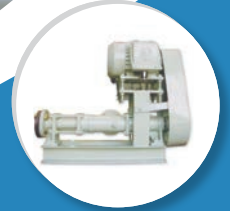




KAB



KS A/ISO 9001



PRODUCT SUMMARY

- BRONZE CASTINGS
- MARINE & OFFSHORE VALVES
- ONSHORE VALVES
- LEVEL GAUGES
- INDUSTRIAL PUMPS
- OIL & GAS EQUIPMENTS



FOS INTERNATIONAL INC.



CONTENTS

1. Direct Manufacture Part	04
1) Bronze Castings	
2) Marine & Offshore Valves	
Bronze Globe Valves/Check JIS F7427	05
Bronze Angle Valves/Check JIS F7427	06
Bronze Rising Stem Gate Valves JIS F7427	07
Bronze Swing Check Valves JIS F7427 / Bronze Flanged Cocks JIS F7381	08
Bronze Hose Valves JIS F7427	09
Bronze Hose Valves JIS F7427	10
Bronze Hose Valves JIS F7427	11
Bronze Compact Hydrant Valves 10Kg/cm ² & 16Kg/cm ²	12
Bronze Globe Valves DIN PN10 & PN16	13
Bronze Angle Valves DIN PN10 & PN16	14
Oil Tank Emergency Shut Off Valves JIS F7399	15
Fuel Oil Tank Self Closing Drain Valves JIS F7398	16
Cast Iron Globe Valves/Check JIS F7425	17
Cast Iron Angle Valves/Check JIS F7425	18
Cast Iron Gate Valves 5Kg/cm ² & 10Kg/cm ² JIS F7425	19
Cast Iron Gate Valves 16Kg/cm ² JIS F7425 / Cast Iron Lift Check Globe Valves 5Kg/cm ² JIS F7425	20
Cast Iron Swing Check Valves 5Kg/cm ² & 10Kg/cm ² JIS F7425	21
Cast Steel Globe Valves/Check JIS F7426	22
Cast Steel Angle Valves/Check JIS F7426	23
Cast Steel Gate Valves 10Kg/cm ² JIS F7425 / Cast Steel Hull Gate Valves 10Kg/cm ² JIS F7425	24
Cast Steel Screw-Down Vertical/Angle Storm Valves JIS F3060 & 3060A	25
3) Onshore Valves	
Bronze Globe 10Kg/cm ² Valves JIS B2026 / Bronze Angle 10Kg/cm ² Valves JIS B2027	26
Bronze Gate Valves For Ultra High Power Transformer 10Kg/cm ²	27
Bronze Globe Valves/Check Class 150	28



Bronze Angle Valves/Check Class 150	29
Other Bronze or Brass Products	30
[JIS Coupling 15A ~ 65A, Storz Coupling 40A ~ 65A, BS336 Coupling, JIS F3018 & 3019 etc]	

2. Outsourcing Part

Butterfly Valves	31
Butterfly Valves	32
Butterfly Valves	33
Butterfly Valves	34
Butterfly Valves	35
Cast Steel Gate Valves OS&Y, Rising Stem, Flexible Solid Wedge	36
Cast Steel Globe Valves, OS&Y, Rising Stem, Plug Disc	37
Cast Steel Swing Check Valves, Bolted Cover, Renewable Seat Ring	38
Cast Bronze, Steel, Stainless Steel DUO-Check Valves Class 150/300/600	39
2-Way Ball Valves	40
3-Way Ball Valves	41
Safety Relief Valves	42
Safety Relief Valves	43
Pressure Reducing Valves	44
Pressure Reducing Valves	45
Vertical Single Stage Centrifugal Pump	46
Horizontal Single Stage Centrifugal Pump	47
Air Operated Double Diaphragm Pump	48
Level Gauge - Flat Type	49
Level Gauge - Magnetic Type	50
Level Gauge - Reflex Type	51
3 Way Temperature Regulating Valve	52
Pneumatic Control Valve	53
Other Products	54
Cooperators	55

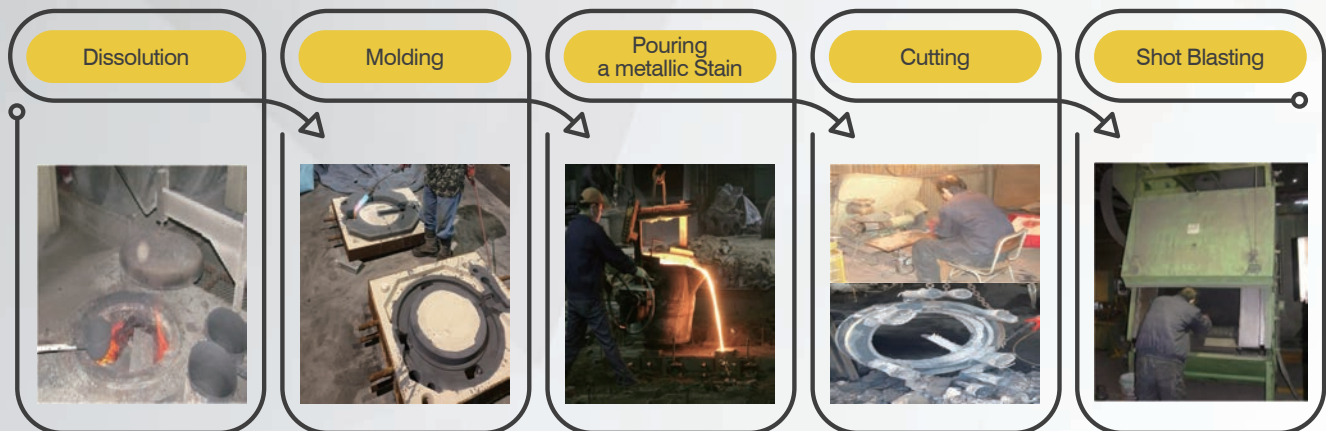
Bronze Castings

Direct Manufacture Part



We produce copper and copper alloy casting products which are considered to be the best products based on expertise technology.

All employees and management of the company are committed to developing the company as a professional manufacturer of various casting products, including industrial valves and parts of equipments based on the spirit for challenges.



Casting product 1



Casting product 2



Casting product 3



Casting product 4

Inspection equipment

Direct Manufacture Part



Spectrometer



Universal Test Machine
For Measuring
Tensile Strength



Hardness Tester



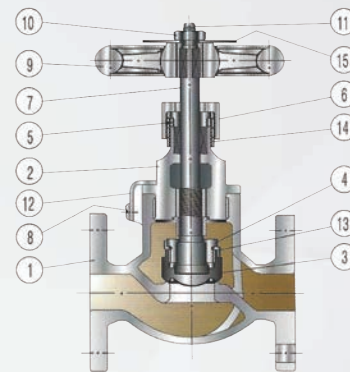
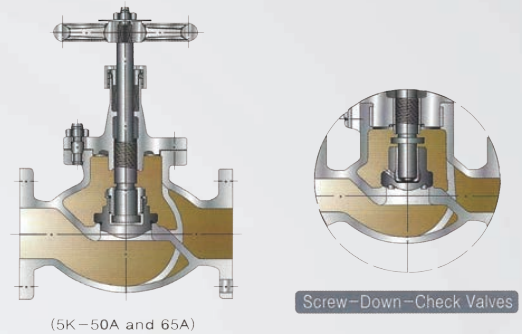
Thermometer For
Melting
Temperature Inspection

Bronze Globe Valves/Check

Marine & Offshore Valves

5kg/cm² | JIS F 7427

16kg/cm² | JIS F 7427



◎ PART NAME

No	Component	Material
1	Body	Bronze
2	Bonnet	Bronze or Brass
3	Disc	Bronze or Brass
4	Valve disc nut	Brass
5	Packing gland	Brass
6	Gland nut	Brass
7	Stem	Brass
8	Set Screw	Brass
9	Handwheel	Cast iron
10	Hexagon nut	Brass
11	Split pin	Brass
12	Lockplate	Brass
13	Disclockwasher	Brass
14	Packing	Teflon
15	Name plate	Brass & Al

◎ Test Pressure [kgf/cm²]

Rating	5	16
Shell HYD' Test	10.5	33
Seat HYD' Test	7.7	24.2
Seat HYD' Test [Check]	4	4

◎ Fluid Condition & Max. Working Pressure [kgf/cm²]

Fluid Condition / Rating	5	16
Steam up to 205°C	5	16
Air Gas Oil and Pulsation Water	5	16
Non Shock Water	7	22

◎ DIMENSIONS

Unit : mm

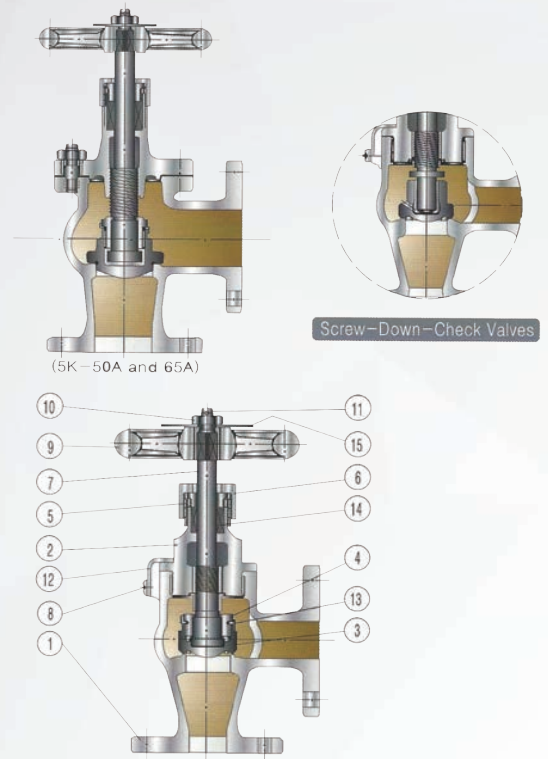
Rating	Size	Face to Face	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [kg]
5kgf/cm ² F7427	15	100	80	60	4-12	130	80	2.02 / 1.96
	20	110	85	65	4-12	140	100	2.86 / 2.77
	25	120	95	75	4-12	160	125	3.54 / 3.41
	32	140	115	90	4-15	170	125	5.00 / 4.86
	40	160	120	95	4-15	190	140	6.48 / 6.30
	50	210	130	105	4-15	235	140	11.70
	65	250	155	130	4-15	260	150	17.00
16kgf/cm ² F7427	15	110	95	70	4-15	130	80	2.76 / 2.70
	20	120	100	75	4-15	140	100	3.72 / 3.63
	25	130	125	90	4-19	160	125	5.20 / 5.09
	32	160	135	100	4-19	170	125	6.91 / 6.77
	40	180	140	105	4-19	190	140	8.43 / 8.25

Bronze Angle Valves/Check

Marine & Offshore Valves

5kg/cm² | JIS F 7427

16kg/cm² | JIS F 7427



◎ PART NAME

No	Component	Material
1	Body	Bronze
2	Bonnet	Bronze or Brass
3	Disc	Bronze or Brass
4	Valve disc nut	Brass
5	Packing gland	Brass
6	Gland nut	Brass
7	Stem	Brass
8	Set Screw	Brass
9	Handwheel	Cast iron
10	Hexagon nut	Brass
11	Split pin	Brass
12	Lockplate	Brass
13	Disclockwasher	Brass
14	Packing	Teflon
15	Name plate	Brass & Al

◎ Test Pressure [kgf/cm²]

Rating	5	16
Shell HYD' Test	10.5	33
Seat HYD' Test	7.7	24.2
Seat HYD' Test [Check]	4	4

◎ Fluid Condition & Max. Working Pressure [kgf/cm²]

Fluid Condition / Rating	5	16
Steam up to 205°C	5	16
Air Gas Oil and Pulsation Water	5	16
Non Shock Water	7	22

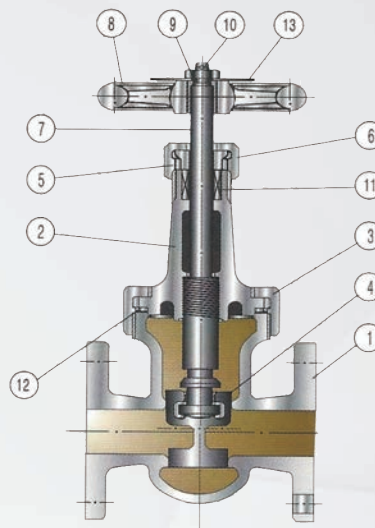
◎ DIMENSIONS

Unit : mm

Rating	Size	Face to Face	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [kg]
5kgf/cm ² F7427	15	50	80	60	4-12	120	80	1.98 / 1.92
	20	60	85	65	4-12	130	100	2.73 / 2.64
	25	65	95	75	4-12	145	125	3.44 / 3.30
	32	80	115	90	4-15	150	125	4.77 / 4.63
	40	85	120	95	4-15	165	140	5.99 / 5.81
	50	100	130	105	4-15	200	140	10.10
	65	115	155	130	4-15	220	160	15.60
16kgf/cm ² F7427	15	70	95	70	4-15	120	80	2.73 / 2.67
	20	75	100	75	4-15	130	100	3.65 / 3.56
	25	85	125	90	4-19	145	125	5.16 / 5.02
	32	95	135	100	4-19	150	125	6.72 / 6.58
	40	100	140	105	4-19	165	140	8.13 / 7.98

Bronze Rising Stem Gate Valves

Marine & Offshore Valves

5kg/cm² | JIS F 742710kg/cm² | JIS F 7427

◎ PART NAME

No	Component	Material
1	Body	Bronze
2	Bonnet	Bronze or Brass
3	Bonnet Nut	Bronze or Brass
4	Disc	Bronze or Brass
5	Packing Gland	Brass
6	Packing Gland Nut	Brass
7	Stem	Brass
8	Handwheel	Cast Iron
9	Hexagon Nut	Brass
10	Split Pin	Brass
11	Packing	Teflon
12	Name Plate	Brass or Al

◎ Test Pressure [kgf/cm²]

Rating	5	10
Shell HYD' Test	10.5	21.0
Seat HYD' Test	7.7	15.4

◎ Fluid Condition & Max. Working Pressure [kgf/cm²]

Fluid Condition / Rating	5	10
Steam	2	2
Oil and Pulsation Water	5	10
Non Shock Water of 120°C and Under	7	14

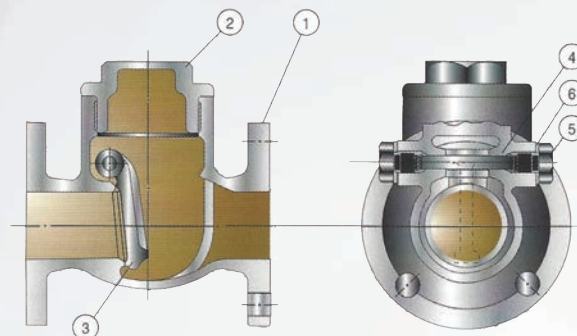
◎ DIMENSIONS

Unit : mm

Rating	Size	Face to Face	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [kg]
5kgf/cm ² F7427	15	90	80	60	4-12	175	80	2.29
	20	100	85	65	4-12	200	80	2.98
	25	110	95	75	4-12	220	100	4.10
	32	130	115	90	4-15	250	100	5.79
	40	140	120	95	4-15	290	125	7.78
10kgf/cm ² F7427	15	100	95	70	4-15	175	80	2.96
	20	110	100	75	4-15	200	80	3.89
	25	120	125	90	4-19	220	100	5.82
	32	140	135	100	4-19	250	100	7.52
	40	150	140	105	4-19	290	125	9.71

Bronze Swing-Check Valves

Marine & Offshore Valves

5kg/cm² | JIS F 7427

Working Pressure	Test Pressure [Body]	Test Pressure [Seat]
5kg/cm ²	10.5	7.7 ~ 4

© DIMENSIONS

Unit : mm

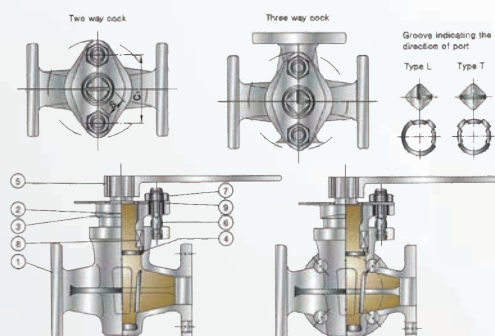
Size	Face to Face	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Weight [kg]
25	110	95	75	4-12	69	2.24
32	130	115	90	4-15	79	3.07
40	140	120	95	4-15	93	4.34

© PART NAME

No	Component	Material
1	Body	Bronze
2	Bonnet	Bronze or Brass
3	Disc	Bronze or Brass
4	Hinge pin	Brass
5	Plug	Brass
6	Gasket	Teflon

Bronze Flanged Cocks

JIN HU ENGINEERING

5kg/cm² | JIS F 7381

Working Pressure	Test Pressure [Body]	Test Pressure [Seat]
5kg/cm ²	7.5	5.5

© PART NAME

No	Component	Material
1	Body	Bronze
2	Plug	Bronze
3	Packing gland	Brass

No	Component	Material
4	Seat ring	Brass
5	Handle	Bronze
6	Stud	Brass

No	Component	Material
7	Hexagon nut	Brass
8	Packing	Non Asbestos

© DIMENSIONS

Unit : mm

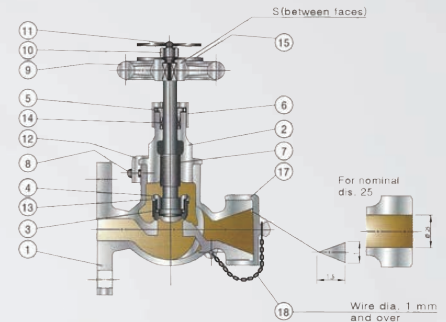
Rating	Size	Face to Face	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Weight [kg] Two	Weight [kg] Three
5kgf/cm ² F7381	25	130	95	75	4-12	105	3.13	3.81
	32	160	115	90	4-15	125	5.02	6.13
	40	170	120	95	4-15	135	6.66	7.93
	50	190	130	105	4-15	163	10.0	11.8
	65	220	155	130	4-15	201	16.7	19.0

Bronze Hose Valves

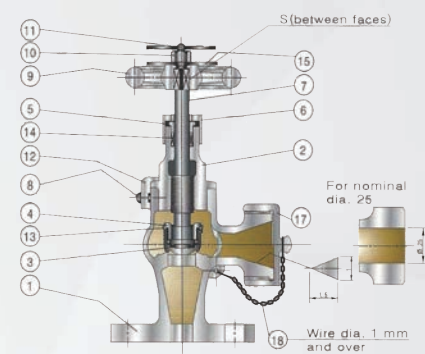
Marine & Offshore Valves

5kg/cm² | JIS F 742710kg/cm² | JIS F 7427

GLOBE TYPE 15A AND 25A



ANGLE TYPE 15A AND 25A



◎ PART NAME

No	Component	Material
1	Body	Bronze
2	Bonnet	Bronze or Brass
3	Disc	Bronze or Brass
4	Disc Nut	Brass
5	Packing Gland	Brass
6	Gland nut	Brass
7	Stem	Brass
8	Set Screw	Brass
9	Handwheel	Cast iron
10	Hexagon nut	Brass
11	Split pin	Brass
12	Bonnet Lock plate	Brass
13	Disc Lock Washer	Brass
14	Packing	Teflon
15	Name plate	Brass & Al
17	Cap	Bronze or Brass
18	Chain	Brass & Al

◎ Test Pressure [kgf/cm²]

Rating	5	10
Shell HYD' Test	10.5	21.0
Seat HYD' Test	7.7	15.4
Coupler	7	14

◎ Fluid Condition & Max. Working Pressure [kgf/cm²]

Fluid Condition / Rating	5	10
Steam of 205°C and Under	5	10
Air Pulsation Water	5	10
Non Shock Water	7	14

◎ DIMENSIONS [GLOBE TYPE]

Unit : mm

Rating	Size	Thread	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [kg]
5K	15	M42 x 2	80	60	4-12	130	80	2.51
10K	15	M42 x 2	95	70	4-15	130	80	2.76
5K	25	M42 x 2	95	75	4-12	160	125	3.55
10K	25	M42 x 2	125	90	4-19	160	125	4.15

◎ DIMENSIONS [ANGLE TYPE]

Unit : mm

Rating	Size	Thread	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [kg]
5K	15	M42 x 2	80	60	4-12	120	80	2.41
10K	15	M42 x 2	95	70	4-15	120	80	2.72
5K	25	M42 x 2	95	75	4-12	145	125	3.44
10K	25	M42 x 2	125	90	4-19	145	125	4.04

