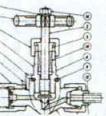


Valves & Cocks

JIS Valves P. 75-1 ~ 3	(a) Ordinary Globe & Angle Valves P. 75-3 ~ 8		(b) Union Bonnet Type Valves P. 75-8 ~ 9		(c) Screw or Union End Valves P. 75-9 ~ 11	
(d) Compressed Air Valves P. 75-11 ~ 12	(e) Pressure Gauge & Stop Valves P. 75-12 ~ 13		(f) Gate Valves P. 75-13 ~ 15		(g) Screw Down Check Valves P. 75-16 ~ 20	
(h) Lift Check Valves P. 75-20 ~ 21	(i) Swing Check Valves P. 75-21 ~ 22		(j) Marine Cocks P. 75-22 ~ 23		(k) Hose Valves P. 75-23 ~ 26	
Emergency Shut-off Valves P. 75-26 ~ 29	Screwed Valves P. 75-29 ~ 31		Air & Oil Cocks P. 75-32		Needle Valves P. 75-32 ~ 33	
Butterfly Valves P. 75-33 ~ 36	Diaphragm Valves P. 75-36 ~ 37		Ball Valves P. 75-37		Y-Strainers P. 75-37 ~ 38	
Marine Can Water Filters P. 75-38 ~ 39	Steam Traps P. 75-39 ~ 40		Flow Indicators P. 75-41 ~ 43		Storm Valves P. 75-43 ~ 45	
DIN Standard Valves Introduction P. 75-45 ~ 49	DIN Globe Valves P. 75-50 ~ 57		DIN Gate Valves P. 75-57 ~ 61		DIN Check Valves P. 75-62 ~ 66	
DIN Fire and Deckwash Valves P. 75-66 ~ 69	DIN Cocks P. 75-69 ~ 70		DIN Needle Valves P. 75-70 ~ 71		DIN Butterfly Valves P. 75-71 ~ 79	
DIN Diaphragm Valves P. 75-79 ~ 80	DIN Pressure Reducing Valves P. 75-80 ~ 85		DIN Ball Valves P. 75-85 ~ 90		DIN Strainers P. 75-90 ~ 91	
DIN Mud Box P. 75-91 ~ 92	DIN Sight Glasses P. 75-92		DIN Overflow Valves P. 75-92 ~ 96		DIN Safety Valves P. 75-96 ~ 110	
ANSI Valves - Introduction P. 75-111	ANSI Globe Valves P. 75-112		ANSI Gate Valves P. 75-112 ~ 114		ANSI Check Valves P. 75-114 ~ 115	
ANSI Strainers P. 75-115 ~ 116						

JIS Valves

Application Table for JIS Valves

Tabla de Aplicación para Válvulas según la Norma JIS

JIS バルブ申請表 JIS 阀申请表

The tables below are provided to help determine the valves and cocks which are suitable for use under the material, pressure, and temperature conditions of the pipes listed below.

1. In steam piping and boiler circulating water piping

Globe valves and angle valves

Nominal diameter 15 – 40 mm

Max. Working Pressure	Max. Working Temperature	Applicable JIS F Valve No.
1.57 MPa (16 kgf/cm ²)	205°C	F-7301, F-7302, F-7303, F-7304, F-7346, F-7347, F-7348, F-7349, F-7351, F-7352, F-7411, F-7412, F-7413, F-7414
3.04 MPa (31 kgf/cm ²)	400°C	F-6313, F-7314, F-7421, F-7422, F-7473, F-7474
5.59 MPa (57 kgf/cm ²)	425°C	F-7317, F-7318, F-7320, F-7330

Nominal diameter 50 – 200 mm

0.49 MPa (5 kgf/cm ²)	205°C	F-7301, F-7302, F-7305, F-7306, F-7353, F-7354
0.98 MPa (10 kgf/cm ²)		F-7307, F-7308, F-7375, F-7376
1.57 MPa (16 kgf/cm ²)		F-7309, F-7310, F-7377, F-7378
1.18 MPa (12 kgf/cm ²)	300°C	F-7319, F-7320, F-7471, F-7472
3.04 MPa (31 kgf/cm ²)	400°C	F-7313, F-7314, F-7473, F-7474
4.22 MPa (43 kgf/cm ²)	425°C	F-7317, F-7318, F-7315, F-7316
5.59 MPa (57 kgf/cm ²)		F-7317, F-7318

Nominal diameter 250 – 400 mm

0.49 MPa (5 kgf/cm ²)	100°C	F-7307, F-7308
1.18 MPa (12 kgf/cm ²)	300°C	F-7319, F-7320
3.04 MPa (31 kgf/cm ²)	400°C	F-7313, F-7314, F-7473, F-7474

2. In feed water piping general non-shock sea water, bilge and ballast sea water piping

Globe valves and angle valves

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.49 MPa (5 kgf/cm ²)	450 • 500	F-7354
0.60 MPa (6 kgf/cm ²)	300 - 400	F-7305, F-7306 F-7354

0.69 MPa (7 kgf/cm ²)	15 - 40	F-7301, F-7302, F-7346, F-7347, F-7351, F-7352, F-7356, F-7411, F-7412, F-7415, F-7416
	50 - 150	F-7305, F-7306, F-7353, F-7354, F-7358, F-7359
	200 • 250	F-7305, F-7306, F-7353, F-7354
0.98 MPa (10 kgf/cm ²)	250 • 300	F-7307, F-7308
	350 • 400	F-7308
	50 - 200	F-7307, F-7308, F-7375, F-7376
1.37 MPa (14 kgf/cm ²)	15 - 40	F-7307, F-7304, F-7348, F-7349, F-7413, F-7414, F-7417, F-7418
	50 - 150	F-7309, F-7310, F-7377, F-7378,
	200	F-7309, F-7310
2.75 MPa (28 kgf/cm ²)	6 • 10	F-7388, F-7389
	6 - 25	F-7421, F-7422
	32 - 250	F-7313, F-7314, F-7473, F-7474
4.51 MPa (46 kgf/cm ²)	100 - 150	F-7315, F-7316
	6 - 25	F-7329, F-7330
	32 - 150	F-7317, F-7318

3. In feed water piping for non-shock water at temperatures 120°C or less, general non-shock sea water piping, bilge and ballast sea water piping

Globe valves

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.69 MPa (7 kgf/cm ²)	15 - 400	F-7367
1.37 MPa (14 kgf/cm ²)	50 - 400	F-7363
1.57 MPa (16 kgf/cm ²)	15 - 40	F-7368
1.57 MPa (16 kgf/cm ²)	50 - 400	F-7364
1.57 MPa (16 kgf/cm ²)	300 - 400	F-7369

Swing check valves

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.69 MPa (7 kgf/cm ²)	25 - 40	F-7371
1.37 MPa (14 kgf/cm ²)	50 - 250	F-7372
1.37 MPa (14 kgf/cm ²)	50 - 200	F-73673

4. Cocks in feed water piping for non-shock water at temperature 120°C or less

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.49 MPa (5 kgf/cm ²)	25 - 65	F-7381
1.57 MPa (16 kgf/cm ²)	6 - 20	F-7387

(to be continued)

5. In pulsating water piping, fuel oil piping, lubricating oil piping and cargo oil piping

Globe and angle valves

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.49 MPa (5 kgf/cm ²)	15 - 40	F-7301, F-7302, F-7346, F-7347, F-7351, F-7352, F-7356, F-7411, F-7412, F-7415, F-7416
	50 - 150	F-7305, F-7306, F-7353, F-7354, F-7358, F-7359
	200 • 250	F-7305, F-7306, F-7353, F-7354
	300 - 400	F-7305, F-7306
0.98 MPa (10 kgf/cm ²)	50 - 200	F-7307, F-7308, F-7375, F-7376
	250 • 300	F-7307, F-7308
	350 • 400	F-7308
1.57 MPa (16 kgf/cm ²)	15 - 40	F-7307, F-7304, F-7348, F-7349, F-7413, F-7414, F-7417, F-7418
	50 - 150	F-7309, F-7310, F-7377, F-7378,
	200	F-7309, F-7310
1.96 MPa (20 kgf/cm ²)	6 • 10	F-7388, F-7389
2.94 MPa (31 kgf/cm ²)	6 - 25	F-7421, F-7422
	32 - 250	F-7313, F-7314, F-7473, F-7474
4.51 MPa (46 kgf/cm ²)	100 - 150	F-7315, F-7316
6.08 MPa (62 kgf/cm ²)	6 - 25	F-7329, F-7330
	32 - 150	F-7317, F-7318

Gate valves

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.49 MPa (5 kgf/cm ²)	15 - 40	F-7367
	50 - 600	F-7363
0.98 MPa (10 kgf/cm ²)	15 - 40	F-7368
	50 - 600	F-7364
1.57 MPa (16 kgf/cm ²)	300 - 400	F-7369

Swing check valves

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.49 MPa (5 kgf/cm ²)	25 - 40	F-7371
	50 - 250	F-7372
0.98 MPa (10 kgf/cm ²)	50 - 200	F-73673
	6 - 20	

Cocks

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.49 MPa (5 kgf/cm ²)	25 - 65	F-7381

6. In compressed air piping and control air piping

Globe and angle valves

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.49 MPa (5 kgf/cm ²)	15 - 40	F-7301, F-7302, F-7346, F-7347, F-7351, F-7352, F-7411, F-7412
	50 - 200	F-7305, F-7306, F-7353, F-7354
0.98 MPa (10 kgf/cm ²)	50 - 200	F-7307, F-7308, F-7375, F-7376
	15 - 40	F-7307, F-7304, F-7348, F-7349, F-7413, F-7414, F-7417, F-7418
1.57 MPa (16 kgf/cm ²)	50 - 150	F-7309, F-7310, F-7377, F-7378,
	200	F-7313, F-7314, F-7473, F-7474, F-7475
3.04 MPa (31 kgf/cm ²)	6 - 25	F-7336, F-7337
	32 - 250	F-7341, F-7422, F-7336, F-7337
	200	F-7313, F-7314, F-7473, F-7474, F-7475
4.51 MPa (46 kgf/cm ²)	6 - 25	F-7336, F-7337
	32 - 150	F-7340, F-7475
	200	F-7475

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JIS F No. / CODE Reference Table

JIS No.	CODE	Page	JIS No.	CODE	Page	JIS No.	CODE	Page
F-7301	75 01 21-27	75- 3	F-7336	75 07 31-43	75-12	F-7376	75 11 41-47	75-17
F-7302	75 01 31-37	75- 3	F-7337	75 07 51-58	75-12	F-7377	75 11 51-57	75-18
F-7303	75 01 41-45	75- 4	F-7340	75 07 01-08	75-11	F-7378	75 11 61-66	75-18
F-7304	75 01 51-55	75- 4	F-7341	75 07 66-69	75-12	F-7379	75 07 76-88	75-13
F-7305	75 02 01-11	75- 4	F-7343	75 16 51-54	75-23	F-7381	75 16 01-15	75-22
F-7306	75 02 16-26	75- 4	F-7346	75 05 01-05	75- 8	F-7387	75 16 31-36	75-22
F-7307	75 02 31-39	75- 5	F-7347	75 05 11-15	75- 8	F-7388	75 05 51-57	75- 9
F-7308	75 02 46-56	75- 5	F-7348	75 05 21-25	75- 9	F-7389	75 05 61-62	75-10
F-7309	75 02 61-67	75- 5	F-7349	75 05 31-35	75- 9	F-7390	75 16 61-64	75-23
F-7310	75 02 71-77	75- 5	F-7351	75 10 51-55	75-16	F-7409	75 10 71-75	75-16
F-7311	75 04 01-02	75- 6	F-7352	75 10 61-65	75-16	F-7410	75 10 81-85	75-16
F-7312	75 04 06-07	75- 6	F-7353	75 11 01-11	75-17	F-7411	75 12 61-65	75-19
F-7313	75 04 31-40	75- 7	F-7354	75 11 16-29	75-17	F-7412	75 12 66-70	75-19
F-7314	75 04 41-50	75- 7	F-7356	75 13 01-03	75-20	F-7413	75 12 81-85	75-19
F-7315	75 04 61-63	75- 8	F-7358	75 13 11-16	75-20	F-7414	75 12 86-90	75-19
F-7316	75 04 66-68	75- 8	F-7359	75 13 21-26	75-20	F-7415	75 13 41-45	75-20
F-7317	75 04 71-78	75- 8	F-7363	75 08 01-15	75-13	F-7416	75 13 46-50	75-20
F-7318	75 04 81-88	75- 8	F-7364	75 08 21-35	75-14	F-7417	75 13 61-65	75-21
F-7319	75 04 11-19	75- 7	F-7366	75 09 01-11	75-14	F-7418	75 13 66-70	75-21
F-7320	75 04 21-29	75- 7	F-7367	75 09 51-55	75-15	F-7421	75 06 01-13	75-10
F-7321	75 03 01-05	75- 5	F-7368	75 09 61-65	75-15	F-7422	75 06 21-28	75-10
F-7322	75 03 11-15	75- 6	F-7369	75 08 41-43	75-14	F-7471	75 12 01-12	75-18
F-7329	75 06 41-63	75-10	F-7371	75 14 01-03	75-21	F-7472	75 12 16-27	75-18
F-7330	75 06 71-83	75-11	F-7372	75 14 21-28	75-21	F-7473	75 12 31-41	75-19
F-7333	75 17 31-37	75-25	F-7373	75 14 31-37	75-22	F-7474	75 12 46-56	75-19
F-7334	75 17 01-23	75-23	F-7375	75 11 31-37	75-17	F-7475	75 07 16-24	75-12

(a) Ordinary Globe & Angle Valves

CODE	JIS No.	Material	Pressure kgf/cm ²	Shape
75 01 21 - 27 31 - 37	F-7301 F-7302	Bronze	5	Globe Angle
75 01 41 - 45 51 - 55	F-7303 F-7304		16	Globe Angle
75 02 01 - 11 16 - 26	F-7305 F-7306	Cast Iron	5	Globe Angle
75 02 31 - 39 46 - 56	F-7307 F-7308		10	Globe Angle
75 02 61 - 67 71 - 77	F-7309 F-7310		16	Globe Angle
75 04 01 - 02 06 - 07	F-7311 F-7312	Cast Steel	5	Globe Angle
75 04 11 - 19 21 - 29	F-7319 F-7320		10	Globe Angle
75 04 31 - 40 41 - 50	F-7313 F-7314		20	Globe Angle
75 04 61 - 63 66 - 68	F-7315 F-7316		30	Globe Angle
75 04 71 - 78 81 - 88	F-7317 F-7318		40	Globe Angle

No.	Component	No.	Component
1	Body	9	Handwheel
2	Bonnet	10	Hexagon nut
3	Disc	11	Split pin
4	Valve disc nut	12	Lock plate
5	Packing gland	13	Disc lock washer
6	Gland nut	14	Packing
7	Stem	15	Name plate
8	Cross recessed pan head machine screw		

Marine Bronze 5 kgf/cm² Globe Valves F-7301 Angle Valves F-7302

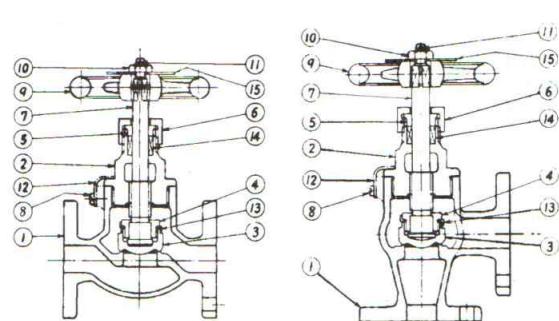
Válvulas de Globo, Paso Recto y en Escuadra en Bronce Marino
船用青銅玉形及びアングル弁 船用青銅球閥及角閥

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 205°C or less	0.49 [5]
Air, gas, oil ' pulsation water	
Non-spark water of 120°C or less	0.69 [7]

Hydraulic Inspection

Watertight inspection for valve seat	0.76 MPa [7.7 kgf/cm ²]
Hydraulic inspection for body	1.03 MPa [10.5kgf/cm ²]



F-7301



F-7302

How to order: CODE

GLOBE or ANGLE valve, bronze, 5 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg	Unit Per Pcs.
		Face to Face	Flange Diam.	Pitch	Flange Bolt Number	Hole		

Globe Valve F-7301

75 01 21	15	100	80	60	4	12	2.02
22	20	110	85	65	4	12	2.86
23	25	120	95	75	4	12	3.54
24	32	140	115	90	4	15	5.00
25	40	160	120	95	4	15	6.48
75 01 26	50	210	130	105	4	15	11.7
27	65	250	155	130	4	15	17.0

Angle Valve F-7302

75 01 31	15	55	80	60	4	12	1.98
32	20	60	85	65	4	12	2.73
33	25	65	95	75	4	12	3.44
34	32	80	115	90	4	15	4.77
35	40	85	120	95	4	15	5.99
75 01 36	50	100	130	105	4	15	10.1
37	65	115	155	130	4	15	15.6

Marine Bronze 16 kgf/cm²
Globe Valves F-7303
Angle Valves F-7304

Válvulas de Globo, Paso Recto y en Escuadra en Bronce Marino
船用青銅玉形及びアンダル弁 船用青銅球閥及角閥

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 205°C or less	1.57 [16]
Air, gas, oil & pulsation water	
Non-shock water of 120°C or less	2.16 [22]

Hydraulic Inspection

Watertight inspection for valve seat	2.37 MPa [24.2 kgf/cm ²]
Hydraulic inspection for body	3.24 MPa [33.0 kgf/cm ²]

How to order: CODE

GLOBE or ANGLE valve, bronze, 16 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg	Unit Per Pcs.
		Face to Face	Flange Diam.	Pitch	Flange Bolt Number	Hole		

Globe Valve F-7303

75 01 41	15	100	95	70	4	15	2.76
42	20	120	100	75	4	15	3.72
43	25	130	125	90	4	19	5.20
44	32	160	135	100	4	19	6.91
45	40	180	140	105	4	19	8.43

Angle Valve F-7304

75 01 51	15	70	95	70	4	15	2.73
52	20	75	100	75	4	15	3.65
53	25	85	125	90	4	19	5.16
54	32	95	135	100	4	19	6.72
55	40	100	140	105	4	19	8.13

Marine Cast Iron 5 kgf/cm²
Globe Valves F-7305
Angle Valves F-7306

Válvulas de Globo, Paso Recto y en Escuadra en Hierro Fundido
船用鋳鉄玉形及びアンダル弁 船用铸球閥及角閥

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]		
	Nominal dia. 200 mm or less		Nominal dia. 250, 300 mm
	Class B	Class S	Class B
Steam of 230°C or less	-	0.49 [5]	-
Steam of 205°C or less	0.49 [5]		
All & gas			-
Oil & pulsation water		0.49 [5]	0.49 [5]
Non-shock water of 120°C or less		0.69 [7]	0.59 [6]

Hydraulic Inspection

Nominal Dia. mm	Test pressure MPa [kgf/cm ²]	
	Watertight inspection for valve seat	Hydraulic inspection for body
300 or less	0.76 [7.7]	1.03 [10.5]
350 & 400	0.65 [6.6]	0.88 [9]



F-7305



F-7306

How to order: CODE

GLOBE or ANGLE valve, cast iron, 5 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg	Unit Per Pcs.
		Face to Face	Flange Diam.	Pitch	Flange Bolt Number	Hole		
75 02 01	50	210	130	105	4	15	14.7	
02	65	250	155	130	4	15	21.3	
03	80	280	180	145	4	19	27.7	
04	100	340	200	165	8	19	40.8	
05	125	410	235	200	8	19	57.6	
75 02 06	150	480	265	230	8	19	80.3	
07	200	570	320	280	8	23	139	
08	250	740	385	345	12	23	246	
09	300	840	430	390	12	23	377	
10	350	940	480	435	12	25	462	
75 02 11	400	1,050	540	495	16	25	647	

Angle Valve F-7306

75 02 16	50	100	130	105	4	15	12.9
17	65	115	155	130	4	15	18.2
18	80	130	180	145	4	19	23.4
19	100	150	200	165	8	19	33.7
20	125	170	234	200	8	19	46.2
75 02 21	150	190	265	230	8	19	63.4
22	200	220	320	280	8	23	105
23	250	275	385	345	12	23	176
24	300	310	430	390	12	23	243
25	350	360	180	435	12	25	327
75 02 26	400	395	540	495	16	25	459

Marine Cast Iron 10 kgf/cm² Globe Valves F-7307 Angle Valves F-7308

Válvulas de Globo, Paso Recto y en Escuadra en Hierro Fundido
船用鋳鉄玉形及びアングル弁 船用铸球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]			
	Nominal dia. 200 mm or less	Nominal dia. 250 mm or more		
	Class B	Class S	Class B	Class S
Steam or 230°C or less	-	0.98 [10]	-	
Steam of 205°C or less			0.49 [5]	
Saturated steam	0.98 [10]		-	
Air & gas			-	
Oil & pulsation water				
Non-shock water of 120°C or less	1.37 [14]		0.98 [10]	

Hydraulic Inspection

Nominal dia. mm	Test pressure MPa [kgf/cm ²]	
	Watertight inspection for valve seat	Hydraulic inspection for body
200 or less	1.51 [15.4]	2.06 [21]
250 or more	1.08 [11]	1.47 [15]

How to order: CODE

GLOBE or ANGLE valve, cast iron, 10 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm				Weight Kg	
		Face to Face	Flange Diam.	Flange Bolt Hole Pitch	Number		
Globe Valve F-7307							
75 02 31	50	220	155	120	4	19	19.9
32	65	270	175	140	4	19	28.7
33	80	300	185	150	8	19	32.4
34	100	350	210	175	8	19	48.7
35	125	420	250	210	8	23	73.1
75 02 36	150	490	280	240	8	23	104
37	200	570	330	290	12	23	162
38	250	740	400	355	12	25	304
39	300	840	445	400	16	25	458

Angle Valve F-7308

CODE	Size mm	Dimensions mm				Weight Kg	
		Face to Face	Flange Diam.	Flange Bolt Hole Pitch	Number		
Angle Valve F-7308							
75 02 46	50	120	155	120	4	19	18.2
47	65	130	175	140	4	19	25.4
48	80	140	185	150	8	19	27.4
49	100	160	210	175	8	19	40.6
50	125	180	250	210	8	23	69.9
75 02 51	150	205	280	240	8	23	81.0
52	200	230	330	290	12	23	125
53	250	290	400	355	12	25	211
54	300	320	445	400	16	25	293
55	350	360	490	445	16	25	386
75 02 56	400	420	560	510	16	25	544

Marine Cast Iron 16 kgf/cm², Globe Valves F-7309 Angle Valves F-7310

Válvulas de Globo, Paso Recto y en Escuadra en Hierro Fundido
船用鋳鉄玉形及びアングル弁 船用铸球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]	
	Class B	Class S
Steam of 230°C or less	-	1.57 [16]
Steam of 205°C or less	1.57 [16]	
Air, gas, oil & pulsation water	1.57 [16]	
Non-shock water of 120°C or less	2.16 [22]	

Hydraulic Inspection

Watertight inspection for valve seat	2.38 MPa [24.2 kgf/cm ²]
Hydraulic inspection for body	3.24 MPa [33.0 kgf/cm ²]

How to order: CODE

GLOBE or ANGLE valve, cast iron, 16 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm				Weight Kg	
		Face to Face	Flange Diam.	Flange Bolt Hole Pitch	Number		
Globe Valve F-7309							
75 02 61	50	220	155	120	8	19	19.6
62	65	270	175	140	8	19	28.3
63	80	300	200	160	8	23	40.4
64	100	350	225	185	8	23	56.9
65	125	430	270	225	8	25	89.5
75 02 66	150	500	300	260	12	25	123
67	200	570	350	305	12	25	188
Angle Valve F-7310							
75 02 71	50	120	155	120	8	19	18.0
72	65	130	175	140	8	19	25.0
73	80	150	200	160	8	23	35.7
74	100	170	225	185	8	23	49.2
75	125	200	270	225	8	25	76.1
75 02 76	150	225	305	260	12	25	103
77	200	250	350	305	12	25	155

Marine Malleable Iron 5 kgf/cm² Globe Valves/Angle Valves

Hierro naval maleable válvulas esféricas/válvulas de ángulo
船用可鍛鉄玉形及びアングル弁 船用铸铁球阀及直角

Previously listed in JIS standard and abolished in 1999, but still in demand and available in marine industry.

Globe Valve – ex JIS F-7321

Angle Valve – ex JIS F-7322

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]	
	Class B	Class S
Steam of 300°C	-	0.49 [5]
Steam of 220°C or less	-	
Steam of 205°C or less		0.59 [6]
Air, gas, oil & pulsation water	0.49 [5]	
Non-shock water of 120°C or less		0.69 [7]

Hydraulic Inspection

Watertight inspection for valve seat	0.76 MPa [7.7 kgf/cm ²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm ²]

How to order: CODE

GLOBE or ANGLE valve, cast iron, 5 kgf/cm², SIZE mm

CODE	Size mm	Dimensions mm				Weight Kg	
		Face to Face	Flange Diam.	Flange Bolt Hole Pitch	Number		
Globe Valve (ex JIS F-7321)							
75 03 01	15	100	80	60	4	12	1.98
02	20	110	85	65	4	12	2.80
03	25	120	95	75	4	12	4.18
04	32	140	115	90	4	15	5.53
05	40	160	120	95	4	15	7.08

(to be continued)

CODE	Size mm	Dimensions mm						Weight Kg	
		Face to Face	Flange Diam.	Flange Bolt Hole					
				Pitch	Number	Hole			
Angle Valve (ex JIS F-7322)									
75 03 11	15	55	80	60	4	12	1.88		
	12	20	60	65	4	12	2.65		
	13	25	65	95	4	12	3.85		
	14	32	80	115	4	15	5.29		
	15	40	85	120	4	15	6.86		

75

Valves & Cocks

Marine Malleable Iron 16 kgf/cm² Globe Valves/Angle Valves

Hierro naval maleable válvulas esféricas/válvulas de ángulo

船用可鍛鉄玉形及びアングル弁

Previously listed in JIS standard and abolished in 1999, but still in demand and available in marine industry.

Globe Valve – ex JIS F-7323

Angle Valve – ex JIS F-7324

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]		Weight Kg
	Class B	Class S	
	-	1.57 [16]	
Steam or 350°C or less		1.57 [16]	
Steam of 300°C or less		1.57 [18]	
Steam of 220°C or less			
Steam of 205°C or less	1.57 [16]	1.96 [20]	
Air, gas, oil & pulsation water			
Non-shock water of 120°C or less	2.16 [22]		

Hydraulic Inspection

Watertight inspection for valve seat	2.38 MPa [24.2 kgf/cm ²]
Hydraulic inspection for body	3.24 MPa [33.0 kgf/cm ²]

How to order: CODE

GLOBE or ANGLE valve, cast iron, 16 kgf/cm², SIZE mm

CODE	Size mm	Dimensions mm						Weight Kg	
		Face to Face	Flange Diam.	Flange Bolt Hole					
				Pitch	Number	Hole			
Globe Valve (ex JIS F-7323)									
75 03 21	15	100	95	70	4	15	2.91		
	22	20	120	100	75	4	3.85		
	23	25	130	125	90	4	5.57		
	24	32	160	135	100	4	7.40		
	25	40	180	140	105	4	9.29		

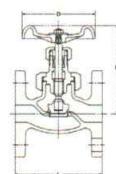
Angle Valve (ex JIS F-7324)

75 03 31	15	70	95	70	4	15	2.85
	32	20	75	100	75	4	3.75
	33	25	85	125	90	4	5.36
	34	32	95	135	100	4	7.05
	35	40	100	140	105	4	8.80

Ductile Iron 10K Globe Valves B-2051

Válvula de bola 10K de hierro dúctil

ダクタイル鉄10K玉形弁 球墨铸铁 10K 球阀



Temperature & Pressure Rating

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm ²]
Static Water	120°C	1.4
Steam, Air, Gas, Oil	220°C	1.0

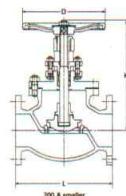
CODE	Size mm	Dimensions mm						Weight Kg	
		Face to Face	Flange Diam.	Flange Bolt Hole					
				Pitch	Number	Hole			
75 03 41	10	85	90	65	4	15	1.7		
	42	15	85	95	4	15	2.1		
	43	20	95	100	4	15	2.6		
	44	25	110	125	4	19	4.0		
	45	32	130	135	4	19	5.4		
75 03 46	40	150	140	105	4	19	6.8		
	47	50	180	155	4	19	9.2		

Ductile Iron 10K Globe Valves Bolted Bonnet Outside Screw & Yoke B-2051

Válvula de bola 10K de hierro dúctil

ダクタイル鉄10K玉形弁

球墨铸铁 10K 球阀



200 & smaller

Temperature & Pressure Rating

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm ²]
Static Water	120°C	1.4
Steam, Air, Gas, Oil	220°C	1.2
Steam, Air, Gas, Oil	300°C	1.0

CODE	Size mm	Dimensions mm						Weight Kg	
		Face to Face	Flange Diam.	Flange Bolt Hole					
				Pitch	Number	Hole			
75 03 51	50	203	155	120	4	4	15.1		
	52	216	175	140	4	4	21.1		
	53	241	185	150	8	8	27.4		
	54	292	210	175	8	8	37.0		
	55	356	250	210	8	8	58.3		
75 03 56	150	406	280	240	8	8	83.5		
	57	200	495	330	290	12	124.0		

Marine Cast Steel 5 kgf/cm² Globe Valves F-7311 Angle Valves F-7312

Válvulas de Globo, Paso Recto y en Acero Fundido

船用铸钢玉形及アングル弁

船用铸钢球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Oil & pulsation water	0.49 [5]
Non-shock water of 120°C or less	0.69 [7]

Hydraulic Inspection

Watertight inspection for valve seat	0.76 MPa [7.7 kgf/cm ²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm ²]



F-7311



F-7312

How to order: CODE

GLOBE or ANGLE valve, cast steel, 5 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm						Weight Kg	Unit Per Pcs.
		Face to Face	Flange Diam.	Pitch	Number	Flange Bolt Hole Pitch	Hole		

Globe Valve F-7311

75 04 01	250	740	385	345	12	23	230	
02	300	840	430	390	12	23	309	

Angle Valve F-7312

75 04 06	250	275	385	345	12	23	178	
07	300	310	430	390	12	23	275	

Marine Cast Steel 10 kgf/cm²

Globe Valves F-7319

Angle Valves F-7320

Válvulas de Globo, Paso Recto y en Acero Fundido
船用錆鋼玉形及びアングル弁

船用铸钢 球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 300°C	0.98 [10]
Steam of 220°C or less	1.18 [12]
Air, gas, oil & pulsation water	
Non-shock water of 120°C or less	1.37 [14]

Hydraulic Inspection

Watertight inspection for valve seat	1.51 MPa [15.4 kgf/cm ²]
Hydraulic inspection for body	2.06 MPa [21.0 kgf/cm ²]

How to order: CODE

GLOBE or ANGLE valve, cast steel, 10 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm						Weight Kg	Unit Per Pcs.
		Face to Face	Flange Diam.	Pitch	Number	Flange Bolt Hole Pitch	Hole		
Globe Valve F-7319									
75 04 11	50	220	155	120	4	19	17.9		
12	65	270	175	140	4	19	26.0		
13	80	300	185	150	8	19	29.8		
14	100	350	210	175	8	19	44.7		
15	125	420	250	210	8	23	70.3		
75 04 16	150	490	280	240	8	23	96.4		
17	200	570	330	290	12	23	159		
18	250	740	400	355	12	25	257		
19	300	840	445	400	16	25	370		

(to be continued)

CODE	Size mm	Dimensions mm						Weight Kg
		Face to Face	Flange Diam.	Pitch	Number	Flange Bolt Hole Pitch	Hole	
Globe Valve F-7320								
75 04 21	50	120	155	120	4	19	16.3	
22	65	130	175	140	4	19	23.0	
23	80	140	185	150	8	19	25.3	
24	100	160	210	175	8	19	37.0	
25	125	180	250	210	8	23	57.1	
75 04 26	150	205	280	240	8	23	77.2	
27	200	230	330	290	12	23	116	
28	250	290	400	355	12	25	188	
29	300	320	445	400	16	25	256	

Marine Cast Steel 20 kgf/cm²

Globe Valves F-7313

Angle Valves F-7314

Válvulas de Globo, Paso Recto y en Acero Fundido
船用錆鋼玉形及びアングル弁

船用铸钢球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 400°C	2.26 [23]
Steam of 350°C	2.55 [26]
Steam of 300°C	2.84 [29]
Steam of 220°C or less	3.04 [31]
Air, gas, oil & pulsation water	3.33 [34]
Non-shock water of 120°C or less	

Hydraulic Inspection

Watertight inspection for valve seat	3.67 MPa [37.4 kgf/cm ²]
Hydraulic inspection for body	5.0 MPa [51 kgf/cm ²]

How to order: CODE

GLOBE or ANGLE valve, cast steel, 20 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm						Weight Kg
		Face to Face	Flange Diam.	Pitch	Number	Flange Bolt Hole Pitch	Hole	
Globe Valve F-7313								
75 04 31	32	190	135	100	4	19	14.4	
32	40	200	140	105	4	19	16.0	
33	50	230	155	120	8	19	21.6	
34	65	270	175	140	8	19	30.4	
35	80	300	200	160	8	23	43.5	
75 04 36	100	350	225	185	8	23	62.3	
37	125	430	270	225	8	25	95.7	
38	150	500	305	260	12	25	133.3	
39	200	560	350	305	12	25	296.1	
40	250	660	430	380	12	27	339.1	
Angle Valve F-7314								
75 04 41	32	100	135	100	4	19	13.0	
42	40	110	140	105	4	19	15.2	
43	50	125	155	120	8	19	20.0	
44	65	135	175	140	8	19	26.9	
45	80	150	200	160	8	23	38.9	
75 04 46	100	170	225	185	8	23	54.4	
47	125	200	270	225	8	25	80.7	
48	150	225	305	260	12	25	112.3	
49	200	280	350	305	12	25	183.0	
50	250	310	430	380	12	27	285.9	

Marine Cast Steel 30 kgf/cm² Globe Valves F-7315 Angle Valves F-7316

Válvulas de Globo,Paso Recto y en Acero Fundido
船用鑄鋼玉形及びアングル弁 船用铸钢 球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]	
	Carbon steel	Molybdenum steel
	-	3.33 [34]
Steam of 450°C	2.94 [30]	3.53 [36]
Steam of 400°C	3.33 [34]	3.73 [38]
Steam of 350°C		3.82 [39]
Steam of 300°C or less		4.22 [43]
Air, gas, oil & pulsation water		4.51 [46]
Hydraulic Inspection		
Watertight inspection for valve seat	4.96 MPa [50.6 kgf/cm ²]	
Hydraulic inspection for body	6.76 MPa [59 kgf/cm ²]	

How to order: CODE

GLOBE or ANGLE valve, cast steel, 30 kgf/cm², JIS F NO.,
SIZE mm

Unit Per Pcs.

