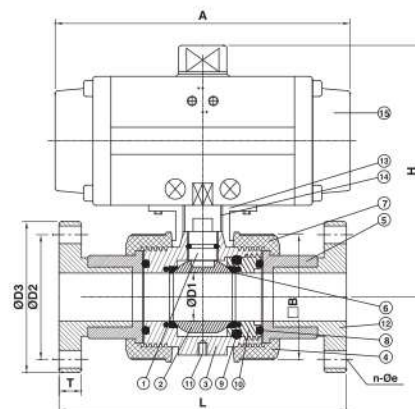
JIS																				Unit: mm		
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			H	H1	A	J	T	K	E	S	S1	Test Press (kgf/cm ²)	Working press (kgf/cm ²)
				Socket	Thread				Socket	Thread	Flange											
15(1/2")	15	70	95	22	PT1/2"	15	4	22.2	115	115	153	151.6	40	137	66	15	31		3/16"-24G	4	22.5	15
20(3/4")	19	75	100	26	PT3/4"	15	4	25.4	126	126	165	157.5	40	137	66	15	37		1/4"-20G	4	22.5	15
25(1")	25	90	125	32	PT 1"	19	4	28.6	144	144	189	162.0	40	137	66	17	40		1/4"-20G	4	22.5	15
32(1-1/4")	38	100	135	38	PT1-1/4"	19	4	31.8	181	181	226	197.7	55	152	73	17	55		5/16"-18G	4	22.5	15
40(1-1/2")	38	105	140	48	PT1-1/2"	19	4	34.9	181	181	226	197.7	55	152	73	19	55		5/16"-18G	4	22.5	15
50(2")	48	120	155	60	PT 2"	19	4	38.1	202	202	252	208.3	55	152	85	21	68		5/16"-18G	4	22.5	15
65(2-1/2")	65	140	175	76	PT2-1/2"	19	4	44.5	227	227	281	263.2	68	230	98	21	80	41	5/16"-18G	8	15	10
80(3")	78	150	185	89	PT 3"	19	8	47.6	275	275	330	307.7	85	271	110	22	80	41	5/16"-18G	8	15	10
100(4")	102	175	210	114	PT 4"	19	8	57.2	321	321	387	326.0	80	360	140	22	121	50	5/16"-18G	8	15	10



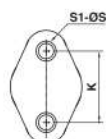
DN15~DN100
SOCKET & SCREW TYPE



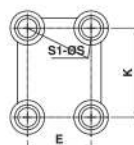
DN15~DN50
FLANGE TYPE



DN65~DN100
FLANGE TYPE

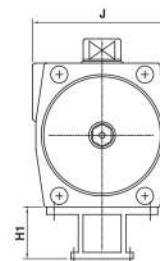


DN15~DN50



DN65~DN100

MOUNTING PAD



DIMENSIONS TABLE

ANSI																						Unit: inch	
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			H	H1	A	J	T	K	E	S	S1	Test press (lb/in ²)	Working press (lb/in ²)	
				Socket	Thread				Socket	Thread	Flange												
15(1/2")	0.59	2.375	3.500	0.848	NPT1/2"	0.625	4	0.875	4.528	4.528	6.024	5.97	1.57	5.39	2.60	0.59	1.22		3/16"-24G	4	353	235	
20(3/4")	0.748	2.750	3.875	1.058	NPT3/4"	0.625	4	1.000	4.960	4.960	6.496	6.20	1.57	5.39	2.60	0.59	1.45		1/4"-20G	4	353	235	
25(1")	0.98	3.125	4.250	1.325	NPT1"	0.625	4	1.125	5.669	5.669	7.440	6.38	1.57	5.39	2.60	0.66	1.57		1/4"-20G	4	353	235	
32(1-1/4")	1.496	3.500	4.625	1.670	NPT1-1/4"	0.625	4	1.125	7.126	7.126	8.898	7.78	2.17	5.98	2.87	0.66	2.16		5/16"-18G	4	353	235	
40(1-1/2")	1.496	3.875	5.000	1.912	NPT1-1/2"	0.625	4	1.375	7.126	7.165	8.898	7.78	2.17	5.98	2.87	0.75	2.16		5/16"-18G	4	353	235	
50(2")	1.89	4.750	6.000	2.387	NPT2"	0.750	4	1.500	7.953	7.953	9.921	8.20	2.17	5.98	2.87	0.83	2.67		5/16"-18G	4	353	235	
65(2-1/2")	2.56	5.500	7.000	2.889	NPT2-1/2"	0.750	4	1.750	8.937	8.937	11.063	10.36	2.68	9.06	3.86	0.83	3.15	1.61	5/16"-18G	8	225	150	
80(3")	3.07	6.000	7.500	3.515	NPT3"	0.750	4	1.875	10.826	10.826	12.992	12.11	3.35	10.76	4.33	0.866	3.15	1.61	5/16"-18G	8	225	150	
100(4")	4.01	7.500	9.000	4.518	NPT4"	0.750	8	2.250	12.638	12.638	15.236	12.83	3.15	14.17	6.10	0.866	4.76	1.97	5/16"-18G	8	225	150	

DIN																				Unit: mm		
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			H	H1	A	J	T	K	E	S	S1	Test press (bar)	Working press (bar)
				Socket	Thread				Socket	Thread	Flange											
15(1/2")	15	65	95	20	R1/2"	14	4	16.0	115	115	153	151.6	40	137	66	15	31		3/16"-24G	4	24	16
20(3/4")	19	75	105	25	R3/4"	14	4	18.5	126	126	165	157.5	40	137	66	15	37		1/4"-20G	4	24	16
25(1")	25	85	115	32	R1"	14	4	22.0	144	144	189	162.0	40	137	66	17	40		1/4"-20G	4	24	16
32(1-1/4")	38	100	140	40	R1-1/4"	18	4	26.0	181	181	226	197.7	55	152	73	17	55		5/16"-18G	4	24	16
40(1-1/2")	38	110	150	50	R1-1/2"	18	4	31.0	181	181	226	197.7	55	152	73	19	55		5/16"-18G	4	24	16
50(2")	48	120	165	63	R2"	18	4	37.5	202	202	252	208.3	55	152	85	21	68		5/16"-18G	4	24	16
65(2-1/2")	65	145	185	75	R2-1/2"	18	4	43.5	227	227	281	263.2	68	230	98	21	80	41	5/16"-18G	8	15	10
80(3")	78	160	200	90	R3"	18	8	51.0	275	275	330	307.7	85	271	110	22	80	41	5/16"-18G	8	15	10
100(4")	102	180	220	110	R4"	18	8	61.0	321	321	387	326.0	80	360	14	22	121	50	5/16"-18G	8	15	10

The dimension table is calculated based on PVC material.

✱ The valve of test pressure is calculated based on PVC PVDF materials.

The valve of test pressure for PP material is 70% based on the table.

The flanged length tolerance is according to EN558-1:1995.



PNEUMATIC ACTUATED BALL VALVE (SPRING RETURN TYPE)



CQ Series

SOCKET CQ100 / THREAD CQ200 / FLANGED CQ300
Size: 1/2"-4"

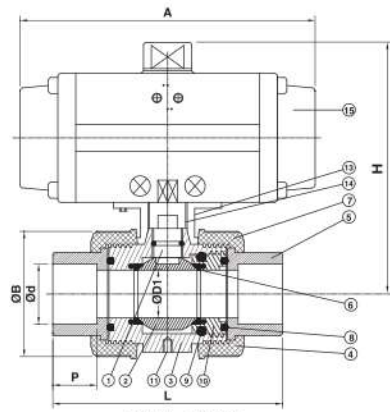
MATERIALS OF CONSTRUCTION

No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials
1	STEM	1	UPVC, PP, CPVC, PVDF	9	BODY O-RING	2	EPDM,VITON
2	BALL	1	UPVC, PP, CPVC, PVDF	10	SEAT CARRIER	1	UPVC, PP, CPVC, PVDF
3	BODY	1	UPVC, PP, CPVC, PVDF	11	BRASS INSERTS	4...15-50 8...65-100	BRASS
4	UNION NUT	2	UPVC, PP, CPVC, PVDF	12	FLANGE	2	UPVC, PP, CPVC, PVDF
5	END CONNECTOR	2	UPVC, PP, CPVC, PVDF	13	MOUNTING BRACKET	1	SU304
6	SEAT	2	PTFE	14	STEM TRANSMIT HOUSING	1	SU304
7	STEM O-RING	1...15-50 2...65-100	EPDM,VITON	15	PNEUMATIC ACTUATORS	1	ECRLD ALLIMINUM ALLOY
8	SEAT CARRIER O-RING	1	EPDM,VITON				

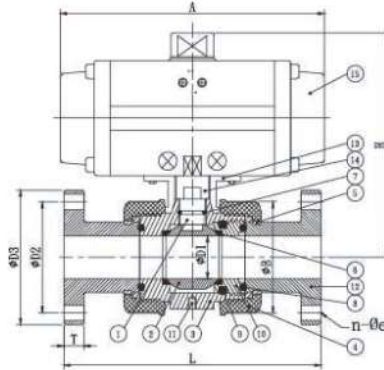
Air force (actuation) : Mini.5kg/cm²
Max.8kg/cm²

DIMENSIONS TABLE

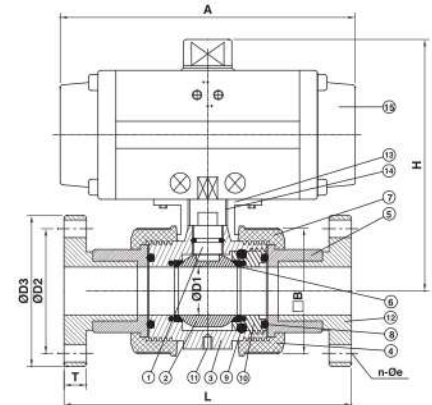
JIS																			Unit: mm			
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			H	H1	A	J	T	K	E	S	S1	Test press (kgf/cm ²)	Working press (kgf/cm ²)
				Socket	Thread				Socket	Thread	Flange											
15(1/2")	15	70	95	22	PT1/2"	15	4	22.2	115	115	153	151.6	40	137	66	15	31		3/16"-24G	4	22.5	15
20(3/4")	19	75	100	26	PT3/4"	15	4	25.4	126	126	165	157.5	40	137	66	15	37		1/4"-20G	4	22.5	15
25(1")	25	90	125	32	PT 1"	19	4	28.6	144	144	189	162.0	40	137	66	17	40		1/4"-20G	4	22.5	15
32(1-1/4")	38	100	135	38	PT1-1/4"	19	4	31.8	181	181	226	197.7	55	152	73	17	55		5/16"-18G	4	22.5	15
40(1-1/2")	38	105	140	48	PT1-1/2"	19	4	34.9	181	181	226	197.7	55	152	73	19	55		5/16"-18G	4	22.5	15
50(2")	48	120	155	60	PT 2"	19	4	38.1	202	202	252	208.3	55	152	85	21	68		5/16"-18G	4	22.5	15
65(2-1/2")	65	140	175	76	PT2-1/2"	19	4	44.5	227	227	281	263.2	68	230	98	21	80	41	5/16"-18G	8	22.5	15
80(3")	78	150	185	89	PT 3"	19	8	47.6	275	275	330	307.7	85	271	110	22	80	41	5/16"-18G	8	15	10
100(4")	102	175	210	114	PT 4"	19	8	57.2	321	321	387	326.0	80	360	140	22	121	50	5/16"-18G	8	15	10