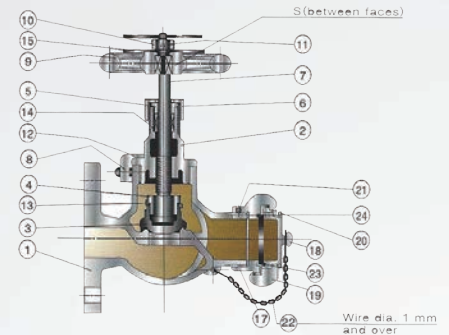
Bronze Hose Valves

Marine & Offshore Valves

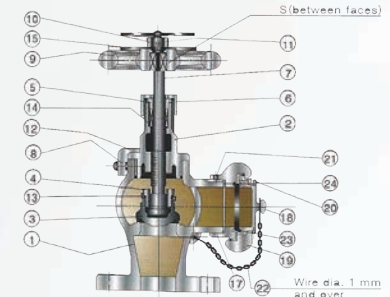
5kg/cm² · 10kg/cm² | JIS F 7427



GLOBE TYPE 40A



ANGLE TYPE 40A



◎ PART NAME

No	Component	Material
1	Body	Bronze
2	Bonnet	Bronze
3	Disc	Bronze or Brass
4	Disc nut	Brass
5	Packing gland	Brass
6	Gland nut	Brass
7	Stem	Brass
8	Set Screw	Brass
9	Handwheel	Cast iron
10	Hexagon nut	Brass
11	Split pin	Brass
12	Bonnet lock plate	Brass

No	Component	Material
13	Disc washer	Brass
14	Packing	Teflon
15	Name plate	Brass & Al
16	Seat ring	Bronze
17	Base connection	Bronze or Brass
18	Cap	Bronze or Brass
19	Coupling ring	Bronze
20	Set ring	Bronze
21	Set screw	Brass
22	Chain	Brass or Stainless Steel
23	Gasket	Rubber
24	Gasket	Rubber

◎ Test Pressure [kgf/cm²]

Rating	5	10
Shell HYD' Test	10.5	21
Seat HYD' Test	7.7	15.4
Coupler	7	14

◎ Fluid Condition & Max. Working Pressure [kgf/cm²]

Fluid Condition / Rating	5	10
Steam of 205°C and Under	5	10
Air Pulsation Water	5	10
Non Shock Water	7	14

◎ DIMENSIONS [GLOBE TYPE]

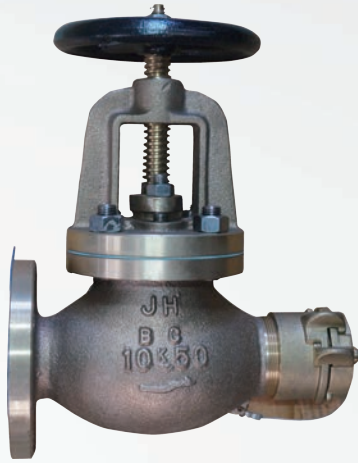
Rating	Size	Thread	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [kg]
5K	40	M52 x 2	120	95	4-15	190	140	6.26
10K	40	M52 x 2	140	105	4-19	190	140	8.43

◎ DIMENSIONS [ANGLE TYPE]

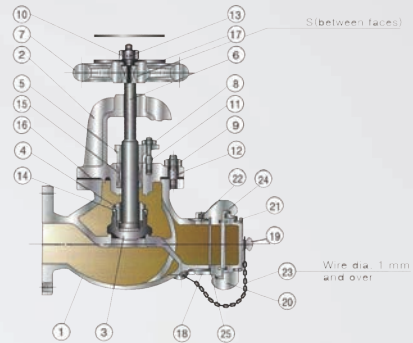
Rating	Size	Thread	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [kg]
5K	40	M52 x 2	120	95	4-15	165	140	5.91
10K	40	M52 x 2	140	105	4-19	165	140	8.19

Bronze Hose Valves

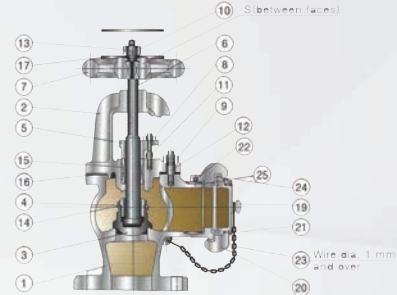
Marine & Offshore Valves

5kg/cm² · 10kg/cm² | JIS F 7427

GLOBE TYPE 50A AND 65A



ANGLE TYPE 50A AND 65A



© PART NAME

No	Component	Material
1	Body	Bronze or Fc
2	Bonnet	Bronze or Fc
3	Disc	Bronze
4	Disc Nut	Brass
5	Packing Gland	Brass
6	Stem	Brass
7	Handwheel	Cast iron
8	Hexagon nut	Brass
9	Hexagon nut	Brass
10	Hexagon nut	Brass
11	Stud	Brass
12	Stud	Brass
13	Split Pin	Brass

No	Component	Material
14	Disc lock washer	Brass
15	Packing	Teflon
16	Gasket	Non Asbestos
17	Name Plate	Brass or Al
18	Base Connection	Bronze or Brass
19	Cap	Bronze or Brass
20	Coupling ring	Bronze
21	Set ring	Bronze
22	Set screw	Brass
23	Chain	Brass or Stainless Steel
24	Gasket	Rubber
25	Gasket	Rubber

© Test Pressure [kgf/cm²]

Rating	5	10
Shell HYD' Test	10.5	21
Seat HYD' Test	7.7	15.4
Coupler	7	14

© Fluid Condition & Max. Working Pressure [kgf/cm²]

Fluid Condition / Rating	5	10
Steam of 205°C and Under	5	10
Air Pulsation Water	5	10
Non Shock Water	7	14

© DIMENSIONS [GLOBE TYPE]

Rating	Size	Thread	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [kg]
5K	50	M64 x 2	130	105	4-15	255	160	12.9
10K	50	M64 x 2	155	120	4-19	270	160	15.4
5K	65	M80 x 2	177	130	4-15	280	160	26.41
10K	65	M80 x 2	175	140	4-19	295	200	27.8

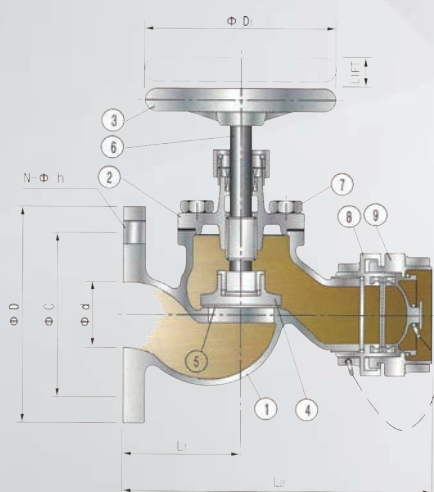
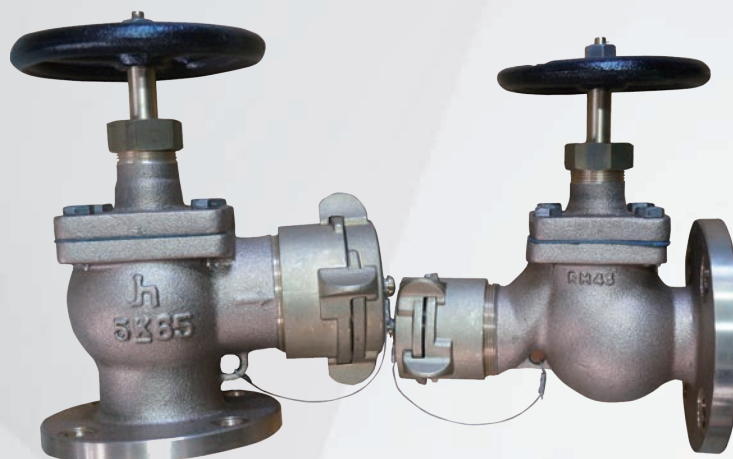
© DIMENSIONS [ANGLE TYPE]

Rating	Size	Thread	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [kg]
5K	50	M64 x 2	130	105	4-15	255	160	11
10K	50	M64 x 2	155	120	4-19	240	160	14.3
5K	65	M80 x 2	155	130	4-15	240	160	21.85
10K	65	M80 x 2	175	140	4-19	255	200	23.0

Bronze Compact Hydrant Valves

Marine & Offshore Valves

5kg/cm² & 10kg/cm² & 16Kg/cm² | GLOBE & ANGLE



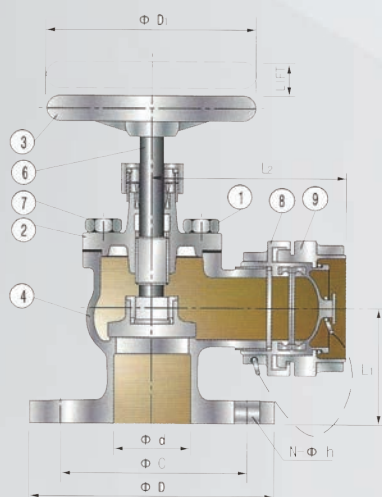
© PART NAME

No	Component	Material
1	Body	Bronze
2	Bonnet	Bronze
3	Hand Wheel	Cast Iron
4	Disc	Bronze
5	Seat	Bronze
6	Stem	Brass
7	Bolt	Stainless Steel
8	Coupling Body	Bronze or Brass
9	Coupling Cap	Bronze or Brass

© DIMENSIONS [GLOBE TYPE]

Unit : mm

Size	Dia	Pcd	Bolt Hole	L1	L2	Handle Dia
50A	155	120	4-19	80	230	140
65A	175	140	4-19	95	255	160



© PART NAME

No	Component	Material
1	Body	Bronze
2	Bonnet	Bronze
3	Hand Wheel	Cast Iron
4	Disc	Bronze
5	Seat	Bronze
6	Stem	Brass
7	Bolt	Stainless Steel
8	Coupling Body	Bronze or Brass
9	Coupling Cap	Bronze or Brass

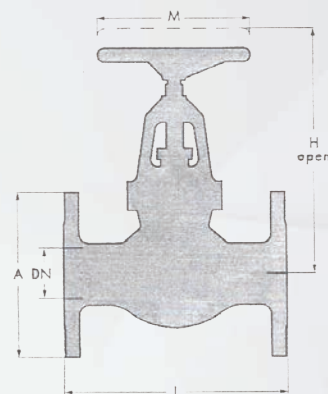
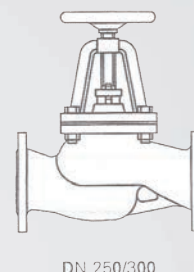
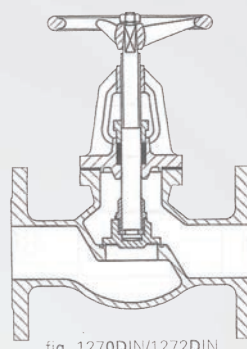
© DIMENSIONS [ANGLE TYPE]

Unit : mm

Size	Dia	Pcd	Bolt Hole	L1	L2	Handle Dia
50A	155	120	4-19	60	144	140
65A	175	140	4-19	75	157	160

Bronze DIN Globe Valves PN6 / 10 / 16

Marine & Offshore Valves



© PART NAME

Component	Material
Body	Bronze
Disc	Bronze
Gland	Bronze
Stem	Brass
Gland packing	Asbestos Free
Handwheel	Cast Iron

© Test Pressure/temperature

DN 15 to DN 175	16bar - 120°C	10bar - 200°C
DN 200 to DN 300	10bar - 200°C	6bar - 200°C

© DIMENSIONS

Unit : mm

DN	A	L	H [open]	M	Weight [kg]
15	95	130	180	100	5
20	105	150	200	100	5.5
25	115	160	210	100	6
32	140	180	220	125	8
40	150	200	250	160	10
50	165	230	250	160	12
65	185	290	315	200	17
80	200	310	335	200	23
100	220	350	375	250	30
125	250	400	420	250	50
150	285	480	460	315	65
175	315	550	520	315	85
200	340	600	550	400	110
250	395	730	670	400	165
300	445	850	750	400	295

Bronze DIN Angle Valves PN6 / 10 / 16

Marine & Offshore Valves

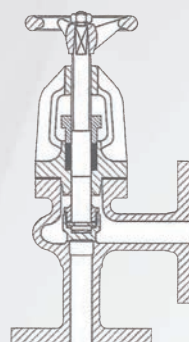
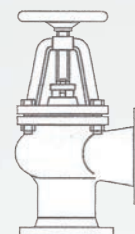


fig. 1271DIN/1273DIN



DN 250/300

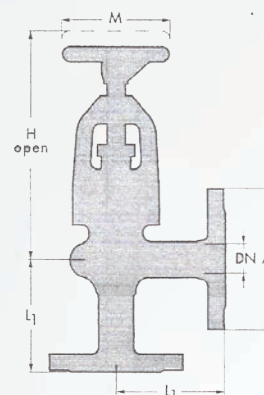


fig. 1271DIN/1273DIN

© PART NAME

Component	Material
Body	Bronze
Disc	Bronze
Gland	Bronze
Stem	Brass
Gland packing	Asbestos Free
Handwheel	Cast Iron

© Test Pressure/temperature

DN 15 to DN 175	16bar - 120°C	10bar - 200°C
DN 200 to DN 300	10bar - 200°C	6bar - 200°C

© DIMENSIONS

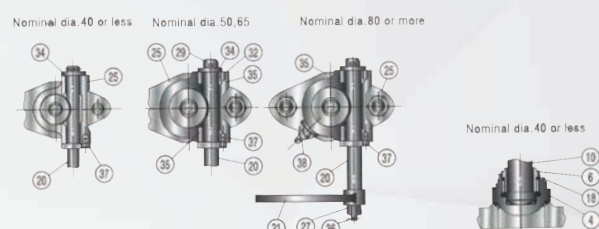
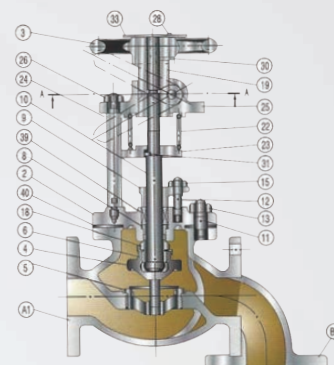
Unit : mm

DN	A	L	H [open]	M	Weight [kg]
15	95	90	160	100	3.8
20	105	95	170	100	4
25	115	100	170	100	5
32	140	105	190	125	7
40	150	115	210	160	9
50	165	125	220	160	11
65	185	145	260	200	16
80	200	155	280	200	20
100	220	175	300	250	25
125	250	200	340	250	40
150	285	225	360	315	50
175	315	250	380	315	75
200	340	275	440	400	95
250	395	325	550	400	155
300	445	375	620	400	225

Fuel Oil Tank Emergency Shut off Valves

Marine & Offshore Valves

JIS F 7399



◎ Test Pressure [kgf/cm²]

Rating	10
Shell HYD' Test	7
Seat HYD' Test	2

◎ PART NAME

No	Component	Material [40 or less]	Material [50 or 65]
1A	Body [A-Type]	Bronze	Cast steel
2B	Body [B-Type]	Bronze	Cast steel
2	Bonnet	Bronze	Cast steel
3	Handwheel	Cast iron	Cast Iron
4	Disc	Bronze or Brass	Stainless
5	Valve seat	-	Stainless
6	Disc nut	Brass	Stainless
8	Bonnet bush	-	Bronze or Brass
9	Packing gland	Bronze	Bronze
10	Stem	Brass	Stainless
11	Stud bolt	Steel	Steel
12	Stud bolt	Steel	Steel
13	Hexagon nut	Steel	Steel
15	Hexagon nut	Brass	Brass
18	Disc lock washer	Brass	Stainless
19	Bush for stem lift	Brass	Brass
20	Operating spindle	Steel	Stainless
21	Lever	Steel	Steel
22	Spring	Spring steel	Spring Steel

No	Component	Material [40 or less]	Material [50 or 65]
23	Spring support	Bronze	Steel
24	Stay	Bronze	Steel
25	Support bush for stem	Bronze	Steel
26	Hexagon nut	Steel	Steel
27	Hexagon nut	Steel	Steel
28	Machine screw	Steel	Steel
29	Split pin	Brass	Brass
30	Machine screw	Steel	Steel
31	Lock pin	Steel	Steel
32	Set screw	-	Steel
33	Name plate	Brass or Al	Brass or Al
34	Washer	Steel	Steel
35	Bush	-	Brass
36	Split pin	Steel	Steel
37	Set screw	Steel	Steel
38	Grease nipple	-	-
39	Packing	Non-Asbestos	Non-Asbestos
40	Gasket	Non-Asbestos	Non-Asbestos

◎ DIMENSIONS

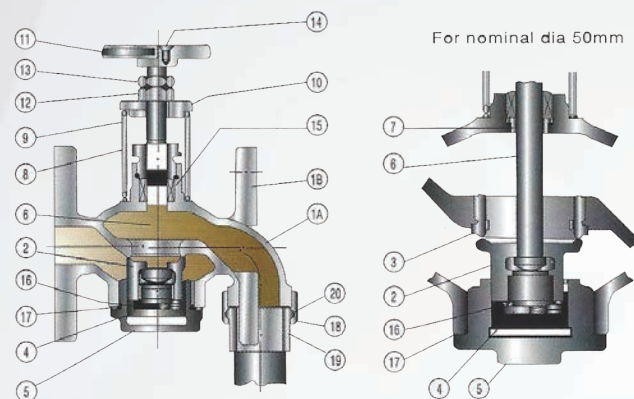
Unit : mm

Size	Face to Face	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [kg] A1	Weight [kg] B1
25	130	125	90	4-19	265	125	8.5	8.8
40	170	140	105	4-19	310	140	12.7	13.0
50	220	155	120	4-19	335	160	20.9	21.8
65	270	175	140	4-19	395	180	30.5	32.1
80	300	185	150	8-19	420	180	35.4	37.5
100	350	210	175	8-19	510	224	55.6	59.2

Fuel Oil Tank Self Closing Drain Valves

Marine & Offshore Valves

JIS F 7398



© Test Pressure [kgf/cm²]

Rating	10
Shell HYD' Test	1.5
Seat HYD' Test	1.1

© PART NAME

No	Parts	Material [For nominal dia. 25mm & 40mm]	Material [For nominal dia. 50mm]
1A	Body [Type U]	Bronze	Cast steel
2B	Body [Type F]	Bronze	Cast steel
2	Disc	Bronze or Brass	Bronze or Brass
3	Valve seat	-	Bronze
4	Plug	Bronze or Brass	Bronze or Brass
5	Bonnet	Bronze or Brass	Cast steel
6	Stem	Brass	Brass
7	Packing bush	-	Brass
8	Packing gland	Brass	Brass
9	Spring	Spring Steel	Spring Steel
10	Spring support	Bronze or Brass	Steel
11	Handle	Bronze or Brass	Steel
12	Hexagon nut	Brass	Brass
13	Hexagon nut	Brass	Brass
14	Cross-Reccssed Flat Counter-Sank Head Machine Screw	Brass	Brass
15	Packing	Non-Asbestos	Non-Asbestos
16	Gasket	Non-Asbestos	Non-Asbestos
17	Gasket	Non-Asbestos	Non-Asbestos
18	Union nut	Steel	Steel
19	Nipple	Steel	Steel
20	Gasket	Non-Asbestos	Non-Asbestos

© DIMENSIONS

Unit : mm

Size	Face to Face	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [Type U]	Weight [Type F]
25	130	125	90	4-19	130	70	3.87	4.70
40	180	140	105	4-19	165	80	7.43	8.10
50	220	155	120	4-19	195	80	12.2	12.4

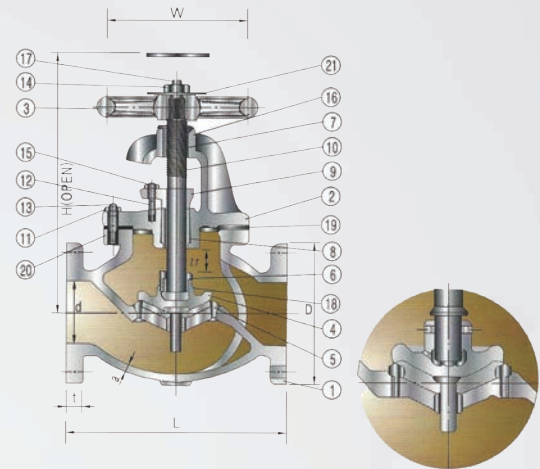
Cast Iron Globe Valves/Check

Marine & Offshore Valves

5kg/cm² | JIS F 7425

10kg/cm² | JIS F 7425

16kg/cm² | JIS F 7425



Screw-Down-Check Valves

© PART NAME

No	Component	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
3	Handwheel	Cast Iron
4	Disc	Bronze or SUS
5	Seat Ring	Bronze or SUS
6	Disc Lock Nut	Bronze or SUS
7	Yoko Bushing	Bronze
8	Bonnet Bushing	Bronze or SUS
9	Packing Gland	Bronze
10	Stem	Bronze or SUS
11	Bonnet Nut	Rolled Steel

