BUTTERFLY VALVE ISO5211



CE 0038 ISO9000

The valve body shall be one-piece wafer or lug design with extended neck to allow for 2”~24” of piping insulation, have flange hole drilling per international flange standards and be provided with a non-corrosive bushing and self-adjusting stem seal. Flange locating holes shall be provided on wafer and lug bodies to allow for quick and precise alignment during valve installation. The valve disc edge and hub on metal discs shall be spherically machined and hand polished for minimum torque and maximum sealing capability. The valve stem shall be one-piece design and be mechanically retained in the body neck and no part of the stem shall be exposed to the line media. The seat shall totally encapsulate the body isolating the body from the line media and no flange gaskets shall be required. The wafer and lug valve shall be rated for bubble-tight shut-off for bidirectional service to 16 Bar on sizes 2”-12” (50mm-300mm) and to 10Bar on sizes 14”-24” (350mm-600mm). The valve shall be tested for tight shut-off to 110% of the rated pressure. The Valve shall have the following approvals and certifications: CE/PED Certification, ANSI 61- 2008 (Potable Water) Certification, SIL, ABS, Bureau Veritas, DNV, ISO9001,API,







BUTTERFLY VALVE ISO5211

Max working pressure

DN50-DN300 16Bar

Flange PN10 PN16 150LB JIS10K AS"D""E"

DN350-DN600 16Bar

Flange PN10 PN16 150LB JIS10K AS"D""E"

Design

EN593 API 609 BS5155 EN1092 ISO5211

Face to Face

DIN558-1 API609 DIN3202 ISO5752 BS5155

Testing

EN 12266-1 ISO5208 API598



Body

Material	Referencesstandard	Coating
Cast iron	GG20 GG25 A126	Epoxy Ral 5005
Ductile iron	GGG40 GGG45 GGG50 A536 A395	Epoxy Ral 5005
Carbon steel	WCB WCC LCC LCB	Epoxy Ral 7011
Stainless steel	CF8 CF8M CF3 CF3M SAF2507 SAF2205	
Aluminuim-bronze	C9540 C95500 C95800	

Disc

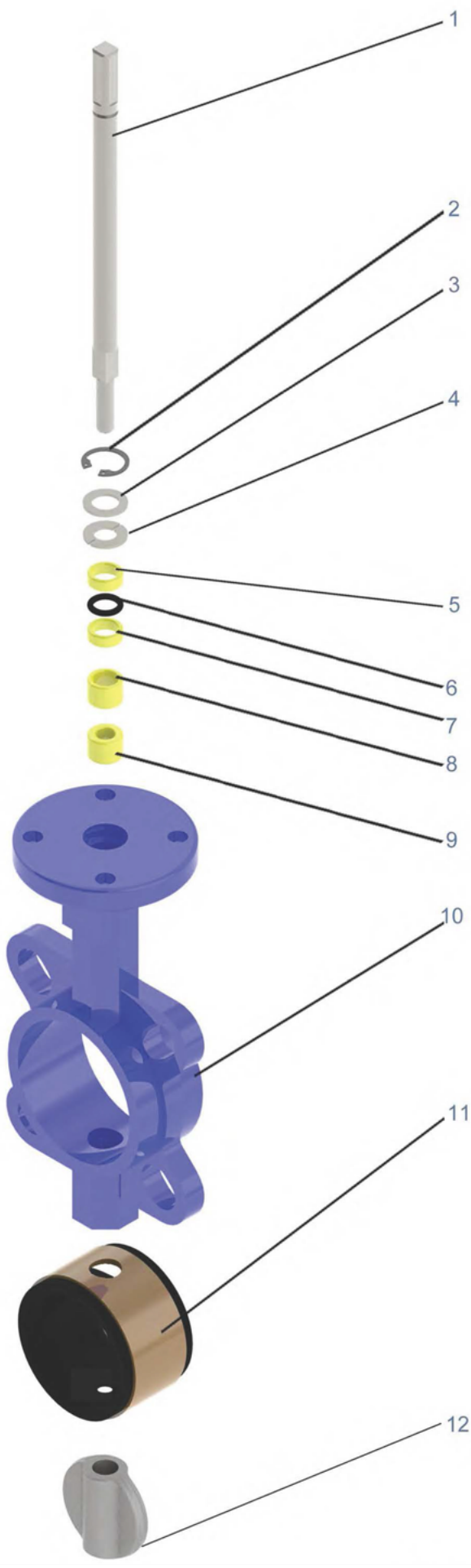
Material	References	Standard coating
Ductile iron	GGG40 GGG45 GGG50 A536	Nickel Brass-Nikle
Carbon steel	WCB WCC LCC LCB	Nickel Brass-Nikle
Stainless steel	CF8 CF8M CF3 CF3M SAF2507 SAF2205	
Aluminuim-bronze	C95400 C95500 C95800	

Body Rubber Seat

References	Desigation	Trade Name	Working temp	Applications
NBR	Nitrile Rubber	BUNA-N	-25/+100	Oils ,Hydrocarbons ,Gas, Air ,Water
EPDM	Copolymer	EPDM	-35/+130	Water ,Sea Water,Steam,Diluted Acids
FKM	Fluoroelastomer	VITON	-20/+200	Oils, Hydrocarbons, Acids
CR	Polychloroprene	NEOPRENE	-20/+100	Alkail, Bases,Water
NR	Natural Rubber	NR	-40/+80	Glycols,Abrasive media
MVQ	Sillicon Rubber	SR	-60/+190	Water,food,Drinks
CSM	Chlorosulfonate Polychloroprene	HYPALON	-20/+125	Acids,mineral bases,Alcohols,Hydrocarbons
PTFE	PolyTetraFluoroEthyl ene	TEFLON	-180/+260	Acidity Alkaline

BUTTERFLY VALVE ISO5211

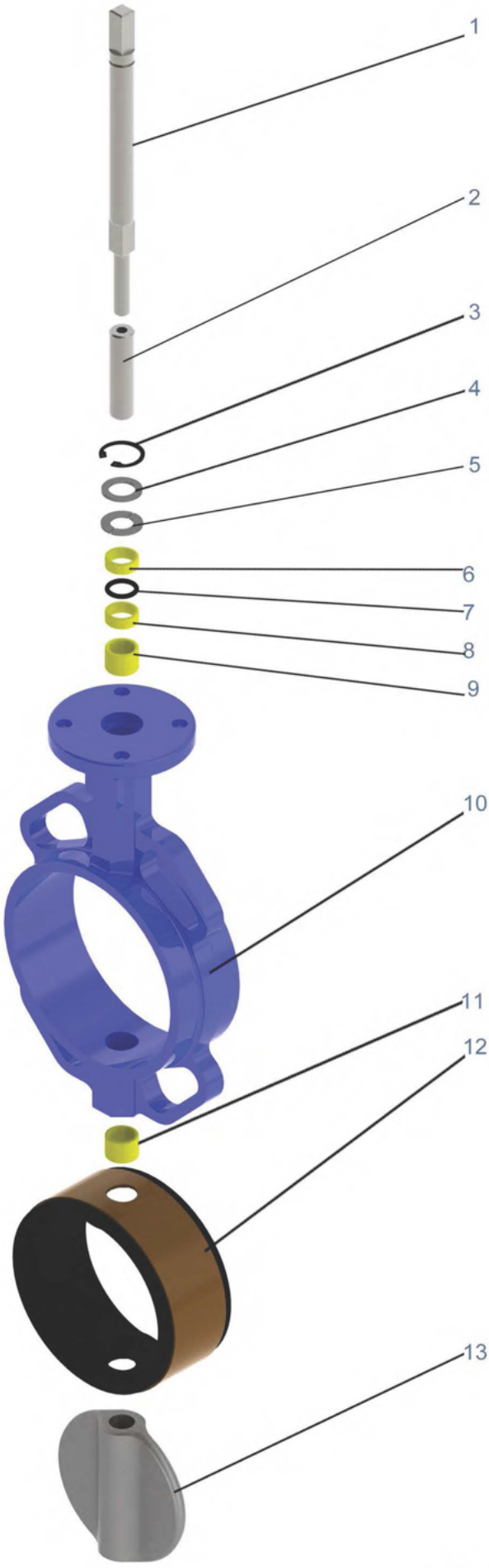
Main Spare Part Material Quality（DN50-DN80）



1	Shaft	SS410 SS304 SS431 SS316 MONEL K500 17-4PH C63000 C92200 2507 2205
2	Retaining Ring	Sk7
3	Thrust Washer	Stainless steel Carbon Steel
4	Shaft Retainer	Stainless steel Carbon Steel
5	Short Bushing	PTFE
6	“O” Ring	NBR VITON
7	Short Bushing	PTFE
8	Long Bushing	PTFE
9	Long Bushing	PTFE
10	Body	GG20 GG25 GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95800 C95400
11	Body seat	NBR(BUNA) EPDM HEPDM FKM(VITON) Polychloroprene Natural Rubber Sillicon Rubber
12	Disc	GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95800

BUTTERFLY VALVE ISO5211

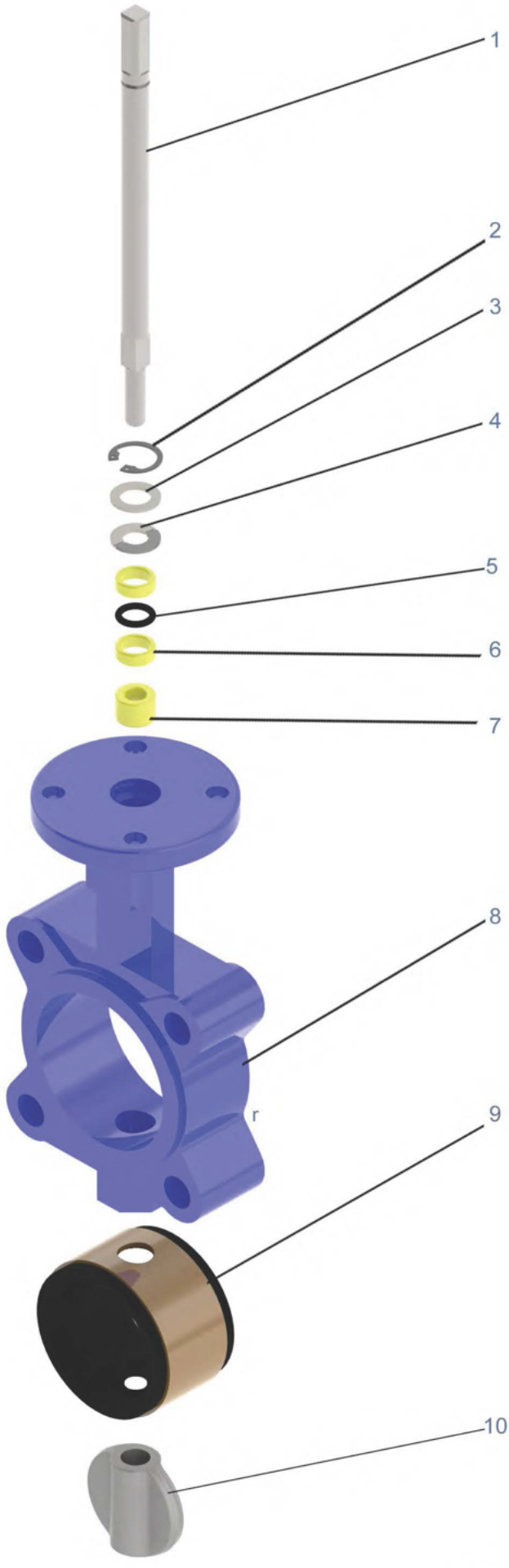
Main Spare Part Material Quality（DN100-DN300）



1	Up Shaft	SS410 SS304 SS431 SS316 MONEL K500 17-4PH C63000 C92200 2507 2205
2	Down Shaft	MONEL K500 17-4PH C63000 C92200 2507 220
3	Retaining Ring	Sk7
4	Thrust Washer	Stainless steel Carbon Steel
5	Shaft Retainer	Stainless steel Carbon Steel
6	Short Bushing	PTFE
7	"O"Ring	NBR VITON
8	Short Bushing	PTFE
9	Long Bushing	PTFE
10	Body	GG20 GG25 GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95800 C95400
11	Long Bushing	PTFE
12	Body seat	NBR(BUNA-N) EPDM HEPDM FKM(VITON) Polychloroprene Natural Rubber Sillicon Rubber
13	Disc	GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95800

BUTTERFLY VALVE ISO5211

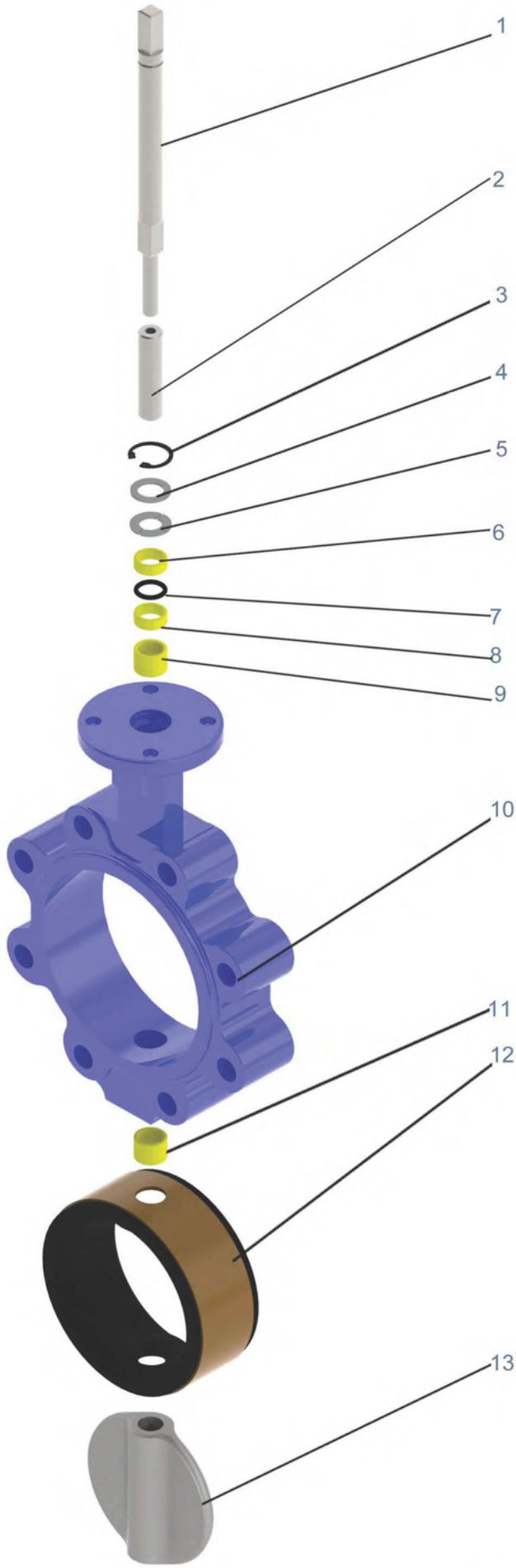
Main Spare Part Material Quality（DN50-DN80）



1	Shaft	SS410 SS304 SS431 SS316 MONEL K500 17-4PH C63000 C92200 2507 2205
2	Retaining Ring	Sk7
3	Thrust Washer	Stainless steel Carbon Steel
4	Shaft Retainer	Stainless steel Carbon Steel
5	"O"Ring	NBR VITON
6	Short Bushing	PTFE
7	Long Bushing	PTFE
8	Body	GG20 GG25 GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95800 C95400
9	Body seat	NBR(BUNA) EPDM HEPDM FKM(VITON) Polychloroprene Natural Rubber Sillicon Rubber
10	Disc	GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95800

BUTTERFLY VALVE ISO5211

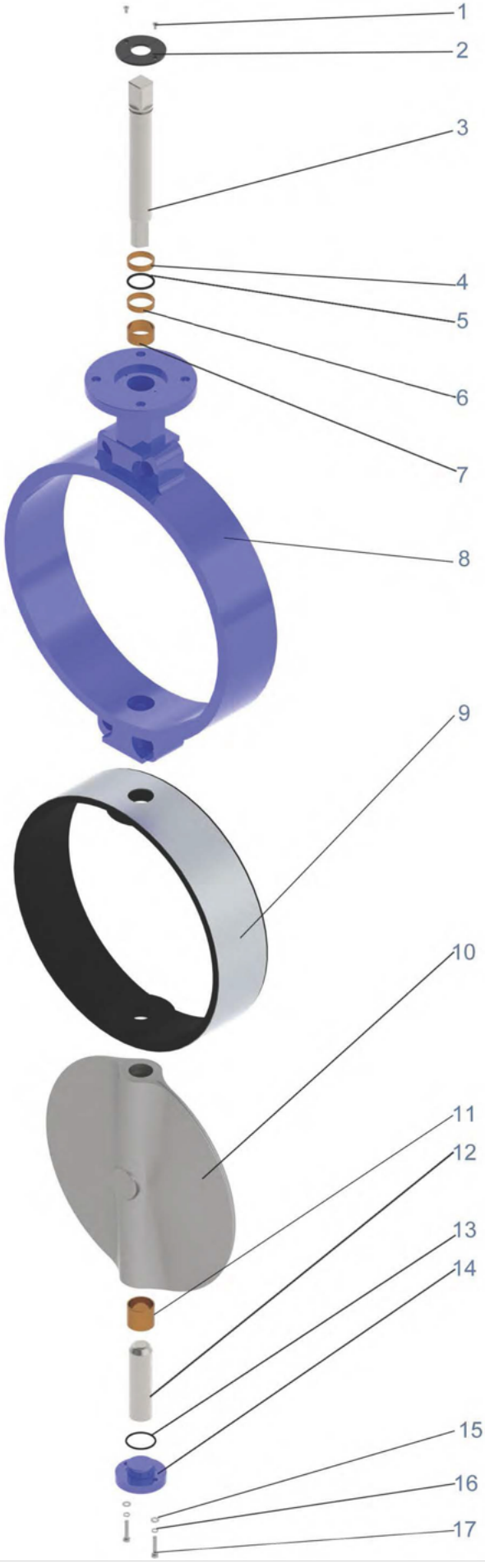
Main Spare Part Material Quality（DN100-DN300）



1	Up Shaft	SS410 SS304 SS431 SS316 MONEL K500 17-4PH C63000 C92200 2507 2205
2	Down Shaft	MONEL K500 17-4PH C63000 C92200 2507 220
3	Retaining Ring	Sk7
4	Thrust Washer	Stainless steel Carbon Steel
5	Shaft Retainer	Stainless steel Carbon Steel
6	Short Bushing	PTFE
7	"O"Ring	NBR VITON
8	Short Bushing	PTFE
9	Long Bushing	PTFE
10	Body	GG20 GG25 GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95800 C95400
11	Long Bushing	PTFE
12	Body seat	NBR(BUNA-N) EPDM HEPDM FKM(VITON) Polychloroprene Natural Rubber Sillicon Rubber
13	Disc	GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95800

BUTTERFLY VALVE ISO5211

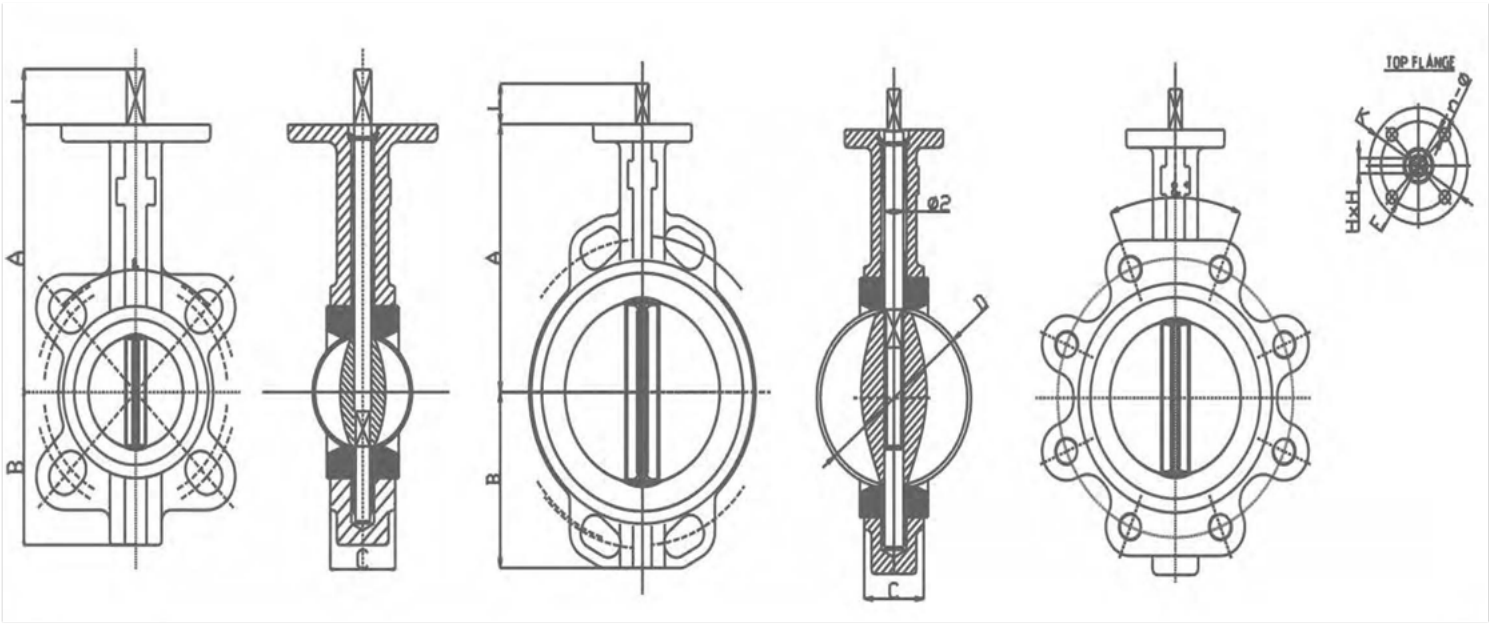
Main Spare Part Material Quality (DN350-DN600)



1	Screw	Stainless Steel
2	Retainer Ring	Q235
3	Shaft	SS410 SS304 SS431 SS316 C63000 Monel
4	Short Bushing	Bronze
5	"O"Ring	NBR EPDM
6	Short Bushing	Bronze
7	Long Bushing	Bronze
8	Body	GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95800 C95400
9	Body Seat	NBR(BUNA-N) EPDM FKM(VITON) Polychloroprene Natural Rubber Sillicon Rubber
10	Disc	GGG40 GGG45 GGG50 CF8 CF8M CF3 CF3M C95800 C95400 WCB WCC LCC LCB
11	Long Bushing	Bronze
12	Down Shaft	SS410 SS304 SS316 SS431 C63000 Monel
13	"O"Ring	NBR EPDM
14	End Cover	GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95800 C95400
15	Gasket	Stainless Steel
16	Spring Washer	Stainless Steel
17	Screw	Stainless Steel

BUTTERFLY VALVE ISO5211

Drawing (50-300)



Outline Dimensions &Weight

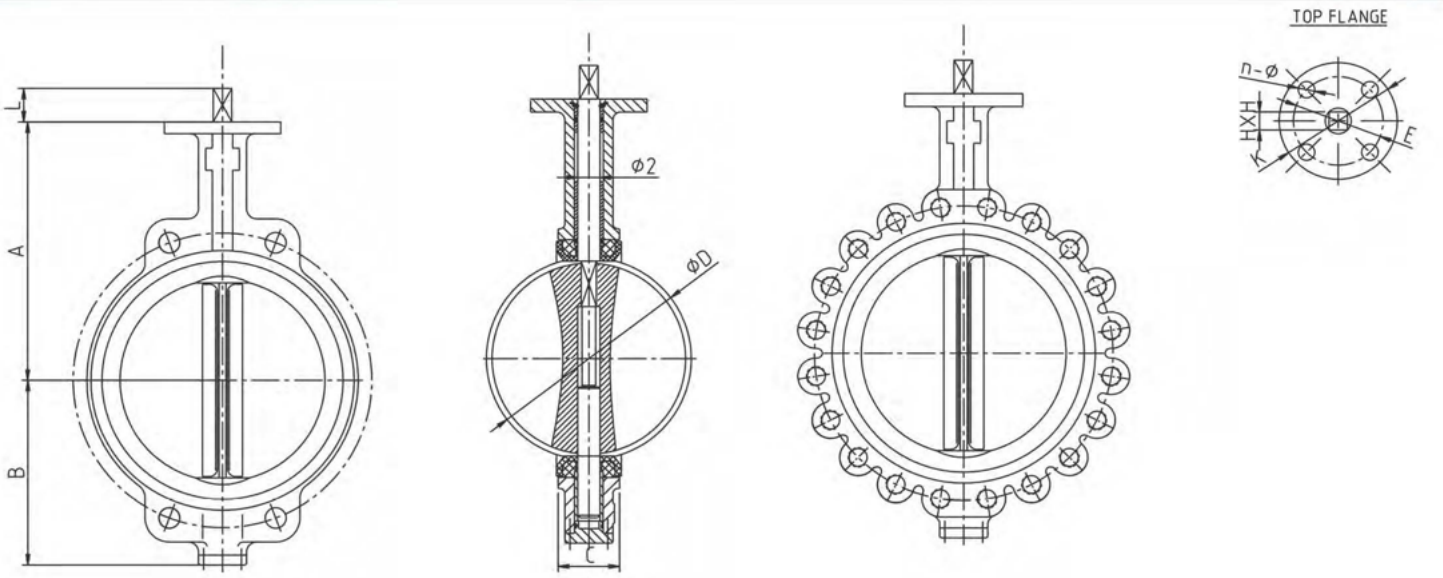
Size(mm)	A	B	C	D	Φ2	ISO5211	K	E	n-Φ	L	H*H	A (Kg)	LT (Kg)
50	140	80	42	52.9	12.6	F07	90	70	4-Φ10	28	11*11	2.2	3.8
65	150	89	44.7	64.5	12.6	F08	90	70	4-Φ10	28	11*11	2.5	4.2
80	158	95	45.2	78.8	12.6	F07	90	70	4-Φ10	28	11*11	2.9	4.7
100	176	114	52.1	104	15.77	F07	90	70	4-Φ10	28	11*11	4.3	9
125	190	127	54.4	123.3	18.92	F07	90	70	4-Φ10	28	14*14	6.1	10.9
150	212	139	55.8	155.6	18.92	F07	90	70	4-Φ10	28	14*14	7.8	14.2
200	235	175	60.6	202.5	22.1	F10	125	102	4-Φ12	40	17*17	12.2	18.2
250	265	203	65.6	250.5	28.45	F10	125	102	4-Φ12	40	22*22	18.8	26.8
300	305	242	76.9	301.6	31.6	F10	125	102	4-Φ12	40	22*22	28.7	40

Connection Dimensions

	Outer Diameter of flange				Diameter of center Circle				Number and Diameter of bolt Holes			
DN	150LB	PN10	PN16	JIS10K	150LB	PN10	PN16	JIS10K	150LB	PN10	PN16	JIS10K
50	150	165	165	155	120.7	125	125	120	4-19	4-18	4-18	4-19
65	180	185	185	175	139.7	145	145	140	4-19	4-18	4-18	4-19
80	190	200	200	185	152.4	160	160	150	4-19	8-18	8-18	8-19
100	230	220	220	210	190.5	180	180	175	8-19	8-18	8-18	8-19
125	255	250	250	250	215.9	210	210	210	8-22	8-18	8-18	8-23
150	280	285	285	280	241.3	240	240	240	8-22	8-23	8-23	8-23
200	345	340	340	330	298.5	295	295	290	8-22	8-23	12-23	12-23
250	405	395	405	400	362	350	355	355	12-26	12-23	12-26	12-25
300	485	445	460	445	431.8	400	410	400	12-26	12-23	12-26	16-25

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Drawing(DN350-DN600)



Outline Dimensions &Weight

Size(mm)	A	B	C	D	Φ2	ISO5211	K	E	n-Φ	L	H*H	A (Kg)	LT (Kg)
350	363	267	76.5	333.5	31.6	F10	125	102	4-Φ12	40	22*22	41.3	56
400	400	309	85.7	389.6	33.15	F14	175	140	4-Φ18	55	27*27	61	96
500	480	360	130.28	491.6	41.15	F14	175	140	4-Φ18	55	36*36	128	202
600	562	459	151.36	592.5	50.65	F16	210	165	4-Φ22	60	36*36	188	270

Connection Dimensions

	Outer Diameter of flange				Diameter of center Circle				Number and Diameter of bolt Holes			
DN	150LB	PN10	PN16	JIS10K	150LB	PN10	PN16	JIS10K	150LB	PN10	PN16	JIS10K
350	535	505	520	490	476.3	460	470	445	12-29	16-23	16-26	16-25
400	595	565	580	560	539.8	515	525	510	16-29	16-26	16-30	16-27
450	635	615	640	620	577.9	565	585	565	16-32	20-26	20-30	20-27
500	700	670	715	675	635	620	650	620	20-32	20-26	20-33	20-27
600	815	780	840	745	749.3	725	770	730	20-35	20-30	20-36	24-33

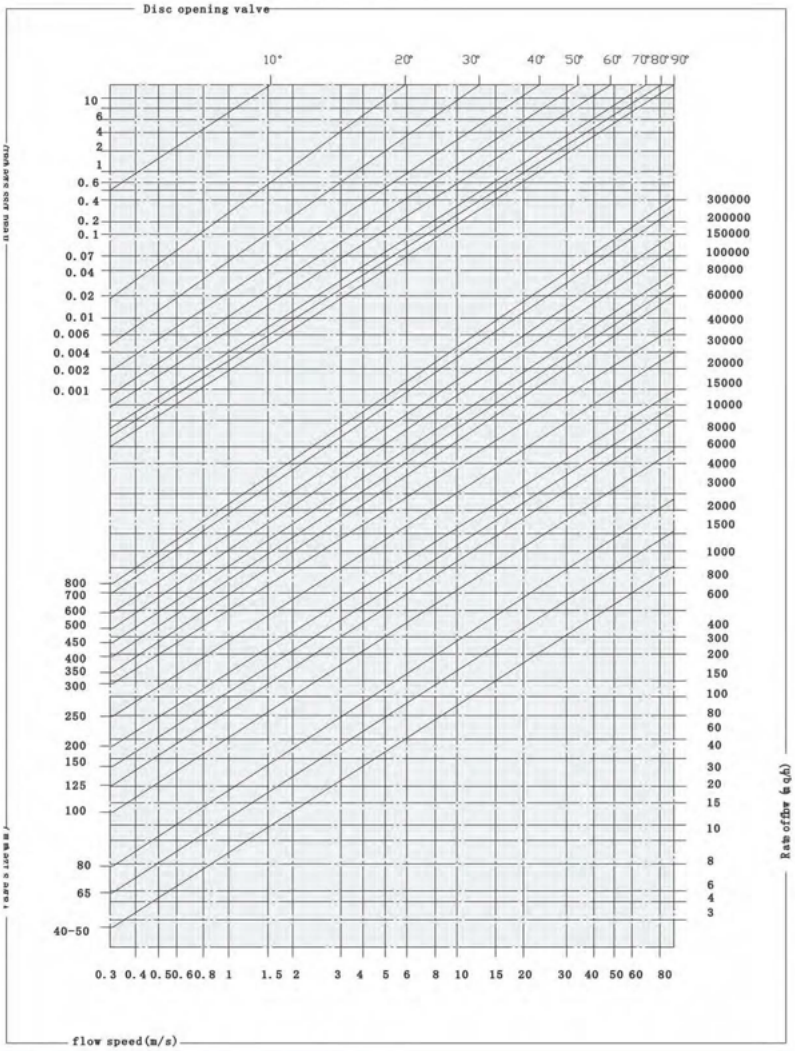
Torque values-Nm

SIZE		APPICATION IN WATER			APPICATION IN AIR		
mm	inch	Deltap 6 bar (Nm)	Deltap 10 bar (Nm)	Deltap 16 bar (Nm)	Deltap 6 bar (Nm)	Deltap 10 bar (Nm)	Deltap 16 bar (Nm)
DN50	2	12	13	14	14	15	15
DN65	2 ½	14	16	18	17	19	22
DN80	3	21	23	24	24	27	29
DN100	4	35	39	42	41	46	53
DN125	5	55	61	66	74	82	90
DN150	6	90	100	109	158	175	205
DN200	8	165	183	204	204	227	252
DN250	10	274	304	343	362	402	444
DN300	12	410	455	521	550	611	708
DN350	14	480	600	960	1200	1500	2400
DN400	16	710	920	1500	1775	2300	3750
DN450	18	955	1260	2000	2388	3150	5000
DN500	20	1200	1600	2500	3000	4000	6250
DN600	24	2000	2600	4100	5000	6500	10250

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Head losses

Notes:Values indicated in this page is only for information



Formulae for calculation of rate flow

Liquids: $Q = \frac{KV}{\sqrt{\frac{PS}{\Delta P}}}$

Q rate of flow (m3/h)

PS specific gravity (water=1)

ΔP pressure drop (bar)

Gas: $Q = 28.5 \frac{KV}{\sqrt{\frac{PS}{P_2 \cdot \Delta P}}}$

Q rate of flow (m3/h)

PS specific gravity (air=1)

ΔP pressure drop (bar)
(less than 1/2 inlet pressure)

P2 outlet pressure

Steam: $Q = 22.5 \cdot KV \cdot \sqrt{P_2 \cdot \Delta P}$

Q rate of flow (Kg/h)

ΔP pressure drop (bar)
(less than 1/2 inlet pressure)

P2 outlet pressure

Calculation of the rate of flow equivalent to H2O:

For different liquid, gas or steam head losses are determined by equivalent water of flow, as follosw:

Qe equivalent water flow
(mc/l o l/s)

Q fluid flow
(mc/l o l/s)

d fluid specific gravity
(Kg/mc)

Values KV (CV=1.16KV)

Size	Flow in Gpm@1 PSI P@ Various Disc Angles								Full 90°
(mm)	10°	20°	30°	40°	50°	60°	70°	80°	Open
50	0.1	5	12	24	45	64	90	125	135
65	0.2	8	20	37	65	98	144	204	220
80	0.3	12	22	39	70	116	183	275	302
100	0.5	17	36	78	139	230	364	546	600
125	0.8	29	61	133	237	392	620	930	1022
150	2	45	95	205	366	605	958	1437	1579
200	3	89	188/	408	727	1202	1903	2854	3136
250	4	151	320	694	1237	2047	3240	4859	5340
300	5	234	495	1072	1911	3162	5005	7507	8250
350	6	338	715	1549	2761	4568	7230	10844	11917
400	8	464	983	2130	3797	6282	9942	14913	16388
450	11	615	1302	2822	5028	8320	13168	19752	21705
500	14	971	1674	3628	6465	10698	16931	25396	27908
600	22	1222	2587	5605	9989	16528	26157	39236	43116

BUTTERFLY VALVE ISO5211

Installation Instructions







The butterfly valve can be installed on the pipeline, which is at any angle.

1.The valve should be installed in the location being sure to provide convenient operation, maintenance and replacement.

2.As mounting the butterfly valve, fail to consider flow direction of mediums in pipeline, that is to say, the valve can be used in double way.

3.Before installation, the butterfly valve should be stored in ware house and prevent it from moisture and in so doing, the disc should be kept to open at an angle of 15 degree.

4.Before installation, the following processes should be completed:

(1)Check carefully and confirm the operation condition of the valve is in line with the technical specification and requirements.

(2)Clean the disc sealing area and body sealing completely. It is not permitted to open the disc before cleaning.

(3)Check and confirm the handle is strongly collected to the flange and stem.

5.As mounting the butterfly valve in pipeline, the load for tightening connection bolts should be uniformed.

6.After installation, the disc must be opened in the case of the strength pressure test on pipeline being carried out.

7.After being installed, the valve should be examined regularly. The main item to be checked are as follows:

(1)Whether the valve seat and 'O' sealing ring have been damaged.

(2)Check the sealing effects of the disc sealing area.

(3)After the valve was examined and assembled, no scuffing happens at the time of on-off rotation.

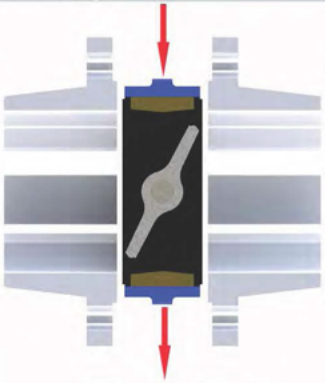
(4)After the valve was examined and assembled, the sealing test should be carried out as the introduction.

(5)After each examination, detailed records should be filed for reference.