CODE	Size mm	Dimensions mm				Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole Pitch	Number	
Globe Valve F-7315						
75 04 61	100	410	240	195	8	25
62	125	460	275	230	8	25
63	150	500	325	275	12	27
Angle Valve F-7316						
75 04 66	100	205	240	195	8	25
67	125	230	275	230	8	25
68	150	250	325	275	12	27

Marine Cast Steel 40 kgf/cm² Globe Valves F-7317 Angle Valves F-7318

Válvulas de Globo,Paso Recto y en Acero Fundido
船用鑄鋼玉形及びアングル弁 船用铸钢 球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]		
	Carbon steel	Molybdenum steel	Chromium molybdenum steel
Steam of 490°C	-	-	3.92 [40]
Steam of 475°C	-	3.92 [40]	4.12 [42]
Steam of 450°C	-		4.41 [45]
Steam of 425°C	3.92 [40]		4.71 [48]
Steam of 400°C	4.51 [46]		5.00 [51]
Steam of 350°C		5.10 [52]	
Steam of 300°C or less		5.59 [57]	
Air, gas, oil & pulsation water		6.08 [62]	

Hydraulic Inspection

Watertight Inspection for valve seat	6.69 MPa [68.2 kgf/cm ²]
Hydraulic inspection for body	9.12 MPa [93 kgf/cm ²]

How to order: CODE

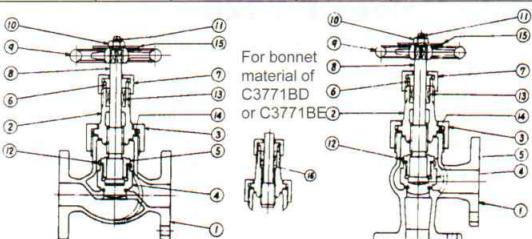
GLOBE or ANGLE valve, cast steel, 40 kgf/cm², JIS F NO.,
SIZE mm

Unit Per Pcs.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole Pitch	Number	Hole	
Globe Valve F-7317							
75 04 71	32	229	140	105	4	19	25.4
72	40	241	160	120	4	23	30.2
73	50	292	165	130	8	19	41.0
74	65	330	200	160	8	23	62.3
75	80	356	210	170	8	23	79.0
75 04 76	100	432	250	205	8	25	140
77	125	508	300	250	8	27	197
78	150	559	355	295	12	33	298
Angle Valve F-7318							
75 04 81	32	114	140	105	4	19	24.9
82	40	121	160	120	4	23	29.4
83	50	146	165	130	8	19	40.0
84	65	165	200	160	8	23	60.3
85	80	178	210	170	8	23	76.2
75 04 86	100	216	250	205	8	25	135
87	125	254	300	250	8	27	189
88	150	279	355	295	12	33	284

(b) Union Bonnet Type Valves

CODE	JIS No.	Material	Pressure kgf/cm ²	Shape
75 05 01-05 11-15	F-7346 F-7347	Bronze	5	Globe, Angle
75 05 21-25 31-35	F-7348 F-7349		16	Globe, Angle



No.	Component	No.	Component
1	Body	9	Handwheel
2	Bonnet	10	Hexagon nut
3	Bonnet nut	11	Split pin
4	Disc	12	Disc lock washer
5	Disc nut	13	Packing
6	Packing gland	14	Gasket
7	Gland nut	15	Name plate
8	Stem	16	Seat ring

Marine Bronze Union Bonnet Type 5 kgf/cm² Globe Valves F-7346 Angle Valves F-7347

Válvulas de Globo,Paso Recto y en Escuadra de Bronce Marino Tipo tapa Roscada
船用青銅ユニオンボンネット型玉形及びアングル弁
船用青铜活接头阀盖式球形阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 205°C or less	0.49 [5]
Air, gas, oil pulsation water	
Non-shock water of 120°C or less	0.69 [7]

Hydraulic Inspection

Watertight inspection for valve seat	0.76 MPa [7.7 kgf/cm ²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm ²]



F-7346



F-7347

How to order: CODE

Union bonnet type GLOBE or ANGLE valve, bronze, 5 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm				Weight Kg	Unit Per Pcs.
		Face to Face	Flange Diam.	Flange Pitch	Bolt Hole Number		
Globe Valve F-7346							
75 05 01	15	100	80	60	4	12	2.21
02	20	110	85	65	4	12	3.04
03	25	120	95	75	4	12	3.97
04	32	140	115	90	4	15	5.23
05	40	160	120	95	4	15	6.94

Angle Valve F-7347

75 05 11	15	55	80	60	4	12	2.15
12	20	60	85	65	4	12	2.94
13	25	65	95	75	4	12	3.82
14	32	80	115	90	4	15	4.99
15	40	85	120	95	4	15	6.40

Marine Bronze Union Bonnet Type

16 kgf/cm²

Globe Valves F-7348

Angle Valves F-7349

Válvulas de Globo, Paso Recto y en Escuadra de Bronce Marino Tipo tapa Roscada

船用青銅ユニオンボンネット型玉形及びアングル弁

船用青銅活接頭閥蓋式球形閥

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 205°C or less	1.57 [16]
Air, gas, oil & pulsation water	
Non-shock water of 120°C or less	2.16 [22]

Hydraulic Inspection

Watertight inspection for valve seat	2.38 MPa [24.2 kgf/cm ²]
Hydraulic inspection for body	3.24 MPa [33 kgf/cm ²]

How to order: CODE

Union bonnet type GLOBE or ANGLE valve, bronze, 16 kgf/cm², JIS F NO., SIZE mm

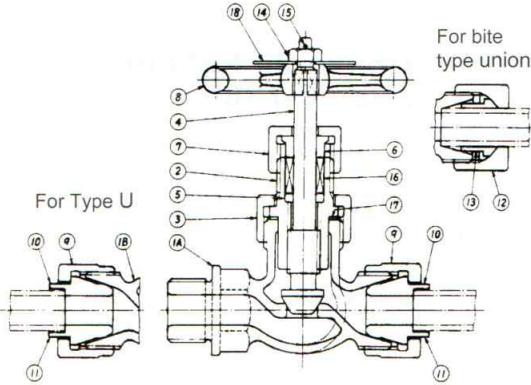
CODE	Size mm	Dimensions mm				Weight Kg	Unit Per Pcs.
		Face to Face	Flange Diam.	Flange Pitch	Bolt Hole Number		
Globe Valve F-7348							
75 05 21	15	110	95	70	4	15	2.96
22	20	120	100	75	4	15	3.92
23	25	130	125	90	4	19	5.65
24	32	160	135	100	4	19	7.24
25	40	180	140	105	4	19	9.12

Angle Valve F-7349

75 05 31	15	70	95	70	4	15	2.94
32	20	75	100	75	4	15	3.88
33	25	85	125	90	4	19	5.53
34	32	95	135	100	4	19	6.98
35	40	100	140	105	4	19	8.57

(c) Screw or Union End Valves

CODE	JIS No.	Material	Pressure kgf/cm ²	Shape
75 05 51-57 61-62	F-7388 F-7389	Bronze	20	Globe, Angle
75 06 01-13 21-28	F-7421 F-7422		20	Globe, Angle
75 06 41-63 71-83	F-7329 F-7330	Forged Steel	40	Globe, Angle



No.	Component	No.	Component
1A	Body (Type S)	10	Nipple for copper pipe
1B	Body (Type U)	11	Nipple for steel pipe
2	Bonnet	12	Union nut
3	Bonnet nut	13	Sleeve
4	Stem	14	Hexagon nut
5	Stem ring	15	Split pin
6	Packing gland	16	Packing
7	Gland nut	17	Gasket
8	Handwheel	18	Name plate
9	Unit nut		

Marine Bronze 20 kgf/cm² Globe Valves F-7388

Válvulas de Globo de Bronce Marino
船用青銅玉形弁

船用青銅球閥



F-7388

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 205°C or less	1.57 [16]
Air, gas, oil & pulsation water	1.96 [20]
Non-shock water of 120°C or less	2.75 [29]

Hydraulic Inspection

Watertight inspection for valve seat	3.02 MPa [30.8 kgf/cm ²]
Hydraulic inspection for body	4.12 MPa [42 kgf/cm ²]

How to order: CODE

Globe valve, bronze, 20 kgf/cm², JIS F-7388, TYPE of CONNECTION, SIZE mm

CODE	Size mm	Dimensions mm			Weight Kg	Unit Per Pcs.		
		Pipe Out. Diam.		Thread				
		Copper	Steel					
Type S (Screwed)								
75 05 51	6	8 & 10	10.5	M20x1.5	0.81			
52	10	15	17.3	M24x2	1.22			
Type U (Union)								
75 05 56	6	8 & 10	10.5	-	0.85			
57	10	15	17.3	-	1.37			

Note: When copper pipe is applied, a valve with bite type union may be used.

Marine Bronze 20 kgf/cm² Angle Valves F-7389

Válvulas de Angulo de Bronce Marino

船用青銅アングル弁 船用青铜角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 205°C or less	1.57 [16]
Air, gas, oil & pulsation water	1.96 [20]
Non-shock water of 120°C or less	2.75 [28]

Hydraulic Inspection

Watertight Inspection for valve seat	3.02 MPa [30.8 kgf/cm ²]
Hydraulic inspection for body	4.12 MPa [42 kgf/cm ²]

How to order: CODE

Angle valve, bronze, 20 kgf/cm², JIS F-7389, SIZE mm

CODE	Size mm	Dimensions mm			Weight Kg	Unit Per Pcs.		
		Pipe Out. Diam.		Thread				
		Copper	Steel					
75 05 61	6	8 & 10	10.5	M20x1.5	0.83			
62	10	15	17.3	M24x2	1.19			

Note: When copper pipe is applied, a valve with bite type union may be used.

Marine Forged Steel 20 kgf/cm² Globe Valves F-7421

Válvulas de Globo de Acero Forjado Marino

船用鍛鋼玉形弁 船用锻钢球阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 400°C	2.16 [22]
Steam of 350°C	2.55 [26]
Steam of 300°C	2.84 [29]
Steam of 220°C or less	3.04 [31]
Air, gas, oil pulsation water	
Non-shock water of 120°C or less	3.33 [34]

Hydraulic Inspection

Watertight Inspection for valve seat	3.67 MPa [37.4 kgf/cm ²]
Hydraulic inspection for body	5.0 MPa [51 kgf/cm ²]

How to order: CODE

Globe valve, forged steel, 20 kgf/cm², JIS F-7421, TYPE of CONNECTION, SIZE mm

CODE	Size mm	Dimensions mm			Weight Kg	Unit Per Pcs.		
		Pipe Out. Diam.		Thread				
		Copper	Steel					
75 06 01	6	8 & 10	10.5	M20x1.5	1.47			
02	10	15	17.3	M24x2	1.75			
Type S (Screw Thread Type)								
75 06 06	6	8 & 10	10.5	-	1.55			
07	10	15	17.3	-	1.85			
Type U (Union Type)								

Type F (Flange Type)

CODE	Size mm	Dimensions mm			Weight Kg	Unit Per Pcs.	
		Face to Face	Flange Diam.	Flange Bolt Hole			
		Pitch	Number	Hole			
75 06 11	15	140	95	70	4	15	4.4
12	20	160	100	75	4	15	5.9
13	25	180	125	90	4	19	7.7

Marine Forged Steel 20 kgf/cm² Angle Valves F-7422

Válvulas de Angulo de Bronce Marino

船用青銅アングル弁 船用青铜角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 400°C	2.16 [22]
Steam of 350°C	2.55 [26]
Steam of 300°C	2.84 [29]
Steam of 220°C or less	3.04 [31]
Air, gas, oil & pulsation water	
Non-shock water of 120°C or less	3.33 [34]

Hydraulic Inspection

Watertight inspection for valve seat	3.67 MPa [37.4 kgf/cm ²]
Hydraulic inspection for body	5.0 MPa [51 kgf/cm ²]

How to order: CODE

Angle valve, forged steel, 20 kgf/cm², JIS F-7422, TYPE of CONNECTION, SIZE mm

CODE	Size mm	Dimensions mm			Weight Kg	Unit Per Pcs.		
		Pipe Out. Diam.		Thread				
		Copper	Steel					
75 06 21	6	8 & 10	10.5	M20 x 1.5	1.47			
22	10	15	17.3	M24 x 2	1.75			
Type S (Screw Thread Type)								

Type F (Flange Type)

CODE	Size mm	Dimensions mm			Weight Kg	Unit Per Pcs.	
		Face to Face	Flange Diam.	Flange Bolt Hole			
		Pitch	Number	Hole			
75 06 26	15	75	95	70	4	15	4.2
27	20	80	100	75	4	15	5.6
28	25	95	125	90	4	19	7.2

Marine Forged Steel 40 kgf/cm² Globe Valves F-7329

Válvulas de Globo de Acero Forjado Marino

船用鍛鋼玉形弁 船用锻钢球阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 425°C	3.92 [40]
Steam of 400°C	4.51 [46]
Steam of 350°C	5.10 [52]
Steam of 300°C or less	5.59 [57]
Air, gas, oil & pulsation water	6.08 [62]

Hydraulic Inspection

Watertight inspection for valve seat	6.69 MPa [68.2 kgf/cm ²]
Hydraulic inspection for body	9.12 MPa [93 kgf/cm ²]

How to order: CODE

Globe valve, forged steel, 40 kgf/cm², JIS F-7329,
TYPE of CONNECTION, SIZE mm

CODE	Size mm	Dimensions mm			Weight Kg
		Length End to End	Thread	Height Fully Opened	

Type S (Screw Thread Type)

75 06 41	6	89	M20 × 1.5	152	1.6
	42	10	M24 × 2	152	2.0

Type U (Union Type)

75 06 46	6	102	-	152	1.8
	47	10	126	-	152

Type W (Socket Weld Type)

75 06 51	6	84	-	152	1.5
52	10	102	-	152	2.0
53	15	130	-	205	3.6
54	20	150	-	230	5.2
55	25	170	-	255	7.5

Type F (Flanged Type)

CODE	Size mm	Dimensions mm				Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole		
				Pitch	Number	Hole
75 06 61	15	150	115	80	4	19
62	20	170	120	85	4	19
63	25	200	130	95	4	19

Marine Forged Steel 40 kgf/cm² Angle Valves F-7330

Válvulas de Angulo de Bronce Marino

船用鍛鋼アングル弁 船用青铜角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 425°C	3.92 [40]
Steam of 400°C	4.51 [46]
Steam of 350°C	5.10 [52]
Steam of 300°C or less	5.59 [57]
Air, gas, oil & pulsation water	6.08 [62]

Hydraulic Inspection

Watertight inspection for valve seat	6.69 MPa [68.2 kgf/cm ²]
Hydraulic inspection for body	9.12 MPa [93 kgf/cm ²]

How to order: CODE

Angle valve, forged steel, 40 kgf/cm², JIS F-7330,
TYPE of CONNECTION, SIZE mm

CODE	Size mm	Dimensions mm			Weight Kg
		Length End to End	Thread	Height Fully Opened	

Type S (Screw Thread Type)

75 06 71	6	51	M20 × 1.5	136	1.6
	72	10	M24 × 2	136	1.9

Type W (Socket Weld Type)

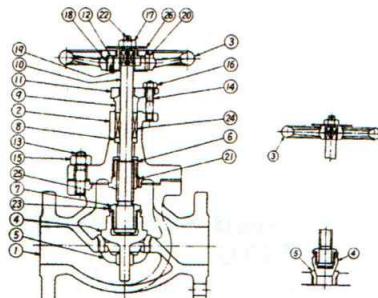
75 06 76	15	75	-	205	3.6
77	20	80	-	230	5.0
78	25	95	-	255	7.1

Type F (Flanged Type)

CODE	Size mm	Dimensions mm			Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole	
				Pitch	Hole
75 06 81	15	90	115	80	4
82	20	95	120	85	4
83	25	100	130	95	4

(d) Compressed Air Valves

CODE	JIS No.	Material	Shape
75 07 01-08 16-24	F-7340 F-7475	Cast Steel	Globe, Angle
75 05 31-43 51-58	F-7336 F-7337	Forged Steel	Globe, Angle



No.	Component	No.	Component
1	Body	14	Stud
2	Bonnet	15	Hexagon nut
3	Hand wheel	16	Hexagon nut
4	Disc	17	Hexagon nut
5	Valve seat	18	Pounding piece
6	Screwed bush	19	Pounding piece holder
7	Disc unit	20	Straight pin
8	Seat ring	21	Straight pin
9	Packing gland ring	22	Split pin
10	Stem	23	Disc lock washer
11	Packing gland	24	Packing
12	Pounding receiver piece	25	Gasket
13	Stud	26	Name plate

Marine Cast Steel Globe Air Valves F-7340

Válvulas de Globo de Acero Fundido Marino

船用铸钢空心球形弁 船用锻钢球形气阀

Pressure Rating

Maximum working pressure	4.51 MPa [46 kgf/cm ²]
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Hydraulic Inspection

Watertight Inspection for valve seat	4.96 MPa [50.6 kgf/cm ²]
Hydraulic inspection for body	6.76 MPa [69 kgf/cm ²]

How to order: CODE

Globe air valve, cast steel, JIS F-7340, SIZE mm

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
75 07 01	32	220	140	105	4	19	16.7
02	40	240	160	120	4	23	21.1
03	50	260	165	130	8	19	28.8
04	65	310	200	160	8	23	48.7
05	80	340	210	170	8	23	60.9
75 07 06	100	390	240	195	8	25	86.0
07	125	470	275	230	8	25	139
08	150	540	325	275	12	27	199

Marine Cast Steel Angle Air Valves F-7475Válvulas de Ángulo Aire de Acero Fundido Marino
船用鋳鋼空氣 angled弁 船用锻钢角形气阀

Pressure Rating

Maximum working pressure	4.51 MPa [46 kgf/cm ²]
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Hydraulic Inspection

For body	6.76 MPa [69 kgf/cm ²]
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How to order: CODE

Angle air valve, cast steel, JIS F-7475, SIZE mm

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
75 07 16	32	114	140	105	4	19	16.6
17	40	121	160	120	4	23	20.3
18	50	146	165	130	8	19	27.6
19	65	165	200	160	8	23	46.6
20	80	178	210	170	8	23	55.6
75 07 21	100	205	240	195	8	25	80.9
22	125	230	275	230	8	25	126
23	150	250	325	275	12	27	177
24	200	300	370	320	12	27	258

Marine Forged Steel Globe Air Valves F-7336Válvulas de Globo Aire de Acero Forjado Marino
船用鍛鋼空氣球形弁 船用锻钢球形气阀

Pressure Rating

Maximum working pressure	4.51 MPa [46 kgf/cm ²]
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Hydraulic Inspection

Watertight Inspection for valve seat	4.96 MPa [50.6 kgf/cm ²]
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Hydraulic inspection for body	6.76 MPa [69 kgf/cm ²]
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How to order: CODE

Globe air valve, forged steel, JIS F-7336, TYPE of CONNECTION, SIZE mm

Unit Per Pc.

CODE	Size mm	Pipe Out. Diam.		Thread	Weight Kg
		Copper	Steel		
Type S (Union Nut and Thread Type)					
75 07 31	6	8 & 10	10.5	M20 × 1.5	1.26
	32	10	15	M24 × 2	1.80

Type U (Both Side Union Nut Type)

75 07 36	6	8 & 10	10.5	-	1.30
	37	10	15	-	1.94

Type F (Flange Type)

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
75 07 41	15	150	115	80	4	19	5.60
42	20	170	120	85	4	19	7.09
43	25	200	130	95	4	19	9.46

Marine Forged Steel Angle Air Valves F-7337Válvulas de Ángulo para Aire de Acero Forjado Marino
船用鍛鋼空氣angled弁 船用锻钢角形气阀

Pressure Rating

Maximum working pressure	4.51 MPa [46 kgf/cm ²]
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Hydraulic Inspection

Watertight Inspection for valve seat	4.96 MPa [50.6 kgf/cm ²]
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Hydraulic inspection for body	6.76 MPa [69 kgf/cm ²]
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How to order: CODE

Angle air valve, forged steel, JIS F-7337, TYPE of CONNECTION, SIZE mm

Unit Per Pc.

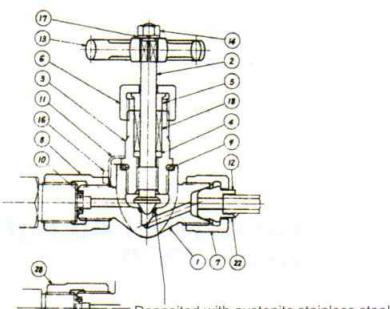
CODE	Size mm	Dimensions mm			Weight Kg
		Pipe Out. Diam.	Copper	Steel	
Type S (Union Nut Type)					
75 07 51	6	8 & 10	10.5	10.5	1.23
	52	10	15	17.3	1.75

Type F (Flange Type)

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
75 07 56	15	90	115	80	4	19	5.59
57	20	95	120	85	4	19	7.00
58	25	100	130	95	4	19	9.11

(e) Pressure Gauge & Stop Valves

CODE	JIS No.	Material	Pressure kgf/cm ²	For
75 07 66-69	F-7341	Forged Steel	100	Pressure gauge
75 07 76-88	F7379	Brass	30	Stop



No.	Component	No.	Component
1	Body	11	Bonnet lock plate
2	Stem	12	Nipple for steel pipe
3	Bonnet	13	Handwheel
4	Set ring	14	Hexagon nut
5	Gland	16	Cross recessed pan head machine screw
6	Gland nut	17	Spring washer
7	Union nut	18	Stem packing
8	PF 1/2 union nut	22	Nipple for copper pipe
9	Gasket	28	PF 3/8 union nut
10	Gasket		

Marine Forged Steel 100 kgf/cm² Pressure Gauge Valves F-7341

Válvulas de Manometro de Acero Forjado

船用鍛鋼压力形弁 船用锻钢压力计阀

Pressure Rating

Maximum working pressure	10.40 MPa [106 kgf/cm ²]
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Hydraulic Inspection

Watertight Inspection for valve seat	11.44 MPa [116.6 kgf/cm ²]
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Hydraulic inspection for body	15.60 MPa [159 kgf/cm ²]
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How to order: CODE

Pressure gauge valve, forged steel, 100 kgf/cm², JIS F-7341,
SIZE mm

Unit Per Pcs.

CODE	Size	Thread	Length End to End mm	Connecting Pipe	Weight kg
75 07 66	3/8 C	PF 3/8	96.0	Copper pipe	0.68
67	3/8 S	PF 3/8	96.0	Steel pipe	0.68
68	1/2 C	PF 1/2	96.0	Copper pipe	0.71
69	1/2 S	PF 1/2	96.0	Steel pipe	0.71

Marine Brass 30 kgf/cm² Stop Valves with Bite Joint F-7379

Válvulas de Cierre (Stop) con Mordaza Marino

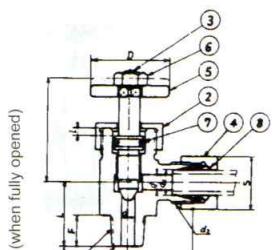
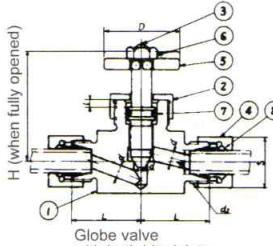
船用黄銅い込形止め弁 船用黄銅 截止閥

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Non-shock fluid of 80°C or less	2.94 [30]

Hydraulic Inspection

Watertight Inspection for valve seat	3.23 MPa [33.0 kgf/cm ²]
Hydraulic inspection for body	4.41 MPa [45.0 kgf/cm ²]



No.	Component
1	Body
2	Cap nut
3	Stem
4	Union nut
5	Handwheel
6	Hexagon nut
7	O-ring
8	Sleeve

How to order: CODE

Stop valve, brass, 30 kgf/cm², JIS F-7379, TYPE of CONNECTION, SIZE mm

Unit Per Pcs.

CODE	Size mm	Dimensions mm			
		Pipe out Diam.	"L" for Stop Valve	"L" for Angle Valve	d Thread PT
Globe valve with both bite joint (GBB)					
75 07 76	4	6	24	-	-
77	6	8 & 10	28	-	-
78	10	15	35	-	-

(to be continued)

Dimensions mm					
CODE	Size mm	Pipe out Diam.	"L" for Stop Valve	"L" for Angle Valve	d Thread PT

Screwed globe valve with bite joint (GBS)

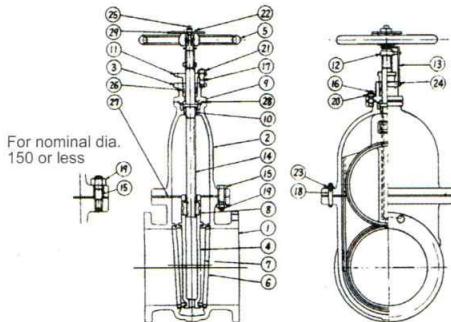
75 07 81	4	6	24	-	PT 1/8
82	6	8 & 10	28	-	PT 1/4
83	10	15	35	-	PT 3/8

Screwed angle valve with bite joint (LBS)

75 27 86	4	6	-	22	PT 1/8
87	6	8 & 10	-	25	PT 1/4
88	10	15	-	31	PT 3/8

(f) Gate Valves

CODE	JIS No.	Material	Pressure kgf/cm ²
75 08 01-15 21-35 41-43	F-7363	Cast Iron	5
	F-7364		10
	F-7369		16
75 09 01-11	F-7366	Cast Steel	10
	F-7367 61-65		5
75 09 51-55 61-65	F-7368	Bronze	10



No.	Component	No.	Component
1	Body	16	Stud
2	Bonnet	17	Stud
3	Screwing box	18	Taper pin with thread
4	Disc	19	Hexagon nut
5	Hand wheel	20	Hexagon nut
6	Valve seat for body	21	Hexagon nut
7	Valve set of disc	22	Hexagon nut
8	Screwing piece	23	Hexagon nut
9	Guide bush	24	Cross recessed pan head machine screw
10	Packing gland	25	Split pin
11	Indicator	26	Packing
12	Indicator plate	27	Gasket
13	Stem	28	Gasket
14	Stud/Hexagon head bolt	29	Name plate

Marine Cast Iron 5 kgf/cm² Gate Valves F-7363

Válvulas de Compuerta de Hierro Fundido Marino

船用铸铁仕切弁

船用铸铁 闸阀



F-7363

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]			Unit Per Pcs.		
	Nominal dia. 200 mm or less	Nominal dia. 250 mm to 400 mm	Nominal dia. 450 mm to 600 mm	Face to Face	Flange Diam.	Flange Bolt Hole Pitch Number Hole
Saturated seam	0.29 [3]	0.20 [2]				
Oil & pulsation water	0.49 [5]					
Non-shock water of 120°C or less	0.69 [7]		0.49 [5]			

75

Valves & Cocks

Hydraulic Inspection

Nominal Dia. mm	Test pressure MPa [kgf/cm ²]			Unit Per Pcs.		
	Watertight inspection for valve seat	Hydraulic inspection for body		Face to Face	Flange Diam.	Flange Bolt Hole Pitch Number Hole
400 or less	0.76 [7.7]	1.03 [10.5]				
450 to 600	0.54 [5.5]	0.74 [7.5]				

How to order: CODE

Gate valve, cast iron, 5 kgf/cm², JIS F-7363, SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole Pitch	Number	Hole	
75 08 21	50	200	155	120	4	19	19.4
	22	65	220	175	4	19	27.6
	23	80	230	185	8	19	33.0
	24	100	250	210	8	19	45.8
	25	125	270	250	8	23	65.9
75 08 26	150	290	280	240	8	23	86
	27	320	330	290	12	23	136
	28	250	380	400	12	25	230
	29	300	440	445	16	25	331
	30	350	500	490	16	25	433
75 08 31	400	590	560	510	16	27	597
	32	450	640	620	20	27	704
	33	500	710	675	20	27	901
	34	550	780	745	20	33	1,192
	35	600	850	795	24	33	1,490

Marine Cast Iron 16 kgf/cm²
Gate Valves F-7369

Válvulas de Compuerta de Hierro Fundido Marino

船用铸铁闸阀

Pressure Rating

Maximum working pressure	1.57 MPa [16 kgf/cm ²]
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Hydraulic Inspection

Watertight inspection for valve seat	1.73 MPa [17.6 kgf/cm ²]
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Hydraulic inspection for body	2.36 MPa [24 kgf/cm ²]
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How to order: CODE

Gate valve, cast iron, 16 kgf/cm², JIS F-7369, SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole Pitch	Number	Hole	
75 08 01	50	180	130	105	4	15	13.5
	65	190	155	130	4	15	19.0
	80	200	180	145	4	19	24.2
	100	230	200	165	8	19	35.3
	125	250	235	200	8	19	48.1
75 08 06	150	270	265	230	8	19	65.3
	200	290	320	280	8	23	103
	250	330	385	345	12	23	164
	300	370	430	390	12	23	236
	350	410	480	435	12	25	307
75 08 11	400	470	540	495	16	25	405
	450	500	605	555	16	25	556
	500	550	655	605	20	25	700
	550	600	720	665	20	27	878
	600	660	770	715	20	27	1,120

Marine Cast Iron 10 kgf/cm²
Gate Valves F-7364

Válvulas de Compuerta de Hierro Fundido Marino

船用铸铁闸阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]			Unit Per Pcs.		
	Nominal dia. 200 mm or less	Nominal dia. 250 mm to 400 mm	Nominal dia. 450 mm to 600 mm	Face to Face	Flange Diam.	Flange Bolt Hole Pitch Number Hole
Saturated seam	0.49 [5]	0.29 [3]				
Oil & pulsation water	0.98 [10]					
Non-shock water of 120°C or less	1.37 [14]		1.18 [12]			

Hydraulic Inspection

Nominal Dia. mm	Test pressure MPa [kgf/cm ²]			Unit Per Pcs.		
	Watertight inspection for valve seat	Hydraulic inspection for body		Face to Face	Flange Diam.	Flange Bolt Hole Pitch Number Hole
400 or less	1.57 [15.4]	2.06 [21]				
450 to 600	1.29 [13.2]	1.77 [18]				

How to order: CODE

Gate valve, cast iron, 10 kgf/cm², JS F-7364, SIZE mm

F-7366

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]			Unit Per Pcs.		
	Nominal dia. 200 mm or less	Nominal dia. 250 mm or less		Face to Face	Flange Diam.	Flange Bolt Hole Pitch Number Hole
Saturated steam	0.69 [7]	0.49 [5]				
Oil & pulsation water	0.981 [10]					
Non-shock water of 120°C or less	1.37 [14]					

Hydraulic Inspection

Watertight Inspection for valve seat	1.51 MPa [15.4 kgf/cm ²]
Hydraulic inspection for body	2.06 MPa [21 kgf/cm ²]

How to order: CODE

Gate valve, cast steel, 10 kgf/cm², JIS F-7366, SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
		Pitch	Number	Hole			
75 09 01	50	200	155	120	4	19	17.1
02	65	220	175	140	4	19	26.5
03	80	230	185	150	8	19	31.5
04	100	250	210	175	8	19	44.9
05	125	270	250	210	8	23	63.2
75 09 06	150	290	280	240	8	23	82.3
07	200	310	330	290	12	23	130
08	250	340	400	355	12	25	203
09	300	380	445	400	16	25	291
10	350	420	490	445	16	25	368
75 09 11	400	480	560	510	16	27	507

Marine Bronze 5 kgf/cm² Rising Stem Type Gate Valves F-7367

Válvulas de Compuerta Tipo Husillo Exterior Ascendente de Bronce Marino
船用青銅上昇式仕切弁

船用黄铜升杆式闸阀



F-7367

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Oil & pulsation water	0.49 [6]
Saturated steam	0.20 [2]
Non-shock water of 120°C or less	0.69 [7]

Hydraulic Inspection

Watertight Inspection for valve seat	0.76 MPa [7.7 kgf/cm ²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm ²]

How to order: CODE

Gate valve, rising stem type, bronze, 5 kgf/cm², JIS F-7367,
SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
		Pitch	Number	Hole			
75 09 51	15	90	80	60	4	12	2.29
52	20	100	85	65	4	12	2.98
53	25	110	95	75	4	12	4.10
54	32	130	115	90	4	15	5.79
55	40	140	120	95	4	15	7.78

Marine Bronze 10 kgf/cm² Rising Stem Type, Gate Valves F-7368

Válvulas de Compuerta Tipo Husillo Exterior Ascendente de Bronce Marino

船用青銅上昇式仕切弁

船用黄铜升杆式闸阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Oil & pulsation water	0.98 [10]
Saturated steam	0.20 [2]
Non-shock water of 120°C or less	1.37 [14]

Hydraulic Inspection

Watertight Inspection for valve seat	1.51 MPa [15.4 kgf/cm ²]
Hydraulic inspection for body	2.06 MPa [21 kgf/cm ²]

How to order: CODE

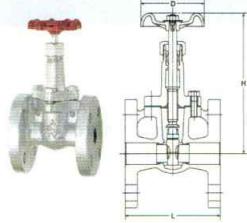
Gate valve, rising stem type, bronze, 10 kgf/cm², JIS F-7368,
SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
		Pitch	Number	Hole			
75 09 61	15	100	95	70	4	15	2.96
62	20	110	100	75	4	15	3.89
63	25	120	125	90	4	19	5.82
64	32	140	135	100	4	19	7.52
65	40	150	140	105	4	19	9.71

Ductile Iron 10K Gate Valves B-2051

Válvulas de compuerta de hierro dúctil 10K B-2051

ダクタイル鉄10K仕切弁
球墨铸铁10K分流阀



Temperature & Pressure Rating

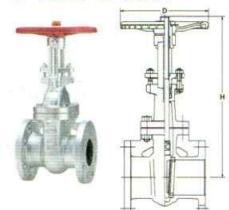
Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm ²]
Static Water	120°C	1.4
Steam, Air, Gas, Oil	220°C	1.2
Steam, Air, Gas, Oil	300°C	1.0

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
		Pitch	Number	Hole			
75 09 71	15	90	95	70	4	15	2.1
72	20	100	100	75	4	15	2.5
73	25	110	125	90	4	19	3.6
74	32	120	135	100	4	19	5.15
75	40	130	140	105	4	19	5.6
75 09 76	50	140	155	120	4	19	7.7