No	Component	Material
12	Gland Bolt	Brass
13	Bonnet Bolt	Rolled Steel
14	Handwheel Nut	Brass
15	Gland Nut	Brass
16	Set Screw	Rolled Steel
17	Split Pin	Brass
18	Lock Washer	Brass or SUS
19	Packing	Non-Asbestos
20	Gasket	Non-Asbestos
21	Name Plate	Brass

© Fluid condition & Max. Working Pressure [kgf/cm²]

-	Max. Working [kgf/cm ²]							
Rating	5				10			
Size	Up to 200	250,300	350,400		Up to 200	Over 250	50-200	
Fluid Condition Trim	B Trim	S Trim	B Trim		B Trim	S Trim	B Trim	S Trim
Steam up to 230°C	-	5	-		-	10	-	16
Steam up to 205°C	5					-		16
Saturated Sream					10	5		-
Air and Gas	5					-		16
Oil and Pulsation Water	5				10			
Non-Shock Water 120°C	7	6			14	10		22

© Test Pressure [kgf/cm²]

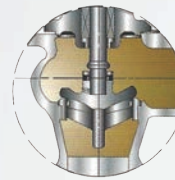
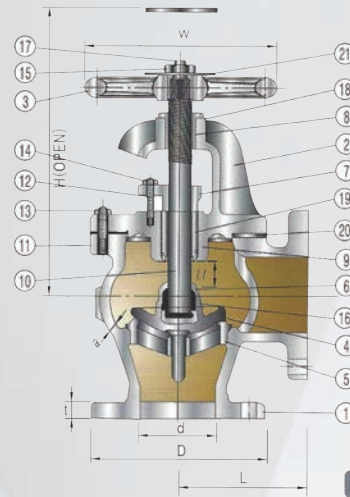
Rating	5		10		16	
Size	Up to 300	350-450	Up to 200	Over 250	50-200	
Shell Hydraulic Test	10.5	9	24	21	20	33
Seat Hydraulic Test	7.7	6.6	15	15.4	11	23
Seat Hydraulic [Check]	4	3	4	-		4

© DIMENSIONS [Unit : mm / Weight : kg]

Rating	Size	50	65	80	100	125	150	200	250	300	350	400
5kg/cm ²	d	50	65	80	100	125	150	200	250	300	335	380
	L	210	250	280	340	410	480	570	740	840	940	1050
	a	8	9	9	10	11	12	15	16	17	18	20
	H	270	300	310	360	390	445	530	650	740	840	940
	W	160	180	180	224	250	280	315	355	400	500	630
	J1	17	22	27	33	42	50	67	84	100	112	1270
10kg/cm ²	Weight	14.7	21.3	27.7	40.8	57.6	80.3	139	246	377	462	647
	d	50	65	80	100	125	150	200	250	300	-	-
	L	220	270	300	350	420	490	570	740	840	-	-
	a	10	11	11	12	13	14	17	20	22	-	-
	H	285	310	320	370	420	470	555	680	770	-	-
	W	160	200	200	250	280	315	355	450	500	-	-
16kg/cm ²	J1	17	22	27	33	42	50	67	84	100	-	-
	Weight	19.9	28.7	32.4	48.7	73.1	104	162	304	458	-	-
	d	50	65	80	100	125	150	200	-	-	-	-
	L	220	270	300	350	430	500	570	-	-	-	-
	a	10	11	12	13	15	16	19	-	-	-	-
	H	285	310	340	385	425	510	630	-	-	-	-
	W	160	200	224	250	315	355	455	-	-	-	-
	J1	17	22	27	33	42	50	67	-	-	-	-
	Weight	19.6	28.3	40.4	56.9	89.5	123	188	-	-	-	-

Cast Iron Angle Valves/Check

Marine & Offshore Valves

5kg/cm² | JIS F 742510kg/cm² | JIS F 742516kg/cm² | JIS F 7425

Screw-Down-Check Valves

◎ PART NAME

No	Component	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
3	Handwheel	Cast Iron
4	Disc	Bronze or SUS
5	Seat Ring	Bronze or SUS
6	Disc Lock Nut	Bronze or SUS
7	Yoko Bushing	Bronze
8	Bonnet Bushing	Bronze or SUS
9	Packing Gland	Bronze
10	Stem	Bronze or SUS
11	Bonnet Nut	Rolled Steel

No	Component	Material
12	Gland Bolt	Brass
13	Bonnet Bolt	Rolled Steel
14	Handwheel Nut	Brass
15	Gland Nut	Brass
16	Set Screw	Rolled Steel
17	Split Pin	Brass
18	Lock Washer	Brass or SUS
19	Packing	Graphited Asbestos
20	Gasket	Graphited Asbestos
21	Name Plate	Brass

◎ Fluid condition & Max. Working Pressure [kgf/cm²]

-	Max. Working [kgf/cm ²]							
Rating	5				10		16	
Size	Up to 200	250,300	350,400	Up to 200	Over 250	50-200		
Fluid Condition Trim	B Trim	S Trim	B Trim	B Trim	S Trim	B Trim	S Trim	
Steam up to 230°C	-	5	-	-	10	-	-	16
Steam up to 205°C	5			10		-	5	-
Saturated Sream						-	-	16
Air and Gas	5					-	-	16
Oil and Pulsation Water	5			10				
Non-Shock Water 120°C	7	6	14	10	22			

◎ Test Pressure [kgf/cm²]

Rating	5			10			16	
Size	Up to 300	350-450	Over 450	Up to 200 Angle	AG-GH	Over 250	50-200 Angle	AG-GH
Shell Hydraulic Test	10.5	9	7.5	21	21	20	33	3
Seat Hydraulic Test	7.7	6.6	5.5	15.4	15.4	11	24.2	24.2
Seat Hydraulic [Check]	4	3	-	4	-	-	4	

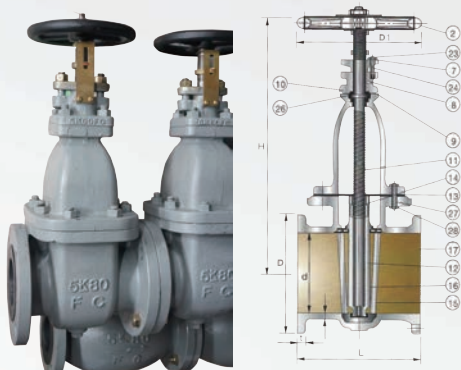
◎ DIMENSIONS [Unit : mm / Weight : kg]

Rating	Size	50	65	80	100	125	150	200	250	300	350	400
5kgf/cm ²	d	50	65	80	100	125	150	200	250	300	335	380
	L	100	115	130	150	170	190	220	275	310	360	395
	a	8	9	9	10	11	12	15	16	17	18	20
	H	240	225	265	310	330	380	450	540	610	690	770
	W	160	180	180	224	250	280	315	355	400	500	630
	J1	17	22	27	33	42	50	67	84	100	112	1270
10kgf/cm ²	Weight	12.9	18.2	23.4	33.7	46.2	63.4	105	166	243	327	459
	d	50	65	80	100	125	150	200	250	300	335	380
	L	120	130	140	160	180	205	230	290	320	360	420
	a	10	11	11	12	13	14	17	20	22	24	26
	H	255	270	275	315	360	405	475	570	645	710	790
	W	160	200	200	250	280	315	355	450	500	560	630
16kgf/cm ²	J1	17	22	27	33	42	50	67	84	100	112	127
	Weight	18.2	25.4	27.4	40.6	69.9	81.0	125	211	293	386	544
	d	50	60	850	100	125	150	200	-	-	-	-
	L	120	130	150	170	200	225	250	-	-	-	-
	a	10	11	12	13	15	16	19	-	-	-	-
	H	255	270	295	330	390	435	540	-	-	-	-
16kgf/cm ²	W	160	200	224	250	315	355	450	-	-	-	-
	J1	17	22	27	33	42	50	67	-	-	-	-
	Weight	18.0	25.0	35.7	49.2	76.1	103	155	-	-	-	-

Cast Iron Gate Valves

Marine & Offshore Valves

5kg/cm² | JIS F 7425



© DIMENSIONS

Unit : mm

Size	H	D	d	D1	t	L
50	285	50	50	125	16	180
65	330	65	65	140	18	190
80	380	80	80	160	18	200
100	430	100	100	180	20	230
125	495	125	125	200	20	250
150	560	150	150	224	22	270
200	680	200	200	280	24	290
250	800	250	250	355	26	330
300	920	300	300	400	28	370
350	1000	335	335	450	30	410
400	1100	380	380	500	30	470

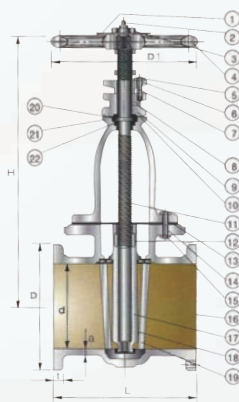
© PART NAME

No	Component	Material
1	Indicator	Bronze
2	Hand Wheel	Cast Iron
3	Thrust Ball Bearing	-
4	Bushing	Bronze
5	Bevel Gear	Cast Iron
6	Key	Carbon Steel
7	Packing Gland	Bronze
8	Packing	Non-Asbestos
9	Gasket	Non-Asbestos
10	Bonnet	Cast Iron
11	Stem	Brass or SUS
12	Disc	Cast Iron
13	Gasket	Non-Asbestos
14	Screwed Piece	Bronze
15	Body Seat Ring	Brass or SUS
16	Disc Seat Ring	Brass or SUS
17	Body	Cast Iron
18	Indicator Stem	Brass
19	Cap For Yoke	Cast Steel
20	Yoke	Cast Iron
21	Set screw	Carbon Steel
22	Hexagon nut	Brass
23	Nut	Brass
24	Bolt	Brass
25	Pin	Brass
26	Packing Bush	Bronze
27	Bonnet Stud Bolt	Rolled Steel
28	Bonnet Nut	Brass

Cast Iron Gate Valves

Marine & Offshore Valves

10kg/cm² | JIS F 7425



© DIMENSIONS

Unit : mm

Size	H	D	d	D1	t	L
50	300	155	50	140	20	200
65	350	175	65	160	22	220
100	450	210	100	200	24	250
125	520	250	125	224	24	270
160	580	280	150	250	26	290
200	700	380	200	315	26	320
250	840	400	250	400	30	380
300	960	445	300	450	32	440
350	1050	490	335	500	34	500
400	1150	560	380	560	36	590
500	-	675	480	-	40	710
600	-	795	580	-	44	850

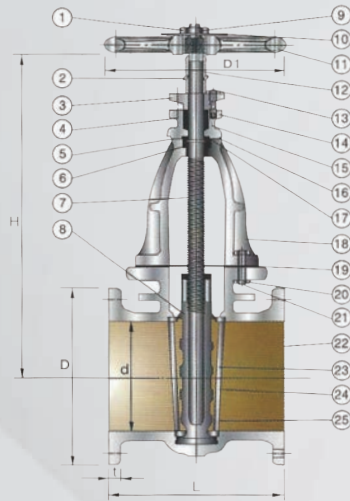
© PART NAME

No	Component	Material
1	Name Plate	Brass
2	Split Pin	Brass
3	Handwheel Nut	Brass
4	Handwheel	Cast Iron
5	Gland Nut	Brass
6	Packing Gland	Bronze
7	Gland Bolt	Brass
8	Packing	Non-Asbestos
9	Stuffing Box	Cast Iron
10	Gasket	Non-Asbestos
11	Stem	Bronze or SUS
12	Screwed Bush	Bronze
13	Gasket	Non-Asbestos
14	Bonnet Bolt	Rolled Steel
15	Bonnet Nut	Rolled Steel
16	Body	Cast Iron
17	Disc	Cast Iron
18	Disc Seat Ring	Bronze or SUS
19	Disc Seat Ring	Bronze or SUS
20	Guide Bush	Bronze
21	Bonnet	Cast Iron
22	Guide Bosh	Bronze

Cast Iron Gate Valves

Marine & Offshore Valves

16kg/cm² | JIS F 7425



Working Pressure	Test Pressure [Body]	Test Pressure [Seat]
16kg/cm ²	24kg/cm ²	17.6kg/cm ²

© DIMENSIONS

Unit : mm

Size	H	D	d	D1	t	L
300	1010	485	300	560	36	490
350	1070	540	350	560	38	540
400	1185	605	380	630	42	610

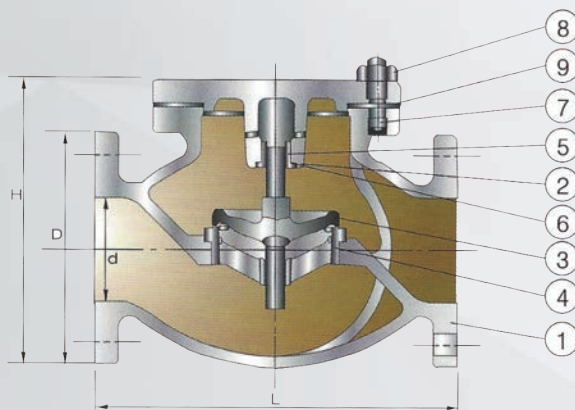
© PART NAME

No	Component	Material
1	Hand Wheel Nut	Brass
2	Indicator	Braonze
3	Packing Gland	Bronze
4	Stuffing Box	Cast Iron
5	Gsket	Non-Asbestos
6	Guide Bushing	Bronze
7	Stem	Bronze or SUS
8	Screwed Piece	Bronze
9	Split Pin	Brass
10	Name Plate	Brass
11	Hand Wheel	Cast Iron
12	Indicator Plate	Brass
13	Gland Nut	Brass
14	Gland Bolt	Brass
15	Packing	Non-Asbestos
16	Gasket	Non-Asbestos
17	Guide Bush	Bronze
18	Bonnet	Cast Iron
19	Gasket	Non-Asbestos
20	Bonnet Nut	Rolled Steel
21	Bonnet Bolt	Rolled Steel
22	Body	Cast Iron
23	Disc	Cast Iron
24	Disc Seat Ring	Bronze or SUS
25	Body Seat Ring	Bronze or SUS

Cast Iron Lift Check Globe Valves

Marine & Offshore Valves

5kg/cm² | JIS F 7425



© DIMENSIONS

Unit : mm

Size	H	D	d	t	L
50	107	130	50	16	210
65	124	155	65	18	250
80	129	180	80	18	280
100	146	200	100	20	340
125	166	235	125	20	410
150	188	265	150	22	480

Working Pressure	Test Pressure [Body]	Test Pressure [Seat]
5kg/cm ²	10.5kg/cm ²	7.7-4kg/cm ²

Condition of Fluid	Max. Working pressure
Oil and Pulsation Water	5
Non-Shock Water 120°C and Under	7

© PART NAME

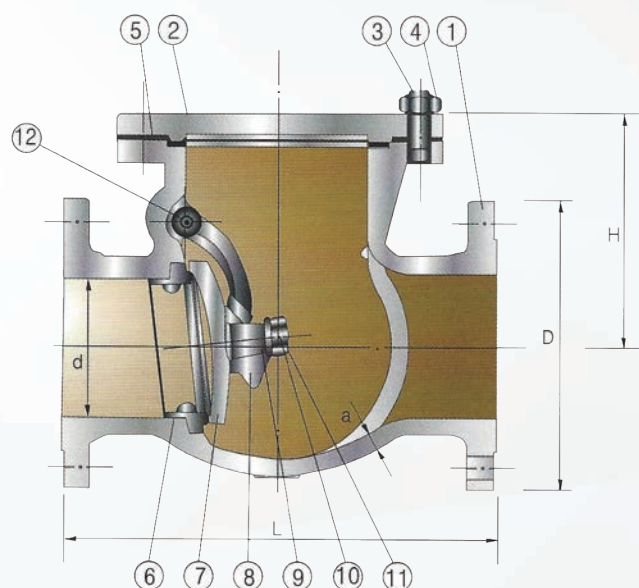
No	Component	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
3	Disc	Bronze
4	Seat Ring	Bronze
5	Bonnet Bushing	Bronze
6	Set Screw	Rolled Steel
7	Bonnet Stud Bolt	Rolled Steel
8	Bonnet Nut	Rolled Steel
9	Gasket	Non-Asbestos

Cst Iron Swing-Check Valves

Marine & Offshore Valves

5kg/cm² | JIS F 7425

10kg/cm² | JIS F 7425



© PART NAME

No	Component	Material
1	Body	Cast Iron
2	Bonnet	Cast Iron
3	Bonnet Stud Bolt	Rolled Steel
4	Bonnet Nut	Rolled Steel
5	Gasket	Asbestos
6	Body Seat Ring	Bronze
7	Disc	Bronze
8	ARM	Bronze
9	Washer	Brass
10	Split Pin	Brass
11	Hexagon Nut	Brass
12	Hinge Pin	Brass

© Fluid Condition & Max. Working Pressure [kgf/cm²]

Fluid Condition / Rating	5	10
Oil and Pulsation Water	5	10
Non Shock Water up to 120°C	7	14

© Test Pressure [kgf/cm²]

Rating	5	10
Shell HYD' Test	10.5	21
Seat HYD' Test	7.7 C4	15.4 C4

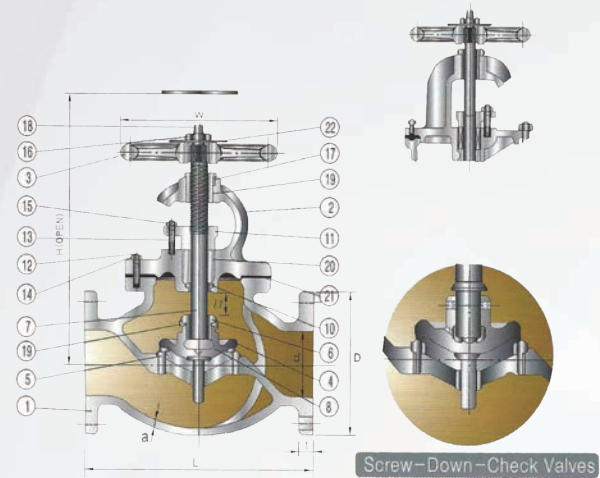
© DIMENSIONS [Unit : mm / Weight : kg]

Rating	Size	50	65	80	100	125	150	200	250	300
5kgf /cm ²	d	50	65	80	100	125	150	200	250	300
	L	190	220	250	280	330	380	460	550	690
	a	8	9	9	10	11	12	15	16	17
	H	97	119	129	146	171	198	235	290	385
	Weight	9.1	13.9	19.1	27.1	39.0	53.7	94.4	150	288
10kgf /cm ²	d	50	65	80	100	125	150	200	250	300
	L	210	240	270	300	350	400	480	622	698
	a	10	11	11	12	13	14	17	20	22
	H	109	126	136	153	180	205	242	330	385
	Weight	13.6	20.0	23.0	31.0	49.2	64.9	103	206	295

Cast Steel Globe Valves/Check

Marine & Offshore Valves

5kg/cm² | JIS F 7426 10kg/cm² | JIS F 7426 20kg/cm² | JIS F 7426



◎ PART NAME

No	Component	Material
1	Body	Cast Steel
2	Bonnet	Cast Steel
3	Handwheel	Cast Iron
4	Disc	Bronze or SUS
5	Body Seat	Bronze or SUS
6	Disc Gland	Bronze or SUS
7	Stem	Brass or SUS
8	Whaser	Alloy Tool Steel
9	Bush	Bronze
10	Packing Ring	Bronze or SUS
11	Packing Gland	Bronze

No	Component	Material
12	Bonner Bolt	Rolled Steel
13	Packing Gland Bolt	Rolled Steel
14	Bonnet Nut	Rolled Steel
15	Packing Gland Nut	Rolled
16	Handle Nut	Brass
17	Set Screw	Rolled Steel
18	Split Pin	Brass Wire
19	Disc Stopper	Brass Plate of SUS
20	Packing	Non-Asbestos
21	Gsket	Non-Asbestos
22	Name Plate	Brass Plate

◎ Fluid Condition & Max. Working Pressure [kgf/cm²]

	Max. Working Pressure		
Fluid Condition / Rating	5	10	20
Steam 400°C	10	10	23
Steam 350°C	10	10	26
Steam 300°C	10	10	29
Steam up to 220°C	10	12	31
Air, Gas, Oil and Pulsation Water	5	12	31
Non-Shock Water up to 120°C	7	14	34

Without Air, Gas.