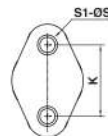
DN15~DN100
SOCKET & SCREW TYPE



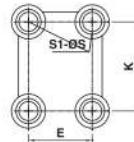
DN15~DN50
FLANGE TYPE



DN65~DN100
FLANGE TYPE

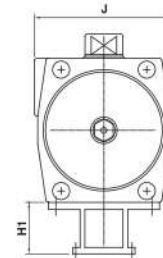


DN15~DN50



DN65~DN100

MOUNTING PAD



DIMENSIONS TABLE

ANSI																						Unit: inch		
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			H	H1	A	J	T	K	E	S	S1	Test press (lb/in ²)	Working press (lb/in ²)		
				Socket	Thread				Socket	Thread	Flange													
15(1/2")	0.59	2.375	3.500	0.848	NPT1/2"	0.625	4	0.875	4.528	4.528	6.024	5.97	1.57	5.39	2.60	0.59	1.22		3/16"-24G	4	353	235		
20(3/4")	0.748	2.750	3.875	1.058	NPT3/4"	0.625	4	1.000	4.960	4.960	6.496	6.20	1.57	5.39	2.60	0.59	1.45		1/4"-20G	4	353	235		
25(1")	0.98	3.125	4.250	1.325	NPT1"	0.625	4	1.125	5.669	5.669	7.440	6.38	1.57	5.39	2.60	0.66	1.57		1/4"-20G	4	353	235		
32(1-1/4")	1.496	3.500	4.625	1.670	NPT1-1/4"	0.625	4	1.125	7.126	7.126	8.898	7.78	2.17	5.98	2.87	0.66	2.16		5/16"-18G	4	353	235		
40(1-1/2")	1.496	3.875	5.000	1.912	NPT1-1/2"	0.625	4	1.375	7.126	7.126	8.898	7.78	2.17	5.98	2.87	0.75	2.16		5/16"-18G	4	353	235		
50(2")	1.89	4.750	6.000	2.387	NPT2"	0.75	4	1.500	7.953	7.953	9.921	8.20	2.17	5.98	2.87	0.83	2.67		5/16"-18G	4	353	235		
65(2-1/2")	2.56	5.500	7.000	2.889	NPT2-1/2"	0.75	4	1.750	8.937	8.937	11.063	10.36	2.68	9.06	3.86	0.83	3.15	1.61	5/16"-18G	8	225	150		
80(3")	3.07	6.000	7.500	3.515	NPT3"	0.75	4	1.875	10.826	10.826	12.992	12.11	3.35	10.76	4.33	0.866	3.15	1.61	5/16"-18G	8	225	150		
100(4")	4.01	7.500	9.000	4.518	NPT4"	0.75	8	2.250	12.638	12.638	15.236	12.83	3.15	14.17	6.10	0.866	4.76	1.97	5/16"-18G	8	225	150		

DIN																					Unit: mm		
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			H	H1	A	J	T	K	E	S	S1	Test press (bar)	Working press (bar)	
				Socket	Thread				Socket	Thread	Flange												
15(1/2")	15	65	95	20	R1/2"	14	4	16.0	115	115	153	151.6	40	137	66	15	31		3/16"-24G	4	24	16	
20(3/4")	19	75	105	25	R3/4"	14	4	18.5	126	126	165	157.5	40	137	66	15	37		1/4"-20G	4	24	16	
25(1")	25	85	115	32	R1"	14	4	22.0	144	144	189	162.0	40	137	66	17	40		1/4"-20G	4	24	16	
32(1-1/4")	38	100	140	40	R1-1/4"	18	4	26.0	181	181	226	197.7	55	152	73	17	55		5/16"-18G	4	24	16	
40(1-1/2")	38	110	150	50	R1-1/2"	18	4	31.0	181	181	226	197.7	55	152	73	19	55		5/16"-18G	4	24	16	
50(2")	48	120	165	63	R2"	18	4	37.5	202	202	252	208.3	55	152	85	21	68		5/16"-18G	4	24	16	
65(2-1/2")	65	145	185	75	R2-1/2"	18	4	43.5	227	227	281	263.2	68	230	110	21	80	41	5/16"-18G	8	15	10	
80(3")	78	160	200	90	R3"	18	8	51.0	275	275	330	307.7	85	271	110	22	80	41	5/16"-18G	8	15	10	
100(4")	102	180	220	110	R4"	18	8	61.0	321	321	387	362.0	80	360	140	22	121	50	5/16"-18G	8	15	10	

The dimension table is calculated based on PVC material.
 ✕ The valve of test pressure is calculated based on PVC PVDF materials.
 The valve of test pressure for PP material is 70% based on the table.
 The flanged length tolerance is according to EN558-1:1995.



ELECTRIC ACTUATED BALL VALVE



CJ Series

SOCKET CJ100 / THREAD CJ200 / FLANGED CJ300
Size: 1/2"-4"

FEATURES:

1. Small HP, big torque, electrical-saving.
2. Light weight, compact, easy to install, long service life.
3. water proof.

OPTIONS:

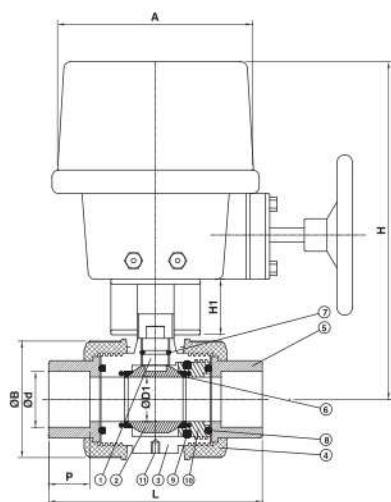
1. AC single-phase 100/220V, 3-phase 220V, 380V, 160V
2. manual operation option.

MATERIALS OF CONSTRUCTION

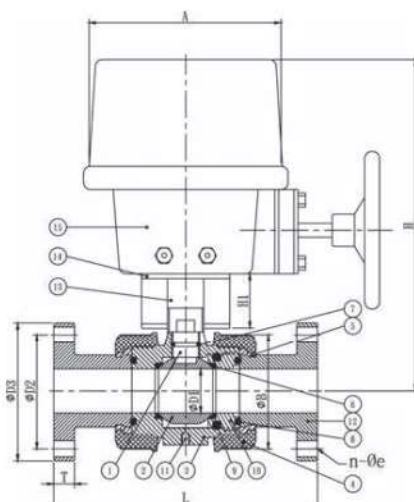
No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials
1	STEM	1	UPVC, PP, CPVC, PVDF	9	BODY O-RING	2	EPDM, VITON
2	BALL	1	UPVC, PP, CPVC, PVDF	10	SEAT CARRIER	1	UPVC, PP, CPVC, PVDF
3	BODY	1	UPVC, PP, CPVC, PVDF	11	BRASS INSERTS	4...15-50 8...65-100	BRASS
4	UNION NUT	2	UPVC, PP, CPVC, PVDF	12	FLANGE	2	UPVC, PP, CPVC, PVDF
5	END CONNECTOR	2	UPVC, PP, CPVC, PVDF	13	COUPLING	1	SU304
6	SEAT	2	PTFE	14	MOUNTING BRACKET	1	SU304
7	STEM O-RING	1...15-50 2...65-100	EPDM, VITON	15	WP CONTROL ACTUATOR	1	
8	SEAT CARRIER O-RING	1	EPDM, VITON				

DIMENSIONS TABLE

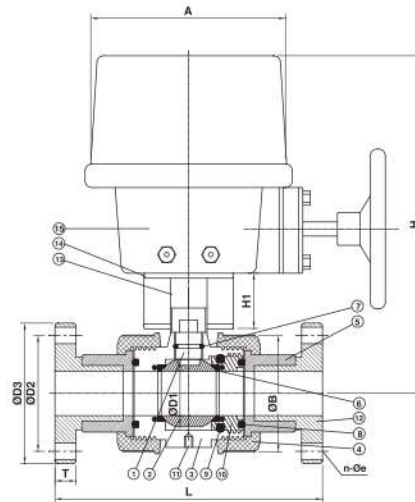
				JIS																		Unit: mm		
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			H	H1	A	T	K	E	S	S1	Test press (kgf/cm²)	Working press (kgf/cm²)			
				Socket	Thread				Socket	Thread	Flange													
15(1/2")	15	70	95	22	PT1/2"	15	4	22.2	115	115	152	203	42	106	15	31		3/16"-24G	4	22.5	15			
20(3/4")	19	75	100	26	PT3/4"	15	4	25.4	126	126	165	206	42	106	15	37		1/4"-20G	4	22.5	15			
25(1")	25	90	125	32	PT 1"	19	4	28.6	144	144	189	213	42	106	17	40		1/4"-20G	4	22.5	15			
32(1-1/4")	38	100	135	38	PT1-1/4"	19	4	31.8	181	181	226	227	42	106	17	55		5/16"-18G	4	22.5	15			
40(1-1/2")	38	105	140	48	PT1-1/2"	19	4	34.9	181	181	226	237	42	106	19	55		5/16"-18G	4	22.5	15			
50(2")	48	120	155	60	PT 2"	19	4	38.1	202	202	252	349	60	190	21	68		5/16"-18G	4	22.5	15			
65(2-1/2")	65	140	175	76	PT2-1/2"	19	4	44.5	227	227	281	359	60	190	21	80	41	5/16"-18G	8	15	10			
80(3")	78	150	185	89	PT 3"	19	8	47.6	275	275	330	373	60	190	22	80	41	5/16"-18G	8	15	10			
100(4")	102	175	210	114	PT 4"	19	8	57.2	321	321	387	388	76	230	22	121	50	5/16"-18G	8	15	10			