Ductile Iron 10K Gate Valves Bolted Bonnet Outside Screw & Yoke B-2051

Válvulas de compuerta de hierro dúctil 10K bonete atornillado tornillo exterior y yugo

ダクタイル鉄 10K 仕切弁
球墨铸铁 10K 阀门 螺栓阀盖
外螺纹和轭型 B-2051



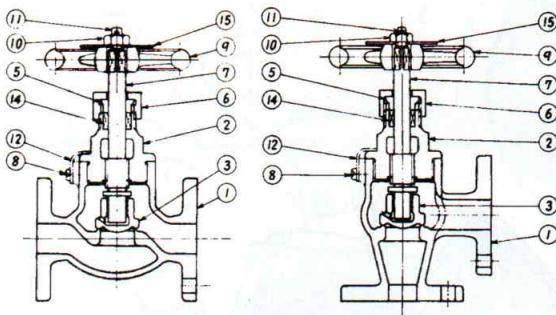
Temperature & Pressure Rating

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm ²]
Static Water	120°C	1.4
Steam, Air, Gas, Oil	220°C	1.2
Steam, Air, Gas, Oil	300°C	1.0

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
		Pitch	Number	Hole			
75 09 81	40	165	140	105	4	19	7.4
82	50	178	155	120	4	19	14.6
83	65	190	175	140	4	19	18.4
84	80	203	185	150	8	19	23.5
85	100	229	210	175	8	19	33.4
75 09 86	125	254	250	210	8	23	46.5
87	150	267	280	240	8	23	49.0
88	200	292	330	290	12	23	104.0
89	250	330	400	355	12	25	175.0
90	300	356	445	400	16	25	226.0

(g) Screw Down Check Valves

CODE	JIS No.	Material	Pressure kgf/cm ²	Shape
75 10 51-55 61-65	F-7351 F-7352	Bronze	5	Globe Angle
75 10 71-75 81-85	F-7409 F-7410		16	Globe Angle
75 11 01-11 16-29	F-7353 F-7354	Cast Iron	5	Globe Angle
75 11 31-37 41-47	F-7375 F-7376		10	Globe Angle
75 11 51-57 61-66	F-7377 F-7378	Cast Steel	16	Globe Angle
75 12 01-12 16-27	F-7471 F-7472		10	Globe Angle
75 12 31-41 46-56	F-7473 F-7474	Bronze	20	Globe Angle
75 12 61-65 66-70	F-7411 F-7412		5	Globe Angle
75 12 81-85 86-90	F-7413 F-7414		16	Globe Angle



No.	Component	No.	Component
1	Body	9	Hand wheel
2	Bonnet	10	Hexagon nut
3	Disc	11	Split pin
5	Packing gland	12	Bonnet lock plate
6	Glad nut	14	Packing
7	Stem	15	Name plate
8	Cross recessed pan head machine screw		

Marine Bronze 5 kgf/cm² Screw Down Check Globe Valves F-7351 Angle Valves F-7352

Válvulas de Cierre y Retención Paso Recto y Anglar de Bronce Marino
船用青銅ねじ締め逆止め式玉形及びアングル弁 船用青铜升杆式闸阀

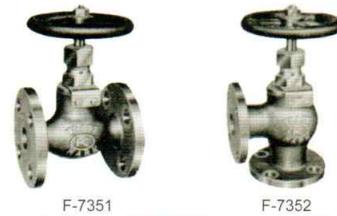
Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 205°C or less	0.49 [5]
Air, gas, oil & pulsation water	
Non-shock water of 120°C or less	0.69 [7]

Hydraulic Inspection

Watertight Inspection for valve seat	Hydraulic inspection for body
Inlet side	0.76 MPa [7.7 kgf/cm ²]
Outlet side	0.76 MPa [7.7 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]

Hydraulic inspection for body 1.03 MPa [10.5 kgf/cm²]



How to order: CODE

Screw down check valve, GLOBE or ANGLE, bronze, 5 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Pitch	Bolt Number	Hole	
Globe Valve F-7351							
75 10 51	15	100	80	60	4	12	1.96
	52	20	110	85	65	4	2.77
	53	25	120	95	75	4	3.41
	54	32	140	115	90	4	4.86
	55	40	160	120	95	4	6.30
Angle Valve F-7352							
75 10 61	15	55	80	60	4	12	1.92
	62	20	60	85	65	4	2.64
	63	25	65	95	75	4	3.30
	64	32	80	115	90	4	4.63
	65	40	85	120	95	4	5.81

Marine Bronze 16 kgf/cm² Screw Down Check Globe Valves F-7409 Angle Valves F-7410

Válvulas de Cierre y Retención Paso Recto y Anglar de Bronce Marino
船用青銅ねじ締め逆止め式玉形及びアングル弁 船用青铜升杆式闸阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 205°C or less	1.57 [6]
Air, gas, oil & pulsation water	
Non-shock water of 120°C or less	2.16 [22]

Hydraulic Inspection

Watertight Inspection for valve seat	Hydraulic inspection for body
Inlet side	2.37 MPa [24.2 kgf/cm ²]
Outlet side	2.37 MPa [24.2 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]

How to order: CODE

Screw down check valve, GLOBE or ANGLE, bronze, 16 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Pitch	Bolt Number	Hole	
Globe Valve F-7409							
75 10 71	15	100	95	70	4	15	2.70
	72	20	120	100	75	4	3.63
	73	25	130	125	90	4	5.09
	74	32	160	135	100	4	6.77
	75	40	180	140	105	4	8.25
Angle Valve F-7410							
75 10 81	15	70	95	70	4	15	2.67
	82	20	75	100	75	4	3.56
	83	25	85	125	90	4	5.02
	84	32	95	135	100	4	6.58
	85	40	100	140	105	4	7.95

Marine Cast Iron 5 kgf/cm² Screw Down Check Globe Valves F-7353

Válvulas de Cierre y Retención Paso Recto Hierro Fundido Marino
船用鋳鉄ねじ締め逆止め式玉形弁
船用铸铁 拧紧检查球阀



F-7353

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]		
	Nominal dia. 200 mm or less	Nominal dia. 250 and 300	Nominal dia. 350 and 400
	Class B	Class S	Class B
Steam of 230°C or less	-	0.49 [5]	-
Steam of 205°C or less	0.49 [4]	-	-
Air & gas	0.49 [5]	-	-
Oil & pulsation water		0.49 [5]	
Non-shock water of 120°C or less	0.69 [7]	0.59 [6]	

Hydraulic Inspection

Nominal dia. mm	Test Pressure MPa [kgf/cm ²]		
	Watertight inspection for valve seat	Hydraulic inspection for body	
	Inlet Side	Outlet Side	
300 or less	0.76 [7.7]	0.39 [4]	1.03 [10.5]
350, 400	0.65 [6.6]	0.29 [3]	0.88 [9]

How to order: CODE

Screw down check globe valve, cast iron, 5 kgf/cm², JIS F-7353, SIZE mm

Unit Per Pcs.

CODE	Size mm	Dimensions mm				Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole Pitch	Number	
75 11 01	50	210	130	105	4	15
02	65	250	155	130	4	21.3
03	80	280	180	145	4	27.6
04	100	340	200	165	8	40.4
05	125	410	235	200	8	57.9
75 11 06	150	480	265	230	8	80.9
07	200	570	320	280	8	139
08	250	740	385	345	12	243
09	300	840	430	390	12	377
10	350	940	480	435	12	463
75 11 11	400	1,050	540	495	16	643

Marine Cast Iron 5 kgf/cm² Screw Down Check Angle Valves F-7354

Válvulas de Cierre y Retención Paso Angular Hierro Fundido Marino
船用鋳鉄ねじ締め逆止め式アングル弁
船用铸铁 拧紧检查角阀



F-7354

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]			
	Nominal dia. 200 mm or less	Nominal dia. 250 and 300	Nominal dia. 350 and 400	Nominal dia. 450 or more
	Class B	Class S	Class B	
Steam of 230°C or less	-	0.49 [5]	-	-
Steam of 205°C or less	0.49 [5]	-	-	-
Air & gas	0.49 [5]		0.49 [5]	0.39 [4]
Oil & pulsation water				
Non-shock water of 120°C or less	0.69 [7]	0.59 [6]	0.49 [5]	

Hydraulic Inspection

Nominal dia. mm	Test Pressure MPa [kgf/cm ²]		
	Watertight inspection for valve seat		Hydraulic inspection for body
	Inlet Side	Outlet Side	
300 or less	0.76 [7.7]	0.39 [4]	1.03 [10.5]
350, 400	0.65 [6.6]	0.29 [3]	0.88 [9]
450 or more	0.54 [5.5]	0.20 [2]	0.74 [7.5]

How to order: CODE

Screw down check angle valve, cast iron, 5 kgf/cm², JIS F-7354, SIZE mm

Unit Per Pcs.

CODE	Size mm	Dimensions mm				Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole Pitch	Number	
75 11 16	50	100	130	105	4	15
17	65	115	155	130	4	18.2
18	80	130	180	145	4	23.3
19	100	150	200	165	8	33.5
20	125	170	235	200	8	46.5
75 11 21	150	190	265	230	8	19
22	200	220	320	280	8	104
23	250	275	385	345	12	175
24	300	310	430	390	12	243
25	350	360	480	435	12	336
75 11 26	400	395	540	495	16	25
27	450	440	605	555	16	618
28	500	485	655	605	20	800
29	550	530	720	665	20	1,161

Marine Cast Iron 10 kgf/cm² Screw Down Check Globe Valves F-7375 Angle Valves F-7376

Válvulas de Cierre y Retención Paso y Angular Hierro Fundido Marino
船用鋳鉄ねじ締め逆止め式玉形及びアングル弁
船用铸铁 拧紧检查球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]		
	Class B		Class S
	Steam of 230°C or less	Steam of 205°C or less	
Air, gas, oil & pulsation water	-	0.98 [10]	
Non-shock water of 120°C or less	0.98 [10]	1.37 [14]	

Hydraulic Inspection

Watertight Inspection for valve seat	Test Pressure MPa [kgf/cm ²]		
	Inlet side	Outlet side	to 0.39 MPa [4 kgf/cm ²]
1.51 MPa [15.4 kgf/cm ²]			
1.51 MPa [15.4 kgf/cm ²]			

Hydraulic inspection for body

2.06 MPa [21 kgf/cm²]

How to order: CODE

Screw down check valve, GLOBE or ANGLE, cast iron 10 kgf/cm², JIS F NO., SIZE mm

Unit Per Pcs.

CODE	Size mm	Dimensions mm				Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole Pitch	Number	
Globe Valve F-7375						
75 11 31	50	220	155	120	4	19
32	65	270	175	140	4	19
33	80	300	185	150	4	19
34	100	350	210	175	8	19
35	125	420	250	210	8	23
75 11 36	150	490	280	240	8	23
37	200	570	330	290	12	23

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Pitch	Bolt Number	Hole	
Angle Valve F-7376							
75 11 41	50	120	155	120	4	19	18.2
42	65	130	175	140	4	19	25.3
43	80	140	185	150	8	19	27.5
44	100	160	210	175	8	19	40.6
45	125	180	250	210	8	23	69.8
75 11 46	150	205	280	240	8	23	81.2
47	200	230	330	290	12	23	124

Marine Cast Iron 16 kgf/cm² Screw Down Check Globe Valves F-7377 Angle Valves F-7378

Válvulas de Cierre y Retención Paso y Angular Hierro Fundido Marino
船用鋳鉄ねじ締め逆止め玉形及びアングル弁
船用铸铁 拧紧检查球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]					Weight Kg
	Class B	Class S	Face to Face	Flange Diam.	Flange Bolt Hole	
Steam of 230°C or less	-					
Steam of 205°C or less	1.57 [16]					
Air, gas, oil & pulsation water	1.57 [16]					
Non-shock water of 120°C or less	2.16 [22]					

Hydraulic Inspection

Watertight Inspection for valve seat	Hydraulic inspection for body
Inlet side Outlet side	2.37 MPa [24.2 kgf/cm ²] 2.37 MPa [24.2 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]
	3.24 MPa [33 kgf/cm ²]

How to order: CODE

Screw down check valve, GLOBE or ANGLE, cast iron,
16 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Pitch	Bolt Number	Hole	
Globe Valve F-7377							
75 11 51	50	220	155	120	8	19	19.6
52	65	270	175	140	8	19	28.2
53	80	300	200	160	8	23	40.5
54	100	350	225	185	8	23	56.9
55	125	430	270	225	8	25	59.5
75 11 56	150	500	305	260	12	25	123
57	200	570	350	305	12	25	188

Angle Valve F-7378

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Pitch	Bolt Number	Hole	
Angle Valve F-7378							
75 11 61	50	120	155	120	8	19	18.0
62	65	130	175	140	8	19	24.9
63	80	150	200	160	8	23	35.8
64	100	170	225	185	8	23	49.2
65	125	200	270	225	8	25	76.1
75 11 66	150	225	305	260	12	25	103

Marine Cast Steel 10 kgf/cm² Screw Down Check Globe Valves F-7471

Válvulas de Cierre y Retención Paso Recto y Fundido Marino
船用鋳鋼ねじ締め逆止め式玉形
船用锻钢 拧紧检查球阀

Pressure Rating

Fluid condition	Dimensions mm					Weight Kg
	Face to Face	Flange Diam.	Flange Pitch	Bolt Number	Hole	
Steam of 300°C						0.98 [10]
Steam of 220°C or less						1.18 [12]
Air, gas, oil & pulsation water						1.37 [14]
Non-shock water of 120°C or less						
Hydraulic Inspection						
Watertight Inspection for valve seat						
Inlet side						1.51 MPa [15.4 kgf/cm ²]
Outlet side						1.51 MPa [15.4 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]
Hydraulic inspection for body						2.06 MPa [21 kgf/cm ²]

How to order: CODE

Screw down check globe valve, cast steel, 10 kgf/cm²,
JIS F-7471, TYPE of GUIDE, SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Pitch	Bolt Number	Hole	
Stem-Guide Type							
75 12 01	50	220	155	120	4	19	17.9
02	65	270	175	140	4	19	26.1
03	80	300	185	150	8	19	29.8
04	100	350	210	175	8	19	44.8
05	125	420	250	210	8	23	69.8
75 12 06	150	490	280	240	8	23	96.3
07	200	570	330	290	12	23	158
Piston-Guide Type							
75 12 11	150	490	280	240	8	23	100
12	200	570	330	290	12	23	165

Marine Cast Steel 10 kgf/cm² Screw Down Check Angle Valves F-7472

Válvulas de Cierre y Retención Paso Recto y Fundido Marino
船用鋳鋼ねじ締め逆止め式アングル弁
船用锻钢 拧紧检查球阀

Pressure Rating

Fluid condition	Dimensions mm					Weight Kg
	Face to Face	Flange Diam.	Flange Pitch	Bolt Number	Hole	
Steam of 300°C						0.98 [10]
Steam of 220°C or less						1.18 [12]
Air, gas, oil & pulsation water						1.37 [14]
Non-shock water of 120°C or less						
Hydraulic Inspection						
Watertight Inspection for valve seat						
Inlet side						1.51 MPa [15.4 kgf/cm ²]
Outlet side						1.51 MPa [15.4 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]
Hydraulic inspection for body						2.06 MPa [21 kgf/cm ²]

How to order: CODE

Screw down check angle valve, cast steel, 10 kgf/cm²,
JIS F-7472, TYPE of GUIDE, SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Pitch	Bolt Number	Hole	
Stem-Guide Type							
75 12 16	50	120	155	120	4	19	16.3
17	65	130	175	140	4	19	23.1
18	80	140	185	150	8	19	25.3
19	100	160	210	175	8	19	37.0
20	125	180	250	210	8	23	56.6
75 12 21	150	205	280	240	8	23	77.1
22	200	230	330	290	12	23	116

(to be continued)

CODE	Size mm	Dimensions mm						Weight Kg	
		Face to Face		Flange Diam.	Flange Bolt Hole				
		Pitch	Number	Hole					
Piston-Guide Type									
75 12 26	150	205	280	240	8	24	81		
27	200	230	330	290	12	23	123		

Marine Cast Steel 20 kgf/cm² Screw Down Check Globe Valves F-7473 Angle Valves F-7474

Válvulas de Cierre y Retención Paso Recto y Angular Hierro Fundido Marino
船用鋳鋼ねじ締め逆止め式玉形及びアングル弁

船用鍛鋼 拧紧检查球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 350°C	2.55 [26]
Steam of 300°C	2.84 [29]
Steam of 220°C or less	3.04 [31]
Air, gas, oil & pulsation water	
Non-shock water of 120°C or less	3.33 [34]
Hydraulic Inspection	
Watertight inspection for valve seat Inlet side Outlet side at stem fully raised	3.66 MPa [37.4 kgf/cm ²] 3.66 MPa [37.4 kgf/cm ²] to 0.98 MPa [10 kgf/cm ²]
Hydraulic inspection for body	5.00 MPa [51.0 kgf/cm ²]

How to order: CODE

Screw down check valve, GLOBE or ANGLE, cast steel,
20 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm						Weight Kg	
		Face to Face		Flange Diam.	Flange Bolt Hole				
		Pitch	Number	Hole					
Globe Valve F-7473									
75 12 31	32	190	135	100	4	19	14.4		
	32	200	140	105	4	19	16.0		
	33	230	155	120	8	19	21.6		
	34	270	175	140	8	19	30.1		
	35	300	200	160	8	23	43.5		
75 12 36	90	320	210	170	8	23	52.1		
	37	350	225	185	8	23	62.1		
	38	430	270	225	8	25	97.0		
	39	500	305	260	12	25	136		
	40	560	350	305	12	25	212		
75 12 41	250	660	430	380	12	27	349		

Angle Valve F-7374

CODE	Size mm	Dimensions mm						Weight Kg	
		Face to Face		Flange Diam.	Flange Bolt Hole				
		Pitch	Number	Hole					
75 12 46	32	100	135	100	4	19	13.0		
	47	110	140	105	4	19	15.1		
	48	125	155	120	8	19	19.9		
	49	135	175	140	8	19	26.7		
	50	150	200	160	8	23	38.8		
75 12 51	90	160	210	170	8	23	46.2		
	52	170	225	185	8	23	54.2		
	53	200	270	225	8	25	83		
	54	225	305	260	12	25	115		
	55	280	350	305	12	25	189		
75 12 56	250	310	430	380	12	27	296		

Marine Bronze 5 kgf/cm² Screw Down Check

Globe Valves Union Bonnet Type F-7411

Válvulas de Cierre y Retención con Tapa Roscada Bronce Marino

船用青銅ユニオンボンネット型ねじ締め逆止め玉形及びアングル弁

船用铸铁 拧紧检查角阀



Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 205°C or less	0.49 [5]
Air, gas, oil & pulsation water	0.69 [7]
Hydraulic Inspection	
Watertight inspection for valve seat Inlet side Outlet side	0.76 MPa [7.7 kgf/cm ²] 0.76 MPa [7.7 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm ²]

How to order: CODE

Screw down check valve, union bonnet type,
GLOBE or ANGLE, bronze, 5 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm						Weight Kg	
		Face to Face		Flange Diam.	Flange Bolt Hole				
		Pitch	Number	Hole					
Globe Valve F-7411									
75 12 61	15	100	80	60	4	12	2.12		
	62	110	85	65	4	12	2.91		
	63	120	95	75	4	12	3.82		
	64	140	115	90	4	15	5.09		
	65	160	120	95	4	15	6.71		
Angle Valve F-7412									
75 12 66	15	55	80	60	4	12	2.07		
	67	60	85	65	4	12	2.81		
	68	65	95	75	4	12	3.67		
	69	80	115	90	4	15	4.85		
	70	85	120	95	4	15	6.17		

Marine Bronze 16 kgf/cm² Screw Down Check

Globe Valves Union Bonnet Type F-7413

Angle Valves Union Bonnet Type F-7414

Válvulas de Cierre y Retención con Tapa Roscada Bronce Marino

船用青銅ユニオンボンネット型ねじ締め逆止め玉形及びアングル弁

船用铸铁 拧紧检查角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Steam of 205°C	1.57 [16]
Air, gas, oil & pulsation water	
Non-shock water of 120°C or less	2.16 [22]

(to be continued)

Hydraulic Inspection

Watertight inspection for valve seat Inlet side Outlet side	2.38 MPa [24.2 kgf/cm ²] 2.38 MPa [24.2 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]
Hydraulic inspection for body	3.24 MPa [33.0 kgf/cm ²]

How to order: CODE

Screw down check valve, union bonnet type,
GLOBE or ANGLE, bronze, 16 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg	Unit Per Pcs.
		Face to Face		Flange Diam.	Flange Bolt Hole			

Globe Valve F-7413

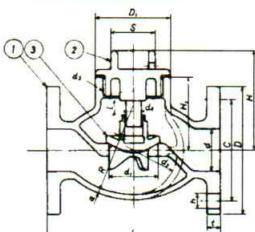
75 12 81	15	110	95	70	4	15	2.87
82	20	120	100	75	4	15	3.79
83	25	130	125	90	4	19	5.44
84	32	160	135	100	4	19	7.04
85	40	180	140	105	4	19	8.89

Angle Valve F-7414

75 12 86	15	70	95	70	4	15	2.86
87	20	75	100	75	4	15	3.75
88	25	85	125	90	4	19	5.38
89	32	95	135	100	4	19	6.84
90	40	100	140	105	4	19	8.34

(h) Lift Check Valves

CODE	JIS No.	Material	Pressure kgf/cm ²	Shape
75 13 01-03	F-7356	Bronze	5	-
75 13 11-16 21-26	F-7358 F-7359	Cast Iron	5	Globe Angle
75 13 41-45 46-50	F-7415 F-7416	Bronze	5	Globe Angle
75 13 61-65 66-70	F-7417 F-7418		16	Globe Angle



No.	Component
1	Body
2	Bonnet
3	Disk

Marine Bronze 5 kgf/cm² Lift Check Valves F-7356

Válvulas de Retención. Paso Recto de Bronce Marino
船用青銅リフト逆止め弁 船用青銅提升止回阀



Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Oil & pulsation water	0.49 [5]
Non-shock water of 120°C or less	0.69 [7]

Hydraulic Inspection

Watertight Inspection for valve seat	0.76 MPa [7.7 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]
Hydraulic inspection for body	1.03 MPa [10.5 kgf/cm ²]

How to order : CODE

Lift check valve, bronze, 5 kgf/cm², JIS F-7356, SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg	Unit Per Pcs.
		Face to Face	Flange Diam.	Flange Bolt Hole				
75 13 01	25	120	95	70	4	12	2.39	
02	32	140	115	90	4	15	3.80	
03	40	160	120	95	4	15	4.95	

Marine Cast Iron 5 kgf/cm² Lift Check Globe Valves F-7358 Angle Valves F-7359

Válvulas de Retención, Paso Recto y Angular (Lift) de Bronce Marino
船用铸铁リフト逆止め玉形及びアングル弁
船用铸铁 提升球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Oil & pulsation water	0.49 [5]
Non-shock water of 120°C or less	0.69 [7]

Hydraulic Inspection

Watertight Inspection for valve seat	0.76 MPa [7.7 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]
Hydraulic inspection for body	1.03 MPa [10.5 kgf/cm ²]

F-7358



F-7359



How to order: CODE

Lift check valve, GLOBE or ANGLE, cast iron, 5 kgf/cm², JIS F NO., SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg	Unit Per Pcs.	
		Face to Face	Flange Diam.	Flange Bolt Hole					
Globe Valve F-7358									
75 13 11	50	210	130	105	4	15	11.3		
12	65	250	155	130	4	15	16.8		
13	80	280	180	145	4	19	23.2		
14	100	340	200	165	8	19	32.5		
15	125	410	235	200	8	19	48.1		
16	150	480	265	230	8	19	67.9		

Angle Valve F-7359

75 13 21	50	100	130	105	4	15	9.5	
22	65	115	155	130	4	15	13.8	
23	80	130	180	145	4	19	18.9	
24	100	150	200	165	8	19	25.6	
25	125	170	235	200	8	19	36.7	
26	150	190	265	230	8	19	50.9	

Marine Bronze 5 kgf/cm² Lift Check Union Bonnet Type Globe Valves F-7415 Angle Valves F-7416

Válvulas de Retención, Paso Recto y Angular con Tapa Atornillada de Bronce Marino

船用青銅ユニオンボンネット型リフト逆止め玉形及びアングル弁
船用黄銅帽式提升閥接头

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Air, gas, oil & pulsation water	0.49 [5]
Non-shock water of 120°C or less	0.69 [7]

Hydraulic Inspection

Watertight Inspection upper side for valve seat	0.76 MPa [7.7 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm ²]



F-7415



F-7416

How to order: CODE

Lift check valve, union bonnet type, GLOBE or ANGLE, bronze, 5 kgf/cm², JIS F NO., SIZE mm

Unit Per Pcs.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
Globe Valve F-7415							
75 13 41	15	100	80	60	4	12	1.62
42	20	110	85	65	4	12	2.17
43	25	120	95	75	4	12	2.80
44	32	140	115	90	4	15	3.92
45	40	160	120	95	4	15	5.49

Angle Valve F-7416

75 13 46	15	55	80	60	4	12	1.57
47	20	60	85	65	4	12	2.07
48	25	65	95	75	4	12	2.65
49	32	80	115	90	4	15	3.68
50	40	85	120	95	4	15	4.95

Marine Bronze 16 kgf/cm² Lift Check Union Bonnet Type Globe Valves F-7417 Angle Valves F-7418

Válvulas de Retención, Paso Recto y Angular con Tapa Atornillada de Bronce Marino

船用青銅ユニオンボンネット型リフト逆止め玉形及びアングル弁
船用黄銅帽式提升閥接头

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Air, gas, oil & pulsation water	1.57 [16]
Non-shock water of 120°C or less	2.16 [22]

Hydraulic Inspection

Watertight Inspection upper side for valve seat	2.38 MPa [24.2 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]
Hydraulic inspection for body	3.24 MPa [33.0 kgf/cm ²]

How to order: CODE

Lift check valve, union bonnet type, GLOBE or ANGLE, bronze, 16 kgf/cm², JIS F NO., SIZE mm

Unit Per Pcs.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
Globe Valve F-7417							
75 13 61	15	110	95	70	4	15	2.37
62	20	120	100	75	4	15	3.05
63	25	130	125	90	4	19	4.42
64	32	160	135	100	4	19	5.87
65	40	180	140	105	4	19	7.67

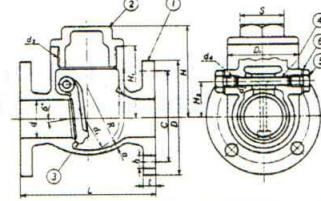
CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
Angle Valve F-7418							

Angle Valve F-7418

75 13 66	15	70	95	70	4	15	2.36
67	20	75	100	75	4	15	3.01
68	25	85	125	90	4	19	4.36
69	32	92	135	100	4	19	5.67
70	40	100	140	105	4	19	7.12

(i) Swing Check Valves

CODE	JIS No.	Material	Pressure kgf/cm ²
75 14 01-03	F-7371	Bronze	5
75 14 21-28 31-37	F-7372 F-7373	Cast Iron	5 10



No.	Component	No.	Component
1	Body	4	Hinge pin
2	Bonnet	5	Plug
3	Disc	6	Gasket

Marine Bronze 5 kgf/cm² Swing Check Valves F-7371

Válvulas de Retención de Charnela de Bronce Marino

船用青銅スイシング逆止め弁

船用黄銅回转止回阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Oil pulsation water	0.49 [5]
Non-shock water of 120°C or less	0.69 [7]

Hydraulic Inspection

Watertight Inspection for valve seat	0.76 MPa [7.7 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm ²]

How to order: CODE

Swing check valve, bronze, 5 kgf/cm², JIS F-7371, SIZE mm

Unit Per Pcs.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
75 14 01							
75 14 01	25	110	95	75	4	12	2.24
02	32	130	115	90	4	15	3.07
03	40	140	120	95	4	15	4.34

Marine Cast Iron 5 kgf/cm² Swing Check Valves F-7372

Válvulas Retenciones de Charnela de Hierro Fundido Marino

船用铸铁逆止阀

船用铸铁回转止回阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Oil & pulsation water	0.49 [5]
Non-shock water of 120°C or less	0.69 [7]

Hydraulic Inspection

Watertight Inspection for valve seat outlet side	0.76 MPa [7.7 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]
Hydraulic inspection for body	1.03 MPa [10.5 kgf/cm ²]

How to order: CODESwing check valve, cast iron, 5 kgf/cm², JIS F-7372, SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg	Unit Per Pcs.		
		Face to Face	Flange Diam.	Flange Bolt Hole						
				Pitch	Number	Hole				
75 14 21	50	190	130	105	4	15	9.06			
22	65	220	155	130	4	15	13.9			
23	80	250	180	145	4	19	19.1			
24	100	280	200	165	8	19	27.1			
25	125	330	235	200	8	19	39.0			
75 14 26	150	380	265	230	8	19	53.7			
27	200	460	320	280	8	23	94.4			
28	250	550	385	345	12	23	150			

Marine Cast Iron 10 kgf/cm² Swing Check Valves F-7373

Válvulas Retenciones de Charnela de Hierro Fundido Marino

船用鋳鉄スイッジング逆止め弁 船用铸铁回转止

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Oil pulsation water	0.98 [10]
Non-shock water of 120°C or less	1.37 [14]

Hydraulic Inspection

Watertight Inspection for valve seat outlet side	1.51 MPa [15.4 kgf/cm ²] to 0.39 MPa [4 kgf/cm ²]
Hydraulic inspection for body	2.06 MPa [21.0 kgf/cm ²]

How to order: CODESwing check valve, cast iron, 10 kgf/cm², JIS F-7373, SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg	Unit Per Pcs.		
		Face to Face	Flange Diam.	Flange Bolt Hole						
				Pitch	Number	Hole				
75 14 31	50	210	155	120	4	19	13.6			
32	65	240	175	140	4	19	19.6			
33	80	270	185	150	8	19	22.6			
34	100	300	210	175	8	19	30.9			
35	125	350	250	210	8	23	49.2			
75 14 36	150	400	280	240	8	23	64.9			
37	200	480	330	290	12	23	103			

Spare Hand Wheels for Valve

Manubrios de repuesto para válvulas

バルブ用開閉ハンドル 阀门用开关把手



Made of cast iron to be used for the JIS bronze, cast iron, or cast steel valves. This can be fixed to DIN or ANSI valves as long as the square hole size meets to the spindle of the valves.

CODE	Size mm Outside Diam x Square Hole	Alligator No.
75 15 01	60 x 7	AD340006
02	80 x 8	AD340008
03	100 x 10	AD340010
04	125 x 10	AD340012
05	140 x 12	AD340014
75 15 06	160 x 14	AD340016
07	180 x 14	AD340018
08	200 x 17	AD340020
09	224 x 19	AD340022
10	250 x 22	AD340025

(to be continued)

75 15 11	280 x 22	AD340028
12	315 x 22	AD340031
13	315 x 27	AD340032
14	355 x 27	AD340035
15	400 x 30	AD340040
75 15 16	450 x 36	AD340045

Name of Mfr.: Alligator

(j) Marine Cocks

CODE	JIS No.	Material	Pressure kgf/cm ²
75 16 01-15	F-7381		5
31-36	F-7387		16
51-54	F-7343	Bronze	20
61-64	F-7390		w/Lock



F-7381

Marine Bronze 5 kgf/cm² Flanged Cocks F-7381

Grifos Embridados de Bronce Marino

船用青銅 フランジ形コック

船用青铜法兰旋塞

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Water & Oil	0.49 [5]

Hydraulic Inspection

Watertight Inspection for plug

Hydraulic inspection for body

How to order: CODEFlanged cock, bronze, 5 kgf/cm², JIS F-7381, TYPE, SIZE mm

CODE	Size mm	Dimensions mm					Weight Kg	Unit Per Pcs.	
		Face to Face	Flange Diam.	Flange Bolt Hole					
Two-Way									
75 16 01	25	130	95	75	4	12	3.13		
02	32	160	115	90	4	15	5.02		
03	40	170	120	95	4	15	6.66		
04	50	190	130	105	4	15	10.0		
05	65	220	155	130	4	15	16.7		

L-Type Three-Way

75 16 06	25	130	95	75	4	12	3.81
07	32	160	115	90	4	15	6.13
08	40	170	120	95	4	15	7.93
09	50	190	130	105	4	15	11.8
10	65	220	155	130	4	15	19.0

T-Type Three-Way

75 16 11	25	130	95	75	4	12	3.81
12	32	160	115	90	4	15	6.13
13	40	170	120	95	4	15	7.93
14	50	190	130	105	4	15	11.8
15	65	220	155	130	4	15	19.0

Marine Bronze 16 kgf/cm² Cocks, F-7387Bronce marino 16 kgf/cm² Grifos船用青銅 16 kgf/cm² コック海洋青铜 16 kgf/cm² 螺塞

F-7387

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]	
	Nominal dia. 6 mm & 10 mm	Nominal dia. 10 mm & 20 mm
Saturated steam	0.98 [10]	0.49 [5]
Oil & pulsation water	1.57 [16]	1.27 [13]
Non-shock water of 120°C or less	1.96 [20]	1.57 [16]

Hydraulic Inspection

Nominal Dia. mm	Test pressure MPa [kgf/cm ²]	
	Watertight inspection for plug	Body
6 & 10	2.16 [22]	2.94 [30]
15 & 20	1.73 [17.6]	2.36 [24]

How to order: CODE

Cock, bronze, 16 kgf/cm², JIS F-7387, TYPE of CONNECTION, SIZE mm

Unit Per Pcs.

CODE	Size mm	Pipe Out. Diam.		Thread	Weight kg
		Copper	Steel		

Type S (Screwed Type)

75 16 31	6	8 & 10	10.5	M20×1.5	0.46
32	10	15	17.3	M24×2	0.85
33	15	20	21.7	M30×2	1.46
34	20	25	27.2	M36×2	2.09

Type U (Union Type)

75 16 35	6	8 & 10	10.5	M24×2	0.50
36	10	15	17.3	M30×2	1.00

Marine Bronze 20 kgf/cm² Pressure Gauge Cocks F-7343

Grifos de Manómetro de Bronce Marino

船用青銅圧力計コック 船用青銅 壓力計旋塞



Pressure Rating

Maximum working pressure	1.96 MPa [20 kgf/cm ²]
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Hydraulic Inspection

Watertight Inspection for plug	2.16 MPa [22.0 kgf/cm ²]
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Hydraulic inspection for body	2.94 MPa [30.0 kgf/cm ²]
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How to order: CODE

Pressure gauge cock, bronze, 20 kgf/cm², JIS F-7343, TYPE of CONNECTION, SIZE mm

Unit Per Pcs.