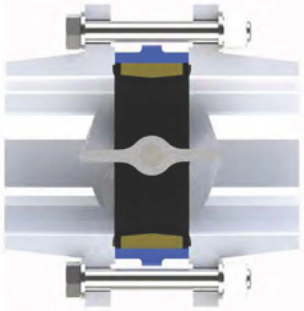
BUTTERFLY VALVE ISO5211

INSTALLATION

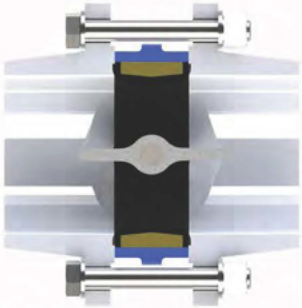
Assembly



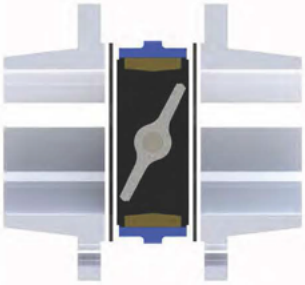
1 Leave a space between flanges so that valve can be easily inserted and re-moved .and more the valve in accordance with the arrow



2 Open completely the valve before tightening flanges



3 Tighten bolts till flanges are in contact with valve body

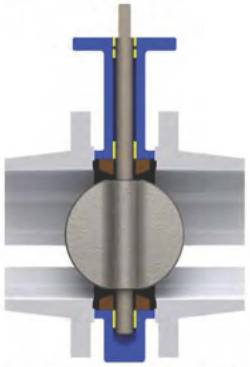


4 NOTE: do not insert other packing between flange and valve

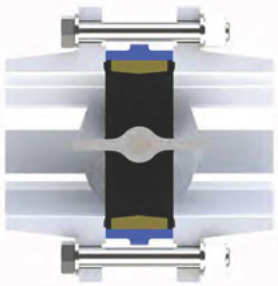
NOTE:Weld the pipe only in spots with the valve between flanges. Remove the valve before finishing welding to aviod that heat damage the seat， Clean carefully the welding to avoid that slags damage the seat

Installation for powders and muddy fluids

In case of use with powders or muddy fluids,install the valve with horizontal rotation axis,to allow sediments to flow easily on opening



Wrong
Vertical rotation axis



Right
Horizontal rotation axis

End piping installation

When valves are installed end of piping,a counterflange as per dwg type B is needed to secure tightness at max peressure，



Type A installation without end piping



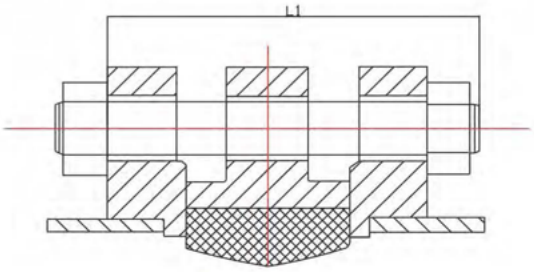
Type B installation with end piping

Pressure（max）：
Type B installation is 16 Bar

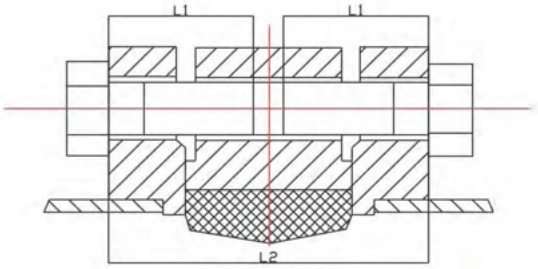
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Length & Quantity of Bolts for Valve Installation

Bolt Connection of Wafer Butterfly Valve



Bolt Connection of Lug Butterfly Valve



2L1<L2

EN1092-1 PN10/16 ISO7005 PN10/16

size	1.0Mpa					1.6Mpa				
	Stud Bolt for Type of wafer valve			Hexagon Head Bolt for Type of Lug valve		Stud Bolt for Type of wafer valve			Hexagon Head Bolt for Type of Lug valve	
inch	Qty	Dia×L1	Length	Qty	Dia×L1	Qty	Dia×L1	Length	Qty	Dia×L1
50	4	M16×110	130	4×2	M16×40	4	M16×110	130	4×2	M16×40
65	4	M16×120	140	4×2	M16×45	4	M16×120	140	4×2	M16×45
80	8	M16×120	140	8×2	M16×45	8	M16×120	140	8×2	M16×45
100	8	M16×130	150	8×2	M16×50	8	M16×130	150	8×2	M16×50
125	8	M16×130	150	8×2	M16×50	8	M16×130	150	8×2	M16×50
150	8	M20×140	165	8×2	M20×50	8	M20×140	165	8×2	M20×50
200	8	M20×150	175	8×2	M20×55	12	M20×150	175	12×2	M20×55
250	12	M20×160	185	12×2	M20×60	12	M24×160	185	12×2	M24×60
300	12	M20×170	195	12×2	M20×65	12	M24×170	195	12×2	M24×65
350	16	M20×170	195	16×2	M20×65	16	M24×170	195	16×2	M24×65
400	16	M24×190	220	16×2	M24×75	16	M27×190	220	16×2	M27×75
450	20	M24×220	250	20×2	M24×80	20	M27×220	250	20×2	M27×80
500	20	M24×260	290	20×2	M24×90	20	M30×260	290	20×2	M30×90
600	20	M27×290	324	20×2	M27×100	20	M33×290	324	20×2	M33×100

ASME B 16.5 150LB JIS B2220 10K

size	150LB					10K				
	Stud Bolt for Type of wafer valve			Hexagon Head Bolt for Type of Lug valve		Stud Bolt for Type of wafer valve			Hexagon Head Bolt for Type of Lug valve	
inch	Qty	Dia×L1	Length	Qty	Dia×L1	Qty	Dia×L1	Length	Qty	Dia×L1
50	4	5/8 "×1	130	4×2	5/8 "×40	4	M16×110	130	4×2	M16×40
65	4	5/8 "×1	140	4×2	5/8 "×45	4	M16×120	140	4×2	M16×45
80	4	5/8 "×1	140	4×2	5/8 "×45	8	M16×120	140	8×2	M16×45
100	8	3/4 "×1	150	8×2	3/4 "×50	8	M16×130	150	8×2	M16×50
125	8	3/4 "×1	150	8×2	3/4 "×50	8	M20×130	150	8×2	M20×50
150	8	3/4 "×1	165	8×2	3/4 "×50	8	M20×140	165	8×2	M20×50
200	8	3/4 "×1	175	8×2	3/4 "×55	12	M20×150	175	12×2	M20×55
250	12	7/8 "×1	185	12×2	7/8 "×60	12	M22×160	185	12×2	M22×60
300	12	7/8"×17	195	12×2	7/8"×65	16	M22×170	195	16×2	M22×65
350	12	1"×170	195	12×2	1"×65	16	M22×170	195	16×2	M22×65
400	16	1"×190	220	16×2	1"×75	16	M24×190	220	16×2	M24×75
450	16	9/8"×22	250	16×2	9/8"×80	20	M24×220	250	20×2	M24×80
500	20	9/8"×26	290	20×2	9/8"×90	20	M24×260	290	20×2	M24×90
600	20	5/4"×29	324	20×2	5/4"×100	24	M30×290	324	24×2	M30×100

BUTTERFLY VALVE ISO5211

Work principle

This product mainly consists of body, stem, disc, seat AL-Bronze bushings etc. The rotation of actuating device makes stem and disc revolved, which ensures on-off operations and flow control.

The rotation of the actuating device ensures dependability and position disc control and position disc control and water flow control. Rotate handle wheel clockwise, the valve is close.

Features

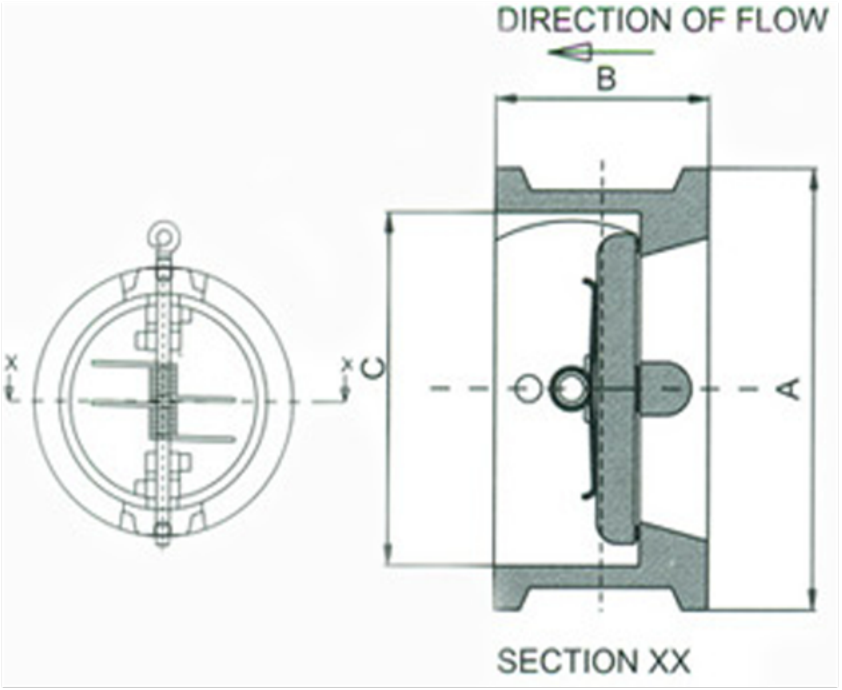
1.Small in size and light in weight. Easy installation and maintenance. It can be mounted wherever needed.
2.Simple and compact construction, quick 90degrees on-off operation.
3.Minimized operating torque, energy saving.
4.Bubbles-tight sealing with no leakage under the pressure testing
5.Wide selection of materials, applicable for various medium.
6.Long service life. Standing the test of tens of thousands opening/closing operations.
7.Flow curve tending to straight line. Excellent regulation performance.

Trouble & remedy

Trouble	cause	remedy
Leakage in sealing area	Disc sealing area or body sealing seat scratched, disc is not closed completely. Hexagonal socket head bolts on clamping ring are not tightened completely.	Repair the disc sealing replace repair the body sealing seat, adjust actuator to close the disc completely, tighten loosed hexagonal socket head bolts.
Leakage in shaft end	The seat or The 'O' ring is not pressed completely.	Replace the body sealing seat
Leakage in joint area between valve face and relevant flange on pipeline	Connection bolts are not screwed up uniformly.	Tighten the connection bolts evenly.

DO-U CHECK VALVE





WAFER BUTTERFLY CHECK VALVE

Characteristic of Product

- Small in size,light in weight,compact in structure,easy in maintenance.
- Two torsion springs are added to each of the pair valve plates,which close the plates quickly and automatically.
- The quick-close action prevents the medium from flowing back.
- Short face to face and good rigidity.
- Easy installation, it can be installed on both horizontal and vertical direction pipelines.
- This valve is tightly sealed,without leakage under the water pressure test.
- Safe and reliable in operation,high interference-resistance.

Technical Specifications

Series		EH	AH		BH		MH		
DN Nominal Diameter		"40~700(1.5""~28"")"	"50~750(2""~30"")"	"50~300(2""~12"")"	"50~500(2""~20"")"	"50~300(2""~12"")"	"50~600(2""~24"")"		50~400 (2"~16")
PN Nominal Pressure		1.0MPa	150PSI	200PSI	150PSI	200PSI	1.0MPa	1.6MPa	2.5MPa
Testing Pressure	Shell	1.5MPa	225PSI	300PSI	225PSI	300PSI	1.5MPa	2.4MPa	3.75MPa
	Sealing	1.1MPa	165PSI	220PSI	165PSI	220PSI	1.1MPa	1.76MPa	2.75MPa
Working Temperature		-15~+150							
Suitable Media		Fresh water,Sewage,Sea water,Air,Vapour,Food,Medicine,Oils,Acids,Alkalis,Salts,etc.							

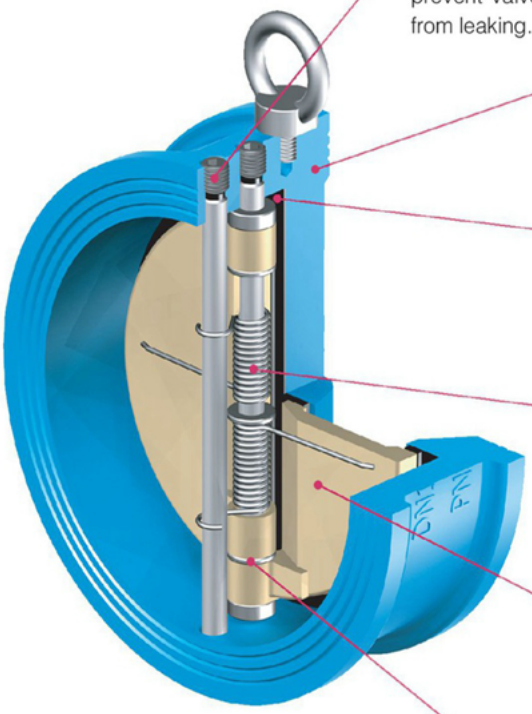
Flange Connection:

- Series EH、MH conform to EN1092;
- Series AH、BH conform to ANSI B16.1;

Face to Face:

- Series EH conform to EN558-1; Series AH conform to ANSI B16.10

DO-U CHECK VALVE



Fasten Screw:
Effectively prevent the shaft from traveling, prevent valve work from failing and shaft end from leaking.

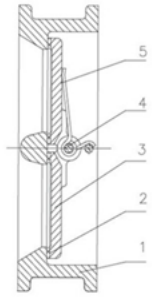
Body:
Short face to face and good rigidity.

Rubber Seat:
Vulcanized on body,tight fit and tight seat with no leakage.

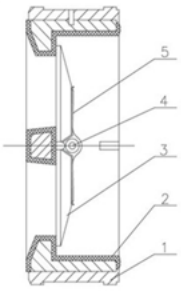
Springs:
Dual springs distribute the load force evenly across each plate,ensuring quick shut off in back flow.

Disc:
Adopting unitized design of dual discs and two torsion springs,the disc closes quickly and removes water–hammer.

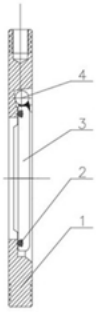
Gasket:
It adjusts fit–up gap and assures disc seal performance.



Series EH & AH



Series BH



Series MH


Series EH


Series AH


Series BH


Series MH

Materials of Main Parts

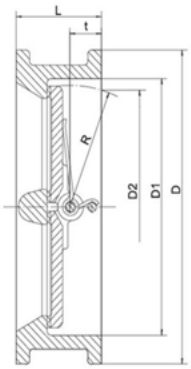
No.	Part	Material		
		AH EH	BH	MH
1	Body	CI DI WCB CF8 CF8M C95400	CI DI WCB CF8 CF8M C95400	WCB CF8 CF8M C95400
2	Seat	NBR EPDM VITON etc.	DI Covered Rubber	NBR EPDM VITON etc.
3	Disc	DI C95400 CF8 CF8M	DI C95400 CF8 CF8M	WCB CF8 CF8M C95400
4	Stem	416/304/316	304/316	WCB CF8 CF8M C95400
5	Spring	316		-------

DO-U CHECK VALVE

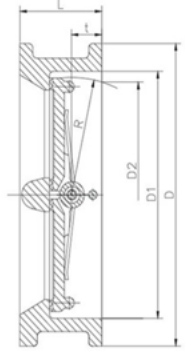
WAFER BUTTERFLY CHECK VALVE

Overall Dimensions & Weights





Series EH





Series AH

Series EH

Size		D	D1	D2	L	R	t	Weight(kg)
(mm)	(inch)							
40	1.5"	92	65	43.3	43	28.8	19	1.5
50	2"	107	65	43.3	43	28.8	19	1.5
65	2 1/2	127	80	60.2	46	36.1	20	2.4
80	3"	142	94	66.4	64	43.4	28	3.6
100	4"	162	117	90.8	64	52.8	27	5.7
125	5"	192	145	116.9	70	65.7	30	7.3
150	6"	218	170	144.6	76	78.6	31	9.0
200	8"	273	224	198.2	89	104.4	33	17
250	10"	328	265	233.7	114	127	50	26
300	12"	378	310	283.9	114	148.3	43	42
350	14"	438	360	332.9	127	172.4	45	55
400	16"	489	410	381.0	140	197.4	52	75
450	18"	539	450	419.9	152	217.8	58	101
500	20"	594	505	467.8	152	241	58	111
600	24"	690	624	572.6	178	295.4	73	172
700	28"	800	720	680	229	354	98	219

Series AH

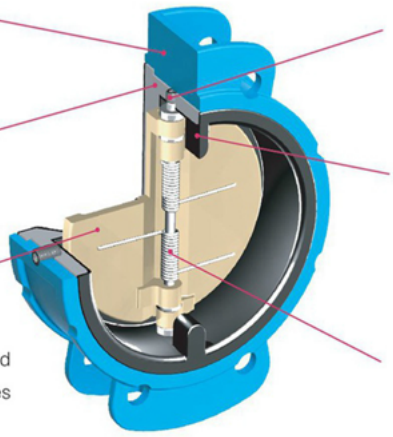
Size		D	D1	R	L	t	D2	Weight(kg)
(mm)	(inch)							
DN50	2"	105(4.134)	65(2.559)	29.73(1.17)	54(2.12)	25(0.984)	32.18(1.26)	2.8
DN65	2.5"	124(4.882)	78(3.071)	36.14(1.423)	60(2.38)	29.3(1.154)	42.31(1.666)	3
DN80	3"	137(5.39)	94(3.701)	43.42(1.709)	67(2.62)	27.7(1.091)	66.87(2.633)	3.8
DN100	4"	175(6.89)	117(4.606)	55.66(2.191)	67(2.62)	26.7(1.051)	97.68(3.846)	5.5
DN125	5"	187(7.362)	145(5.709)	67.68(2.665)	83(3.25)	38.6(1.52)	111.19(4.378)	7.4
DN150	6"	222(8.74)	171(6.732)	78.64(3.096)	95(3.75)	46.3(1.823)	127.13(5.005)	10.9
DN200	8"	279(10.984)	222(8.740)	102.5(4.035)	127(5)	66(2.598)	161.8(6.370)	22.5
DN250	10"	340(13.386)	276(10.866)	126(4.961)	140(5.5)	70.7(2.783)	213.6(8.490)	36
DN300	12"	410(16.142)	327(12.874)	154(6.063)	181(7.12)	102(4.016)	237.9(9.366)	54
DN350	14"	451(17.756)	375(14.764)	179.9(7.083)	184(7.25)	89.2(3.512)	312.5(12.303)	80
DN400	16"	514(20.236)	416(16.378)	198.4(7.811)	191(7.5)	92.5(3.642)	351.0(13.819)	116
DN450	18"	549(21.614)	467(18.386)	226.2(8.906)	203(8)	96.2(3.787)	409.4(16.118)	138
DN500	20"	606(23.858)	514(20.236)	248.2(9.72)	213(8.374)	102.7(4.043)	451.9(17.791)	175
DN600	24"	718(28.268)	616(24.252)	297.4(11.709)	222(8.75)	107.3(4.224)	554.7(21.839)	239
DN750	30"	884(34.8)	772(30.39)	374(14.724)	305(12)	150(5.905)	685.2(26.976)	659

DO-U CHECK VALVE

Body:
Conform to ASME B16.1 Standard flange pipline connection dimensions.

Seat:
Maintains full rated pressure.Rubber lining prevents flow medium from contacting the body.

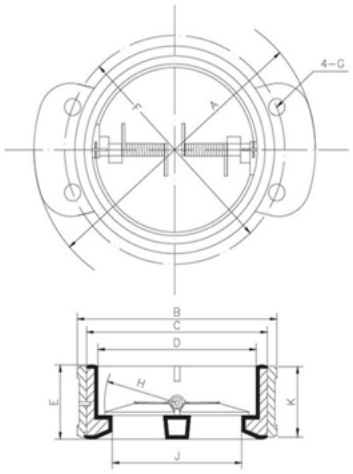
Disc:
Adopting unitized design of dual discs and two torsion springs,The disc closes quickly and removes water–hammer.



Fasten Screw:
It is possible to regulate fitting clearance using washer and ensure the sealing of disc.

Stop Washer:
Made of the same material as the the valve liner (2" –12") or 316 stainless steel (14" –20").

Springs:
Dual springs distribute the load force evenly across each plate, ensuring quick shut off in back flow.



Series BH

Series BH

(Unit: mm,kg)

Size		A	B	C	D	K	F	G	H	J	E	Weight (kg)
(mm)	(Inch)											
50.00	2"	159.00	101.60	84.14	66.68	52.39	120.65	19.05	28.45	47.63	53.98	2.00
65.00	2.5"	178.00	120.65	98.43	79.38	52.39	139.70	19.05	36.51	58.74	53.98	2.90
80.00	3"	191.00	133.35	115.89	92.08	52.39	152.40	19.05	41.28	69.85	53.98	3.20
100.00	4"	235.00	171.45	142.88	117.48	61.91	190.50	19.05	53.98	87.31	63.50	6.40
125.00	5"	270.00	193.68	171.45	144.46	65.02	215.90	22.35	67.47	112.71	66.68	7.50
150.00	6"	305.00	222.25	200.03	171.45	77.79	241.30	22.35	80.17	141.29	79.38	10.70
200.00	8"	368.00	269.88	254.00	222.25	96.84	298.45	22.35	105.57	192.09	98.43	18.50
250.00	10"	429.00	336.55	307.98	276.23	100.01	361.95	25.40	130.18	230.19	101.60	24.00
300.00	12"	495.00	4.6.40	365.13	327.03	128.59	431.80	25.40	158.75	274.64	130.18	41.50
350.00	14"	572.00	447.68	396.88	358.78	177.80	476.25	28.45	171.45	306.39	180.98	63.30
400.00	16"	632.00	511.18	450.85	409.58	158.75	539.75	28.45	196.85	355.60	161.93	73.90
450.00	18"	641.00	546.10	508.00	460.37	180.97	577.85	31.75	222.25	406.14	184.15	114.70
500.00	20"	699.00	596.90	555.62	511.17	212.72	635.00	31.75	247.65	469.90	215.90	165.00

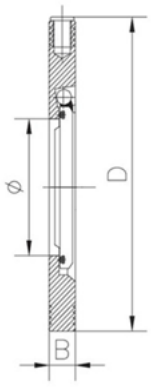
Series MH

PN1.6

Size		Ø	D	B	Weight (kg)
(mm)	(inch)				
DN50	2"	27	106	19	1.12
DN65	2.5"	38	126	19	1.5
DN80	3"	47	141	19	1.88
DN100	4"	71	161	19	2.7
DN125	5"	90	191	19	3.8
DN150	6"	114	216.5	19	5.3
DN200	8"	142	271	28	9.4
DN250	10"	190	326	28	14.8
DN300	12"	220	376	38	26.3
DN350	14"	260	436	44	42.1
DN400	16"	298	486	51	59.3
DN450	18"	355	536	60	75.9
DN500	20"	387	591	60	99.7
DN600	24"	482	710	70	156.8

PN2.5

Size		Ø	D	B	Weight (kg)
(mm)	(inch)				
DN50	2"	30	106	19	1.27
DN65	2.5"	41	126	19	1.9
DN80	3"	54	141	19	2.13
DN100	4"	72	170	19	3.1
DN125	5"	94	191	19	4.13
DN150	6"	115	217	19	5.7
DN200	8"	156	275	28	10.8
DN250	10"	192	332	32	17.4
DN300	12"	222	390	38	28.1
DN350	14"	262	440	44	46.8
DN400	16"	304.8	500	52	67.1
DN450	18"	350	542	62	90.8
DN500	20"	382	600	68	121.6
DN600	24"	482	710	80	186




Series MH

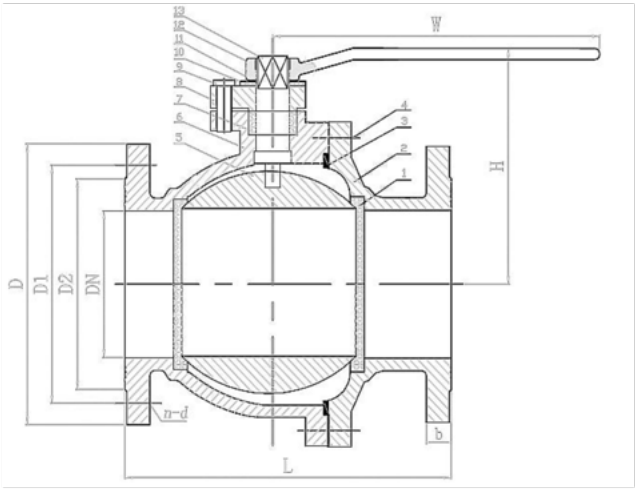
Min. Opening Pressure of Series AH,BH & EH

- The min.opening pressure of series AH,BH & EH is about 0.03 bar when installed horizontally.
- The min.opening is about 0.1 bar when installed vertically.
- The min.opening pressure of series MH is about 0.05 bar.

2-PIECE BALL VALVE

- For water, air, oil and other fluids
- Flanged JIS 10K and PN 16 connection available
- Max working pressure: 16 bar





Nomenclature and Material

	Parts	Material
1	Washer	PTFE
2	Bonnet	Cast Iron GG25
3	Gasket	Graphite
4	Bolt	Alloy Steel 40Cr
5	Ball	Stainless Steel 304
6	Body	Cast Iron GG25
7	Washer	PTFE
8	Gland	Cast Iron GG25
9	Bolt	Alloy Steel 40Cr
10	Locating Washer	Galvanized Iron
11	Locking Ring	Manganese Steel
12	Wrench	Cast Iron GG25
13	Lever	Stainless Steel 304

Dimensions

DN	L	H	W	D	D1	D2	b	n–Φd
15	108	78	135	95	60.5	35	9.7	4–Φ14
20	117	113	135	105	75	58	16	4–Φ14
25	127	107	150	115	85	68	16	4–Φ14
32	140	113	175	140	100	78	18	4–Φ18
40	165	130	200	150	110	88	18	4–Φ18
50	178	146	245	165	125	102	20	4–Φ18
65	190	176	270	185	145	122	20	4–Φ18
80	203	222	300	200	160	138	22	8–Φ18
100	229	222	320	220	180	158	24	8–Φ18
125	356	250	350	250	210	188	26	8–Φ18
***150**	394	275	-	285	240	212	26	8–Φ23
***200**	457	487	-	340	295	268	30	12–Φ23

* We recommend using Gear Type for sizes DN150 and DN200 (optional).

GL41H FLANGED Y-STRAINER

Brief introduction

Flanged strainers are main parts of all kinds of pumps, valves in the pipeline. It is suitalbe for pipeline of nominal pressure≤1.6MPa. Mainly used to filter dirt, rust and other debris in media such as steam, air, and water etc.



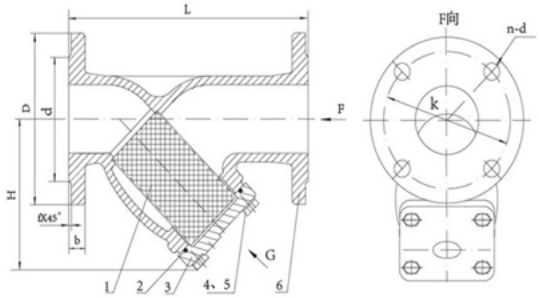


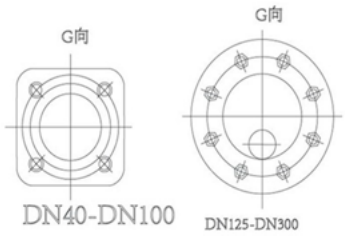
Materials of Main Parts

Parts	Material
Body	Cast iron , Stainless steel
Bonnet	Cast iron
Filtering net	Stainless steel

Main Specifications

Nominal diameterDN(mm)	40~600
Nominal pressure(MPa)	1.6
Suitable temperature℃	≤200
Suitable media	Water, oil, gas, etc.
Main material	HT200





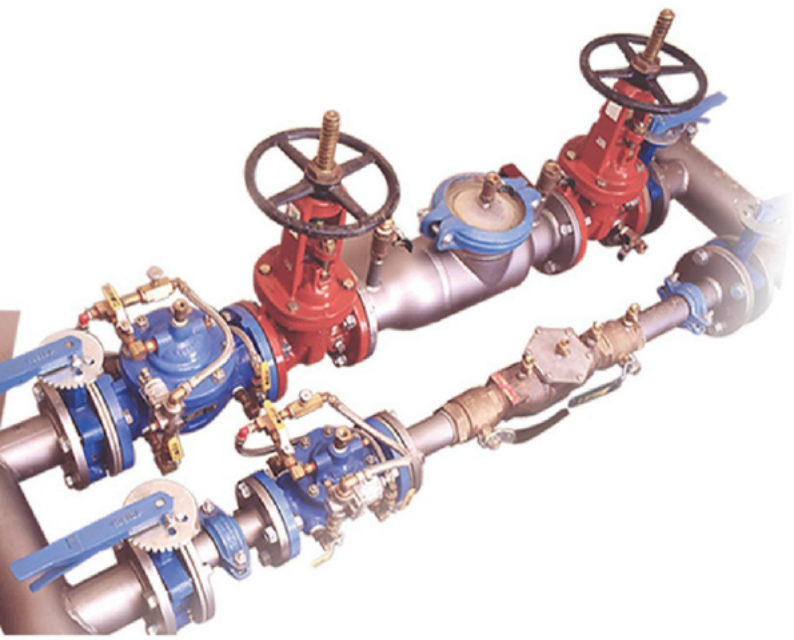
Overall & Connection Dimensions and Weights

DN	D	d	K	L		b	f	n-d	H	Weight(kg)	
				F1	GB					F1	GB
40	150	84	110	200	200	18	3	4-18	125	9.5	9.5
50	165	99	125	230	230	20	3	4-18	133	12	12
65	185	118	145	290	290	20	3	4-18	154	16	16
80	200	132	160	310	310	22	3	8-18	176	20	20
100	220	156	180	350	350	24	3	8-18	204	28	28
125	250	184	210	400	400	26	3	8-18	267	45	45
150	285	211	240	480	480	26	3	8-22	310	62	62
200	340	266	295	600	600	30	3	12-22	405	112	112
250	405	319	355	730	605	32	3	12-26	455	163	125
300	460	370	410	850	635	32	4	12-26	516	256	145
350	520	430	470	980	696	32	4	16-26	495	368	214
400	580	482	525	1100	790	38	4	16-30	560	440	304
450	640	532	585	1200	850	40	4	20-30	641	- -	396
500	715	585	650	1250	978	42	4	20-33	850	- -	450
600	840	685	770	1450	1295	48	5	20-36	980	- -	700

FLANGED GATE VALVE

Characteristic of Product

- On-line replacement of top seal: Easy installation and maintenance.
- Integral rubber-clad disc: The ductile iron framework is thermal-clad integrally with high-performance rubber, ensuring tight seal and rust prevention.
- Integrated brass nut: By means of special casting process, the brass stem nut is integrated with the disc with secure connection, thus the product is safe and reliable.
- Flat-bottom seat: The sealing surface of the body is flat without hollow, avoiding any dirt deposit.
- Wholly-through flow channel: The whole flow channel is through, giving "zero" pressure loss.
- Dependable top sealing: With multi-O ring structure adopted, the sealing is dependable.
- Epoxy resin coating: The cast is sprayed with epoxy resin coat both inside and outside, and the disc is wholly clad with rubber in accordance with food hygiene requirement, so it is safe and resistant to corrosion.



FLOW CONTROLLED BY US

Technical Data

Series		EZ				AZ				WZ				CZ		
DN Nominal Diameter		DN50-600		DN50-300		2.5" -12"		2.5" -12"		DN40-600		DN40-600		DN40~600		
PN Nominal Pressure		Non-Rising Stem		Rising Stem		Non-Rising Stem		Rising Stem		Non-Rising Stem		Rising Stem		Rising Stem		
		1.0MPa	1.6MPa	1.0MPa	1.6MPa	150PSI	200PSI	150PSI	200PSI	1.0MPa	1.6MPa	1.0MPa	1.6MPa	1.6MPa	2.5MPa	4.0MPa
Testing Pressure	Shell	1.5MPa	2.4MPa	1.5MPa	2.4MPa	225PSI	300PSI	225PSI	300PSI	1.5MPa	2.4MPa	1.5MPa	2.4MPa	2.4MPa	3.75MPa	6.0MPa
	Sealing	1.1MPa	1.76MPa	1.1MPa	1.76MPa	165PSI	220PSI	165PSI	220PSI	1.1MPa	1.76MPa	1.1MPa	1.76MPa	1.76MPa	2.75MPa	4.4MPa
Working Temperature		-15~+425														
Suitable Media		Fresh water, Sewage, Sea water, Air, Vapour, Food, Medicine, Oils, Acids, Alkalis, Salts, etc.														

GATE VALVE

Handwheel:
Ensure valve easy opening.

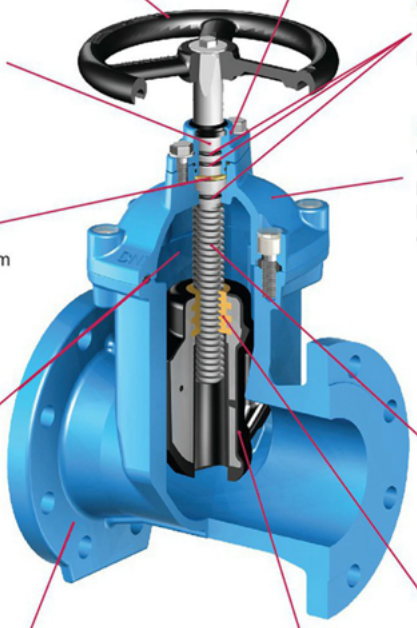
Packing:
Ensure the stem is in the right position.

Sealing Ring:
Made of metal frame and several rubber O-Rings, to prevent stem end from leakage.

O-Ring:
Prevent stem ends from leakage.

Bonnet:
With EPOXY coating inside, conform to potable water requirement. With disc fully lifted, the upper design allows sealing O-Ring rubber online replaced.

Wearing Washer:
Prevent the stem from wearing, ensure the right position and reduce opening torque.



Stem:
Made of high strength materials, ensure gate valve easily controlled.

Middle Sealing Ring:
Ensure the sealing between body and bonnet connection area.

Yoke Sleeve:
Integrate with disc, deliver axial force effectively.

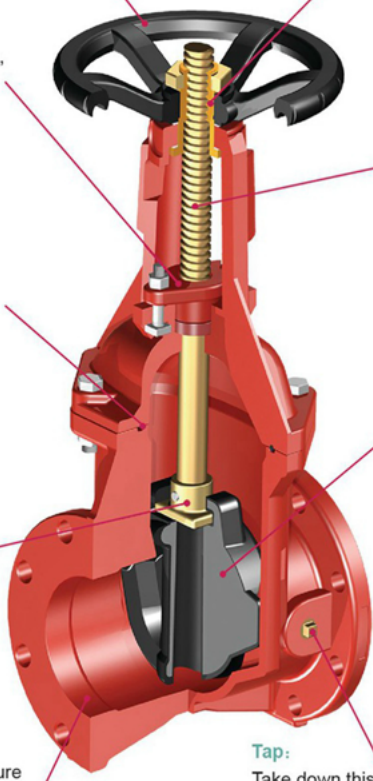
Body:
No groove design, prevent from impurities, ensure effective sealing. With EPOXY coating inside, conform to potable water requirement.

Disc:
Metal frame with rubber lined, ensure valve sealing and conform to potable water requirement.

Handwheel:
Ensure valve easy opening.

Yoke Sleeve:
Made of bronze material, can deliver axial force effectively.

Gland:
Through compressing the packing, ensure the upper sealing.



Stem:
Made of high strength materials, ensure gate valve easily controlled.

Middle Sealing Ring:
Ensure the sealing between body and bonnet connection area.

Disc:
Metal frame with rubber lined, ensure valve sealing and conform to potable water requirement.

Stem Nut:
The connection piece of stem and disc, ensure disc easy operating.

Body:
No groove design, prevent from impurities, ensure effective sealing. With EPOXY coating inside, conform to potable water requirement.

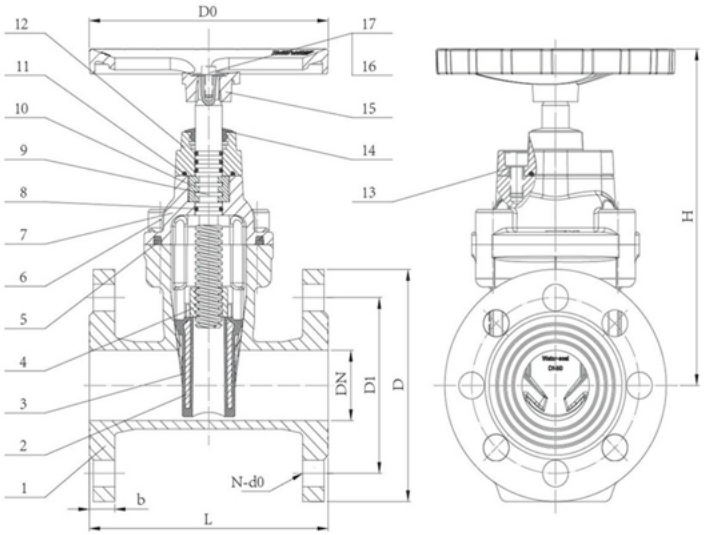
Tap:
Take down this part, the screw hole on body can connect with fluid measuring equipment.