◎ Test Pressure [kgf/cm²]

Rating	5	10	20
Shell Hydraulic Test	10.5	21.0	51.0
Seat Hydraulic Test	7.7	15.4	37.4
Shell Hydraulic [Check]	4	4	10

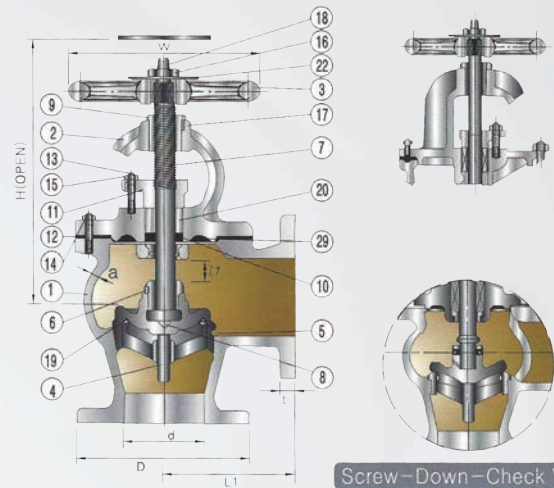
◎ DIMENSIONS [Unit : mm / Weight : kg]

Rating	Size	50	65	80	100	125	150	200	250	300
5kgf/cm ²	d	50	65	80	100	125	150	200	250	300
	L	210	250	280	340	410	480	570	740	840
	a	8	9	9	10	11	12	15	17	18
	H	270	300	310	360	390	445	530	795	930
	W	160	180	180	224	250	280	315	355	400
	J1	17	22	27	33	42	50	67	138	165
	Weight	16.2	23.4	30	45	63	88	153	230	309
	d	50	65	80	100	125	150	200	250	300
10kgf/cm ²	L	220	270	300	350	420	490	570	740	840
	a	8	9	9	11	12	13	15	16	17
	H	270	300	310	355	415	470	565	645	735
	W	160	200	200	250	280	315	355	400	450
	J1	17	22	27	33	42	50	67	83	100
	Weight	17.9	26.0	29.8	44.7	70.3	96.4	159	257	370
	d	50	65	80	100	125	150	200	250	-
	L	230	270	300	350	430	500	560	660	-
20kgf/cm ²	a	9	10	11	13	14	16	17	19	-
	H	305	345	385	440	500	550	630	725	-
	W	200	224	250	280	315	365	450	560	-
	J1	24	30	35	43	52	61	68	83	-
	Weight	21.6	30.4	43.5	62.3	94.8	132	204	336	-

Cast Steel Angle Valves/Check

Marine & Offshore Valves

5kg/cm² | JIS F 7426 10kg/cm² | JIS F 7426 20kg/cm² | JIS F 7426



Screw-Down-Check Valves

◎ PART NAME

No	Component	Material
1	Body	Cast Steel
2	Bonnet	Cast Steel
3	Handwheel	Cast Iron
4	Disc	Bronze or SUS
5	Body Seat	Bronze or SUS
6	Disc Gland	Bronze or SUS
7	Stem	Brass or SUS
8	Whaser	Alloy Tool Steel
9	Bush	Bronze
10	Packing Ring	Bronze or SUS
11	Packing Gland	Bronze

No	Component	Material
12	Bonner Bolt	Rolled Steel
13	Packing Gland Bolt	Rolled Steel
14	Bonnet Nut	Rolled Steel
15	Packing Gland Nut	Rolled
16	Handle Nut	Brass
17	Set Screw	Rolled Steel
18	Split Pin	Brass Wire
19	Disc Stopper	Brass Plate of SUS
20	Packing	Non-Asbestos
21	Gsket	Non-Asbestos
22	Name Plate	Brass Plate

◎ Fluid Condition & Max. Working Pressure [kgf/cm²]

	Max. Working Pressure		
Fluid Condition / Rating	5	10	20
Steam 400°C	10	10	23
Steam 350°C	10	10	26
Steam 300°C	10	10	29
Steam up to 220°C	10	12	31
Air, Gas, Oil and Pulsation Water	5	12	31
Non-Shock Water up to 120°C	7	14	34

Without Air, Gas.

◎ Test Pressure [kgf/cm²]

Rating	5	10	20
Shell Hydraulic Test	10.5	21.0	51.1
Seat Hydraulic Test	7.7	15.4	37.4
Shell Hydraulic [Check]	4	4	10

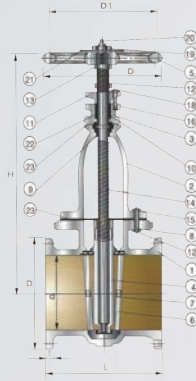
◎ DIMENSIONS [Unit : mm / Weight : kg]

Rating	Size	50	65	80	100	125	150	200	250	300
5kg/cm ²	d	50	65	80	100	125	150	200	250	300
	L	100	115	130	150	170	190	220	275	310
	a	8	9	9	10	11	12	15	17	18
	H	240	225	265	310	330	380	450	645	750
	W	160	180	180	224	250	280	315	355	400
	J1	17	22	27	33	42	50	67	138	165
	Weight	12.9	18.2	23.4	33.7	43.2	63.4	105	178	275
10kg/cm ²	d	50	65	80	100	125	150	200	250	300
	L	120	130	140	160	180	205	230	290	320
	a	8	9	9	11	12	13	15	16	17
	H	240	260	265	300	350	400	480	535	610
	W	160	200	200	250	280	315	355	400	450
	J1	17	22	27	33	42	50	67	83	100
	Weight	16.3	23.0	25.3	37.0	57.1	77.2	116	188	256
20kgf/cm ²	d	50	65	80	100	125	150	200	250	-
	L	125	135	150	170	200	225	280	310	-
	a	9	10	11	13	140	16	17	19	-
	H	275	305	340	385	440	485	540	620	-
	W	200	224	250	280	315	365	450	560	-
	J1	24	30	35	43	52	61	68	83	-
	Weight	20.0	26.9	38.9	54.4	79.7	111	181	283	-

Cast Steel Gate Valves

Marine & Offshore Valves

10kg/cm² | JIS F 7426



Fluid Condition	Max. Working Pressure [200mm and Under]	Max. Working Pressure [250mm and Above]
Saturated Steam	7kg/cm ²	5kg/cm ²
Oil and Pulsation Water	10kg/cm ²	10kg/cm ²
Non-Shock Water of 120°C and Under	14kg/cm ²	14kg/cm ²

Working Pressure	Test Pressure [Body]	Test Pressure [Seat]
10kg/cm ²	21kg/cm ²	15.4kg/cm ²

© DIMENSIONS

Unit : mm

Size	H	D	d	D1	t	L
50	300	155	50	140	16	200
65	350	175	65	160	18	220
80	400	185	80	180	18	230
100	450	210	100	200	18	250
125	520	250	125	224	20	270
150	580	280	150	250	22	290

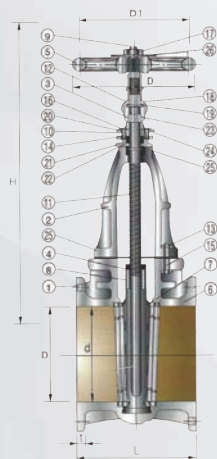
Size	H	D	d	D1	t	L
200	700	330	200	315	22	310
250	840	400	250	400	24	340
300	960	445	300	450	24	380
350	1050	490	335	500	26	420
400	1150	560	380	650	28	480

© PART NAME

No	Component	Material
1	Body	Cast Steel
2	Bonnet	Cast Steel
3	Stuffing Box	Cast Steel
4	Disc	Cast Steel
5	Hand Wheel	Cast Iron
6	Body Seat Ring	Bronze or SUS
7	Disc Seat Ring	Bronze or SUS
8	Screwed Bush	Bronze
9	Guide Bush	Bronze
10	Guide Bush	Bronze
11	Packing Gland	Bronze
12	Indicator	Bronze
13	Indicator Plate	Bronze
14	Stem	Brass or SUS
15	Bolt	Rolled Steel
16	Bolt	Brass
17	Nut	Rolled Steel
18	Nut	Brass
19	Nut	Brass
20	Split Pin	Brass
21	Name Plate	Brass
22	Packing	Non-Asbestos
23	Gasket	Non-Asbestos

Cast Steel Hull Gate Valves

10kg/cm² | JIS F 7426



Working Pressure	Test Pressure [Body]	Test Pressure [Seat]
10kg/cm ²	5kg/cm ²	2.5kg/cm ²

© DIMENSIONS

Unit : mm

Size	H	D	d	D1	t	L
450	1300	620	430	450	30	450
500	1420	675	480	500	30	500
550	1550	745	530	500	32	550
600	1650	795	580	500	32	600

Size	H	D	d	D1	t	L
650	1750	845	630	560	34	650
700	1850	905	680	560	34	700
750	1950	970	730	630	36	750
800	2050	1020	780	630	36	800

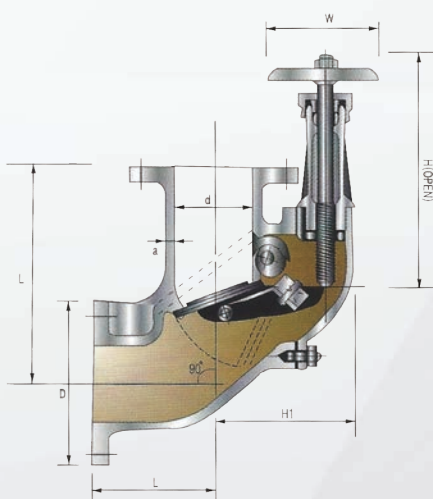
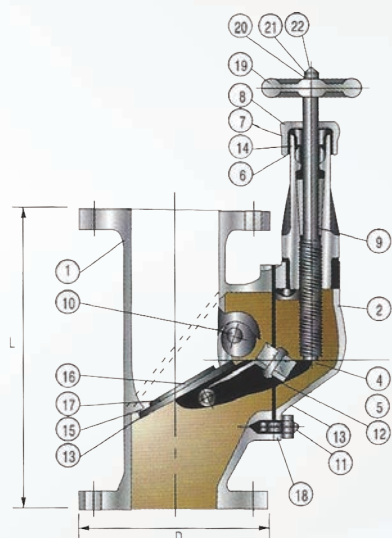
© PART NAME

No	Component	Material
1	Body	Cast Steel
2	Bonnet	Cast Steel
3	Guide Bush	Cast Steel
4	Disc	Cast Steel
5	Hand Wheel	Cast Iron
6	Body Seat Ring	Bronze or SUS
7	Disc Seat Ring	Bronze or SUS
8	Screw Bush	Bronze
9	Split Pin	Brass
10	Packing Gland	Bronze
11	Stem	Brass or SUS
12	Cop For Yoke	Cast Steel
13	Bolt	Rolled Steel
14	Swing Bolt	SYS
15	Nut	Rolled Steel
16	Nut	Brass
17	Nut	Brass
18	Stud Bolt	Rolled Steel
19	Nut	Rolled Steel
20	Washer	Brass
21	Pin	Brass
22	Pin	Brass
23	Grease Nipple	-
24	Packing	Non-Asbestos
25	Gasket	Non-Asbestos
26	Name Plate	Brass

Cast Steel Screw-Down Vertical/Angle Storm Valves

Marine & Offshore Valves

5kg/cm² | JIS F 3060 / JIS F 3060A



◎ PART NAME

No	Component	Material
1	Body	Cast Steel
2	Bonnet	Cast Steel
3	Disc	Bronze
4	Disc Lever	Bronze
5	Weight	Lead
6	Bushing	Bronze
7	Nut	Bronze
8	Gland	Bronze
9	Spindle	Brass
10	Plug	Brass
11	Stud Bolt & Nut	Brass
12	Screw & Nut	Brass
13	Pin	Brass
14	Packing	Non-Asbestos
15	Packing	Non-Asbestos
16	Plate	Bronze or Bronze Plate
17	Screw & Nut	Brass
18	Gasket	Non-Asbestos
19	Hand Wheel	Cast Iron
20	Name Plate	Brass
21	Handle Nut	Brass
22	Split Pin	Brass Wire

◎ Fluid Condition & Max. Working Pressure [kgf/cm²]

Fluid Condition	Max. Working Pressure
Non-Shock Water	5

◎ Test Pressure [kgf/cm²]

Shell Hydraulic Test	5.1
Seat Test	1.0

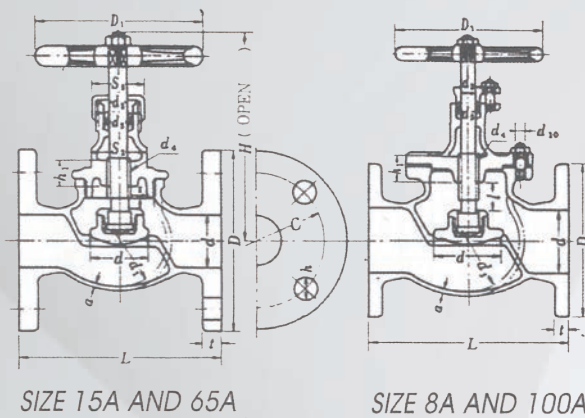
◎ DIMENSIONS [Unit : mm / Weight : kg]

Rating	Size	d	L	L1	D	t	a	H	H1	W	Weight
5kgf/cm ² JIS F 3060	50	50	210	-	130	14	8	131	328	100	11.5
	65	65	240	-	155	14	9	141	335	100	16.5
	80	80	260	-	180	14	9	155	335	125	21.6
	100	100	280	-	200	16	10	171	340	125	29.6
	125	125	330	-	235	16	11	195	340	125	43.6
5kgf/cm ² JIS F 3060A	150	150	360	-	265	18	12	212	345	125	51.6
	50	50	170	90	130	14	8	131	328	100	13.0
	65	65	190	100	155	14	9	141	335	100	19.0
	80	80	220	120	180	14	9	155	335	125	23.8
	100	100	250	130	200	16	10	171	340	125	29.6
	125	125	270	150	235	16	11	195	340	125	50.0
	150	150	340	165	265	18	12	212	345	125	67.0

Bronze Globe Valves

Onshore Valves

10kg/cm² | JIS B 2026



SIZE 15A AND 65A

SIZE 8A AND 100A

◎ DIMENSIONS

Size	Face to Face	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [kg]
15	85	95	70	4-15	110	63	2.1
20	95	100	75	4-15	125	80	3.2
25	110	125	90	4-19	140	100	4.5
32	130	135	100	4-19	170	125	6.4
40	150	140	105	4-19	180	125	7.5
50	180	155	120	4-19	205	140	9.8
65	210	175	140	4-19	240	180	13.5
80	240	185	150	8-19	275	200	18.0
100	280	210	175	8-19	345	250	30

Unit : mm

◎ HYD'S Test Pressure [kgf/cm²]

Rating	Shell HYD' Test	Seat HYD' Test
10	20	15

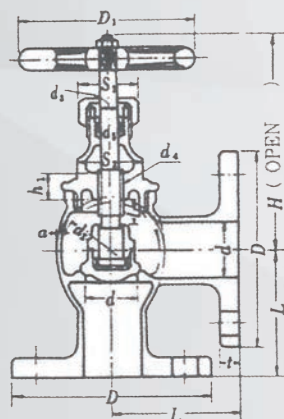
◎ PART NAME

No	Component	Material
1	Body	Bronze
2	Bonnet	Bronze or Brass
3	Disc	Bronze or Brass
4	Packing Gland	Brass
5	Gland Nut	Brass
6	Stem	Brass
7	Hand Wheel	Cast Iron
8	Hexagon Nut	Brass
9	Packing	Teflon

Bronze Angle Valves

Onshore Valves

10kg/cm² | JIS B 2027



◎ DIMENSIONS

Size	Face to Face	Flange [Dia]	Flange [Pcd]	Flange [Bolt Hole]	Height	Handle Dia	Weight [kg]
15	62	95	70	4-15	110	63	2.1
20	65	100	75	4-15	125	80	3.2
25	80	125	90	4-19	140	100	4.5
32	85	135	100	4-19	170	125	6.4
40	90	140	105	4-19	180	125	7.5
50	100	155	120	4-19	205	140	9.5
65	105	175	140	4-19	240	180	13.0

Unit : mm

◎ HYD'S Test Pressure [kgf/cm²]

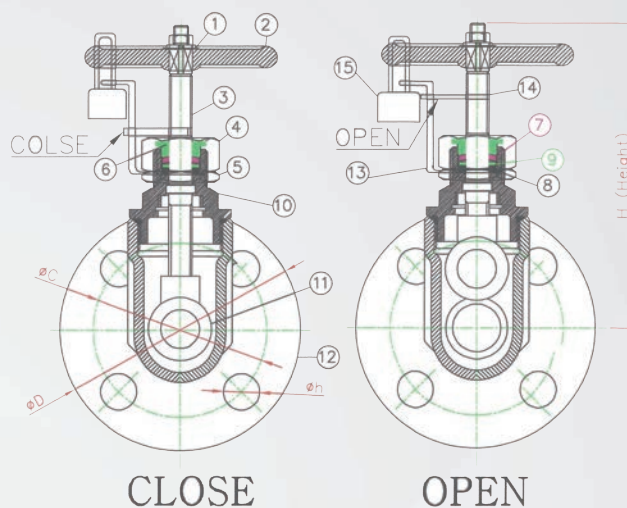
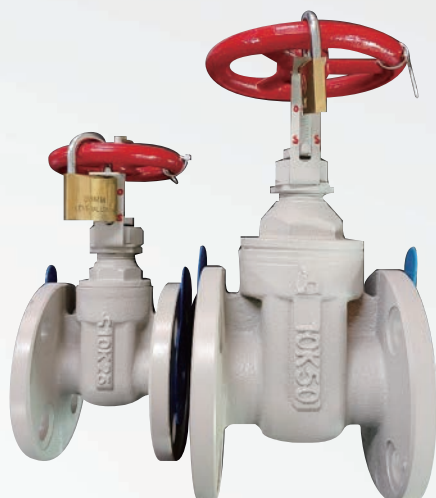
Rating	Shell HYD' Test	Seat HYD' Test
10	20	15

◎ PART NAME

No	Component	Material
1	Body	Bronze
2	Bonnet	Bronze or Brass
3	Disc	Bronze or Brass
4	Packing Gland	Brass
5	Gland Nut	Brass
6	Stem	Brass
7	Hand Wheel	Cast Iron
8	Hexagon Nut	Brass
9	Packing	Teflon

Bronze Gate Valves For Ultra High Power Transformer

Onshore Valves

10kg/cm²

© Test Pressure MPa [kgf/cm²]

Body	Seat
2.06 [21.0]	1.51 [15.4]

© Pressure Rating

Fluid Condition	Max. Working Pressure MPa [kgf/cm ²]
Air, Gas, Oil and Pulsation Water	0.98 [10]
Saturated Steam	0.20 [2]
Non-Shock Water of 120°C or Less	1.37 [14]

© DIMENSIONS

Unit : mm

Size	d	L	ϕD	Flange [ϕC]	Flange [No.]	Flange [h]	Flange [t]	Height
25A	25	100	125	90	4	19	12	177
50A	50	140	150	120	4	19	14	250

© PART NAME

No	Component	Material
1	Name Plate	Al
2	Handwheel	Cast Iron
3	Stem	Brass
4	Bonnet Nut	Brass
5	Stop Nut	Brass
6	Packing Gland	Brass
7	Packing	Teflon
8	O-ring	Viton

No	Component	Material
9	Washer	Stainless Steel
10	Bonnet	Bronze
11	Disc	Bronze
12	Body	Bronze
13	Indicator Plate	Brass
14	Opening Indicator	Bronze
15	Pad Lock	Brass

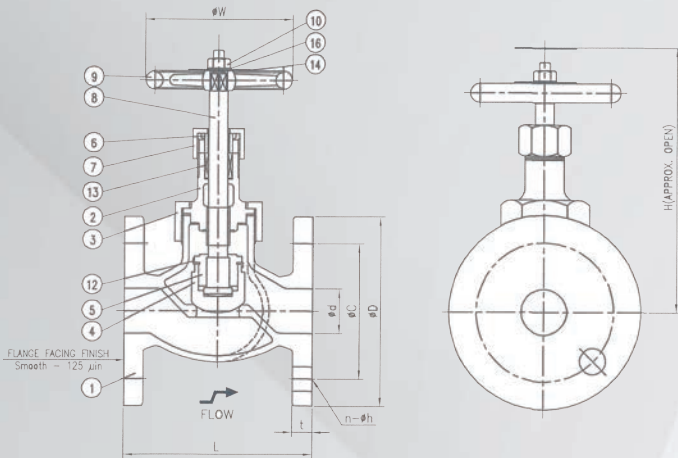
Bronze Globe Valves/Check

Onshore Valves

Class 150

◎ PART NAME

No	Component	Material
1	Body	B62-C83600
2	Bonnet	B62-C83600
3	Bonnet Nut	B62-C83600
4	Disc	B584-C86400
5	Disc Nut	B62-C83600
6	Packing Gland	B124-C37700
7	Gland Nut	B62-C83600
8	Stem	B584-C86400
9	Handwheel	A126
10	Hexagon Nut	SS304
12	Disc Lock Washer	B124-C37700
13	Packing	Teflon
14	Name Plate	A240-316
16	Spring Washer	A24-316