CODE	Type	Union Nut Thread	For Copper Pipe		Weight Kg
			Union	Bite Type Union	
75 16 51	3/8	3/8 PF			0.41
			Union	Bite Type Union	
52	1/2	1/2 PF			0.44
			Union	Bite Type Union	
53					
54					

Marine Bronze Cocks with Lock F-7390

Grifos de Cierre de Bronce Marino

船用青銅錠付きコック 带锁的船用黄铜旋塞



Marine cocks with lock used for lubricating oil, daily service tanks, etc.

Hydraulic Inspection

Watertight Inspection for cock plug	0.20 MPa [2 kgf/cm ²]
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Hydraulic inspection for body	0.20 MPa [2 kgf/cm ²]
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Unit Per Pcs.

CODE	JIS No.	Threads	Weight Kg
75 16 61	10	M24×2	0.32
62	15	M30×2	0.61
63	20	M36×2	0.99
64	25	M42×2	1.50

(k) Hose Valves

CODE	JIS No.	Material	Pressure kgf/cm ²
75 17 01-23	F-7334	Bronze	5·10
75 17 31-37	F-7333	Cast Iron	5·10

Marine Bronze Hose Valves

F-7334

Válvulas para Conexión de Manguera de Bronce Marino

船用青銅ホース弁



Pressure Rating

Fluid Condition	Maximum working pressure MPa [kgf/cm ²]					
	Nominal pressure 5 kgf/cm ²		Nominal pressure 10 kgf/cm ²			
	Nominal diameter mm	15	25	40/50	15	25
Steam of 205°C or less	-	-	-	0.981	-	-
Air	[5]	0.49 [5]	0.49 [5]	0.49 [5]	0.981 [10]	0.981 [10]
Pulsation water						
Non-shock water of 120°C or less				0.69 [7]		1.37 [14]

Hydraulic Inspection

Nominal pressure kgf/cm ²	Test pressure MPa [kgf/cm ²]			
	Watertight inspection for valve seat	Hydraulic inspection for body	Hydraulic inspection for base connection	
5	0.75 [7.7]	1.03 [10.5]	0.69 [7]	
10	1.51 [15.4]	2.06 [21]	1.37 [14]	

Classification

Class	Nominal pressure kgf/cm ²	Nominal Dia. mm	Shape		Application
			Globe valve	Angle valve	
5	15	15			Steam for cleaning sea chest strainer, boiler and machinery, and for soda boiling
		25			For air motor
		40			Fire extinguishing, deck washing, reserve water shifting, draining of boiler water, etc.
		50			
		15			Steam for cleaning sea chest strainer, boiler and machinery, and for soda boiling
	25	25			For air motor
		40			Fire extinguishing, deck washing, reserve water shifting, draining of boiler water, etc.
		50			
		65			Fire extinguishing, deck washing, etc.
		15	Screwed type	Globe valve Angle valve	Steam or other fluid for cleaning boiler and machinery, and for soda boiling



F-7334 Globe

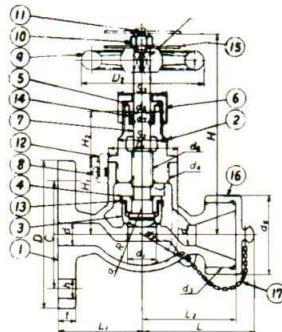


F-7334 Angle

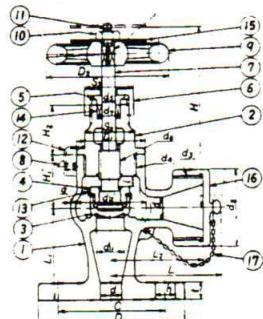
75

Globe & Angle Valve diam. 15/25 mm

S (between laces)



S (between laces)



How to order: CODE

Hose valve, GLOBE or ANGLE, bronze, PRESSURE, JIS F-7334, SIZE mm

Globe Hose Valve

Unit Per Pc.

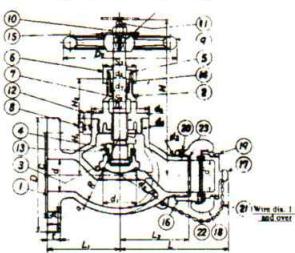
	CODE	75 17 01	75 17 02	75 17 03	75 17 04
Dimensions	Size	15 mm		25 mm	
Bolts	Pressure	5 kgf/cm ²	10 kgf/cm ²	5 kgf/cm ²	10 kgf/cm ²
	Threads	M42 x 2	M42 x 2	M42 x 2	M42 x 2
	L	73 mm	73 mm	78 mm	83 mm
	D	80 mm	95 mm	95 mm	125 mm
Bolts	Pitch	60 mm	70 mm	75 mm	90 mm
	Number	4	4	4	4
	Hole	12 mm	15 mm	12 mm	19 mm
	L ₁	50 mm	55 mm	60 mm	65 mm
	L ₂	60 mm	60 mm	65 mm	70 mm
	Weight	2.51 kg	2.76 kg	3.55 kg	4.15 kg

Angle Hose Valve

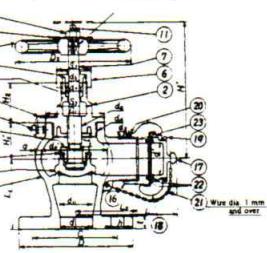
	CODE	75 17 06	75 17 07	75 17 08	75 17 09
Dimensions	Size	15 mm		25 mm	
Bolts	Pressure	5 kgf/cm ²	10 kgf/cm ²	5 kgf/cm ²	10 kgf/cm ²
	Threads	M42 x 2	M42 x 2	M42 x 2	M42 x 2
	L	68 mm	73 mm	78 mm	83 mm
	D	80 mm	95 mm	95 mm	125 mm
Bolts	Pitch	60 mm	70 mm	75 mm	90 mm
	Number	4	4	4	4
	Hole	12 mm	15 mm	12 mm	19 mm
	L ₁	55 mm	70 mm	65 mm	85 mm
	L ₂	55 mm	60 mm	65 mm	70 mm
	Weight	2.41 kg	2.72 kg	3.44 kg	4.04 kg

Globe & Angle Valve diam. 40 mm

S (between laces)



S (between laces)



How to order: CODE

Hose valve, GLOBE or ANGLE, bronze, PRESSURE, JIS F-7334, 40 mm

Unit Per Pc.

Valve Type	Globe		Angle		
	CODE	75 17 11	75 17 12	75 17 13	75 17 14
Dimensions	Size	40 mm			
Bolts	Pressure	5 kgf/cm ²	10 kgf/cm ²	5 kgf/cm ²	10 kgf/cm ²
	Coupling	Nakajima System Coupling			
	L	128.5 mm	133.5 mm	123.5 mm	123.5 mm
	D	120 mm	140 mm	120 mm	140 mm
Bolts	Pitch	95 mm	105 mm	95 mm	105 mm
	Number	4	4	4	4
	Hole	15 mm	19 mm	15 mm	19 mm
	L ₁	80 mm	90 mm	85 mm	100 mm
	L ₂	80 mm	85 mm	75 mm	75 mm
	Weight	6.26 kg	8.43 kg	5.91 kg	8.19 kg

Globe & Angle Valve diam. 50/65 mm

How to order: CODE

Hose valve, GLOBE or ANGLE, bronze, PRESSURE, JIS F-7334, SIZE mm

Unit Per Pc.

Globe Hose Valve

	CODE	75 17 16	75 17 17	75 17 18
Dimensions	Size	50 mm	65 mm	
Bolts	Pressure	5 kgf/cm ²	10 kgf/cm ²	10 kgf/cm ²
	Coupling	Nakajima System Coupling		
	L	159.8 mm	164.8 mm	199.8 mm
	D	130 mm	155 mm	175 mm
Bolts	Pitch	105 mm	120 mm	140 mm
	Number	4	4	4
	Hole	15 mm	19 mm	19 mm
	L ₁	105 mm	110 mm	135 mm
	L ₂	105 mm	110 mm	140 mm
	Weight	12.9 kg	15.4 kg	27.8 kg

Angle Hose Valve

	CODE	75 17 21	75 17 22	75 17 23
Dimensions	Size	50 mm	65 mm	
Bolts	Pressure	5 kgf/cm ²	10 kgf/cm ²	10 kgf/cm ²
	Coupling	Nakajima System Coupling		
	L	154.8 mm	159.8 mm	179.8 mm
	D	130 mm	155 mm	175 mm
Bolts	Pitch	105 mm	120 mm	140 mm
	Number	4	4	4
	Hole	15 mm	19 mm	19 mm
	L ₁	100 mm	120 mm	130 mm
	L ₂	100 mm	105 mm	120 mm
	Weight	11 kg	14.3 kg	23.0 kg

Marine Cast Iron Hose Valves F-7333

Válvulas para Conexión de Manguera de Hierro Fundido Marino
船用鋳鉄ホース弁 船用铸铁水带阀门

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]	
	Nominal pressure 5 kgf/cm	Nominal pressure 10 kgf/cm
Pulsation water	0.49 [5]	0.98 [10]
Non-shock water of 120°C or less	0.69 [7]	1.37 [14]

Hydraulic Inspection

Nominal pressure kgf/cm ²	Test pressure MPa [kgf/cm ²]		
	Watertight inspection for valve seat	Hydraulic inspection for body	Hydraulic inspection for base connection
5	0.76 [7.7]	1.03 [10.5]	0.69 [7]
10	1.51 [15.4]	2.06 [21]	1.37 [14]

Classification

Class			Application
Nominal pressure kgf/cm ²	Nominal Dia. mm	Shape	
5	50	Globe valve	Fire extinguishing, deck washing, water shifting etc.
		Angle valve	
10	65	Globe valve	
		Angle valve	



How to order: CODE

Hose valve, GLOBE or ANGLE, cast iron, PRESSURE JIS F-7333,
SIZE mm

Unit Per Pcs.

Globe Hose Valve			
CODE	75 17 31	75 17 32	75 17 33
Size	50 mm		65 mm
Pressure	5 kgf/cm ²	10 kgf/cm ²	10 kgf/cm ²
Coupling		Nakajima System Coupling	
L	165 mm	170 mm	200 mm
D	130 mm	155 mm	175 mm
Bolts	Pitch	105 mm	120 mm
	Number	4	4
	Hole	15 mm	19 mm
L-1		105 mm	110 mm
L-2		110 mm	115 mm
Weight	14.7 kg	18.9 kg	28.2 kg

Angle Hose Valve

Unit Per Pcs.

CODE	75 17 35	75 17 36	75 17 37
Size	50 mm	65 mm	
Pressure	5 kgf/cm ²	10 kgf/cm ²	10 kgf/cm ²
Coupling	Nakajima System Coupling		
L	155 mm	170 mm	185 mm
D	130 mm	155 mm	175 mm
Bolts	Pitch	105 mm	120 mm
	Number	4	4
	Hole	15 mm	19 mm
L-1		100 mm	120 mm
L-2		100 mm	115 mm
Weight	12.8 kg	17.0 kg	24.3 kg

Marine Hose Valves with ANSI Screw Threads (ANSI-NFPA 1963)

Válvulas para Conexión de Manguera con Roscas ANSI Marinas
船用アメリカねじホース弁 船用水带阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm ²]
Pulsation water	0.98 [10]
Non-shock water of 120°C or less	1.37 [14]

Test Pressure

Nominal pressure kgf/cm ²	Watertight inspection for valve seat	Hydraulic inspection for body
10	1.47 MPa [15 kgf/cm ²]	2.35 MPa [24 kgf/cm ²]

Classification

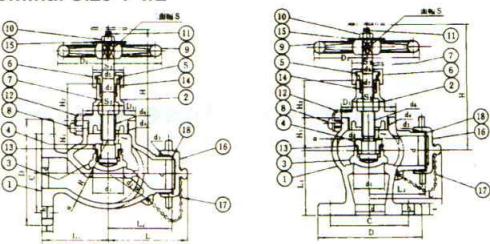
Type	Main material	Nominal diameter inch	Nominal pressure kgf/cm ²	Fluid	Application
Globe	Bronze	1-1/2	10	Water	Fire Extinguishing
Angle					
Globe		2-1/2			Deck Washing
Angle		2-1/2			
Globe	Cast Iron	2-1/2			
Angle					

Marine Bronze Hose Valves with ANSI Screw Threads ANSI-NFPA 1963

JMS7305-10 kgf/cm²

Válvulas para Conexión de Manguera con Roscas ANSI de Bronce Marino
船用青銅アメリカねじホース弁 船用青铜水带阀门

1. Nominal Size 1-1/2"



* JMS denotes Japan Marine Standards.

No.	Component	No.	Component
1	Body	10	Hexagon nut
2	Bonnet	11	Split pin
3	Disc	12	Bonnet lock plate
4	Disc nut	13	Disc lock plate
5	Packing gland	14	Packing
6	Gland nut	15	Name plate
7	Stem	16	Cap
8	Cross recessed pan head screw	17	Chain
9	Hand wheel	18	Gasket

How to order: CODE

Hose valve, with ANSI screw thread, GLOBE or ANGLE, bronze, 10 kgf/cm², 1-1/2"

Unit Per Pcs.

CODE		75 17 51	75 17 52
Type		Globe	Angle
Nominal Size		1-1/2"	
Nominal Pressure		10 kgf/cm ²	
Thread (d3)	Size	1-1/2"	ANSI-NFPA
	Per inch	9	1963
	L	105 mm	95 mm
	L ₁	90 mm	100 mm
	L ₂	85 mm	75 mm
	Diam (D)	140 mm	
Flange	Pitch	105 mm	
	Bolt Hole Number	4	
	Hole	19 mm	
Height Opened		190 mm	165 mm
Weight		8.22 kg	7.98 kg

* ANSI-NFPA denotes the Screw Threads and Gasket for the Fire Hose Connection.

2. Nominal Size 2-1/2"**How to order: CODE**

Hose valve, with ANSI screw thread, GLOBE or ANGLE, bronze, 10 kgf/cm², 2-1/2"

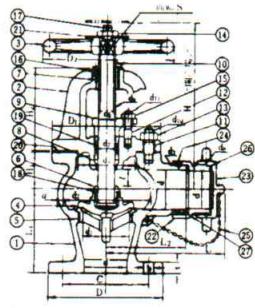
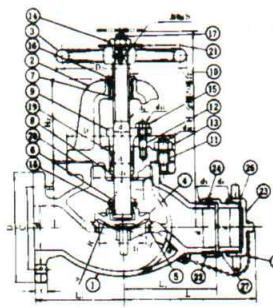
Unit Per Pcs.

CODE		75 17 53	75 17 54
Type		Globe	Angle
Nominal Size		2-1/2"	
Nominal Pressure		10 kgf/cm ²	
Thread (d3)	Size	2-1/2"	ANSI-NFPA
	Per inch	7.5	1963
	L	165 mm	145 mm
	L ₁	135 mm	130 mm
	L ₂	140 mm	120 mm
	Diam (D)	175 mm	
Flange	Pitch	140 mm	
	Bolt Hole Number	4	
	Hole	19 mm	
Height Opened		295 mm	255 mm
Weight		28.1 kg	23.3 kg

Marine Cast Iron Hose Valves**with ANSI Screw Threads****ANSI-NFPA 1963****JMS 7305-10 kgf/cm²**

Válvulas para Conexión de Manguera con Roscas ANSI de Hierro Fundido Marino

船用鋳鉄アメリカねじホース弁 船用铸铁水带阀门



No.	Component	No.	Component
1	Body	15	Hex nut
2	Bonnet	16	Lock pin
3	Hand wheel	17	Split pin
4	Disc	18	Disc lock washer
5	Valve seat	19	Packing
6	Disc nut	20	Gasket
7	Screwed bonnet bush	21	Name plate
8	Seat ring	22	Hose base connection
9	Packing gland	23	Cap
10	Stem	24	Set screw
11	Stud	25	Chain
12	Stud	26	Gasket
13	Hex nut	27	Gasket
14	Hex nut		

How to order: CODE

Hose valve, with ANSI screw thread, GLOBE or ANGLE, cast iron, 10 kgf/cm², 2-1/2"

Unit Per Pcs.

CODE		75 17 56	75 17 57
Type		Globe	Angle
Nominal Size		2-1/2"	
Nominal Pressure		10 kgf/cm ²	
Thread (d3)	Size	2-1/2"	ANSI-NFPA
	Per inch	7.5	1963
	L	200 mm	185 mm
	L ₁	135 mm	130 mm
	L ₂	140 mm	125 mm
	Diam (D)	175 mm	
Flange	Pitch	140 mm	
	Bolt Hole Number	4	
	Hole	19 mm	
Height Opened		310 mm	270 mm
Weight		27.4 kg	23.5 kg

Emergency Shut-off Valves**Emergency Shut-off Valves & Air Reservoirs**

Válvulas Cierre de Emergencia 非常遮断弁 紧急开闭阀

Every Pipe to suck in oil from Tank located up in the double bottom such as Fuel-oil Tank, Lubricating-oil Tank and Heat-agent-oil Tank must be equipped with Stop Valve or Cock in the way that it is located direct to Tank wall. This Stop Valve or Cock has to be of function and structure so that it can shut off oil-flow direct at the installed position and also can be remote-controlled for shut-off from a safe place out of the area. This is a Device fit for such purpose.

Shut-off Operation

Air operating type:

Only open the compressed air supply valve connected from air reservoir. Air reservoir should be kept certain pressure between 0.39 MPa and 0.89 MPa.

*If there is insufficient pressure in the tank, there is a risk of inadequate air supply causing malfunction.

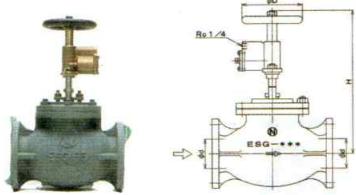
Wire operating:

Only pull the lever connected with wire. For manual shut, these valves can close with handle wheel by rotating in clockwise direction.

Reset after Shut-off

1. Rotate clockwise until a head of piston is set in the grooving on spindle, and then rotate counterclockwise the handle to set valve in full open condition.
2. In an emergency, the valves can be manually reset by lifting the handle upward.

*Regarding Air operating type, 1 or 2 should be applied after air supply valve is closed.

JIS Flanged End Globe Type**JIS 5K*****Shut-off Operation: Air operating type**

CODE	Type	Size mm			Weight kg
		d	L	H	
87 45 01	ESG-005-025	25	120	265	100
02	ESG-005-040	40	160	270	100
03	ESG-005-050	50	210	270	100
04	ESG-005-065	65	250	320	125
05	ESG-005-080	80	280	325	125
87 45 06	ESG-005-100	100	340	410	160
07	ESG-005-125	125	410	430	160
08	ESG-005-150	150	480	460	160
09	ESG-005-200	200	570	615	315
10	ESG-005-250	250	740	655	315

Name of Mfr.: Niikura Kogyo Co., Ltd.

***Shut-off Operation: Wire operating type**

CODE	Type	Size mm			Weight kg
		d	L	H	
87 45 11	ESG-005-025-W	25	120	265	100
12	ESG-005-040-W	40	160	270	100
13	ESG-005-050-W	50	210	270	100
14	ESG-005-065-W	65	250	320	125
15	ESG-005-080-W	80	280	325	125

Name of Mfr.: Niikura Kogyo Co., Ltd.

JIS 10K***Shut-off Operation: Air operating type**

CODE	Type	Size mm			Weight kg
		d	L	H	
87 45 41	ESG-010-025	25	130	265	100
42	ESG-010-040	40	170	270	100
43	ESG-010-050	50	220	270	100
44	ESG-010-065	65	270	320	125
45	ESG-010-080	80	300	325	125
87 45 46	ESG-010-100	100	350	410	160
47	ESG-010-125	125	420	430	160
48	ESG-010-150	150	490	460	160
49	ESG-010-200	200	570	615	315
50	ESG-010-250	250	740	655	315

Name of Mfr.: Niikura Kogyo Co., Ltd.

***Shut-off Operation: Wire operating type**

CODE	Type	Size mm				Weight kg
		d	L	H	D	
87 45 51	ESG-010-025W	25	130	265	100	8
52	ESG-010-040W	40	170	270	100	12
53	ESG-010-050W	50	220	270	100	16.5
54	ESG-010-065W	65	270	320	125	22
55	ESG-010-080W	80	300	325	125	27

Name of Mfr.: Niikura Kogyo Co., Ltd.

JIS 16K***Shut-off Operation: Air operating type**

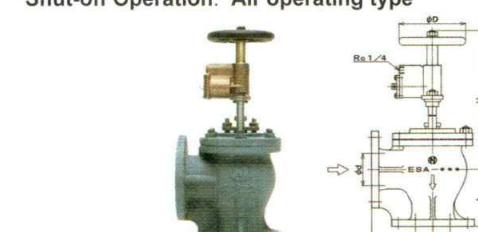
CODE	Type	Size mm				Weight kg
		d	L	H	D	
87 45 71	ESG-016-025	25	130	265	100	8
72	ESG-016-040	40	170	270	100	12
73	ESG-016-050	50	220	270	100	16.5
74	ESG-016-065	65	270	320	125	22
75	ESG-016-080	80	300	325	125	27

Name of Mfr.: Niikura Kogyo Co., Ltd.

***Shut-off Operation: Wire operating type**

CODE	Type	Size mm				Weight kg
		d	L	H	D	
87 45 76	ESG-016-025W	25	130	265	100	8
77	ESG-016-040W	40	170	270	100	12
78	ESG-016-050W	50	220	270	100	16.5
79	ESG-016-065W	65	270	320	125	22
80	ESG-016-080W	80	300	325	125	27

Name of Mfr.: Niikura Kogyo Co., Ltd.

JIS Flanged End Angle Type**JIS 5K*****Shut-off Operation: Air operating type**

CODE	Type	Size mm				Weight kg
		d	L	H	D	
87 45 21	ESA-005-025	25	120	265	100	7
22	ESA-005-040	40	160	270	100	10
23	ESA-005-050	50	210	270	100	14
24	ESA-005-065	65	250	320	125	18
25	ESA-005-080	80	280	325	125	22
87 45 26	ESA-005-100	100	340	410	160	30
27	ESA-005-125	125	410	430	160	42
28	ESA-005-150	150	480	460	160	50
29	ESA-005-200	200	570	615	315	85
30	ESA-005-250	250	740	655	315	115

Name of Mfr.: Niikura Kogyo Co., Ltd.

***Shut-off Operation: Wire operating type**

CODE	Type	Size mm				Weight kg
		d	L	H	D	
87 45 31	ESA-005-025-W	25	65	245	100	7
32	ESA-005-040-W	40	80	240	100	9
33	ESA-005-050-W	50	100	240	100	13
34	ESA-005-065-W	65	115	280	125	17
35	ESA-005-080-W	80	130	280	125	21

Name of Mfr.: Niikura Kogyo Co., Ltd.

JIS 10K***Shut-off Operation: Air operating type**

CODE	Type	Size mm				Weight kg
		d	L	H	D	
87 45 56	ESA-010-025	25	85	245	100	9
57	ESA-010-040	40	100	240	100	10
58	ESA-010-050	50	120	240	100	13
59	ESA-010-065	65	130	280	125	19
60	ESA-010-080	80	140	280	125	23.5

(to be continued)

CODE	Type	Size mm				Weight kg	Unit Per Pcs.
		d	L	H	D		
87 45 61	ESA-010-100	100	160	355	160	32.5	
62	ESA-010-125	125	180	370	160	49	
68	ESA-010-150	150	205	385	160	66	
69	ESA-010-200	200	230	535	315	95	
70	ESA-010-250	250	290	560	315	135	

Name of Mfr.: Niikura Kogyo Co., Ltd.

***Shut-off Operation: Wire operating type**

CODE	Type	Size mm				Weight kg	Unit Per Pcs.
		d	L	H	D		
87 45 63	ESA-010-025-W	25	85	245	100	9	
64	ESA-010-040-W	40	100	240	100	10	
65	ESA-010-050-W	50	120	240	100	13	
66	ESA-010-065-W	65	130	280	125	19	
67	ESA-010-080-W	80	140	280	125	23.5	

Name of Mfr.: Niikura Kogyo Co., Ltd.

JIS 16K***Shut-off Operation: Air operating type**

CODE	Type	Size mm				Weight kg	Unit Per Pcs.
		d	L	H	D		
87 45 81	ESA-016-025	25	85	245	100	9	
82	ESA-016-040	40	100	240	100	10	
83	ESA-016-050	50	120	240	100	13	
84	ESA-016-060	65	130	280	125	19	
85	ESA-016-080	80	140	280	125	23.5	
87 45 86	ESA-016-100	100	160	355	160	32.5	
87	ESA-016-125	125	180	370	160	49	
88	ESA-016-150	150	205	385	160	66	
89	ESA-016-200	200	230	535	315	95	
90	ESA-016-250	250	290	560	315	135	

Name of Mfr.: Niikura Kogyo Co., Ltd.

***Shut-off Operation: Wire operating type**

CODE	Type	Size mm				Weight kg	Unit Per Pcs.
		d	L	H	D		
87 45 91	ESA-016-025-W	25	85	245	100	9	
92	ESA-016-040-W	40	100	240	100	10	
93	ESA-016-050-W	50	120	240	100	13	
94	ESA-016-065-W	65	130	280	125	19	
95	ESA-016-080-W	80	140	280	125	23.5	

Name of Mfr.: Niikura Kogyo Co., Ltd.

Self-Closing Valves

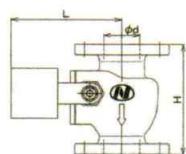
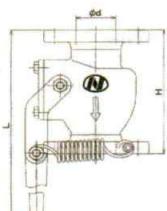
Válvulas de cierre automático 自動閉鎖弁 自关闭阀

Required in the middle of the drainpipe and need to be installed in a handle-operated position when directing the drain water that accumulates at the top of the deep tank to the bilge reservoir.

Regulations also require that a quick-acting self-closing valve be installed in the drainpipe that collects at the top of the deep-water tank. Available in spring type and counter-weight type. Connecting Flange is JIS 5K.



Spring Type



Counter-weight Type

39A-050~100 / 39A-W-050~100

CODE	Type	Model	Unit Per Pcs.			
			d	H	L	Weight Kg
87 46 61	Spring type	39A-50	50	165	375	7
		39A-65	65	180	375	10
		39A-80	80	240	470	16
		39A-100	100	280	465	23
87 46 65	Counter-weight type	39A-A-50	50	165	155	8
		39A-A-65	65	180	192	12
		39A-A-80	80	240	228	20
		39A-A-100	100	280	168	32

Name of Mfr.: Niikura Kogyo Co., Ltd.

Quick-Closing Valves (DIN)

Ductile Cast Iron for Marine Service

Pressure Rating PN 16/10

Válvulas de cierre rápido (DIN)

非常遮断弁 (DIN) 快关阀 (DIN)

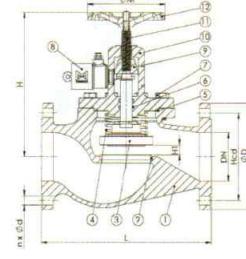
Angle and straight types metal seated quick closing valve made with Modular Cast Iron. It equipped with universal release cylinder for mechanical, hydraulic or pneumatic closing. Also has an integrated safety feature for fire release and raised face flanges.

Applications:

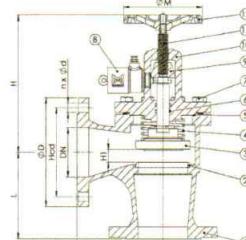
Fuel oil, Lubricating oil, Flammable hydraulic oil, Cargo oil, Non-flammable hydraulic fluid, Boiler feedwater, Condensate, Sea water, Water.



Straight



Angle

**Pressure and Temperature Range**

Size	Max. Press. At 180°C	Flange Rate
DN 15 - 150	10	PN16
DN 200 - 250	6	PN10

Material Specification

Component	Material	EN and/or DIN
Body	Ductile Cast Iron	EN-GJS400-18-LT
Bonnet	Ductile Cast Iron	EN-GJS400-18-LT
Disc	Stainless Steel	1.4301
Seat	Stainless Steel	1.4301
Stem	Stainless Steel	1.4301
Gasket	Rubber	NBR
O-ring	Rubber	FKM
Screw	Stainless Steel	1.4401
Release Cylinder	Copper Alloy	CW614N
Setting nut	Copper Alloy	CW617N
Handwheel	Cast Iron	GG25

How to order: CODE

Quick-closing valve (DIN), ductile cast iron, pressure rating PN 10,
TYPE of OPERATION, STRAIGHT or ANGLE, SIZE DN

Straight Type

CODE	DN	Size mm					Weight Kg	Unit Per Pcs.
		Hcd	D	L	H	M		
87 46 01	15	65	95	130	176	120	5.2	
02	20	75	105	150	178	120	5.9	
03	25	85	115	160	188	120	6.8	
04	32	100	140	180	192	120	8.4	
05	40	110	150	200	202	140	10.0	
87 46 06	50	125	165	230	224	140	14.0	
07	65	145	185	290	253	140	19.0	
08	80	160	200	310	253	160	26.0	
09	100	180	220	350	298	160	46.0	
10	125	210	250	400	338	200	54.0	
87 46 53	150	240	285	480	410	200	72.0	
54	200	295	340	600	575	400	150.0	
55	250	350	405	730	615	400	183.0	

MESON Model No.: 450.2.4.4.1

Angle Type

CODE	DN	Size mm					Weight Kg	Unit Per Pcs.
		Hcd	D	L	H	M		
87 46 11	15	65	95	90	169	120	5	
12	20	75	105	95	170	120	5.6	
13	25	85	115	100	179	120	6.4	
14	32	100	140	105	186	120	8.3	
15	40	110	150	115	205	140	9.9	
87 46 16	50	125	165	125	204	140	14	
17	65	145	185	145	233	140	19	
18	80	160	200	155	252	160	26	
19	100	180	220	175	278	160	41	
20	125	210	250	200	295	200	47	
87 46 56	150	240	285	225	335	200	63	

MESON Model No.: 451.2.4.4.1

Screwed Valves**Bronze Screwed 5 kgf/cm² Globe Valves B-2011**Bronce Atornillado 5 kgf/cm², Válvulas de globo B-2011青銅ねじ込み 5kgf/cm², 玉形弁 B-2011青铜螺纹式 5 kgf/cm² 截止阀 B-2011**Temperature & Pressure Rating**

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm ²]
Water, Oil & Gas non-shock	-29°C to +120°C (not freezing)	0.7
Saturated steam pressure	159°C	0.5

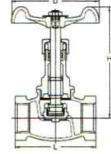
Note: Do not use for flammable gas or toxic gas.

CODE	Size		Taper Pipe Thread	Distance between Faces mm	Max. Extend Height mm	Unit Per Pcs.
	Nominal	Diam. mm				
75 18 01	1/4	6	PT 1/4	40	65	
02	3/8	10	3/8	50	87	
03	1/2	15	1/2	60	90	
04	3/4	20	3/4	70	105	
05	1	25	1	80	120	
75 18 06	1-1/4	32	PT 1-1/4	100	135	
07	1-1/2	40	1-1/2	110	145	
08	2	50	2	135	175	
09	2-1/2	65	2-1/2	160	200	
10	3	80	3	190	230	

Bronze Screwed 10 kgf/cm² Globe Valves B-2011Válvulas de Globo Paso Recto y Angular con Rosca Ambos Extremos de Bronce 10 kgf/cm²

青銅ねじ込玉形及びアングル弁

青铜旋入式球阀和角阀

**Temperature & Pressure Rating**

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm ²]
Water, Oil & Gas non-shock	-29°C to +120°C (not freezing)	1.4
Saturated steam pressure	185°C	1.0

Note: Do not use for flammable gas or toxic gas.

How to order: CODEScrewed valve, GLOBE or ANGLE, bronze, 10 kgf/cm², JIS B-2011, SIZE mm

CODE	Size mm		Taper Pipe Thread	Distance Between Faces mm	Max. Extended Height mm	Unit Per Pcs.
	Nominal	Diam. mm				
Globe Valves						
75 18 16	1/4	10	PT 1/4	50	90	
17	3/8	12	3/8	55	95	
18	1/2	15	1/2	65	110	
19	3/4	20	3/4	80	125	
20	1	25	1	90	140	
75 18 21	1-1/4	32	PT 1-1/4	105	170	
22	1-1/2	40	1-1/2	120	180	
23	2	50	2	140	205	
24	2-1/2	65	2-1/2	180	240	
25	3	80	3	200	275	
75 18 27	4	100	4	260	340	

Angle Valves

75 18 31	1/4	10	PT 1/4	28	90	
32	3/8	12	3/8	30	100	
33	1/2	15	1/2	32	105	
34	3/4	20	3/4	40	130	
35	1	25	1	45	145	
75 18 36	1-1/4	32	PT 1-1/4	55	175	
37	1-1/2	40	1-1/2	60	190	
38	2	50	2	70	225	
39	2-1/2	65	2-1/2	90	265	
40	3	80	3	100	275	
75 18 42	4	100	4	125	340	

Bronze Screwed 5 kgf/cm² Gate Valves B-2011Bronce Atornillado 5 kgf/cm² Válvulas de compuerta B-2011ブロンズねじ込み式 5kgf/cm²、仕切弁 B-2011青铜螺纹式 5 kgf/cm²、闸阀 B-2011**Temperature & Pressure Rating**

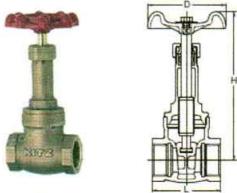
Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm ²]
Water, Oil & Gas non-shock	-29°C to +120°C (not freezing)	0.7
Saturated steam pressure	134°C	0.5

Note: Do not use for flammable gas or toxic gas.

CODE	Size		Taper Pipe Thread	Distance Between Faces mm	Max. Extend Height mm	Unit Per Pc.
	Nominal	Diam. mm				
75 18 52	1/2	15	PT 1/2	50	145	
	3/4	20	3/4	60	165	
	1	25	1	65	190	
	1-1/4	32	1-1/4	75	225	
	1-1/2	40	1-1/2	85	255	
	2	50	PT 2	95	305	
75 18 57	2-1/2	65	2-1/2	115	400	
	3	80	3	130	460	

Bronze Screwed 10 kgf/cm² Gate Valves B-2011

Bronce Atornillado 10 kgf/cm², Válvulas de compuerta B-2011
 ブロンズねじ込み 10 kgf/cm² 仕切弁 B-2011
 青铜螺纹式 10 kgf/cm² 阀门 B-2011



Temperature & Pressure Rating

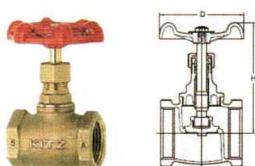
Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm ²]
Water, Oil & Gas non-shock	-29°C to +120°C (not freezing)	1.4
Saturated steam pressure	171°C	1.0

Note: Do not use for flammable gas or toxic gas.