GATE VALVE

FLANGED GATE VALVE

Overall Dimensions & Weight of Series EZ Gate valve





PN1.0/1.6 MPa

DN	L			D		D1		b		N-d0		H	D0	Weight(kg)	
	F4	F5	5163	10	16	10	16	10	16	10	16			10	16
50(2")	150	250	178	165		125		19		4-19		249	180	10	11
65(2.5")	170	270	190	185		145		19		4-19		274	180	13	14
80(3")	180	280	203	200		160		18-19		8-19		310	200	23	24
100(4")	190	300	229	220		180		18-19		8-19		338	240	25	26
125(5")	200	325	254	250		210		18		8-19		406	300	33	35
150(6")	210	350	267	285		240		19		8-23		470	300	42	44
200(8")	230	400	292	340		295		20		8-23	12-23	560	350	76	80
250(10")	250	450	330	395	405	350	355	22		12-23	12-28	642	350	101	116
300(12")	270	500	356	445	460	400	410	24	22	12-23	12-28	740	400	136	156
350(14")	290	550	381	505	520	460	470	25		16-23	16-25	802	450	200	230
400(16")	310	600	406	565	580	515	525	28		16-25	16-30	907	450	430	495
450(18")	330	650	432	615	640	565	585	29		20-25	20-30	997	620	450	518
500(20")	350	700	457	670	715	620	650	31		20-25	20-34	1110	620	480	552
600(24")	390	800	508	780	840	725	770	33		20-30	20-41	1288	620	530	610

Material of Main Parts

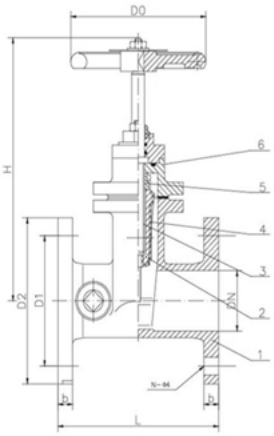
No.	Parts	Material
1	Body	65-45-12
2	Disc framework	65-45-12
3	Rubber Sealed Disc	65-45-12+EPDM
4	Shaft Nut	ZCuZn38Mn2Pb2
5	Middle Gasket	NBR
6	Internal hexagon cylinder-head bolt	Q235-A
7	Bonnet	65-45-12
8	Bonnet O-ring	NBR
9	Shaft	2Cr13

No.	Parts	Material
10	Bisect ring	ZCuZn38Mn2Pb2
11	Upper cover O-ring	NBR
12	Upper cover	65-45-12
13	Internal hexagon cylinder-head bolt	Q235-A
14	Dust cover	NBR
15	Handwheel	65-45-12
16	Flat gasket	304
17	Hexagon bolt	304

GATE VALVE

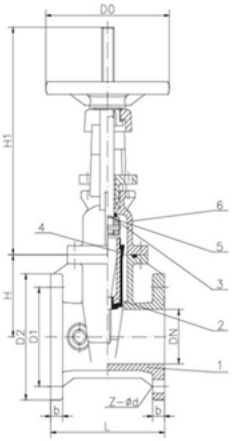
Overall Dimensions & Weights of Series AZ Gate valve





NRS(405)





OS & Y (409)

NRS(405)

125 PSI

Size mm (inch)	D1	D2	D0	H	L	b	N-Ød	Weight (kg)
DN65(2.5")	139.7(5.5)	178(7)	160(6.3)	256(10.08)	190.5(7.5)	17.53(0.69)	4-19(0.75)	15
DN80(3")	152.4(6)	190.5(7.5)	180(7.09)	275(10.83)	203.2(8)	19.05(0.75)	4-19(0.75)	20.22
DN100(4")	190.5(7.5)	228.6(9)	200(7.87)	310(12.2)	228.6(9)	23.88(0.94)	8-19(0.75)	30.5
DN150(6")	241.3(9.5)	279.4(11)	251(9.88)	408(16.06)	266.7(10.5)	25.4(1)	8-22(0.88)	53.75
DN200(8")	298.5(11.75)	342.9(13.5)	286(11.26)	512(20.16)	292.1(11.5)	28.45(1.12)	8-22(0.88)	86.33
DN250(10")	362(14.252)	406.4(16)	316(12.441)	606(23.858)	330.2(13)	30.23(1.19)	12-25.4(1)	133.33
DN300(12")	431.8(17)	482.6(19)	356(14.06)	716(28.189)	355.6(14)	31.75(1.25)	12-25.4(1)	319

OS & Y (409)

125 PSI

Size mm (inch)	D1	D2	D0	H	H1	L	b	N- Ød	Weight (kg)
DN65(2.5")	139.7(5.5)	178(7)	182(7.17)	126(4.96)	296(11.614)	190.5(7.5)	17.53(0.69)	4-19(0.75)	25
DN80(3")	152.4(6)	190.5(7.5)	250(9.84)	130(5.12)	345(13.583)	203(8)	19.05(0.75)	4-19(0.75)	31
DN100(4")	190.5(7.5)	228.6(9)	250(9.84)	157(6.18)	420(16.535)	228.6(9)	23.88(0.94)	8-19(0.75)	48
DN150(6")	241.3(9.5)	279.4(11)	302(11.89)	225(8.86)	540(21.26)	266.7(10.5)	25.4(1)	8-22.4(0.882)	72
DN200(8")	298.5(11.75)	344(13.54)	345(13.58)	285(11.22)	708(27.87)	292(11.5)	28.45(1.12)	8-22.4(0.882)	132
DN250(10")	362(14.252)	406(15.98)	408(16.06)	324(12.760)	927(36.5)	330.2(13)	30.23(1.19)	12-25.4(1)	210
DN300(12")	431.8(17)	483(19.02)	483(19.02)	383 (15.08)	1025(40.35)	355.6(14)	31.75(1.25)	12-25.4(1)	315

Material of Main Parts

NO.	Name		Material
1	Body		HT200 ASTM A216 CL.B
2	Rubber Disc		QT450+NBR ASTM A536 65-45-12+NBR
3	Stem	405	Y1Cr13 416
		409	ASTM C62300
4	Sealing Face		ZQAl 9-4
5	Stem Nut		ASTM C95200
6	Bonnet		ASTM A216 CL.B

FOOT VALVE

SPECIFICATION

EPDM / NBR RESILENT SEAT
FLANGED TO BS 4504 PN16

PRESSURE / TEMPERATURE RATINGS

Working Pressure	16 bar
Testing Pressure	Shell : 24 bar Seat : 17.6 bar
Working Temperature	-10˚C to 120˚C (EPDM Seat) -10˚C to 80˚C (NBR Seat)
Suitable Media	Water

MATERIALS

Part	Material	BS
Body	Cast Iron	1452 Gr. 220
Disc	Cast Iron	1452 Gr. 220
Stem	Stainless Steel	970 420S37
Bushing	Gunmetal	1400 LG2
Screen	Stainless Steel	970 304S15
Seat	EPDM / NBR	

DIMENSIONS

Size mm	L mm	H mm	D mm
50	100	160	94
65	120	205	120
80	140	240	142
100	170	300	177
125	200	355	206
150	230	410	237
200	288	490	290
250	354	575	330
300	410	655	360

Note:

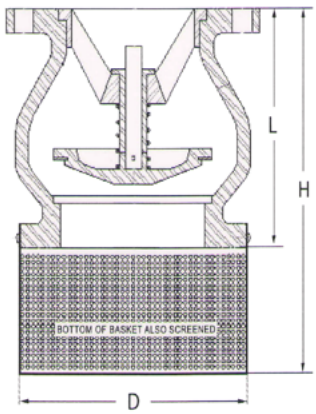
1. Screen can be perforated or wire cloth.
2. BS 4504 PN16 is equivalent to EN 1092-2.
3. JIS B2239 10K and other flange standards available upon request.
4. Design and specifications are subject to change without prior notice.

CFV-B

PN16

DN50~300





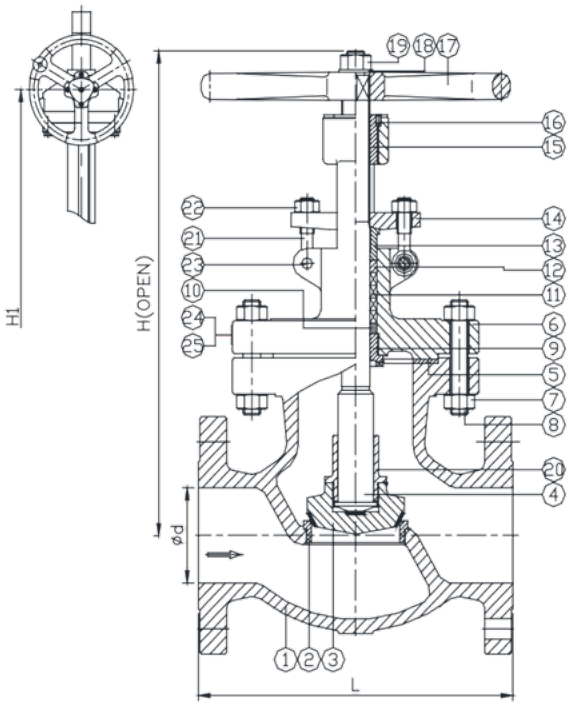
GLOBE VALVE



FEATURES

- 1/2"~24" (DN15~DN600)
- Body W.P. : Class 150/300/600/ 900/1500/2500
- W.T. : -20°C~400°C (-4°F~752°F)

- Design: BS 1873
- Flange Dimension: ASME B16.5
- Face to Face: ASME B16.10



ITEM	PARTS	MATERIAL		
		Trim 1	Trim 5	Trim 8
1	BODY	ASTM A216-WCB		
2	SEAT RING	ASTM A216-WCB+Cr13	ASTM A105+STL#6	ASTM A105+STL#6
3	DISC	ASTM A216-WCB+Cr13	ASTM A105+STL#6	ASTM A216-WCB+Cr13
4	STEM	ASTM A182-F6a		
5	GASKET	SPW SS304+GRAPHITE		
6	BONNET	ASTM A216-WCB		
7	NUT	ASTM A194-2H		
8	STUD	ASTM A193-B7		
9	BACK SEAT	ASTM A276-410		
10	PACKING A	GRAPHITE		
11	PACKING B			
12	PACKING C			
13	GLAND	ASTM A276-410		
14	GLAND FLANGE	ASTM A216-WCB		
15	STEM BUSHING	ASTM A439 D-2		
16	SCREW	ASTM A29-1035		
17	HANDWHEEL	DUCTILE IRON		
18	WASHER	ASTM A29-1025		
19	HANDWHEEL NUT	ASTM A29-1045		
20	DISC NUT	ASTM A276-410		
21	EYE BOLT	ASTM A193-B7		
22	NUT	ASTM A194-2H		
23	PIN	ASTM A29-1025		
24	NAMEPLATE	SS 304		
25	RIVET			

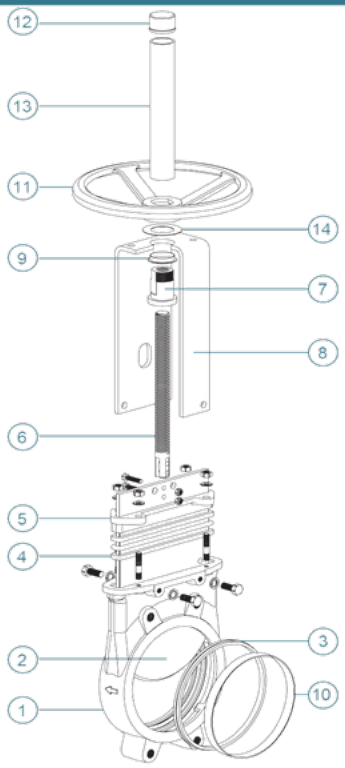
DN	d	CLASS 150			CLASS 300			CLASS 600			CLASS 900			CLASS 1500			CLASS 2500		
		L	H	H1	L	H	H1	L	H	H1	L	H	H1	L	H	H1	L	H	H1
15	13	108	182	-	152	185	-	-	-	-	-	-	-	-	-	-	-	-	-
20	19	117	193	-	178	195	-	-	-	-	-	-	-	-	-	-	-	-	-
25	25	127	217	-	203	220	-	-	-	-	-	-	-	-	-	-	-	-	-
32	32	140	235	-	216	240	-	-	-	-	-	-	-	-	-	-	-	-	-
40	38	165	258	-	229	260	-	-	-	-	-	-	-	-	-	-	-	-	-
50	51	203	330	-	267	385	-	292	360	-	368	480	-	368	529	614	451	620	698
65	64	216	360	-	292	420	-	330	410	-	419	520	-	419	660	700	508	690	730
80	76	241	390	-	318	440	-	356	465	-	381	564	630	470	692	729	578	750	805
100	102	292	445	-	356	515	-	432	545	575	457	685	720	546	907	930	673.1	960	1020
125	127	356	480	-	400	580	-	508	625	660	559	780	840	673	1120	1190	-	-	-
150	152	406	520	556	444	660	690	559	785	820	610	950	1015	705	1015	1280	914.4	1080	1325
200	203	495	600	658	559	900	950	660	930	960	737	932	-	832	1145	1400	-	-	-
250	254	622	773	805	622	950	990	787	1040	-	838	1040	-	-	-	-	-	-	-
300	305	698	880	955	711	1030	1080	838	1280	-	-	-	-	-	-	-	-	-	-
350	337	787	966	977	838	-	1385	-	-	-	-	-	-	-	-	-	-	-	-
400	387	914	1085	1100	863	-	1560	-	-	-	-	-	-	-	-	-	-	-	-
450	438	978	-	1166	977	-	1580	-	-	-	-	-	-	-	-	-	-	-	-
500	489	978	-	1217	1016	-	1609	-	-	-	-	-	-	-	-	-	-	-	-
600	591	1295	-	1295	1346	-	1803	-	-	-	-	-	-	-	-	-	-	-	-

unit:mm

KNIFE GATE VALVE

Part list and material specification





No.	Part name	Material
1	Body	WCB, CF8, CF8M, 904L, CK20
2	Gate	SS304, SS316, 904L, SS310
3	Seat	NBR, EPDM, VITON, Silicon, PTFE, Metal to metal
4	Packing	PTFE impregn, Synth, Fiber (Braided PTFE, Graphite, Replaceable metal)
5	Gland	WCB, SS304, SS316
6	Stem	SS410, SS304, SS316, SS316L
7	Stem nut	Brass
8	Yoke	WCB, CF8, CF8M
9	Collar	Brass
10	Seat retainer ring	SS304, SS316
11	Hand wheel	Ductile iron
12	Cap	Plastic (Optional)
13	Stem protector	Carbon steel (Optional)
14	Thrust washer	Brass

Manual

Handwheel (rising & non-rising stem)
Chainwheel
Lever
Bevel Gear
Other (square nut…)

Automatic

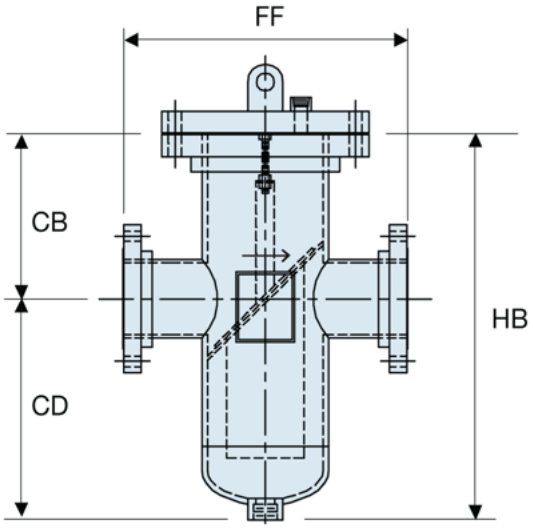
Electric
Pneumatic
Hydraulic

DN	L	D	D1	D2	B	C	f	n-M	H	G	[kg]
50	40	165	125	95	136	16	2	4-M16	375	180	7
65	40	185	145	110	151	16	2	4-M16	420	180	8
80	50	200	160	127	170	17	2	8-M16	450	200	11
100	50	220	180	148	190	17	2	8-M16	512	200	12
125	50	250	210	174	212	17	2	8-M16	570	220	15
150	60	285	240	199	230	21	2	8-M20	665	250	21
200	60	340	295	250	286	21	2	8-M20	825	300	29
250	70	395	350	308	338	24	2	12-M20	1000	350	46
300	70	445	400	360	388	24	2	12-M20	1155	350	66
350	96	505	460	416	460	33	2	16-M20	1310	400	92
400	100	565	515	466	520	35	2	16-M24	1475	500	125

* Different pressure may cause different dimension of “D1”.

BASKET STRAINER VALVE





MODEL FB - BOLTED COVER

Standard Features:

* Bolted Blind Flange Cover
* 1/8" Perforated Basket
* NPT Vent (1/2") and Drain
* NAF Cover Gasket

Line Size	Body Dia	FF	CD	CB	HB	Drain NPT	CQ	HQ	FB Weight lbs	FQ Weight lbs
2	4-1/2	14	9	6	15	3/4	na	na	60	na
3	6-5/8	17	13	8	21	3/4	10	23	115	80
4	6-5/8	18	13	8	21	3/4	10	23	180	120
6	10-3/4	22	19	10	29	1	13	32	280	190
8	12-3/4	26	22	12	34	1	15	37	400	260
10	14	30	24	14	38	1	19	43	600	410
10	16	32	24	14	38	1-1/2	20	44	690	460
12	16	33	26	16	42	1-1/2	20	46	730	500
12	18	34	26	17	43	1-1/2	20	46	880	590
14	18	37	29	17	46	1-1/2	23	52	930	640
16	20	40	32	18	50	2	25	57	1210	840
16	24	42	40	20	60	2	28	68	1550	975
18	24	42	40	20	60	2	28	68	1650	1110
20	24	44	43	22	65	2	32	75	1840	1290
20	30	50	51	30	81	2	40	91	2530	2190
24	30	56	51	30	81	2	40	91	2720	2380

Options:

* Stainless Steel, Alloy materials
* Hinged Cover
* Cover Davit
* ASME B31.3, B31.4, B31.8, ASME VIII Div 1
* U-Stamp certification
* Support Legs or skirt
* DP gauge connections
* DP gauge/switch (fitted)
* Air release head (fitted)
* Cad. Plated Bolting
* Weld neck flanges
* Larger Perf or Mesh liners
* Replaceable mesh liner
* Flanged Vent and Drain
* Additional ancillary connections
* Heavy duty baskets and wedge wire
* Blow-down basket

Notes:

Dimensions for guidance only, please request certified drawings.
Larger sizes and pressure ratings available upon request.
Special application requirements can be incorporated on request.
Lower pressure drop designs available on request.
Dimensions in inches.

PRESSURE REDUCING VALVE

- Please name the model No. (PR-B6S) when negotiation.
- Thread: BS21, ANSI B2.1.
- Max. Temperature: 120°C
- Test Pressure: Body 15 kgf/cm² (Hydrostatic)
- Outlet Primary Pressure: 0.5 kgf/cm² - 5 kgf/cm²



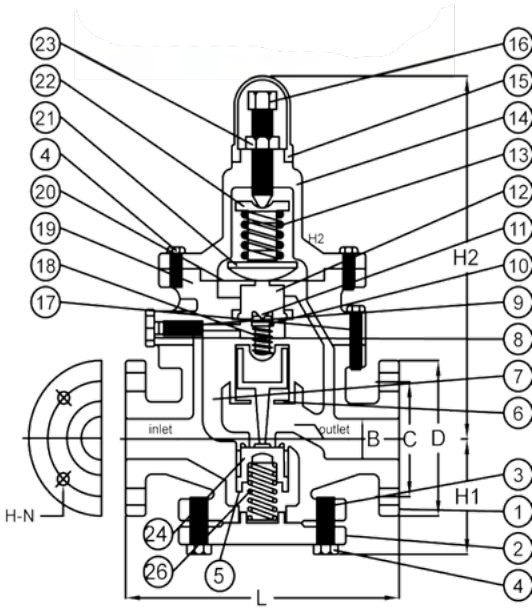


Material / Model		PR-3AF	PR-304F
1	Valve Body	CAST IRON	SUS 304
2	Bottom Cover	CAST IRON	SUS 304
3	Gasket	ASBESTOS	ASBESTOS
4	Bolt	SS41	SUS 304
5	Valve Seat	SS304	SS304
6	Cylinder	SS304	SS304
7	Piston	SS304	SS304
8	Strainer Plug	SS41	SUS 304
9	Screen	SS304	SUS 304
10	Spring Knob	SUS 304	SUS 304
11	Pin Guide	SUS 304	SUS 304
12	Floating Pin	SUS 304	SUS 304
13	Upper Spring	SUP-6	SUP-6
14	Top Bonnet	CAST IRON	SUS 304
15	Top Cap	CAST IRON	SUS 304
16	Adjusting Screw	SS41	SUS 304
17	Body Gasket	ASBESTOS	ASBESTOS
18	Central Spring	SUS 304	SUS 304
19	Transit Body	CAST IRON	SUS 304
20	Diaphragm Disc	SUS 301	SUS 301
21	Spring Knob	SS41	CF8
22	Spring Holder	SS41	CF8
23	Positioning Nut	SS41	SUS 304
24	Gasket	PTFE	PTFE
25	Lower Spring	SUP-6	SUP-6

Dimension mm

Size		inch	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"	2.1/2"	3"	4"	5"	6"
		B mm	15	20	25	32	40	50	65	80	100	125	150
L	Face to Face		155	155	165	195	195	225	250	290	330	410	410
H1	Lower Height		74	74	74	99	99	116	125	135	153	195	195
H2	Upper Height		260	260	260	280	280	310	322	325	370	540	540
D	End Flange	JIS 10K	95	100	125	135	140	155	175	185	210	250	280
		ANSI 150	89	98	108	117	127	152	178	190	229	254	279
		PN16	95	105	115	140	150	165	185	200	220	250	285
C	Bolt Circle Diameter	JIS 10K	70	75	90	100	105	120	140	150	175	210	240
		ANSI 150	60.5	70	79.5	89	98.5	120.5	139.5	152.5	190.5	216	241.5
		PN16	65	75	85	100	110	125	145	160	180	210	240
H-N	Diameter & Num of Bolts	JIS 10K	15-4	15-4	19-4	19-4	19-4	19-4	19-4	19-8	19-8	23-8	23-8
		ANSI 150	15-4	15-4	15-4	15-4	15-4	19-4	19-4	19-4	19-8	22-8	22-8
		PN16	14-4	14-4	14-4	18-4	18-4	18-4	18-4	18-8	18-8	18-8	22-8
Weight (kgs)			10	10.5	11	16	17	24	31	37	50	98	105

FLANGED END ACC. TO JIS 10K, ANSI 150 LBS OR DIN PN10/16 SPECIFICATION.



SiGHT GLASS INDICATOR



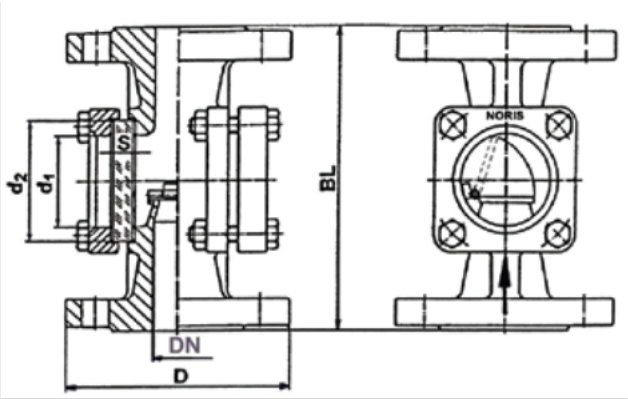
Straight through with spout
Ideal for gravity feed systems, intermittent flow, liquids containing entrained air and low flow rates. This model has an integral drip lip and can be mounted in any pipeline position.

Rotor
This model has a rotor to show you if the liquid is flowing. The indicator can be mounted in any pipeline position, and the light weight rotors will operate over a wide flow range.

Flap
The basic model is suitable for horizontal and vertically upward flow.

- Sizes up to 10"
- DIN or ANSI flanges
- Soda Lime or Borosilicate glass
- Pressure ratings up to 40 Bar

Dimensional Information



DN	D	BL	d_1	Glass plate			
				d_2	S		
					PN 16	PN 25	PN 40
15	95	130	32	45	10	10	10
20	105	150	32	45	10	10	10
25	115	160	48	63	10	12	15
32	140	180	48	63	10	12	15
40	150	200	65	80	12	15	20
50	165	230	80	100	15	20	25
65	185	290	80	100	15	20	25
80	200	310	100	125	20	25	30
100	220(235)*	350	125	125	25	30	35
125	250(270)*	400	150	150	25	30	a.A
150	285(300)*	480	175	175	30**	35	a.A
200	340(360/375)*	600	175	175	30**	35	a.A
250	405(425/450)*	730	175	175	30**	35	a.A

Options & Ordering Information

Style
with Graphite Seals 880.N
with PTFE Seals 880.A
(CS & SS models only)

Material
Grey Cast Iron 1
Carbon Steel 2
Stainless Steel 3

Glass
Soda Lime Glass Standard 1
(max 150°C, 16 Bar)
Borosilicate Glass 2
(max 280°C, 25 Bar, CS/SS only)
Borosilicate Glass 3
(max 280°C, 40 Bar, CS/SS only)

Connection style
DN15 (1/2") 15
DN20 (3/4") 20
DN25 (1") 25
DN32 (11/4") 32
(Style N only)
DN40 (11/2") 40
DN50 (2") 50
DN65 (21/2") 65
(Style N only)
DN80 (3") 80
DN100 (4") 100
DN125 (5") 125
(Style N only)
DN150 (6") * 150
DN200 (8") * 200
* (PN10 with Soda lime glass, PN16 with Borosilicate glass)

Internal style
Drip Tube 1
Rotor 2
Flap 3

Flange style
PN16 1
ANSI 150LB 2
ANSI 300LB * 3
* (40 Bar Borosilicate glass required)

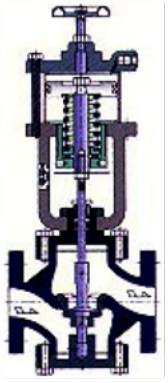
Materials

Cast Iron	GG 25 (EN-GJL-250) max 16 bar
Cast Steel	GS-C 25 (1.0619 /GP240GH)
Stainless Steel	WN 1.4408

Body	GG25	GS-C 25	1.4408
Covers	GG 25 / S235JRG2	GS-C 25 / S235JRG2	1.4408 / 1.4301
Screws	4.6 / 5.6 gal		A4-70
Glass	Borosilicate glass DIN 7080 Soda lime glass DIN 8902		
Gaskets	Graphite, (or other materials)		
Spinner	Plastic up to 120°C PTFE up to 260°C		
Flap	1.4571		

CYLINDER CONTROL VALVE





Model WY-C08GS

CYLINDER TYPE CONTROL VALVE

Model WY-C08GS series are actuated by Cylinder. They provide high thrust because of their greater range of supply pressure, and also can provide a long stroke. Cylinder-type actuators, are suitable for applications where compactness or a higher thrust than that of diaphragm actuators are required. They are also installed for on-off, emergency shut-off control system.

Specification

Body

Type :	Single seated, direct or reverse type, globe valve.3 way diverting or mixing type.
Material :	Cast iron (FC250), Ductile iron (FCD450),Carbon steel (SCPH2),Stainless steel (SCS13, SCS14)
Size :	1/2", 3/4", 1", 1-1/4", 1-1/2", 2", 3", 4", 5", 6".
End connection :	Flanged end (FF, RF).
Rating :	JIS10k, 20k, 30k. ANSI 150, 300, 600lb.
Bonnet :	Plain bonnet (0-under 200C)Radiator finned bonnet (200C or over).
Packing :	V-teflon, Asbestos yarn and Carbon graphite.
Guide :	Top and bottom guide, top guide.

Trim

Valve plug :	Single seated, three-way
Plug form :	Teflon seat plug for on-off service
Material :	Stainless steel (SUS304, SUS316 with stellite coating furnished to the seat).

Actuator

Type :	Spring return cylinder actuated, direct or reverse.Double-action cylinder acuated.
Cylinder material :	Aluminum Alloy, Anodized.
Operating air pressure :	3 ~ 5 kg/cm^2.
Pneumatic tubing connection :	1/4" female tap.
Ambient temperature :	-20 ~ +60 °C

Valve action

Air to open or air to close by using direct or reverse actuator.

Accessory

HandwheelPositioner, limit switch, air set & lubricator

Performance

Leakage of full closure: Class VI

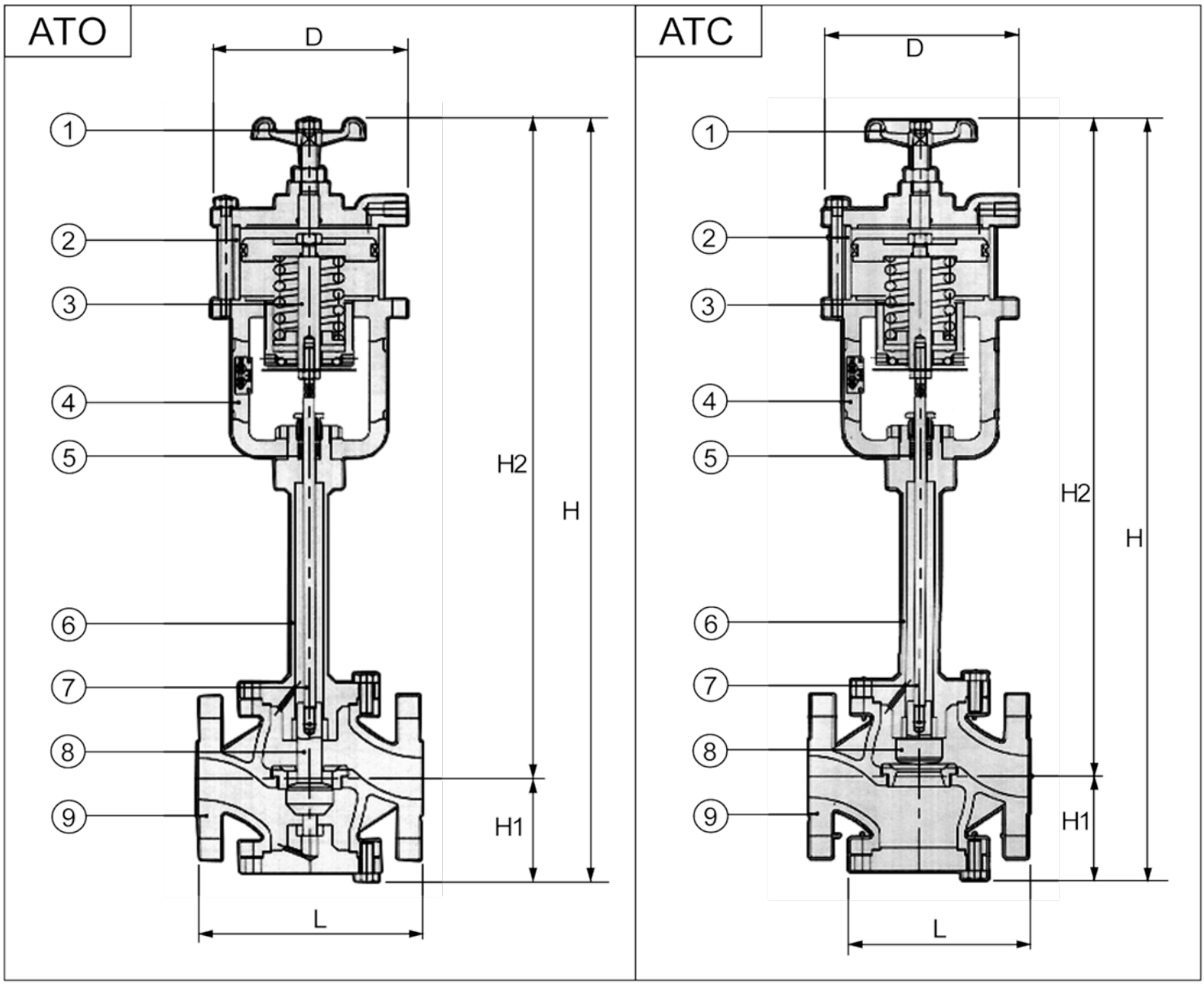
Service:

For steam, air, water, oil and other fluids.Operating Air Pressure: 3-5 kg/cm^{2}G

Remark:

Up to 4" are double acting cylinder actuator.Connection Rating JIS 10K.

CYLINDER CONTROL VALVE



Parts & Material

No	Part Name	Material (SCPH2)	Material (SCS13)
1	Handwheel	Aluminum Alloy	Aluminum Alloy
2	Cylinder	Aluminum Alloy	Aluminum Alloy
3	Actuator Stem	SS41	SS41
4	Yoke	FC250	FC250
5	V-Packing	PTFE	PTFE
6	Bonnet	SS41	SUS304
7	Plug Stem	SUS316	SUS316
8	Plug	SUS304	SUS304
9	Body	SCPH2	SCS13

Dimensions **Unit : mm**

Valve		L	H1	H2	H	D
mm	inch					
15	1/2	130	82	549	631	120
20	3/4	150	82	549	631	120
25	1	160	82	549	631	120
40	1-1/2	200	99	615	714	150
50	2	230	106	622	728	150
65	2-1/2	290	118	662	780	175
80	3	310	132	761	893	200
100	4	350	149	780	929	200

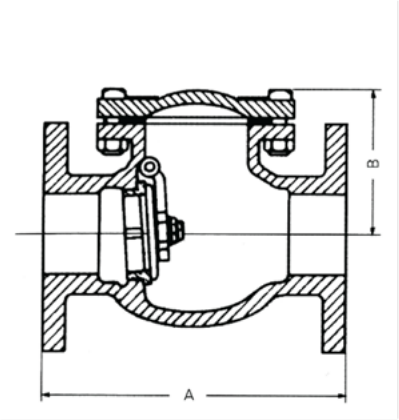
SWING CHECK VALVE

SPECIFICATION

BRONZE / RESILIENT SEAT
BS 5153 • FLANGED TO BS 4504 PN10/PN16

PN/10/16
DN50~600





PRESSURE / TEMPERATURE RATINGS

Working Pressure	16 bar
Testing Pressure	Shell : 24 bar Seat : 17.6 bar
Working Temperature	-10˚C to 120˚C (Bronze / EPDM) -10˚C to 80˚C (NBR)
Suitable Media	Water, Oil & Gas

MATERIALS

Part	Material	BS
Body	Cast Iron	1452 Gr. 220
Disc	Cast Iron	1452 Gr. 220
Seat Ring	Gunmetal	1400 LG 2
Disc Ring	Gunmetal EPDM / NBR	1400 LG 2

DIMENSIONS

Size mm	L mm	H mm
50	203	121
65	216	135
80	241	145
100	292	162
125	330	182
150	356	212
200	495	265
250	622	305
300	699	343
350	787	450
400	914	520
450	914	550
500	1016	590
600	1219	680

Note:

1. BS 5153 is equivalent to EN 12334.
2. BS 4504 PN16 is equivalent to EN 1092-2.
3. JIS B2239 10K and other flange standards available upon request.
4. If used for gas application, please consult our sales office.
5 Design and specifications are subject to change without prior notice.