◎ DIMENSIONS

Unit : mm

Size [A]	Size [B]	ΦD	L	ΦC	ΦD	t	n-Φh	ΦW	H
DN 15	1/2"	13	108	60.3	90	10.0	4-15.9	80	189
DN 25	1"	26	127	79.4	110	11.6	4-15.9	125	205
DN 32	1.1/4"	32	140	88.9	115	13.2	4-15.9	125	220
DN 40	1.1/2"	39	165	98.4	125	14.7	4-15.9	140	235

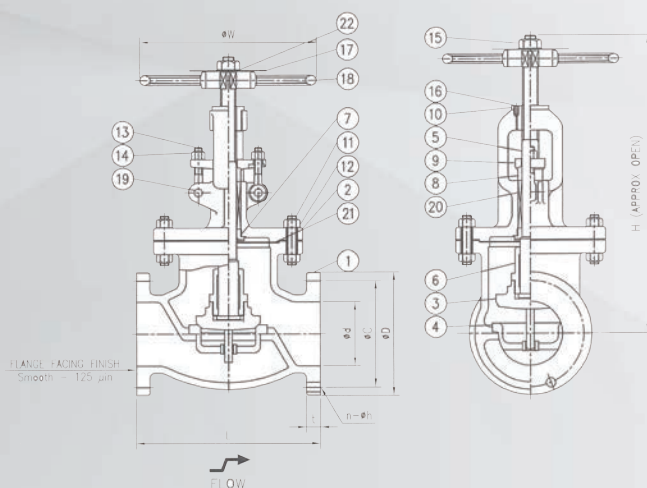
Bronze Globe Valves/Check

Onshore Valves

Class 150

◎ PART NAME

No	Component	Material
1	Body	B62-C83600
2	Bonnet	B62-C83600
3	Disc	B62-C83600
4	Body Seat Ring	B62-C83600
5	Stem	B584-C86400
6	Disc Gland	B124-C37700
7	Back Seat Ring	B584-C86400
8	Packing Gland	B124-C37700
9	Gland Flange	A240-304
10	Yoke Bush	A439-D2C
11	Bonnet Bolt	B16-C36000
12	Bonnet Nut	B16-C36000
13	Gland Bolt	A193-B8
14	Gland nut	A1964-8
15	Hexagon Nut	SS304
16	Set Screw	SS304
17	Name Plate	A240-316
18	Handwheel	A126
19	Hinge Pin	A479-304
20	Packing	Graphite
21	Gasket	Graphite
22	Spring Washer	A240-316



◎ DIMENSIONS

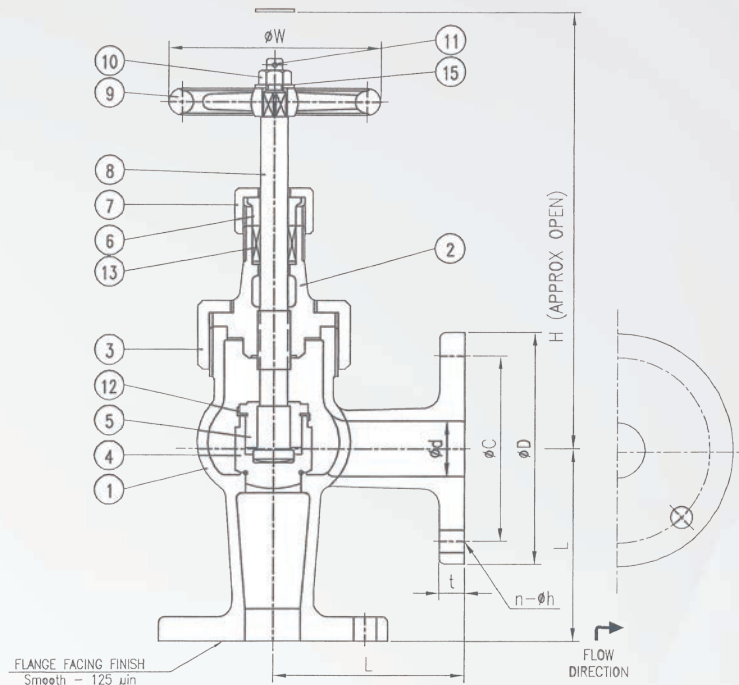
Unit : mm

Size [A]	Size [B]	ΦD	L	ΦC	ΦD	t	ΦW	H	n-Φh	Weight [kg]
DN 50	2"	51	203	120.7	150	16.3	180	320	4-19.1	22

Bronze Angle Valves/Check

Onshore Valves

Class 150



◎ PART NAME

No	Component	Material
1	Body	B62-C83600
2	Bonnet	B62-C83600
3	Bonnet Nut	B124-C37700
4	Disc	B62-C83600
5	Disc Nut	B124-C37700
6	Packing Gland	B124-C37700
7	Gland Nut	B124-C37700
8	Stem	B584-C86400

No	Component	Material
9	Handwheel	A126
10	Hexagon Nut	SS304
12	Split Pin	B134-C27000
13	Disc Lock Washer	B124-C37700
14	Packing	Graphite
15	Name Plate	A240-316

◎ DIMENSIONS

Unit : mm

Size [A]	Size [B]	ØD	L	ØC	ØD	t	n-Øh	ØW	H
DN 15	1/2"	13	57	60.3	90	7.9	4-15.9	80	195
DN 25	1"	25	70	79.4	110	9.7	4-15.9	125	225
DN 32	1.1/4"	32	76	88.9	115	10.4	4-15.9	125	225
DN 40	1.1/2"	38	83	98.4	125	11.2	4-15.9	140	240

Other Bronze or Brass Products

JIS Coupling 15A ~ 65A / Storz Coupling 40A ~ 65A / BS336 Coupling / JIS F3018 & 3019 etc



Brass DISC NUT
For Power Transformer



Bronze Base Fitting
& BS336 Coupling



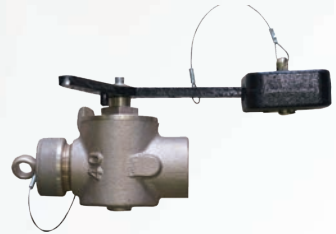
Bronze Compact DIN Hose Valves
with Storz Couplings PN16 DN50 ~ DN65



Bronze Compact Gate Valves
5K 50A ~ 100A



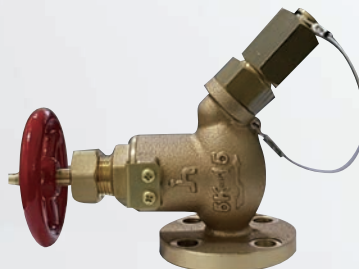
Bronze Self Closing Gate Valves
40A ~ 65A



Bronze Self Closing Parallel Cock
40A ~ 65A



JIS Couplings 15A ~ 65A



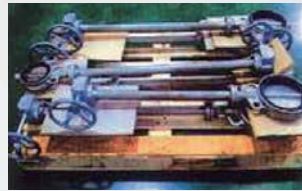
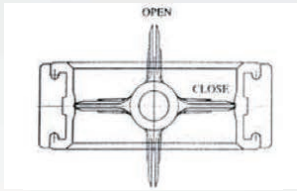
Oil Sampling Valve



Storz Couplings 40A ~ 65A

Butterfly Valves

Outsourcing Part



© General Features

- 100% bi-directional tight shut off.
- Installation without restriction in direction of flow.
- Reduced weight and overall dimensions.
- Low pressure loss and reduced energy costs.
- High Kv/Cv values.
- Easy to clean and disinfect for portable water systems etc.
- Self cleaning [No residue will be trapped].
- Good resistance to corrosion.
- High reliability

© Perfect Sealing

Seat and disc is sealed as flat surface matched both top and bottom shaft point.
Unique sealing gives perfect tight at low torque and smooth touch. And gasket with 3 mold O-rings gives self-adjusting and positive sealing in both directions.

© Testing

All valves are confirm to API 598 and Bs5155. Body pressure test to be done. 150% and shell to be 110% of maximum Working pressure.

© Operations

The following operation of the valves are possible, the choice is depending upon the valve location and the type of work and service for which the valve is used.

- Bare stemtype valve only
- valve with 10 position lever operated
- valve with gear operated
- valve with electric actuator
- valve with pneumatic actuator
- valve with hydraulic actuator

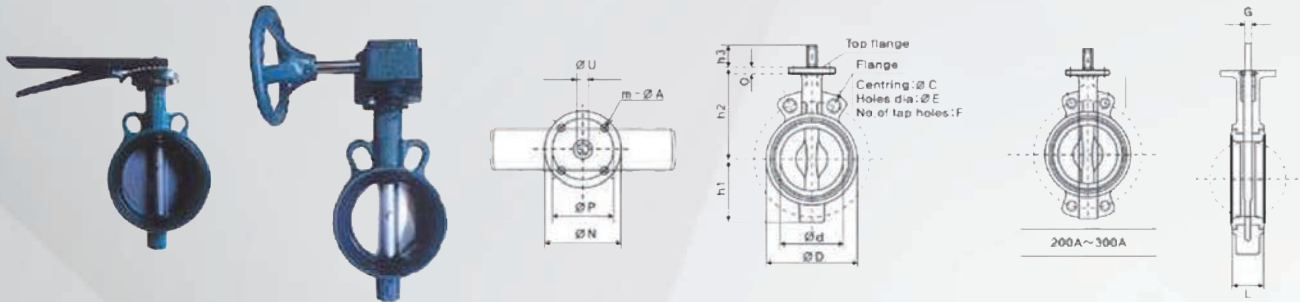
© MATERIAL SELECTION

Part Name	Material [DESCRIPTION]	Material [ASTM]	Material [JIS]	Material [KS]	Standard Material
Body	Cast Iron	A126	FC200	GC200	GC200
		A278	FC200	GC200	GC200
	Ductile Iron	A536	FCD450	GCD450	FCD450
	Cast Steel	A216, GR, WCB	SC480, SCPH2	SC480	SC480
	Stainless Cast Steel	A351, CF8	SCS13	SSC13	SCS13
		A351, CF8M	SCS14	SSC14	SCS14
	Bronze Cast	B574	BC6	BrC3	BC6
	Aluminum Bronze	B148	ALBC3	ALBrB3	ALBC3
	Aluminum Cast	B108	AC2A	AC2A	AC2A
Disc	Stainless Cast Steel	A351, CF8	SCS13	SSC13	SSC13
		A351, CF8M	SCS14	SSC14	SSC14
	Aluminum Bronze	B584	BC6	BrC3	BC6
	Aluminum Cast	B148	ALBC3	ALBrB3	ALBC3
	Bronze Cast	B108	AC2A	AC2A	AC2A
Seat	Ethylene Propylene	-	EPDM	-	EPDM
	Nitril Butadiene	-	NBR	-	EPDM
	Viton	-	VITON	-	EPDM
	Teflon	-	PIFE	-	EPDM
Stem	Stainless Steel	A276	SUS410	STS410	S45C STS410
			SUS304	STS304	
			SUS316	STS316	
Disc Bolt & Pin	Stainless Steel	A276	SUS410	STS410	SUS304
			SUS304	STS304	
			SUS316	STS316	

Wafer Type Dimension

Outsourcing Part

40A ~ 300A

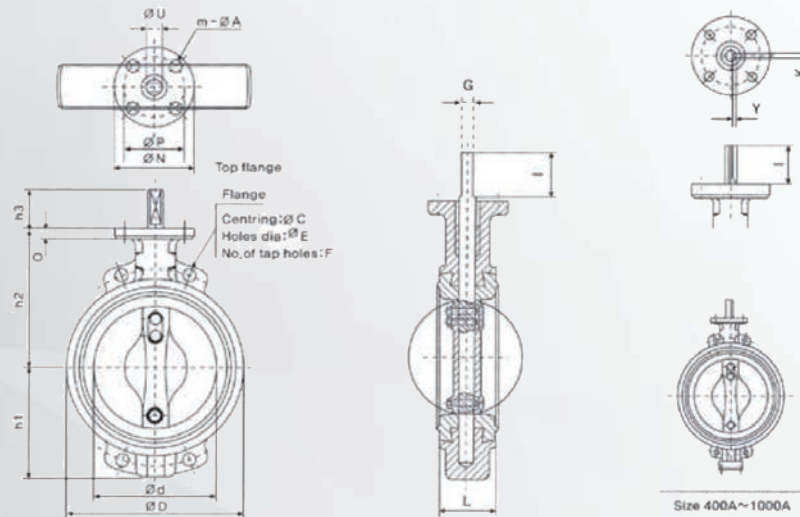


© DIMENSIONS

Unit : mm

Size	ϕD	ϕd	L	h1	h2	h3	Stem			Top Flange to ISO 5211				O	WT [kg]
							ϕU	ϕG		ϕN	ϕP	m	ϕA		
40	86	40	33	54	122	33	14	10		90	70	4	9	10	2.1
50	105	52	43	57	129	33	14	10		90	70	4	9	11	2.9
65	114	65	46	67	139	33	14	10		90	70	4	9	11	3.4
80	129	80	46	78	156	33	14	10		90	70	4	9	11	4.1
100	155	100	52	100	164	33	16	12		90	70	4	9	11	5.0
125	180	125	56	107	187	33	19	15		90	70	4	9	12	6.9
150	207	150	56	122	200	33	19	15		90	70	4	9	12	8.3
200	260	198	60	160	238	35	22	18		90	70	4	9	13	11
250	331	248	68	215	283	35	22	-		125	102	4	12	15	20
300	377	298	78	245	316	40	28	-		125	102	4	12	15	31.5

350A ~ 1000A



© DIMENSIONS

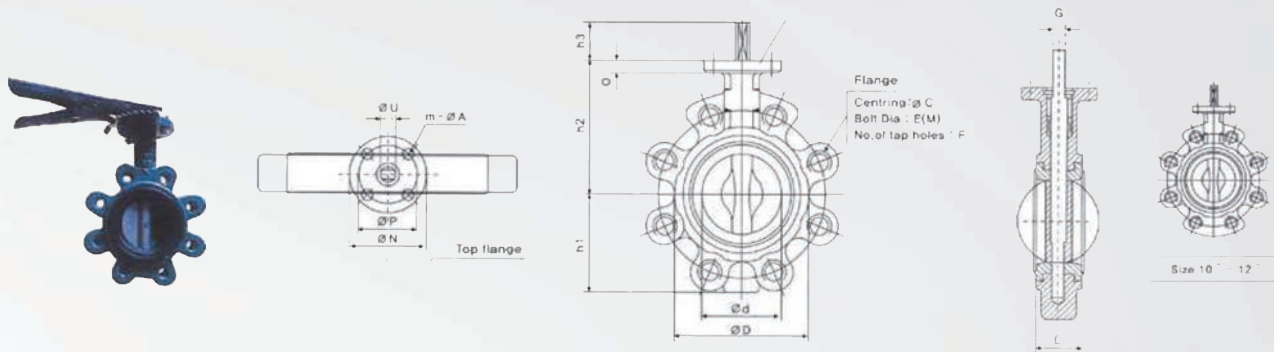
Unit : mm

Size	ϕD	ϕd	L	h1	h2	h3	Stem					Top Flange to ISO 5211				O	WT [kg]
							ϕU	G	I	Y	K	ϕN	ϕP	m	ϕA		
350	416	327	78	285	341	50	32	-	45	-	-	125	102	4	12	20	43
400	475	387	102	304	382	65	35	-	60	5	10	175	140	4	18	23	63.5
450	535	438	114	330	403	65	38	-	60	5	10	175	140	4	18	23	99
500	590	477	127	370	442	65	45	-	60	5	10	230	165	6	19	34	114.5
600	695	560	154	420	510	65	50	-	60	5	10	230	165	6	19	34	214.5
700	800	690	165	480	580	125	70	-	120	5	10	230	165	6	18.5	35	377
750	857	729	180	535	585	125	70	-	120	5	10	300	250	6	22	35	460
800	920	785	180	570	630	145	80	-	140	5.5	14	300	254	6	22	35	542
850	945	820	200	590	660	145	80	-	140	5.5	14	300	254	6	22	35	542
900	1000	870	203	640	700	145	80	-	140	5.5	14	300	254	6	22	38	699
1000	1095	960	216	700	750	145	90	-	140	5.5	14	300	298	6	22	40	977

Lug Type Dimension

Outsourcing Part

40A ~ 300A

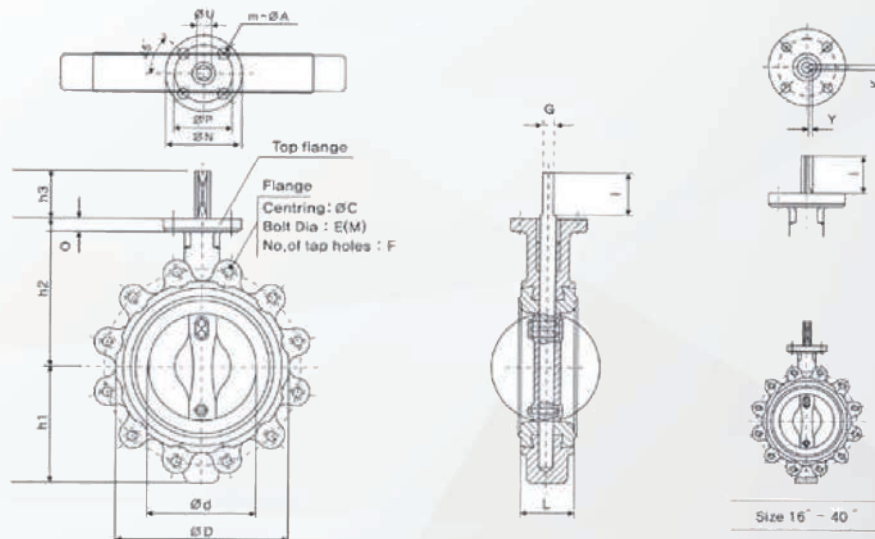


◎ DIMENSIONS

Unit: mm

Size	ΦD	Φd	L	h1	h2	h3	Stem			Top Flange to ISO 5211				O	WT [kg]
							ΦU	ΦG		ΦN	ΦP	m	ΦA		
40	86	40	33	54	122	33	14	10		90	70	4	9	10	2.1
50	105	52	43	57	129	33	14	10		90	70	4	9	11	2.9
65	114	65	46	67	139	33	14	10		90	70	4	9	11	3.4
80	129	80	46	78	156	33	14	10		90	70	4	9	11	4.1
100	155	100	52	100	164	33	16	12		90	70	4	9	11	5.0
125	180	125	56	107	187	33	19	15		90	70	4	9	12	6.9
150	207	150	56	122	200	33	19	15		90	70	4	9	12	8.3
200	260	198	60	160	238	35	22	18		90	70	4	9	13	11
250	331	248	68	215	283	35	22	-		125	102	4	12	15	20
300	377	298	78	245	316	40	28	-		125	102	4	12	15	31.5

350A ~ 1000A



◎ DIMENSIONS

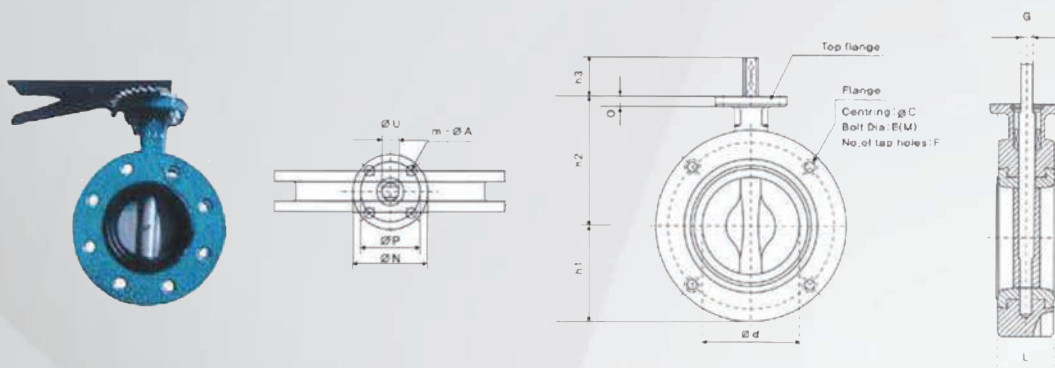
Unit: mm

Size	ΦD	Φd	L	h1	h2	h3	Stem					Top Flange to ISO 5211				O	WT [kg]
							ΦU	G	I	Y	K	ΦN	ΦP	m	ΦA		
350	416	327	78	285	341	50	32	-	45	-	-	125	102	4	12	20	43
400	475	387	102	304	382	65	35	-	60	5	10	175	140	4	18	23	63.5
450	535	438	114	330	403	65	38	-	60	5	10	175	140	4	18	23	99
500	590	477	127	370	442	65	45	-	60	5	10	230	165	6	19	34	114.5
600	695	560	154	420	510	65	50	-	60	5	10	230	165	6	19	34	214.5
700	800	690	165	480	580	125	70	-	120	5	10	230	165	6	18.5	35	377
750	857	729	180	535	585	125	70	-	120	5	10	300	250	6	22	35	460
800	920	785	180	570	630	145	80	-	140	5.5	14	300	254	6	22	35	542
850	945	820	200	590	660	145	80	-	140	5.5	14	300	254	6	22	35	542
900	1000	870	203	640	700	145	80	-	140	5.5	14	300	254	6	22	38	699
1000	1095	960	216	700	750	145	90	-	140	5.5	14	300	298	6	22	40	977