CODE	Size		Taper Pipe Thread	Distance Between Faces mm	Max. Extend Height mm	Unit Per Pc.
	Nominal	Diam. mm				
75 18 71	1/2	15	PT 1/2	55	150	
	3/4	20	3/4	65	175	
	1	25	1	70	205	
	1-1/4	32	1-1/4	80	245	
	1-1/2	40	1-1/2	90	275	
	2	50	PT 2	100	325	
75 18 76	2-1/2	65	2-1/2	120	430	
	3	80	3	140	490	

Bronze Screwed 100 Psi Globe Valves

Válvulas de globo de bronce roscadas 100 Psi
 青銅ねじ込み式 100 Psi 玉形弁
 青铜螺纹 100 Psi 球阀



Temperature & Pressure Rating

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm ²]
Water, Oil & Gas non-shock	-29°C to +100°C (not freezing)	0.98
Saturated steam pressure	174°C	0.78

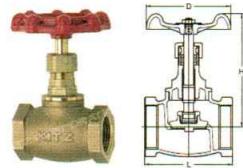
Note: Do not use for flammable gas or toxic gas.

CODE	Size		Dimensions mm		
	L	H	D		
75 19 01	PT 1/2	48	69	55	
	02	53	80	60	
	03	63	94	70	
	04	73	104	80	
	05	81	127	90	
75 19 06	PT 2	94	147	100	
	07	115	179	115	
	08	131	200	135	
	09	171	250	180	

Bronze Screwed 150 Psi Globe Valves

Válvulas de globo de bronce roscadas 150 Psi

青銅ねじ込み式 150 型玉形弁
 青铜螺纹 150 Psi 球阀



Temperature & Pressure Rating

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm ²]
Size 1/4" - 2"		
Water, Oil & Gas non-shock	-29°C to +120°C (not freezing)	1.6
Saturated steam pressure	183°C	0.98
Size 2-1/2" - 3"		
Water, Oil & Gas non-shock	-29°C to +120°C (not freezing)	1.37
Saturated steam pressure	183°C	0.98

Note: Do not use for flammable gas or toxic gas.

Unit Per Pcs.

CODE	Size		Dimensions mm		
	L	H	D		
75 19 16	PT 1/4	44	66	50	
	17	44	68	50	
	18	53	79	60	
	19	65	93	70	
	20	77	104	80	
75 19 21	PT 1-1/4	85	127	90	
	22	100	145	100	
	23	119	174	115	
	24	139	199	135	
	25	158	215	155	

Bronze Screwed 150 Psi Angle Valves

Válvulas de ángulo roscadas de bronce 150 Psi

ブロンズねじ込み式 150 型アングル弁
 青铜螺纹 150 Psi 角阀



Temperature & Pressure Rating

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm ²]
Size 1/4" - 2"		
Water, Oil & Gas non-shock	-29°C to +120°C (not freezing)	1.6
Saturated steam pressure	183°C	0.98
Size 2-1/2" - 3"		
Water, Oil & Gas non-shock	-29°C to +120°C (not freezing)	1.37
Saturated steam pressure	183°C	0.98

Note: Do not use for flammable gas or toxic gas.

Unit Per Pcs.

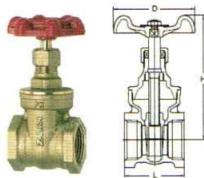
CODE	Size	Dimensions mm		
		L	H	D
75 19 31	PT 1/4	21	66	50
	32	3/8	24	50
	33	1/2	28	60
	34	3/4	34	70
	35	1	40	80
75 19 36	PT 1-1/4	47	127	90
	37	1-1/2	52	100
	38	2	61	115
	39	2-1/2	74	135
	40	3	85	155

Bronze Screwed 125 Psi Gate Valves

Válvulas de compuerta de bronce roscadas 125 Psi

青銅ねじ込み式 125 型 仕切弁

青铜螺纹 125 Psi 闸阀



Temperature & Pressure Rating

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm²]
Water, Oil & Gas non-shock	-29°C to +120°C (not freezing)	1.18
Saturated steam pressure	179°C	0.88

Note: Do not use for flammable gas or toxic gas.

Unit Per Pcs.

CODE	Size	Dimensions mm		
		L	H	D
75 19 51	PT 3/8	38	75	50
	52	1/2	42	50
	53	3/4	47	55
	54	1	50	60
	55	1-1/4	60	70
75 19 56	PT 1-1/2	63	126	80
	57	2	72	90
	58	2-1/2	80	100
	59	3	90	115

Bronze Screwed 150 Psi Gate Valves

Válvulas de compuerta de bronce roscadas 150 Psi

青銅ねじ込み式 150 型 仕切弁

青铜螺纹 150 Psi 闸阀



Temperature & Pressure Rating

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm²]
Size 3/8" - 2"		
Water, Oil & Gas non-shock	-29°C to +120°C (not freezing)	1.6
Saturated steam pressure	183°C	0.98

Size 2-1/2" - 3"

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm²]
Water, Oil & Gas non-shock	-29°C to +120°C (not freezing)	1.4
Saturated steam pressure	183°C	0.98

Note: Do not use for flammable gas or toxic gas.

Unit Per Pcs.

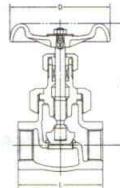
CODE	Size	Dimensions mm		
		L	H	D
75 19 70	PT 3/8	43	86	50
	71	1/2	48	55
	72	3/4	53	60
	73	1	62	70
	74	1-1/4	69	80
75 19 75	PT 1-1/2	75	167	90
	76	2	86	100
	77	2-1/2	105	115
	78	3	116	135

Ductile Iron Screwed 10K Globe Valves B-2051

Hierro dúctil roscada 10K , Válvulas de globo B-2051

ダクタイル鋳鉄 10K ねじ玉形弁

球墨铸铁 10K 螺纹球阀



Temperature & Pressure Rating

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm²]
Static water	120°C	1.4
Steam, Air, Gas, Oil	220°C	1.0

Unit Per Pcs.

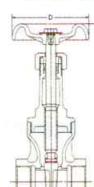
CODE	Size	Dimensions mm			Weight Kg
		L	H	D	
75 19 81	PT 3/8	64	107	60	0.65
	82	1/2	70	125	0.8
	83	3/4	80	125	1.04
	84	1	90	145	1.6
	85	1-1/4	110	162	2.3
75 19 86	PT 1-1/2	120	180	115	3.2
	87	2	140	198	5.04

Ductile Iron Screwed 10K Gate Valves B-2051

Hierro dúctil roscada 10K , Válvulas de compuerta B-2051

ダクタイル鋳鉄 10K ねじ込仕切弁

球墨铸铁螺纹 10K 闸阀



Temperature & Pressure Rating

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm²]
Static water	120°C	1.4
Steam, Air, Gas, Oil	220°C	1.0

Unit Per Pcs.

CODE	Size	Dimensions mm			Weight Kg
		L	H	D	
75 19 91	PT 1/2	60	150	60	0.65
	92	3/4	70	171	0.818
	93	1	75	198	1.212
	94	1-1/4	85	233	1.849
	95	1-1/2	95	274	2.661
75 19 96	2	105	318	115	4.212

Air & Oil Cocks

Bronze Air Cocks

with Lever Handle Male & Hose Ends

Grifos Purga de Bronce 青銅エアコック 青铜气旋塞



Unit Per Pc.

CODE	75 20 41	75 20 42	75 20 43
Nominal Size	PT-1/4	PT-3/8	PT-1/2
Thread Per Inch	9	10.5	14

75

Valves & Cocks

Bronze Two Way Air Cocks

with Lever Handle Male & Hose Ends

Grifos Purga 2 Vias de Bronce

青銅二又エアコック 青铜两通气旋塞



Unit Per Pc.

CODE	75 20 46	75 20 47
Nominal Size	PT-1/4	PT-3/8
Thread Per Inch	9	10.5

Brass Pee Cocks

with Tee Handle

Grifos Purga de Latón 黄銅ピーコック 黄铜P形旋塞



Unit Per Pc.

CODE	75 20 51	75 20 52	75 20 53	75 20 54	75 20 55
Nominal Size	PT-1/8	PT-1/4	PT-3/8	PT-1/2	PT-3/4

Brass Meter Cocks

with Lever Handle Both Female Ends

Grifos Purga de Latón

黄銅メートルコック 黄铜仪表旋塞



Unit Per Pc.

CODE	75 20 61	75 20 62	75 20 63
Nominal Size	PS-1/4	PS-3/8	PS-1/2

Bronze Drain Cocks

with Lever Handle Male & Female Ends

Grifos de Purga de Bronce

青銅製ドレインコック (アスタップ) 青铜清洗龙头



Unit Per Pc.

CODE	75 20 66	75 20 67	75 20 68	75 20 69	75 20 70
Nominal Size	PT-1/4	PT-3/8	PT-1/2	PT-3/4	PT-1

Bronze Locking Bib Cocks

with Male End

Llave Paso Bronce, Macho

青銅錠前カラム 青铜锁紧弯嘴旋塞



Unit Per Pc.

CODE	75 20 76	75 20 77	75 20 78	75 20 79
Nominal Size	M20	M24	M30	M36

Bronze Union Valves

Male & Female Ends

Grifo Union Macho-Hembra, Bronce

青銅ユニオンバルブ 青钢管阀



Unit Per Pc.

CODE	75 20 81	75 20 82	75 20 83	75 20 84
Nominal Size	PT-3/8	PT-1/2	PT-3/4	PT-1

Needle Valves

Brass Needle Valves

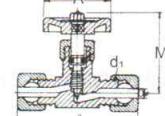
with Ring Joint & Nut for Copper Tubing

Válvulas de aguja de latón 真鍮ニードルバルブ 黄铜针阀

For controlling flow of liquids or gases requiring close regulating. Made of brass rods and brass except for the gland of "O" rings. Applicable temperature will be -20°C to 100°C and the maximum pressure will be 3.43 MPa [35 kgf/cm²]. Recommended for use at less than 80% of maximum load pressure at temperatures between 80°C and 100°C.

Brass Needle Straight Valves

with Ring Joint Nut Both Ends



Válvulas rectas de aguja de latón

真鍮ニードルストレートバルブ

黄铜针形直通阀

Unit Per Pc.

CODE	Nominal Size	For Tube OD "D" mm	Thread d ₁	Length L mm	Height M mm
75 21 01	6 × 1/4	6	PF-1/4	57	37
02	8 × 3/8	8	" 3/8	68	42
03	10 × 3/8	10	" 3/8	85	50
04	12 × 1/2	12	" 1/2	91	50
05	14 × 1/2	14	" 1/2	93	50

Brass Needle Straight Valves

with Ring Joint Nut and Male Thread

Válvulas rectas de aguja de latón

真鍮ニードルストレートバルブ

黄铜针形直通阀

Unit Per Pc.

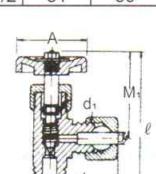
CODE	Nominal Size	For Tube OD "D" mm	Thread		Length L mm	Height M mm
			d ₁	d ₂		
75 21 06	6 × 1/8	6	PF-1/4	PT-1/8	57	37
07	6 × 1/4	6	" 1/4	" 1/4	53	37
08	8 × 1/4	8	" 3/8	" 1/4	66	42
09	10 × 3/8	10	" 3/8	" 3/8	77	50
10	12 × 1/2	12	" 1/2	" 1/2	80	50
75 21 11	14 × 1/2	14	PF-1/2	PT-1/2	81	50

Brass Needle Angle Valves

with Ring Joint Nut at Outlet

Ángulo de aguja de latón Válvulas

真鍮ニードルアンダル弁 黄铜型角阀



Unit Per Pc.

CODE	Nominal Size	For Tube OD "D" mm	Thread		Length L mm	Height M mm
			d ₁	d ₂		
75 21 16	6 × 1/8	6	PF-1/4	PT-1/8	55	27
17	6 × 1/4	6	" 1/4	" 1/4	58	27
18	8 × 1/4	8	" 3/8	" 1/4	65	28
19	10 × 3/8	10	" 3/8	" 3/8	73	34
20	12 × 1/2	12	" 1/2	" 1/2	76	39
75 21 21	14 × 1/2	14	PF-1/2	PT-1/2	76	40

Brass Needle Valves

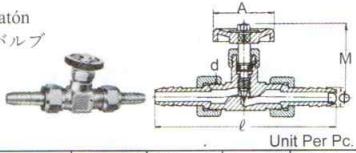
with Corrugated Hose Ends

Válvulas de aguja de latón ホース口付真鍮ニードルバルブ 黄铜针阀

For controlling flow of liquids or gases requiring close regulating. Brass rod material made body and bonnet except for the gland "O" rings. The applicable temperature will be -20°C to 100°C and the maximum pressure will be 1.47 MPa [15 kgf/cm²]. Recommended for use at less than 80% of maximum load pressure at temperatures between 80°C to 100°C.

Brass Needle Straight Valves with Both Corrugated Hose Ends

Válvulas rectas de aguja de latón
真鍮ニードルストレートバルブ
黄铜针形直通阀

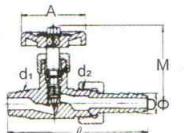


CODE	Nominal Size	For Hose ID mm	Thread d ₁	Wheel Dia.	Length L mm	Height M mm
75 21 36	8 × 1/4	8	PF-1/4	35	95	37
37	9.5 × 3/8	9.5	" 3/8	35	109	42
38	11 × 3/8	11	" 3/8	35	115	42

Brass Needle Straight Valves

with Corrugated Hose End & Male Thread

Válvulas rectas de aguja de latón
真鍮ニードルストレートバルブ 黄铜针形直通阀

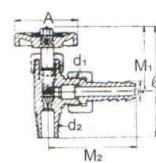


CODE	Nominal Size	For Hose ID. mm	Thread		Length L mm	Height M mm
			d ₁	d ₂		
75 21 41	8 × 1/8	8	PF-1/4	PT-1/8	72	37
42	8 × 1/4	8	" 1/4	" 1/4	73	37
43	9.5 × 1/4	9.5	" 3/8	" 1/4	87	42
44	11 × 1/4	11	" 3/8	" 1/4	89	42

Brass Needle Angle Valves

with Corrugated Hose End & Male Thread

Ángulo de aguja de latón Válvulas
真鍮ニードルアンダル弁 黄铜针型角阀



CODE	Nominal Size	For Hose ID. mm	Thread		Length L mm	Height M mm
			d ₁	d ₂		
75 21 46	8 × 1/8	8	PF-1/4	PT-1/8	55	46
47	8 × 1/4	8	" 1/4	" 1/4	58	46
48	9.5 × 1/4	9.5	" 3/8	" 1/4	65	54
49	11 × 3/8	11	" 3/8	" 1/4	65	56

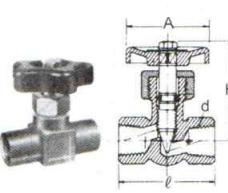
Brass Needle Valves

Threaded

Válvulas de Agua Roscada de Latón

ねじ込式真鍮ニードルバルブ 黄铜针阀

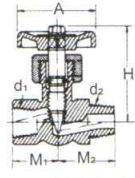
For controlling flow of liquids or gases requiring close regulating. Brass rod material made body and bonnet with nitrile "O" rings and heat-resist plastic handles. The applicable temperature is -20°C to 100°C and the maximum pressure is 5.88 MPa [60 kgf/cm²] at 80°C.



CODE	Nominal Size	Thread d	Dimensions mm		
			L	H	A
75 21 51	1/8	PF-1/8	35	37	35
52	1/4	" 1/4	40	45	35
53	3/8	" 3/8	50	50	45
54	1/2	" 1/2	70	65	55

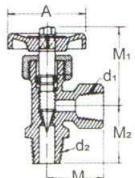
Brass Needle Straight Valves Male & Female Ends

Válvulas rectas de aguja de latón
真鍮ニードルストレートバルブ
黄铜针形直通阀



Unit Per Pcs.

CODE	Nominal Size	Thread		Dimensions mm		
		d ₁	d ₂	M ₁ +M ₂	H	A
75 21 56	1/8 × 1/8	PT-1/8	PT-1/8	37	37	35
57	1/4 × 1/4	" 1/4	" 1/4	45	45	35
58	3/8 × 3/8	" 3/8	" 3/8	56	50	45
59	1/2 × 1/2	" 1/2	" 1/2	72	65	55



Unit Per Pcs.

CODE	Nominal Size	Thread		Dimensions mm		
		d ₁	d ₂	M ₁ +M ₂	H	A
75 21 61	1/8 × 1/8	PT-1/8	PT-1/8	56	20	35
62	1/4 × 1/4	" 1/4	" 1/4	64	25	35
63	3/8 × 3/8	" 3/8	" 3/8	75	30	45
64	1/2 × 1/2	" 1/2	" 1/2	97	38	55

Butterfly Valves

Butterfly Valves

Válvulas de Mariposa バタフライバルブ 碟形阀

Compared with conventional gate and globe valves, butterfly valves achieve high performance near to perfection with its pressure resistance and durability.

Especially in vessels, the Butterfly Valves enjoy high reliability and when compared with the conventional valves, the Butterfly Valves are excellent in the following aspects: (1) light and compact, (2) maintenance is easy, (3) labour-saving ease of operation, and (4) low cost.

Model 700G/705G

Standard Specifications

Nominal Size	40 to 300 mm	350 to 600mm
Applicable Flange Standard	JIS 5K/10K, ANSI 125/150 lb, DIN NP10/16, BS 4504 PN10/16, BS 10"E"	
	*Model 700G: only JIS 5K/10K is available from 350-600 mm	
Face to Face Dimensions	JIS B2002 (46 series)/ ISO 5752 wafer butterfly valve(short)	
Max. Working Pressure	1.0 MPa	
Working Temperature Range	NBR : -10 to 80°C EPDM : -20 to 120°C (on request)	

Standard Materials

Body	Ductile iron, JIS FCD450	Cast iron, JIS FC 250
Disc	316 stainless steel, JIS SCS14	304 stainless steel, JIS SCS13
	PPS (40 to 200 mm)	
Stem	Ductile iron, JIS FCD 450 (80 to 300 mm)	Ductile iron, JIS FCD 450 (with hard chrome plating)
Seat Ring	SUS420J2	NBR, EPDM

Actuators

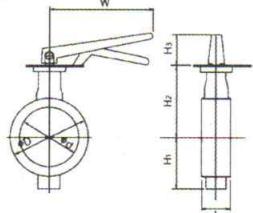
Lock Lever	40 to 200 mm	-
Worm Gear	40 to 300 mm	350 to 600 mm
Center Handle	40 to 300 mm	-
Pneumatic Cylinder	40 to 300 mm	350 to 600 mm
Motorized	40 to 300 mm	350 to 600 mm

Remark: *Never use an EPDM rubber seat ring if the valve being used for oil or for a fluid containing even a slight amount of oil.

The 316 stainless steel (JIS SCS14) rib disc comes standard from 50 mm to 300 mm.

1. Lock Lever Actuator

Generally used in small diameters. Opening and closing operations can be done with a light one-touch device, by turning the lever to only 90 degrees. Moreover, flow regulation is available with a ten-step locking device. Opening degrees are indicated by the tip of the lever

**Model 700G (Wafer Type)****How to order: CODE**

Butterfly valve, wafer type with lock lever, NOMINAL SIZE

Unit Per Pcs.

CODE	Nom Size		Dimension (mm)						Weight kg	
	mm	Inch	φd	φD	L	H1	H2	H3		
75 22 08	40	1-1/2	45	80	35	61	132	66	200	2.1
01	50	2	56	90	43	68	66	200		2.4
02	65	2-1/2	69	115	46	79	151	66		3.1
03	80	3	84	126	46	86	156	66		3.2
04	100	4	104	146	52	103	167	66		4
75 22 05	125	5	130	181	56	118	191	92	300	6.7
06	150	6	153.5	211	56	135	202	92	300	8.3
07	200	8	199	256	60	177	227	97	350	12.1

Name of Mfr.: Tomoe Valve Co., Ltd. Model: 700G-1T

Model 705G (Semi Lugged Type)**How to order: CODE**

Butterfly valve, semi lugged type with lock lever, NOMINAL SIZE

Unit Per Pcs.

CODE	Nom Size		Dimension (mm)						Weight kg	
	mm	Inch	φd	φD	L	H1	H2	H3		
75 22 09	50	2	56	90	43	85	138	66	200	3.1
10	65	2-1/2	69	115	46	94	151	66	200	4.1
28	80	3	84	126	46	109	156	66	200	4.6
29	100	4	104	146	52	117	167	66	200	5.6
30	125	5	130	181	56	143	191	92	300	9.3
75 22 46	150	6	153.5	211	56	164	202	92	300	12.3
47	200	8	199	256	60	186	227	97	350	16.7

Name of Mfr.: Tomoe Valve Co., Ltd. Model: 705G-1T

2. Worm Gear Actuator

Gear reduction is available by the worm and worm wheels incorporated, opening the disc very lightly, leading to non-step adjustment of flow.

In addition, a stopper bolt is fitted to the fully closed and fully opened positions, hence accurate positions can be taken.

Furthermore, the opening angle of the disc can be read by the indicator at the upper part of the gear box. "Close" is effected by revolving clockwise, and "Open" by revolving anticlockwise, with the manual handle.



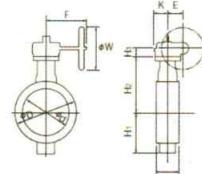
Wafer Type

Model: 700G



Semi Lugged Type

Model: 705G

**Model 700G (Wafer Type)****How to order: CODE**

Butterfly valve, wafer type with worm gear, NOMINAL SIZE

Unit Per Pcs.

CODE	Nom Size		Dimension (mm)						Weight kg		
	mm	Inch	φd	φD	L	H1	H2	H3			
75 22 27	40	1-1/2	45	80	35	61	132	29.5	160	100	3.8
11	50	2	56	90	43	68	138	29.5	160	100	4.1
12	65	2-1/2	69	115	46	79	151	29.5	160	100	4.8
13	80	3	84	126	46	86	156	29.5	160	100	4.9
14	100	4	104	146	52	103	167	29.5	160	100	5.7
75 22 15	125	5	130	181	56	118	191	34.5	173.5	160	9.6
16	150	6	153.5	211	56	135	202	34.5	173.5	160	11.2
17	200	8	199	256	60	177	227	41.5	198	200	18
18	250	10	253	322	68	215	280	41.5	198	200	26
19	300	12	302	367	78	253	312	48	222.5	200	39
75 22 20	350	14	337	410	78	276	348	48	222.5	280	58
21	400	16	394	469	102	338	383	50	266	280	80
22	450	18	441	525	114	368	413	50	266	280	103
23	500	20	492	580	127	403	453	50	266	280	130
24	550	22	540	608	154	410	523	-	392	450	199
75 22 25	600	24	589	658	154	445	558	-	392	450	233
61	650	26	634	708	170	468	647	-	421	390	350
62	700	28	684	756	165	496	722	-	454	390	410
63	750	30	731	810	190	540	762	-	454	390	495
64	800	32	781	860	190	570	792	-	454	390	575

Name of Mfr.: 40-500 mm & 600 mm - Tomoe Valve Co., Ltd.

Model 700G-2U

550 mm & 650-800 mm - Okumura Engineering Corp.

Model 615X

Model: 705G (Semi Lugged Type)**How to order: CODE**

Butterfly valve, semi lugged type with worm gear, NOMINAL SIZE

Unit Per Pcs.

CODE	Nom Size		Dimension (mm)						Weight kg		
	mm	Inch	φd	φD	L	H1	H2	H3			
75 22 65	50	2	56	90	43	85	138	29.5	160	100	4.8
66	65	2-1/2	69	115	46	94	151	29.5	160	100	5.8
67	80	3	84	126	46	109	156	29.5	160	100	6.3
68	100	4	104	146	52	117	167	29.5	160	100	7.3
69	125	5	130	181	56	143	191	34.5	173.5	160	12.2
75 22 70	150	6	153.5	211	56	164	202	34.5	173.5	160	16
71	200	8	199	256	60	186	227	41.5	198	200	23
72	250	10	253	322	68	215	280	41.5	198	200	32
73	300	12	302	367	78	253	312	48	222.5	200	45
74	350	14	337	410	78	276	348	48	222.5	280	63
75 22 75	400	16	394	469	102	338	383	50	266	280	91
76	450	18	441	525	114	368	413	50	266	280	115
77	500	20	492	580	127	403	453	50	266	280	145
78	550	22	540	608	154	410	523	-	392	450	199
79	600	24	589	658	154	445	558	-	392	450	223
75 22 80	650	26	634	708	170	468	647	-	421	390	350
81	700	28	684	756	165	496	722	-	454	390	410
82	750	30	731	810	190	540	762	-	454	390	495
83	800	32	781	860	190	570	792	-	454	390	575

Name of Mfr.: 50-500 mm & 600 mm - Tomoe Valve Co., Ltd.

Model 705G-2U

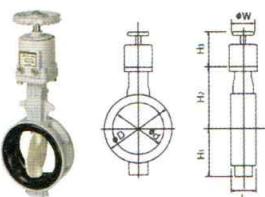
550 mm & 650-800 mm - Okumura Engineering Corp.

Model 615X

3. Center Handle Actuator

How to order: CODE

Butterfly valve, wafer type with center handle, NOMINAL SIZE



Unit Per Pcs.

CODE	Dimension (mm)							Weight Kg			
	Nom Size mm	Nom Size Inch	φd	φD	L	H1	H2	H3	W		
75 22 31	40	1-1/2	45	80	35	61	132	136	100	4.4	
	32	50	56	90	43	68	138	136	100	4.7	
	33	65	2-1/2	69	115	46	79	151	136	100	5.4
	34	80	3	84	126	46	86	156	136	100	5.5
	35	100	4	104	146	52	103	167	136	100	6.3
75 22 36	125	5	130	181	56	118	191	133	100	9.2	
	37	150	6	153.5	211	56	135	202	133	100	10.8
	38	200	8	199	256	60	177	227	151	200	17.5
	39	250	10	253	322	68	215	280	151	200	25.1
	40	300	12	302	367	78	253	312	161	200	32.1
75 22 41	350	14	337	410	78	276	348	409	355	75	
	42	400	16	394	469	102	338	383	409	355	97
	43	450	18	441	525	114	368	413	409	355	121
	44	500	20	492	580	127	403	453	409	355	148
	45	600	24	584	682	154	458	528	498	450	244

Name of Mfr.: Tomoe Valve Co.,Ltd.

700G-2G (40 mm - 300 mm)

700G-2R (350 mm - 600 mm)

Besides the above types of actuator, the following types are also available on request:

1. Pneumatic Cylinder
2. Motorized

Double Flanged Large Diameter Butterfly Valves

Válvulas de mariposa de gran diámetro y doble brida

ダブルフランジ式大口径バタフライバルブ 双法兰大口径蝶阀

Model 700E

For various applications in water treatment, shipbuilding, air conditioning, petrochemical, power generation and other industries.

Standard Specifications

Valve Nominal Size	650 to 1,350 mm
Applicable Flange Standard	JIS 5K/10K
Face to face Dimensions	Manufactured standard
Max. Working Pressure	1.0 MPa
Working Temperature Range	NBR: -10 to 80 deg. C EPDM: -20 to 120 deg. C (on request)

Standard Materials

Body	FC 250
Disc	FCD 450 (hard chrome plating), SCS13
Stem	SUS403
Seat Ring	EPDM* / NBR

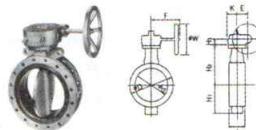
Remark: *Never use an EPDM rubber seat ring if the valve being used for oil or for a fluid containing even a slight amount of oil.

Worm Gear Actuator

Actuador de tornillo sin fin

ウォームギア・アクチュエーター

蜗轮传动执行机构



How to order: CODE

Butterfly valve, double flangd, wafer type with worm gear, NOMINAL SIZE

CODE	Nom Size		Dimension (mm)						Weight kg			
	mm	Inch	φd	φD	L	H1	H2	H3	F	W		
75 22 51	650	26	627	845	170	558	510	65	400	450	363	
	52	700	28	670	905	180	629	560	75	457	500	487
	53	750	30	723	970	190	659	590	75	457	500	547
	54	800	32	772	1,020	200	679	620	75	457	500	617
	55	850	34	822	1,070	210	709	650	100	490	500	780
75 22 56	900	36	858	1,120	230	759	685	100	490	500	855	
	57	1,000	40	975	1,235	250	819	745	100	490	500	1,384
	58	1,100	44	1,070	1,345	280	874	820	100	490	500	1,584
	59	1,200	48	1,170	1,465	300	948	880	100	490	500	1,984
	60	1,350	54	1,314	1,630	330	1,030	960	151	675	600	2,436

Name of Mfr.: Tomoe Valve Co.,Ltd. Model: 700E-2S

Flange Dimensions

Nominal Size	JIS 5K			JIS 10K		
	mm	Inch	Long Bolts & Nuts	Hex Bolts	Long Bolts & Nuts	Hex Bolts
650	26	16-M24x285x90	16-M24x65x54	16-M30x310x60	16-M30x80x66	
700	28	16-M24x295x50	16-M24x65x54	16-M30x320x60	16-M30x80x66	
750	30	16-M30x320x60	16-M30x75x66	16-M30x335x60	16-M30x80x66	
800	32	16-M30x335x60	16-M30x75x66	20-M30x345x60	16-M30x80x66	
850	34	16-M30x345x60	16-M30x75x66	20-M30x360x60	16-M30x80x66	
900	36	16-M30x360x60	16-M30x75x66	20-M30x385x65	16-M30x85x66	
1,000	40	20-M30x385x65	16-M30x85x66	20-M36x420x75	16-M36x100x78	
1,100	44	20-M30x420x65	16-M30x85x66	20-M36x450x80	16-M36x100x78	
1,200	48	24-M30x445x65	16-M30x85x66	24-M36x475x80	16-M42x525x80	
1,350	54	24-M30x475x65	16-M30x85x66	24-M42x100x90	-	

Nominal Size	ASME B 16.47 Series A			BS 4504 NP10, DIN PN10		
	mm	Inch	Long Bolts & Nuts	Hex Bolts	Long Bolts & Nuts	Hex Bolts
650	26	16-U1 1/4x390x70	16-U1 1/4x10x70	16-U1 200x45	-	-
	700	28	20-U1 1/4x410x70	16-U1 1/4x110x70	16-M24x210x50	-
	750	30	20-U1 1/4x425x70	16-U1 1/4x125x70	20-M24x250x50	-
	800	32	1/2x460x80	16-U1 1/4x125x80	16-M27x280x60	8-M27x60x50
	850	34	24-U1 1/2x475x80	16-U1 1/4x135x80	16-M27x305x60	16-M27x65x54
900	36	24-U1 1/2x510x80	24-U1 1/2x510x80	16-M30x335x60	16-M30x65x54	
1,000	40	28-U1 1/2x530x80	28-U1 1/2x530x80	20-M30x370x65	16-M30x75x66	
1,100	44	32-U1 1/2x580x80	32-U1 1/2x580x80	20-M33x400x65	16-M33x90x72	
1,200	48	36-U1 1/2x615x80	36-U1 1/2x615x80	24-M36x475x80	16-M36x100x78	
1,350	54	-	-	-	-	-

Besides the above model, the following types of actuators are available on request:

1. Double-acting pneumatic cylinder type
2. Three phase motor actuator type

Guide of how to order

When ordering, please specify the following points:

How to order: 75 - 22 - 26

Butterfly valve, with the following information:

- ... 1. Type pipe connection Water Type, or Double Flanged Type
- ... 2. Flange standard JIS (kgf/cm²), ANSI (lbs)BS, DIN, etc.
- ... 3. Nominal diameter mm
- ... 4. Name of fluid
- ... 5. Pressure and temperature of fluid
- ... 6. Flow m³/min.
- ... 7. Material of body, disk, seat
- ... 8. Type of actuator
- ... 9. Operating power source
- 10. Classification society of required

Butterfly Valves

Double Flanged with Gear Box Nodular Cast Iron, Undrillle Model: KL700

Válvulas de Mariposa バタフライバルブ 碟形閥

A nodular cast iron double flanged butterfly valve with gear box. Flanges are undrilled.

Suitable for JIS 5K, 10K, PN10 & PN16.

Disc: Stainless steel, Seat: NBR



How to order: CODE

Butterfly valve, double flangd, wafer type with worm gear, NOMINAL SIZE

CODE	Size mm			Product No.	Unit Per Pcs.
	Nom Size	Flange Dia	Face to Face		
75 23 02	50	165	41	KL700050	
03	65	185	40	KL700065	
04	80	200	60	KL700080	
05	100	229	60	KL700100	
06	125	254	100	KL700125	
75 23 07	150	285	100	KL700150	
08	200	343	100	KL700200	
09	250	406	110	KL700250	
10	300	483	110	KL700300	

Name of Mfr.: Alligator

Butterfly Valves

**Double Flanged with Gear Box
Nodular Cast Iron Model: KL710**

Válvulas de Mariposa バタフライバルブ 碟形閥

A nodular cast iron double flanged butterfly valve with gear box.

Nominal Pressure: 5 kgf/cm²

Disc: Stainless steel, Seat: NB



Unit Per Pcs.

CODE	Size mm	Dimensions mm			Product No.	Unit Per Pcs.	
		Face to Face	Flange Dia	Flange Bolt Hole			
75 23 11	50	43	165	105	4	15	KL710050
12	65	45	185	130	4	15	KL710065
13	80	46	200	145	4	19	KL710080
14	100	60	229	165	8	19	KL710100
15	125	100	254	200	8	19	KL710125
75 23 16	150	100	285	230	8	19	KL710150
17	200	100	343	280	8	23	KL710200
18	250	110	406	345	12	23	KL710250
19	300	110	483	390	12	23	KL710300

Name of Mfr.: Alligator

Butterfly Valves

Double Flanged with Gear Box Nodular Cast Iron Model: KL720

Válvulas de Mariposa バタフライバルブ 碟形閥

A nodular cast iron double flanged butterfly valve with gear box.

Nominal Pressure: 10 kgf/cm²

Disc: Stainless Steel, Seat: NBR



Unit Per Pcs.