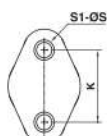
DN15~DN100 SOCKET & SCREW TYPE



DN15~DN50 FLANGE TYPE

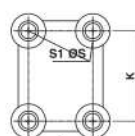


DN65~DN100 FLANGE TYPE



DN15~DN50

END VIEW



DN65~DN100

DIMENSIONS TABLE

ANSI																				Unit: inch			
Nominal Pipe Size	D1	D2	D3	d		e	n	P	L			H	H1	A	T	K	E	S	S1	Test press (lb/in ²)	Working press (lb/in ²)		
				Socket	Thread				Socket	Thread	Flange												
15(1/2")	0.59	2.375	3.500	0.848	NPT1/2"	0.625	4	0.875	4.528	4.528	6.024	7.99	1.65	4.17	0.59	1.22		3/16"-24G	4	353	235		
20(3/4")	0.748	2.750	3.875	1.058	NPT3/4"	0.625	4	1.000	4.960	4.960	6.496	8.11	1.65	4.17	0.59	1.45		1/4"-20G	4	353	235		
25(1")	0.98	3.125	4.250	1.325	NPT 1"	0.625	4	1.125	5.669	5.669	7.440	8.39	1.65	4.17	0.66	1.57		1/4"-20G	4	353	235		
32(1-1/4")	1.496	3.500	4.625	1.670	NPT1-1/4"	0.625	4	1.250	7.126	7.126	8.898	8.94	1.65	4.17	0.66	2.16		5/16"-18G	4	353	235		
40(1-1/2")	1.496	3.875	5.000	1.912	NPT1-1/2"	0.625	4	1.375	7.126	7.126	8.898	9.33	1.65	4.17	0.75	2.16		5/16"-18G	4	353	235		
50(2")	1.89	4.750	6.000	2.387	NPT 2"	0.750	4	1.500	7.953	7.953	9.921	13.74	2.36	7.48	0.83	3.15		5/16"-18G	4	353	235		
65(2-1/2")	2.56	5.500	7.000	2.889	NPT2-1/2"	0.750	4	1.750	8.937	8.937	11.063	14.13	2.36	7.48	0.83	3.15	1.61	5/16"-18G	8	225	150		
80(3")	3.07	6.000	7.500	3.515	NPT 3"	0.750	4	1.875	10.826	10.826	12.992	14.68	2.36	7.48	0.866	3.29	1.61	5/16"-18G	8	225	150		
100(4")	4.01	7.500	9.000	4.518	NPT 4"	0.750	8	2.250	12.638	12.638	15.236	15.28	2.99	9.06	0.866	4.76	1.97	5/16"-18G	8	225	150		

DIN																				Unit: mm		
Nominal Pp e Size	D1	D2	D3	d		e	n	P	L			H	H1	A	T	K	E	S	S1	Test press (bar)	Working press (bar)	
				Socket	Thread				Socket	Thread	Flange											
15(1/2")	15	65	95	20	R1/2"	14	4	16.0	115	115	153	203	42	106	15	31		3/16"-24G	4	24	16	
20(3/4")	19	75	105	25	R3/4"	14	4	18.5	126	126	165	203	42	106	15	37		1/4"-20G	4	24	16	
25(1")	25	85	115	32	R 1"	14	4	22.0	144	144	189	218	42	106	17	40		1/4"-20G	4	24	16	
32(1-1/4")	38	100	140	40	R1-1/4"	18	4	26.0	181	181	226	225	42	106	17	55		5/16"-18G	4	24	16	
40(1-1/2")	38	110	150	50	R1-1/2"	18	4	31.0	181	181	226	230	42	106	19	55		5/16"-18G	4	24	16	
50(2")	48	120	165	63	R 2"	18	4	37.5	202	202	252	343	60	190	20	68		5/16"-18G	4	24	16	
65(2-1/2")	65	145	185	75	R2-1/2"	18	4	43.5	227	227	281	353	60	190	20	80	41	5/16"-18G	8	15	10	
80(3")	78	160	200	90	R 3"	18	8	51.0	275	275	330	366	60	190	22	80	41	5/16"-18G	8	15	10	
100(4")	102	180	220	110	R 4"	18	8	61.0	321	321	387	383	76	230	22	121	50	5/16"-18G	8	15	10	

The dimension table is calculated based on PVC material.
 ✱ The valve of test pressure is calculated based on PVC/PVDF materials.
 The valve of test pressure for PP material is 70% based on the table.
 The flanged length tolerance is according to EN558-1:1995.



PNEUMATIC ACTUATED BUTTERFLY VALVE (DOUBLE ACTION TYPE)



BM Series

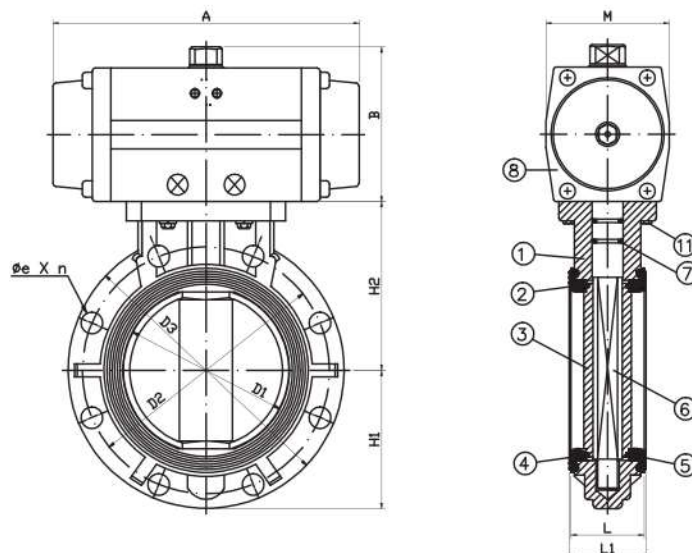
BM300
Size: 2"- 24"

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP, CPVC, PPG, PVDF
2	Seat	1	EPDM,VITON, NBR, HYPALON
3	Disc	1	UPVC, PP, CPVC, PPG, PVDF
4	Disc O'ring(A)	2	EPDM,VITON
5	Side O'ring(B)	2	EPDM,VITON
6	Stem	1	SUS410/304/316
7	Stem O'ring	2	EPDM,VITON
8	Control Actuator	1	
9	Mounting Bracket	1	SUS304
10	Coupling	1	ZINC,PLATED,CARBON STEEL

DIMENSIONS TABLE

Nom-Size DN (inch)	JIS												Unit: mm		
	D1	D2	D3	e	n No. of holes	L	L1	H1	H2	A	B	M	Test Press (kgf/cm ²)		Working Press (kgf/cm ²)
													Body	Seat	
50(2")	55	120	164	18	4	36.1	43.5	82	107	138	87	75	15.0	12.0	10.0
65(2- 1/2")	69.6	140	185	18	4	40	46.4	92	115	155.5	103	75	15.0	12.0	10.0
80(3")	78	150	196	18	8	40	47.4	98	123	210	120	86	15.0	12.0	10.0
100(4")	100	175	225	18	8	48	52.4	112.5	139.5	210	120	86	15.0	12.0	10.0
125(5")	128	210	254	23	8	51.2	58.8	127	160	228	130	94	15.0	12.0	10.0
150(6")	152	240	286	23	8	51	57	143	178	280.5	145	120	15.0	12.0	10.0
200(8")	200	290	344	23	12	61	67.5	172	212	362	185	141	15.0	12.0	10.0
250(10")	255	350	412	23	12	102	108	206	242.7	362	185	176	15.0	12.0	10.0
300(12")	312	400	493	23	12	120	126	247	289	462	246	176	10.5	8.5	7.0
350(14")	355	445	540	23	16	123	129	270	305	462	246	220	10.5	8.5	7.0
400(16")	398	510	615	27	16	163	170	307.5	353	575	290	220	9.0	7.0	6.0
450(18")	451	565	640	27	20	175	182	325	365				7.5	6.0	5.0
500(20")	500	620	730	27	20	183	190	373	405				5.0	4.0	3.5
600(24")	600	730	844	33	24	205	218	435	460				5.0	4.0	3.5



DN50~DN600

DIMENSIONS TABLE

Nom-Size DN (inch)	D1	D2	D3	e	n No. of holes	ANSI							Unit: inch		
						L	L1	H1	H2	A	B	M	Test Press (lb/in ²)		Working Press (lb/in ²)
													Body	Seat	
50(2")	2.16	4.75	6.46	0.75	4	1.42	1.71	3.23	4.21	5.433	3.425	2.953	225	180	150
65(2-1/2")	2.74	5.50	7.28	0.75	4	1.57	1.83	3.62	4.53	6.122	4.055	2.953	225	180	150
80(3")	3.07	6.00	7.72	0.75	4	1.57	1.83	3.86	4.84	8.268	4.724	3.386	225	180	150
100(4")	3.94	7.50	8.85	0.75	8	1.89	2.06	4.43	5.49	8.268	4.724	3.386	225	180	150
125(5")	5.04	8.50	10.0	0.87	8	2.02	2.31	5.00	6.30	8.976	5.118	3.70	225	180	150
150(6")	5.98	9.50	11.26	0.87	8	2.01	2.24	5.63	7.00	11.043	5.71	4.724	225	180	150
200(8")	7.87	11.75	13.54	0.87	8	2.40	2.66	6.77	8.35	14.25	7.283	5.55	225	180	150
250(10")	10.00	14.25	16.22	0.98	12	4.02	4.25	8.11	9.56	14.25	7.283	6.93	225	180	150
300(12")	12.28	17.00	19.41	0.98	12	4.72	4.96	9.72	11.38	18.19	9.685	6.93	155	125	105
350(14")	13.97	18.75	21.26	1.14	12	4.84	5.08	10.63	12.01	18.19	9.685	8.66	155	125	105
400(16")	15.69	21.25	24.21	1.14	16	6.42	6.69	12.11	13.90	22.64	11.42	8.66	133	100	89
450(18")	17.75	22.75	25.20	1.26	16	6.89	7.17	12.80	14.37				110	89	75
500(20")	19.70	25.00	28.74	1.26	20	7.20	7.48	14.69	15.94				75	60	52
600(24")	23.66	29.50	32.23	1.38	20	8.07	8.58	17.13	18.11				75	60	52