Flange Type Dimension

Outsourcing Part

40A ~ 300A

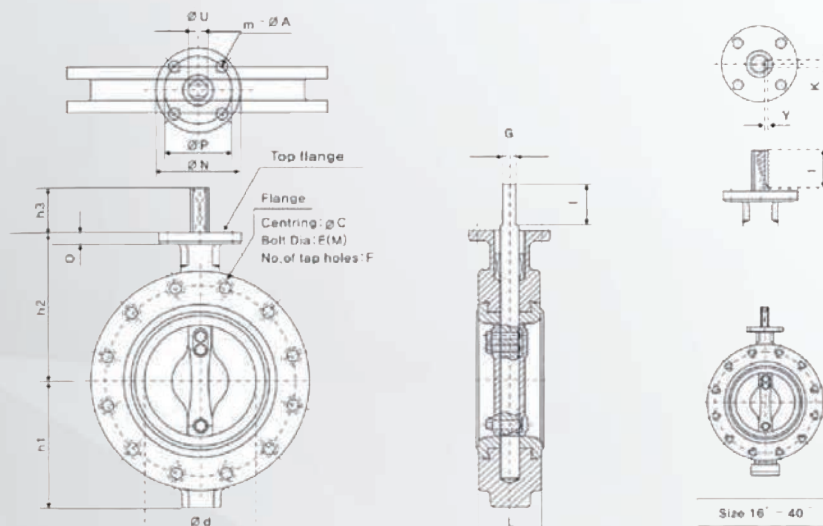


© DIMENSIONS

Unit : mm

Size	ϕD	ϕd	L	h1	h2	h3	Stem			Top Flange to ISO 5211				O	WT [kg]
							ϕU	ϕG		C	ϕP	m	ϕA		
40	86	40	33	54	122	33	14	10		90	70	4	9	10	2.1
50	105	52	43	57	129	33	14	10		90	70	4	9	11	2.9
65	114	65	46	67	139	33	14	10		90	70	4	9	11	3.4
80	129	80	46	78	156	33	14	10		90	70	4	9	11	4.1
100	155	100	52	100	164	33	16	12		90	70	4	9	11	5.0
125	180	125	56	107	187	33	19	15		90	70	4	9	12	6.9
150	207	150	56	122	200	33	19	15		90	70	4	9	12	8.3
200	260	198	60	160	238	35	22	18		90	70	4	9	13	11
250	331	248	68	215	283	35	22	-		125	102	4	12	15	20
300	377	298	78	245	316	40	28	-		125	102	4	12	15	31.5

350A ~ 1000A



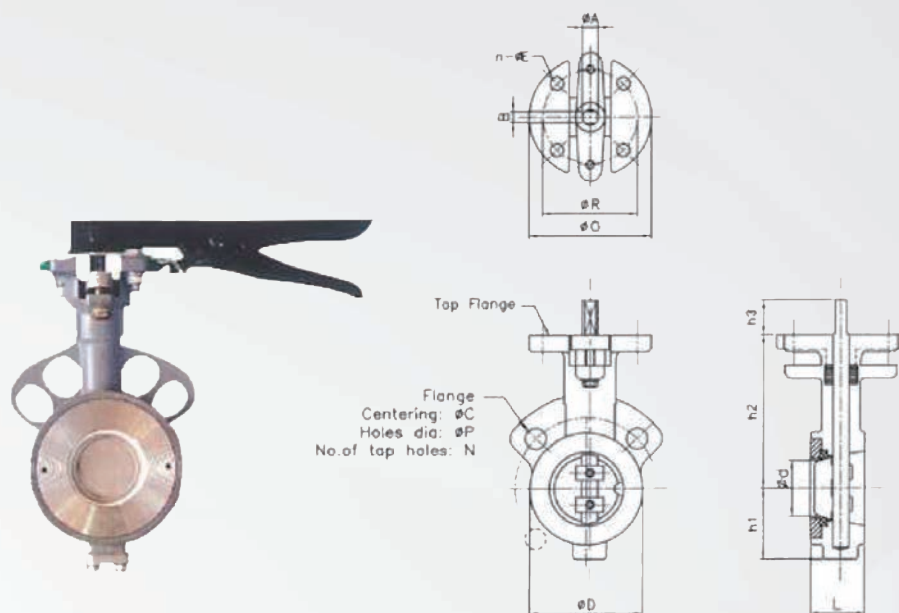
© DIMENSIONS

Unit : mm

Size	ϕD	ϕd	L	h1	h2	h3	Stem					Top Flange to ISO 5211				O	WT [kg]
							ϕU	G	I	Y	K	ϕN	ϕP	m	ϕA		
350	416	327	78	285	341	50	32	-	45	-	-	125	102	4	12	20	43
400	475	387	102	304	382	65	35	-	60	5	10	175	140	4	18	23	63.5
450	535	438	114	330	403	65	38	-	60	5	10	175	140	4	18	23	99
500	590	477	127	370	442	65	45	-	60	5	10	230	165	6	19	34	114.5
600	695	560	154	420	510	65	50	-	60	5	10	230	165	6	19	34	214.5
700	800	690	165	480	580	125	70	-	120	5	10	230	165	6	18.5	35	377
750	857	729	180	535	585	125	70	-	120	5	10	300	250	6	22	35	460
800	920	785	180	570	630	145	80	-	140	5.5	14	300	254	6	22	35	542
850	945	820	200	590	660	145	80	-	140	5.5	14	300	254	6	22	35	542
900	1000	870	203	640	700	145	80	-	140	5.5	14	300	254	6	22	38	699
1000	1095	960	216	700	750	145	90	-	140	5.5	14	300	298	6	22	40	977

High Performance Body

Outsourcing Part



© DIMENSIONS

Unit : mm

Size	ϕD	ϕd	L	h1	h2	h3	Stem		Top Flange			
							ϕA	B	ϕO	ϕR	n	ϕE
50	92	48	43	63	120	33	14	10	102	82.5	4	12
65	108	62	46	72	128	33	14	10	102	82.5	4	12
80	123	75	46	82	167	33	14	10	102	82.5	4	12
100	147	95	52	92	181	33	16	12	102	82.5	4	12
125	178	117	56	105	202	33	19	15	102	82.5	4	12
150	202	146	56	127	225	33	19	15	102	82.5	4	12

© Flange drilling

Unit : mm

Size		JIS 5K			KS, JIS 10K			JIS 16K [20K]			BS4504 PN10			BS4504 PN16			ANSI 150LB		
inch	mm	ϕC	F	ϕE	ϕC	F	ϕE	ϕC	F	ϕE	ϕC	F	ϕE	ϕC	F	ϕE	ϕC	F	ϕE
1½	40	95	4	15	105	4	19	105	4	19	110	4	18	110	4	18	98.5	4	16
2	50	105	4	15	120	4	19	120	8	19	125	4	18	125	4	18	120.5	4	19
2½	65	130	4	19	140	4	19	140	8	19	146	4	18	145	4	18	139.5	4	19
3	80	145	4	19	150	8	19	160	8	23	160	8	18	160	8	18	152.5	4	19
4	100	165	8	19	175	8	19	185	8	23	180	8	18	180	8	18	190.5	8	19
5	125	200	8	19	210	8	23	225	8	25	210	8	18	210	8	18	216	8	22
6	150	230	8	19	240	8	23	260	12	25	240	8	18	240	8	23	241.5	8	22
8	200	280	8	23	290	12	23	305	12	25	295	8	23	295	12	23	298.5	8	22
10	250	345	12	23	355	12	25	380	12	27	350	12	23	355	12	27	362	12	25
12	300	390	12	23	400	16	25	430	16	27	400	12	23	410	12	27	432	12	25
14	350	435	12	25	445	16	25	480	16	33	460	16	18	110	4	18	98.5	4	16
16	400	495	16	25	510	16	27	540	16	33	515	16	18	125	4	18	120.5	4	19
18	450	555	16	25	565	20	27	605	20	33	565	20	18	145	4	18	139.5	4	19
20	500	605	20	25	620	20	27	660	20	33	620	20	18	160	8	18	152.5	4	19
24	600	715	20	27	730	24	33	770	24	39	725	20	18	180	8	18	190.5	8	19
28	700	820	24	27	840	24	33	875	24	42	840	24	18	210	8	18	216	8	22
30	750	880	24	33	900	24	33	935	24	42	-	-	18	240	8	23	241.5	8	22
32	800	930	24	33	950	28	33	990	24	48	950	24	23	295	12	23	298.5	8	22
36	900	1030	24	33	1050	28	33	1090	28	48	1050	28	23	355	12	27	362	12	25
40	1000	1130	28	33	1160	28	39	1210	28	56	1160	28	23	410	12	27	432	12	25

Cast Steel Gate Valves

Outsourcing Part

OUTSIDE SCREW AND YOKE, RISING STEM FLEXIBLE SOLID WEDGE



© PART NAME

No	Component	Material
1	Body	A216-WCB
2	Bonnet	A216-WCB
3	Disc	13cr.Steel
4	Stem	A276-410
5	Hand Wheel	A536
6	Gasket	Graphite
7	Bonnet Bolt	A193-B7
8	Bonnet Nut	A194-2H
9	Packing	Graphite
10	Packing Gland	A276-410
11	Gland Flange	A105
12	Gland Bolt Pin	A108-1020
13	Gland Bolt	A307-B

No	Component	Material
14	Gland Nut	A194-2H
15	Yoke Sleeve	A439-D2C
16	Sleeve Gland	A351-CF8
17	Set Screw	Steel
18	Wheel Nut	A36
19	Name Plate	A240-304
20	Nipple	Steel
21	Yoke	A216-WCB
22	Yoke Bolt	A193-B7
23	Yoke Nut	A194-2H
24	Body Seat Ring	13cr.Steel
25	Back Seat Ring	A276-410
26	Bearing	AISI 4130

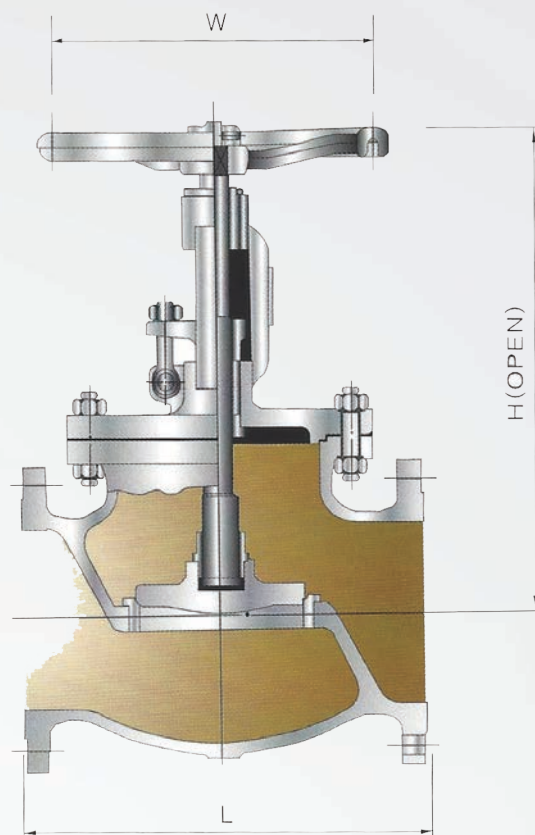
© DIMENSION & Weight [Unit : mm / Weight : kg]

Class	Size	50	65	80	100	150	200	250	300	350	400	450	500	600
150# [10K]	L [RF]	178	191	203	229	267	292	330	356	381	406	432	457	508
	H [OPEN]	341	398	470	580	780	980	1210	1420	1522	1756	1941	2138	2505
	W	200	200	224	250	355	355	400	450	500	560	560	630	630
	Weight / kg	22	25	30	44	70	118	189	292	366	516	598	780	1020
300# [20K]	L [RF]	216	241	283	305	403	419	457	502	762	838	914	991	-
	H [OPEN]	412	460	522	632	865	1014	1251	1435	1540	1780	2100	2310	-
	W	200	200	224	250	355	400	450	500	560	630	630	630	-
	Weight / kg	23	30	36.5	66	119.3	194	286.5	490	644	935	1325	1486	-

Cast Steel Globe Valves

Outsourcing Part

OUTSIDE SCREW AND YOKE, RISING STEM PLUG DISC



◎ PART NAME

No	Component	Material
1	Body	A216-WCB
2	Bonnet	A216-WCB
3	Disc	13cr.Steel
4	Stem	A276-410
5	Hand Wheel	A536
6	Gasket	Graphite
7	Packing	Graphite
8	Gland Flange	A105
9	Gland Bolt	A307-B
10	Gland Nut	A194-2H
11	Gland Bolt Pin	A108-1020
12	Packing Gland	A276-410
13	Bonnet Bolt	A193-B7

No	Component	Material
14	Bonnet Nut	A194-2H
15	Yoke Sleeve	A439-D2C
16	Disc Nut	A276-410
17	Wheel Nut	A108-1020
18	Name Plate	A240-304
19	Set Screw	Steel
20	Body Seat Ring	13cr.Steel
21	Back Seat Ring	A276-410

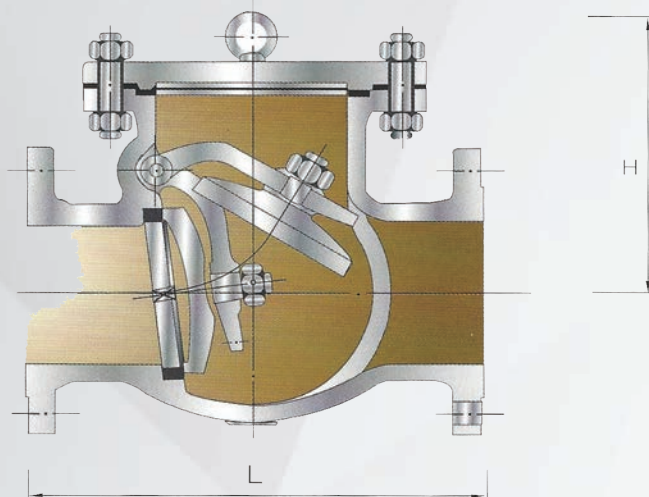
◎ DIMENSION & Weight [Unit : mm / Weight : kg]

Class	Size	50	65	80	100	150	200	250	300
150# [10K]	L [RF]	203	216	241	292	406	495	622	699
	H [OPEN]	260	295	313	356	462	548	764	896
	W	200	200	250	280	355	400	450	500
	Weight / kg	24	32	42	65	103	160	285	412
300# [20K]	L [RF]	267	292	318	356	445	559	622	711
	H [OPEN]	401	447	498	574	733	836	914	1025
	W	200	240	270	355	450	500	560	630
	Weight / kg	28.5	47	55	90	192	230	460	653

Cast Steel Swing Check Valves

Outsourcing Part

BOLTECOVER RENEWABLE SEAT RING



◎ PART NAME

No	Component	Material
1	Body	A216-WCB
2	Disc	13cr.Steel
3	ARM	A216-WCB
4	Washer	A276-304
5	Disc Nut	A194-8
6	Split Pin	A580-304
7	Hinge Pin	A276-410

No	Component	Material
8	Gasket	Graphite
9	Cover	A216-WCB
10	Cover Bolt	193-B7
11	Cover Nut	A194-2H
12	Eye Bolt	A181-70
13	Body Seat Ring	13cr.Steel

◎ DIMENSION & Weight [Unit : mm / Weight : kg]

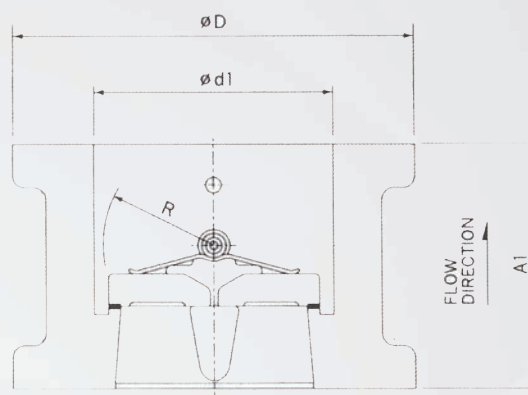
Unit : mm

Class	Size	50	65	80	100	150	200	250	300	350	400	450	500	600
150# [10K]	L [RF]	203	216	241	292	356	495	622	699	787	864	978	978	1295
	H	145	150	165	205	270	310	340	385	420	626	651	676	880
	Weight / kg	18.8	21.5	31.2	52.7	108	126	196	307	435	567	816	1090	1560
300# [20K]	L [RF]	267	292	318	356	445	533	622	711	838	864	978	1016	1346
	H	133	159	174	210	231	340	460	505	515	577	645	854	940
	Weight / kg	27.5	31	52	66	145	276	270	431	710	950	1200	1350	2200

Cast Bronze, Steel, Stainless Steel Duo-Check Valves

Outsourcing Part

CLASS 150 / 300 / 600



© DIMENSIONS [DUO-CHECK 150LB]

Size	inch	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
A1	inch	2.36	2.64	2.87	2.87	3.86	5.00	5.75	7.13	7.24	7.48	7.99	8.62	8.74
	mm	60	67	73	73	98	127	146	181	184	190	203	219	222
#D	inch	4.13	4.88	5.39	6.89	8.74	10.98	13.39	16.14	17.72	20.24	21.61	23.86	28.27
	mm	105	124	137	175	222	279	340	410	450	514	549	606	718
#d1	inch	2.36	2.87	3.50	4.49	6.61	8.62	10.75	12.76	14.02	15.98	17.99	20.00	24.02
	mm	60	73	89	114	168	219	273	324	356	406	457	508	610
R	inch	1.06	1.30	1.61	2.13	3.11	4.02	4.96	5.98	6.69	7.68	8.62	9.61	11.50
	mm	27	33	41	54	79	102	126	152	170	195	219	244	292

© DIMENSIONS [DUO-CHECK 300LB]

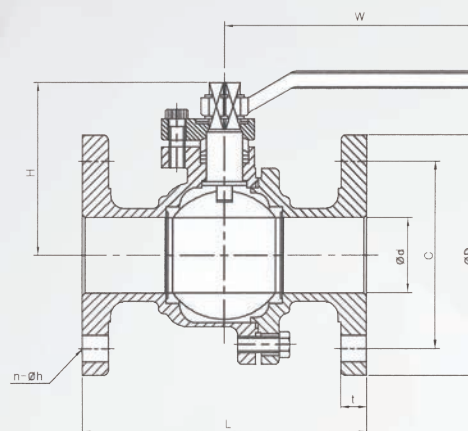
Size	inch	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
A1	inch	2.36	2.64	2.87	2.87	3.86	5.00	5.75	7.13	8.74	9.13	10.35	11.50	12.52
	mm	60	67	73	73	98	127	146	181	222	232	263	292	318
#D	inch	4.37	5.12	5.87	7.13	9.88	12.13	14.25	16.61	19.13	21.26	23.50	25.75	30.51
	mm	111	130	149	181	251	308	362	422	486	540	597	654	775
#d1	inch	2.36	2.87	3.50	4.49	6.61	8.62	10.75	12.76	14.02	15.98	17.99	20.00	24.02
	mm	60	73	89	114	168	219	273	324	356	406	457	508	610
R	inch	1.06	1.30	1.61	2.13	3.11	4.02	4.96	5.98	6.69	7.68	8.62	9.61	11.50
	mm	27	33	41	54	79	102	126	152	170	195	219	244	292

© DUO-CHECK 600LB

Size	inch	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
A1	inch	2.36	2.64	2.87	3.11	5.35	6.50	8.39	9.02	8.74	12.01	14.29	14.49	17.24
	mm	60	67	73	79	136	165	213	229	222	305	363	368	438
#D	inch	4.37	5.12	5.87	7.60	10.51	12.60	15.75	17.99	19.13	22.24	24.13	26.89	31.14
	mm	111	130	149	193	267	320	400	457	486	565	613	683	791
#d1	inch	2.36	2.87	3.50	4.49	6.61	8.62	10.75	12.76	14.02	15.98	17.99	20.00	24.02
	mm	60	73	89	114	168	219	273	324	356	406	457	508	610
R	inch	1.06	1.30	1.61	2.13	3.11	4.02	4.96	5.98	6.89	7.80	8.98	9.76	11.61
	mm	27	33	41	54	79	102	126	152	175	198	228	248	295

2-Way Ball Valves

Outsourcing Part



© DIMENSIONS [5K]

Unit : mm

Size	Φd	C	ΦD	H	L	W	t	n-Φh
15A	15	60	80	82	100	120	9	4-12
20A	20	65	85	85	110	120	10	4-12
25A	25	75	95	95	120	157	10	4-12
32A	32	90	115	100	140	157	12	4-15
40A	40	95	120	110	160	245	12	4-15
50A	50	105	130	120	178	245	14	4-15
65A	65	130	155	160	190	275	14	4-15
80A	80	145	180	170	203	275	14	4-19
100A	100	165	200	185	229	400	16	8-19