CODE	Size mm	Dimensions mm			Product No.	Unit Per Pcs.	
		Face to Face	Flange Dia	Flange Bolt Hole			
75 23 20	50	43	165	120	4	19	KL720050
21	65	45	185	140	4	19	KL720065
22	80	46	200	150	4	19	KL720080
23	100	60	229	175	8	19	KL720100
24	125	100	254	210	8	23	KL720125
75 23 25	150	100	285	240	8	23	KL720150
26	200	100	343	290	12	23	KL720200
27	250	110	406	355	12	25	KL720250

Name of Mfr.: Alligator

Diaphragm Valves

Diaphragm Valves

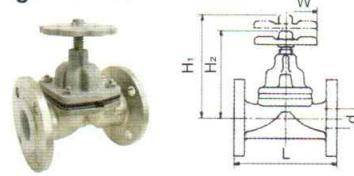
Válvulas de Diafragma ダイアフラムバルブ 隔膜閥

The basic construction of the diaphragm valve is quite simple. It is composed of three principal units called body, bonnet and diaphragm. It is particularly suitable for service lines handling

corrosive, abrasive, viscous or fibrous fluids with the following advantages:

1. The most economical corrosion/abrasion resisting valve available today – versatile body and diaphragm materials.
2. Permanent bubble tightness against slurry, fibre and gases – resilient closure.
3. No contamination. The most suitable for the nuclear and food service – no gland packing.
4. Simple in-line maintenance – easy to disassemble and reassemble. Can be made without removing the body from the pipeline.

1. Weir Type Handwheel Operated Diaphragm Valves



Maximum Working Pressure at Room Temperature

Nominal Size	Diaphragm	Unit kgf/cm ²		
		Body	Rubber Diaphragm	Teflon Diaphragm
15	Cast Iron	14	10	10
20	Stainless Steel	14	10	10
25	Bronze	14	10	7
40	Rubber Lined	14	10	7
50		14	7	7
65		10	7	7
80		10	7	7
100		10	5	7

Dimensions

Nominal Size	Actual Diam. d	Face to Face		Wheel Diam.	Open Height
		Unlined	Rubber Lines		
15	13	102	107	63	115
20	19	118	123	63	125
25	25	127	132	80	129
40	38	159	165	100	155
50	51	191	197	125	172
65	64	216	222	125	209
80	76	254	260	160	235
100	102	305	313	224	297

2. Weir Type Piston Operated Reverse Acting Valves (Air-to-Open, Spring-to-Close)

When it is desirable to close the valve in case of a failure in the supply of operating pressure, this type of valve is recommended. Actuators are supplied in 2 kgf/cm² and 4 kgf/cm² operating pressure.

3. Weir Type Piston Operated Direct Acting Valves (Spring-to-Open, Air-to-Close)

When it is desirable to open the valve in case of a failure in the supply of operating pressure, this type of valve is recommended.

4. Weir Type Piston Operated Double Acting Valves (Air-to-Open, Air-to-Close)

Being a springless type valve, the double acting valve is much more compact than the reverse acting valve and the direct acting valve. This type of valve may serve as either a normal open type or a normal closed type valve depending on the control scheme.

5. Straight Way Type Handwheel Operated Valves

The hand wheel operated valve has the usual features of the weir type diaphragm valve plus the features of the sluice valves. When fully opened, it forms a straight-transfer passage as in a pipeline.

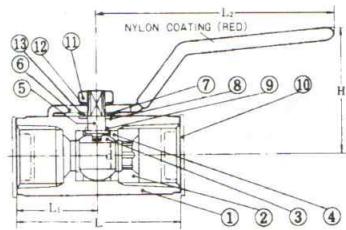
Guide of how to order

When ordering, please specify the following points,

How to order: 75 - 23 - 01

Diaphragm valve, with the following information:

1. Name of fluid to be used ...
2. Type of flow Weir type, or straight way type
3. Size Nominal size
4. End connection..... Screwed or flanged
5. Body material..... Cast iron, ductile iron, etc.
6. Diaphragm material ... Neoprene, natural rubber, etc.
7. Operation Handwheel operated or pneumatically operated



No.	Description	Material
1	Valve Body	SUS 316
2	End Cap	SUS 316
3	Ball	SUS 316
4	Seat	Reinforced Teflon
5	Stem	SUS 316
6	Handle	SUS 430
7	Gland Washer	SUS 316
8	A Packing	Reinforced Teflon
9	B Packing	Reinforced Teflon
10	Dust Proof Cap	Polyethylene
11	Nut	SUS 316
12	Toothed Lock Washer	SUS 304
13	Conical Spring Washer	SUS 304

Unit Per Pcs.

CODE	Size	Dimensions mm				
		d	L	L ₁	L ₂	H
75 24 11	PT 1/4	5	40	19	60	31
	12	3/8	7.5	44.5	21.7	80
	13	1/2	9	54.5	26.5	80
	14	3/4	12.5	61	30	51
	15	1	16	68.5	34.5	100
75 24 16	PT 1-1/4	21	78	39	150	66
	17	1-1/2	24	82	41	150
	18	2	32	100	50	75

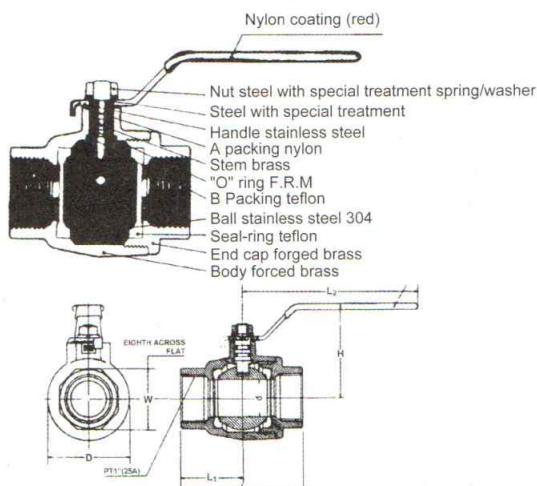
* Screwed end available BSPT, NPT.

Ball Valves

Forged Brass Screwed End Ball Valves

Válvulas de Bola Roscada de Latón Forjado

黄銅ねじ込ボールバルブ 螺旋式铸造黃铜球阀



Service fluid	Water, oil, gas, air, etc.
Max. working pressure	1.96 MPa [20 kgf/cm ²]
Range of temperature used	-10°C +120°C

Unit Per Pcs.

CODE	Size	Dimensions mm			
		d	L	H	W
75 24 01	PT 3/8	10	51.1	46	22
	02	15	61	48	27
	03	20	74.5	55	32
	04	25	90.5	59	41
	05	32	103.8	74	50
75 24 06	PT 1-1/2	40	117	80	55
	07	50	135	88	70

* Screwed end available BSPT, NPT.

Stainless Steel Screwed End Ball Valves

Válvulas de Bola Roscada de Acero-inoxidable

ステンレスねじ込ボールバルブ 螺旋式不锈钢球阀

Service fluid	Oil, gas and corrosive chemical liquid
Max. working pressure	3.29 MPa [40 kgf/cm ²]

Ball Valves Reduced Bore Type

Válvulas de bola, Tipo de paso reducido

ボールバルブ プレデュースドボアタイプ

球閥縮径型



The stream through the reduced bore valve is one pipe size smaller than the valve's pipe size.

Suitable medium: Water, oil, air and corrosive liquid.
Nominal pressure: 1.6-6.4 MPa. Blow out proofstem full port.
Investment casting body. Locking device. Temperature: -20°C to +232°C

SUS304

Unit Per Pcs.

CODE	Size BSPT Female	Alligator No.	CODE	Size BSPT Female	Alligator No.
75 33 01	1/4"	KR265006	75 33 05	1"	KR265025
	02	KR265010		1-1/4"	KR265032
	03	KR265015		1-1/2"	KR265040
	04	KR265020		2"	KR265050

SUS316

75 33 11	1/4"	KR270006	75 33 15	1"	KR270025
12	3/8"	KR270010	16	1-1/4"	KR270030
13	1/2"	KR270015	17	1-1/2"	KR270040
14	3/4"	KR270020	18	2"	KR270050

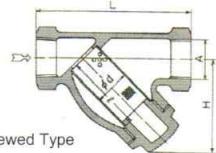
Name of Mfr.: Alligator

Y-strainers

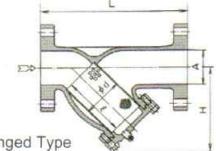
Pipeline Y-strainers

Filtros-Y para Oleoducto Y型ストレーナー 管道Y-过滤器

Installed into pipelines to protect traps, regulators, pumps, meters, burners and lubricators against damage caused by foreign matters such as scale, dirt, etc. Among the wide variety of types of sizes of strainers, the most common models have been coded with the undermentioned specifications.

Bronze Y-strainer

Screwed Type



Flanged Type

Standard Feature

Max working pressure	Screwed type	20 kgf/cm ² *65-80A 16 kgf/cm ²
	Flanged type	10 kgf/cm ²
Max working temperature	Screwed type	200°C *65-80A 120°C
	Flanged type	120°C
Material	Body (Screwed)	Cast Iron (FCD450) *65-80A-FC200
	Body (Flanged)	Cast Iron (FC200)
Connection	Screen	Stainless Steel (SUS304)
	Screw thread	Rc
	Flange rating	JIS 10 kgf/cm ²

How to order: CODE

Pipeline Y-strainer, cast iron, PRESSURE, TYPE of CONNECTION, Size mm

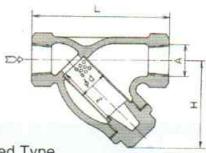
Standard Feature

Max working pressure	Screwed type	16 kgf/cm ²
	Flanged type	10 kgf/cm ²
Max working temperature		120°C
Material	Body	Bronze Casting (CAC406)
	Screen	Stainless Steel (SUS304)
Connection	Screw thread	Rc
	Flange rating	JIS 10 kgf/cm ²

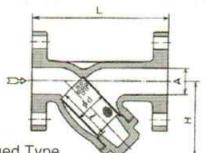
How to order: CODE

Pipeline Y-strainer, bronze, PRESSURE, TYPE of CONNECTION, SIZE mm

CODE	Size		Dimensions mm		Screen mm		Unit Per Pcs.
	mm(A)	Inch	L	H	Φd	L	
Screwed Type (16 kgf/cm²)							
75 24 21	8A	1/4	75	55	18	40	
22	10A	3/8	75	55	18	40	
23	15A	1/2	80	55	18	40	
24	20A	3/4	100	65	23	50	
25	25A	1	115	75	30	60	
75 24 26	32A	1-1/4	135	95	39	70	
27	40A	1-1/2	150	100	44	75	
28	50A	2	180	120	56	90	
Flanged Type (10 kgf/cm²)							
75 24 31	10A	3/8	125	60	18	45	
32	15A	1/2	125	60	18	45	
33	20A	3/4	140	70	23	50	
34	25A	1	160	80	30	60	
35	32A	1-1/4	180	100	39	70	
75 24 36	40A	1-1/2	190	105	44	75	
37	50A	2	220	125	56	90	
38	65A	2-1/2	270	180	78	120	
39	80A	3	290	200	88	130	
40	100A	4	350	240	110	180	
75 24 41	125A	5	390	260	140	200	
42	150A	6	440	320	170	240	
43	200A	8	540	380	210	300	

Cast Iron Y-strainer

Screwed Type

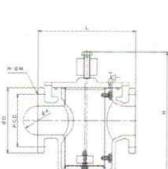


Flanged Type

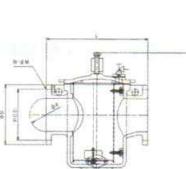
Marine Can Water Filters

Filtros Marinos de Agua 简型水こし 船用筒型水过滤器

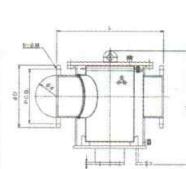
Made of casting steel and used for water pipelines in ship. Complete with inner strainer. Connecting flange size are conform to JIS 5K cm² standard.



25A-100A



125A-150A



200A-800A

CODE	Nominal Diam. mm	Flange				Total Height mm	Weight Kg		
		Face to Face mm	Diam. mm	Bolt					
				P.C.D. mm	No.				
87 20 01	25	170	95	75	4	M10	178	5.8	
02	40	190	115	90	4	M12	211	8.2	
03	40	190	120	95	4	M12	211	8.4	
04	50	200	130	105	4	M12	258	11.4	
05	65	250	155	130	4	M12	314	18.5	
87 20 06	80	270	180	145	4	M16	335	25.4	
07	100	320	200	165	8	M16	391	35.7	
08	131	400	235	200	8	M16	480	52.4	
09	156	460	265	230	8	M16	573	71.6	
10	200	550	320	280	8	M20	600	95	
87 20 11	250	680	385	345	12	M20	725	150	
12	300	760	430	390	12	M20	820	185	
13	350	820	480	435	12	M22	920	245	
14	400	880	540	495	16	M22	1,010	290	
15	450	1,040	605	555	16	M22	1,230	440	
87 20 16	500	1,130	655	605	20	M22	1,320	530	
17	550	1,220	720	665	20	M24	1,380	720	
18	600	1,310	770	715	20	M24	1,455	830	
19	650	1,410	825	770	24	M24	1,514	1,150	
20	700	1,500	875	820	24	M24	1,574	1,200	
87 20 35	750	1,600	945	880	24	M30	1,630	1,390	
36	800	1,700	995	930	24	M30	1,900	1,690	

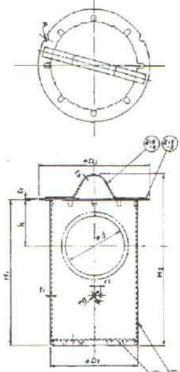
Filter Elements for Marine Can Water Filter

Repuestos para Filtros Marino

筒型水こし用エレメント 过滤器配件

Suitable for use with marine can water filter based on JIS F-7121 specification.

Made of stainless steel with light weight and tough structure.



CODE	Model	Size mm				Weight kg
		d	D1	D2	H1	
87 20 21	SWS II-FC-S-C- 25	33	50	68	109.1	0.17
22	SWS II-FC-S-C- 32	47	65	84	137	0.24
23	SWS II-FC-S-C- 40	47	65	84	137	0.28
24	SWS II-FC-S-C- 50	62	75	94	172	0.28
25	SWS II-FC-S-C- 65	78	100	125	218	0.42
87 20 26	SWS II-FC-S-C- 80	91	110	140	226	0.69
27	SWS II-FC-S-C-100	116	130	160	282	1.56
28	SWS II-FC-S-C-125	141	162	195	319	1.77
29	SWS II-FC-S-C-150	167	200	235	371	2.19
30	SWS II-SS-S-C-200	217	250	347	350	2.0
87 20 31	SWS II-SS-S-C-250	269	330	390	505	4.0
32	SWS II-SS-S-C-300	320	380	440	581	6.0
33	SWS II-SS-S-C-350	359	420	485	709	8.0
34	SWS II-SS-S-C-400	410	471	535	755	9.5
37	SWS II-SS-S-C-450	461	562	637	861	14.0
87 20 38	SWS II-SS-S-C-500	514	625	700	927	18.0
39	SWS II-SS-S-C-550	566	689	780	980	21.0
40	SWS II-SS-S-C-600	617	753	845	1,033	25.0
41	SWS II-SS-S-C-650	667	816	910	1,074	31.0
42	SWS II-SS-S-C-700	719	882	980	1,134	40.0
87 20 43	SWS II-SS-S-C-750	770	941	1,040	1,170	47.0
44	SWS II-SS-S-C-800	820	1,008	1,110	1,482	67.0

Name of Mfr.: Niikura Kogyo Co., Ltd.

Steam Traps

Steam Traps

Purgadores de Vapor

スチームトラップ

蒸汽冷凝罐

These steam traps automatically adjust themselves to operate at varying steam pressures, and feature a large condensate discharge capacity for such a compact design. The small size of the traps means less heat and therefore energy is wasted by radiation. For protection against dirt and scale and to prolong trap service life, pipe strainers should be fitted on the inlet side of the trap. Among the wide variety of these traps in types and sizes, the most common types are described along with their specifications.

Thermodynamic Steam Trap

Purgador de vapor termodinámico

熱力学的蒸気トラップ

热动力式蒸汽疏水阀

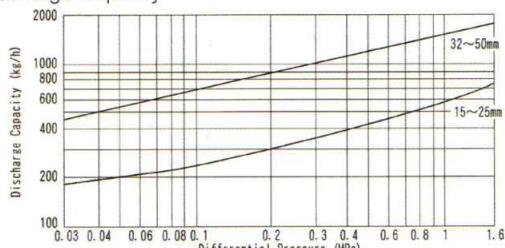


TLV A3N

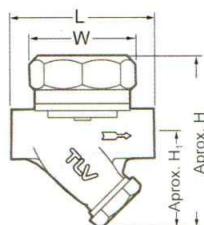
Specifications

Operating Pressure	Maximum	1.6 MPaG
	Minimum	0.03 MPaG
Maximum Operating Temperature		220°C
Material	Size 15-25 mm	Ductile Cast Iron
	Size 32-50 mm	Cast Iron
Main Components		Stainless Steel
Connection	Screwed	Rc (PT)
	Flanged	JIS 10KFF/20KRF ASME/JPI Class 150RF/300RF

Discharge Capacity



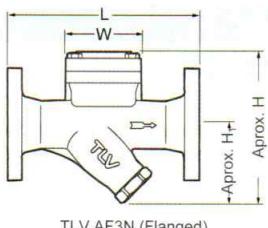
Dimensions



TLV A3N (Screwed)

A3N Screwed

CODE	Size		L mm	H mm	H1 mm	W mm	Weight kg
	mm (A)	Inch					
75 24 81	15	1/2	98	125	70		1.5
82	20	3/4	104	125	70	71	1.6
83	25	1	112	135	75		1.8
84	32	1-1/4	175	194	104		7.2
85	40	1-1/2	180	193	105	104	7.4
86	50	2	195	208	109		8.8



TLV AF3N (Flanged)

AF3N Flanged

CODE	Size		L mm	H mm	H1 mm	W mm	Weight kg	Unit Per Pcs.
	mm (A)	Inch						
75 24 91	15	1/2	175	120	70	71	3.5	1
92	20	3/4	195	125	70		4.3	
93	25	1	215	130	75		5.7	
94	32	1-1/4	245	194	104		11	
95	40	1-1/2	260	198	106		13	
96	50	2	265	208	109		13	

* Weight is for JIS10KFF

Thermodynamic Steam Trap

Purgador de vapor termodinámico

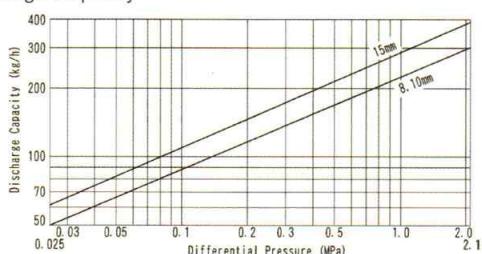
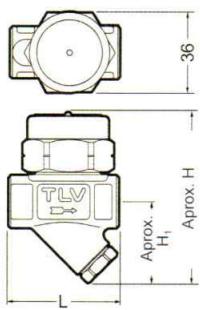
熱力学的蒸気トラップ 热动力式蒸汽疏水阀



TLV P21S ver.C

Specifications

Operating Pressure	Maximum	2.1 MPaG
	Minimum	0.025 MPaG
Maximum Operating Temperature	425°C	
Material	Size 8-15 mm	Cast Stainless Steel
Main Components	Stainless Steel	
Connection	Screwed	Rc (PT)

Discharge Capacity**Dimensions**

TLV P21S ver.C (Screwed)

P21S ver.C Screwed

CODE	Size		L mm	H mm	H1 mm	Weight kg	Unit Per Pcs.
	mm (A)	Inch					
75 24 80	8	1/4	50	77	37	0.35	1
87	10	3/8					
88	15	1/2	68	82	39	0.46	

Mechanical Steam Trap

Purgador de Vapor Mecánico

機械式スチームトラップ

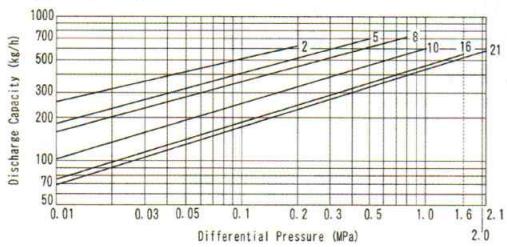
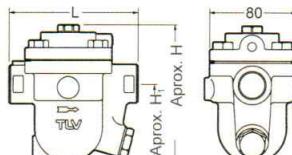
机械式蒸汽疏水阀



TLV J3X

Specifications

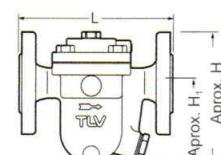
Operating Pressure	Orifice No.	2, 5, 8, 10, 16, 21
	Maximum	0.2, 0.5, 0.8, 1.0, 1.6, 2.1 MPaG
	Minimum	0.01 MPaG
Maximum Operating Temperature	220°C	
Material	Size 15-25 mm	Ductile Cast Iron /Cast Iron
	Screwed	Rc (PT)
Connection	Flanged	JIS 10KFF/20KRF ASME/JPI Class 150RF/300RF

Discharge Capacity**Dimensions**

TLV J3X (Screwed)

J3X Screwed

CODE	Size		L mm	H mm	H1 mm	Weight kg	Unit Per Pcs.
	mm (A)	Inch					
75 24 89	15	1/2	120	130	75	2.7	1
90	20	3/4			72.5	2.8	
97	25	1			137	3.0	

**JF3X Flanged**

CODE	Size		L mm	H mm	H1 mm	Weight kg	Unit Per Pcs.
	mm (A)	Inch					
75 24 98	15	1/2	175	130	80	3.8	1
99	20	3/4	195	135	90	4.4	
75 25 00	25	1	215	140	95	5.5	

* Weight is for JIS10KFF

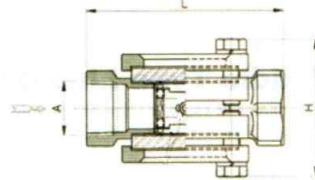
Flow Indicators

Flapper Type Sight Flow Indicators

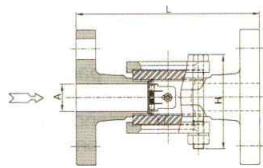
Indicadores visuales de caudal tipo clapeta

フッパー式サイトフローインジケーター 活瓣式视流量指示器

Cast iron flow indicator used for the visual inspection of the level of liquid flow through pipes and valves. The indicator is comprised of a gravity loaded swing flap which is lifted when fluid flows through the line. Used in pipes where there is no back flow. Stainless steel indicators are also available upon request.



Screwed Type (FCD450)



Flanged Type (FC200)

Standard Feature

Maximum working pressure	10 kgf/cm ²
Maximum working temperature	150
Connection	Screw thread
	Rc
	Flange rating
	JIS 10 kgf/cm ²

How to order: CODE

Flow indicator, flapper type, cast iron, SCREWED or FLANGED type, NOMINAL BORE

CODE	Size		Dimensions mm	
	mm(A)	Inch	L	H
Screwed Type (FCD450)				
75 25 01	8A	1/4	70	52
75 25 02	10A	3/8	70	52
75 25 03	15A	1/2	95	65
75 25 04	20A	3/4	100	70
75 25 05	25A	1	120	84
75 25 06	32A	1-1/4	140	108
75 25 07	40A	1-1/2	145	116
75 25 08	50A	2	160	134

Flanged Type (FC200)				
75 25 11	15A	1/2	150	66
75 25 12	20A	3/4	150	71
75 25 13	25A	1	170	87
75 25 14	32A	1-1/4	200	113
75 25 15	40A	1-1/2	200	118
75 25 16	50A	2	220	138
75 25 17	65A	2-1/2	270	162
75 25 18	80A	3	270	178
75 25 19	100A	4	320	210
75 25 20	125A	5	380	263
75 25 21	150A	6	420	288
75 25 22	200A	8	500	350

Note: Max. working pressure for 150A = 7.5 kgf/cm²
for 200A = 4.5 kgf/cm²

Oil Flowmeters

Caudalímetros de aceite オイル流量計 油流量計

These oil flowmeters are positive displacement type flow meters which are used in a wide variety of applications including measuring of boiler fuel oil and diesel oil, as well as for transactions of kerosene, light oil and heavy oil.



Gear Type



Roots Type

Gear Type

This flowmeter employs a gear-type rotor for small-volume flow of low-viscosity oil in heat control applications, etc. It can be used without modification to measure kerosene, light oil, or heavy oil. Measuring accuracy is $\pm 0.5\%$.

Roots Type

This flowmeter is widely used for transaction and in other applications. The roots rotor rotates without physical contact, resulting in extremely low pressure loss. In addition, its accuracy remains virtually unchanged over a long period of time.

Standard Specifications

Accuracy	$\pm 0.5\%$
Max. working pressure	10 kgf/cm ²
Hydraulic test pressure	20 kgf/cm ²
Max. working temperature	50°C for kerosene and light oil, 100°C for heavy oil

Flange rating	JIS kgf/cm ² FF
Body	Cast Iron
Material	Gear type: Bronze or phenol resin Roots type: Aluminium alloy casting
Counter unit	
	Integrating pointer and integrating counter (a reset counter is also available.)

Transmitter	Reed switch (S): Microswitch (M)
Power supply	AC 100V 50/60 Hz as standard
Electrical transmitter unit	Number of pulse 0 - 5 PPS Output signal ON-OFF contact Transmission cable 2-core cabtyre cable

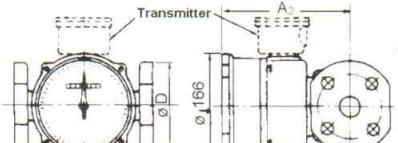
Flow direction	Right → Left
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Specifications for each type-1

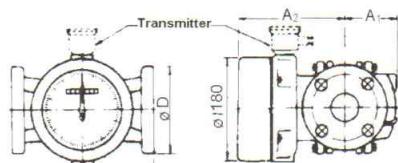
Type	Bore (mm)	Pointer (litr/rev)	Integrating counter
			Number of digits
Gear type	15	1	7
	20		
	25	10	
Roots type	40	10	7
	50	10	7
	80	100	7

Specifications for each type-2

Type	Type of Transmitter	Flow range (litr / h) (Accuracy : =0.5%)		
		Fluid	Kerosene, Light oil	A heavy oil
		Viscosity	1.2 - 3 cP	> 10 cP -
Gear type	Reed switch	Normal operation	10 - 200	5 - 200
			40 - 1,250	20 - 1,250
			150 - 3,000	50 - 3,000
Roots type	Micro switch	Normal operation	Intermittent	800 - 6,000
		Continuous	800 - 4,500	100 - 6,000
			Max.	7,000
				8,000



Gear Type

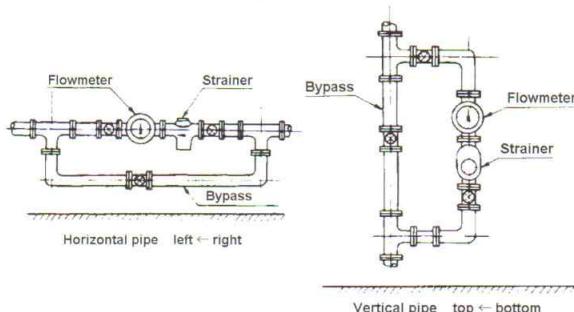


Roots Type

Dimension table

Type	Dimensions (mm)	Flange dimensions (mm)			Approx. weight (kg)
		øD	L	A1	
Gear type	15	95	130	-	181
	20	100	170	-	176
	25	125	200	-	187
Roots type	40	140	200	77	17.0
	50	155	250	99	19.0
	80	185	300	125	40.0

Precautions during piping and operation



Guide of how to order

When ordering, please specify the following points,

How to order: 75 - 25 - 31

Flowmeter with the following information :

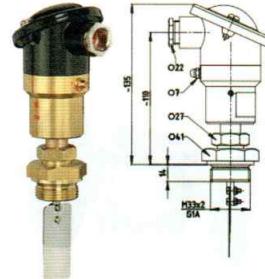
1. Type (Gear type or Roots type)
2. Fluid Name
3. Transmission Unit (In case of a flowmeter with transmitter)
4. Specify the following only when they deviate from the standard specifications.
 - a. Flow direction
 - b. Paint colour
 - c. Power supply
 - d. Cable connect standards
 - e. Attachment for fitting counter unit by 45°

Paddle Type Liquid Flow Switches

Interruptores de caudal de liquido tipo paleta

パドル型液体スイッチ 桨式液体流量开关

For detecting the incoming flow or movement of the existing water or oil in the pipe, by utilizing the force of liquid flow to propel its paddle. Insert installation into pipe or T-pieces DN 25 to DN 50 or larger. Four paddles in different sizes included to be selected in accordance to the pipe size. Robust construction and vibration proof to 4g. Wide set point ranges and universally insertable. Setpoint adjustment by paddle size selection and by adjustment screw. Micro switch with high contact rating. Approved by DNV, Certificate No: TAA000011M



Technical Data

Max. pressure rating	: 6 bar or 10 bar
Max. test pressure	: 10 bar or 15 bar
Max. medium temperature	: 100°C
Max. ambient temperature	: 85°C
Change over contact, max. contact rating	: 24V DC, 5 A resistance load, 4 A inductive load 60V DC 1 A resistance load, 0.5 A inductive load 250V AC 10A resistance load, 10 A inductive load
Protection class	: IP 54
Material	: Brass

Unit Per Pcs.

CODE	Size of Pipe	Target Plate mm	Set Point Ranges H2O bis 2 Bar [m³/h]*	
			ON	OFF
Thread Connection : 1" BSP Male (Code VH 500 NI)				
75 25 35	DN 25	25 x 30	1.00...1.25	1.05...1.20
36	DN 32	25 x 38	1.70...2.05	1.60...1.95
37	DN 40	25 x 46	2.20...2.55	2.10...2.45
38	DN 50	25 x 58	3.25...3.85	3.15...3.75
Thread Connection : M33 x 2 (Code VH 500 NM)				
75 25 41	DN 25	25 x 30	1.00...1.25	1.05...1.20
42	DN 32	25 x 38	1.70...2.05	1.60...1.95
43	DN 40	25 x 46	2.20...2.55	2.10...2.45
44	DN 50	25 x 58	3.25...3.85	3.15...3.75

Note: *) Higher set points selectable by use of smaller paddle sizes.
Tolerance of the set point ranges: ±15%, set points for bigger pipe sizes on request.

Name of Mfr. : SIKA

Engine Indicator Valves

Válvulas indicadoras del motor

エンジン・インジケータ・バルブ 动发动机指示阀

The connection between the engine and the indicator for accurate measurement.

Images	Specifications
	<ul style="list-style-type: none"> - Divided spindle - 3/4" connection for SKL engine - Option with thread cup - Height: 148 mm
1715 Long	
	<ul style="list-style-type: none"> - With divided spindle - All connection thread customer wish - Option with thread cup - Height: 105 mm - Angle: 45°
1715	
	<ul style="list-style-type: none"> - Swinging, divided spindle - All connection thread customer wish - Option with thread cup - Height: 128 mm - Angle: 45°
1715/1	
	<ul style="list-style-type: none"> - Divided spindle - Corner Valve - All connection thread customer wish - Option with thread cup - Height: 116 mm
1720	
	<ul style="list-style-type: none"> - All connection thread customer wish - Option with thread cup - Height: 116 mm
1725	

Unit Per Pcs.					
CODE	Type	Max. Working Pressure	CODE	Type	Max. Working Pressure
75 26 21	1715 Long	250 bar	75 26 24	1720	250 bar
22	1715		25	1725	250 bar
23	1715/1				

Sleeve Packing for Diesel Engine Indicator Cocks

Janta Grifo Nivel スリーブパッキング 套筒填料

Made of pressed non-asbestos joint sheets heat resisting. When ordering, specify packing size, if not, inner and outer diameters as well as height.



Unit Per Pcs.					
CODE	No.	Size mm ID x OD x H	CODE	Type	Size mm ID x OD x H
75 26 51	AB-12	12 x 18 x 22	75 26 56	AB-32H	32 x 45 x 84
52	18	18 x 26 x 32	57	40	40 x 58 x 94
53	22	22 x 33 x 37	58	50	50 x 70 x 106
54	28	28 x 38 x 54	59	70	70 x 94 x 134
55	32	32 x 45 x 74			

Sleeve Packing Replacing Instruments

Janta Grifo Nivel スリーブパッキング 石棉套筒盼更

2 pcs in a set. One is for extracting and another is for inserting sleeve packings.



75 26 71 Sleeve packing replacing instrument Set

Storm Valves

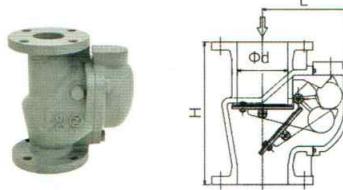
Storm Valves

Válvulas de Mal Tiempo 波止弁 止回排水阀

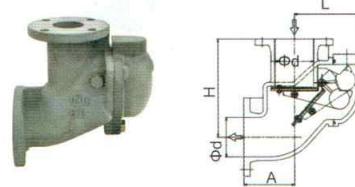
Non-return valve for scupper, soil and sanitary discharge lines. When ordering please specify type of flange fitting as listed below, and also please specify if the screw-down closing handle is required.

JIS 5K – F3060

Storm Valve Standard, Ductile Cast Iron



Vertical & Horizontal Type, Standard

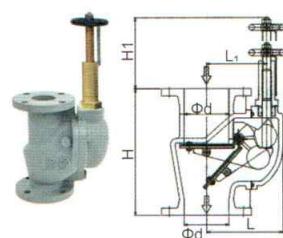


Angle Type, Standard

Unit Per Pcs.