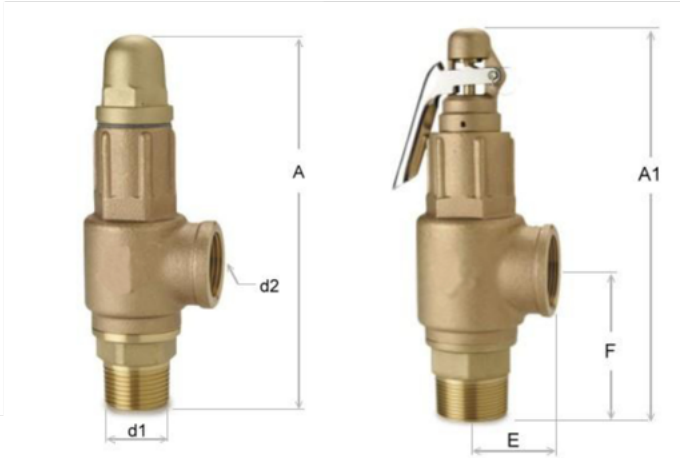
SAFETY & RELIEL VALVE

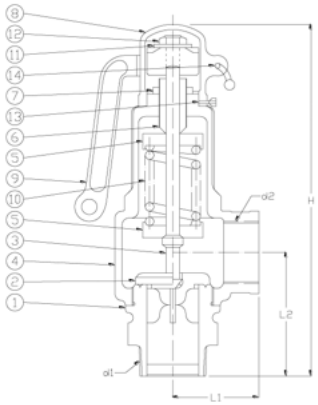
MODEL	METAL	PTFE
W/O LEVER	SV-B27	SVP-B27
WITH LEVER	SV-B29	SVP-B29

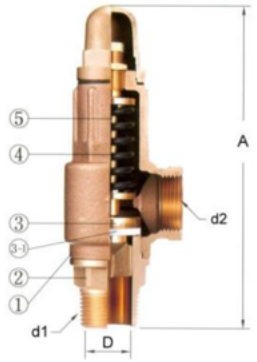
SV-B27/SV-B29 optional Pressure: 10.5~20 kgf/cm²

The Disc can be replaced with **PTFE** for good effect of anti-leakage. (Model: SVP-B27, SVP-B29)

When placing order, please indicate **Working Pressure**







Working Fluid	**SV-B27/SV-B29/SVP-B29** Non-Corrosive Gas, Air, Steam. **SVP-B27 (W/O Lever)** Non-Corrosive Gas, Non-Corrosive Liquid, Air, Steam, Water, Oil.
Working Temperature	-45℃～185℃
Working Pressure	**SV-B27 / SV-B29** 0.3~2 kgf/cm² 2.1~10 kgf/cm² 11 ~ 20 kgf/cm² **SVP-B27 / SVP-B29 (PTFE)** 7 ~10 kgf/cm²
Connection	BSPT (BS21), NPT (ANSI B2.1)

Material

No./ Parts	W/O Lever	SV-B27 (S3W-A)	SVP-B27
	With Lever	SV-B29 (S3W-LR)	SVP-B29
	Disc Type	METAL TO METAL	PTFE
1	Valve Seat	FORGE BRASS	FORGE BRASS
2	Valve Disc	FORGE BRASS	FORGE BRASS
3	Valve Spindle (Stem)	FORGE BRASS	FORGE BRASS
3-1	Valve Seal	-	PTFE
4	Valve Body	CAST BRONZE	CAST BRONZE
5	Spring Shoe	BsBM	BsBM
6	Adjusting Screw	BsBM	BsBM
7	Stop Nut	BsBM	BsBM
8	Cap	FORGE BRASS	FORGE BRASS
9	Lever (B29)	STEEL	STEEL
10	Spring	SWOSC-V	SWOSC-V
11	Screw Washer	BsBM	BsBM
12	Hexagon Nut	BsBM	BsBM
13	Stop Bolt	BsBM	BsBM
14	Pin	BsBF	BsBF

This type of safety valve is characterized by regulating of pressure in valve rising and blowing-out when actuated and is the smallest and lightest valve, and also can be used in non-corrosive gases (air, oxygen, nitrogen, etc.) steam and liquids, such as water and oil. The sizes shown in the chart are subject to change without notice.

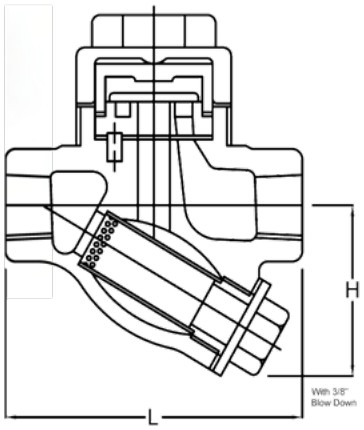
Nominal Diameter	Valve Seat Orifice D	Lift ℓ	Effective Area mm²			L1 E	L2 F	Fitting Screw		Closed Type		Lever Type	
			2.22Dl	πDl	0.785D²			Inlet d1	Outlet d2	A mm	Wt. kgs	A1 mm	Wt. kgs
12	13	0.52	13.32	18.84	113.0	29	50	PT 1/2	PF 1/2	138	0.52	161	0.59
19	19	0.76	32.05	45.36	283.3	36	58	PT 3/4	PF 3/4	149	0.66	172	0.74
25	25	1.00	55.50	78.53	490.6	40	70	PT 1	PF 1	181	1.09	202	1.19
32	32	1.28	90.93	128.67	803.8	50	82	PT 1.1/4	PF 1.1/4	207	1.90	222	1.94
38	38	1.52	128.22	181.45	1133.5	54	93	PT 1.1/2	PF 1.1/2	231	2.35	246	2.39
50	50	2.00	222.00	314.15	1962.5	67	102	PT 2	PF 2	266	3.85	282	4.11

STEAM TRAP CLASS 16K

- Please name the model No. (ST-8LS) when negotiation.
- Thread: BS21, ANSI B2.1 or DIN-259.
- Working Temperature: 120°C
- Max. Temperature: 220°C

- Test Pressure: Body 32 kgf/cm² (Hydrostatic)
- Working Pressure: 0.3 kgf/cm² - 16 kgf/cm²





Material

Model	ST-8LS
Body	IRON
Bonnet/Plug	IRON
Seat	SS 410
Disc	SS 304
Seal	PTFE
Packing	PTFE
Screen	SS 304

Dimension mm

Size	inch	1/2	3/4	1
	mm	15	20	25
L		95	105	110
H		56	65	70

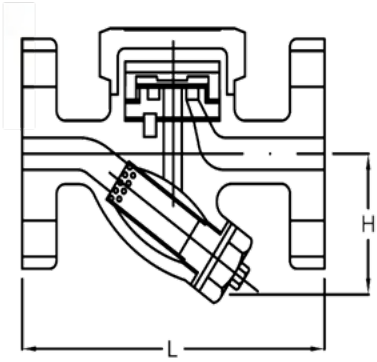
Capacity kgf/H

P kg/cm²	0.3	0.6	1	2	3	4	5	6	8	10	12	14	16
15	160	205	250	320	380	420	460	490	540	590	630	660	690
20	230	295	360	460	530	590	640	690	770	840	900	960	1000
25	290	380	460	590	680	760	820	880	980	1060	1130	1200	1260

Material

Model	ST-T3F
Body	IRON
Bonnet/Plug	IRON
Seat	SS 410
Disc	SS 304
Seal	PTFE
Packing	PTFE
Screen	SS 304





Dimension mm

Size	inch	1/2	3/4	1	1.1/4	1.1/2	2
	mm	15	20	25	32	40	50
L		142	160	182	244	244	268
H		67	73	92	107	107	125

Capacity kgf/H

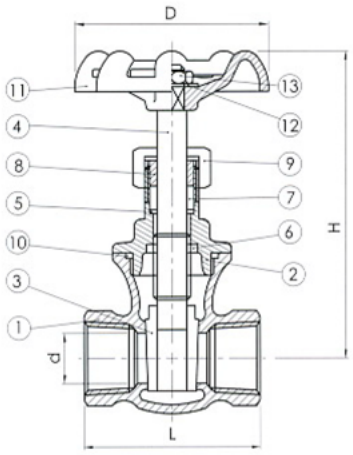
P kg/cm²	0.3	0.6	1	2	3	4	5	6	8	10	12	14	16
15 - 25	183	220	253	300	345	385	420	450	510	570	630	690	740
32	350	410	490	620	730	820	900	960	1080	1200	1320	1440	1560
40	440	520	610	780	900	1000	1090	1180	1350	1500	1650	1790	1930
50	460	560	670	850	1000	1110	1220	1320	1500	1680	1860	2030	2200

STAINLESS STEEL VALVE SCREWED

VT-GA CLASS 200 GATE VALVE

SIZE:1/2"~2"





ITEM	PARTS	MATERIAL
1	BODY	ASTM--A351-CF8M
2	BONNET	ASTM--A351-CF8M
3	DISC	ASTM--A351-CF8M
4	STEM	AISI 316
5	STEM WASHER	AISI 316
6	SNAP WASHER	AISI 316
7	PACKING	PTFE
8	GLAND	AISI 316
9	PACKING NUT	ASTM--A351-CF8M
10	PACKING	PTFE
11	HAND WHEEL	CAST IRON
12	PLATE	ALUMINUM
13	WHEEL NUT	AISI 316

FEATURES:

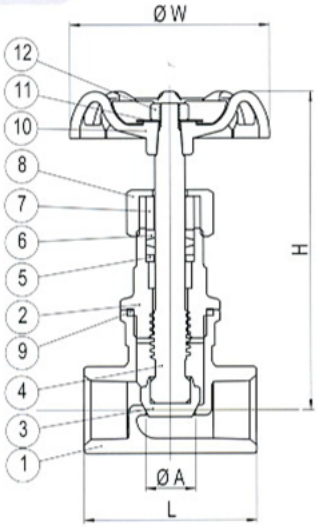
- *Full port pressure temperature rating 200 PSI/ W.O.G. 350°F S.P.
- * Threaded ends conform to ANSI B 2.1, BS 21, DIN 259/2999, ISO 228
- *Stainless steel class 200 inside screw and screwed bonnet, wedge disc integral seat, non-rising stem and handwheel.

SIZE	A	L	H	W
DN15	15	54	96	60
DN20	20	58	103	70
DN25	25	65	112	70
DN32	32	75	128	80
DN40	40	78	149	90
DN50	50	87	165	100
DN65	40	115	197	115
DN80	50	135	225	135

VT-GL CLASS 200 GLOBE VALVE

SIZE:1/2"~2"





ITEM	PARTS	MATERIAL
1	BODY	ASTM-A351-CF8M
2	BONNET	ASTM-A351-CF8M
3	DISC	316 SS
4	STEM	316 SS
5	STEM WASHER	316 SS
6	STEM PACKING	TEFLON
7	SLEEVE	316 SS
8	PACKING NUT	ASTM-A351-CF8M
9	GASKET	TEFLON
10	HAND WHEEL	CAST IRON
11	NAME PLATE	ALUMINUM
12	WHEEL NUT	316 SS

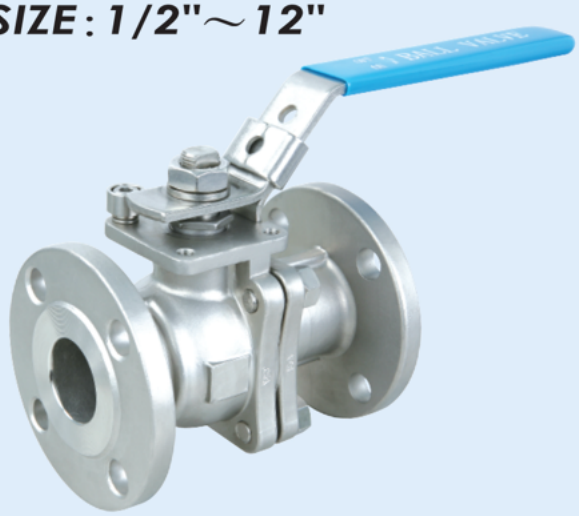
FEATURES:

- *Full port pressure temperature rating 200 PSI /W.O.G. 350°F S.P.
- *Threaded ends conform to ANSI B 2.1, BS 21, DIN 259/2999, ISO 228
- *Stainless steel class 200 inside screw and screwed bonnet, swivel disc integral seat, rising stem and handwheel.

SIZE	A	L	H OPEN	W
DN10	10	52	108	60
DN12	12	52	108	60
DN15	15	52	108	60
DN20	20	60	118	70
DN25	25	72	130	80
DN32	32	80	150	90
DN40	40	90	160	100
DN50	50	106	178	115

2-PC FULL PORT BALL VALVE FLANGE

SIZE : 1/2"～12"

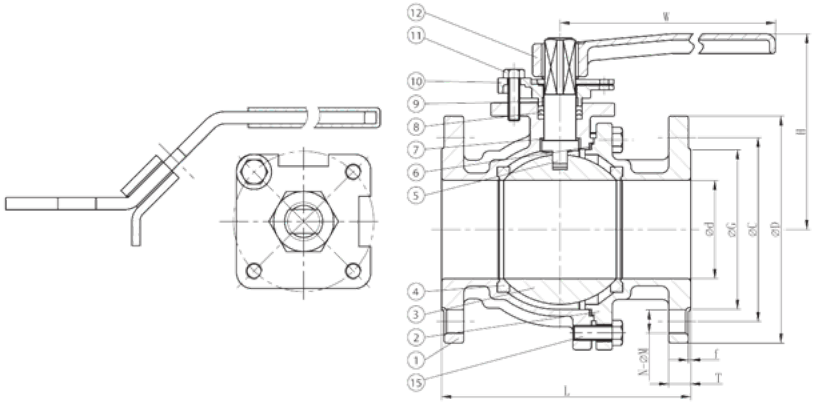


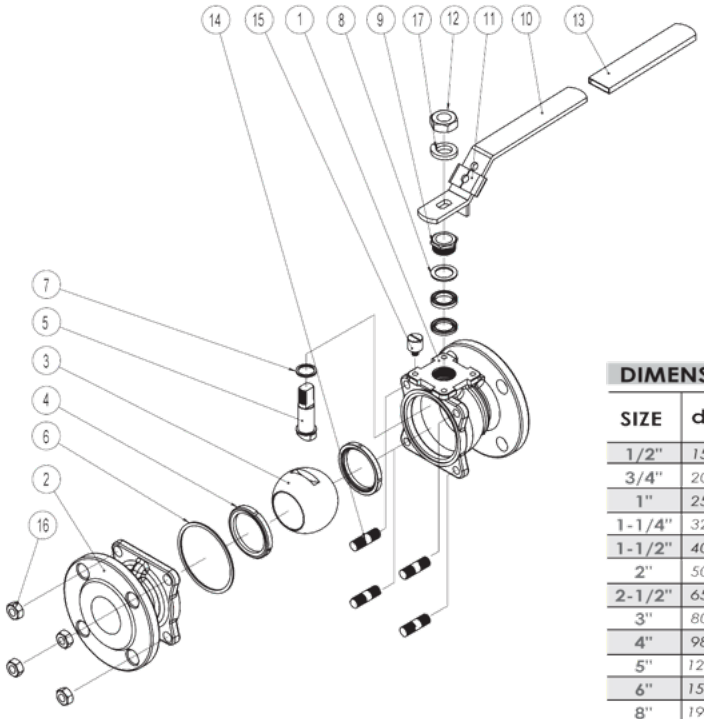
ANSI CLASS 150
STAINLESS STEEL
AISI-316 (EN10213-4 1.4408) (ASTM-A351-CF8M)
AISI-304 (EN10213-4 1.4308) (ASTM-A351-CF8)
CARBON STEEL
S-20C (EN10213-2 1.0619) (ASTM-A216-WCB)

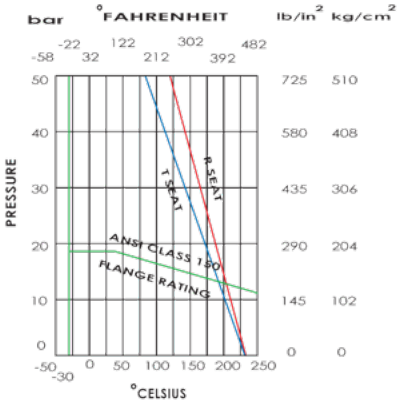
FEATURES:
*Flange: ANSI B16.5 class 150
*Face to face: ANSI B16.10
*Mounting Pad for ISO 5211
*Anti-static device, fire safe design
*Blow-out proof stem, lever operated
*Full port

OPTION: Solid ball / Hollow ball
Wrench handle
Locking device

NO	PART NAME	MATERIALS			
1	BODY	FC20	WCB	CF8	CF8M
2	CAP	FC20	WCB	CF8	CF8M
3	BALL	CF8	SCS13	CF8	CF8M
4	SEAT	PTFE			
5	STEM	SS304	SS304	SS316	SS304
6	GASKET	PTFE			
7	THRUST WASHER	PTFE			
8	PACKING	PTFE			
9	STEM PACKING	PTFE			
10	GLAND	SCS13			
11	GLAND BOLT	ASTM 194-B8			
12	HANDLE	FC / WCB /SS304			
13	STOPPER	SS304			
14	SNAP RING	SS304			
15	BOLT	ASTM 194-B8			







DIMENSIONS UNIT:mm

SIZE	d	D	C	G	f	T		N	M	L	H	J	K	Ma	W	ISO-5211
						FC	SUS									
1/2"	15	89	60.5	35	1.6	11.1	11.1	4	16	108	85	50	42	M5	160	F04
3/4"	20	98	70	43	1.6	12.7	11.1	4	16	117	90	50	42	M5	160	F04
1"	25	108	79.5	51	1.6	14.3	11.1	4	16	127	100	50	42	M5	160	F04
1-1/4"	32	117	89	64	1.6	14.9	12.7	4	16	140	105	50	50	M6	160	F05
1-1/2"	40	127	98.5	73	1.6	17.5	14.3	4	16	165	110	62	70	M8	206	F07
2"	50	152	120.5	92	1.6	19.1	15.9	4	19	178	120	62	70	M8	206	F07
2-1/2"	65	178	139.5	105	1.6	22.3	17.5	4	19	190	160	75	70	M8	324	F07
3"	80	190	152.5	127	1.6	23.9	19.1	4	19	203	170	75	102	M10	324	F10
4"	98	229	190.5	157	1.6	23.9	23.9	8	19	229	185	75	102	M10	324	F10
5"	125	254	216	186	1.6	23.9	23.9	8	22	356	260	89	125	M12	650	F12
6"	150	279	241.5	216	1.6	25.4	25.4	8	22	394	280	89	125	M12	650	F12
8"	198	343	298.5	270	1.6	28.6	28.6	8	22	457	340	100	125	M12	850	F12
10"	250	406	362	324	1.6	30.2	30.2	12	25	533	400	100	140	M16	1000	F14
12"	300	483	432	381	1.6	31.8	31.8	12	25	610	GEAR	100	140	M16	1000	F14
14"	350	533	476.5	413	1.6	35	35	12	25	686	GEAR	100	140	M16	1000	F14

3-PC FULL PORT BALL VALVE

SIZE : 1/4"～6"

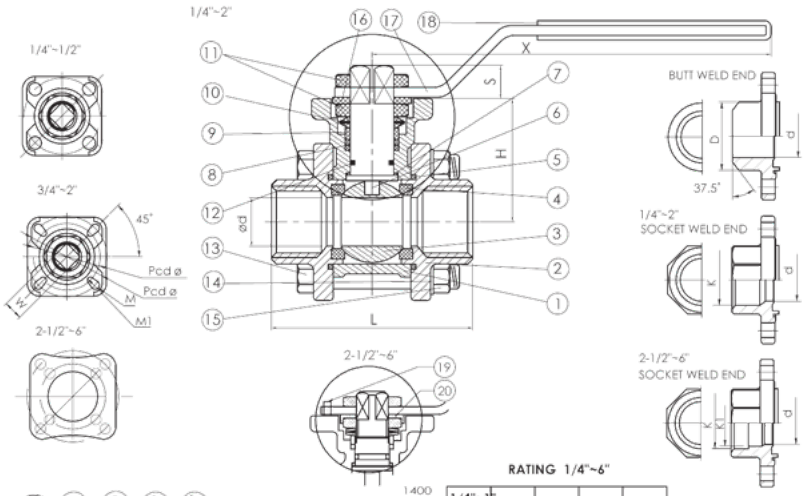


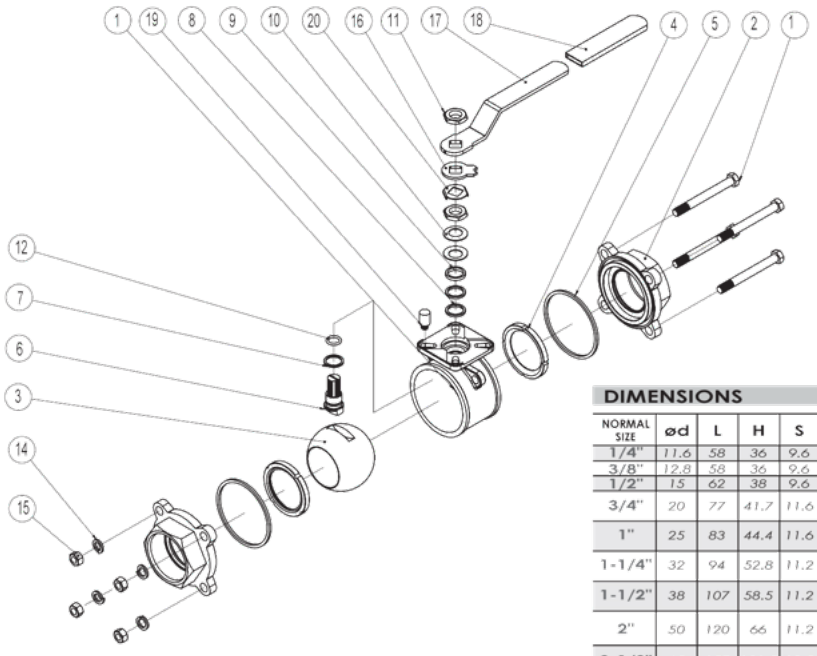
STAINLESS STEEL
AISI-316 (EN10213-4 1.4408) (ASTM-A351-CF8M)
AISI-304 (EN10213-4 1.4308) (ASTM-A351-CF8)
CARBON STEEL
S-20C (EN10213-2 1.0619) (ASTM-A216-WCB)

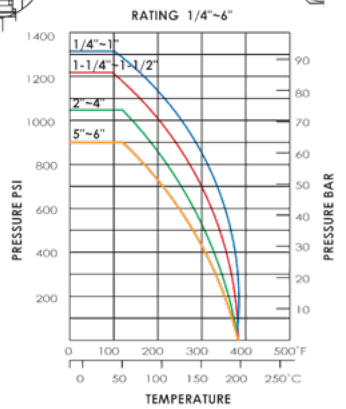
FEATURES:
*Pipe thread in accordance with ANSI B2.1, BS21 1973, DIN259/2999, ISO 228
*lug body
*Blow-out proof stem/Full port
*Investment casting body and cap
*1000PSI (69BAR) W.O.G.
*Direct Mounting Pad for ISO Standard 5211
*Screwed end, butt weld end, socket weld end.

OPTION: Similar Design but with C Style clip DIN Standard,M3 Length

ITEM	PARTS	Q,TY	MATERIALS	
1	BODY	1	ASTM-A351-CF8M	ASTM-A216-WCB
2	CAP	2	ASTM-A351-CF8M	ASTM-A216-WCB
3	BALL	1	ASTM-A351-CF8M	ASTM-A351-CF8
4	BALL SEAT	2	PTFE	PTFE
5	JOINT GASKET	2	PTFE	PTFE
6	STEM	1	AISI 316	AISI 304
7	THRUST WASHER	1	PTFE	PTFE
8	STEM PACKING	2	PTFE	PTFE
9	HIGH WASHER	1	AISI 304	AISI 304
10	BELLEVILLE WASHER	2	AISI 304	AISI 304
11	STEM NUT	2	AISI 304	AISI 304
12	O-RING	1	VITON	VITON
13	BOLT	4(2-1/2"~4"X6PCS)	AISI 304	AISI 304
14	SPRING WASHER	4(2-1/2"~4"X6PCS)	AISI 304	AISI 304
15	HEX NUT	4(2-1/2"~4"X6PCS)	AISI 304	AISI 304
16	STOPPER	1	AISI 304	AISI 304
17	HANDLE	1	AISI 304	AISI 304
18	PLASTIC COVER	1	PLASTIC	PLASTIC
19	STOPPER PIN	1	AISI 304	AISI 304
20	LOCK WASHER	1	AISI 304	AISI 304







DIMENSIONS UNIT:mm

NORMAL SIZE	ød	L	H	S	X	ISO-5211 Pcd ø		W	M	M1	Cv FACTOR	TORQUE kgf-cm	D	d	K	K1
1/4"	11.6	58	36	9.6	112	F03	ø36	9	R3.0	-	6.6	45	ø18.1	ø11.6	ø14.1	
3/8"	12.8	58	36	9.6	112	F03	ø36	9	R3.0	-	7.9	45	ø18.1	ø12.7	ø17.6	
1/2"	15	62	38	9.6	112	F03	ø36	9	R3.0	-	11.2	55	ø21.7	ø15	ø21.7	
3/4"	20	77	41.7	11.6	138	F04 F05	ø42 ø50	11	R3.5	R3.0	21	90	ø27.2	ø20	ø27.2	
1"	25	83	44.4	11.6	138	F04 F05	ø42 ø50	11	R3.5	R3.0	34	110	ø34	ø25	ø33.9	
1-1/4"	32	94	52.8	11.2	205	F05 F07	ø50 ø70	14	R4.5	R3.5	57	155	ø42.7	ø32	ø42.6	
1-1/2"	38	107	58.5	11.2	205	F05 F07	ø50 ø70	14	R4.5	R3.5	80	220	ø48.6	ø40	ø48.7	
2"	50	120	66	11.2	205	F05 F07	ø50 ø70	14	R4.5	R3.5	148	330	ø60.5	ø50	ø61.1	
2-1/2"	65	157	101.5	18.5	330	F07 F10	ø70 ø102	17	R5.5	ø9.0	265	400	ø76.3	ø65	ø73.8	ø70.9
3"	80	182	112.5	18.5	330	F07 F10	ø70 ø102	17	R5.5	ø9.0	415	660	ø93	ø80	ø89.8	ø82.5
4"	100	213.6	127.0	18.5	330	F07 F10	ø70 ø102	17	R5.5	ø9.0	780	900	ø114	ø100	ø115.4	ø108
5"	12	283	158.5	47.0	500	F10 F12	ø102 ø125	27	R7.0	ø12	1040	1200	ø139.8	ø125	ø134.7	ø127.2
6"	150	342	175	47.0	500	F10 F12	ø102 ø125	27	R7.0	ø12	1200	1500	ø165.2	ø150	ø161.5	ø154

2-PC FULL PORT BALL VALVE

SIZE : 1/4"～3"



STAINLESS STEEL

AISI-316 (EN10213-4 1.4408) (ASTM-A351-CF8M)

AISI-304 (EN10213-4 1.4308) (ASTM-A351-CF8)

CARBON STEEL

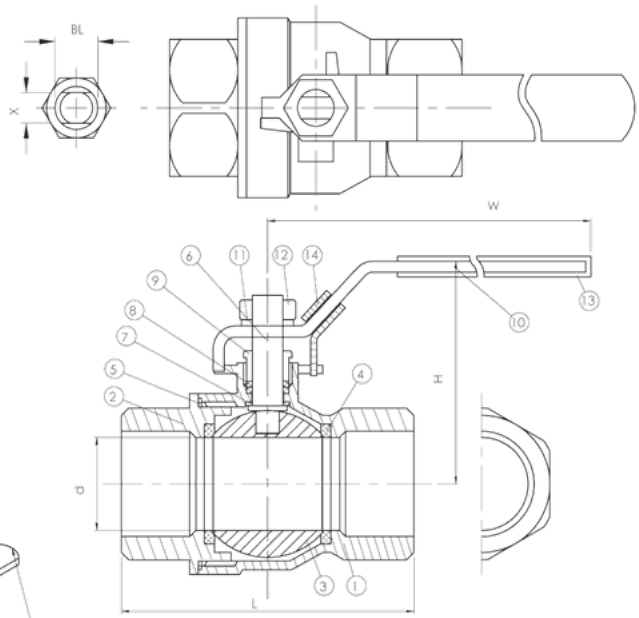
S-20C (EN10213-2 1.0619) (ASTM-A216-WCB)

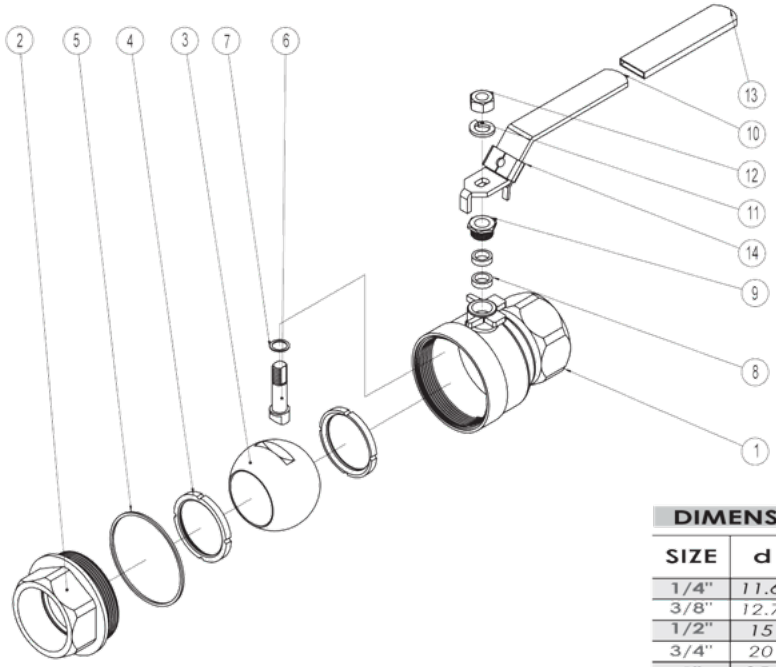
FEATURES:

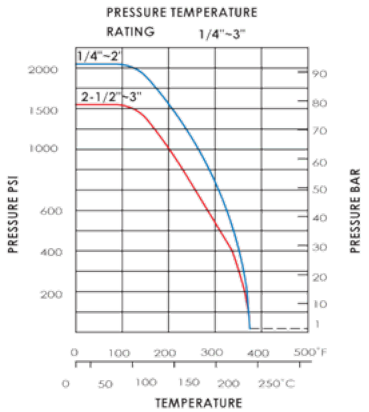
*Pipe thread in accordance with ANSI B2.1, BS 21 1973, DIN 259/2999, ISO 228
*Lug body
*Blow-out proof stem/Full port
*Investment casting body and cap
*2000 PSI (138 BAR) W.O.G.(1/4"~2")
1500 PSI (103 BAR) W.O.G.(2-1/2"~3")

OPTION: Locking device
M3 Length

ITEM	PARTS	Q,TY	MATERIALS	
1	BODY	1	ASTM-A351-CF8M	ASTM-A216-WCB
2	CAP	1	ASTM-A351-CF8M	ASTM-A216-WCB
3	BALL	1	ASTM-A351-CF8M	ASTM-A351-CF8
4	BALL SEAT	2	PTFE	PTFE
5	JOINT GASKET	1	PTFE	PTFE
6	STEM	1	AISI 316	AISI 304
7	THRUST WASHER	1	PTFE	PTFE
8	STEM PACKING	2	PTFE	PTFE
9	GLAND NUT	1	AISI 304	AISI 304
10	HANDLE	1	AISI 304	AISI 304
11	SPRING WASHER	1	AISI 304	AISI 304
12	STEM NUT	1	AISI 304	AISI 304
13	PLASTIC COVER	1	PLASTIC	PLASTIC
14	LOCK DEVICE	1	AISI 304	AISI 304







DIMENSIONS UNIT:mm

SIZE	d	L	H	W	X	BL	Cv FACTOR	TORQUE kgf-cm
1/4"	11.6	44.5	51	95	5	5/16"	6.6	40
3/8"	12.7	44.5	51	95	5	5/16"	7.9	40
1/2"	15	57	53	95	5	5/16"	11.2	54
3/4"	20	65	59.5	110	6.5	3/8"	21	74
1"	25	76	73	135	8	7/16"	35	104
1-1/4"	32	87.5	79	135	8	7/16"	57	135
1-1/2"	38	102	90.5	165	9	1/2"	80	180
2"	50	123	98.5	165	9	1/2"	148	250
2-1/2"	65	156	130.5	215	12	3/4"	265	480
3"	80	184	142.5	215	12	3/4"	415	750

1-PC FULL PORT BALL VALVE

SIZE : 1/4"～2"



STAINLESS STEEL

AISI-316 (EN10213-4 1.4408) (ASTM-A351-CF8M)

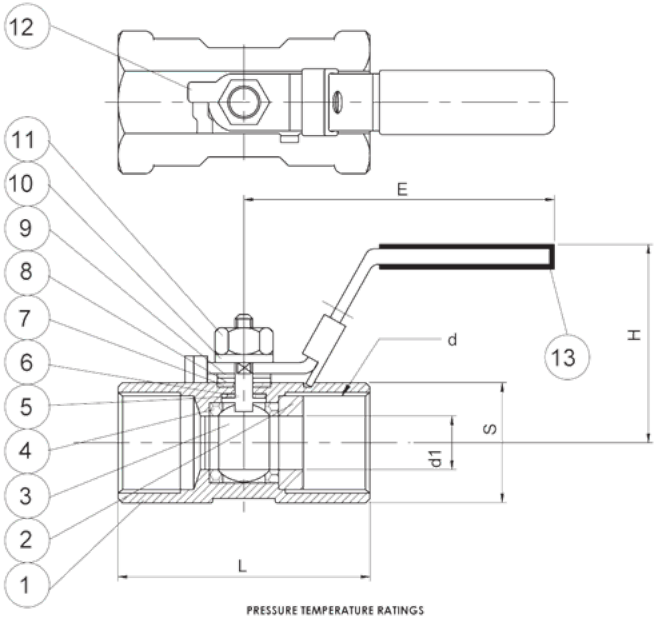
AISI-304 (EN10213-4 1.4308) (ASTM-A351-CF8)

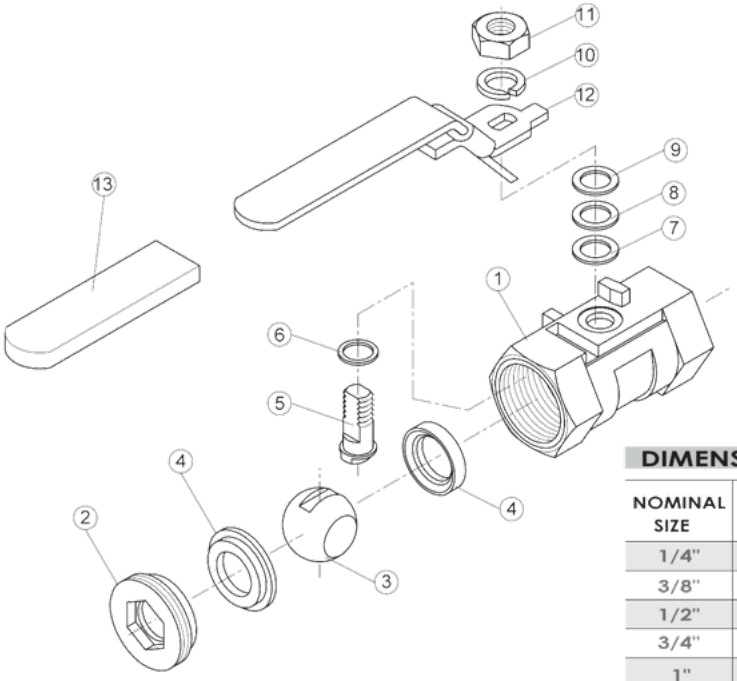
FEATURES:

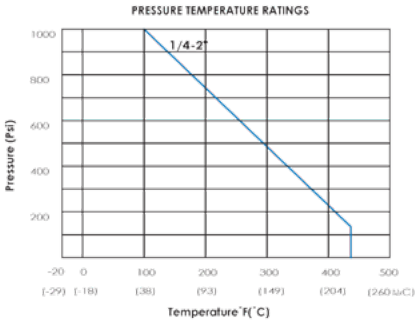
*Pipe thread in accordance with ANSI B2.1, BS 21 1973, DIN 259/2999,ISO 228
*Blow-out proof stem/Reduce bore
*Investment casting body and inscrewed
*800 PSI (55 BAR) W.O.G./1000 PSI (69 BAR) W.O.G.