© DIMENSIONS [10K]

Unit : mm

Size	Φd	C	ΦD	H	L	W	t	n-Φh
15A	15	70	95	85	110	120	12	4-15
20A	20	75	100	85	120	120	14	4-15
25A	25	90	125	95	130	157	14	4-19
32A	32	100	135	100	160	157	16	4-19
40A	40	105	140	110	180	245	16	4-19
50A	50	120	155	120	178	245	16	4-19
65A	65	140	175	160	190	275	18	4-19
80A	80	150	185	170	203	275	18	8-19
100A	100	175	210	185	229	400	18	8-19

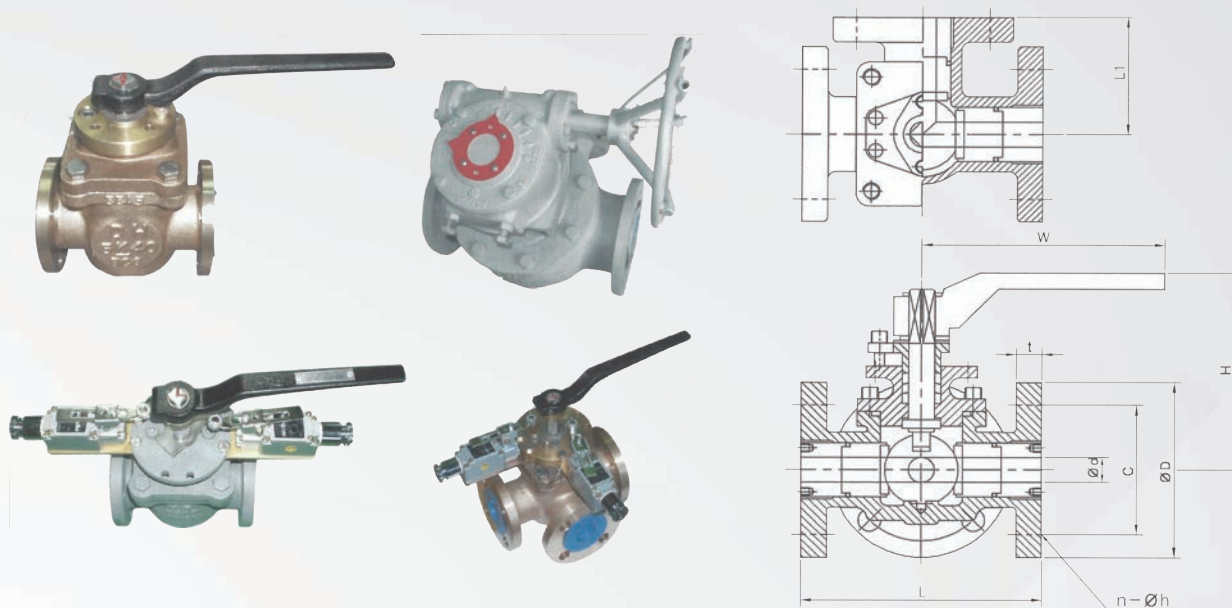
© DIMENSIONS [16K]

Unit : mm

Size	Φd	C	ΦD	H	L	W	t	n-Φh
15A	15	70	95	82	110	120	12	4-15
20A	20	75	100	85	120	120	14	4-15
25A	25	90	125	95	130	157	14	4-19
32A	32	100	135	100	160	157	16	4-19
40A	40	105	140	110	180	245	16	4-19
50A	50	120	155	120	178	245	16	8-19
65A	65	140	175	160	190	275	18	8-19
80A	80	160	200	170	203	275	20	8-23
100A	100	185	225	185	229	400	22	8-23

3-Way Ball Valves

Outsourcing Part



© DIMENSIONS [5K]

Unit : mm

Size	Φd	C	ΦD	H	L	L1	W	t	n-Φh
15A	15	60	80	110	110	55	120	9	4-12
20A	20	65	85	110	120	60	120	10	4-12
25A	25	75	95	120	130	65	157	10	4-12
32A	32	90	115	140	160	80	157	12	4-15
40A	40	95	120	170	170	85	245	12	4-15
50A	50	105	130	207	190	95	245	14	4-15
65A	65	130	155	230	220	110	275	14	4-15
80A	80	145	180	245	320	160	275	14	4-19
100A	100	165	200	260	370	185	400	16	8-19

© DIMENSIONS [10K]

Unit : mm

Size	Φd	C	ΦD	H	L	L1	W	t	n-Φh
15A	15	70	95	110	130	65	120	12	4-15
20A	20	75	100	110	150	75	120	14	4-15
25A	25	90	125	120	160	80	157	14	4-19
32A	32	100	135	140	190	95	157	16	4-19
40A	40	105	140	170	220	110	245	16	4-19
50A	50	120	155	207	240	120	245	16	4-19
65A	65	140	175	230	300	150	275	18	4-19
80A	80	150	185	245	320	160	275	18	8-19
100A	100	175	210	260	370	185	400	18	8-19

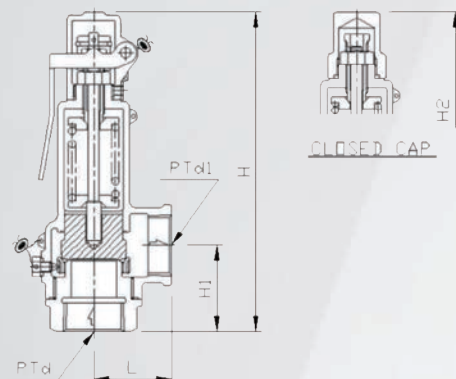
© DIMENSIONS [16K]

Unit : mm

Size	Φd	C	ΦD	H	L	L1	W	t	n-Φh
15A	15	70	95	110	130	65	120	12	4-15
20A	20	75	100	110	150	75	120	14	4-15
25A	25	90	125	120	160	80	157	14	4-19
32A	32	100	135	140	190	95	157	16	4-19
40A	40	105	140	170	220	110	245	16	4-19
50A	50	120	155	207	240	120	245	16	8-19
65A	65	140	175	230	300	150	275	18	8-19
80A	80	160	200	245	320	160	275	20	8-23
100A	100	185	225	260	370	185	400	22	8-23

Safety Relief Valves

Outsourcing Part



© PART NAME

No	Component	Material
1	Body	Bronze
2	Trim	Brass

Working Pressure
0.35~1, 1~2.5, 2.5~5.5, 5.5~11kgf/cm ²

Working Temperature
MAX. 220°C

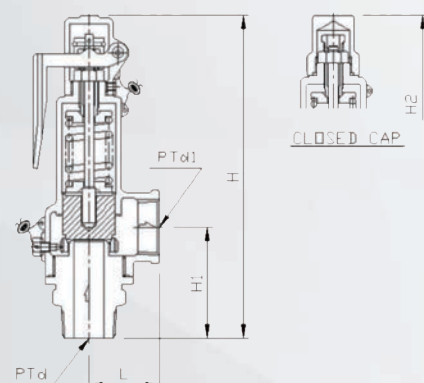
© DIMENSIONS

Unit : mm

Size	dt	ds	L	H1	H	Lift	d [PT]
15A X 20A	20	21	38	42	163	1.0	15
20A X 20A	20	21	38	42	163	1.0	20
25A X 25A	25	26	43	48	178	1.7	25
32A X 32A	32	33	50	58	180	2.2	32
40A X 40A	40	41	56	60	203	2.3	40
50A X 50A	50	51	70	77	275	2.5	50

Safety Relief Valves

Outsourcing Part



© PART NAME

No	Component	Material
1	Body	Bronze
2	Trim	Brass

Working Pressure
0.5~5, 5~15, 15~33kgf/cm ²

Working Temperature
MAX. 220°C

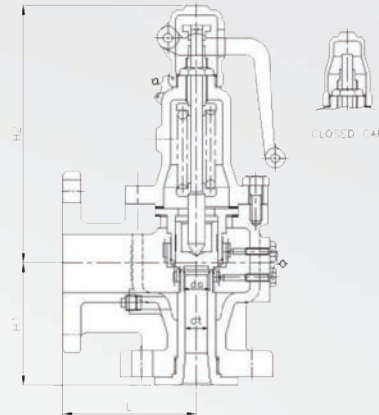
© DIMENSIONS

Unit : mm

Size	dt	ds	L	H1	H	Lift	d [PT]
15A X 20A	13	14	38	60	181	0.8	15
20A X 20A	13	14	38	62	183	0.8	20
25A X 25A	18	19	43	68	197	1.2	25
32A X 32A	23	24	50	80	200	2.2	32
40A X 40A	25	26	56	84	230	2.2	40
50A X 50A	32	33	70	102	300	4.5	50

Safety Relief Valves

Outsourcing Part



◎ PART NAME

No	Component	Material
1	Body	Ductile Iron / Bronze Cast Steel / Stainless Steel
2	Trim	SUS304

Set. Pressure

0.35~1, 1~3, 3~6, 6~11 kgf/cm²

0.35~1, 1~3, 3~6, 6~12, 12~22 kgf/cm²

Working Temperature

MAX. 220°C

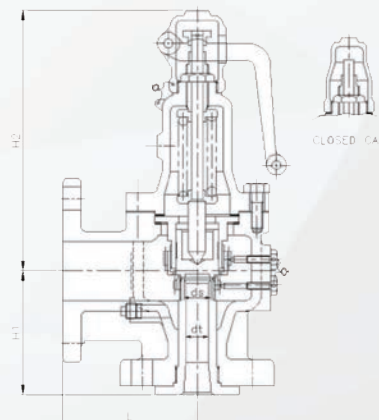
◎ DIMENSIONS

Unit : mm

Size	L	ds	dt	H1	H2
15A X 25A	95	14.5	11.5	85	220
20A X 25A	95	17.5	15	85	220
25A X 40A	100	22	19	105	240
32A X 65A	125	29	24	125	320
40A X 65A	125	35	30	125	320
50A X 80A	135	44	38	135	360
65A X 100A	155	57	49	155	460
80A X 125A	170	71	61	170	600
100A X 150A	210	88	76	195	690

Safety Relief Valves

Outsourcing Part



◎ PART NAME

No	Component	Material
1	Body	Ductile Iron / Bronze Cast Steel / Stainless Steel
2	Trim	SUS304

Set. Pressure

22~33 kgf/cm²

Working Temperature

MAX. 220°C

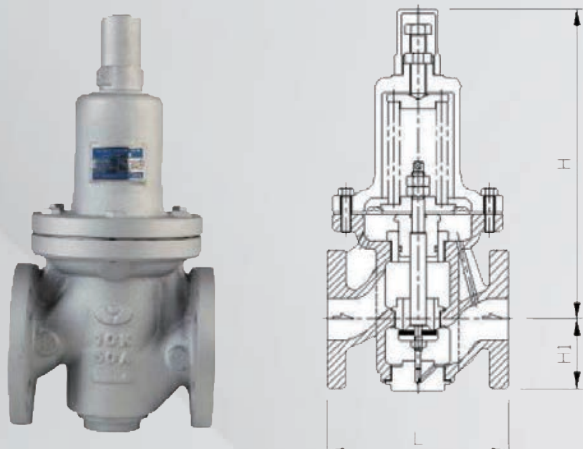
◎ DIMENSIONS

Unit : mm

Size	L	ds	dt	H1	H2
15A X 25A	95	14.5	11.5	85	220
20A X 25A	95	17.5	15	85	220
25A X 40A	100	22	19	105	240
32A X 65A	125	29	24	125	320
40A X 65A	125	35	30	125	320
50A X 80A	135	44	38	135	360
65A X 100A	155	57	49	155	460
80A X 125A	170	71	61	170	600
100A X 150A	210	88	76	195	690

Pressure Reducing Valves

Outsourcing Part



© DIMENSIONS

Unit : mm

Size	L	H1	H
15A	160	65	275
20A	160	65	275
25A	160	65	285
32A	180	70	330
40A	180	70	330

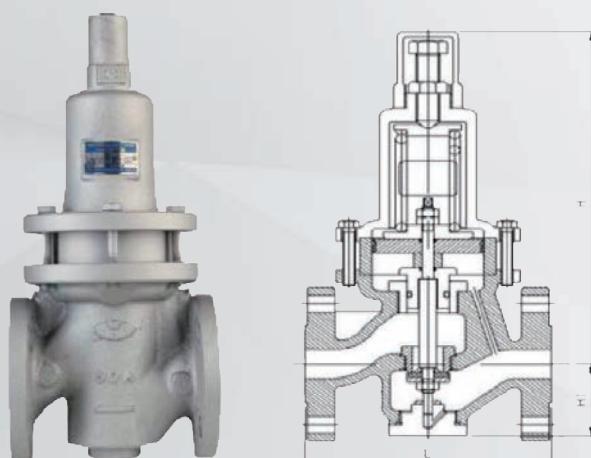
Body	Ductile Iron / Cast Steel / Stainless Steel / Bronze
Trim	Trim : Bronze, Synthetic Rubber
Type	Diaphragm
Inlet Pressure	16kgf/cm ² and Under
Outlet Pressure	0.5~4, 4~8kgf/cm ²
Max Reducing Temperature	10 : 1
Working Temperature	MAX. 80°C
Working Fluid	Water / Air / Liquid
Connection	JIS 10K FF Flange

Unit : mm

Size	L	H1	H
50A	190	80	330
65A	230	105	445
80A	250	105	445
100A	300	145	505
125A	370	174	586

Pressure Reducing Valves

Outsourcing Part



© DIMENSIONS

Unit : mm

Size	L	H1	H
15A	160	65	305
20A	160	65	305
25A	160	65	305
32A	180	70	365
40A	180	70	365

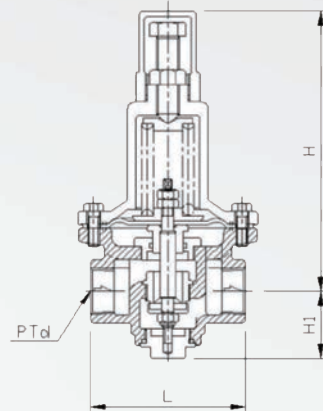
Body	Ductile Iron / Cast Steel / Stainless Steel / Bronze
Trim	Trim : Bronze, Synthetic Rubber
Type	Cylinder
Inlet Pressure	16kgf/cm ² and Under
Outlet Pressure	0.5~4, 4~8kgf/cm ²
Max Reducing Temperature	10 : 1
Working Temperature	MAX. 120°C
Working Fluid	Water / Air / Liquid / Oil
Connection	JIS 10K FF Flange

Unit : mm

Size	L	H1	H
50A	190	80	365
65A	230	105	485
80A	250	105	485
100A	300	145	565
125A	370	174	626

Pressure Reducing Valves

Outsourcing Part



◎ PART NAME

No	Component	Material
1	Body	Ductile Iron
2	Trim	Bronze, Synthetic Rubber

Inlet Pressure
10kgf/cm ² and Under

Outlet Pressure
0.5~4, 4~8kgf/cm ²

Working Temperature
MAX. 80°C

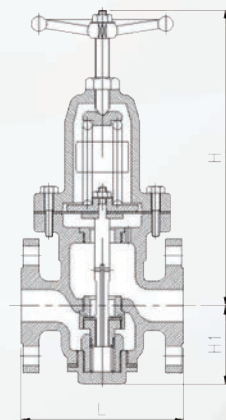
◎ DIMENSIONS

Unit : mm

Size	L	H1	H	d [PT]
15A	100	48	200	PT 1/2"
20A	100	48	200	PT 3/4"
25A	110	51	200	PT 1"
32A	150	75	280	PT 1-1/4"
40A	150	75	280	PT 1-1/2"

Pressure Reducing Valves

Outsourcing Part



◎ PART NAME

No	Component	Material
1	Body	Cast Steel / Stainless Steel
2	Trim	Stainless Steel / Synthetic Rubber

Inlet Pressure
30kgf/cm ² and Under

Outlet Pressure
0.5~4, 4~10 kgf/cm ²

Working Temperature
MAX. 80°C

◎ DIMENSIONS

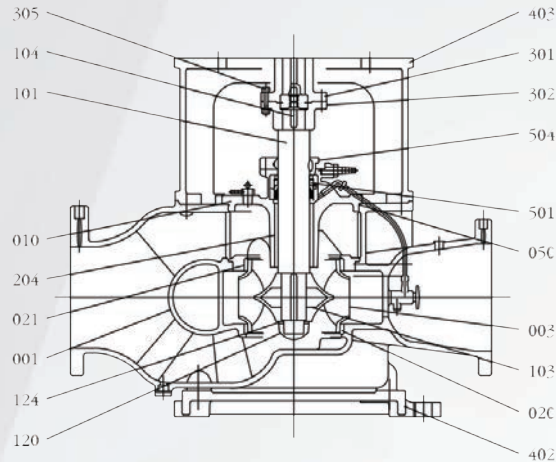
Unit : mm

Size	L	H1	H
15A	145	77	290
20A	145	77	290
25A	150	77	290
32A	180	90	320
40A	180	90	320
50A	180	90	320

Vertical Single Stage Centrifugal Pump

Outsourcing Part

Service : Fire&Bilge, Ballast Pump / Fire&General Service Pump / S.W&F.W Cooling Pump / Others



◎ PRINCIPAL PARTICULARS

Item \ Model	JYP-8065	JYP-1080	JYP-90C	JYP-180C	JYP-250C	JYP-300C	JYP-400C
R.P.M	1450 ~ 3450						
Suction Bore [mm]	80	100	100	150	250	300	400
Discharge Bore [mm]	65	80	80	150	250	300	400
Stuffing Box Seal	Mechanical Seal						
Weight GC [BC] [kg]	160 [190]	170 [200]	190 [190]	220 [260]	430 [520]	580 [700]	780 [980]

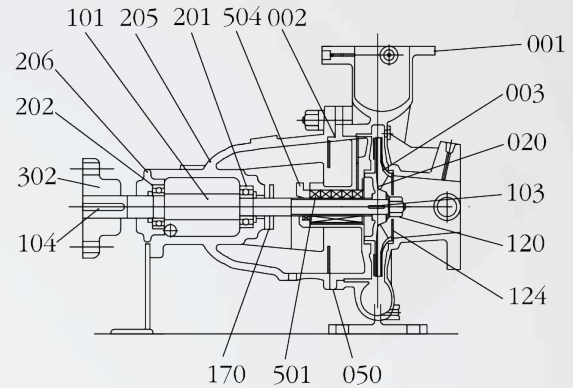
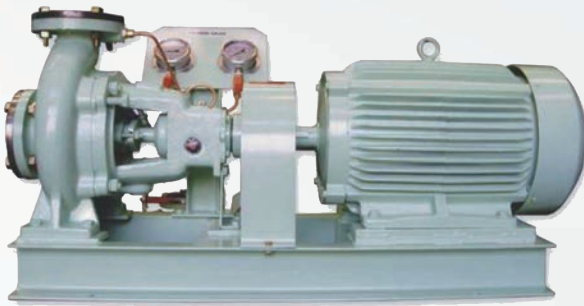
◎ SECTIONAL DRAWING

No	Component	Quat	Mat Erial Class
001	Casing	1	GC20
003	Impeller	1	BC6
010	Casing Cover	1	GC20
020	Mouth Ring	1	BC6
021	Mouth Ring	1	BC6
050	O-Ring	1	Rubber
101	Shaft	1	STS304
103	Impeller Key	1	STS304
104	Coupling Key	1	SM45C
120	Impeller Nut	1	STS304
124	Impeller Washer	1	STS304
204	Bearing Metal	1	-
301	Coupling	1	GC20
302	Coupling	1	GC20
305	Coupling Bolt	1set	SUS
402	Pump Bed	1	GC20
403	Frame	1	GC20
501	Mechanical Seal	1set	-
504	Mechanical Seal Cover	1	SUS

Horizontal Single Stage Centrifugal Pump

Outsourcing Part

Service : Fire&General Service Pump / S.W&F.W Cooling Pump / Ballast Pump / Condenser Cooling Pump
Others



© PRINCIPAL PARTICULARS

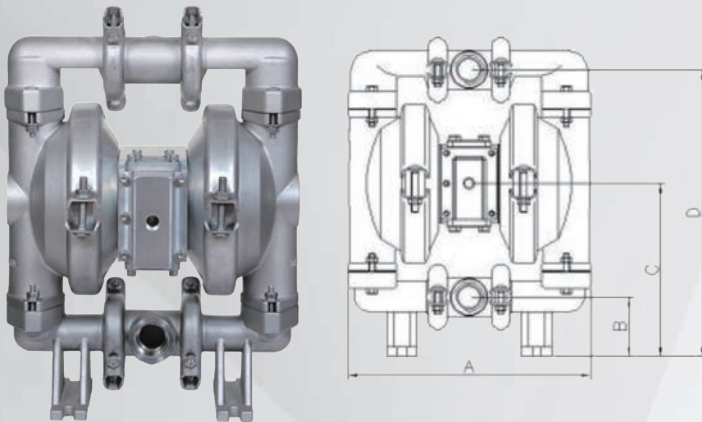
Item \ Model	JP-40	JP-50	JP-5040	JP-65	JP-6550	JP-80	JP-8065	JP-100	JP-1080	JP-125	JP-150	JP-200	JP-250
R.P.M	1450 ~ 3450												
Suction Bore [mm]	40	50	50	65	65	80	80	100	100	125	150	200	250
Discharge Bore [mm]	32	50	40	65	50	80	65	100	80	100	125	150	200
Stuffing Box Seal	GLAND PACKING of MECHANICAL SEAL												
Weight GC [BC] [kg]	45 [68]	55 [57]	52 [75]	64 [85]	60 [80]	67 [90]	65 [90]	72 [100]	74 [98]	98 [125]	149 [195]	260 [350]	370 [510]

© SECTIONAL DRAWING

No	Component	Quat	Mat Erial Class
001	Casing	1	GC20
002	Casing Cover	1	GC20
003	Impeller	1	BC6
020	Mouth Ring	1	BC6
050	O-Ring	1	Rubber
101	Shaft	1	STS304
103	Impeller Key	1	STS304
104	Coupling Key	1	SM45C
120	Impeller Nut	1	STS304
124	Impeller Washer	1	STS304
170	Flinger	1	Rubber
201	Ball Bearing	1	STB2
202	Ball Bearing	1	STB2
205	Bearing Housing	1	GC20
206	Bearing Cover	1	GC20
302	Coupling	1set	GC20
501	Gland Packing	1set	Semi Metallic
504	Gland	1	GC20

Dolphin A.O.D SUS Pump [1"]

Outsourcing Part



◎ FEATURES

- Portable & Easy Maintenance.
- Explosion-proof.
- Interchangeable with other A.O.D pumps.
- Wide range of Fluids.
- Discharge rate Proportional to Air Input.
- Self Priming and Run-Dry operation.
- Spare Parts always available.
- Pilot type, Non stalling.