CODE	Model	Dimensions mm				Weight Kg
		Φd	H	A	L	
Vertical & Horizontal Type, Standard						
75 42 01	SVII-FCD- 50	50	210	-	130	10
02	SVII-FCD- 65	65	240	-	140	14
03	SVII-FCD- 80	80	260	-	155	18
04	SVII-FCD-100	100	280	-	170	23
05	SVII-FCD-125	125	330	-	185	35
75 42 06	SVII-FCD-150	150	360	-	205	50
31	SVII-FCD-200	200	450	-	257	78
Angle Type, Standard						
75 42 07	SVII-FCD-A- 50	50	170	90	130	90
08	SVII-FCD-A- 65	65	200	110	140	110
09	SVII-FCD-A- 80	80	220	120	155	120
10	SVII-FCD-A-100	100	250	130	170	130
11	SVII-FCD-A-125	125	270	150	185	150
75 42 12	SVII-FCD-A-150	150	310	165	215	165
32	SVII-FCD-A-200	200	400	190	257	190

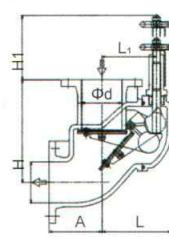
Storm Valve with Handle, Ductile Cast Iron



Vertical & Horizontal Type with Handle



Angle Type with Handle



CODE	Model	Dimensions mm						Weight Kg
		Φd	H	A	L	L1	H1	

Vertical & Horizontal Type, Standard

75 42 41	SVII-FCD-RMH- 50	50	210	-	130	100	180	12
42	SVII-FCD-RMH- 65	65	240	-	140	110	182	16
43	SVII-FCD-RMH- 80	80	260	-	155	120	170	20
44	SVII-FCD-RMH-100	100	280	-	170	135	166	25
45	SVII-FCD-RMH-125	125	330	-	185	150	190	38

75 42 46	SVII-FCD-RMH-150	150	360	-	205	180	185	53
47	SVII-FCD-RMH-200	200	450	-	257	210	239	82

Angle Type, Standard

75 42 51	SVII-FCD-A-RMH- 50	50	170	90	130	90	180	12
52	SVII-FCD-A-RMH- 65	65	200	110	140	110	182	17
53	SVII-FCD-A-RMH- 80	80	220	120	155	120	170	21
54	SVII-FCD-A-RMH-100	100	250	130	170	130	166	27
55	SVII-FCD-A-RMH-125	125	270	150	185	150	190	40

75 42 56	SVII-FCD-A-RMH-150	150	310	165	205	165	185	56
57	SVII-FCD-A-RMH-200	200	400	190	257	190	239	89

Storm Valves with handle

Cast Steel, JIS 10 Kgs Type

AA 730/AA 740

Válvulas de mal tiempo con manija de hierro fundido

ハンドル付き鋳鉄波止弁 带手轮铸铁吸入截止阀



Vertical Type



Angle Type

Vertical Type

Unit Per Pcs.

CODE	Nom. Size mm	Dimensions mm				Item No.
		Flange Diam	Face to Face	Pitch	Hole dia x No.	
75 42 29	50	155	210	120	19 x 4	AA730050
30	65	175	240	140	19 x 4	AA730065
40	80	185	260	150	19 x 8	AA730080
48	100	210	280	175	19 x 8	AA730100
49	125	250	330	210	23 x 8	AA730125
75 42 50	150	280	360	240	23 x 8	AA730150
58	200	330	450	290	23 x 12	AA730200

Name of Mfr.: Alligator

Angle Type

Unit Per Pcs.

CODE	Nom. Size mm	Dimensions mm				Item No.
		Flange Diam	Face to Face	Pitch	Hole dia x No.	
75 42 59	50	155	130	120	19 x 4	AA740050
60	65	175	140	140	19 x 4	AA740065
83	80	185	155	150	19 x 8	AA740080
84	100	210	170	175	19 x 8	AA740100
97	125	250	185	210	23 x 8	AA740125
75 42 98	150	280	205	240	23 x 8	AA740150
99	200	330	257	290	23 x 12	AA740200

Name of Mfr.: Alligator

Storm Valves (DIN)

Ductile Cast Iron

According to DIN-HNA Type

Flat Faced Flanged Ends to DIN PN 10

Válvula de Tormenta (DIN) Hierro Fundido Ductil Conforme al Tipo

DIN-HNA

DIN型ダクタイル鋳鉄波止弁

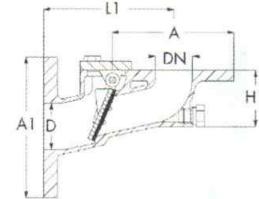
DIN-HNA 型延性铸铁止浪阀附 DIN PN10 平面法蘭

Storm valves are mainly installed in sanitary piping systems which have a ship's side exit. They will prevent sea water entering this system during heavy sea.

Maximum Operating Pressure
Strength tested at pressure 10 bar.

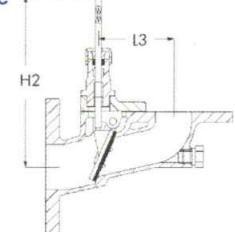
Material Specification

Component	Material	EN and/or (DIN)
Disc Sealing Ring (Seawater resistant)	Rubber	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Disc	Bronze	GJS-400-15 (GGG-40)
Cover	Ductile cast iron	
Body	Ductile cast iron	GJS-400-15 (GGG-40)

Angle, without Locking Device**How to order: CODE**

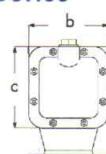
Storm valve (DIN), ductile cast iron, according to DIN-HNA type, flat faced flanged ends to DIN PN 10, angle, without locking device, SIZE DN

CODE	DN	Size mm					Weight Kg
		D	A	A1	L1	H1	
75 42 71	50	68	165	200	180	90	30
72	65	85	185	220	200	99	41
73	80	100	200	250	215	108	47
74	100	130	220	285	250	130	44
75	125	158	250	315	290	152	73
75 42 76	150	190	285	340	330	176	65

Angle, with Locking Device**How to order: CODE**

Storm valve (DIN), ductile cast iron, according to DIN-HNA type, flat faced flanged ends to DIN PN 10, angle, with locking device, SIZE DN

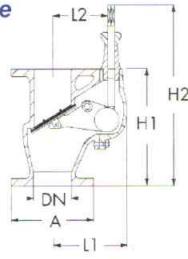
CODE	DN	Size mm					Weight Kg
		D	A1	L3	H1	H2	
75 42 77	50	68	200	103	90	333	30
78	65	85	220	118	99	341	41
79	80	100	250	135	108	352	47
80	100	130	285	154	130	413	44
81	125	158	315	188	152	438	73
75 42 82	150	190	340	210	176	465	69.0

Straight, without Locking Device**How to order: CODE**

Storm valve (DIN), ductile cast iron, according to DIN-HNA type, flat faced flanged ends to DIN PN 10, straight, without locking device, SIZE DN

CODE	DN	Size mm					Weight Kg	Unit Per Pc.
		A	b	c	L1	H1		
75 42 85	50	165	160	165	137	200	55	15
86	65	185	180	175	148	240	55	19
87	80	200	195	190	174	260	55	27
88	100	220	220	205	195	300	42	36
89	125	250	270	240	216	350	58	54
75 42 90	150	285	300	255	242	400	77	65

Straight, with Locking Device



How to order: CODE

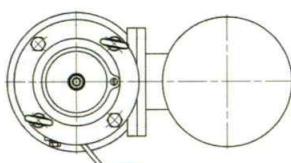
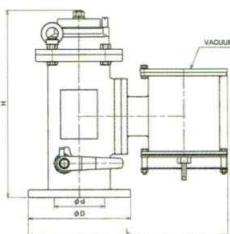
Storm valve (DIN), ductile cast iron, according to DIN-HNA type, flat faced flanged ends to DIN PN 10, straight, with locking device, SIZE DN

CODE	DN	Size mm					Weight Kg	Unit Per Pc.
		A	L1	L2	H1	H2		
75 42 91	50	165	137	110	200	369	55	17
92	65	185	148	120	240	407	55	21
93	80	200	174	139	260	418	55	29
94	100	220	195	154	300	508	42	38
95	125	250	216	175	350	541	58	56
75 42 96	150	285	242	195	400	583	77	67

High Velocity Venting Valves

Válvulas de ventilación de alta velocidad 高速排気弁 高速排气阀

Device to prevent the passage of flame into inert cargo tanks in oil tankers pressure during cargo loading or ballasting. High velocity and full open. Automatic move. Simple mechanism. Application of IMO MSC/Circ.677. 1009 & IMO MSC. 1/Circ.1324. Approved by NK, ABS, LRS. Setting pressure 14kPa to 20kPa.



* The above right side of image is included Vacuum Valve. These can be supplied separately as your request.

N-NHV-SCS-065 / 080 for chemical tanker

Body Material: SCS

CODE	Model	Φd	H	L ¹	Weight (Kg) ^{2,*3}	Unit Per Pc.
75 43 21	N-NHV-SCS-065	100	387	433	39	
22	N-NHV-SCS-080	125	447	490	53	

*1: The dimensions of L is included Vacuum Valve(VV-IIB)

*2: The weight is included Vacuum Valve (VV-IIB). (-3.5kPa)

*3: The weight of the model is 14kPa.

DHV-F05-08~20 for oil tanker

Body Material: FC

CODE	Model	Φd	H	L ¹	Unit Per Pc.	
					Weight (Kg) ^{2,*3}	
75 43 23	DHV-F05-08	125	445	455	69	
24	DHV-F05-10	150	478	546	105	
25	DHV-F05-13	200	600	666	160	
26	DHV-F05-15	200	614	732	217	
27	DHV-F05-20	250	697	889	340	

*1: The dimensions of L is included Vacuum Valve(VV-E)

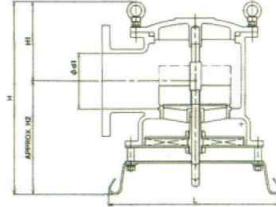
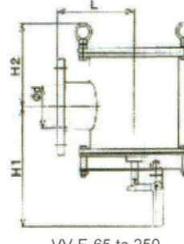
*2: The weight is included Vacuum Valve (VV-E). (-3.5kPa)

*3: The weight of the model is 14kPa.

Name of Mfr.: Niikura Kogyo Co., Ltd.

Vacuum Relief Valves

Válvulas de alivio de vacío 真空逃げ弁 真空泄压阀



VV-E-65 to 125

Designed for vacuum break of cargo tank. Combined of High velocity vending valve. Incorporating flame screen. Flange connection is JIS 5K, Setting Pressure is -3.5 kPa. to -7.0 kPa. Approved by NK/ABS/LRS.

VV-E Model for oil tanker

Unit Per Pc.

CODE	Model	d	L	H1	H2	Flow Rate (Nm ³ /h)
75 43 61	VV-E- 65	65	130	176	148	200 ~1,100
62	VV-E- 80	80	145	181	152	400 ~1,600
63	VV-E-100	100	170	205	157	900 ~2,600
64	VV-E-125	125	205	217	170	1,200 ~4,000
65	VV-E-150	150	235	300	205	1,500 ~5,200
75 43 66	VV-E-200	200	285	335	245	2,000 ~7,500
67	VV-E-250	250	370	570	305	2,500~10,500

Name of Mfr.: Niikura Kogyo Co., Ltd.

VV-II B Model for chemical tanker

Unit Per Pc.

CODE	Model	d	L	H1	H2	L
75 43 68	VV-E- 65	65	320	130	190	263
69	VV-E- 80	80	325	133	192	394
70	VV-E-100	100	364	145	219	332
71	VV-E-125	125	403	157	246	374

Name of Mfr.: Niikura Kogyo Co., Ltd.

DIN Standard Valves

The following table are a cross comparison from JIS(Japan Industrial Standard) to DIN(Deutsche Industrie-Norm), and from DIN to JIS for your reference purpose. The tables are classified according to similar material, working pressure and general design. However as you understand, the basic specification of material, dimensions and flanges are essentially different between JIS standard and DIN standard. We are not held responsible for any possible accident or damage caused by using these tables.

Comparison List
JIS to equivalent design DIN Valves

Globe Valves

Material & W.P.	Type	JIS No.	Nom. Size	CODE	DIN Model	CODE	Flanged to	DN
Bronze 16 kgf/cm ² Flanged	Straight	F-7303	15-40mm	75 01 41 - 45	410.5.5.1 -	75 51 21 - 29/93 75 51 61 - 75	PN 16 PN 6/10/16	15-125mm 15-300mm
	Angle	F-7304	15-40mm	75 01 51 - 55	411.5.5.1 -	75 51 32 - 38 75 52 00 / 91 75 51 76 - 90	PN 16 PN 6/10/16	20-125mm 15-300mm
Cast Iron 16 kgf/cm ² Flanged	Straight	F-7309	50-200mm	75 02 61 - 67	- 410.2.5.5.1	75 52 31 - 45 75 52 61 - 75 75 54 01 - 11	PN 10/16 PN 10/16 PN 16	15-300mm 15-300mm 15-150mm
	Angle	F-7310	50-200mm	75 02 71 - 77	- 411.2.5.5.1	75 52 46 - 60 75 52 76 - 90 75 54 16 - 29	PN 10/16 PN 10/16 PN 16	15-300mm 15-300mm 15-250mm
Cast Steel 20 kgf/cm ² Flanged	Straight	F-7313	32-250mm	75 04 31 - 40	-	75 53 01 - 11 75 51 94 - 99	PN 10/16	15-400mm
	Angle	F-7314	32-250mm	75 04 41 - 50	-	75 53 15 - 25 75 52 94 - 99	PN 10/16	15-400mm
Cast Steel 40 kgf/cm ² Flanged	Straight	F-7317	32-150mm	75 04 71 - 78	410.3.4.4.1	75 53 26 - 34	PN 40	15-100mm
	Angle	F-7318	32-150mm	75 04 81 - 88	411.3.4.4.1	75 53 41 - 51	PN 40	15-150mm

Gate Valves

Material & W.P.	Type	JIS No.	Nom. Size	CODE	DIN Model	CODE	Flanged to	DN
Cast Iron 10 kgf/cm ²	Flanged	F-7364	50-600mm	75 08 21 - 35	-	75 55 71 - 86	PN 10	40-600mm
					-	75 56 01 - 14	PN 10	40-600mm
					-	15 - 24	PN 10	40-300mm
					-	32 - 40	PN 10	50-300mm
					-	41 - 50	PN 10	40-300mm
					-	51 - 60	PN 10/16	40-300mm
Cast Steel 10 kgf/cm ²	Flanged	F-7366	50-400mm	75 09 01 - 11	-	75 56 72 - 80	PN 16	50-300mm

Lift Check Valves

Material & W.P.	Type	JIS No.	Nom. Size	CODE	DIN Model	CODE	Flanged to	DN
Bronze 16 kgf/cm ²	Straight	F-7417	15-40mm	75 13 61 - 65	-	75 58 11 - 21	PN 16	15-150mm
					-	41 - 68	PN 16	15-300mm
					-	71 - 98	PN 16	15-300mm
Flanged	Angle	F-7418	15-40mm	75 13 66 - 70	-	75 58 25 - 35	PN 16	15-150mm
					-	55 - 67	PN 16	15-200mm
					-	85 - 97	PN 16	15-200mm

Swing Check Valves

Material & W.P.	Type	JIS No.	Nom. Size	CODE	DIN Model	CODE	Flanged to	DN
Cast Iron 10 kgf/cm ² Flanged	Straight	F-7373	50-200mm	75 14 31 - 37	-	75 59 11 - 20	PN 10/16	40-300mm

Hose Valves

Material & W.P.	Type	JIS No.	Nom. Size	CODE	DIN Model	CODE	Flanged to	DN
Bronze 10 kgf/cm ² Flanged	Straight	F-7334	50 / 65 mm	75 17 17 / 18	470.5.6.5.1	75 60 44 / 46	PN 16	50 / 65 mm

Screwed Valves

Material & W.P.	Type	JIS No.	Size	CODE	DIN Model	CODE	Pressure Rating	Size
Bronze 10 kgf/cm ²	Straight	B-2011	1/4" - 4"	75 18 16 - 27	-	75 51 01 - 10	12/16 bar	1/4" - 3"
	Angle	B-2011	1/4" - 4"	75 18 31 - 42	-	75 51 11 - 18	12/16 bar	1/4" - 2"

Needle Valves

Material & W.P.	Type	JIS No.	Size	CODE	DIN Model	CODE	Pressure Rating	Size
Brass w/Ring Joint	Straight	-	6x1/4"-14x1/2"	75 21 01 - 05	-	75 62 02 - 06	100/40 bar	1/4" - 1"
Brass w/Ring Joint	Angle	-	6x1/8"-14x1/2"	75 21 16 - 21	-	75 62 12 - 16	100/40 bar	1/4" - 1/2"

Butterfly Valves

Material & W.P.	Type	JIS No.	Size	CODE	DIN Model	CODE	Flanged to	DN
FC250 10 kgf/cm ²	-	-	1-1/2" - 8" 1-1/2" - 24"	75 22 01 - 08 75 22 11 - 27 75 22 --	- 700.2.5.6.1 700.2.5.6.1	75 63 01 - 14 75 63 31 - 44 / 67 75.63 68 -70 75 63 45 - 55 75 63 56 - 66	PN 10 / 16 PN 10 / 16 PN 10 / 16 PN 10 / 16 PN 10	50-600mm 40-600mm 450-600mm 50-400mm 50-400mm

Diaphragm Valves

Material & W.P.	Type	JIS No.	Size	CODE	DIN Model	CODE	Pressure Rating	D
Cast Iron, Ductile Iron, etc. (To be indicated)	-	-	-	75 23	- - -	75 64 12 - 17 15 - 26 31 - 42	10 bar PN 16 PN 16	1/2" - 2" 15-200m 15-200m

Ball Valves

Material & W.P.	Type	JIS No.	Size	CODE	DIN Model	CODE	Pressure Rating	D
Forged Brass 20 kgf/cm ²	Screwed	-	3/8" - 2"	75 24 01-07	503.5.5.7.1	75 66 01 - 10	PN 40	8-80mm

Y-Strainers

Material & W.P.	Type	JIS No.	Size	CODE	DIN Model	CODE	Pressure Rating	D
Bronze 16 kgf/cm ²	Screwed	-	1/4" - 2"	75 24 21 - 28	-	75 68 01 - 10	16 bar	1/4" - 3"
Cast Iron 16 kgf/cm ²	Screwed	-	1/4" - 3"	75 24 46 - 55	-	75 68 25 - 38 / 69 15	PN 16	15-400mm

Storm Valves

Material & W.P.	Type	JIS No.	Size	CODE	DIN Model	CODE	Flanged to	DN
Ductile Cast Iron	Angle	-	50-200mm	75 42 07 - 12 75 42 32	-	75 42 71 - 76	PN 10	50-150mm
Ductile Cast Iron w/Handle	Vertical	F-3060	50-200mm	75 42 41 - 47	-	75 42 91 - 96	PN 10	50-150mm
Ductile Cast Iron w/Handle	Angle	-	50-200mm	75 42 51 - 57	-	75 42 77 - 82	PN 10	50-150mm

Remark : DIN model is referred to MESON products.

Comparison List

DIN to equivalent design JIS Valves

Globe Valves

Material & W.P.	Type	DIN Model	Size	CODE	JIS No.	CODE	Max. W/P	Size
Bronze 12 - 16 bar Screwed	Straight	-	1/4" - 3"	75 51 01 - 10	B-2011	75 18 16 - 27	10 kgf / cm ²	1/4" - 4"
	Angle	-	1/4" - 2"	75 51 11 - 18	B-2011	75 18 31 - 42	10 kgf / cm ²	1/4" - 4"
Bronze 16 - 12 bar Flanged	Straight	410.5.5.5.1	15-125mm	75 51 21 - 29 / 93	F-7303	75 01 41 - 45	16 kgf / cm ²	15-40mm
	Angle	411.5.5.5.1	20-125mm	75 51 32 - 38	F-7304	75 01 51 - 55	16 kgf / cm ²	15-40mm
Bronze 16 - 6 bar Flanged	Straight	-	15-300mm	75 51 61 - 75	F-7303	75 01 41 - 45	16 kgf / cm ²	15-40mm
	Angle	-	15-300mm	75 51 76 - 90	F-7304	75 01 51 - 55	16 kgf / cm ²	15-40mm
Cast Iron 16 - 10 bar Flanged	Straight	-	15-300mm	75 52 31 - 45	F-7309	75 02 61 - 67	16 kgf / cm ²	50-200mm
	Angle	-	15-300mm	75 52 46 - 60	F-7310	75 02 71 - 77	16 kgf / cm ²	50-200mm
Cast Iron 16 - 10 bar Flanged	Straight	-	15-300mm	75 52 61 - 75	F-7309	75 02 61 - 67	16 kgf / cm ²	50-200mm
	Angle	-	15-300mm	75 52 76 - 90	F-7310	75 02 71 - 77	16 kgf / cm ²	50-200mm
Carbon Steel 16 - 10 bar Flanged	Straight	-	15-400mm	75 53 01 - 11 75 51 94 - 99	F-7313	75 04 31 - 40	20 kgf / cm ²	32-250mm
	Angle	-	15-400mm	75 53 15 - 25 75 52 94 - 99	F-7314	75 04 41 - 50	20 kgf / cm ²	32-250mm
Cast Steel 40 - 25 bar Flanged	Straight	410.3.4.4.1	15-100mm	75 53 26 - 34	F-7317	75 04 71 - 78	40 kgf / cm ²	32-150mm
	Angle	411.3.4.4.1	15-150mm	75 53 41 - 51	F-7318	75 04 81 - 88	40 kgf / cm ²	32-150mm
Ductile Cast Iron 16 - 10 bar Flanged	Straight	410.2.5.5.1	15-150mm	75 54 01 - 11	F-7309	75 02 61 - 67	16 kgf / cm ²	50-200mm
	Angle	411.2.5.5.1	15-250mm	75 54 16 - 29	F-7310	75 02 71 - 77	16 kgf / cm ²	50-200mm

Gate Valves

Material & W.P.	Type	DIN Model	DN	CODE	JIS No.	CODE	Max. W/P	Size
Cast Iron 10 - 2 bar	Flanged	-	40-600mm	75 55 71 - 86	F-7364	75 08 21 - 35	10 kgf / cm ²	50-600mm
Cast Iron 10 - 2 bar	Flanged	-	40-600mm	75 56 01 - 14	F-7364	75 08 21 - 35	10 kgf / cm ²	50-600mm
Cast Iron 10 - 2 bar	Flanged	-	40-300mm	75 56 15 - 24	F-7364	75 08 21 - 35	10 kgf / cm ²	50-600mm
Cast Iron 10 - 8 bar	Flanged	-	50-300mm	75 56 32 - 40	F-7364	75 08 21 - 35	10 kgf / cm ²	50-600mm
Cast Iron 10 - 8 bar	Flanged	-	40-300mm	75 56 41 - 50	F-7364	75 08 21 - 35	10 kgf / cm ²	50-600mm
Cast Iron 10 bar	Flanged	-	40-300mm	75 56 51 - 60	F-7364	75 08 21 - 35	10 kgf / cm ²	50-600mm
Cast Iron 10 bar	Flanged	-	50-300mm	75 56 72 - 80	F-7366	75 09 01 - 11	10 kgf / cm ²	50-400mm

Lift Check Valves

Material & W.P.	Type	DIN Model	DN	CODE	JIS No.	CODE	Max. W/P	Size
Bronze 16 - 8 bar Flanged	Straight	-	15-150mm	75 58 11 - 21	F-7417	75 13 61 - 65	16 kgf / cm ²	15-40mm
Bronze 16 - 8 bar Flanged	Angle	-	15-150mm	75 58 25 - 35	F-7418	75 13 66 - 70	16 kgf / cm ²	15-40mm
Cast Iron 16 - 13 bar Flanged	Straight	-	15-300mm	75 58 41 - 68	F-7417	75 13 61 - 65	16 kgf / cm ²	15-40mm
Cast Iron 16 - 13 bar Flanged	Angle	-	15-200mm	75 58 55 - 67	F-7418	75 13 66 - 70	16 kgf / cm ²	15-40mm
Cast Iron 16 - 13 bar Flanged	Straight	-	15-300mm	75 58 71 - 98	F-7417	75 13 61 - 65	16 kgf / cm ²	15-40mm
Cast Iron 16 - 13 bar Flanged	Angle	-	15-200mm	75 58 85 - 97	F-7418	75 13 66 - 70	16 kgf / cm ²	15-40mm

Swing Check Valves

Material & W.P.	Type	DIN Model	DN	CODE	JIS No.	CODE	Max. W/P	Size
Cast Iron 10 - 8 bar Flanged	Straight	-	40-300mm	75 59 11 - 20	F-7373	75 14 31 - 37	10 kgf / cm ²	50-200mm

Globe Fire and Deckwash Valves

Material & W.P.	Type	DIN Model	DN	CODE	JIS No.	CODE	Max. W/P	Size
Bronze 10 bar	Straight	470.5.6.5.1	50/65mm	75 60 44 - 46	F-7334	75 17 17 - 18	10 kgf / cm ²	50 / 65mm

Needle Valves

Material & W.P.	Type	DIN Model	Size	CODE	JIS No.	CODE	W/P	Size
Brass 100-40 bar Screwed	Straight	-	1/4" - 1"	75 62 02 - 06	-	75 21 01 - 05	-	6x1/4"-14x1/2"
Brass 100-40 bar Screwed	Angle	-	1/4" - 1/2"	75 62 12 - 16	-	75 21 16 - 21	-	6x1/8"-14x1/2"

Butterfly Valves

Material & W.P.	Type	DIN Model	DN	CODE	JIS No.	CODE	Max. W/P	Size
Ductile Cast Iron 10 bar	-	-	50-600mm	75 63 01 - 14	-	75 22 01 - 08	10 kgf / cm ²	1-1/2" - 8"
Cast Iron 10/16 bar	Water	700.2.5.6.1	40-600mm	75 63 31 - 44 / 67	-	75 22 11 - 27	10 kgf / cm ²	1-1/2"-24"
	Semi Lug	700.2.5.6.1	450-400mm	75 63 68 - 70				
Cast Iron 10/16 bar	-	-	50-400mm	75 63 45 - 55	-			
Cast Iron 10 bar	-	-	50-400mm	75 63 56 - 66	-			

Diaphragm Valves

Material & W.P.	Type	DIN Model	Size	CODE	JIS No.	CODE	W/P	Size
Bronze 10 bar Threaded	Straight	-	1/2" - 2"	75 64 12 - 17	-	75 23 --	-	-
Cast Iron 10 - 4 bar Flanged	Straight	-	15-200mm	75 65 15 - 26	-	75 23 --	-	-
Cast Iron 10 - 4 bar Flanged	Straight	-	15-200mm	75 65 31 - 42	-	75 23 --	-	-

Ball Valves

Material & W.P.	Type	DIN Model	Size	CODE	JIS No.	CODE	Max. W/P	Size
Brass Nickel Plate (See spec.)	Screwed	503.5.5.7.1	8-80mm	75 66 01 - 10	-	75 24 01 - 07	20 kgf / cm ²	3/8" - 2"

Y-Strainers

Material & W.P.	Type	DIN Model	Size	CODE	JIS No.	CODE	Max. W/P	Size
Bronze 16 bar	Screwed	-	1/4" - 3"	75 68 01 - 10	-	75 24 21 - 28	16 kgf / cm ²	1/4" - 2"
Cast Iron 16 bar	Flanged	-	15-400mm	75 68 25 - 38 / 69 15	-	75 24 46 - 55	16 kgf / cm ²	1/4" - 3"

Storm Valves

Material & W.P.	Type	DIN Model	DN	CODE	JIS No.	CODE	Nom. /P	Size
Ductile Cast Iron 10 bar	Angle	-	50-150mm	75 42 71 - 76	-	75 42 07 - 12 75 42 32	5 kgf / cm ²	50-200mm
Ductile Cast Iron 10 bar	Angle	-	50-150mm	75 42 77 - 82	-	75 42 51- 57	5 kgf / cm ²	50-200mm
Ductile Cast Iron 10 bar	Vertical	-	50-150mm	75 42 91 - 96	F-3060	75 42 41 - 47	5 kgf / cm ²	50-200mm

Remark : DIN model is referred to MENSON Products.

DIN Globe Valves

Globe Valves (DIN)

Bronze, BSP Female Threaded

Threaded Bonnet, Metal Seated

Fixed Disc, Max 16 bar, Straight and Angle

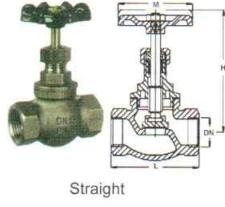
Válvulas de globo (DIN) Bronce, rosca hembra BSP

DIN 型青銅玉形弁・アンダル弁

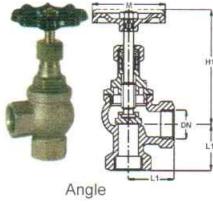
截止閥 (DIN) 青銅, 英制锥螺纹内螺纹

Bronze globe valves with threaded bonnet, metal seated, straight and angle pattern, BSP female threaded connection, inside screwed stem and rising handwheel.

Application: water, oil, air and gas.



Straight



Angle

Pressure and Temperature Range

Bore	20°C	200°C
3/8" - 3"	16 bar	12 bar

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Bonnet	Brass	- (CuZn41Pb62)
Disc	Brass	- (CuZn41Pb62)
Stem	Brass	- (CuZn41Pb62)
Gland Packing	PTFE	
Bonnet Gasket	Asbestos-free	
Handwheel	Aluminium	

How to order: CODE

Globe valve (DIN), bronze, BSP female threaded, threaded bonnet, metal seated, STRAIGHT or ANGLE, MODEL NO., SIZE DN

Unit Per Pcs.						
Straight			Angle			Weight kg
CODE	DN	Size mm	CODE	DN	Size mm	
		L H M			L ₁ H M	
75 51 01	1/4"	50 95 50	75 51 11	1/4"	28 85 50	0.3
02	3/8"	50 95 50	12	3/8"	28 85 50	0.3
03	1/2"	60 95 60	13	1/2"	32 95 60	0.5
04	3/4"	70 110 70	14	3/4"	40 115 70	0.6
05	1"	80 120 70	15	1"	46 120 70	1.0
75 51 06	1-1/4"	95 145 70	75 51 16	1-1/4"	51 135 70	1.3
07	1-1/2"	105 155 80	17	1-1/2"	58 140 80	1.7
08	2"	130 185 110	18	2"	61 165 110	2.9
09	2-1/2"	155 245 130				
10	3"	180 280 150				

Same weight for straight type and angle type.

Globe Valves (DIN)

Bronze, DIN Flanges

Secured Bonnet, Metal Seated

Fixed Disc, Pressure Rating PN 16, Straight and Angle

Válvulas de globo (DIN), Bridas de bronce, DIN

DIN 型青銅玉形弁・アンダル弁

截止閥 (DIN) 青銅, DIN 法兰

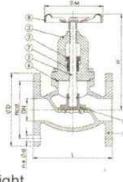
Metal seated globe valve with bronze (RG5) body. Comes with rising stem and bolted bonnet. Raised face flanges.

Applications:

Steam, Fuel oil, Lubricating oil, Flammable hydraulic oil, Cargo oil, Boiler feedwater, Condensate, Sea water, Water



Straight



Angle



Angle

Pressure and Temperature Range

PN 16: Min. & Max. -10°C/+200°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CC491K
Bonnet	Bronze	CC491K
Stem	Bronze	CW602N
Gland	Bronze	CC491K
Disc	Bronze	CC491K
Gasket	NA	Dixo 4000
Packing	NA	Graphite
Handwheel	Ductile Iron	GGG40

How to order: CODE

Globe valve (DIN), bronze, DIN flanges, secured bonnet, metal seated, pressure rating PN 16 STRAIGHT or ANGLE, MODEL NO., SIZE DN

Straight

CODE	DN	Size mm				Weight kg
		D	Hcd	L	H	
75 51 21	15	95	65	130	140	100
	22	105	75	150	150	100
	23	115	85	160	160	100
	24	140	100	180	165	100
	25	150	110	200	195	140
75 51 26	50	165	125	230	205	140
	27	185	145	290	255	160
	28	200	160	310	290	200
	29	220	180	350	335	200
	93	250	210	400	405	250

MESON Model No.: 410.5.5.5.1

Angle

CODE	DN	Size mm				Weight kg
		D	Hcd	L	H	
75 51 32	20	105	75	95	130	100
	33	115	85	100	150	100
	34	140	100	105	155	100
	35	150	110	115	180	140
	36	165	125	125	185	140
75 51 37	65	185	145	145	225	160
	38	200	160	155	260	200
75 52 00	100	220	180	175	290	200
	91	285	240	225	335	320

MESON Model No.: 411.5.5.5.1

Globe Valves (DIN)

Bronze, BSP Female Threaded

Secured Bonnet, Metal Seated

Fixed Disc, Pressure Rating PN 16

Straight and Angle

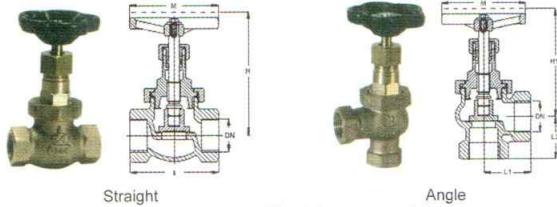
Válvulas de globo (DIN) Bronce, rosca hembra BSP

DIN 型青銅玉形弁・アンダル弁

截止閥 (DIN) 青銅, 英制锥螺纹内螺纹

Bronze globe valves with threaded and secured bonnet, metal seated, straight and angle pattern, BSP female threaded ends, inside screwed stem and rising handwheel.

Application area is aboard ships where a light bronze construction is desirable, but it also complies with all requirements related to marine inspection and classification societies, which in certain instances specify a dependable securing of threaded bonnets.



Pressure and Temperature Range

Bore	0/120°C	200°C
3/8" - 3"	16 bar	12 bar

Material Specification

Component	Material	EN and/or (DIN)
Body, Seat, Bonnet, Bonnet Nut and Disc Stem	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Gland Packing	Brass	CuZn35Ni3Mn2AlPb (CuZn35Ni)
Bonnet Gasket	Asbestos-free PTFE	
Handwheel	Cast iron	

How to order: CODE

Globe valve (DIN), bronze, BSP female threaded, secured bonnet, pressure rating PN 16, fixed disc, STRAIGHT or ANGLE, MODEL NO., SIZE DN

Unit Per Pcs.						
Straight			Angle			
CODE	D Inch	Size mm L H M	CODE	D Inch	Size mm L1 L2 H1 M	Wgt Kg
75 51 41	3/8	60 95 60	75 51 51	3/8	35 30 86 60	0.6
42	1/2	65 95 60	52	1/2	40 35 86 60	0.6
43	3/4	75 110 80	53	3/4	45 40 100 80	0.8
44	1	90 115 80	54	1	50 45 105 80	1.2
45	1-1/4	105 135 90	55	1-1/4	55 50 120 90	1.9
75 51 46	1-1/2	120 145 100	75 51 56	1-1/2	65 55 135 100	2.5
47	2	145 165 120	57	2	75 65 150 120	4.0
48	2-1/2	170 230 160	58	2-1/2	90 75 230 160	7.5
49	3	200 250 200	59	3	110 90 250 200	11.5

Same weight for straight type and angle type.