Nom-Size DN (inch)	D1	D2	D3	e	n No. of holes	DIN							Unit: mm		
						L	L1	H1	H2	A	B	M	Test Press (bar)		Working Press (bar)
													Body	Seat	
50(2")	55	125	164	18	4	36.1	43.5	82	107	138	87	75	15.0	12.0	10.0
65(2-1/2")	69.6	145	185	18	4	40.0	46.4	92	115	155.5	103	75	15.0	12.0	10.0
80(3")	78	160	196	18	8	40.0	47.4	98	123	210	120	86	15.0	12.0	10.0
100(4")	100	180	225	18	8	48.0	52.4	112.5	139.5	210	120	86	15.0	12.0	10.0
125(5")	128	210	254	23	8	51.2	58.8	127	160	228	130	94	15.0	12.0	10.0
150(6")	152	240	286	23	8	51.0	57.0	143	178	280.5	145	120	15.0	12.0	10.0
200(8")	200	295	344	23	8	61.0	67.5	172	212	362	185	141	15.0	12.0	10.0
250(10")	255	350	412	23	12	102	108	206	242.7	362	185	176	15.0	12.0	10.0
300(12")	312	400	493	23	12	120	126	247	289	462	246	176	10.5	8.5	7.0
350(14")	355	460	540	23	16	123	129	270	305	462	246	220	10.5	8.5	7.0
400(16")	398	515	615	27	16	163	176	307.5	363	575	290	220	9.0	7.0	6.0
450(18")	451	565	640	27	20	175	182	325	365				7.5	6.0	5.0
500(20")	500	620	730	27	20	183	190	373	405				5.0	4.0	3.5
600(24")	600	725	844	30	20	205	218	435	460				5.0	4.0	3.5

✱ Standard dimensions based on PVC material.
✱ The flanged length tolerance is according to EN558-1:1995.
✱ L: The suggested length of the valve as installed on pipeline.



PNEUMATIC ACTUATED BUTTERFLY VALVE (Spring Return Type)



BN Series

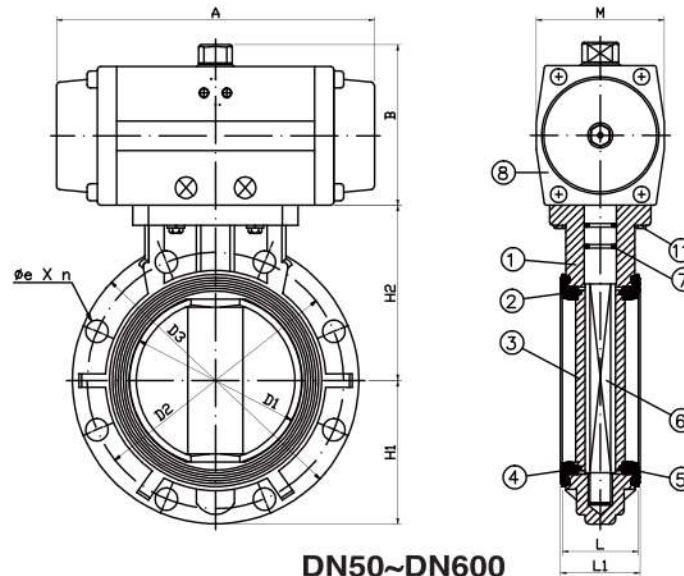
BN300
Size: 2" - 24"

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP, PVDF, PPG, CPVC
2	Seat	1	EPDM, VITON, NBR, HYPALON
3	Disc	1	UPVC, PP, PVDF, PPG, CPVC
4	Disc O'ring(A)	2	EPDM, VITON
5	Disc O'ring(B)	2	EPDM, VITON
6	Stem	1	SUS410/304/316
7	Stem O'ring	2	EPDM, VITON
8	Actuator	1	
9	Mounting Bracket	1	SUS304
10	Coupling	1	ZINC, PLATED, CARBON STEEL

DIMENSIONS TABLE

Nom-Size DN (inch)	JIS												Unit: mm		
	D1	D2	D3	e	n No. of holes	L	L1	H1	H2	A	B	M	Test Press (kgf/cm ²)		Working Press (kgf/cm ²)
													Body	Seat	
50(2")	55	120	164	18	4	36.1	43.5	82	107	138	87	75	15.0	12.0	10.0
65(2-1/2")	69.6	140	185	18	4	40.0	46.4	92	115	155.5	103	75	15.0	12.0	10.0
80(3")	78	150	196	18	8	40.0	47.4	98	123	210	120	86	15.0	12.0	10.0
100(4")	100	175	225	18	8	48.0	52.4	112.5	139.5	210	120	86	15.0	12.0	10.0
125(5")	128	210	254	23	8	51.2	58.8	127	160	228	130	94	15.0	12.0	10.0
150(6")	152	240	286	23	8	51	57	143	178	280.5	145	120	15.0	12.0	10.0
200(8")	200	290	344	23	12	61	67.5	172	212	362	185	141	15.0	12.0	10.0
250(10")	255	355	412	23	12	102	108	206	242.7	362	185	176	15.0	12.0	10.0
300(12")	312	400	493	23	12	120	126	247	289	462	246	176	10.5	8.5	7.0
350(14")	355	445	540	23	16	123	129	270	305	462	246	220	10.5	8.5	7.0
400(16")	398	510	615	27	16	163	170	307.5	353	575	290	220	9.0	7.0	6.0
450(18")	451	565	640	27	20	175	182	325	365				7.5	6.0	5.0
500(20")	500	620	730	27	20	183	190	373	405				5.0	4.0	3.5
600(24")	600	730	844	33	24	205	218	435	460				5.0	4.0	3.5



DN50~DN600

DIMENSIONS TABLE

Nom-Size DN (inch)	D1	D2	D3	e	n No. of holes	ANSI							Unit: inch		
						L	L1	H1	H2	A	B	M	Test Press (lb/in ²)		Working Press (lb/in ²)
													Body	Seat	
50(2")	2.16	4.75	6.46	0.75	4	1.42	1.71	3.23	4.21	5.433	3.425	2.953	225	180	150
65(2-1/2")	2.74	5.50	7.28	0.75	4	1.57	1.83	3.62	4.53	6.122	4.055	2.953	225	180	150
80(3")	3.07	6.00	7.72	0.75	4	1.57	1.87	3.86	4.84	8.268	4.724	3.386	225	180	150
100(4")	3.94	7.50	8.85	0.75	8	1.89	2.06	4.43	5.49	8.268	4.724	3.386	225	180	150
125(5")	5.04	8.50	10.0	0.87	8	2.02	2.31	5.00	6.30	8.976	5.118	3.70	225	180	150
150(6")	5.98	9.50	11.26	0.87	8	2.01	2.24	5.63	7.00	11.043	5.71	4.724	225	180	150
200(8")	7.87	11.75	13.54	0.87	8	2.40	2.66	6.77	8.35	14.25	7.283	5.55	225	180	150
250(10")	10.00	14.25	16.22	0.98	12	4.02	4.25	8.11	9.56	14.25	7.283	6.93	225	180	150
300(12")	12.28	17.00	19.41	0.98	12	4.72	4.96	9.72	11.38	18.19	9.685	6.93	155	125	105
350(14")	13.97	18.75	21.26	1.14	12	4.84	5.08	10.63	12.01	18.19	9.685	8.66	155	125	105
400(16")	15.69	21.25	24.21	1.14	16	6.42	6.69	12.11	13.90	22.64	11.42	8.66	133	100	89
450(18")	17.75	22.75	25.20	1.26	16	6.89	7.17	12.80	14.37				110	89	75
500(20")	19.70	25.00	28.74	1.26	20	7.20	7.18	14.69	15.94				75	60	52
600(24")	23.66	29.50	32.23	1.38	20	8.07	8.58	17.13	18.11				75	60	52

Nom-Size DN (inch)	D1	D2	D3	e	n No. of holes	DIN							Unit: mm		
						L	L1	H1	H2	A	B	M	Test Press (bar)		Working Press (bar)
													Body	Seat	
50(2")	55	125	164	18	4	36.1	43.5	82	107	138	87	75	15.0	12.0	10.0
65(2-1/2")	69.6	145	185	18	4	40.0	46.4	92	115	155.5	103	75	15.0	12.0	10.0
80(3")	78	160	196	18	8	40.0	47.4	98	123	210	120	86	15.0	12.0	10.0
100(4")	100	180	225	18	8	48.0	52.4	112.5	139.5	210	120	86	15.0	12.0	10.0
125(5")	128	210	254	23	8	51.2	58.8	127	160	228	130	94	15.0	12.0	10.0
150(6")	152	240	286	23	8	51.0	57.0	143	178	280.5	145	120	15.0	12.0	10.0
200(8")	200	295	344	23	8	61.0	67.5	172	212	362	185	141	15.0	12.0	10.0
250(10")	255	350	412	23	12	102	108	206	242.7	362	185	176	15.0	12.0	10.0
300(12")	312	400	493	23	12	120	126	247	289	462	246	176	10.5	8.5	7.0
350(14")	355	460	540	23	16	123	129	270	305	462	246	220	10.5	8.5	7.0
400(16")	398	515	615	27	16	163	170	307.5	363	575	290	220	9.0	7.0	6.0
450(18")	451	565	640	27	20	175	182	325	365				7.5	6.0	5.0
500(20")	500	620	730	27	20	183	190	373	405				5.0	4.0	3.5
600(24")	600	725	844	30	20	205	218	435	460				5.0	4.0	3.5

※ Standard dimensions based on PVC material.
 ※ The flanged length tolerance is according to EN558-1:1995.
 ※ L: The suggested length of the valve as installed on pipeline.