◎ DIMENSIONS

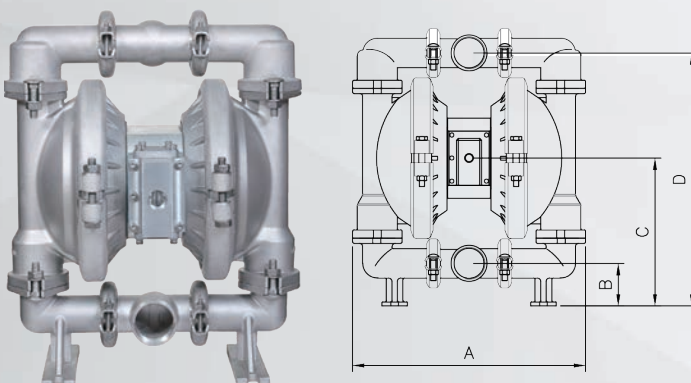
Item	Metric [mm]	Standard [inch]
A	278	10.9
B	67.5	2.6
C	196.8	7.7
D	337.1	12.8

◎ PART NAME

No	Component	Material	Heat-Resisting Temperature	Application
1	Diaphragm & Valve Ball	Neoprene	-18℃ ~ 93℃	Sea Water. Bilge
2	Diaphragm & Valve Ball	Buna-N	-12℃ ~ 8℃2	Oil
3	Diaphragm & Valve Ball	Santoprene	-40℃ ~ 107℃	Diluted Acids & Alkalis
4	Diaphragm & Valve Ball	Teflon	4℃ ~ 105℃	Chemicals & Acids

Dolphin A.O.D SUS Pump [1-1/2"]

Outsourcing Part



◎ FEATURES

- Portable & Easy Maintenance.
- Explosion-proof.
- Interchangeable with other A.O.D pumps.
- Wide range of Fluids.
- Discharge rate Proportional to Air Input.
- Self Priming and Run-Dry operation.
- Spare Parts always available.
- Pilot type, Non stalling.

◎ DIMENSIONS

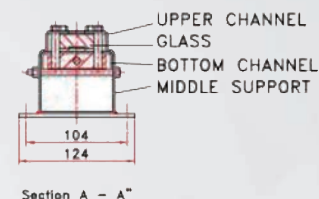
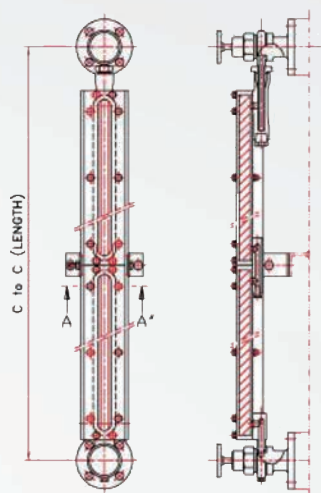
Item	Metric [mm]	Standard [inch]
A	349	13.7
B	63.5	2.5
C	221	8.7
D	387.5	15.2

◎ PART NAME

No	Component	Material	Heat-Resisting Temperature	Application
1	Diaphragm & Valve Ball	Neoprene	-18℃ ~ 93℃	Sea Water. Bilge
2	Diaphragm & Valve Ball	Buna-N	-12℃ ~ 8℃2	Oil
3	Diaphragm & Valve Ball	Santoprene	-40℃ ~ 107℃	Diluted Acids & Alkalis
4	Diaphragm & Valve Ball	Teflon	4℃ ~ 105℃	Chemicals & Acids

Level Gauge - Flat Type

Outsourcing Part



Option : STOPPER

◎ DESIGN & MATERIAL

- Borosilicate glass window is housed & protected in a robust stainless steel column.
- BC material self closing valve is easy maintenance

◎ APPLICATION

- Water tank / Oil tank

◎ DIMENSIONS

No	Name	Material
1	VALVES	BC
2	CHANNEL	SUS 304
3	GLASS	BOROSILICATE

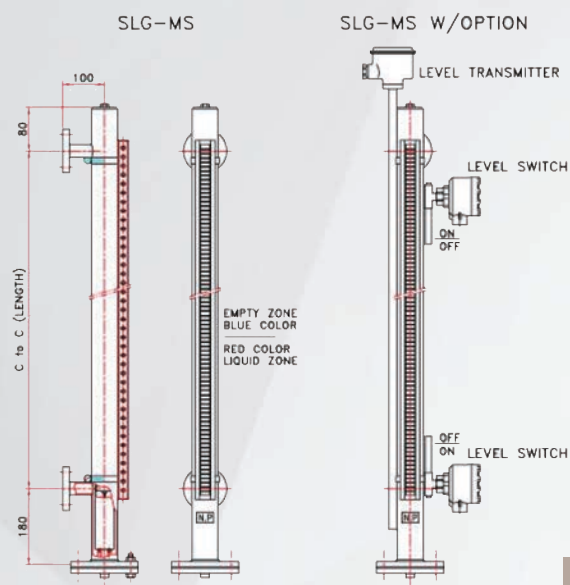
◎ STANDARD MODEL & TYPE

Model	V/V TYPE & CONN' [TOP]	V/V TYPE & CONN' [Bottom]	CONNECTION
SLG-FL-R310	Return	Self Closing	5K 20A or 25A (STD.)
SLG-FL-S310	Self Closing	Self Closing	5K 20A or 25A (STD.)

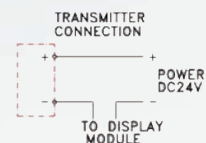
MAX. TEMP	MAX. PRESS	LENGTH	CONNECTION	VALVE TYPE
95 degC	3kgf/cm ²	275 ~ 5,700mm	5K 20A or 25A	SELF CLOSING VALVE

Level Gauge - Magnetic Type

Outsourcing Part



LEVEL TRANSMITTER
 • OUTPUT : DC 4~20mA 2-WIRE
 • TYPE : REED SWITCH



LEVEL SWITCH
 • RATING : SPST 125VAC, 0.5A
 • TYPE : REED SWITCH



Option : Transmitter

Option : Switch



◎ APPLICATION

· F.O. tank / Boiler drum / Special tank / General tank

◎ DIMENSIONS

No	Name	Material
1	Level Gauge	SUS304 or 316
2	Float	Titanium
3	Transmitter	SUS304 / AL.
4	Level Switch	SUS304 / AL.

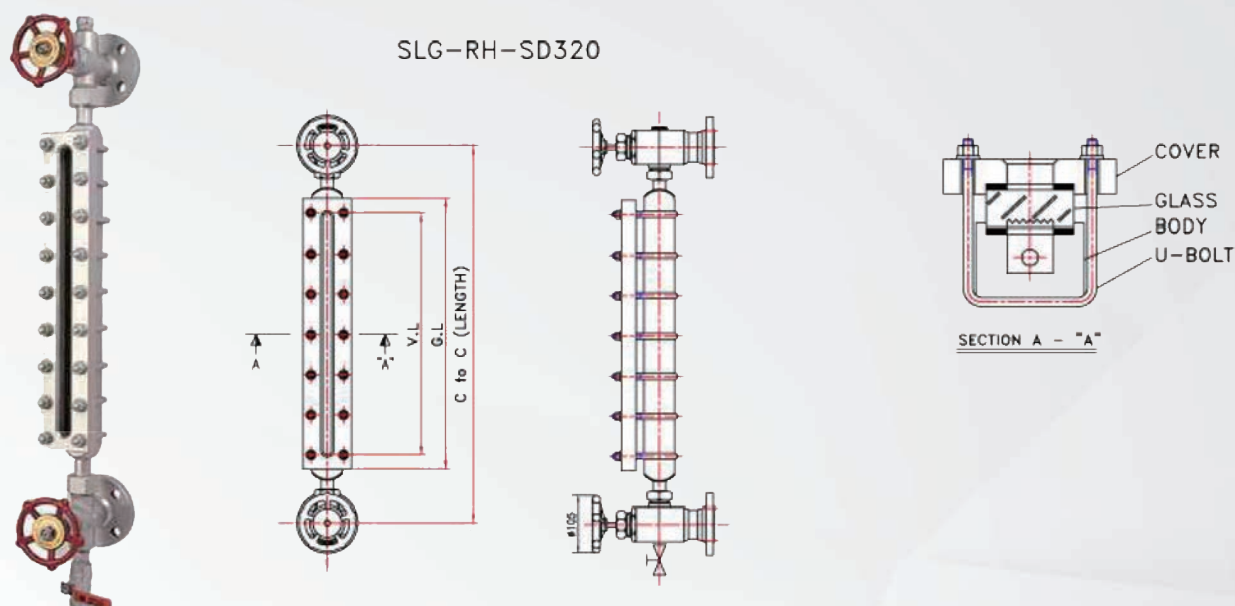
◎ STANDARD MODEL & TYPE

Model	Type & Option
SLG - MS	Indicator Only
SLG - MS-Tx	Indicator & Transmitter [4~20mA]
SLG - MS-S01 ~ 04	Indicator & Switch [Spst Contact]
SLG - MS-Tx-S01 ~ 04	Indicator & Transmitter & Switch

MAX. TEMP	MAX. PRESS	LENGTH	CONNECTION
200 degC	43kgf/cm ²	500 ~ 5,000mm	JIS / ANSI / DIN FLANGE

Level Gauge - Reflex Type

Outsourcing Part



◎ DESIGN & MATERIAL

- Borosilicate glass window is housed & protected in a robust stainless steel column or carbon steel
- BC material self closing valve is easy maintenance

◎ APPLICATION

- Water tank / Boiler drum / Special tank

◎ DIMENSIONS

No	Name	Material
1	Valve & Body	Steel / A105 / SUS304, 316
2	Glass	Borosilicate

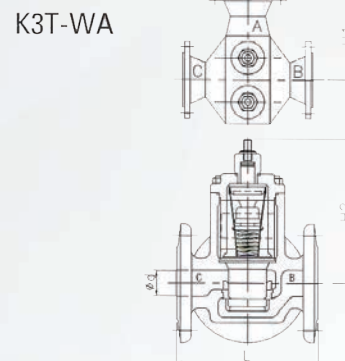
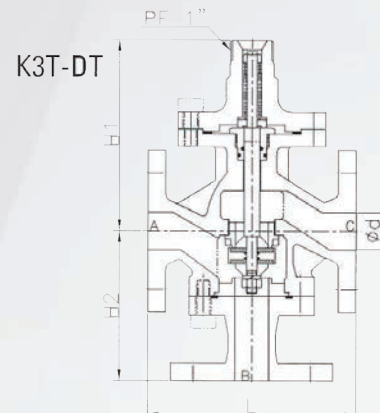
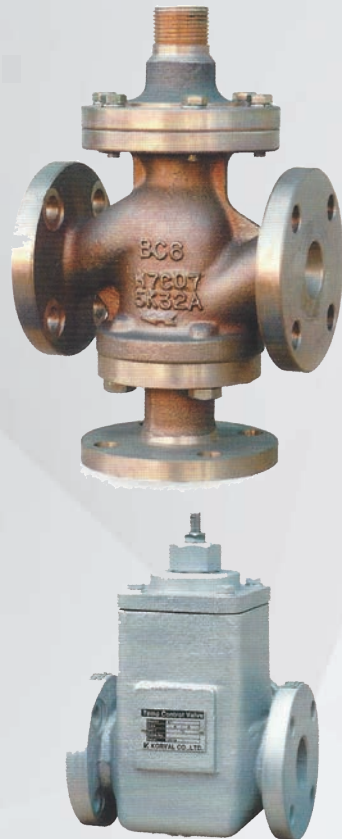
◎ STANDARD MODEL & TYPE

Model	V/V TYPE & CONN' [Valve Type]	V/V TYPE & CONN' [Safety]	V/V TYPE & CONN' [Connection]
RH-SD320	Screw Down Valve	Ball Check	JIS / ANSI / DIN

MAX. TEMP	MAX. PRESS	LENGTH	CONNECTION	VALVE TYPE
200 degC / 500 degC	23kgf/cm ² 100kgf/cm ²	300 ~ 5,700mm	JIS / ANSI / DIN FLANGE	SCREW DOWN VALVE

3 Way Temperature Regulating Valve

Outsourcing Part



◎ K3T-DT

These models consist of 3-way valve and sensor. Adjust flow of fluid by sensor temperature at set. It will keep temperature at set. The heat sensor is "AHS series". This valve uses mixing/dividing type by valve installation status; it normally uses on cooling systems.

FEATURE

- 1) Being self-control type, so an auxiliary power is not required.
- 2) Installation is very simple and this one is economical.
- 3) It is the proportion control type valve by temperature change.
- 4) Heating/cooling is possible by one valve.

◎ SPECIFICATION

Type	Direct	Wax
Applicable Fluids	Water, Oil, Liquid	
Applicable Press / Temp	7 kgf/cm ² / 110°C	
Differential Press	1.0 kgf/cm ²	3.0 kgf/cm ²
Operation [Dividing]	Normal [A→B] / High Temp [A→C]	

◎ DIMENSIONS

Size	d	L	D1	D2	Weight [kg]
15	15	154	155	115	10
20	20	158	155	115	12
25	25	160	155	115	15
32	32	190	160	150	20
40	40	190	160	150	23
50	50	220	165	160	26
40	32	178	165	160	21

◎ K3T-WA

It consists of valve and sensor. This is "internal" sensor type and keeps setting temperature with change of temperature control to regulating flow rate. This valve uses mixing/dividing type by valve installation status and is usually used on cooling systems.

FEATURE

- 1) Being self-control type, no auxiliary power is not required.
- 2) The installation is very easy because it is an internal sensor type.
- 3) No malfunction and economical.
- 4) The heating/cooler is possible with both of mixing/dividing type by installation change.
- 5) This is proportion control type valve by temperature change.

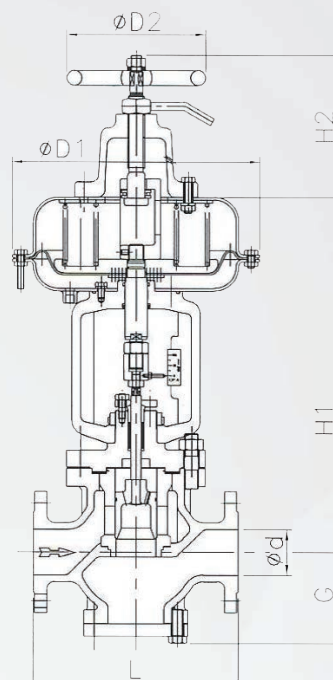
Type	Direct	Wax
Operation [Mixing]	Normal [B→A] / High Temp [C→A]	
Size	15~50mm / 40~150mm	
Material [body]	Ductile Cast Iron, Bronze, Cast Steel	
Material [Trim]	Stainless Steel	

Unit : mm

Size	d	L	D1	D2	Weight [kg]
50	40	225	171	160	27
65	65	246	161	160	21
80	80	259	167	160	27
100	100	395	213	170	35
125	125	481	237	190	44
150	150	481	250	190	51

Pneumatic Control Valve

Outsourcing Part



It is designed to use to convert flow rate fluids and/or keep available temperature and/or control the capacity of fluid in system. Also the trim is part designed proportion control case type. So it is proportion control valve. The actuator part use "Pneumatic Diaphragm thpe" so the actuator is great in ability of control the valve.

FEATURE

- 1) Precision control is possible.
- 2) Emergency operation is possible with emergency handle devices.
- 3) It is not influenced by change of differential pressure because it is balance type.
- 4) It can manufacture and/or supply the trim part as the specific of control.
- 5) The stellite processing on the Trim part makes a valve strongly.

◎ SPECIFICATION

Type	Material
Applicable Fluids	Steam, Water, Oil
Applicable Press / Temp	20 kgf/cm ² 220°C
Material [Body]	Ductile Cast Iron, Bronze, Cast Steel
Material [Trim]	Satainless Steel

◎ SPECIFICATION

Type	Material
Flow Characteristics	Equal Percentage, Linear, Quick Opening
Rangeability	30:1 50:1
Size	15~350mm
Operating Pressure	0.2~1.0 kgf/cm ² 0.4~2.0 kgf/cm ²

◎ DIMENSIONS

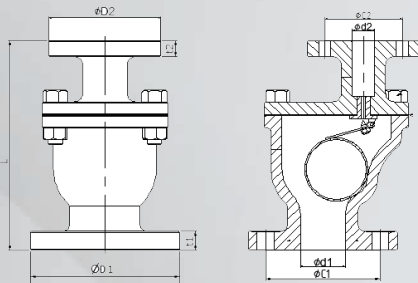
Size	d	L	D1	D2	H1	H2	G	Weight [kg]
15	15	136	271	160	372	172	58	17
20	20	140	271	160	372	172	58	19
25	25	150	271	160	384	172	63	21
32	32	190	271	160	417	172	79	27
40	40	190	271	160	417	172	79	39
50	50	222	355	200	512	195	106	48
65	65	290	355	200	514	195	123	65
80	80	310	355	200	546	195	141	78

Unit : mm

Size	d	L	D1	D2	H1	H2	G	Weight [kg]
100	100	350	465	200	676	195	162	110
125	125	390	465	200	683	195	176	150
150	150	451	465	200	731	195	213	185
200	200	543	520	280	895	303	253	232
250	250	688	520	280	925	303	270	270
300	300	737	520	280	960	303	290	350
350	350	889	520	315	1050	345	320	410

Other Products

Outsourcing Part



AUTOMATIC AIR VENT VALVE 2 Inch



Can Water Filters 25A ~ 400A



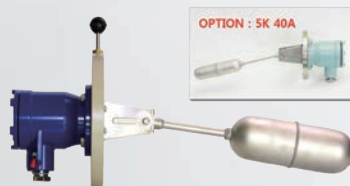
Cast Steel Screw Down Vertical Storm Valves 350A



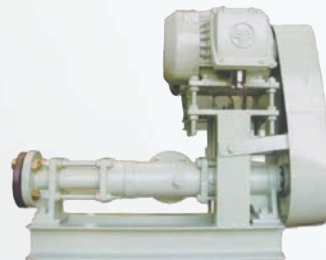
Duplex Oil Strainers 50A ~ 200A



Horizontal Single Stage Wsco Pump
RPM 2900 ~ 3450



Level Switch Float Type



Mono Screw Pump RPM 300 ~ 900



FOS INTERNATIONAL INC.

FORCE OF SOLUTION

DEVELOPMENT OF OVERSEAS & LOCAL SALES

VIETNAM / MYANMAR / INDONESIA / CHINA

HEAD OFFICE

#1137, 21 Century City, Suyeong-Ro 312,

Nam-Gu, Busan, Korea

Tel: +82-51-610-1137 / Fax: +82-51-610-1136

swjung100@fosintl.co.kr / sbcho@fosintl.co.kr

Looking for Overseas and Local dealer by FOS Intl.