OPTION: Locking device
Oval Handle
Wing Handle

NO	NAME OF PARTS	MATERIALS
1	BODY	316.WCB
2	INSERT	316.WCB
3	BALL	SUS 316
4	SEAT	PTFE
5	STEM	SUS 316
6	THRUST WASHER	PTFE
7	STEM PASHER	PTFE
8	GLAKND WASHER	SUS 304
9	GLAKND WASHER	SUS 304
10	SPRING WASHER	SUS 304
11	NUT	SUS 304
12	HANDLE	SUS 304
13	HANDLE SLEEVE	VINYL GRIP







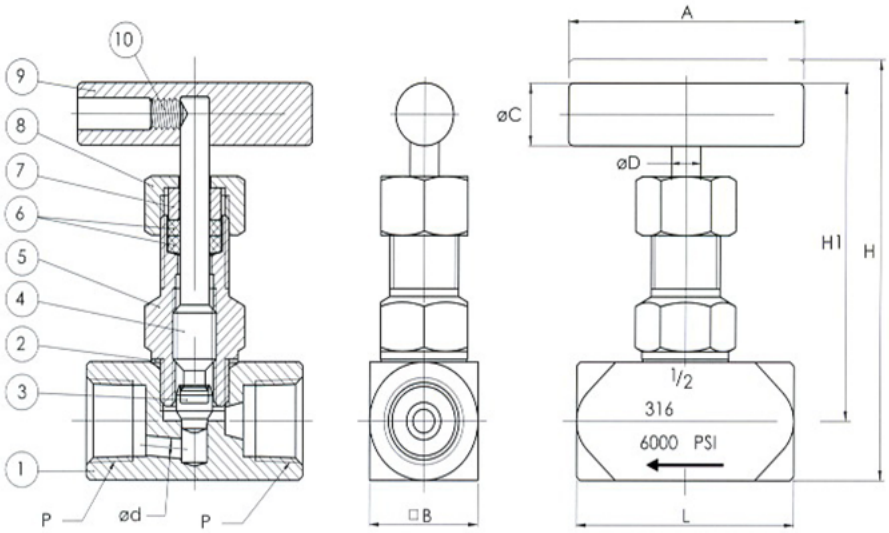
DIMENSIONS UNIT:mm

NOMINAL SIZE	d	d1	L	H	E	S	Cv FACTOR	TORQUE kgf-cm	KG
1/4"	RC 1/4	5	39	36.5	69	17	3.8	12	0.070
3/8"	RC 3/8	7.2	44	37.5	79	21	4.0	12	0.102
1/2"	RC 1/2	9.2	56.5	40	110	25	4.5	13	0.166
3/4"	RC 3/4	12.5	59	45.3	108	31.5	9.0	20	0.247
1"	RC 1	15	71	48	112	38	16.0	38	0.412
1-1/4"	RC 1-1/4	20	78	53	112	48	24.0	50	0.672
1-1/2"	RC 1-1/2	25	83	60.5	157	53	37.0	72	0.838
2"	2	32	100	67.5	155.5	64	68.0	90	1.384

VT-ND 6000 PSI NEEDLE VALVE S.S.316/CARBON STEEL

SIZE: 1/4"~1"





- ▲Investment Casting
- ▲Screwed-In Bonnet
- ▲Rising Stem
- ▲T Handle Operation
- ▲Conneting Threads:
  - ANSI B2.1
  - BS21
  - DIN
- ▲Working Pressure:6000psi
  OPTION:10,000psi

MATERIAL

NO	DESCRIPTION		
1	BODY	SS 316	CARBON STEEL
2	BODY SEAL	PTFE	PTFE
3	DISC	SS 316	SS 316
4	STEM	SS 316	SS 316
5	BONNET	SS 316	CARBON STEEL
6	PACKING	PTFE	PTFE
7	GLAND	SS 316	SS 316
8	PACKING NUT	SS 316	S15C
9	HANDLE	SS 410	SS 410
10	FIXING SCREW	ALLOY STEEL	ALLOY STEEL

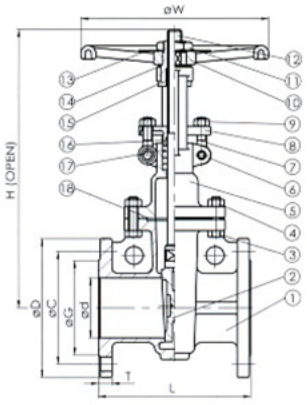
SIZE		A	□B	øC	øB	øD	H	H1	L	P
MM	INCH									
8	1/4"	60	22	13	3	7	82	65	45	1/4"
10	3/8"	60	25	13	3	7	85	67	50	3/8"
15	1/2"	65	30	16	5	8	107	86	60	1/2"
20	3/4"	65	35	16	5	8	111	88	65	3/4"
25	1"	80	46	19	7	10	130	100	83	1"

STAINLESS STEEL VALVE FLANGE

VT-GAF GATE VALVE 10K/150LBS FLANGE END STAINLESS STEEL/CARBON STEEL

SIZE:1/2"~12"





DIMENSIONS 150LBS mm

SIZE	d	L	H	W	D		C		G		T	
					10K	150	10K	150	10K	150	10K	150
1/2"	15	108	183	120	95	89	70	60.5	51	35	12	11.1
3/4"	20	117	190	120	100	98	75	70	56	43	14	11.1
1"	25	127	210	120	125	108	90	79.5	67	51	14	11.1
11/4"	32	140	270	200	135	117	100	89	76	64	16	12.7
11/2"	40	165	270	200	140	127	105	98.5	81	73	16	14.3
2"	50	178	320	200	155	152	120	120.5	96	92	16	15.9
21/2"	65	190	375	200	175	178	140	139.5	116	105	18	17.5
3"	80	203	445	250	185	190	150	152.5	126	127	18	19.1
4"	100	229	523	250	210	229	175	190.5	151	157	18	23.9
5"	125	254	606	300	250	254	210	216	182	186	20	23.9
6"	150	267	710	300	280	279	240	241.5	212	216	22	25.4
8"	200	292	910	350	330	343	290	298.5	262	270	22	28.6
10"	250	330	1117	400	400	406	355	362	324	324	24	30.2
12"	300	356	1324	400	445	483	400	432	368	381	24	31.8

TEST PRESSURE

SHELL(BY HYDRAULIC)		450 PSI 32kg/cm²
SEAT	BY HYDRAULICB	315PSI 22kg/cm²
	PNEUMAIC	80PSI 6kg/cm²

MATERIALS LIST

NO.	PART NAME	MATERIAL
1	BODY	SCS14/CF8M | SCS13/CF8
2	DISC	SCS14/CF8M | SCS13/CF8
3	BONNET BOLT	ASTM 194-B8
4	BONNET NUT	ASTM 194-B8
5	BONNET	SCS14/CF8M | SCS13/CF8
6	HINGE PIN	SUS304
7	EYE BOLT	SUS304
8	GLAND	SCS13
9	EYE NUT	ASTM 194-B8
10	HAND WHEEL	FCD
11	NUT	BRONZE(OR DUCTILENI-RESIST)
12	STEM	SUS316 | SUS304
13	NAME PLATE	SUS304
14	SPRING	BRONZE(OR DUCTILENI-RESIST)
15	YOKE SLEEVE	BRONZE(OR DUCTILENI-RESIST)
16	GLAND PACKING	PTFE
17	PACKING	PTFE
18	GASKET	PTFE(OR NO ASBESTOS)

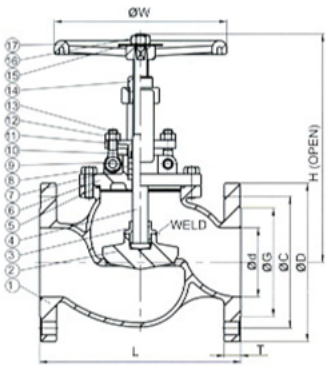
FEATURES

FACE TO FACE DIMENSION:JIS B2002 / ANSI B16.10
END FLANGE DIMENSION:JIS B2239 / ANSI B16.5
DESIGN:ANSI B16.34
TEST: API 598
INVESTMENT CASTING BODY

VT-GLF GLOBE VALVE 10K/150LBS FLANGE END STAINLESS STEEL/CARBON STEEL

SIZE:1/2"~12"





DIMENSIONS 150LBS mm

SIZE	d	L	H	W	D		C		G		T	
					10K	150	10K	150	10K	150	10K	150
1/2"	15	108	168	140	95	89	70	60.5	51	35	12	11.1
3/4"	20	117	168	140	100	98	75	70	56	43	14	11.1
1"	25	127	173	140	125	108	90	79.5	67	51	14	11.1
1-1/4"	32	140	190	160	135	117	100	89	76	64	16	12.7
1-1/2"	40	165	200	160	140	127	105	98.5	81	73	16	14.3
2"	50	203	230	200	155	152	120	120.5	96	92	16	15.9
2-1/2"	65	216	243	200	175	178	140	139.5	116	105	18	17.5
3"	80	241	286	250	185	190	150	152.5	126	127	18	19.1
4"	100	292	325	250	210	229	175	190.5	151	157	18	23.9
5"	125	356	380	300	250	254	210	216	182	186	20	23.9
6"	150	406	445	350	280	279	240	241.5	212	216	22	25.4
8"	200	495	545	350	330	343	290	298.5	262	270	22	28.6
10"	250	622	650	400	400	406	355	362	324	324	24	30.2
12"	300	698	736	400	445	483	400	432	368	381	24	31.8

TEST PRESSURE

SHELL(BY HYDRAULIC)		450 PSI 32kg/cm²
SEAT	BY HYDRAULIC	315PSI 22kg/cm²
	PNEUMAIC	80PSI 6kg/cm²

MATERIALS LIST

NO.	PART NAME	MATERIAL
1	BODY	SCS13/CF8 | SCS14/CF8M
2	DISC	SCS13/CF8 | SCS14/CF8M
3	DISC COVER	SCS13/CF8 | SCS14/CF8M
4	STEM	SS304 | SS316
5	GASKET	PTFE
6	BONNET	SCS13/CF8 | SCS14/CF8M
7	GLAND PACKING	PTFE
8	BONNET BOLT	ASTM 193-B8
9	HINGE PIN	SS304
10	SLEEVE	PTFE
11	GLAND	CF8
12	NUT	ASTM 193-B8
13	EYE BOLT	ASTM 193-B8
14	YOKE SLEEVE	BRONZE
15	NAME PLATE	SS304
16	NUT	ASTM 193-B8
17	HAND WHEEL	FCD400

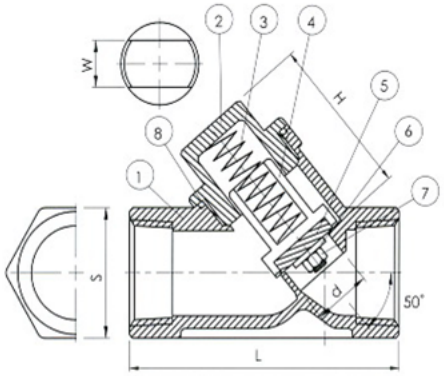
FEATURES

FACE TO FACE DIMENSION:JIS B2002 / ANSI B16.10
END FLANGE DIMENSION:JIS B2239 / ANSI B16.5
DESIGN:ANSI B16.34
TEST:API 598
INVESTMENT CASTING BODY

VT-P PN40 PISTON CHECK VALVE SCREWED END

SIZE:1/4"~2"





ITEM	PARTS	MATERIAL
1	BODY	ASTM-A351-CF8M
2	CAP	ASTM-A351-CF8M
3	SPRING	AISI 316
4	DISC	AISI 316
5	SEAT	PTFE
6	WASHER	AISI 304
7	NUT	AISI 304
8	JOINT GASKET	PTFE

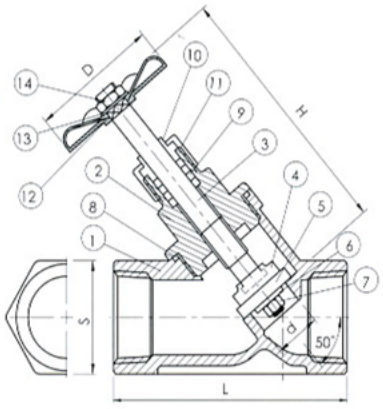
FEATURES: *Investment casting body & cap.
*PN40 rating.
*Maximum working temperature 230°C.
*The end-to-end length conforms to Din 3203. Part 4. M8 series. (PN40)
*Thread ends conform to ANSI B2.1, BS2.1, DIN 259/2999 standard, ISO228

SIZE	d	L	S	H	W
1/4"	11.6	65.5	27	38	24
3/8"	12.5	65.5	27	38	24
1/2"	12.5	65.5	27	36	24
3/4"	18	75.5	32	44	30
1"	23.5	90.5	41	57	35
1-1/4"	31.4	111	50	64	40
1-1/2"	35.7	121	55.5	76	45
2"	45.5	151	70	87	55

VT-S PN40 SHUT-OFF VALVE

SIZE:1/4"~2"





ITEM	PARTS	MATERIAL
1	BODY	ASTM-A351-CF8M
2	BONNET	ASTM-A351-CF8M
3	STEM	AISI 316
4	DISC	AISI 316
5	SEAT	PTFE
6	WASHER	AISI 304
7	NUT	AISI 304
8	JOINT GASKET	PTFE
9	STEM PACKING	PTFE
10	GLAND	AISI 304
11	PACKING NUT	AISI 304
12	HANDWHEEL	MALLEABLE IRON
13	WASHER	AISI 304
14	NUT	AISI 304

FEATURES: *Investment casting body
*PN40
*Max. working temperaure 230° C.
*The end-to-end length conforms to Din 3202 Part 4. M8 series. (PN40)
*Thread ends confoum to ANSI B2.1, BS21, DIN 259/2999. ISO 228

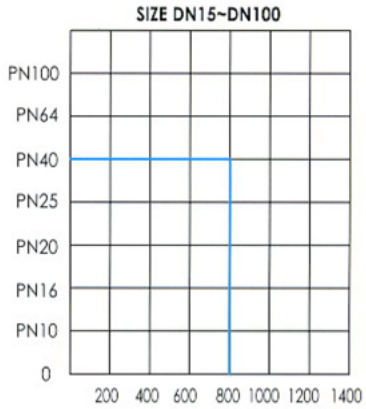
SIZE	d	L	S	H	D
1/4"	11.6	65.5	27	97	62
3/8"	12.5	65.5	27	97	62
1/2"	12.5	65.5	27	97	62
3/4"	18.0	75.5	32	110	62
1"	23.5	90.5	41	117	83
1-1/4"	31.4	111	50	138	83
1-1/2"	35.7	121	55.5	150	114
2"	45.5	151	70	168	114

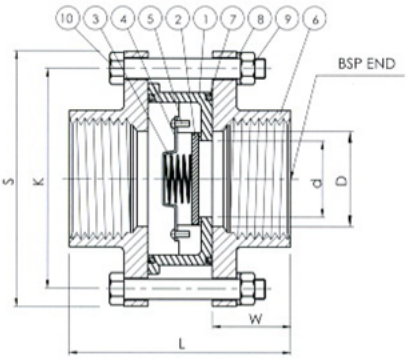
V3-WC PN40 3-PC WAFER DISC CHECK VALVE

SIZE:DN15~DN100



ITEM	PART	MATERIAL	Q,TY
1	VT-WC BODY	ASTM-A351-CF8M	1
2	DISC	ASTM-A351-CF8M	1
3	SPRING	ASTM-A351-CF8M	1
4	SPRING CAP	ASTM-A351-CF8M	1
5	SCREW	AISI 304	4
6	CAP	ASTM-A351-CF8M	2
7	JOINT GASKET	PTFE	2
8	SPRING WASHER	AISI 304	4
9	HEX NUT	AISI 304	4
10	BOLT	AISI 304	4





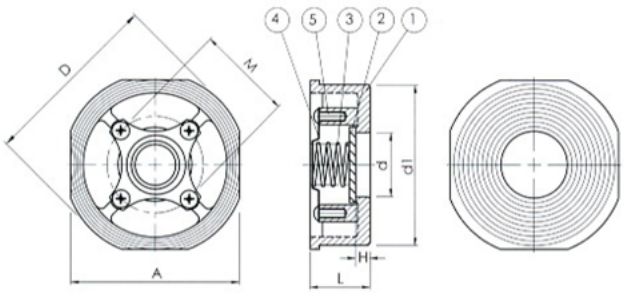
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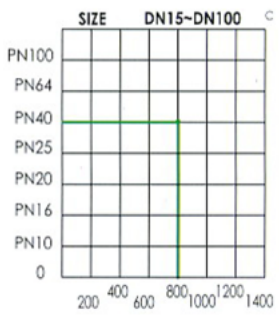
SIZE	DN	D	d	L	W	K	S	KGS
1/2"	15	15	15	67.5	25.4	55	71	0.65
3/4"	15	20	15	67.5	25.4	55	71	0.57
1"	20	25.4	20	75	27.8	63.5	80	0.77
1-1/4"	25	32	25	82.5	30	77	95.5	1.19
1-1/2"	32	38	30	98	35.3	87	106	1.64
2"	40	50.8	38	109	38.5	109	128	2.31
2-1/2"	65	65	62.5	140	47	136	163	5.06
3"	80	80	77	154	52.5	164	193	7.83
4"	100	100	96	195	68	206	241	15.74

VT-WC PN40 1-PC WAFER DISC CHECK VALVE

SIZE:DN15~DN100







FEATURES:

*Investment casting body
*Body in ASTM A351-CF8M
*Trim in AISI 316
*DISC in ASTM-A351-CF8M

* MATERIAL LIST *

ITEM	PART	MATERIAL	Q,TY
1	BODY	ASTM-A351-CF8M	1
2	DISC	ASTM-A351-CF8M	1
3	SPRING	AISI 316	1
4	CAP	AISI 304	1
5	SCREW	AISI 304	4

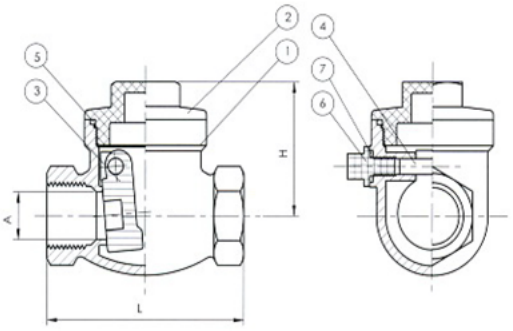
UNIT:MM

DN	SIZE	d	d1	A	D	L	M	H	KGS WEIGHT
15	1/2"	15	43	45	53	16.5	27.7	4.4	0.12
20	3/4"	20	53	55	63	19.5	34.2	4.8	0.20
25	1"	25.4	63	65	73	22	39.4	5.4	0.30
32	1-1/4"	30	75	78	84	28	43.7	6.0	0.40
40	1-1/2"	38	86	88	94	32	54.0	6.6	0.60
50	2"	47	96	98	107	40	63.5	7.1	0.80
65	2-1/2"	62.5	115	118	126	46	82.8	7.8	1.50
80	3"	77	130	134	144	50	98.8	8.4	1.90
100	4"	96	151	154	164	60	119.8	9.0	3.30

VT-C CLASS 200 SWING CHECK VALVE

SIZE:1/2"~3"





ITEM	PARTS	MATERIAL	Q'TY
1	BODY	ASTM-A351-CF8M	1
2	COVER	ASTM-A351-CF8M	1
3	DISC	ASTM-A351-CF8M	1
4	HINGE PIN	SUS316	1
5	GASKET	TEFLON	1
6	PLUG	SUS316	1
7	PLUG GASKET	TEFLON	1

FEATURES:

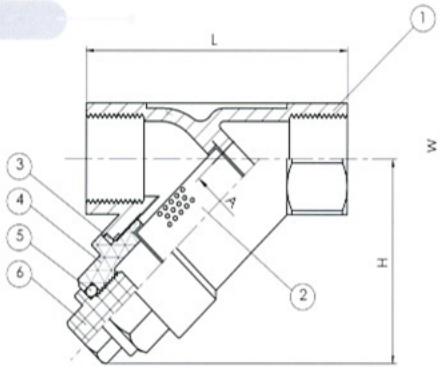
- *Investment casting body.
- *Full port pressure temperature rating 200 PSI /W.O.G. 350°F S.P.
- *Threaded ends conform to ANSI B 2.1, BS 21, DIN 259/2999, ISO228
- *Class 200 screwed cap, swing type disc, integral seat.

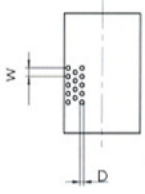
SIZE	A	H	L
1/4"	11	42	65
3/8"	15	42	65
1/2"	15	42	65
3/4"	20	51	80
1"	25	60	90
1-1/4"	32	67	105
1-1/2"	40	75	120
2"	50	81	140
2-1/2"	65	93	180
3"	80	104	200

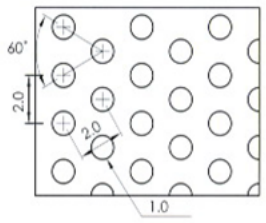
VT-Y CLASS 800 Y-STRAINER

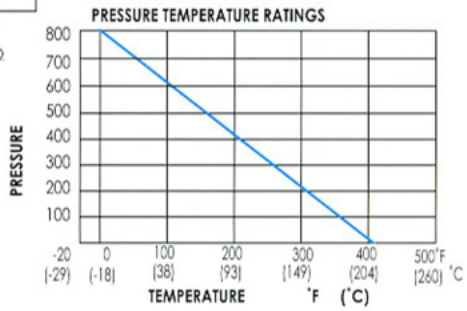
SIZE:1/4"~3"











FEATURES: *Investment casting body.
*Max. Pressure 800PSI.
*Maximum working temperature 230° C.
*Thread ends conform to ANSI B2.1, BS21, DIN259/2999, ISO 228

ITEM	PARTS	MATERIAL	Q'TY
1	BODY	ASTM-A351-CF8M	1
2	SCREEN	SUS316	1
3	GASKET	TEFLON	1
4	BONNET	ASTM-A351-CF8M	1
5	O-RING	VITON	1
6	BLOW OFF	ASTM-A351-CF8M	1

SIZE	A	H	L	W	D
1/4"	10	51	65	2	1
3/8"	12	51	65	2	1
1/2"	15	51	65	2	1
3/4"	20	60	80	2	1
1"	25	72	90	2	1
1-1/4"	32	77	105	2	1
1-1/2"	40	87	120	2	1
2"	50	103	140	2	1
2-1/2"	65	124	180	2	1
3"	80	143	200	2	1

BRASS & BRONZE BALL VALVE

- 600 W.O.G.
- Blow-out Proof Stem
- Conforms to MSS-SP-110 and BS EN 13828
- Screwed Ends & CxC
- 150 PSI Saturated Steam

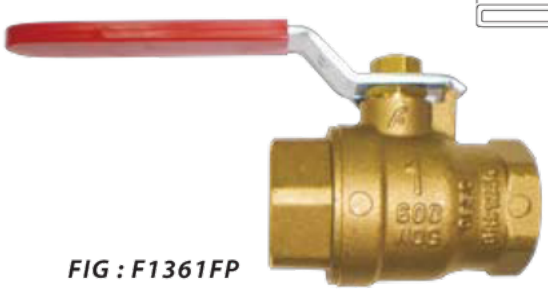
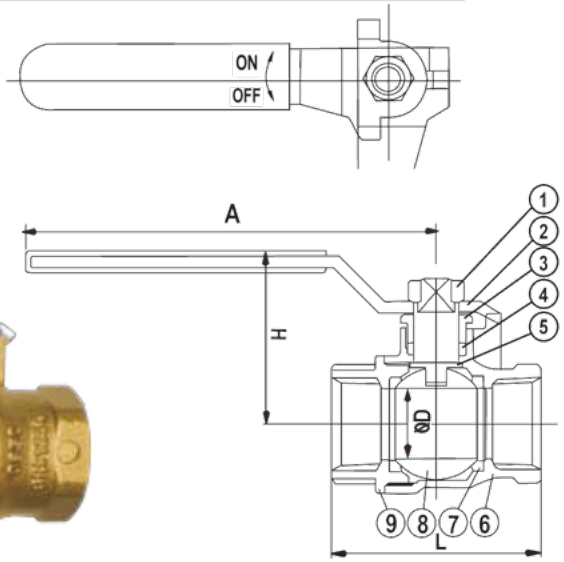
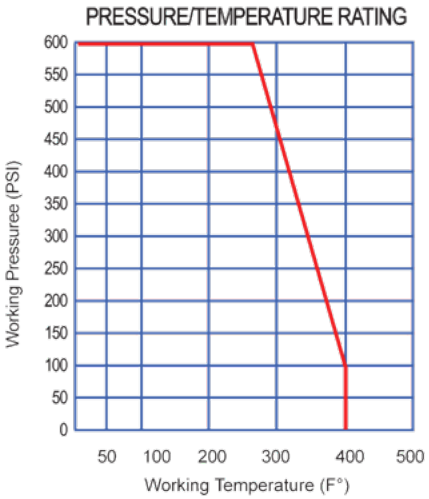


FIG : F1361FP



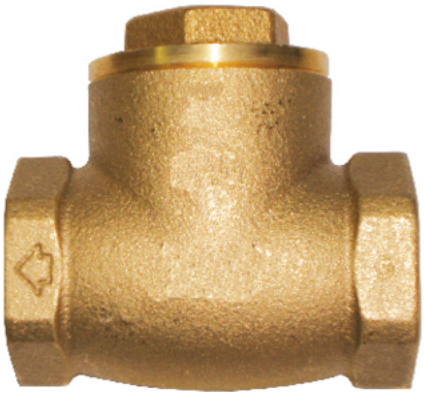


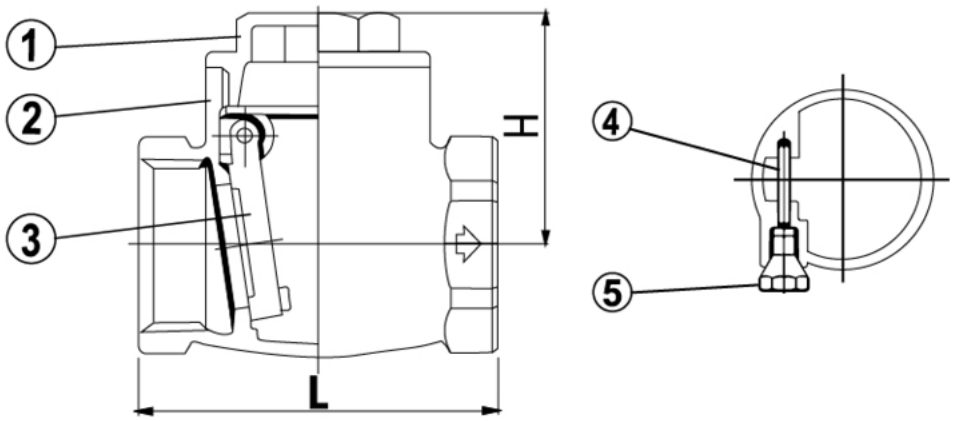
NO.	PART	MATERIAL	SPEC.JIS	SPEC.ASTM
1	NUT	STEEL	S10C	AISI-1010
2	HANDLE	STEEL	SS41	A283-D
3	STEM GLAND SCREW	BRASS	C3604B	B16-C36000
4	STEM PACKING	TEFLON	PTFE	PTFE
5	STEM	BRASS	C3604B	B16-C36000
6	BODY	FORGED BRASS	C3771B	B124-C37700 (1/8"~1 1/2")
		CAST BRASS	YBSC3	B584-C85700 (2"~4")
7	BALL DISC PACKING	TEFLON	PTFE	PTFE
8	BALL DISC	BRASS	C3604B	B16-C36000 (1/8"~3/4")
		FORGED BRASS	C3771B	B124-C37700 (1"~4")
9	END PLUG	FORGED BRASS	C3771B	B124-C37700

NOMINAL	DIMENSION (mm)				PCS	
SIZE	L	H	D	A	Carton	Case
1/8"	46	37	10	84	180	400
1/4"	46	37	10	84	180	400
3/8"	46	37	10	84	180	400
1/2"	51	39	12.7	84	120	400
3/4"	60	50	20	118	90	200
1"	73	54	25	118	60	144
1 1/4"	84	66	32	134	36	80
1 1/2"	92	70	38	134	24	64
2"	110	88	50	200	12	30
2 1/2"	131	98	63	200	8	24
3"	150	106	75	200	6	20
4"	164	106	75	200	4	8

BRASS & BRONZE SWING CHECK VALVE

- 200 W.O.G.
- Conforms to BS 5154
- Screwed Ends & CxC





BRASS FIG : F1151S
BRONZE FIG : F1251S

NO.	PART	MATERIAL	SPEC.JIS	SPEC.ASTM
1	COVER	CAST BRASS	YBSC3	B584-C85700
		CAST BRONZE	BC1	B584-C84400
2	BODY	CAST BRASS	YBSC3	B584-C85700
		CAST BRONZE	BC1	B584-C84400
3	DISC	FORGED BRASS	C3771B	B124-C37700
		CAST BRONZE	BC1	B584-C84400
4	PIN	BRASS	C3604B	B16-C36000
5	SCREW	BRASS	C3604B	B16-C36000

Test pressure : Shell 300PSI (20.7bar)
Seat 200PSI (13.8bar)

NOMINAL	DIMENSION (mm)		PCS	
SIZE	L	H	Carton	Case
1/2"	52	38	160	400
3/4"	59	40	120	300
1"	69	45	72	180
1 1/4"	79	51	60	150
1 1/2"	89	55	32	100
2"	109	67	24	60
2 1/2"	135	84	12	32
3"	160	96	6	24
4"	190	113	4	12

BRASS & BRONZE GATE VALVE

- 200 W.O.G.(PN16)
- Screwed Ends & CxC
- Non-rising Stem
- Solid Wedge Disc
- Conforms to MSS-SP-80 and BS EN 12288 (BS 5154)



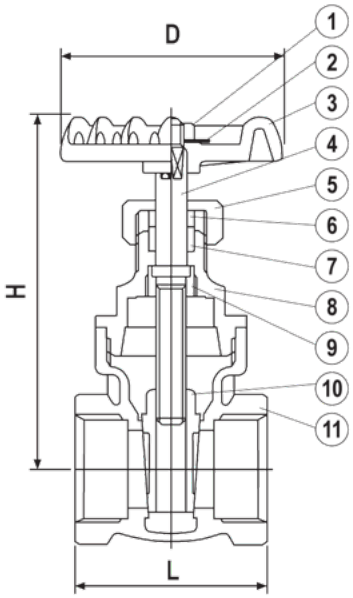


FIG : F1111

NO.	PART	MATERIAL	SPEC.JIS	SPEC.ASTM
1	WHEEL NUT	STEEL	S10C	AISI-1010
2	NAME PLATE	ALUMINUM	A1100P	B209-1100
3	HAND WHEEL	CAST IRON	FC20	A48 CLASS / NO.35
4	STEM	BRASS	C3604B	B16-C36000
5	PACKING NUT	BRASS	C3604B	B16-C36000 (1/4"~1")
		CAST BRASS	YBSC3	B584-C85700 (1 1/4"~4")
6	GLAND	BRASS	C3604B	B16-C36000
7	GLAND PACKING	GRAPHITE	COMMERCIAL	COMMERCIAL
8	BONNET	CAST BRASS	YBSC3	B584-C85700
9	LOCK NUT	BRASS	C3604B	B16-C36000
10	DISC	CAST BRASS	YBSC3	B584-C85700
11	BODY	CAST BRASS	YBSC3	B584-C85700

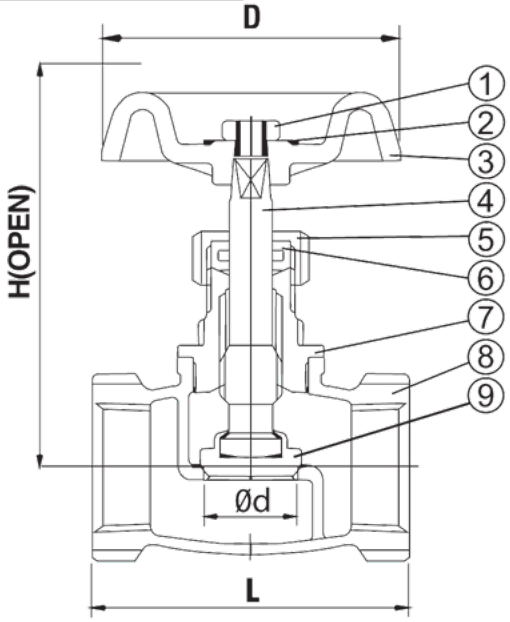
Test pressure : Shell 348 PSI (24bar) (Hydrostatic)
Seat 255 PSI (17.6bar) (Hydrostatic)

NOMINAL	DIMENSION (mm)			PCS	
SIZE	L	H	D	Carton	Case
1/4"	41	70	54	120	300
3/8"	41	70	54	120	300
1/2"	43	72	54	120	300
3/4"	47	84	54	90	200
1"	54	98	61	60	150
1 1/4"	61	116	77	40	100
1 1/2"	62	125	77	32	80
2"	72	153	83	20	60
2 1/2"	89	186	105	12	30
3"	101	222/220	130/112	8	20
4"	116	249/258	172/132	4	9

BRASS & BRONZE GLOBE VALVE

- 200 W.O.G.
- Conforms to BS 5154
- Screwed Ends





BRASS FIG : F1131
BRONZE FIG : F1231

NO.	PART	MATERIAL	SPEC.JIS	SPEC.ASTM
1	NUT	STEEL	S10C	AISI-1010
2	NAME PLATE	ALUMINUM	A1100P	B209-1100
3	HAND WHEEL	CAST IRON	FC20	A48 CLASS / NO.35
4	STEM	BRASS	C3604B	B16-C36000
5	PACKING NUT	BRASS	C3604B	B16-C36000
6	GLAND PACKING	RUBBER	SAME AS NBR	SAME AS NBR
7	BONNET	FORGED BRASS	C3771B	B124-C37700
8	BODY	CAST BRASS	YBSC3	B584-C85700
		CAST BRONZE	BC6	B584-C83600
9	DISC	BRASS	C3604B	B16-C36000

Test pressure : Shell 300 PSI (20.7bar) (Hydrostatic)
Seat 200 PSI (13.8bar) (Hydrostatic)

NOMINAL	DIMENSION (mm)				PCS	
SIZE	L	H	D	d	Carton	Case
1/2"	48	68	54	12.5	120	300
3/4"	53	77	54	13.5	100	300
1"	63	86	61	19	60	180
1 1/4"	73	101	75	24	40	100
1 1/2"	81	106	75	32	32	80
2"	94	130	81	38	20	60

AUTOMATIC AIR VENT VALVE

* Please name the model No. when negotiation.
* Automatic Air Release Type
* Bolted Cover, Stainless Steel Trim & Float.
* Threaded ends to BS21 or ANSI B2.1
* Option: Epoxy Coating In & Out.