BUTTERFLY VALVE (ELECTRIC ACTUATED TYPE)



BP Series

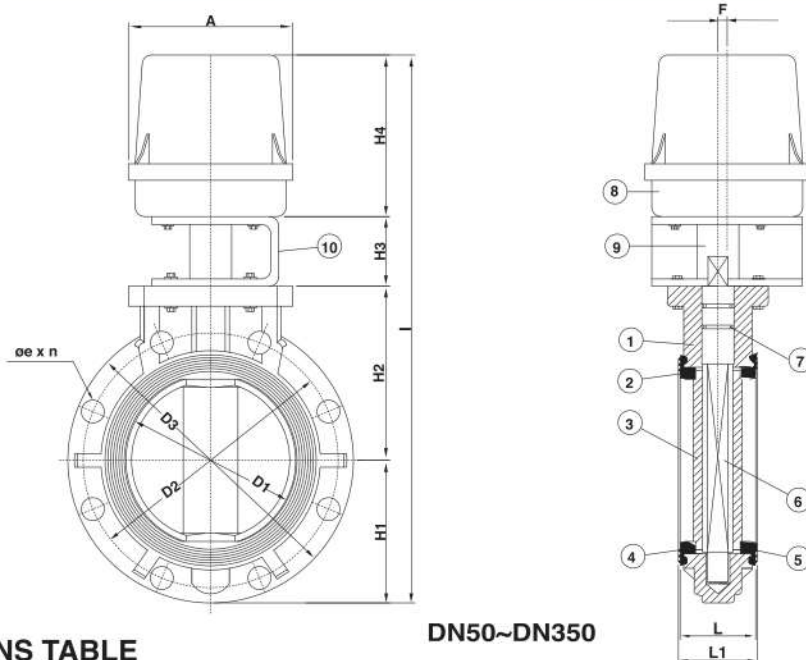
BP300 Size: 2"- 14"

Features of the Product:

1. Low horse power, low power consumption, big torsion power can be cut off automatically when control angle has been reached. It maintains at the condition of no power consumption to save energy and to reduce cost for conforming to AC110V, 220V single phase, AV 220V, 380V, 440V, 3 phase power supply.
2. They are simple, lightweight and compact, and are ideal for use where either space is limited or service and maintenance must be performed quickly. Because they require only 90 to fully open or close. Shie Yu Butterfly Valves are easily automated and are widely used as efficient throttling or flow regulating valves. Additionally, they are excellent for handling abrasive or slurry-type fluids. Of course, they are acid & alkali proof and anti-corrosion.
3. Starting speed is very stable and moisture in the pipeline can be discharged so that the service life of the pipe is increasing. The motor is equipped with temperature Protection switching valve to enable it not to be burnt out even seized with substance.
4. Various models are available for the choice of the customers. Manual control model and non-manual control model are also workable upon power outage, it can be switched manually. It is simple design with less fitting accessories. One electric wire can complete automatic control in order to save workmanship, materials, and money for the customers to attain the goal for automation.

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP, PVDF, CPVC, PPG	6	Stem	1	SUS410/304/316
2	Seat	1	EPDM, VITON, NBR, HYPALON	7	Stem O'ring	2	EPDM, VITON
3	Disc	1	UPVC, PP, PVDF, CPVC, PPG	8	Electric Actuator	1	
4	Disc O'ring(A)	2	EPDM, VITON	9	Mounting Bracket	1	SUS304
5	Disc O'ring(B)	2	EPDM, VITON	10	Coupling	1	ZINC PLATED, CARBON STEEL



DIMENSIONS TABLE

DN50~DN350

JIS															Unit: mm			
Nom. Size DN(inch)	D1	D2	D3	e	n No. of holes	L	L1	H1	H2	H3	H4	I	A	F	Test Press (kgf/cm ²)		Working Press (kgf/cm ²)	Allowed Voltage (W/A)
															Body	Seat		
50(2")	55	120	164	19	4	36.1	43.3	82	107	61	145	391	150	28	15.0	12.0	10.0	110/220
65(2-1/2")	69.6	140	185	19	4	40	46.4	92	115	61	145	408	150	28	15.0	12.0	10.0	110/220
80(3")	78	150	196	19	8	40	47.4	98	123	61	145	424	150	28	15.0	12.0	10.0	110/220
100(4")	100	175	225	19	8	48	52.4	112.5	139.5	61	145	455	150	28	15.0	12.0	10.0	110/220
125(5")	128	210	254	23	8	51.2	58.8	127	160	61	145	493	150	28	15.0	12.0	10.0	110/220
150(6")	152	240	286	23	8	51	57	143	178	71	200	593	190	23	15.0	12.0	10.0	110/220
200(8")	200	290	344	23	12	61	67.5	172	212	71	200	643	190	23	15.0	12.0	10.0	110/220
250(10")	255	350	412	25	12	102	108	206	242.7	71	200	706	190	23	15.0	12.0	10.0	110/220
300(12")	312	400	493	25	16	120	126	247	289	71	200	799	190	23	10.5	8.5	7.0	110/220
350(14")	355	460	540	25	16	123	129	270	305	71	200	835	190	23	10.5	8.5	7.0	110/220

ANSI															Unit: inch			
Nom. Size DN(inch)	D1	D2	D3	e	n No. of holes	L	L1	H1	H2	H3	H4	I	A	F	Test Press (kgf/cm ²)		Working Press (lb/in ²)	Allowed Voltage (W/A)
															Body	Seat		
50(2")	2.16	4.75	6.46	0.75	4	1.42	1.71	3.23	4.21	2.36	5.71	15.39	5.91	1.10	225	180	150	110/220
65(2-1/2")	2.74	5.50	7.28	0.75	4	1.57	1.83	3.62	4.53	2.36	5.71	16.06	5.91	1.10	225	180	150	110/220
80(3")	3.07	6.00	7.72	0.75	4	1.57	1.87	3.86	4.84	2.36	5.71	16.69	5.91	1.10	225	180	150	110/220
100(4")	3.94	7.50	8.85	0.75	8	1.89	2.06	4.43	5.49	2.36	5.71	17.91	5.91	1.10	225	180	150	110/220
125(5")	5.04	8.50	10.00	0.87	8	2.02	2.31	5.00	6.30	2.36	5.71	19.41	5.91	1.10	225	180	150	110/220
150(6")	5.98	9.50	11.26	0.87	8	2.01	2.24	5.63	7.00	2.80	7.87	23.35	7.48	0.91	225	180	150	110/220
200(8")	7.87	11.75	13.54	0.87	8	2.40	2.66	6.77	8.35	2.80	7.87	35.31	7.48	0.91	225	180	150	110/220
250(10")	10.00	14.25	16.22	0.98	12	4.02	4.25	7.87	9.25	2.80	7.87	27.79	7.48	0.91	225	180	150	110/220
300(12")	12.28	17.00	19.41	0.98	12	4.72	4.96	9.41	11.38	2.80	7.87	31.46	7.48	0.91	155	125	105	110/220
350(14")	13.976	18.75	21.26	1.14	12	4.84	5.08	10.20	12.01	2.80	7.87	32.87	7.48	0.91	155	125	105	110/220

DIN															Unit: mm			
Nom. Size DN(inch)	D1	D2	D3	e	n No. of holes	L	L1	H1	H2	H3	H4	I	A	F	Test Press (bar)		Working Press (bar)	Allowed Voltage (W/A)
															Body	Seat		
50(2")	55	125	164	18	4	36.1	43.5	82	107	61	145	391	150	28	15.0	12.0	10.0	110/220
65(2-1/2")	69.6	145	185	18	4	40.0	46.4	92	115	61	145	408	150	28	15.0	12.0	10.0	110/220
80(3")	78	160	196	18	8	40.0	47.4	98	123	61	145	424	150	28	15.0	12.0	10.0	110/220
100(4")	100	180	225	18	8	48.0	52.4	112.5	139.5	61	145	455	150	28	15.0	12.0	10.0	110/220
125(5")	128	210	254	18	8	51.2	58.8	127	160	61	145	493	150	28	15.0	12.0	10.0	110/220
150(6")	152	240	286	23	8	51	57.0	143	178	71	200	593	190	23	15.0	12.0	10.0	110/220
200(8")	200	295	344	23	8	61	67.5	172	212	71	200	643	190	23	15.0	12.0	10.0	110/220
250(10")	255	350	412	23	12	102	108	206	242.7	71	200	706	190	23	15.0	12.0	10.0	110/220
300(12")	312	400	493	23	12	120	126	247	289	71	200	799	190	23	10.5	8.5	7.0	110/220
350(14")	355	460	540	23	16	123	129	270	305	71	200	835	190	23	10.5	8.5	7.0	110/220

Standard dimensions based on PVC material.
 ✱ The flanged length tolerance is according to EN558-1:1995.
 ✱ L: The suggested length of the valve as installed on pipeline.



Other Products

Hi-Tech'S, Hi-Qualitly'S

- Material: UPVC, PP, PPG, CPVC, PVDF
- Size: 1/2"~10"



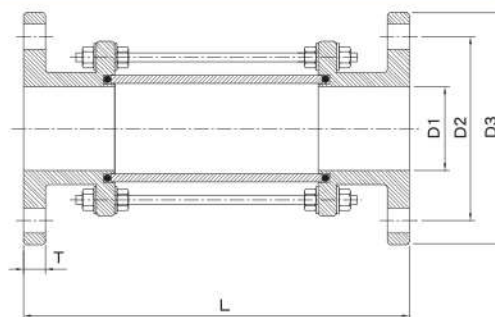


INSPECTION GLASS



EI Series

EI300
Size: 1/2"- 10"



DN15~DN250

Materials	UPVC , PP , CPVC , PPG , PVDF
SIZE	1/2", 3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 8", 10"
END CONNECTIONS	Flange ends in JIS 10K DIN ; ANSI;BS STANDARD
WORKING TEMP	UPVC: 0°~60°C , PP:-20°C~90°C , PPG: -20°C~100°C , PVDF:-40°C~120°C
FEATURES	Can be mounted horizontally or vertically internal device induces visible turbulence with minimum flow retraction

DIMENSIONS TABLE

Nom Size m/m(inch)	D1	D2				D3				L	Test Press		Working Press	
		JIS	DIN	ANSI	BS	JIS	DIN	ANSI	BS		kgf/cm ² (bar)	lb/in ²	kgf/cm ² (bar)	lb/in ²
15(1/2")	16	70	65	2.38	2.62	95	95	3.50	3.75	176	10	150	7	105
20(3/4")	20	75	75	2.76	2.88	100	105	3.86	4.00	174	10	150	7	105
25(1")	25	90	85	3.13	3.25	125	115	4.25	4.50	222	10	150	7	105
32(1-1/4")	30	100	100	3.50	3.43	135	140	4.61	4.75	222	10	150	7	105
40(1-1/2")	40	105	110	3.88	3.88	140	150	5.00	5.25	224	10	150	7	105
50(2")	50	120	125	4.74	4.50	155	165	6.47	6.00	218	10	150	7	105
65(2-1/2")	65	140	145	5.89	5.00	175	185	7.00	6.50	240	10	150	7	105
80(3")	80	150	160	6.00	5.75	185	200	7.52	7.25	238	10	150	7	105
100(4")	100	175	180	7.50	7.00	210	220	9.02	8.50	274	10	150	7	105
125(5")	125	210	210	8.50	8.25	250	250	10.00	10.00	375	5	75	3	45
150(6")	150	240	240	9.51	9.25	280	285	10.98	11.00	386	5	75	3	45
200(8")	200	290	295	11.75	11.50	330	340	13.50	13.25	420	5	75	3	45
250(10")	250	355	350	14.25	14.00	400	395	15.98	16.00	445	5	75	3	45

The dimension table is calculated based on PVC material.