Globe Valves (DIN) Bronze, BSP Female Threaded PN 32

Válvulas de globo (DIN)Bronze, rosca hembra BSP

DIN 型青銅玉形弁

截止閥 (DIN) 青銅, 英制锥螺纹内螺纹



CODE	Size	Item No.	CODE	Size	Item No.
75 51 30	1/4"	AA040006	75 51 60	1"	AA040025
39	3/8"	AA040010	91	1-1/4"	AA040032
40	1/2"	AA040015	92	1-1/2"	AA040038
50	3/4"	AA040020			

Name of Mfr.: Alligator

Globe Valves (DIN)

Bronze, DIN Flanges

Bolted Bonnet, Outside Screw and Yoke

Metal Seated, Fixed Disc

Pressure Rating PN 6-10-16, Straight and Angle

Válvulas de globo (DIN)Bridas de bronce, DIN

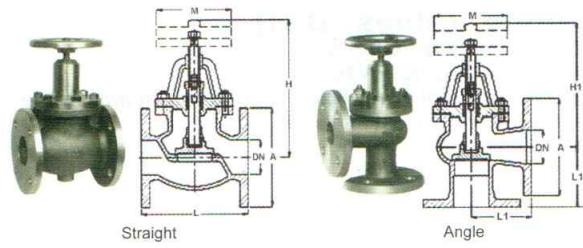
DIN 型青銅玉形弁・アングル弁

截止閥 (DIN) 青銅, DIN 法兰

Bronze globe valves with bronze disc and seat, pressure rating PN 6/10/16, straight and angle pattern, flat faced flanges according to DIN PN 10/16, bolted bonnet, outside screw & yoke. Heavy pattern for ship building industry.

Application: the valves offer good resistance to corrosive action of seawater, fresh water and waste water.

Application area: aboard ships, etc. but also in installations where internal or external corrosion is undesirable.



Pressure and Temperature Range

Bore	Pressure Rating	Pressure and Temperature Range
DN 15 - 150	PN 16	16 bar - 120°C 12 bar - 200°C
DN 200	PN 10	10 bar - 120°C 8 bar - 200°C
DN 250 - 300	PN 6	6 bar - 120°C

Material Specification

Component	Material	EN and/or (DIN)
Body, Bonnet, Disc	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Stem	Brass	CuZn35Ni3Mn2AlPb (CuZn35Ni)
Stud Bolts, Nuts	Stainless steel	
Bonnet Gasket	Graphite	
Gland Packing		
Handwheel	Cast iron	

How to order: CODE

Globe valve (DIN), bronze, DIN flanges, bolted bonnet, outside screw and yoke, metal seated, fixed disc, STRAIGHT or ANGLE, PRESSURE RATING, SIZE DN

Straight Type

CODE	DN	Pressure Rating	Size mm			Weight Kg
			A	L	H	
75 51 61	15	PN16	95	120	175	100
	62		105	120	175	100
	63		115	140	178	125
	64		140	150	200	125
	65		150	155	220	140
75 51 66	50	PN16	165	180	250	140
	67		185	200	260	140
	68		200	240	300	180
	69		220	270	350	200
	70		250	320	380	220
75 51 71	150	PN16	285	370	440	280
	200		340	500	620	315
	250		395	730	670	400
	300	PN 6	445	850	750	400
						295.0

Angle Type

CODE	DN	Pressure Rating	Size mm				Weight Kg	Unit Per Pcs.
			A	L1	H1	M		
75 51 76	15	PN16	95	65	175	100	4.0	
	20		105	65	175	100	5.5	
	25		115	70	178	125	6.2	
	32		140	90	200	125	8.4	
	40		150	90	220	140	10.0	
75 51 81	50	PN16	165	105	250	140	12.8	
	65		185	115	260	140	23.2	
	80		200	125	300	180	31.0	
	100		220	145	350	200	41.0	
	125		250	170	380	220	65.0	
75 51 86	150	PN16	285	200	440	280	89.0	
	200	PN10	340	250	570	315	127.0	
	250	395	325	550	400	155.0		
	300	PN 6	445	375	620	400	225.0	

Angle Type

CODE	DN	Size mm				Weight Kg	Unit Per Pcs.
		A	L1	H1	M		
75 52 46	15	95	90	168	100	3.1	
	20	105	95	166	100	3.5	
	25	115	100	180	120	4.8	
	32	140	105	187	120	6.6	
	40	150	115	234	160	8.7	
75 52 51	50	165	125	236	160	11.8	
	65	185	145	271	180	14.0	
	80	200	155	291	200	20.5	
	100	220	175	332	250	32.2	
	125	250	200	387	250	46.0	
75 52 56	150	285	225	437	320	62.0	
	200	340	275	532	360	106.0	
	250	405	325	651	360	-	
	300	460	375	830	500	-	

Globe Valves (DIN)

Cast Iron, DIN Flanges

Pressure Rating PN16

Stainless Steel Trim, Fixed Disc, Straight and Angle

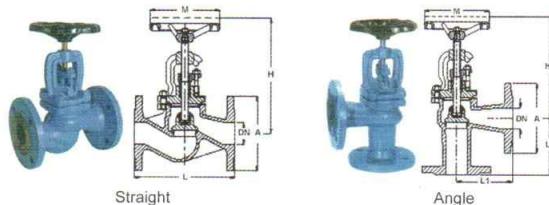
Válvulas de globo (DIN), Hierro fundido, bridas DIN

DIN 型鑄鐵玉形弁・アングル弁

截止閥 (DIN) 铸铁, DIN 法兰

Cast iron globe valves with stainless steel trim, PN 16, straight and angle pattern, flanged ends acc. To DIN PN 10/16. Outside screw & yoke.

Application : steam, cold and hot water, oil, air gases etc.



Pressure and Temperature Range

	-10/120°C	150°C	180°C	200°C	230°C	250°C	300°C
PN 16	16 bar	14.4	13.4	12.8	11.8	11.2	9.6

Material Specification

Component	Material	EN and/or (DIN)
Body, Bonnet and Gland	Cast iron	GJL-250 (GG-25)
Disc and Stem	Stainless steel	X20Cr13
Seat	Stainless steel	X12Cr13 (X10Cr13)
Gland Packing	Graphite	
Bonnet Gasket (SS insert)	Graphite	
Handwheel	Cast iron	

How to order: CODE

Globe valve (DIN), cast iron, DIN flanges, pressure rating PN 16, stainless steel trim, fixed disc STRAIGHT or ANGLE, SIZE DN

Straight Type

CODE	DN	Size mm				Weight Kg	Unit Per Pcs.
		A	L	H	M		
75 52 31	15	95	130	172	100	3.3	
	20	105	150	173	100	3.9	
	25	115	160	182	120	5.0	
	32	140	180	200	120	6.6	
	40	150	200	255	160	8.4	
75 52 36	50	165	230	273	160	12.0	
	65	185	290	295	180	17.3	
	80	200	310	332	200	22.7	
	100	220	350	369	250	35.8	
	125	250	400	432	250	52.8	
75 52 41	150	285	480	483	320	74.2	
	200	340	600	606	360	126.0	
	250	405	730	758	360	200.0	
	300	460	850	830	500	315.0	

Globe Valves (DIN)

Cast Iron, DIN Flanges

Pressure Rating PN16

Bronze Trim, Fixed Disc, Straight and Angle

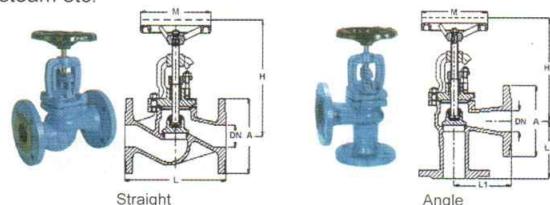
Válvulas de globo (DIN), Hierro fundido, bridas DIN

DIN 型鑄鐵玉形弁・アングル弁

截止閥 (DIN) 铸铁, DIN 法兰

Cast iron globe valves with low-zinc bronze seat, pressure rating PN 16, straight and angle pattern, flanged ends acc. to DIN PN 10/16. Outside screw & yoke and rising handwheel.

Application: Aboard ships for hot and cold water, oil, air, steam etc.



Pressure and Temperature Range

	-10/120°C	150°C	180°C	200°C	225°C
PN 16	16 bar	14.4	13.4	12.8	12

Material Specification

Component	Material	EN and/or (DIN)
Body, Bonnet and Gland	Cast iron	GJL-250 (GG-25)
Disc, Seat	Low-zinc bronze	(G-CuSn10Zn (Rg 10))
Stem	Brass	(CuZn41Pb62)
Gland Packing	Graphite	
Body Gasket (SS insert)	Graphite	
Handwheel	Cast iron	

How to order: CODE

Globe valve (DIN), cast iron, DIN flanges, pressure rating PN 16, bronze trim, fixed disc, STRAIGHT or ANGLE, SIZE DN

Straight Type

CODE	DN	Size mm				Weight Kg	Unit Per Pcs.
		A	L	H	M		
75 52 61	15	95	130	172	100	3.3	
	20	105	150	173	100	3.9	
	25	115	160	182	120	5.0	
	32	140	180	200	120	6.6	
	40	150	200	255	160	8.4	
75 52 66	50	165	230	273	160	12.0	
	65	185	290	295	180	17.3	
	80	200	310	332	200	22.7	
	100	220	350	369	250	35.8	
	125	250	400	432	250	52.8	
75 52 71	150	285	480	483	320	74.2	
	200	340	600	606	360	126.0	
	250	395	730	758	360	200.0	
	300	445	850	830	500	315.0	

Angle Type

CODE	DN	Size mm			Weight Kg	Unit Per Pcs.
		A	L1	H1		
75 52 76	15	95	90	168	100	3.1
77	20	105	95	166	100	3.5
78	25	115	100	180	120	4.8
79	32	140	105	187	120	6.6
80	40	150	115	234	160	8.7
75 52 81	50	165	125	236	160	11.8
82	65	185	145	271	180	14.0
83	80	200	155	291	200	20.5
84	100	220	175	332	250	32.2
85	125	250	200	387	250	46.0
75 52 86	150	285	225	437	320	62.0
88	200	340	275	532	360	106.0
89	250	395	325	651	360	-
90	300	445	375	830	500	-

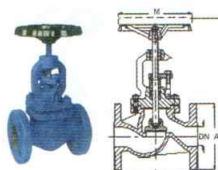
Globe Valves (DIN)**Cast Steel, DIN Flanges Pressure Rating PN 16
Bronze Trim, Fixed Disc, Straight and Angle**

Válvulas de globo (DIN) Acero fundido, bridas DIN

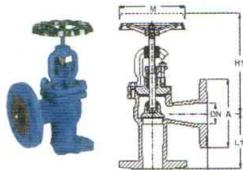
DIN 型铸钢球形阀・アングル弁
截止阀 (DIN) 铸钢, DIN 法兰

Cast steel globe valves with bronze trim, pressure rating PN 16, straight and angle pattern, flanged ends acc. to DIN PN 10/16, outside screw & yoke and rising handwheel.

Application : steel valves are frequently used aboard ships, e.g. as ships side valve.



Straight



Angle

Pressure and Temperature Range

	-10/120°C	200°C	225°C
PN 16	16 bar	14.7	13.9

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast steel	GP240GH + N (GS-C25N)
Bonnet (DN 15 - 80)	Forged steel	C22G2 (C 22.8)
Bonnet (DN 100 - 400)	Cast steel	GP240GH + N (GS-C25N)
Disc	Bronze	CuSn5Zn5Pb5-C (G-CuSN5ZnPb (Rg 5))
Seat	Bronze	CuSn5Zn5Pb5-C (G-CuSN5ZnPb (Rg 5))
Stem	Brass	CuZn35Ni3Mn2AlPb (CuZn35Ni) - (9S20)
Yoke Bush	Steel	
Gland Packing	Graphite	
Bonnet Gasket (SS insert)	Graphite	
Handwheel	Cast iron	

How to order: CODE

Globe valve (DIN), cast steel, DIN cast steel, DIN flanges, pressure rating PN 16, bronze trim, fixed disc, STRAIGHT or ANGLE, SIZE DN

Straight Type

CODE	DN	Size mm			Weight Kg	Unit Per Pcs.
		A	L	H		
75 51 94	15	95	130	189	120	4.8
95	20	105	150	189	120	5.4
96	25	115	160	203	140	7.1
97	32	140	180	203	140	8.0
98	40	150	200	246	160	11.5
75 51 99	50	165	230	254	160	13.5
75 53 01	65	185	290	294	180	21
02	80	200	310	322	200	27.5
03	100	220	350	381	225	40
04	125	250	400	427	250	61
75 53 11	400	580	1,100	1,006	640	780

Angle Type

CODE	DN	Size mm			Weight Kg	Unit Per Pcs.
		A	L1	H1		
75 52 94	15	95	90	159	120	5.2
95	20	105	95	159	120	7.2
96	25	115	100	178	140	7.4
97	32	140	105	178	140	8.4
98	40	150	115	221	160	12.4
75 52 99	50	165	125	229	160	13.6
75 53 15	65	185	145	263	180	20
16	80	200	155	297	200	25
17	100	220	175	336	225	34
18	125	250	200	387	250	53
75 53 19	150	285	225	466	400	70
21	200	340	275	588	520	148
22	250	405	325	690	520	188
23	300	460	375	785	520	327
24	350	520	425	876	640	383
75 53 25	400	580	475	886	640	690

Globe Valves (DIN)**Cast Steel, DIN Flanges Pressure Rating PN 40
Stainless Steel Trim Fixed Disc, Straight and Angle**

Válvulas de globo (DIN) Acero fundido, bridas DIN

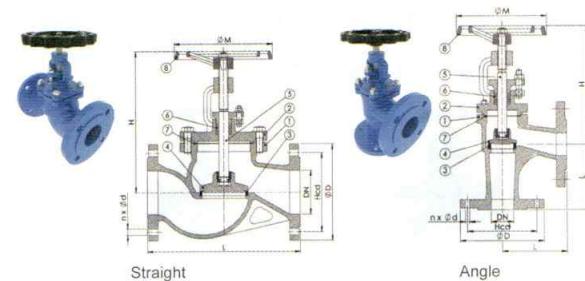
DIN 型铸钢球形阀・アングル弁

截止阀 (DIN) 铸钢, DIN 法兰

Cast Steel globe valves with stainless steel trim, pressure rating PN 40, straight and angle pattern, flanged ends acc. to DIN PN 40, outside screw & yoke and rising handwheel.

Application:

Fuel oil, Lubricating oil, Flammable hydraulic oil, Cargo oil, Non-flammable hydraulic fluid, Boiler feedwater, Condensate, Sea water, Water.



Pressure and Temperature Range
PN 40: maximum temperature 300°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast steel	GS-C25N
Bonnet	Cast steel	GS-C25N
Disc	Stainless steel	1.4021
Seat	Stainless steel	1.4301
Stem	Stainless steel	1.4021

75

How to order: CODE

Globe valve (DIN), cast steel, DIN flanges, pressure rating PN 40, stainless steel trim, fixed disc, STRAIGHT or ANGLE, SIZE DN

Straight Type

CODE	DN	Size mm					Weight Kg	Unit Per Pcs.
		Hcd	D	L	H	M		
75 53 26	15	65	95	130	165	120	4.0	
27	20	75	105	150	165	120	4.5	
28	25	85	115	160	175	140	5.0	
29	32	100	140	180	180	140	7.0	
30	40	110	150	200	220	160	11.0	
75 53 31	50	125	165	230	230	160	13.0	
32	65	145	185	290	245	180	19.0	
33	80	160	200	310	295	200	25.0	
34	100	190	235	350	330	225	37.0	

MESON Model No. : 410.3.4.4.1

Angle Type

CODE	DN	Size mm				Weight Kg	Unit Per Pcs.
		A	L1	H	M		
75 53 41	15	95	90	165	120	3.8	
42	20	105	95	165	120	4	
43	25	115	100	175	140	5	
44	32	140	105	180	140	7	
45	40	150	115	220	160	11	
75 53 46	50	165	125	230	160	13	
47	65	185	145	245	180	18	
48	80	200	155	290	200	25	
49	100	235	175	330	225	35	
50	125	270	200	365	250	55	
75 53 51	150	300	225	420	300	75	

MESON Model No. : 411.3.4.4.1

Globe Valves (DIN)

Cast Iron, DIN Flanges, Screw down check,
Pressure Rating PN 16

Stainless Steel Trim, Straight and Angle

Válvulas de globo (DIN) Hierro fundido, bridas DIN

DIN 形鑄鐵玉形弁・アングル弁

截止閥 (DIN) 鋳鐵, DIN 法蘭

Cast iron screw down check globe valves with stainless steel stem 13% Cr. Maximum working pressure is 16 bar, maximum working temperature is 100°C.



Straight



Angle

Straight Type

CODE	DN	Size mm				Item No.
		Flange Diam.	Face to Face	Pitch	Hole Dia x No. mm	
75 53 12	15	95	130	65	4x14	AA210015
	13	105	150	75	4x14	AA210020
	14	115	160	85	4x14	AA210025
	69	140	180	100	4x18	AA210032
	70	150	200	110	4x18	AA210040
75 53 78	50	165	230	125	4x18	AA210050
	65	185	290	145	4x18	AA210065
	80	200	310	160	8x18	AA210080
	95	220	350	180	8x18	AA210100
	125	250	400	210	8x18	AA210125

Name of Mfr.: Alligator

Angle Type

CODE	DN	Size mm				Item No.
		Flange Diam.	Face to Face	Pitch	Hole Dia x No. mm	
75 53 97	15	95	130	65	4x14	AA225015
	20	105	150	75	4x14	AA225020
	25	115	160	85	4x14	AA225025
75 54 00	32	140	180	100	4x18	AA225032
	40	150	200	110	4x18	AA225040
75 54 89	50	165	230	125	4x18	AA225050
	65	185	290	145	4x18	AA225065
	80	200	310	160	8x18	AA225080
	100	220	350	180	8x18	AA225100

Name of Mfr.: Alligator

Globe Valves (DIN)

Steel, Pressure PN 640, BSP Female Thread End Straight



Válvulas de globo (DIN) Acero

DIN 型鋼製玉形弁

截止閥 (DIN) 鋼

Maximum working pressure/temperature:
100 bar -100°C / 640 bar -20°C.

CODE	Size	Face to Face mm	Alligator No.
75 53 56	1/4"	80	AA250006
57	3/8"	80	AA250010
58	1/2"	80	AA250015
59	3/4"	100	AA250020
60	1"	130	AA250025

Name of Mfr. : Alligator - Model AA250

Globe Valves (DIN)

Stainless Steel, Pressure Rating PN 200, BSP Female Threaded Ends, Straight and Angle

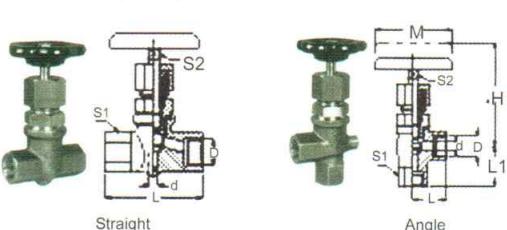
Válvulas de globo (DIN) Acero inoxidable

DIN 形ステンレス製玉形弁・アングル弁

截止閥 (DIN) 不锈钢

Forged steel globe valves with threaded bonnet, SS trim and inside screwed stem.

Application : liquids, gases and steam.



Pressure and Temperature Range

		Pressure rating PN 200
Maximum Operating Pressure		200 bar
Minimum Temperature		-10 °C
Maximum Temperature		300 °C

Material Specification

Component	Material	EN and/or (DIN)
Body	Stainless steel	X20Cr13
Bonnet	Carbon steel	C35E (Ck 35)
Stem	Stainless steel	X14CrMoS17 (X12CrMoS17)
Disc	Stainless steel	X39CrMo17-1 (X35CrMo17) - (St.37-1)
Butt Welding Stub	Steel	
Bonnet Nut	Steel	
Handwheel	PF (Bakelite)	

How to order: CODE

Globe valve (DIN), stainless steel, pressure rating PN 200 BSP female threaded ends, STRAIGHT or ANGLE, SIZE DN

Straight Type

CODE	D ["]	d mm	Size mm					Weight Kg	Unit Per Pcs.
			H max.	L	M	S1	S2		
75 53 62	R3/8	6	130	80	90	30	9	0.87	
63	R1/2	8	130	80	90	30	9	0.82	
64	R3/4	10	135	100	90	36	9	1.02	
65	R3/4	15	160	130	150	46	9	2	
66	R1	20	160	130	150	46	9	1.82	
75 53 67	R1-1/4	25	170	160	150	60	10	3.88	
68	R1-1/2	32	170	160	150	60	10	3.46	

Angle Type

CODE	D ["]	d mm	Size mm					Weight Kg	Unit Per Pcs.	
			H max.	L	L1	M	S1			
75 53 72	R3/8	6	123	42	42	90	30	9	0.99	
73	R1/2	8	123	42	42	90	30	9	0.96	
74	R3/4	12	125	38	50	90	36	9	1.02	
75	R3/4	15	125	38	50	150	46	9	1.02	

Globe Valves (DIN)**Nodular Cast Iron****DIN Flanges, Pressure Rating PN 16****Bronze Trim, Fixed Disc, Straight and Angle**

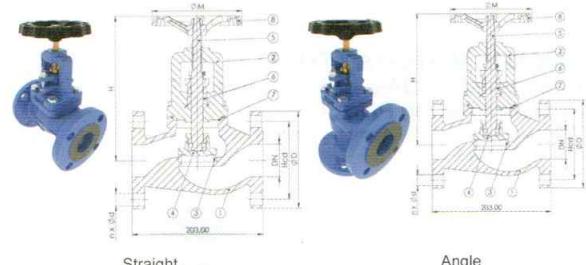
Válvulas de globo (DIN) Fundición nodular

DIN 型ふし状鉄玉形弁・アングル弁 截止阀 (DIN) 球墨铸铁

Nodular cast iron globe valve with bronze trim, pressure rating PN 16, straight and angle pattern, flanged ends acc. to DIN PN 16, outside screw & yoke and rising handwheel.

Application:

Fuel oil, Lubricating oil, Flammable hydraulic oil, Cargo oil, Non-flammable hydraulic fluid, Boiler feedwater, Condensate, Sea water, Water



Size	Max. Press. At 120°C	Max. Press. At 180°C	Flange Rate
DN 15-150	PN16	PN10	PN16
DN 200	PN10	PN6	PN10

Material Specification

Component	Material	EN and/or (DIN)
Body	Nodular cast iron	GGG40
Bonnet	Nodular cast iron	GGG40
Seat	Bronze	RG5
Disc	Bronze	RG5
Stem	Special Brass	CW602N
Gland packing	Graphite	
Gasket	Graphite	
Handwheel	Cast Iron	GG25

How to order: CODE

Globe valve (DIN), nodular cast iron, DIN flanges, pressure rating PN 16, bronze trim, STRAIGHT or ANGLE, SIZE DN

Straight Type

CODE	DN	Size mm					Weight Kg	Unit Per Pcs.
		Hcd	D	L	H	M		
75 54 01	15	65	95	130	177	120	3.8	
02	20	75	105	150	179	120	4.3	
04	32	100	140	180	198	120	7.1	
05	40	110	150	200	221	140	9.8	
06	50	125	165	200	224	140	13.0	
75 54 07	65	145	185	290	267	140	17.0	
08	80	160	200	310	292	160	25.0	
09	100	180	220	350	325	160	35.0	
10	125	210	250	400	370	200	50.0	
11	150	240	285	480	420	200	70.0	

MESON Model No.: 410.2.5.5.1

Angle Type

CODE	DN	Size mm					Weight Kg	Unit Per Pcs.
		Hcd	D	L1	H	M		
75 54 16	15	65	95	90	173	120	4.0	
17	20	75	105	95	173	120	4.5	
18	25	85	115	100	189	120	5.2	
19	32	100	140	105	190	120	6.7	
20	40	110	150	115	225	140	9.6	
75 54 21	50	125	165	125	218	140	12.0	
22	65	145	185	145	246	140	16.0	
23	80	160	200	155	274	160	21.0	
24	100	180	220	175	303	160	33.0	
25	125	210	250	200	310	200	43.0	
75 54 26	150	240	285	225	360	200	70.0	
28	200	295	340	275	488	400	110.0	
29	250	350	395	325	578	400	160.0	

MESON Model No.: 411.2.5.5.1

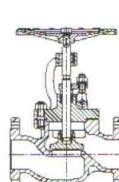
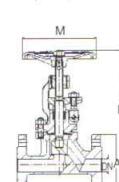
Globe Valves (DIN)**Forged Steel and Cast Steel DIN Flanges****Pressure Rating PN 40-63-100-160****Fixed Disc, Straight**

Válvulas de globo (DIN) Acero fundido y acero forjado

DIN 型鍛造鋼及び鋳鋼玉形弁 截止阀 (DIN) 钢锻和铸钢

Forged and cast steel globe valves, pressure rating PN 40/63/100/160, straight pattern, flanged ends acc. to DIN PN 40/63/100/160, hard-faced seats, outside screw & yoke and rising handwheel.

Application: steam, water, oil, air, etc.



DN 10 - 50

DN 65 - 200

Pressure and Temperature Range

	-10/100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	
PN 40 (DN10-50)	40 bar	37	35	32	28	24	21	10	
PN 40 (DN65-200)	40	37	35	32	28	24	21	-	
PN 63 (DN10-50)	63	58	50	45	40	36	32	24	
PN 63 (DN65-150)	63	53	50	45	40	36	32	-	
PN 100 (DN10-50)	100	90	80	70	60	56	50	38	
PN 100 (DN65-150)	100	83	80	70	60	56	50	-	
PN 160 (DN10-50)	160	145	130	112	96	90	80	60	
PN 160 (DN65-100)	160	135	130	112	96	90	80	-	

Material Specification

Component	Material	EN and/or (DIN)
Body (DN 10-50) with armoured seat	Forged steel	C22G2 (C 22.8)
Body (DN 65 - 200) with armoured seat	Cast steel	GP240GH + N (GS-C 25N)
Bonnet (DN 10 - 50)	Forged steel	C22G2 (C 22.8)
Bonnet (DN 65 - 200)	Cast steel	GP240GH + N(GS-C25N)
Disc (DN 10 - 50) with hard-faced seat	Stainless Steel	X20Cr13
Disc (DN65-200) with armoured seat	Forged steel	C22G2 (C 22.8)
Stem	Stainless steel	X20Cr13
Yoke Bush	Steel	11SMnPb30 (9SMnPb 28)
Gland Packing	Graphite	
Bonnet Gasket	Graphite	
Handwheel	Ductile cast iron	GJS-400-15 (GGG-40)

PN 40**How to order: CODE**

Globe valve (DIN), FORGED or CAST STEEL, DIN flanges, pressure rating PN 40, straight type, SIZE DN

Unit Per Pcs.

CODE	DN	Size mm				Weight Kg
		A	L	H	M	
Forged Steel						
75 54 51	10	90	130	215	140	4.5
52	15	95	130	215	140	5.0
53	20	105	150	220	140	5.7
54	25	115	160	220	140	6.3
55	32	140	180	245	180	10.0
75 54 56	40	150	200	250	180	11.2
57	50	165	230	260	180	15.5
Cast Steel						
75 54 58	65	185	290	310	225	23.5
59	80	200	310	360	280	28.0
60	100	235	350	400	280	40.0
61	125	270	400	465	360	61.0
62	150	300	480	530	360	84.0
75 54 63	200	375	600	575	450	170.0

PN 63**How to order: CODE**

Globe valve (DIN), FORGED or CAST STEEL, DIN flanges, pressure rating PN 63, straight type, SIZE DN

Unit Per Pcs.

CODE	DN	Size mm				Weight Kg
		A	L	H	M	
Forged Steel						
75 54 64	10	100	210	220	180	8.7
65	15	105	210	220	180	8.6
66	20	130	230	220	180	10.4
67	25	140	230	220	180	10.9
68	32	155	260	285	225	19.0
75 54 69	40	170	260	285	225	21.0
70	50	180	300	345	225	24.1

(to be continued)

CODE	DN	Size mm				Weight Kg
		A	L	H	M	
Cast Steel						
75 54 71	65	205	340	360	280	34.0
	72	80	215	380	400	47.0
	73	100	250	430	410	72.0
	74	125	295	500	535	117.0
	75	150	345	550	555	160.0

PN 100**How to order: CODE**

Globe valve (DIN), FORGED or CAST STEEL, DIN flanges, pressure rating PN 100, straight type, SIZE DN

Unit Per Pcs.

CODE	DN	Size mm				Weight Kg
		A	L	H	M	
Forged Steel						
75 54 76	10	100	210	220	180	8.7
	77	15	105	210	220	8.6
	78	20	130	230	220	10.4
	79	25	140	230	220	10.9
	80	32	155	260	285	19.0
75 54 81	40	170	260	285	225	21.0
	82	50	195	300	345	24.1
Cast Steel						
75 54 83	65	220	340	360	280	34.0
	84	80	230	380	400	47.0
	85	100	265	430	410	72.0
	86	125	315	500	535	120.0
	87	150	355	550	555	166.0

PN 160**How to order: CODE**

Globe valve (DIN), FORGED or CAST STEEL, DIN flanges, pressure rating PN 160, straight type, SIZE DN

Unit Per Pcs.

CODE	DN	Size mm				Weight Kg
		A	L	H	M	
Forged Steel						
75 54 31	10	100	210	220	180	8.7
	32	15	105	210	220	8.6
	33	20	130	230	220	10.4
	34	25	140	230	220	10.9
	35	32	155	260	285	19.0
75 54 36	40	170	260	285	225	21.0
	37	50	195	300	345	25.0
Cast Steel						
75 54 38	65	220	340	360	280	39.0
	39	80	230	380	400	51.0
	40	100	265	430	410	80.0

Globe Valves (DIN)**Heat-resistant Steel DIN Flanges****Pressure Rating PN 160**

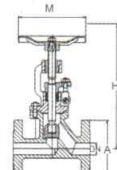
Válvulas de globo (DIN) Acero resistente al calor

DIN 型耐熱鋼玉形弁

截止閥 (DIN) 耐熱鋼

Forged and cast heat-resistant steel globe valves, pressure rating PN 160, straight pattern, flanged ends acc. to DIN PN 160, stellited seat, outside screw & yoke and rising handwheel.

Application: steam, water, oil, air etc.



Pressure and Temperature Range

	-10/300°C	350°C	400°C	450°C	500°C
PN 160	160 bar	153	146	139	118
	510°C	520°C	530°C	540°C	550°C
PN 160	100	79	62	46	35

Material Specification

Component	Material	EN and/or (DIN)
Body (with stellited seat)	Heat-resistant steel	13CrMo4-5 (13CrMo4 4)
Bonnet	Heat-resistant steel	13CrMo4-5 (13CrMo4 4)
Disc (with stellited seat)	Heat-resistant steel	13CrMo4-5 (13CrMo4 4)
Stem	Stainless steel	X20Cr13
Yoke Bush	Steel	11SMnPb30 (9SMnPb 28)
Bonnet Gasket, Gland	Graphite	
Packing	Ductile cast iron	GJS-400-15 (GGG-40)
Handwheel	Ductile cast iron	GJS-400-15 (GGG-40)

How to order: CODE

Globe valve (DIN), heat-resistant steel, DIN flanges, pressure rating PN 160, straight type, SIZE DN

Unit Per Pcs.

CODE	DN	Size mm				Weight Kg
		A	L	H	M	
75 54 41	10	100	210	232	180	8.7
42	15	105	210	232	180	8.6
43	20	130	230	232	180	10.4
44	25	140	230	232	180	10.9
45	32	155	260	300	225	19.0
75 54 46	40	170	260	300	225	21
47	50	195	300	363	225	25

PN16

Unit Per Pcs.

CODE	DN	Size mm				Weight Kg
		Inch	H	L	A	
75 55 03	15	1/2"	74	42	14	55
04	20	3/4"	79	44	19	55
05	25	1"	91	47	24	60
06	32	1-1/2"	112	53	32	70
07	40	1-1/2"	126	58	36	80
75 55 08	50	2"	143	67	46.5	90
09	65	2-1/2"	178	76	60	110
10	80	3"	206	82	69.5	120

MESON Model No.: 600.5.5.5.1

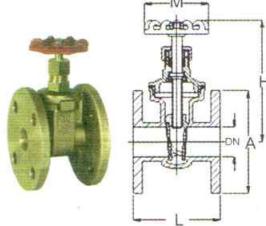
Gate Valves (DIN)*Brass, DIN Flanged Ends**Threaded Bonnet Inside Screwed Stem**Pressure Rating PN 16*

Válvulas de compuerta (DIN) Bronce, bridas DIN

DIN 型青銅仕切弁

闸阀 (DIN) 青铜, DIN 法兰端

Bronze gate valve with bronze wedge and seat, pressure rating PN 16, flat faced flange acc. to DIN PN 10/16, threaded bonnet, inside screwed stem, non-rising stem and handwheel, face to face acc. to EN 558-1, 47 (DIN 3202-F19).



Heavy duty construction with flat faced flanges. Possible certification by various classification societies. Application: cold and hot water, saturated steam and other neutral media. Application area: general; but primarily used in shipbuilding.

Pressure and Temperature Range

Bore	Pressure and temperature Range
DN 15 - 100	16 bar - 120°C
	10 bar - 150°C
	6 bar - 200°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Bonnet	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Wedge	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Stem	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Bonnet Gasket	Asbestos-free	
Gland Packing	Asbestos-free	

How to order: CODE

Gate valve (DIN), bronze, DIN flanged ends, threaded bonnet inside screwed stem, SIZE DN

Unit Per Pcs.

CODE	DN	Size mm				Weight Kg
		A	H	L	M	
75 55 41	15	95	85	75	55	1.7
42	20	105	105	75	55	1.9
43	25	115	117	80	70	2.5
44	32	140	130	90	70	3.5
45	40	150	150	100	80	4.5
75 55 46	50	165	180	110	110	5.1
47	65	185	220	130	110	8.9
48	80	200	251	150	150	11.4
49	100	220	344	160	170	19.0

Pressure and Temperature Range: 16 Bar-120°C (Water, Oil, Air)

Material Specification

No	Part	Material	Code
1	Body	Copper Alloy	CC491K
2	Bonnet	Copper Alloy	CW614N
3	Gland	Copper Alloy	CW614N
4	Wedge	Copper Alloy	CW614N
5	Stem	Copper Alloy	CW614N
6	Gasket	NA	Red fiber
7	Packing	NA	Red fiber
8	Gland nut	Copper Alloy	CW614N
9	Nut	Copper Alloy	CW614N
10	Handwheel	Steel	-

How to order: CODE

Gate valve (DIN), brass, BSPP female threaded ends, non-rising stem, TYPE, SIZE DN