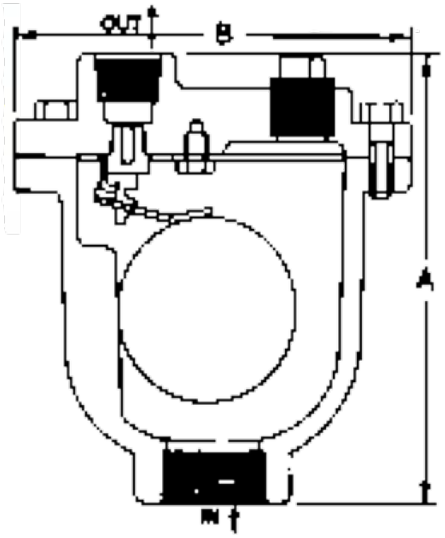


Working Pressure at 80°C water

Water	AV-10K	AV-16K	AV-PN16	AV-304
Static	14.0 kgf/cm²	22 kgf/cm²	20 Bar	22 kgf/cm²
Dynamic	10.0 kgf/cm²	16 kgf/cm²	16 Bar	16 kgf/cm²

Hydrostatic Test Pressure

	AV-10K	AV-16K	AV-PN16	AV-304
Body Test	20 kgf/cm²	32 kgf/cm²	24 Bar	35 kgf/cm²
Seat Test	15 kgf/cm²	24 kgf/cm²	18 Bar	28 kgf/cm²

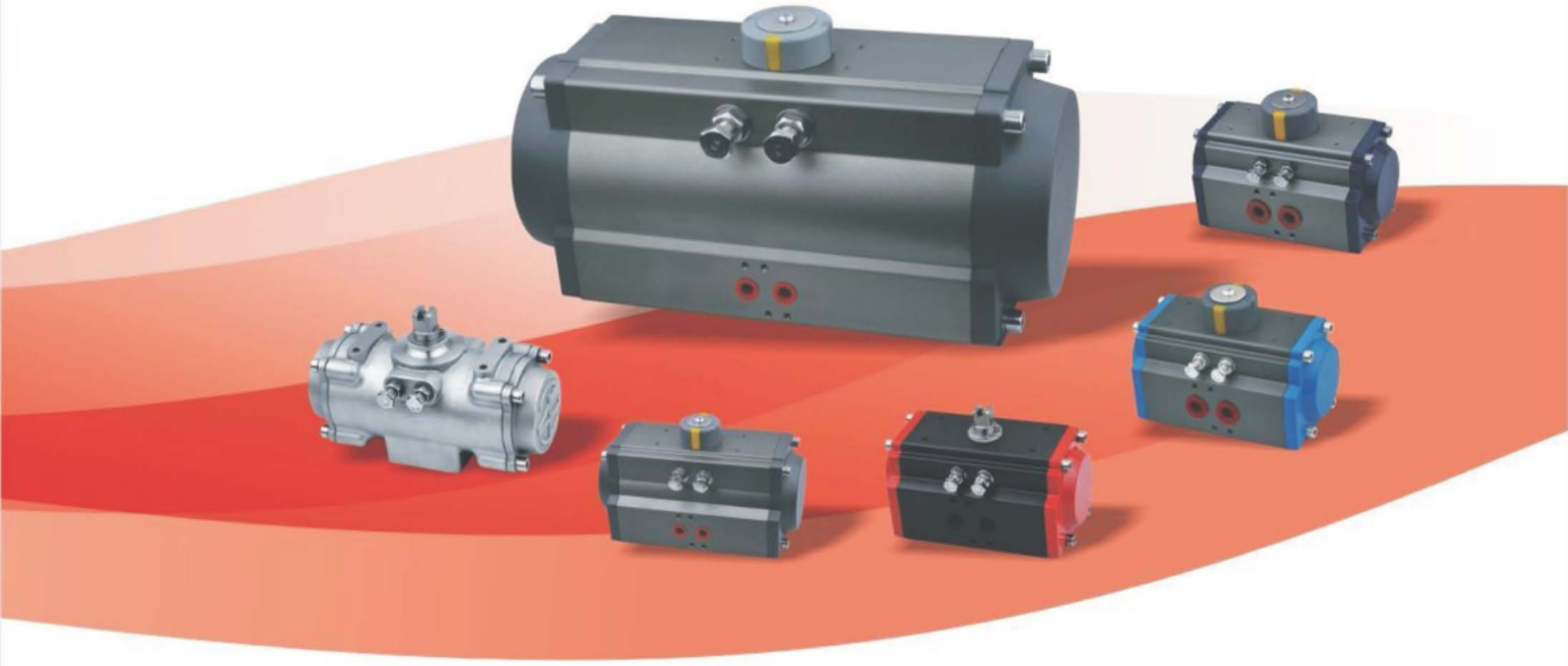


Material

Model	AV-10K	AV-16K	AV-PN16	AV-304
Body	FC20	FCD45	FC20	SUS304
Cover	FC20	FCD45	FC20	SUS304
Lever Frame	SUS304	SUS304	SUS304	SUS304
Seat	SUS304	SUS304	SUS304	SUS304
Float	SUS304	SUS304	SUS304	SUS304
Gasket	Non-Asbestos / NBR			
Float Arm	SUS304	SUS304	SUS304	SUS304
Orifice Button	NBR	NBR	NBR	NBR

Dimension mm

Size	inch	1/2	3/4	1
	mm	15	20	25
Orifice Button		1.6	1.6	1.6
Discharge		1/2"	1/2"	1/2"
A		133	133	133
B		121	121	121

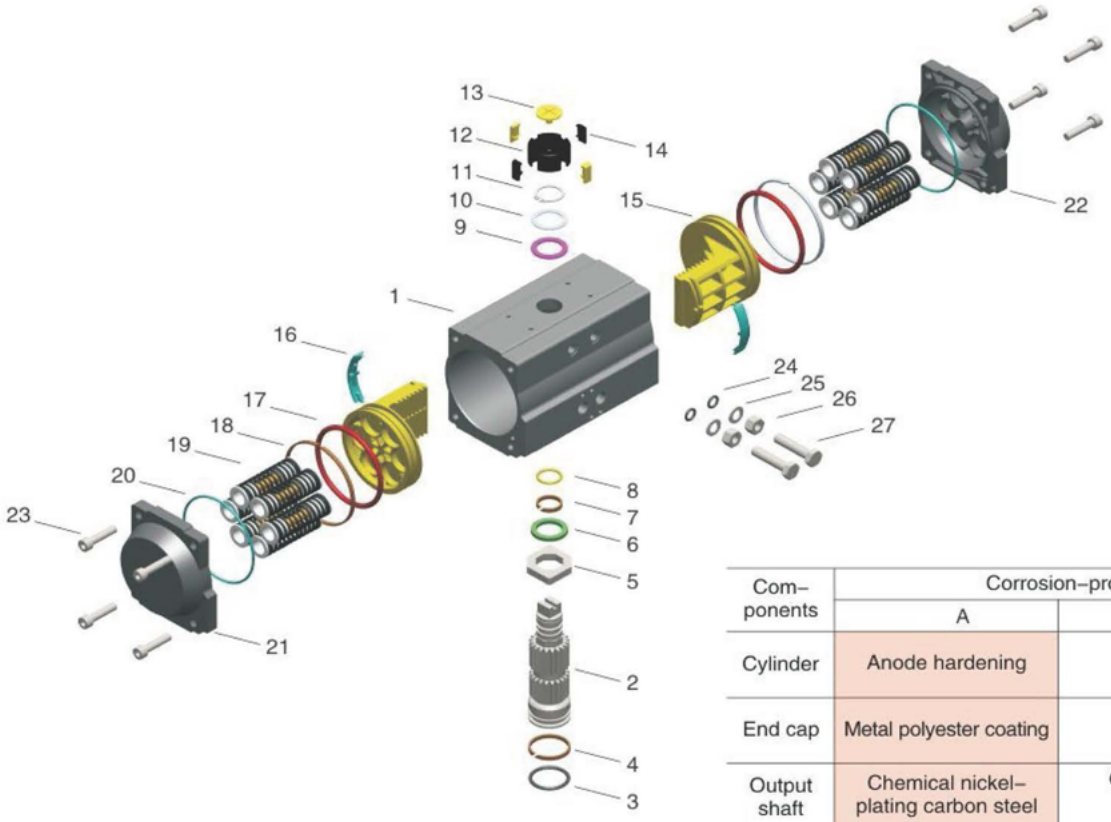


Larger Torque From Actuator

RACK&PINION TYPE PNEUMATIC ACTUATOR
DR TYPE DOUBLE ACTION
SC TYPE SINGLE ACTION



Components, Materials & Corrosion-Proof



Com-ponents	Corrosion-proof grade	
	A	B
Cylinder	Anode hardening	Teflon coating +anode hardening
End cap	Metal polyester coating	Teflon coating
Output shaft	Chemical nickel-plating carbon steel	Chemical nickel-plating carbon steel or stainless steel
Application situation	General situation	General or low acid situation

The following components are recommended for maintenance, including spare parts in the accessory bag.

Part No	Quantity for a machine	Part name	Standard material	Actual material
01	1	Cylinder	Extruded aluminum alloy	Stainless steel
02	1	Output shaft	Carbon steel	Stainless steel
03	1	O-ring (at the bottom of the output shaft)	NBR	Fluorine/silicon rubber
04	1	Bearing (at the bottom of the output shaft)	Nylon46	-
05	1	Adjusting cam	Stainless steel	-
06	1	Thrust bearing (output shaft)	Nylon46	-
07	1	Bearing (at the top of the output shaft)	Nylon46	-
08	1	O-ring (at the top of the output shaft)	NBR	Fluorine/silicon rubber
09	1	Bearing (at the top of the output shaft)	Nylon46	-
10	1	Gasket (output shaft)	Stainless steel	-
11	1	Elastic damping ring	Stainless steel	-
12	1	Position indicator	PPPP+30%GF	-
13	1	Screw	PPPP+30%GF	-
14	4	Position indicating piece	PPPP+30%GF	-
15	2	Piston	Casting aluminum alloy	-
16	2	Guide bearing (at the back of the piston)	Nylon46	-
17	2	O-ring (piston)	NBR	Fluorine/silicon rubber
18	2	Guide ring (piston)	Fluorine-carbon composite material	-
19	5-12	Spring assembly	Alloy spring steel	-
20	2	O-ring (end cap)	NBR	Fluorine/silicon rubber
21	1(1)	Left end cap	Casting aluminum alloy	Stainless steel
22	1(1)	Right end cap	Casting aluminum alloy	Stainless steel
23	8	End cap bolt	Stainless steel	-
24	2	O-ring (adjusting bolt)	NBR	Fluorine/silicon rubber
25	2	Gasket	Stainless steel	-
26	2	Nut	Stainless steel	-
27	2	Adjusting bolt	Stainless steel	-

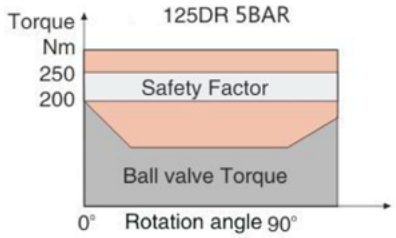
Double Acting Pneumatic Actuator

Actuator Selection

When Actuator Selection, you should add a safe value to the defined valve torque, for example, a 25% safe value to steam or non–lubricating liquid media; a 30% safe value to non–lubricating paste or liquid media; a 40% safe value to non–lubricating dry gas media; a 60% safe value to non–lubricating particle or powder media transmitted by gas; a 20% safe value to clean and low–friction lubricating media (the above are theoretical safe values recommended by our company, only for reference).

Examples for selecting DR double–action actuators

When controlling a ball valve, with torque of 2000lb*in, air supply pressure of 70psi, medium of non–lubricating steam, considering safety factors, you should add a 25% safe value that is equal to 2500lb*in; you can find the air supply pressure of 70psi in the double–action output torque table, and then search the equal or approximate torque data in the vertical line, and select 2619lb*in; and then search leftward the model in the line, and select 125DR.

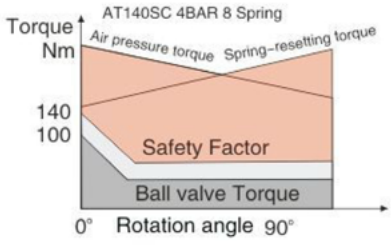


DR double–action output torque (Nm)

Model	AirpressuretoqueN*M							
	2.0bar	3.0bar	4.0bar	5.0bar	5.5bar	6.0bar	7.0bar	8.0bar
040	4.0	6.0	8.0	10.1	11.1	12.1	14.1	16.1
052	8.5	12.7	17.0	21.2	23.4	25.5	29.7	34.0
063	15.0	22.4	29.9	37.4	41.1	44.9	52.4	59.9
075	24.7	37.1	49.5	61.9	68.0	74.2	86.6	99.0
083	32.5	48.7	64.9	81.2	89.3	97.4	113.6	129.9
092	46.5	69.8	93.1	116.3	128.0	139.6	162.9	186.1
105	69.3	103.9	138.5	173.2	190.5	207.8	242.5	277.1
125	122.7	184.1	245.4	306.8	337.5	368.2	429.5	490.9
140	184.7	277.1	369.5	461.8	508.0	554.2	646.5	738.9
160	281	422	563	704	774	844	985	1126
190	454	680	907	1134	1248	1361	1588	1815
210	623	935	1247	1559	1714	1870	2182	2494
240	977	1466	1954	2443	2687	2931	3420	3909
270	1374	2061	2748	3435	3779	4122	4809	5497
300	1696	2545	3393	4241	4665	5089	5938	6786
350	2540	3810	5080	6350	6985	7620	8890	10160
400	3619	5429	7238	9048	9953	10857	12667	14476

Examples for selecting SC single–action actuators

When controlling a butterfly valve, with torque of 100Nm, air supply pressure of 4bar, medium of non–lubricating dry gas, considering safety factors, you should add a 40% safe value that is equal to 140Nm; search the spring resetting terminal in the single–action output torque table for an approximate torque of 142Nm; and then find leftward in the line the terminal torque of 156Nm for the air supply pressure of 4bar; you must the relative balance of air supply pressure torque and spring resetting torque; and then search the model and spring quantity leftward in the line, and select 140SC and 8 springs.



Spring components



Spring Quantity	Spring installation mode	Spring Quantity	Spring installation mode
5		9	
6		10	
7		11	
8		12	

Spring Return Pneumatic Actuator

SC Single–action output torque (NM)

Mod	Spring quantum	Airpressuretoque N*M													
		Spring Torque		3.0bar		4.0bar		5.0bar		6.0bar		7.0bar		8.0bar	
		Start	Over	Start	Over	Start	Over	Start	Over	Start	Over	Start	Over	Start	Over
40	5	3.0	2.0	4.0	3.0	6.0	5.0								
	6	3.6	2.4	3.6	2.4	5.6	4.4	7.6	6.5						
	7	4.2	2.8	3.2	1.8	5.2	3.8	7.2	5.9	9.3	7.9				
	8	4.8	3.2	2.8	1.2	4.8	3.2	6.8	5.3	8.9	7.3	10.9	9.3		
	9	5.4	3.6			4.4	2.6	6.4	4.7	8.5	6.7	10.5	8.7	12.5	10.7
	10	6.0	4.0			4.0	2.0	6.0	4.1	8.1	6.1	10.1	8.1	12.1	10.1
	11	6.6	4.4					5.6	3.5	7.7	5.5	9.7	7.5	11.7	9.5
	12	7.2	4.8					5.2	2.9	7.2	4.9	9.3	6.9	11.3	8.9
52	5	5.4	4.0	8.8	7.3	13.0	11.6								
	6	6.5	4.7	8.0	6.3	12.3	10.5	16.5	14.8						
	7	7.6	5.5	7.2	5.2	11.5	9.4	15.7	13.7	20.0	17.9				
	8	8.6	6.3	6.4	4.1	10.7	8.4	14.9	12.6	19.2	16.8	23.4	21.1		
	9	9.7	7.1			9.9	7.3	14.1	11.5	18.4	15.8	22.6	20.0	26.9	24.3
	10	10.8	7.9			9.1	6.2	13.3	10.4	17.6	14.7	21.8	18.9	26.1	23.2
	11	11.9	8.7					12.6	9.4	16.8	13.6	21.0	17.9	25.3	22.1
	12	13.0	9.5					11.8	8.3	16.0	12.5	20.3	16.8	24.5	21.0
63	5	9.9	6.8	15.7	12.5	23.2	20.0								
	6	11.9	8.1	14.3	10.5	21.8	18.0	29.3	25.5						
	7	13.9	9.5	13.0	8.5	20.4	16.0	27.9	23.5	35.4	31.0				
	8	15.9	10.9	11.6	6.5	19.1	14.0	26.6	21.5	34.0	29.0	41.5	36.5		
	9	17.9	12.2			17.7	12.0	25.2	19.5	32.7	27.0	40.2	34.5	47.7	42.0
	10	19.9	13.6			16.4	10.0	23.9	17.5	31.3	25.0	38.8	32.5	46.3	40.0
	11	21.9	14.9					22.5	15.5	30.0	23.0	37.5	30.5	44.9	38.0
	12	23.9	16.3					21.1	13.6	28.6	21.0	36.1	28.5	43.6	36.0
75	5	15.5	10.2	27.0	21.6	39.3	34.0								
	6	18.6	12.2	24.9	18.6	37.3	30.9	49.7	43.3						
	7	21.7	14.2	22.9	15.5	35.3	27.8	47.6	40.2	60.0	52.6				
	8	24.8	16.2	20.9	12.4	33.2	24.7	45.6	37.1	58.0	49.5	70.4	61.8		
	9	27.9	18.3			31.2	21.6	43.6	34.0	56.0	46.4	68.3	58.7	80.7	71.1
	10	30.9	20.3			29.2	18.5	41.6	30.9	53.9	43.3	66.3	55.7	78.7	68.0
	11	34.0	22.3					39.5	27.8	51.9	40.2	64.3	52.6	76.6	64.9
	12	37.1	24.4					37.5	24.7	49.9	37.1	62.2	49.5	74.6	61.8
83	5	21.5	14.9	33.9	27.2	50.1	43.4								
	6	25.8	17.8	30.9	22.9	47.1	39.1	63.3	55.3						
	7	30.1	20.8	27.9	18.6	44.1	34.8	60.4	51.0	76.6	67.3				
	8	34.4	23.8	24.9	14.3	41.2	30.5	57.4	46.7	73.6	63.0	89.9	79.2		
	9	38.8	26.7			38.2	26.2	54.4	42.4	70.7	58.7	86.9	74.9	103.1	91.1
	10	43.1	29.7			35.2	21.9	51.5	38.1	67.7	54.3	83.9	70.6	100.2	86.8
	11	47.4	32.7					48.5	33.8	64.7	50.0	81.0	66.3	97.2	82.5
	12	51.7	35.6					45.5	29.5	61.8	45.7	78.0	62.0	94.2	78.2
92	5	30.3	21.8	48.0	39.5	71.3	62.8								
	6	36.3	26.2	43.7	33.5	66.9	56.7	90.2	80.0						
	7	42.4	30.5	39.3	27.4	62.6	50.7	85.8	74.0	109.1	97.2				
	8	48.4	34.9	34.9	21.4	58.2	44.6	81.5	67.9	104.7	91.2	128.0	114.4		
	9	54.5	39.2			53.9	38.6	77.1	61.8	100.4	85.1	123.7	108.4	146.9	131.6
	10	60.6	43.6			49.5	32.5	72.8	55.8	96.0	79.1	119.3	102.3	142.6	125.6
	11	66.6	47.9					68.4	49.7	91.7	73.0	114.9	96.3	138.2	119.5
	12	72.7	52.3					64.0	43.7	87.3	66.9	110.6	90.2	133.8	113.5
105	5	46.1	39.3	64.6	57.8	99.2	92.4								
	6	55.3	47.2	56.8	48.6	91.4	83.2	126.0	117.9						
	7	64.5	55.0	48.9	39.4	83.5	74.0	118.2	108.6	152.8	143.3				
	8	73.8	62.9	41.0	30.2	75.7	64.8	110.3	99.4	144.9	134.1	179.6	168.7		
	9	83.0	70.7			67.8	55.6	102.4	90.2	137.1	124.8	171.7	159.5	206.4	194.1
	10	92.2	78.6			59.9	46.3	94.6	81.0	129.2	115.6	163.9	150.3	198.5	184.9
	11	101.4	86.5					86.7	71.8	121.4	106.4	156.0	141.0	190.6	175.7
	12	110.6	94.3					78.9	62.5	113.5	97.2	148.1	131.8	182.8	166.5
125	5	80	53	131	104	192	166								
	6	96	64	120	88	182	150	243	211						
	7	112	74	110	72	171	134	233	195	294	257				
	8	128	85	99	56	161	118	222	179	283	241	345	302		
	9	144	95			150	102	211	163	273	225	334	286	395	347
	10	160	106			139	86	201	147	262	209	324	270	385	331
	11	175	117					190	131	252	193	313	254	374	315
	12	191	127					180	115	241	177	302	238	364	299
140	5	139	93	184	138	277	230								
	6	167	111	166	110	258	203	351	295						
	7	195	130	147	82	240	175	332	267	424	360				
	8	222	148	129	55	221	147	313	239	406	332	498	424		
	9	250	167			203	119	295	212	387	304	480	396	572	489
	10	278	185			184	91	276	184	369	276	461	368	554	461
	11	306	204					258	156	350	248	443	341	535	433
	12	334	222					239	128	332	220	424	313	516	405

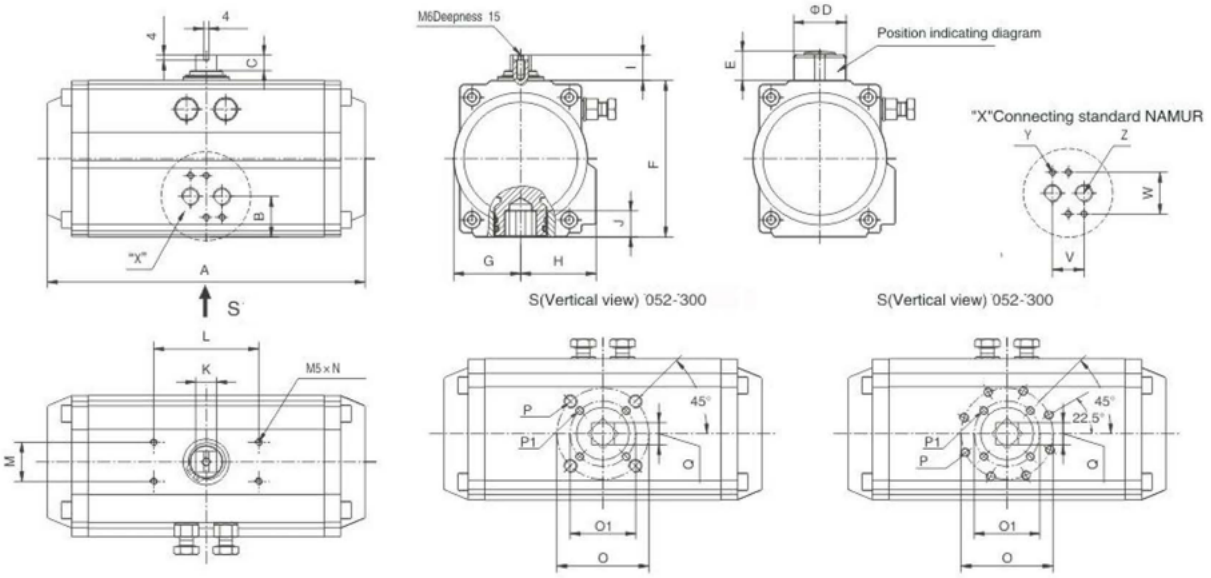
Spring Return Pneumatic Actuator

SC Single–action output torque(NM)

Mod	Spring quantum	Airpressuretoque N*M													
		Spring Torque		3.0bar		4.0bar		5.0bar		6.0bar		7.0bar		8.0bar	
		Start	Over	Start	Over	Start	Over	Start	Over	Start	Over	Start	Over	Start	Over
160	5	211	143	279	211	420	352								
	6	253	172	251	169	391	310	532	450						
	7	295	200	222	127	363	268	504	408	644	549				
	8	338	229	193	85	334	225	475	366	616	507	756	648		
	9	380	257			306	183	446	324	587	465	728	605	869	746
	10	422	286			277	141	418	282	559	422	699	563	840	704
	11	464	315					389	239	530	380	671	521	811	662
	12	507	343					361	197	501	338	642	479	783	619
190	5	349	232	448	332	675	559								
	6	418	278	402	262	629	489	856	716						
	7	488	325	356	192	582	419	809	646	1036	873				
	8	558	371	309	123	536	350	763	576	990	803	1217	1030		
	9	627	418			490	280	717	507	943	733	1170	960	1397	1187
	10	697	464			443	210	670	437	897	664	1124	891	1351	1117
	11	767	510					624	367	851	594	1077	821	1304	1048
	12	837	557					577	297	804	524	1031	751	1258	978
210	5	467	297	638	468	950	780								
	6	560	356	579	375	891	687	1202	998						
	7	654	416	519	282	831	593	1143	905	1455	1217				
	8	747	475	460	188	772	500	1083	812	1395	1123	1707	1435		
	9	840	535			712	407	1024	718	1336	1030	1647	1342	1959	1653
	10	934	594			653	313	965	625	1276	937	1588	1248	1900	1560
	11	1027	653					905	532	1217	843	1529	1155	1840	1467
	12	1121	713					846	438	1158	750	1469	1062	1781	1373
240	5	797	448	1018	668	1506	1157								
	6	957	538	928	509	1417	998	1905	1486						
	7	1116	627	839	350	1327	838	1816	1327	2304	1815				
	8	1276	717	749	190	1238	679	1726	1167	2215	1656	2703	2144		
	9	1435	806			1148	519	1637	1008	2125	1496	2614	1985	3102	2473
	10	1595	896			1058	360	1547	848	2036	1337	2524	1825	3013	2314
	11	1754	985					1457	689	1946	1177	2435	1666	2923	2155
	12	1914	1075					1368	529	1856	1018	2345	1507	2834	1995
270	5	1037	540	1522	1024	2209	1711								
	6	1245	648	1414	816	2101	1503	2788	2190						
	7	1452	756	1306	609	1993	1296	2680	1983	3367	2670				
	8	1660	864	1198	401	1885	1088	2572	1775	3259	2463	3946	3150		
	9	1867	971			1777	881	2464	1568	3151	2255	3838	2942	4525	3629
	10	2075	1079			1669	673	2356	1361	3043	2048	3730	2735	4417	3422
	11	2282	1187					2248	1153	2935	1840	3622	2527	4309	3214
	12	2490	1295					2140	946	2827	1633	3514	2320	4201	3007
300	5	1329	821	1724	1216	2572	2064								
	6	1594	985	1560	950	2408	1798	3256	2647						
	7	1860	1149	1396	685	2244	1533	3092	2381	3940	3229				
	8	2126	1313	1231	419	2080	1267	2928	2115	3776	2963	4624	3812		
	9	2392	1477			1915	1001	2764	1849	3612	2698	4460	3546	5308	4394
	10	2657	1642			1751	736	2600	1584	3448	2432	4296	3280	5144	4128
	11	2923	1806					2435	1318	3284	2166	4132	3014	4980	3863
	12	3189	1970					2271	1052	3119	1901	3968	2749	4816	3597
350	5	1925	1204	2606	1885	3876	3155								
	6	2310	1445	2365	1500	3635	2770	4905	4040						
	7	2695	1686	2124	1115	3394	2385	4664	3655	5934	4925				
	8	3080	1927	1883	730	3153	2000	4423	3270	5693	4540	6963	5810		
	9	3465	2168			2912	1615	4182	2885	5452	4155	6722	5425	7992	6695
	10	3850	2408			2672	1230	3942	2500	5212	3769	6482	5039	7752	6309
	11	4235	2649					3701	2114	4971	3384	6241	4654	7511	5924
	12	4621	2890					3460	1729	4730	2999	6000	4269	7270	5539
400	5	2711	1828	3601	2718	5411	4527								
	6	3253	2193	3235	2176	5045	3985	6855	5795						
	7	3795	2559	2870	1634	4679	3443	6489	5253	8299	7062				
	8	4337	2924	2504	1091	4314	2901	6123	4711	7933	6520	9743	8330		
	9	4879	3290			3948	2359	5758	4168	7567	5978	9377	7787	11187	9597
	10	5422	3655			3583	1817	5392	3626	7202	5436	9011	7245	10821	9055
	11	5964	4021					5027	3084	6836	4894	8646	6703	10455	8513
	12	6506	4387					4661	2542	6471	4351	8280	6161	10090	7971

Appearance & Connection Dimension

Connecting standard ISO5211 / VDI / VDE3845

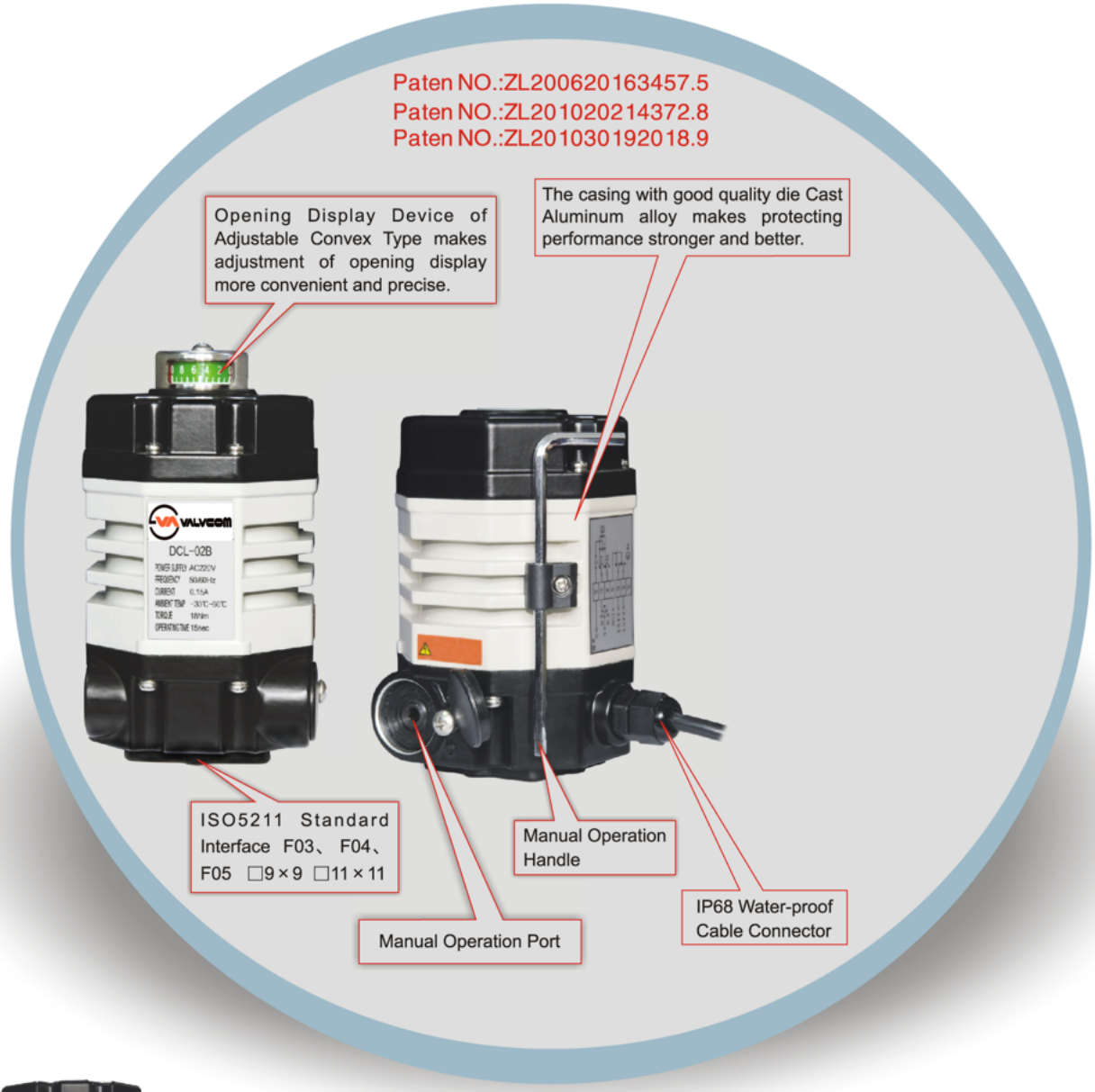


Unit: mm

Model	040	052	063	075	083	092	105	125	140	160	190	210	240	270	300	350	400
Model	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC	DR/SC
ISO Flange	F04	F03–05	F05–07	F05–07	F05–07	F05–07	F07–10	F07–10	F10–12	F10–12	F14	F14	F16	F16	F16	F16–F25	F16–F25
A	116	145	169	201	209	242	275	332	385	450	507	562	646	722	825	866	1006
B	18.5	24	25.5	27	30.5	31	32.5	33	39.5	43.5	58.5	64	72	74	85	95	233
C	12	12	12	12	12	12	12	12	12	12	20	20	20	20	20	35	35
ΦD	40	40	40	40	40	40	40	55	55	55	80	80	80	80	80	95	95
E	22	22	22	22	22	22	22	22	22	22	33	33	33	33	33	54	54
F	60	72	88	100	108	120	133	155	171.5	197	230	255	290	320	354	410	467
G	24	30	36	42	46	51	58	67.5	76	86.5	103	113	129	146	162	190	260
H	36.5	41	46	52	55	57.5	64	70	77	87.5	103	113	129	146	173	195	260
I	20	20	20	20	20	20	20	20	20	20	30	30	30	30	30	50	50
Jmin	13	13	16	20	20	20	25	25	30	30	40	40	50	50	50	60	60
K	9	12	12	12	16	16	16	22	22	22	32	32	32	32	32	45	45
L	80	80	80	80	80	80	80	80	80	80	130	130	130	130	130	130	130
M	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
N	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Φ01	42	36	50	50	50	50	70	70	102	102	/	/	/	/	/	165	165
Φ0	/	50	70	70	70	70	102	102	125	125	140	140	165	165	165	254	254
P1	4–M5	4–M5	4–M6	4–M6	4–M6	4–M6	4–M8	4–M8	4–M10	4–M10	/	/	/	/	/	4–M20	4–M20
P	/	4–M6	4–M8	4–M8	4–M8	4–M8	4–M10	4–M10	4–M12	4–M12	4–M16	4–M16	4–M20	4–M20	4–M20	8–M16	8–M16
Q	9	11	14	17	17	17	22	22	27	27	36	36	46	46	46	55	55
V	20	24	24	24	24	24	24	24	24	24	24	24	40	40	40	40	40
W	29	32	32	32	32	32	32	32	32	32	32	32	45	45	45	45	45
Y	M4X6	M5X8	M5X8	M5X8	M5X8	M5X8	M5X8	M5X8	M5X8	M5X8	M5X8	M5X8	M6X10	M6X10	M6X10	M6X10	M6X10
Z	1/8"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"

ELETRIC ACTUATOR

Paten NO.:ZL200620163457.5
Paten NO.:ZL201020214372.8
Paten NO.:ZL201030192018.9







Three Characteristics

- Subminiature in Volume (Smaller than a pop Can)
- Super Torque (18Nm/15S)
- Super Protection Performance (Full Aluminum alloy Casing)

Main Applications:

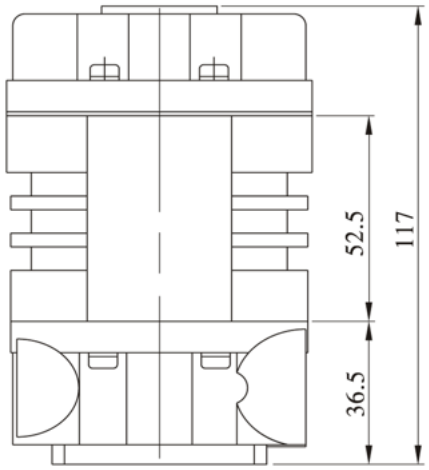
It is widely applied in various automatic operation systems, such as: level, flow, pressure control, air-conditioning systems, fire fighting systems, water treatment systems, and applied to equipment, chemical industry and food machineries. It is matched with butterfly valves with diameter less than DN40 and ball valves with diameter less than DN32.

It is suitable for many kinds of installation conditions with its super miniature in volume and any installation angle within 360.

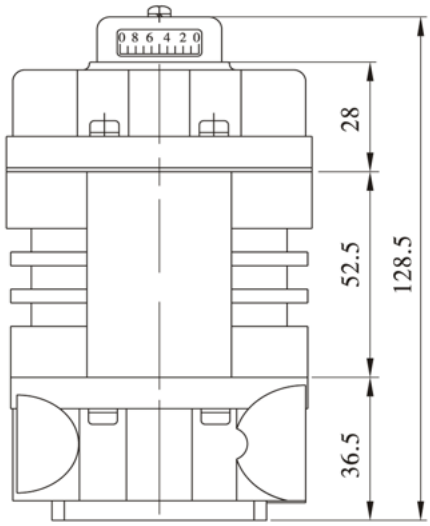
Warning: These series products possess three patents technology. Any copy being found will be held accountable by law!

ELETRIC ACTUATOR

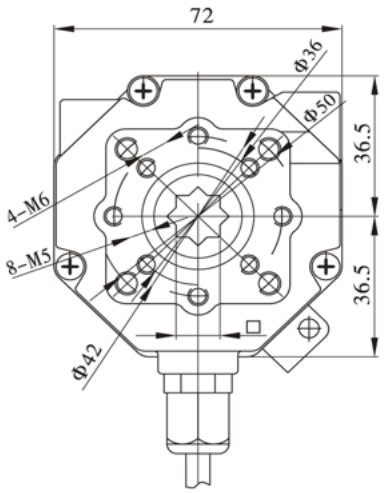
Overall Dimension Drawings



Flat Type Opening Display



Convex Type Opening Display

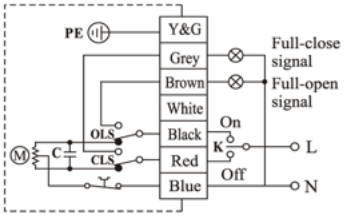


Square	□9×9、□11×11
Flange	F03、F04、F05
Valve Stem	Height≤16mm

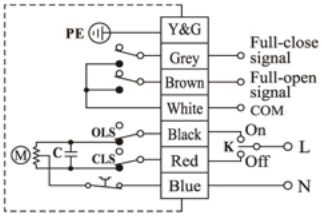
Performance Parameters

Performance Parameters \ Type / Power	DCL—02			
	DC24V	AC24V	AC110V	AC220V
Motor Power	8W	6W	6W	6W
Rated Current	0.7A	1.3A	0.3A	0.15A
Standard Time/Torque	15S/18Nm			
Optional Time/Torque	7S/9Nm 60S/18Nm			
Turning Angle	0~90°			
Available Control Circuit	Type G	Types of A、B、C		
Total Weight	1.2kg			
Insulating Resistance	100MΩ/250VDC		100MΩ/500VDC	
Withstand Voltage Class	500VAC 1minutes		1500VAC 1minutes	
Protection Class	IP67			
Installation Angle	360° at any angle			
Electric Interface	7-core cable for connection			
Ambient Temperature	-30℃~+60℃			
Fuse	2A	3A	1A	1A

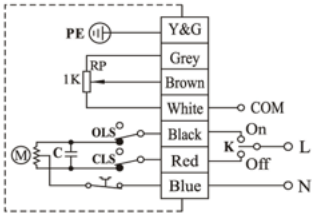
Control Circuit



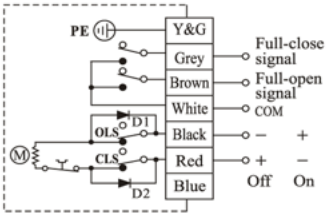
Type A: With Limit Switch (Active Contact)



Type B: With Intermediate Position Switch (Passive contact)



Type C:with 1k Potentiometer



Type G: DC Control Circuit (Passive Contact Switch)

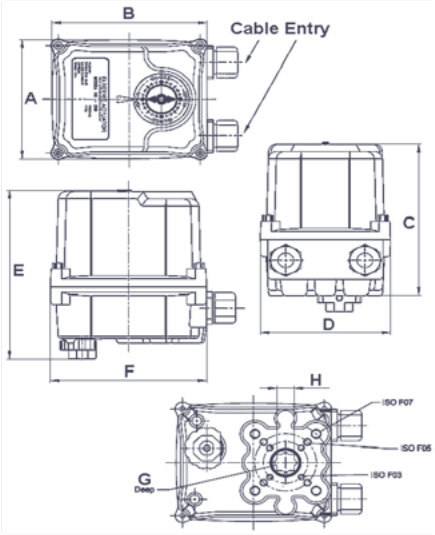
Note: The internal circuit of actuator is shown in the dotted frame.