✱ The valve of test pressure is calculated based on PVC PVDF materials.

The valve of test pressure for PP material is 70% based on the table.

The flanged length tolerance is according to EN558-1:1995.

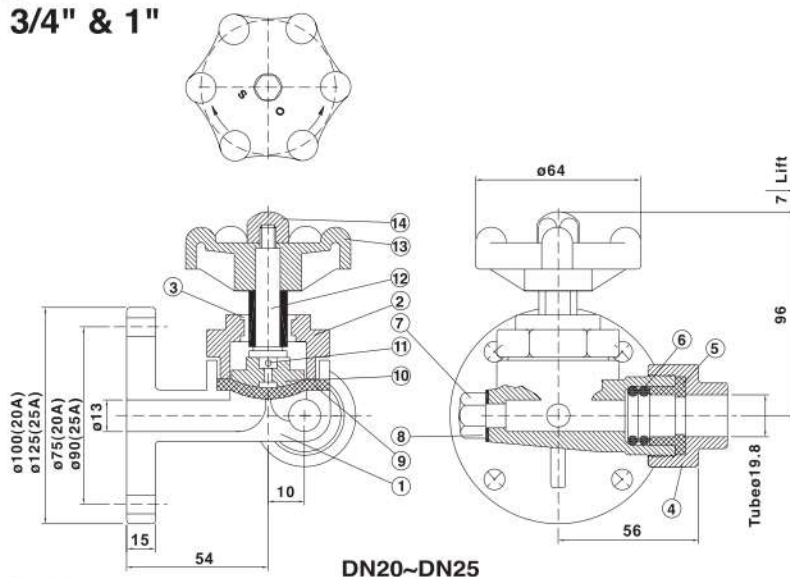


GAUGE VALVE



EG Series

EG300
Size: 3/4" & 1"



MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP, PPG, PVDF	8	Leaking Hole O'ring	1	EPDM, VITON
2	Bonnet	1	UPVC, PP, PPG, PVDF	9	Diaphragm	1	EPDM, VITON, PTFE
3	Inserted Metal Of Bonnet	1	BRASS	10	Compressor	1	BRASS
4	Tube Holder	1	UPVC, PP, PPG, PVDF	11	Set Pin	2	SUS304
5	O'ring Holder	1	UPVC, PP, PPG, PVDF	12	Stem	1	BRASS
6	Tube O'ring	2	EPDM, VITON	13	Handle	1	ABS
7	Leaking Hole Holder	1	UPVC, PP, PVDF	14	Handle Holder	1	UPVC

Flange Size	Nominal Size	Outer diameter of tube
20A-3/4"	14 m/m	20 m/m
25A-1"	14 m/m	20 m/m

※Standard dimensions based on PVC material



Flange

Hi -Tech'S, Hi-Qualitly'S

- Material: UPVC, PP, CPVC, PVDF
- Size: 1/2"~24"





TS FLANGE ONE PIECE FLANGE



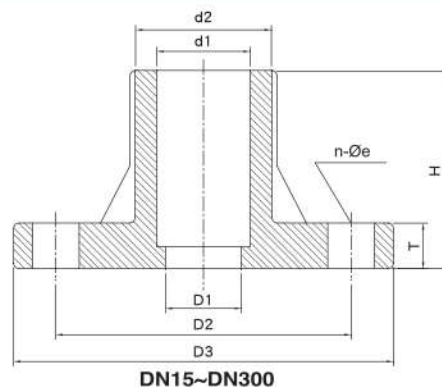
TS Series

UPVC&CPVC

FT100

Size: 1/2" - 12"

UPVC , CPVC , PP
TS-FLANGE



DN15~DN300

● DIMENSIONS TABLE

Size DN-mm	d1		d2		D1		D2		D3		H		T		n		øe	
	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS
15-1/2"	21.64	22.4	29	31	18	17	60.33	70	88.9	95	48	36	12	15	4	4	15.88	15
20-3/4"	26.97	26.45	33	35	22	21	69.85	75	98.43	100	49	43	14	15	4	4	15.88	15
* 25-1"	33.78	32.55	40	42	28	25	79.38	90	107.95	125	50	46	14	15	4	4	15.88	19
25-1"	33.78	34.55	40	42	28	28	79.38	90	107.95	125	50	46	14	15	4	4	15.88	19
* 32-1 1/4"	42.55	38.6	51	48	35	31	88.9	100	117.5	135	54	50	16	16	4	4	15.88	19
32-1 1/4"	-	42.6	-	48	-	35	-	100	-	135	-	50	-	16	4	4	-	19
40-1-1/2"	48.72	48.7	61	62	41	41	98.43	105	127	140	65	60	16	16	4	4	15.88	19
50-2"	60.78	60.8	78	73	52	51	120.65	120	152.4	155	69	69	16	20	4	4	19.05	19
65-2-1/2"	73.56	76.6	92	88	67	66	139.7	140	177.8	175	82	69	18	20	4	4	19.05	19
80-3"	89.51	89.6	103	102	78	78	152.4	150	190.5	185	81	69	18	20	4	8	19.05	19
100-4"	114.99	114.7	132	133	100	100	190.5	175	228.6	210	92	90	18	23	8	8	19.05	19
125-5"	142.06	140.85	162	159	125	126	216	210	254	250	130	112	20	23	8	8	22.23	23
150-6"	169.09	166.0	192	186	150	146	241	240	279	280	165	141	20	27	8	8	22.23	23
200-8"	219.07	218.0	238	238	194	194	298	290	343	330	166	166	29	31	8	12	22.23	23
250-10"	273.81	268.0	-	290	-	247	362	355	406	400	-	200	33	33	12	12	25	25
300-12"	324.61	319.0	-	342	-	298	432	400	483	445	-	203	35	35	12	16	25	25



VAN STONE FLANGE



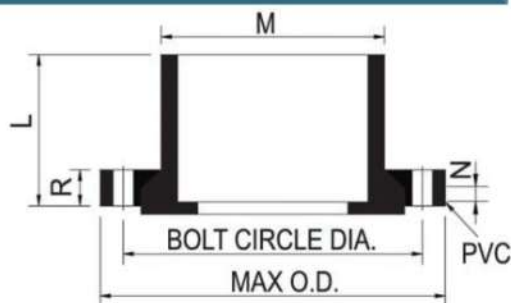
VS Series

UPVC&CPVC

VS100

Size: 1/2"- 24"

UPVC & CPVC
VAN STONE FLANGE



DN15~DN600

DIMENSIONS TABLE

Unit:inch

Size	MAX. O.D	L	M	N	R	Bolt Circle Dia.	No.of Bolt Holes	Bolt Size	Min. Bolt Length	UPVC code no.	CPVC code no.
1/2	3 -1/2	1 -1/32	1-3/16	7/32	1/2	2 -3/8	4	1/2	2	11-FT5-08-0015	41-FT5-08-0015
3/4	3-27/32	1 -1/8	1-15/32	5/16	9/16	2-25/32	4	1/2	2	11-FT5-08-0020	41-FT5-08-0020
1	4 -7/32	1 -1/4	1-23/32	5/16	9/16	3 -1/8	4	1/2	2-1/4	11-FT5-08-0025	41-FT5-08-0025
1-1/4	4 -9/16	1 -5/16	2 -1/8	9/32	9/16	3 -1/2	4	1/2	2-1/4	11-FT5-08-0032	41-FT5-08-0032
1-1/2	4-15/16	1-15/32	2 -3/8	7/16	23/32	3-29/32	4	1/2	2-1/2	11-FT5-08-0040	41-FT5-08-0040
2	5-15/16	1-19/32	2-29/32	15/32	25/32	4-23/32	4	5/8	3	11-FT5-08-0050	41-FT5-08-0050
2-1/2	6-15/16	1-29/32	3-9/16	9/16	15/16	5-15/32	4	5/8	3-1/4	11-FT5-08-0065	41-FT5-08-0065
3	7-15/32	2-7/32	4-9/32	5/8	1-1/16	5-31/32	8	5/8	3-1/4	11-FT5-08-0080	41-FT5-08-0080
4	8-29/32	2-1/16	5 -1/4	5/8	1-3/32	7-13/32	8	5/8	3-1/2	11-FT5-08-0100	41-FT5-08-0100
5	10 -1/8	2-13/16	6-11/32	19/32	1-1/8	8 -1/2	8	3/4	3-3/4	11-FT5-08-0125	41-FT5-08-0125
6	11-7/32	3 -1/4	7-9/16	19/32	1-3/8	9-17/32	8	3/4	4	11-FT5-08-0150	41-FT5-08-0150
8	13-11/16	4 -3/8	9-17/32	21/32	1-5/32	11-21/32	8	3/4	4-1/2	11-FT5-08-0200	41-FT5-08-0200
10	15-15/16	5-9/16	11-23/32	3/4	1-11/16	14-9/32	12	7/8	5	11-FT5-08-0250	41-FT5-08-0250
12	19-3/32	7 -1/4	13-3/4	23/32	1-11/16	16-15/16	12	7/8	5	11-FT5-08-0300	41-FT5-08-0300
14	21-1/16	7 -1/2	15-1/2	29/32	2	18-13/16	12	1	5-1/2	11-FT5-08-0350	41-FT5-08-0350
16	23-1/2	8 -1/2	17-23/32	31/32	2-3/8	21-5/16	16	1	6-1/2	11-FT5-08-0400	41-FT5-08-0400
18	25-1/16	10-29/32	19-31/32	1-15/16	2-3/8	22-25/32	16	1-1/4	6-1/2	11-FT5-08-0450	41-FT5-08-0450
20	27-7/32	10-11/32	22-9/32	1-3/32	2-13/32	25	20	1-1/4	7-7/16	11-FT5-08-0500	41-FT5-08-0500
24	32-3/32	11-7/16	26-7/16	31/32	2-27-32	29-1/2	20	1-3/8	8-5/16	11-FT5-08-0600	41-FT5-08-0600



WELDING FLANGE BLIND FLANGE

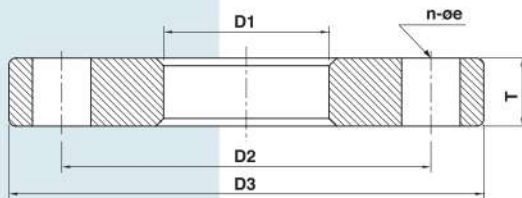


FW Series

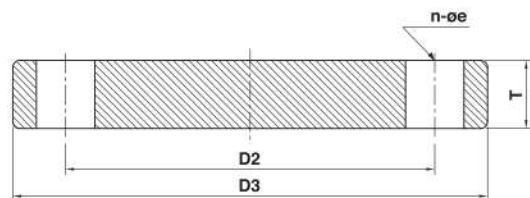
FW100(WELDING FLANGE) / FB100(BLIND FLANGE)

Size: 1/2" - 24"

UPVC, PP, CPVC, PVDF



DN15-DN600
WELDING FLANGE



DN15-DN600
BLIND FLANGE

DIMENSIONS TABLE

Non Size m/m(inch)	D1			D2			D3			T	e			n		
	JIS	ANSI	DIN	JIS	ANSI	DIN	JIS	ANSI	DIN		JIS	ANSI	DIN	JIS	ANSI	DIN
15(1/2")	22±1	22±0.4	20±1	70±0.5	60±0.5	65	95±1	89±1	95	16±1	15	16	14	4	4	4
20(3/4")	26±1	26±0.4	25±1	75±0.5	70±0.5	75	100±1	98±1	105	17±1	15	16	14	4	4	4
25(1")	32±1	34±0.4	32±1	90±0.5	79±0.5	85	125±1	108±1	115	18±1	19	16	14	4	4	4
32(1-1/4")	38±1	42±0.4	40±1	100±0.5	89±0.5	100	135±1	117±1	140	19±1	19	16	18	4	4	4
40(1-1/2")	48±1	48±0.4	50±1	105±0.5	98±0.5	110	140±1	127±1	150	19±1	19	16	18	4	4	4
50(2")	60±1	60±0.6	63±2	120±1.5	121±1.5	125	155±1	152±1	165	22±1	19	19	18	4	4	4
65(2-1/2")	76±1	76±0.6	75±2	140±1	140±1	145	175±1.5	178±1.5	185	20±1	19	19	18	4	4	4
80(3")	89±1	89±0.6	90±1	150±1	152±1	160	185±1.5	191±1.5	200	24±1	19	19	18	8	4	8
100(4")	114±1	114±0.6	110±1	175±1	191±1	180	210±1.5	229±1.5	220	24±1	19	19	18	8	8	8
125(5")	140±1.5	140±0.8	140±1.5	210±1.25	216±1.25	210	250±1.5	254±1.5	250	23±1	23	22	18	8	8	8
150(6")	165±1.5	165±1	160±1.5	240±1.25	241±1.25	240	280±1.5	279±1.5	285	23±1	23	22	23	8	8	8
200(8")	216±1.5	216±2	200±1.5	290±1.25	298±1.25	295	330±1.5	343±1.5	340	24±1	23	22	23	12	8	8
250(10")	267±1.5	267±3	250±1.5	355±1.25	362±1.25	350	400±2	406±2	395	30±2	25	25	23	12	12	12
300(12")	318±2	318±3	315±2	400±1.25	432±1.25	400	445±2	483±2	445	31±2	25	25	26	16	12	12
350(14")	370±2	370±3	355±2	445±1.25	476±1.25	460	490±2	533±2	505	31±2	25	29	26	16	12	16
400(16")	420±2	420±3.5	400±2	510±1.25	540±1.5	515	560±2	597±2	565	32±2	27	29	26	16	16	16
450(18")	470±2	470±3.5	450±2	565±1.5	578±1.5	565	620±2	635±2	620	36±2	27	32	28	20	16	20
500(20")	520±2	520±3.5	500±2	620±1.5	635±1.5	620	675±2	699±2	670	36±2	27	32	28	20	20	20
600(24")	630±2	630±3.5	630±2	730±1.5	749±1.5	725	795±2	813±2	780	28±2	33	35	28	24	20	20



SCREW FLANGE

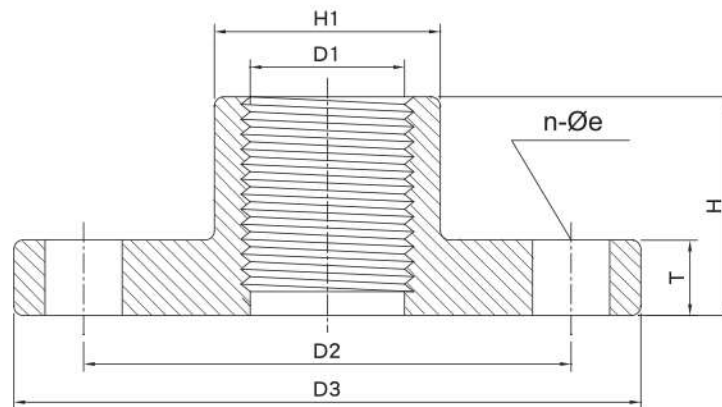


FS Series

FS200

Size: 1/2" - 4"

UPVC, PP, CPVC, PVDF



DN15~DN100

DIMENSIONS TABLE

Non Size m/m(inch)	D1			D2			D3			T	H	H1	e			n		
	JIS	ANSI	DIN	JIS	ANSI	DIN	JIS	ANSI	DIN				JIS	ANSI	DIN	JIS	ANSI	DIN
15(1/2")	PT-1/2"	NPT	R1/2"	70±0.5	60±0.5	65	95±1	89±1	95	12±1	19	35	15	16	14	4	4	4
20(3/4")	PT3/4"	NPT	R3/4"	75±0.5	70±0.5	75	100±1	98±1	105	14±1	22	44	15	16	14	4	4	4
25(1")	PT1"	NPT	R1"	90±0.5	79±0.5	85	125±1	108±1	115	14±1	22	52	19	16	14	4	4	4
32(1-1/4")	PT1-1/4"	NPT	R1-1/4"	100±0.5	89±0.5	100	135±1	117±1	140	14±1	23	56	19	16	18	4	4	4
40(1-1/2")	PT1-1/2"	NPT	R1-1/2"	105±0.5	98±0.5	110	140±1	127±1	150	16±1	23	66	19	16	18	4	4	4
50(2")	PT2"	NPT	R2"	120±0.5	121±0.5	125	155±1	152±1	165	16±1	26	84	19	19	18	4	4	4
65(2-1/2")	PT2-1/2"	NPT	R2-1/2"	140±1	140±1	145	175±1.5	178±1.5	185	16±1	28	105	19	19	18	4	4	4
80(3")	PT3"	NPT	R3"	150±1	152±1	160	185±1.5	191±1.5	200	18±1	30	118	19	19	18	8	4	8
100(4")	PT4"	NPT	R4"	170±1	191±1	180	210±1.5	229±1.5	220	18±1	33	140	19	19	18	8	8	8



Gasket

Hi -Tech'S, Hi-Qualitly'S

- Material: EPDM, PTFE, VITON
- Size: 1/2"~24"





GASKET

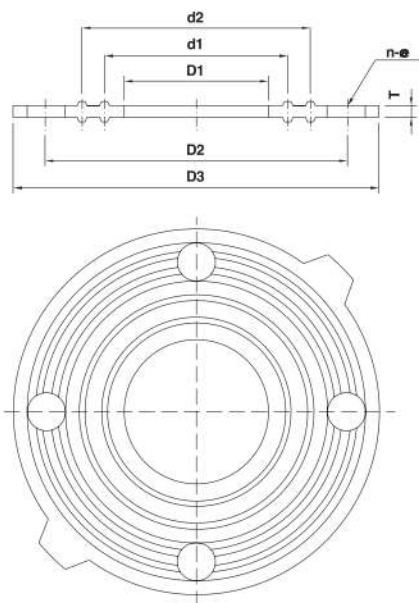


FG Series

FG100
Size: 1/2"- 24"

● **MATERIALS: EPDM, PTFE, VITON**

JIS																	Unit:mm
Nom Size m/m(inch)	D1	D2	D3	d1	d2	n	e	T	Nom Size m/m(inch)	D1	D2	D3	d1	d2	n	e	T
15(1/2")	18	70	93	26	41	4	15	3	150(6")	150	240	278	168	190	8	23	3
20(3/4")	22	75	98	32	47	4	15	3	200(8")	198	290	328	216	248	12	23	3
25(1")	28	90	123	38	53	4	19	3	250(10")	250	355	398	270	306	12	25	3
32(1-1/4")	37	100	133	50	65	4	19	3	300(12")	300	400	443	324	356	16	25	3
40(1-1/2")	41	105	138	54	69	4	19	3	350(14")	350	445	488	368	390	16	25	3
50(2")	54	120	153	68	83	4	19	3	400(16")	404	510	558	433	455	16	27	3
65(2-1/2")	69	140	173	86	101	4	19	3	450(18")	470	565	620	485	508	20	27	3
80(3")	80	150	183	98	113	8	19	3	500(20")	520	620	675	550	575	20	27	3
100(4")	102	175	208	120	138	8	19	3	600(24")	630	730	795	650	675	24	33	3
125(5")	127	210	248	145	168	8	23	3									



● MATERIALS: EPDM, PTFE, VITON

ANSI										Unit:mm							
Nom Size m/m(inch)	D1	D2	D3	d1	d2	n	e	T	Nom Size m/m(inch)	D1	D2	D3	d1	d2	n	e	T
15(1/2")	18	60.33	86.90	25	37	4	15.8	3	150(6")	152	241.30	277.40	172	198	8	22.2	3
20(3/4")	22	69.85	96.43	31	43	4	15.8	3	200(8")	204	298.45	340.90	225	255	8	22.2	3
25(1")	30	79.38	105.95	40	53	4	15.8	3	250(10")	254	361.95	404.40	275	305	12	25.4	3
32(1-1/4")	40	88.90	117.48	52	65	4	15.8	3	300(12")	304	431.80	480.60	325	355	12	25.4	3
40(1-1/2")	43	98.43	125.00	55	70	4	15.8	3	350(14")	354	476.25	531.40	375	405	12	28.5	3
50(2")	54	120.65	150.40	70	84	4	19	3	400(16")	404	539.75	594.90	425	455	16	28.5	3
65(2-1/2")	69	139.70	175.80	86	102	4	19	3	450(18")	470	575.00	635.00	500	525	16	32	3
80(3")	82	152.40	188.50	100	114	4	19	3	500(20")	520	635.00	699.00	550	575	20	32	3
100(4")	102	190.50	226.60	126	147	8	19	3	600(24")	630	749.00	813.00	650	680	20	35	3
125(5")	127	215.90	252.00	149	171	8	22.2	3									