ELECTRIC ACTUATOR



VA SERIES

Electric 1/4 Turn
Low Torque Actuator
40Nm - 60Nm



The VA electric actuators are designed for quarter turn applications on small sized ball, butterfly, plug valves and dampers.

Small, lightweight and compact in design but still offering high output torques. Various control options and a wide range of voltages are available to meet you specifications.

High quality electrical components and alloy gearing ensure reliability and extended life span.

Features & Benefits

- Base to ISO 5211 & DIN 3337 standard
- Weatherproof to IP67
- Manual hexagon and hand wheel override
- High grade aluminium alloy housing
- Low current consumption reversible motor

Temperature

Ambient temperature

-20 to 70°C (on/off)

-20 to 55°C (modulating)

DIMENSIONS	A	B	C	D	E	F	G	H	ISO 5211 F03	ISO 5211 F05	ISO 5211 F07	Cable Entry	Weight Kg
VA-004 & VA006	104	126	133	106	148	127	22	14	✓	✓	✓	M20	3

ADDITIONAL DATA	Maximum Torque Output (Nm)	Square Drive (mm)	Operating Time 50 / 60Hz 90° (sec.)	Duty Cycle IEC34-1 S2 (%)	No. of Handle Turns	ISO 5211 DIN 3337 Mounting
VA-004	40	14	14 / 12	35	8	F03, F05, F07
VA-006	60					

STANDARD SPECIFICATIONS	
Enclosure	Weatherproof Enclosure IP67
Power Supply	110/220V AC 1PH 50/60Hz, 24V DC ± 10%
Motor	Reversible Motor
Limit Switched	2 x Open/Close, SPDT, 250V AC 3A Rating
Additional Limit Switches	2 x Open/Close, SPDT, 250V AC 3A Rating
Space Heater	2W (110/220V AC) Anti-condensation
Manual Override	Hexagon & Handwheel
Movement Angle	320° ± 10° 1(0°-330°)
Casing Material	Aluminium Alloy, Dry Power Polyester Coated
Terminal Block	Push Button
Case Colour	Blue

OPTIONS	
PIU	Potentiometer Unit
PCU	Proportional Control Unit Input / Output Signal Range: 4-20mA or 0-10V DC Adjustable Range: Zero 8mA, Open 16mA Position Conversion Accuracy: 0.5-1.5% (depends on installation)
CPT	Current Position Transmitter (Output 4-20mA)
DCM	DC Motor (24V DC)
LPA	Lever Plate Actuator
LCU	Local Control Unit (Remote/Open/Stop/Close Switch)
Case Colour	Green, Red, Yellow, Grey

ELECTRIC ACTUATOR

The VA electric actuators are designed for quarter turn applications on large sized ball, butterfly, plug valves and dampers.

Compact in design but still offering high output torques. Various control options and a wide range of voltages are available to meet you specifications.

High quality electrical components and alloy gearing ensure reliability and extended life span.

Features & Benefits

- Base to ISO 5211 & DIN 3337 standards
- Weatherproof to IP67 (IP68 option)
- Die cast aluminium housing
- Wide range of torques & options to meet the demands of any site specification

Temperature

Ambient temperature

-20 to 70°C (on/off)

-20 to 55°C (modulating)

STANDARD SPECIFICATIONS

Enclosure	Weatherproof Enclosure IP67 NEMA 4 & 6 (IP68 Option)	**Space Heater**	10W (110/220V AC) Anti-condensation
Power Supply (dependent on size)	110/220V AC 1PH 50/60Hz ± 10% 380/440/460V AC 3PH 50/60Hz ± 10% 24V DC ± 10%	**Manual Override**	Hand wheel c/w Declutching Mechanism
Duty Cycle (on-off)	S2, 100% Standard, Max 30min	**Movement Angle**	90° ± 10° (0-110°)
Duty Cycle (modulating)	S4, 70% Max 300-1600 start/hour	**Casing Material**	Aluminium Alloy, Dry Power Polyester Coated
Motor	Induction Motor (Reversible)	**Terminal Block**	Spring Loaded Lever Push Type
Limit Switches	4 x Open / Close , SPDT, 250 V AC 16A Rating	**Case Colour**	Blue
Torque Switches	2 x Open / Close , SPDT, 250 V AC 16A Rating ♦♦		

♦♦ Except VA-008

ADDITIONAL DATA

	Max. Torque Output (Nm)	Square Drive* (mm)	Operating Time 50 / 60Hz 90° (sec.)	Duty Cycle IEC34-1 S2 (%)	No. of Handle Turns	ISO 5211 DIN 3337 Mounting
VA-008	80	14	16 / 13	30	10	F07
VA-015	150	17	25 / 21	30	10	F07, F10
VA-020	200	17	25 / 21	30	11	F07, F10
VA-030	300	22	31 / 26	30	13.5	F10, F12
VA-050	500	22	31 / 26	30	13.5	F10, F12
VA-060	600	27	31 / 26	30	13.5	F10, F12
VA-080	800	27	37 / 31	30	16.5	F12, F14
VA-120	1200	36	37 / 31	30	16.5	F12, F14
VA-200	2000	36	112 / 93	30	49.5	F14***, F16
VA-300	3000	46	112 / 93	30	49.5	F14***, F16

Solenoid Valve NC/NO Type

S B 1 1 6 180°C High temperature

2/2 Way Solenoid Valve. Normally closed,
Diaphragm Port sizes 1/4" to 1"



Innovation : The fluid temperature may arrive 180oC

The piston type structure runs smoothly
with long life
Low pressure start-up

Applicable for steam, hot air, multiple fluids with the

kinematic coefficient of viscosity 1 mm2/s

IP65 protection system
After the renewal of the pilot head and coil, it may be

Coil model : BD-A-3
Thermosetting plastic encapsulating
Plug conforms with ISO standard
IP 65 protection class with plug

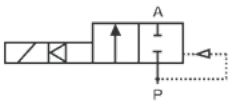
Ambient Tempreature -20°C + 55°C

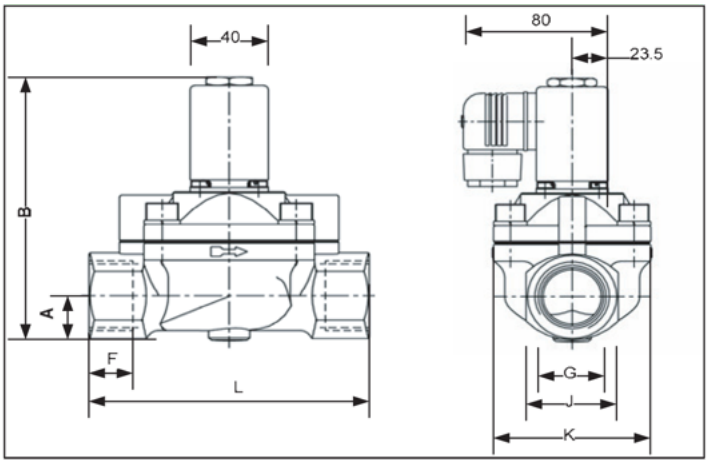
Medium Tempreature 0°C + 180°C : brass body :seal material NBR

* Response times 0.5 - 1 seconds(depending on orifice and differential pressure)

ITEM-NO.	Orifice (mm)	Port Connect (inch)	Kv-value Water (M^3/h)	Seal material	Operating Pressure (Mpa)
SB116-4008	8	G1/4	3.6		0.05-1.6
SB116-4010	10	G3/8	3.6		0.05-1.6
SB116-4015	13	G1/2	3.6		0.05-1.6
SB116-4020	25	G3/4	11		0.05-1.6
SB116-4025	25	G1	11		0.05-1.6

SYMBOL :



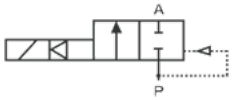


OVERALL DIMENSIONS :

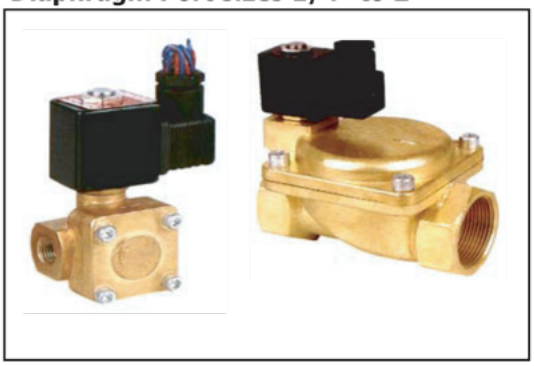
Model	(G)	F	J	K	L	E	B	A
SB116-4008B	**G1/4**	12	40	34	65	24	97	16
SB116-4010B	**G3/8**	12	40	34	65	24	97	16
SB116-4015B	**G1/2**	12	40	34	65	24	97	16
SB116-4020B	**G3/4**	16	40	60	90	45	124	20
SB116-4025B	**G1**	18	40	60	90	45	124	20

Solenoid Valve Steam Type

0927 Series, 0955 Series



2/2 Way Solenoid Valve. Normally closed,
Diaphragm Port sizes 1/4" to 2"



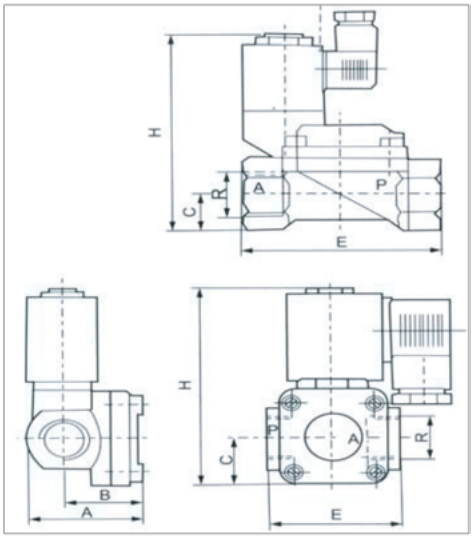
Compact and good appearance

Normal open (0955 series) and Normal close (0927 series)

Diaphragm structure, big orifice, big flow rate

Ambient Tempreature -5°C + 50°C

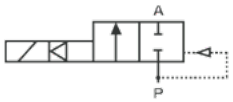
Medium Tempreature 0°C + 80°C : brass body :seal material



OVERALL DIMENSIONS :

Model	(G)	A	B	C	E	H	Pressure (Bar)
927000.0201	G1/4	47	33.5	22	55	113	0.07~16
955105.0201	G1/4	47	33.5	22	55	101	0.07~16
927100.0201	G3/8	47	33.5	22	55	113	0.07~16
955205.0201	G3/8	47	33.5	22	55	101	0.07~16
927200.0201	G1/2	47	33.5	22	55	113	0.07~16
955305.0201	G1/2	47	33.5	22	55	101	0.07~16
927300.0201	G3/4	66	45.5	30	81	130	0.07~16
955405.0201	G3/4	66	45.5	30	81	118	0.07~16
927400.0201	G1	66	45.5	30	91	130	0.07~16
955505.0201	G1	66	45.5	30	91	118	0.07~16
927500.0201	G1 1/4	92.5	47	33.5	132	157	0.1~16
955605.0201	G1 1/4	92.5	47	33.5	132	145	0.1~16
927600.0201	G1 1/2	92.5	47	33.5	132	157	0.1~16
955705.0201	G1 1/2	92.5	47	33.5	132	145	0.1~16
927700.0201	G2	112	55	39.5	160	176	0.1~16
955805.0201	G2	112	55	39.5	160	165	0.1~16

2 L For Steam temperature : -5 - 180 °C



2/2 Way Solenoid Valve. Normally closed,
Diaphragm Port sizes 3/8" to 2"



Adopting pointed structure with self-sealing compensation lengthens the service life of this valve

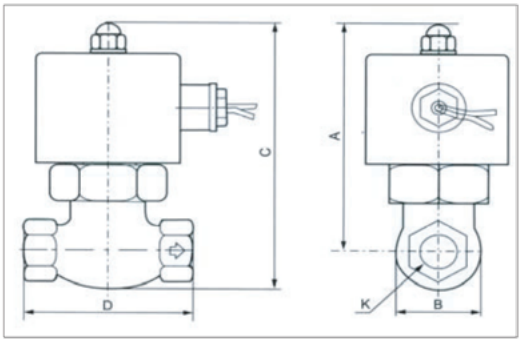
Solenoid magnetic field design can make this product have higher pressure

Solenoid valve good shape, large flow

The balance of the piston gap design enhances the reliable application of this valve in high temperature

Ambient Tempreature -5°C + 80°C

Medium Tempreature 0°C + 90°C : brass body :seal material



OVERALL DIMENSIONS :

Model	(G)	A	B	C	D	Pressure	Seal
2L170-10	G3/8	125	42	146	82	0.1 - 1.5	PTFE
2L170-15	G1/2	125	42	146	82	0.1 - 1.5	PTFE
2L170-20	G3/4	125	42	146	82	0.1 - 1.5	PTFE
2L200-25	G1	136	52	162	90.5	0.1 - 1.5	PTFE
2L300-35	G1 1/4	148	74	185	111	0.1 - 1.5	PTFE
2L300-40	G1 1/2	148	74	183	111	0.1 - 1.5	PTFE
2L500-50	G2	176	94.5	223	163	0.1 - 1.5	PTFE

KOPUVA

Roots Blower

Max Pressure 0.8 kgf/cm2

Max Airflow 9918 m^3/h



KOPUVA

FEATURES:

1. Wide range of capacity, pressure, vacuum
   Bore size: 40 mm ~ 300 mm (1-½"~ 12")
   Capacity: 0.36 ~ 160 m³/min (42 ~ 5700 CMF)
   Pressure:
   ASS up to 8000 mmAq (0.8 Kg/cm²)
   ASW up to 10000 mmAq (1 Kg/cm²)
   TRS (2 stage type) up to 20000 mmAq (2 Kg/cm²)
   Vacuum:
   1 stage up to-7000 mmAq (-500 mmHg)
   2 stage up to-8000 mmAq (-600 mmHg)
2. Blowed air without oil
3. Computerized balance to lower noise level and vibration
4. Steady blow, steady capacity
5. Rotor of special design, high efficiency, low consumption
6. Solid construction, no defect
7. First degree gear, high precision, low consumption
8. Standardized processing system
9. One step process for rotor
10. Piston ring installed

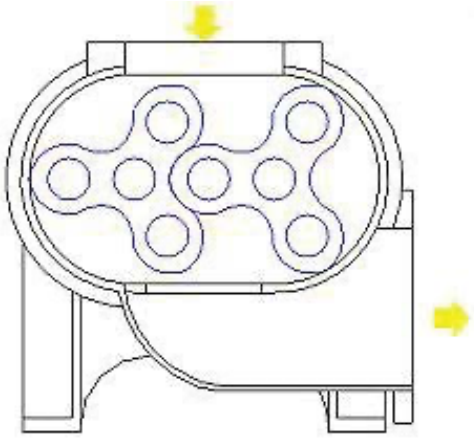
The difference between roots blowers of 2 lobes and 3 lobes

Traditional 2 lobes roots blower has high vibration and noise level, this causes short life of parts.

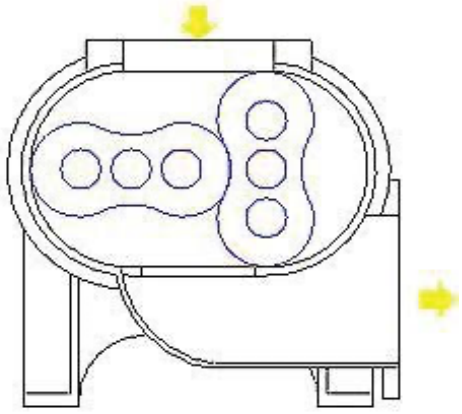
THE ADVANTAGE OF 3-LOBE ROOTS BLOWER:

1. Low reveres pressure, steady capacity, low vibration, low noise level
2. Low fluctuation of outlet pressure, make long life of rotor, gear
3. In the same RPM, 3-lobe roots blower has low noise level, low vibration, longer life

▽3-Lobes



▽2-Lobes



KOPUVA

APPLICATION:

WASTE WATER

1. Dust collecting after burning
2. Equipment of dust collection
3. Vacuum dehydration for dying, paper industry
4. Ventilation, desolates
5. Environment caring
6. Air transportation
7. Gas, bulk conveyance
8. Aquarium
9. Conveyance by air
10. Liquid agitation

UNIT CONVERSION:

PRESSURE	atm	kpa	bar	1bt/m2	in Hg	in Hg	ftAg	mmHg(Torr)	mmAq
1 atm	1	101.325	1.01325	14.696	1.0333	29.921	33.914	760	10333
1 kpa	0.0099	1	0.01	0.145	0.0102	0.295	0.335	7.5	102
1 bar	0.9869	100	1	14.504	1.0198	29.53	33.47	750	101.98
1 1bt/m2(psi)	0.068	6.894	0.0689	1	0.0703	2.036	2.308	51.71	703
1 kgf/cm	0.968	98.062	0.981	14.228	1	28.96	32.82	735.53	10000
1 inhg	0.0334	3.3863	0.0339	0.491	0.0345	1	1.133	25.4	345.3
1 ftAq	0.0295	2.99	0.0299	0.434	0.0305	0.882	1	22.42	304.8
1 mmHg(Torr)	0.013	0.1338	0.00138	0.019	0.0014	0.04	0.045	1	13.6
1 mm Aq	0.000097	0.0098	0.000098	0.0014	0.0001	0.003	0.0033	0.074	1

Pressure Conversion Formula

1 kPa= 1000kPa = 10000 N/M²
1 mmHg =13.6 mmAq
1 psi = 703 mmAq

CAPACITY

CAPACITY	m3/min	l /min	m3/h	ft3/min(cft)
1 m3/min	1	1000	60	35.288
1 l /min	0.001	1	0.06	0.035
1 m3/h	0.017	16.67	1	0.589
1ft3/min(cft)	0.028	28.32	1.699	1

POWER

POWER	kg-m/sec	KW	HP	PS
1 kg-m/sec	1	0.01	0.013	0.013
1 KW	101.97	1	1.341	1.360
1 HP	76.038	16.67	1	1.014
1 PS	75	0.7336	0.986	1

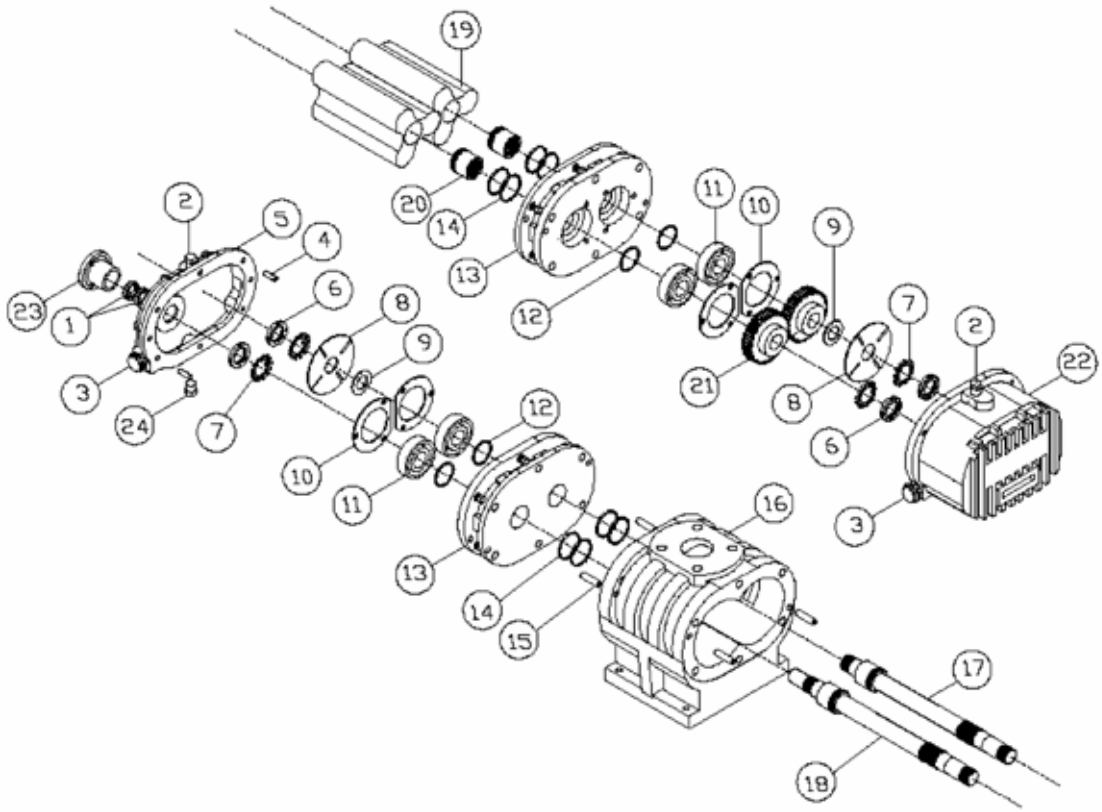
1. Application :
   Please make a description of place, purpose and running period.
2. Capacity :
   Please indicate the inlet and outlet condition.
   Normal or standard state
3. Pressure :
   Please indicate the inlet and outlet condition.
   Normal or standard state
4. Fluid property :

4.1 Species and characteristic
4.2 The weighted averages value
4.3 Specific gravity
4.4 Chemical composition
4.5 Special material
4.6 Explosive or toxic material

5. Temperature and humidity :
   Please consult with factory if the inlet temperature exceeds 50°C.
6. Motor :
   Voltage, frequency and phase should be indicated in your enquiry.

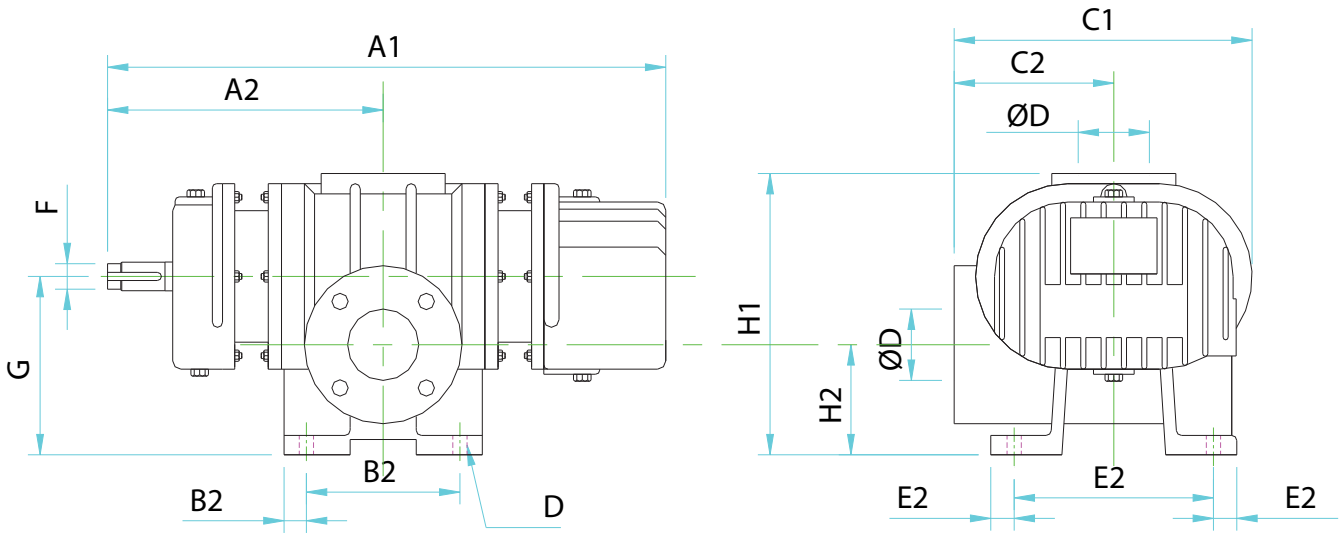
KOPUVA

KPV ASSEMBLING



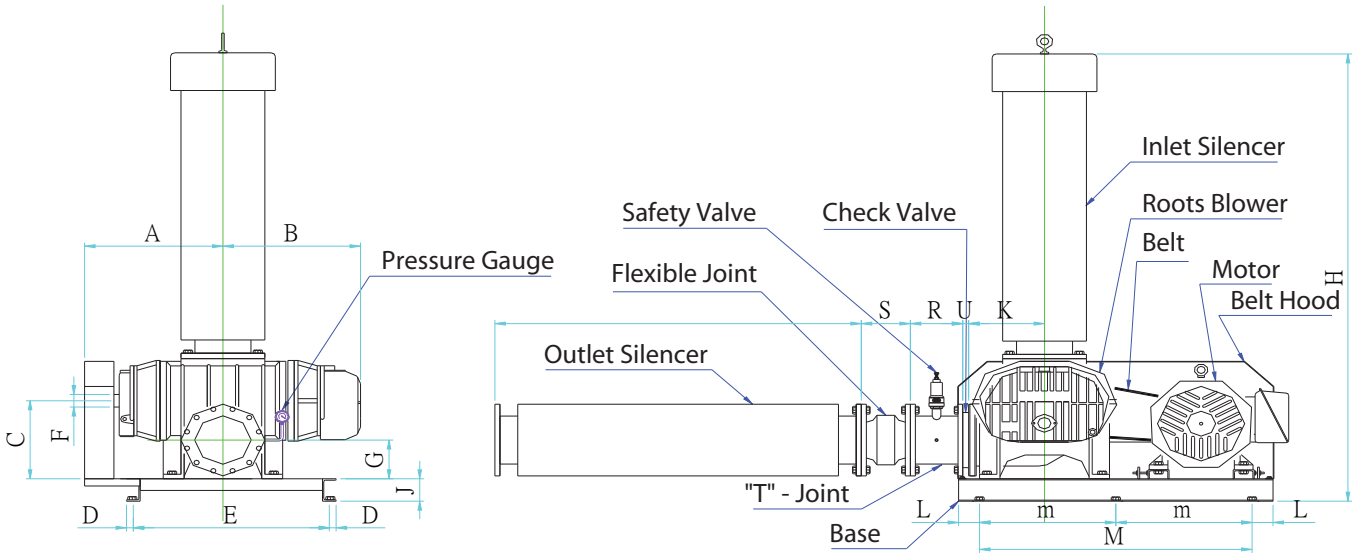
NO.	NAME	MATERIAL	Q'TY	NO.	NAME	MATERIAL	Q'TY
1	Oil seal	Viton	1	16	Casing	FC25	1
2	Lubrication plug	S45C	2	17	Driven shaft	SCM440	1
3	Oil gauge	Plastic	2	18	Drive shaft	SCM440	1
4	Positioning pin	S45C	2	19	Rotor	FCD500	2
5	Oil box	FC25	1	20	Shaft bushing	SCM440	2
6	Lock nut	S45C	4	21	Gear	SNCM220	2
7	Washer	S45C	4	22	Gear box	FC25	1
8	Oil Splash	SS41	2	23	Seal housing	FC25	1
9	Washer	SS41	2	24	Purge plug	S45C	1
10	Bearing washer	SS41	2	25			
11	Bearing	SUJ2	4	26			
12	V- ring	Viton	4	27			
13	Bearing housing	FC25	2	28			
14	Piston ring	FCD500	8	29			
15	Positioning pin	S45C	4	30			

KPV BODY DIMENSION



Model	A1	A2	B1	B2	C1	C2	φD	φd	E1	E2	F	G	H1	H2	Wt.(kg)
KPV-40	457	219	80	15	300	164	70	14	196	23	28	180	290	108	65
KPV-50	537	259	150	22.5	294	158	61.5	14	196	22	28	175	276	108	70
KPV-65	597	289	195	30.5	288	152	77.5	14	200	25	28	173	274	107	75
KPV-80	664	344	195	22.5	358	180	90	16	200	20	38	213	343	114	143
KPV-100	714	394	282	20.5	364	186	116	16	232	30	38	225	359	120	166
KPV-125A	772	377	210	20	483	250	142	19	346	27	48	265	514	143	274
KPV-125	892	437	310	30	483	250	142	19	355	22.5	48	265	501	163	296
KPV-150	1002	492	428	26	483	250	167	19	355	22.5	48	295	463	172	352
KPV-200A	962	465	239	45.5	697	357	200	23	555	42.5	65	355	605	198	640
KPV-200	1062	515	400	40	685	345	200	23	550	33	65	405	705	194	880
KPV-250	1212	590	520	25	715	356	260	23	550	35	65	435	675	216	1050
KPV-300A	1481	758	680	45	705	360	320	24	540	40	70	435	675	255	1350
KPV-300	1310	625	510	30	1060	560	320	23	780	35	95	550	1010	300	2000

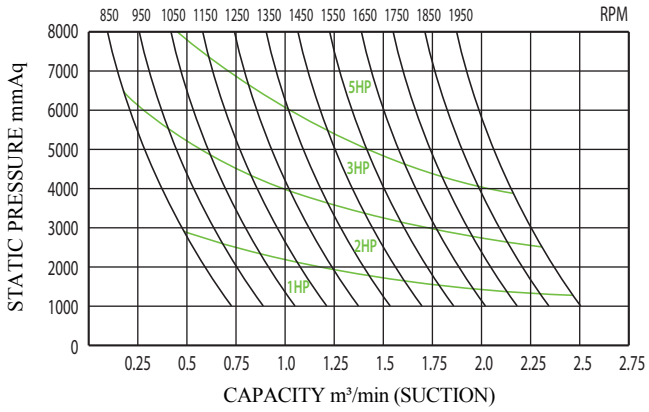
KPV STRUCTURE DIMENSION



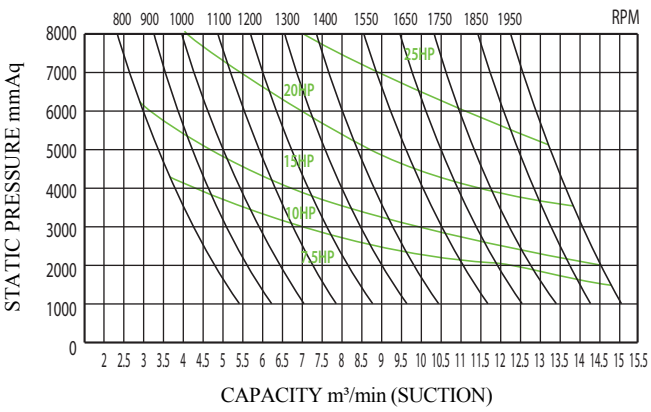
Model	A	B	C	D	E	F	G	H	J	K	L	M	m	R	U	S	T	Wt.(kg)
KPV-40	260	238	180	20	340	28	108	600	46	164	41.5	517	-	-	-	-	-	103
KPV-50	302	278	175	50	350	28	108	897	75	158	37.5	795	-	150	20	85	592	136
KPV-65	323	308	173	50	350	28	107	897	75	152	37.5	795	-	150	24	95	596	155
KPV-80	406	320	213	50	450	38	114	1236	75	180	37.5	945	-	180	24	110	796	250
KPV-100	467	370	225	25	550	38	120	1287	100	186	100	760	-	180	24	115	796	330
KPV-125A	440	395	265	25	550	48	143	1843	100	250	100	900	-	250	25	140	1260	450
KPV-125	500	455	265	25	550	48	163	1843	100	250	100	900	-	250	25	140	1260	485
KPV-150	566	510	295	25	550	48	172	1875	100	250	100	900	-	250	26	150	1264	525
KPV-200A	540	497	355	32.5	935	65	198	2230	125	357	100	-	650	250	28	170	1644	900
KPV-200	620	547	405	32.5	935	65	194	2330	125	345	100	-	650	250	28	170	1644	1155
KPV-250	680	622	435	32.5	935	65	216	2500	125	356	100	-	650	250	28	210	1748	1500
KPV-300A	760	717	430	32.5	925	65	255	2644	150	362	235	1530	765	300	30	240	1848	1800
KPV-300	828	685	550	35	1035	95	300	3084	250	560	235	-	1000	300	30	240	1848	2800

KPV PERFORMANCE CHART

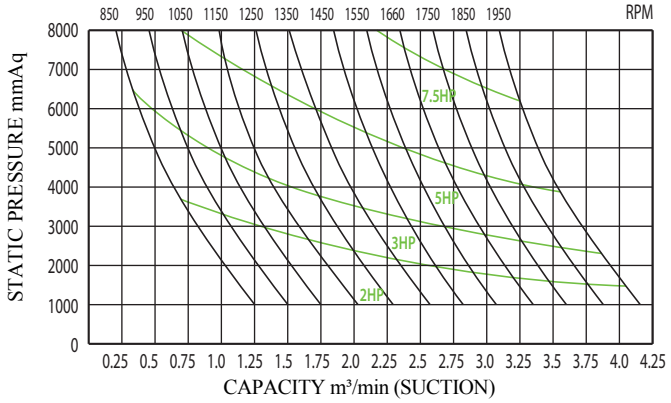
KPV-40



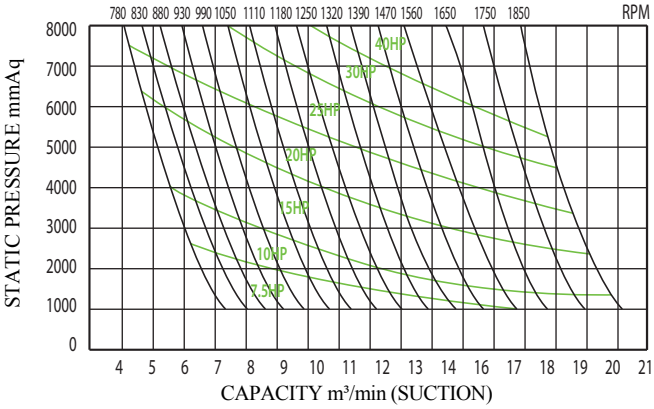
KPV-100



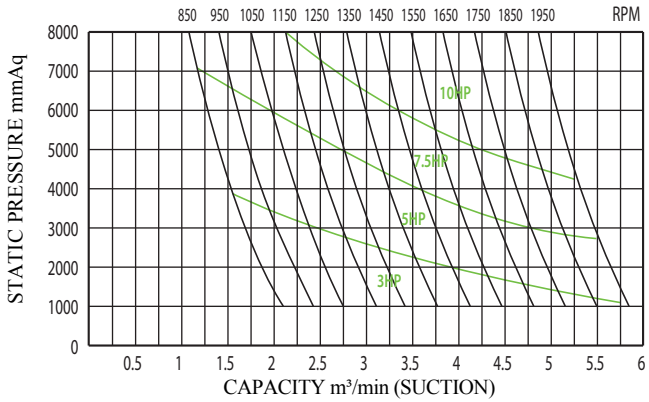
KPV-50



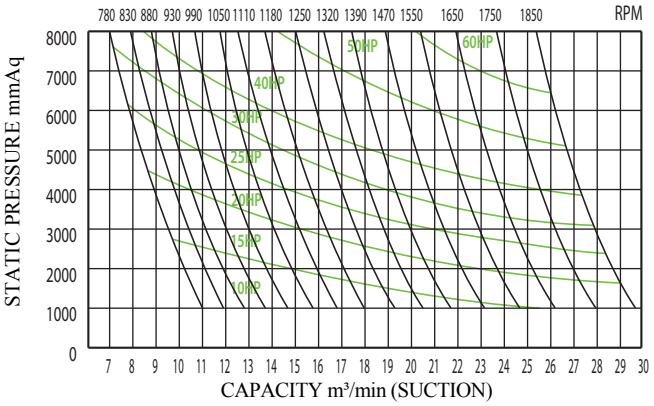
KPV-125A



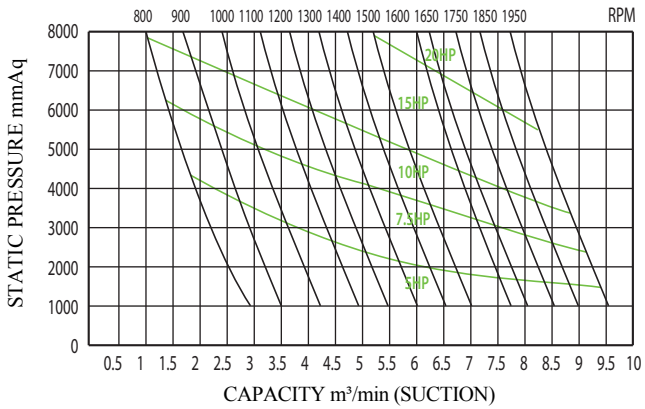
KPV-65



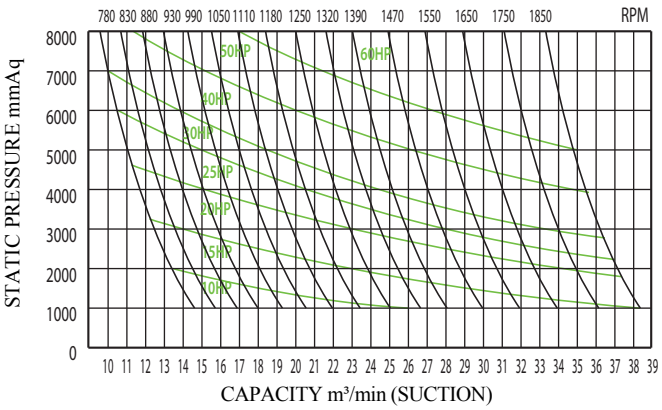
KPV-125



KPV-80

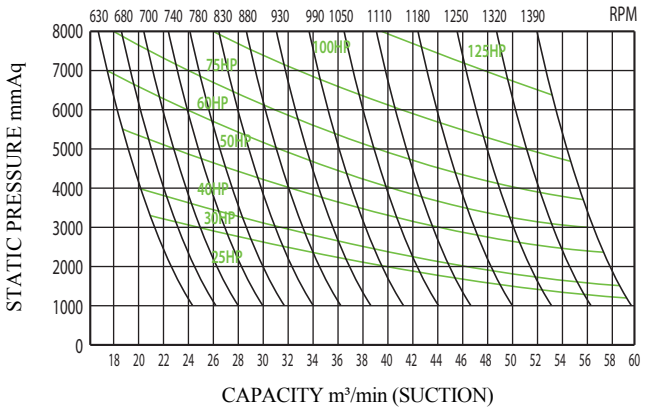


KPV-150

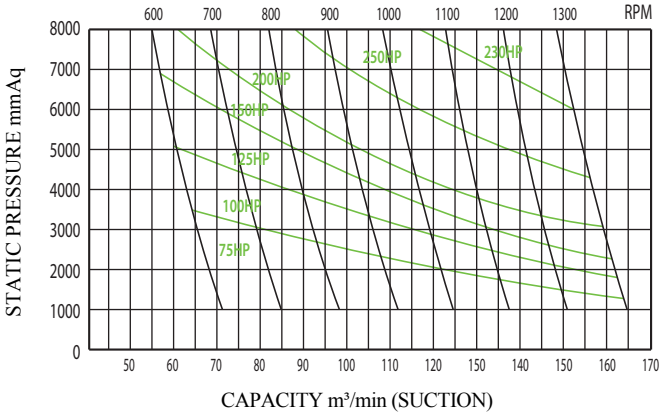


KPV PERFORMANCE CHART

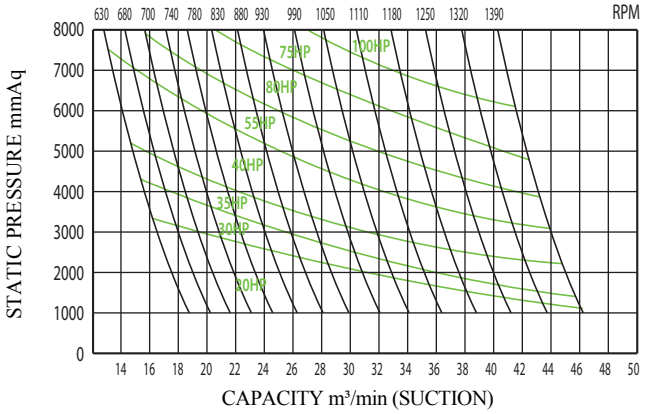
KPV-200A



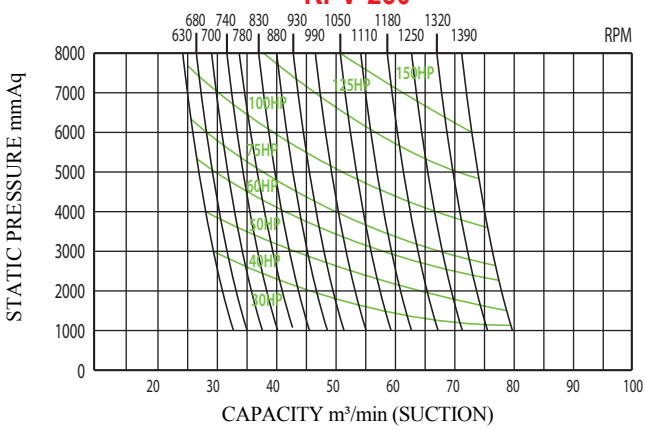
KPV-300



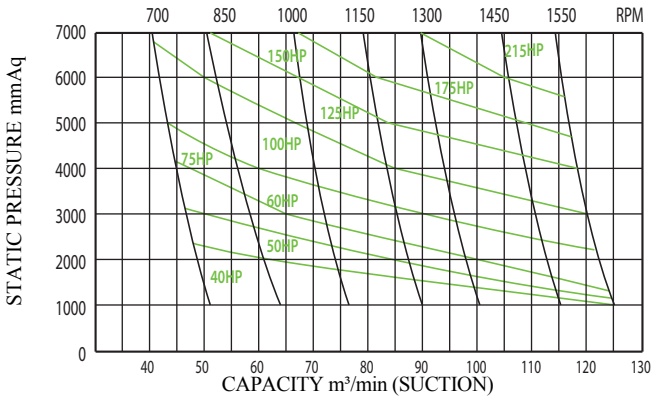
KPV-200



KPV-250



KPV-300A



KOPUVA

KPV PERFORMANCE TABLE

Model	RPM	Type ASS--40 performance															
		1000mmAq		2000mmAq		3000mmAq		4000mmAq		5000mmAq		6000mmAq		7000mmAq		8000mmAq	
		Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw
KPV-40	850	0.74	0.27	0.59	0.53	0.48	0.82	0.37	1.00	0.28	1.21	0.22	1.42	0.16	1.61	0.11	1.81
	950	0.90	0.30	0.75	0.59	0.64	0.85	0.53	1.11	0.44	1.34	0.38	1.58	0.32	1.81	0.27	2.02
	1050	1.06	0.33	0.91	0.65	0.79	0.94	0.70	1.22	0.61	1.50	0.53	1.75	0.48	2.00	0.42	2.23
	1150	1.22	0.37	1.08	0.71	0.96	1.03	0.86	1.40	0.76	1.64	0.70	1.92	0.64	2.19	0.59	2.45
	1250	1.38	0.37	1.24	0.77	1.12	1.12	1.02	1.46	0.92	1.78	0.86	2.09	0.80	2.39	0.75	2.55
	1350	1.54	0.43	1.39	0.83	1.28	1.21	1.18	1.58	1.09	1.93	1.02	2.26	0.97	2.56	0.91	2.66
	1450	1.70	0.46	1.56	0.89	1.45	1.30	1.34	1.69	1.26	2.06	1.18	2.42	1.12	2.76	1.08	2.76
	1550	1.86	0.49	1.72	0.95	1.61	1.39	1.50	1.81	1.41	2.21	1.34	2.59	1.28	2.95	1.24	3.08
	1650	2.02	0.52	1.88	1.01	1.77	1.48	1.66	1.93	1.57	2.35	1.51	2.75	1.45	3.14	1.40	3.40
	1750	2.19	0.59	2.04	1.08	1.93	1.57	1.82	2.05	1.73	2.49	1.66	2.92	1.60	3.33	1.56	3.78
	1850	2.35	0.59	2.20	1.14	2.09	1.66	1.98	2.17	1.88	2.63	1.82	3.09	1.76	3.52	1.72	4.04
	1950	2.51	0.62	2.36	1.23	2.25	1.75	2.14	2.29	2.04	2.77	1.97	3.26	1.91	3.70	1.87	4.37

Model	RPM	Type ASS--50 performance															
		1000mmAq		2000mmAq		3000mmAq		4000mmAq		5000mmAq		6000mmAq		7000mmAq		8000mmAq	
		Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw
KPV-50	850	1.23	0.45	0.98	0.88	0.80	1.37	0.62	1.66	0.47	2.02	0.36	2.36	0.26	2.69	0.18	3.01
	950	1.50	0.50	1.25	0.98	1.06	1.42	0.89	1.85	0.74	2.24	0.63	2.64	0.53	3.01	0.45	3.37
	1050	1.76	0.55	1.52	1.08	1.32	1.57	1.16	2.04	1.01	2.50	0.89	2.92	0.80	3.33	0.71	3.72
	1150	2.03	0.61	1.80	1.18	1.60	1.72	1.43	2.34	1.27	2.74	1.16	3.20	1.07	3.65	0.98	4.08
	1250	2.30	0.66	2.07	1.28	1.87	1.86	1.70	2.43	1.54	2.97	1.43	3.48	1.34	3.97	1.25	4.25
	1350	2.56	0.72	2.35	1.38	2.14	2.02	1.97	2.63	1.81	3.21	1.70	3.76	1.61	4.27	1.52	4.43
	1450	2.83	0.77	2.60	1.49	2.41	2.17	2.23	2.82	2.08	3.44	1.97	4.03	1.87	4.60	1.80	4.60
	1550	3.10	0.82	2.87	1.59	2.68	2.32	2.50	3.02	2.35	3.68	2.24	4.31	2.14	4.92	2.07	5.13
	1650	3.37	0.87	3.14	1.69	2.95	2.47	2.77	3.22	2.62	3.92	2.51	4.59	2.41	5.24	2.34	5.66
	1750	3.65	0.93	3.40	1.80	3.21	2.62	3.03	3.42	2.88	4.15	2.77	4.87	2.67	5.55	2.60	6.30
	1850	3.92	0.98	3.67	1.90	3.48	2.77	3.30	3.62	3.14	4.38	3.03	5.15	2.93	5.86	2.86	6.74
	1950	4.19	1.03	3.94	2.00	3.75	2.92	3.57	3.82	3.40	4.61	3.29	5.43	3.19	6.17	3.12	7.28

Model	RPM	Type ASS--65 performance															
		1000mmAq		2000mmAq		3000mmAq		4000mmAq		5000mmAq		6000mmAq		7000mmAq		8000mmAq	
		Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw
KPV-65	850	2.07	0.62	1.89	1.21	1.71	1.76	1.55	2.29	1.41	2.78	1.29	3.26	1.19	3.71	1.09	4.15
	950	2.41	0.83	2.23	1.35	2.05	1.96	1.89	2.55	1.74	3.11	1.63	3.64	1.53	4.15	1.43	4.64
	1050	2.76	1.20	2.58	1.49	2.40	2.16	2.23	2.82	2.09	3.44	1.98	4.02	1.87	4.57	1.77	5.13
	1150	3.10	1.35	2.93	1.64	2.74	2.38	2.58	3.09	2.45	3.77	2.33	4.41	2.22	5.03	2.12	5.62
	1250	3.41	1.50	3.27	1.78	3.08	2.59	2.92	3.36	2.79	4.09	2.67	4.79	2.56	5.46	2.46	6.10
	1350	3.77	1.60	3.61	1.92	3.42	2.80	3.26	3.63	3.13	4.42	3.01	5.17	2.91	5.90	2.80	6.59
	1450	4.13	1.70	3.96	2.06	3.77	3.01	3.62	3.90	3.48	4.75	3.36	5.56	3.26	6.34	3.15	7.08
	1550	4.48	1.80	4.30	2.20	4.11	3.21	3.96	4.17	3.82	5.07	3.70	5.94	3.60	6.77	3.49	7.56
	1650	4.82	1.90	4.65	2.34	4.45	3.42	4.30	4.44	4.16	5.40	4.04	6.32	3.94	7.20	3.84	8.54
	1750	5.17	2.00	5.00	2.49	4.80	3.63	4.65	4.70	4.50	5.73	4.39	6.70	4.29	7.64	4.19	8.54
	1850	5.51	2.10	5.34	2.63	5.14	3.83	4.99	4.98	4.84	6.05	4.73	7.08	4.63	8.07	4.53	9.02
	1950	5.86	2.20	5.68	2.77	5.48	4.04	5.33	5.25	5.18	6.38	5.07	7.46	4.97	8.50	4.88	9.51

Model	RPM	Type ASS--80 performance															
		1000mmAq		2000mmAq		3000mmAq		4000mmAq		5000mmAq		6000mmAq		7000mmAq		8000mmAq	
		Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw
KPV-80	800	2.91	1.40	2.55	2.12	2.23	2.81	1.93	3.51	1.67	4.31	1.42	5.43	1.21	6.55	1.02	7.67
	900	3.51	1.50	3.25	2.32	2.93	3.14	2.63	3.84	2.36	4.64	2.12	5.76	1.89	6.88	1.70	8.00
	1000	4.21	1.60	3.95	2.53	3.63	3.47	3.33	4.25	3.06	5.52	2.82	6.64	2.61	7.06	2.42	8.18
	1100	4.91	1.70	4.65	2.75	4.33	3.80	4.03	4.70	3.76	5.71	3.52	6.83	3.31	7.95	3.12	9.07
	1200	5.40	1.80	5.14	2.91	4.82	4.03	4.52	5.04	4.29	6.05	4.07	7.17	3.84	8.29	3.65	9.41
	1300	6.05	1.90	5.75	3.20	5.43	4.25	5.13	5.60	4.95	6.72	4.69	7.84	4.48	8.96	4.29	10.08
	1400	6.53	2.00	6.27	3.47	5.95	4.59	5.65	5.82	5.38	7.05	5.14	8.28	4.93	9.56	4.74	10.84
	1500	7.00	2.10	6.74	3.50	6.42	5.04	6.12	6.27	5.85	7.50	5.61	8.96	5.40	10.42	5.21	11.88
	1600	7.76	2.20	7.50	3.92	7.18	5.26	6.86	6.66	6.61	8.06	6.37	9.52	6.16	10.98	5.97	12.44
	1650	8.02	2.25	7.76	4.03	7.44	5.37	7.14	6.83	6.87	8.28	6.63	9.74	6.42	11.20	6.23	12.66
	1750	8.58	2.35	8.28	4.25	7.94	5.71	7.64	7.28	7.38	8.73	7.13	10.30	6.92	11.87	6.73	13.44
	1850	9.07	2.45	8.73	4.70	8.41	6.04	8.11	7.61	7.85	9.18	7.60	10.86	7.39	12.30	7.20	13.77
	1950	9.54	2.55	9.28	4.92	8.96	6.72	8.66	8.40	8.39	10.19	8.15	11.42	7.94	12.15	7.75	14.07

KOPUVA

KPV PERFORMANCE TABLE

Model	RPM	Type ASS--100 performance															
		1000mmAq		2000mmAq		3000mmAq		4000mmAq		5000mmAq		6000mmAq		7000mmAq		8000mmAq	
		Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw
KPV -100	850	5.40	1.46	4.79	2.82	4.25	4.04	3.76	5.19	3.34	6.03	2.96	7.20	2.63	8.10	2.34	8.96
	950	6.24	1.64	5.63	3.17	5.09	4.55	4.60	5.83	4.18	6.91	3.80	8.10	3.47	9.11	3.18	10.07
	1000	7.08	1.83	6.47	3.52	5.93	5.06	5.44	6.48	5.02	7.79	4.64	9.00	4.31	10.13	4.02	11.18
	1100	7.92	2.01	7.31	3.87	6.77	5.56	6.28	7.12	5.86	8.67	5.48	9.90	5.15	11.14	4.75	12.29
	1200	8.76	2.19	8.15	4.22	7.61	6.07	7.12	7.77	6.70	9.55	6.32	10.80	5.99	12.15	5.70	13.41
	1300	9.60	2.38	8.99	4.57	8.45	6.58	7.96	8.42	7.54	10.43	7.16	11.70	6.83	13.17	6.54	14.53
	1400	10.44	2.56	9.83	4.92	9.29	7.08	8.86	9.07	8.38	11.31	8.00	12.60	7.67	14.18	7.38	15.69
	1550	11.72	2.76	11.11	5.09	10.57	7.84	10.08	10.04	9.56	12.63	9.18	13.95	8.85	15.70	8.56	17.31
	1650	12.55	2.98	11.94	5.62	11.40	8.34	10.91	10.69	10.49	13.13	10.11	14.85	9.78	16.71	9.49	18.43
	1750	13.38	3.21	12.77	6.15	12.23	8.85	11.74	11.33	11.32	13.62	10.94	15.75	10.61	17.72	10.32	19.55
	1850	14.21	3.43	13.79	6.68	13.37	9.35	12.88	11.98	12.46	14.26	12.02	16.65	11.69	18.73	11.37	20.67
	1950	15.04	3.66	14.52	7.21	14.11	9.86	13.67	12.63	13.25	14.62	12.87	17.55	12.54	19.74	12.25	21.79

Model	RPM	Type ASS-125A performance															
		1000mmAq		2000mmAq		3000mmAq		4000mmAq		5000mmAq		6000mmAq		7000mmAq		8000mmAq	
		Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw
KPV -125A	780	7.44	2.70	6.70	4.19	6.14	5.77	5.67	7.25	5.30	8.84	4.90	10.43	4.50	12.02	4.10	13.61
	830	8.00	2.79	7.35	4.46	6.79	6.05	6.32	7.72	5.86	9.30	5.49	10.97	5.05	12.64	4.65	14.31
	880	8.65	2.98	7.91	4.65	7.35	6.42	6.88	8.18	6.51	9.86	6.14	11.63	5.69	13.40	5.28	15.20
	930	9.21	3.07	8.46	4.93	7.91	6.79	7.44	8.56	7.07	10.42	6.70	12.28	6.30	14.20	5.91	16.12
	990	9.95	3.26	9.21	5.21	8.65	7.16	8.18	9.11	7.79	11.07	7.44	13.02	7.07	14.97	6.80	16.92
	1050	10.60	3.44	9.95	5.49	9.39	7.53	9.00	9.67	8.46	11.70	8.09	13.76	7.81	15.90	7.50	18.04
	1100	11.35	3.63	10.60	5.77	10.14	8.00	9.67	10.14	9.21	12.37	8.84	14.60	8.46	16.74	8.21	18.88
	1180	12.18	3.81	11.44	6.14	10.88	8.46	10.42	10.79	10.07	13.11	9.67	15.44	9.30	17.76	8.92	20.08
	1250	13.02	4.00	12.28	6.51	11.72	8.93	11.25	11.44	10.88	13.86	10.51	16.28	10.14	19.53	9.70	22.80
	1320	13.86	4.28	13.11	6.79	12.56	9.40	12.09	12.00	11.72	14.60	11.35	17.21	10.97	20.46	10.58	23.71
	1390	14.69	4.46	13.95	7.11	13.32	9.95	12.93	12.65	12.56	15.35	12.18	18.14	11.81	21.39	11.38	24.64
	1470	15.62	4.65	14.88	7.53	14.32	10.42	13.86	13.39	13.49	16.28	13.11	19.53	12.74	22.32	12.32	25.11
	1560	16.65	4.93	15.90	8.00	15.44	11.07	14.97	14.14	14.51	17.21	14.14	20.46	13.56	24.18	13.13	27.90
	1650	17.67	5.21	17.02	8.46	16.46	11.72	16.00	14.97	15.62	18.14	15.25	22.32	14.88	25.11	14.54	30.10
	1750	18.88	5.49	18.14	8.93	17.67	12.37	17.21	15.81	16.74	19.53	16.39	23.25	16.09	26.97	15.83	31.10
	1850	20.09	5.77	19.34	9.39	18.79	13.02	18.32	16.74	17.88	21.39	17.58	24.18	17.21	27.90	16.81	32.60

Model	RPM	Type ASS-125 performance															
		1000mmAq		2000mmAq		3000mmAq		4000mmAq		5000mmAq		6000mmAq		7000mmAq		8000mmAq	
		Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw	Qs	kw
KPV -125	780	11.08	3.69	10.10	5.97	9.34	8.15	8.80	10.42	8.25	12.60	7.70	14.88	7.30	17.06	6.90	19.24
	830	11.95	3.92	10.97	6.30	10.21	8.69	9.67	11.08	9.12	13.47	8.58	15.86	8.15	18.25	7.80	20.64
	880	12.82	4.13	11.84	6.62	11.08	9.12	10.43	11.73	9.99	14.23	9.44	16.72	9.01	19.22	8.60	21.72
	930	13.58	4.34	12.70	6.95	11.95	9.67	11.29	12.38	10.75	15.10	10.32	17.70	9.88	20.31	9.50	22.92
	990	14.66	4.56	13.72	7.39	13.02	10.21	12.38	13.14	11.84	15.96	11.29	18.79	10.80	21.61	10.52	24.43
	1050	15.80	4.78	14.72	7.82	14.01	10.86	13.38	13.90	12.81	16.83	12.31	19.87	12.90	23.02	11.60	26.06
	1100	16.72	5.10	15.80	8.25	15.10	11.29	14.42	14.55	13.90	17.81	13.38	21.07	12.92	24.98	12.40	28.90
	1180	17.92	5.32	16.91	8.69	16.29	12.16	15.64	15.64	15.00	18.90	14.58	22.80	14.12	26.06	13.60	29.32
	1250	19.22	5.54	18.24	9.23	17.49	12.82	16.91	16.40	16.40	19.98	15.90	23.89	15.42	27.80	14.90	31.71
	1320	20.42	5.86	19.44	9.77	18.68	13.47	18.14	17.59	17.59	21.07	17.05	25.19	16.62	29.32	16.10	32.69
	1390	21.61	6.19	20.63	10.21	19.87	14.12	19.33	18.14	18.79	22.81	18.25	27.15	17.81	30.41	17.30	33.67
	1470	23.02	6.52	22.05	10.75	21.30	14.99	20.63	19.11	20.10	23.89	19.66	28.24	19.22	34.75	18.70	36.94
	1550	24.54	6.84	23.57	11.29	22.80	15.86	22.26	20.31	21.72	24.98	21.18	30.41	20.74	32.59	20.20	38.09
	1650	26.06	7.28	25.09	11.95	24.44	16.72	23.78	21.39	23.24	27.15	22.67	31.49	22.26	35.84	21.90	40.19
	1750	27.80	7.60	26.82	12.71	26.06	17.70	25.52	23.89	24.98	28.24	24.43	33.67	24.00	38.01	23.60	42.65
	1850	29.54	8.40	28.56	13.47	27.80	18.68	27.26	24.98	26.72	30.41	26.17	35.84	25.78	40.12	25.40	44.40

Rotameter & Flow meter





























Equipment & Accessories



Bourdon Tube Pressure Gauges
Model MBB, Liquid Filling, Stainless Steel Case
Dial : 2-2/2″ , 4″ ,6″



Bourdon Tube Pressure Gauges
Stainless Steel Series
Model MBS
Dial : 2-1/2″ ,4″ ,6″



Bourdon Tube Pressure Gauges
Polypropylene
Model MBS
Dial : 2-1/2″ ,4″ ,6″



Diaphargm Pressure Gauges
Stainless Steel Series
Model MBS
Dial : 2-1/2″ ,4″ ,6″

+POLOPLUS Mettering & Solenoid Pump

Detailed Product Introduction

Flow:0-15 lph
Pressure: 0-16 Bar
Power: 30-65W, 110V / 220V, 50/60Hz,
Drive System: single phase, two phase
Protection Degree: IP54
Flow Control: Manual operation, Automatic



Material

Pump head: SUS304, SUS316, PVC, PTEF
Diaphragm: PTF
Valve: SUS304, SUS316, PVC, PTEF
Valve ball: ZrO2, SUS304, SUS316, Ceramic

Work Conditio

Envitonment temperature: -30℃ --- 60℃
Motor: Single phase, two phase
Power: 110V / 220V, 50/60Hz, 30-65W
Protection degree: IP54

Technical Parameter

Model	Flow (lph)	Pressure (Bar)	Frequency ((min^{-1})	Caliber (mm)
JLM0110	1	10	0-120	6
JLM0408	3.8	7.6	0-180	6
JLM0505	5.0	5	0-180	6
JLM0804	7.6	3.5	0-180	6
JLM1002	10	2	0-180	6
JLM1202	12	1.5	0-180	6
JLM1501	15	1	0-180	6

Features

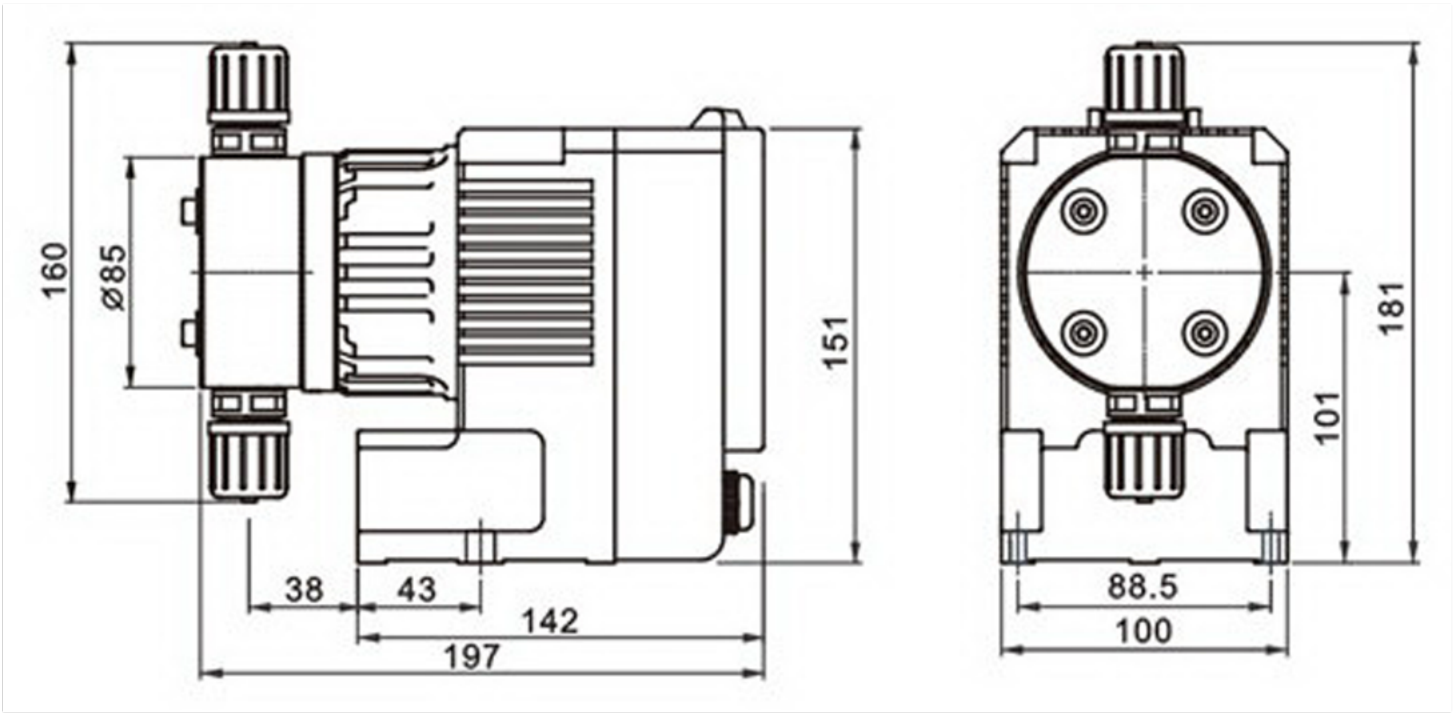
1.Manual control the stroke frequency from 10-100%,LED display the normal frequency(at running or stop)
2.Drive by electromagnetism,simple design,the speed of stroke is adjustable.
3.Easy to install, the pump is together with foot valve, injection valve and tubes for import and export.
4.Aluminium body with good heat ourput function and low weight.
5.Suit for low pressure water treatment industries.
6.The diaghragm is made from multilayer complex structure to promote the life span, the first layer is Teflon anti-acid diaphragm, the second is EPDM stretch rubber, the third is 3.00 mm thick SUS304 that supporting the iron corn. The fourth is also the EPDM stretch rubber to cover all of the body.

+POLOPLUS Mettering & Solenoid Pump

Purpose

Widely used in petroleum, chemical industry, metallurgy, mining, shipbuilding,light industry, agriculture, national defense department, daily chemicals, food industry, constructions industry, and etc.

Measurements



KOPUVA Pump & Equipment

Centrifugal Pump & End-Suction Pump












Bosster Pump & Fire Pump




KOPUVA

Pump & Equipment

Chemical Pump









Vertical Pump & in-line Pump & Root Blower







Swimming Pool Pump













KOPUVA

Pump & Equipment

Vertical Multi-Stage Centrifugal Pump







Submersible Pump

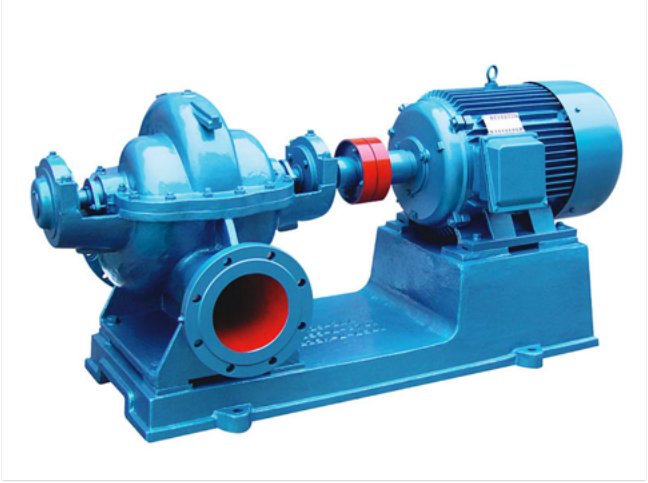








Split Case Pump



Double Diaphragm Pump

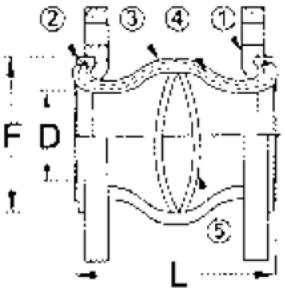


RUBBER EXPANSION JOINT

MODEL: AMS/AMS-H SERIES

Single-Sphere connector
With floating flanges





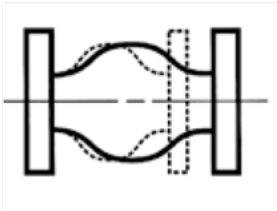
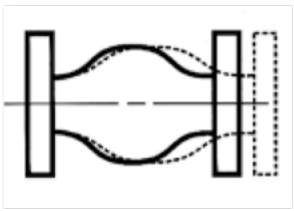
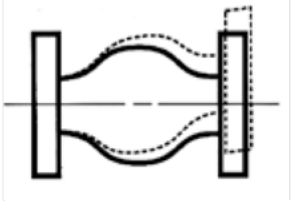
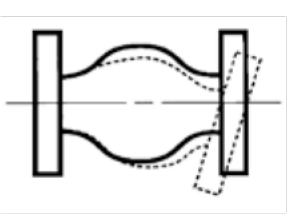
Feature

Fluids
Water, Warm water, seawater, weak acid / alkali, compressed air, etc.

Applicable
- Air Conditioning system
- Air ducts, Chemical lines.
- Circulating water lines
- Compressor lines, Paper stock lines.
- Pump-suction and discharge
- Refrigeration lines.
- Turbine to condenser.

	Part	Material
1	Flanges	SS41 (CHANGEABLE)
2	Wire	CARBON STEEL WIRES STRAND
3	Elastomer	SPECIAL SYNTHETIC RUBBER
4	Reinforcing Fabric	SYNTHETIC FIBER
5	Vacuum Ring	SUS304

Allowable Movements

1. Axial Compression	2. Axial Elongation	3. Transverse Movement	4. Angular Deflection
			

Specification mm

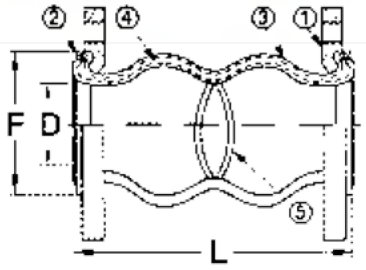
Item No.	Size		L	DØ	FØ	Allowable Movements in Operation			
	inch	mm				Axial Compression	Axial Elongation	Transverse Movement	Angular Deflection
AMS-101	1"	25	95	25	60	8	4	8	15°
AMS-101Q	1.1/4"	35	95	40	69	8	4	8	15°
AMS-101H	1.1/2"	40	95	40	69	8	4	8	15°
AMS-102	2"	50	105	52	86	8	5	8	15°
AMS-102H	2.1/2"	65	115	68	106	12	6	10	15°
AMS-103	3"	80	130	76	116	12	6	10	15°
AMS-104	4"	100	135	103	150	18	10	12	15°
AMS-105	5"	125	170	128	180	18	10	12	15°
AMS-106	6"	150	180	152	209	18	10	12	15°
AMS-108	8"	200	205	194	260	25	14	22	15°
AMS-110	10"	250	240	250	320	25	14	22	15°
AMS-112	12"	300	260	300	367	25	14	22	15°
AMS-114	14"	350	265	320	408	25	16	22	15°
AMS-116	16"	400	265	372	472	25	16	22	15°
AMS-118	18"	450	265	415	522	25	16	22	15°
AMS-120	20"	500	265	454	570	25	16	22	15°
AMS-124	24"	600	254	580	690	19	13	19	15°
AMS-128	28"	700	254	680	800	19	13	19	15°

RUBBER EXPANSION JOINT

MODEL: AMT/AMT-H SERIES

Twin-Sphere connector
With floating flanges





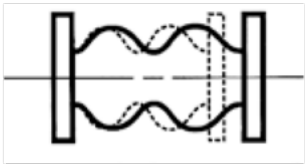
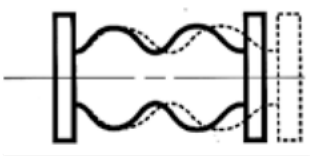
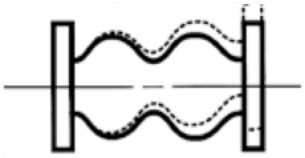
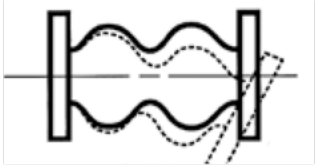
Feature

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	Part	Material
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2	Wire	CARBON STEEL WIRES STRAND
3	Elastomer	SPECIAL SYNTHETIC RUBBER
4	Reinforcing Fabric	SYNTHETIC FIBER
5	Vacuum Ring	SUS304

Allowable Movements

1. Axial Compression	2. Axial Elongation	3. Transverse Movement	4. Angular Deflection
			

Specification

mm

Item No.	Size		L	DØ	FØ	Allowable Movements in Operation			
	inch	mm				Axial Compression	Axial Elongation	Transverse Movement	Angular Deflection
AMT-101H	1.1/2"	40	175	40	69	50	30	45	35°
AMT-102	2"	50	175	52	86	50	30	45	35°
AMT-102H	2.1/2"	65	175	68	106	50	30	45	35°
AMT-103	3"	80	175	76	116	50	35	45	35°
AMT-104	4"	100	225	103	150	50	35	40	35°
AMT-105	5"	125	225	128	180	50	35	40	35°
AMT-106	6"	150	225	152	209	50	35	40	35°
AMT-108	8"	200	325	194	260	60	35	35	30°
AMT-110	10"	250	325	250	320	60	35	35	30°
AMT-112	12"	300	325	300	367	60	35	35	30°
AMT-114	14"	350	350	320	408	40	30	30	20°
AMT-116	16"	400	350	372	472	40	30	30	20°
AMT-118	18"	450	350	415	522	40	30	30	20°
AMT-120	20"	500	350	454	570	40	30	30	20°
AMT-124	24"	600	350	580	690	40	30	30	20°