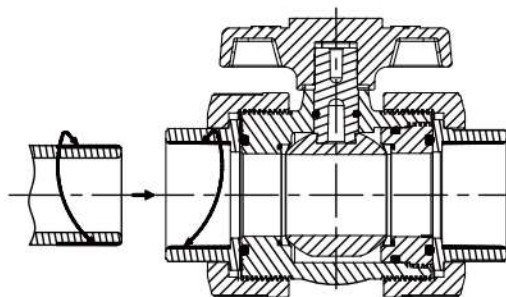
DIN										Unit:mm							
Nom Size m/m(inch)	D1	D2	D3	d1	d2	n	e	T	Nom Size m/m(inch)	D1	D2	D3	d1	d2	n	e	T
15(1/2")	18	65	93	26	41	4	14	3	150(6")	150	240	283	168	190	8	23	3
20(3/4")	22	75	103	32	47	4	14	3	200(8")	198	295	338	216	247	8	23	3
25(1")	30	85	113	38	53	4	14	3	250(10")	250	350	393	270	306	12	23	3
32(1-1/4")	40	100	133	50	65	4	18	3	300(12")	300	400	443	324	335	12	23	3
40(1-1/2")	43	110	148	54	69	4	18	3	350(14")	350	460	503	370	390	16	25	3
50(2")	54	125	163	68	83	4	18	3	400(16")	404	515	556	433	453	16	27	3
65(2-1/2")	69	145	183	86	101	4	18	3	450(18")	450	565	620	481	506	20	28	3
80(3")	80	160	198	98	112	8	18	3	500(20")	500	620	670	533	559	20	28	3
100(4")	102	175	218	120	138	8	18	3	600(24")	630	725	780	651	676	20	28	3
125(5")	127	210	248	145	166	8	18	3									



UPVC. CPVC Solvent Cementing Process

The solvent-cemented connection in thermoplastic pipes and fittings is the success or failure of the system as a whole. It requires the same professional care and attention that are given to other components of the system. There are many solvent cementing techniques published covering step-by-step procedures on how to make solvent cemented joints.

We feel that if the basic principles involved are explained, known, understood, a better understanding would be gained as to what techniques are necessary to suit particular applications, temperature conditions and variations in size and fits of pipe and fittings. Be aware at all times of good safety practices. Solvent cement for pipe and fittings are flammable so there should be no smoking or other sources of heat or flame in working or storage areas. Be sure to work only in a well-ventilated space and avoid unnecessary skin contact with all solvents.



Softening and Penetration

These areas must be softened and penetrated. This can be achieved by the cement itself, by using a suitable primer, or by the use of both primer and cement. As suitable primer will usually penetrate and soften the surfaces more quickly than the cement alone.

Sufficient Application of Cement

More than sufficient cement to fill the gap in the loose part of the joint must be applied. In addition to filling the gap, adequate cement layers will penetrate the jointing surfaces and remain fluid until the joint is assembled.

As the solvent dissipates, the cement layer and the softened surfaces will harden with a corresponding increase in joint strength. A good joint will take the required working pressure long before the joint is fully dry and final strength is obtained. In the tight (fused) part of the joint, strength will develop more quickly than in the looser (bonded) part of the joint. Information about the development of bond strength of solvent cemented joints is available.

To consistently make good joints, the following should be carefully understood:

1. The joining surfaces must be softened and made semi-fluid.
2. Sufficient cement must be applied to fill the gap between pipe and fitting.
3. Assembly of pipe and fittings must be made while the surfaces are still wet and fluid.
4. Joint strength develops as the cement dries. In the tight part of the joint the surfaces will tend to fuse together, in the loose part the cement will bond to both surfaces.

Average Cure Times

Relative Humidity 60% or Less*	Pipe Sizes 1/2"-1-1/4"		Pipe Sizes 1-1/2"-2"		Pipe Sizes 2-1/2"-8"		Pipe Sizes 10"-15"	Pipe Sizes 16"-24"
Temperature Range During Assembly and Cure Periods	Up to 160 psi	Above 160 to 370 psi	Up to 160 psi	Above 160 to 315 psi	Up to 160 psi	Above 160 to 315 psi	Up to 100 psi	Up to 100 psi
60-100°F	15 MIN.	6Hrs.	30 MIN.	12 Hrs.	1-1/2Hrs.	24 Hrs.	48Hrs.	72Hrs..
40°-60°F	20 MIN	12 Hrs.	45 MIN	24 Hrs.	4Hrs.	48 Hrs.	96Hrs.	6Days.
0°-40°F	30 MIN	48 Hrs.	1Hr.	96 Hrs.	72Hrs.	8 Days.	8Days.	14Days.

Note : In damp or humid weather allow 50% more cure time. The cure schedules shown are provided as a courtesy and are suggested as guides only. They are based on laboratory test data, and should be taken to be the recommendations of all cement manufacturers. Individual solvent cement manufacturer's recommendations for the particular cement being used should be followed. Appropriate solvent cement manufacturer for additional information. Important installer should verify for themselves that they can make satisfactory joints under varying conditions and should receive training in installation and safety procedures.

WARNING:

1. DO NOT USE COMPRESSED AIR OR GAS & TEST ANY PVC OR CPVC THERMOPLASTIC PIPING PRODUCT OR SYSTEMS.
2. DO NOT USE DEVICES PROPELLED COMPRESSED AIR OR GAS TO CLEAR SYSTEMS.



Flanged Connections

Flanged joints can be used in applications where frequent dismantling is required. PVC and CPVC flanges are available in socket, spigot and threaded configurations in a variety of styles including one piece solid style flanges and two pieces Van Stone style flanges where the bolt ring spins freely of the hub, easing bolt holes alignment during assembly. Most plastic flanges carry a maximum working pressure rating of 150 psi non-shock for water at 73°F. Care should be taken to select the proper gasket material for compatibility with the fluid being conveyed. Flange bolts should be tight enough to compress the gasket slightly and make a good seal, but not so tight as to distort the flange.

Suitable washers should be used between the bolt head and nut.

Opposite bolts should be made up in alternate sequence. Follow flange manufacturers assembly instructions, recommended bolt torque values, and bolt tightening sequence.

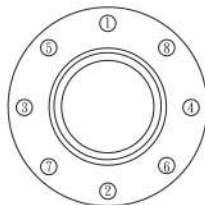
Recommended Flange Bolt Torque for Plastic Flanges

Flange Size (in.)	No. of Bolt Holes	Bolt Dia. (in.)	Min. Bolt Length (in.)	Torque ft.-lb. PSI
1/2	4	1/2	2	10-15
3/4	4	1/2	2	10-15
1	4	1/2	2-1/4	10-15
1-1/4	4	1/2	2-1/4	10-15
1-1/2	4	1/2	2-1/2	20-30
2	4	5/8	3	20-30
2-1/2	4	5/8	3-1/4	20-30
3	4	5/8	3-1/4	20-30
4	8	5/8	3-1/2	20-30
6	8	3/4	4	30-50
8	8	3/4	4-1/2	30-50
10	12	7/8	5	50-80
12	12	7/8	5	80-100
14	12	1	5-1/2	100-120
16	16	1	6-1/2	100-120
18	16	1-1/8	4-1/8	100-120
20	20	1-1/8	5-1/2	100-120
24	20	1-1/4	5-1/2	100-120

Bolt Torque

Recommended Bolt torque is shown above. Threads should be cleaned and well lubricated. Actual field conditions may require variations in these recommendations.

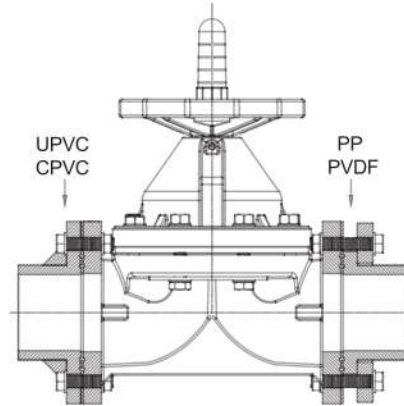
Flange Bolt Tightening Sequence



CAUTION UNNECESSARY OVER TORQUING WILL DAMAGE THE FLANGE.

Gaskets

1. Use the raised type gasket.
2. Prohibit to use rubber, teflon flat type gasket



Note: While the valve flanged connection, should avoid the torque too much to transform the flange to cause the leaking.

Flange Make-up

Follow proper solvent cementing and / or threaded component procedures as applicable to join the flange to the pipe. Once a flange is joined to pipe, the method for joining two flanges is as follows:

A. Piping runs joined to the flanges must be installed in a straight-line position to the flange to avoid stress at the flange due to misalignment. Piping must also be secured and supported to prevent lateral movement that can create stress and damage the flange.

B. With gasket in place, align the bolt holes of the mating flanges by rotating the ring into position.

C. Insert all bolts, washers (two standard flat washers per bolt), and nut

D. Make sure the faces of the mating surfaces are flush against the gasket prior to bolting down the flanges.

E. Tighten the nuts by hand until they are snug. Establish uniform pressure over the flange face by tightening the bolts in 5 ft.-lbs. increments according to the sequence shown in the diagram, following a 180° opposing sequence.

F. Care must be taken to avoid "bending" the flange when joining a flange to a "raised face" flange, or a wafer-style valve. Do not use bolts to bring together improperly mated flanges.

Specified minimum bolt lengths are based on the use of two Flanges, two standard flat washers, standard nut and 1/8" thick elastomer full-face gasket. Mating with other brands or accessories may require variation. Bolts and gaskets are not supplied with flanges.

Actual field conditions may require a variation in these recommendations.

The above recommendations are considered general and are provided as a courtesy. Follow flange component manufacturers assembly instructions to ensure the highest system integrity.