75
Valves & Cocks

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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/cm²)	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/cm²)	400°C	F-6313, F-7314, F-7421, F-7422, F-7473, F-7474
5.59 MPa (57 kgf/cm²)	425°C	F-7317, F-7318, F-7320, F-7330

Nominal diameter 50 – 200 mm

0.49 MPa (5 kgf/cm²)	205°C	F-7301, F-7302, F-7305, F-7306, F-7353, F-7354
0.98 MPa (10 kgf/cm²)		F-7307, F-7308, F-7375, F-7376
1.57 MPa (16 kgf/cm²)		F-7309, F-7310, F-7377, F-7378
1.18 MPa (12 kgf/cm²)	300°C	F-7319, F-7320, F-7471, F-7472
3.04 MPa (31 kgf/cm²)	400°C	F-7313, F-7314, F-7473, F-7474
4.22 MPa (43 kgf/cm²)	425°C	F-7317, F-7318, F-7315, F-7316
5.59 MPa (57 kgf/cm²)		F-7317, F-7318

Nominal diameter 250 – 400 mm

0.49 MPa (5 kgf/cm²)	100°C	F-7307, F-7308
1.18 MPa (12 kgf/cm²)	300°C	F-7319. F-7320
3.04 MPa (31 kgf/cm²)	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/cm²)	450 • 500	F-7354
0.60 MPa (6 kgf/cm²)	300 - 400	F-7305, F-7306 F-7354
0.69 MPa (7 kgf/cm²)	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/cm²)	250 • 300	F-7307, F-7308
	350 • 400	F-7308
1.37 MPa (14 kgf/cm²)	50 - 200	F-7307, F-7308, F-7375, F-7376
2.16 MPa (22 kgf/cm²)	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/cm²)	6 • 10	F-7388, F-7389
3.33 MPa (34 kgf/cm²)	6 - 25	F-7421, F-7422
	32 - 250	F-7313, F-7314, F-7473, F-7474
4.51 MPa (46 kgf/cm²)	100 - 150	F-7315, F-7316
6.08 MPa (62 kgf/cm²)	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 waterpiping, bilge and ballast sea water piping

Globe valves

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.69 MPa (7 kgf/cm²)	15 - 400	F-7367
	50 - 400	F-7363
1.37 MPa (14 kgf/cm²)	15 - 40	F-7368
	50 - 400	F-7364
1.57 MPa (16 kgf/cm²)	300 - 400	F-7369

Swing check valves

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.69 MPa (7 kgf/cm²)	25 - 40	F-7371
	50 - 250	F-7372
1.37 MPa (14 kgf/cm²)	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/cm²)	25 - 65	F-7381
1.57 MPa (16 kgf/cm²)	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/cm²)	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/cm²)	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/cm²)	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/cm²)	6 • 10	F-7388, F-7389
2.94 MPa (31 kgf/cm²)	6 - 25	F-7421, F-7422
	32 - 250	F-7313, F-7314, F-7473, F-7474
4.51 MPa (46 kgf/cm²)	100 - 150	F-7315, F-7316
6.08 MPa (62 kgf/cm²)	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/cm²)	15 - 40	F-7367
	50 - 600	F-7363
0.98 MPa (10 kgf/cm²)	15 - 40	F-7368
	50 - 600	F-7364
1.57 MPa (16 kgf/cm²)	300 - 400	F-7369

Swing check valves

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.49 MPa (5 kgf/cm²)	25 - 40	F-7371
	50 - 250	F-7372
0.98 MPa (10 kgf/cm²)	50 - 200	F-73673

Cocks

Max. Working Pressure	Nominal Diameter mm	Applicable JIS F Valve No.
0.49 MPa (5 kgf/cm²)	25 - 65	F-7381
	6 - 20	F-7387

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/cm²)	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/cm²)	50 - 200	F-7307, F-7308, F-7375, F-7376
1.57 MPa (16 kgf/cm²)	15 - 40	F-7307, F-7304, F-7348, F-7349, F-7413, F-7414
	50 - 150	F-7309, F-7310, F-7377, F-7378,
	200	F-7309, F-7310
1.96 MPa (20 kgf/cm²)	6 • 10	F-7388, F-7389
3.04 MPa (31 kgf/cm²)	6 - 25	F-7421, F-7422, F-7336, F-7337
	32 - 250	F-7313, F-7314, F-7473, F-7473, F-7474, F-7475
	200	F-7313, F-7314, F-7473, F-7474, F-7475
4.51 MPa (46 kgf/cm²)	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
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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
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(a) Ordinary Globe & Angle Valves

CODE	JIS No.	Material	Pressure kgf/cm²	Shape
75 01 21 - 27	F-7301	Bronze	5	Globe
31 - 37	F-7302			Angle
75 01 41 - 45	F-7303		16	Globe
51 - 55	F-7304			Angle
75 02 01 - 11	F-7305	Cast Iron	5	Globe
16 - 26	F-7306			Angle
75 02 31 - 39	F-7307		10	Globe
46 - 56	F-7308			Angle
75 02 61 - 67	F-7309		16	Globe
71 - 77	F-7310			Angle
75 04 01 - 02	F-7311	Cast Steel	5	Globe
06 - 07	F-7312			Angle
75 04 11 - 19	F-7319		10	Globe
21 - 29	F-7320			Angle
75 04 31 - 40	F-7313		20	Globe
41 - 50	F-7314			Angle
75 04 61 - 63	F-7315		30	Globe
66 - 68	F-7316			Angle
75 04 71 - 78	F-7317		40	Globe
81 - 88	F-7318			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　船用青铜球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
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/cm²]
Hydraulic inspection for body	1.03 MPa [10.5kgf/cm²]

F-7301

F-7302

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	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グル弁　船用青铜球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
Steam of 205oC 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/cm²]
Hydraulic inspection for body	3.24 MPa [33.0 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	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グル弁　船用铸球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]			
	Nominal dia. 200 mm or less		Nominal dia. 250, 300 mm	Nominal dia 350, 400 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	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/cm²]	
	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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
Globe Valve F-7305							
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 Raring

Fluid condition	Maximum working pressure MPa [kgf/cm²]			
	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	0.98 [10]			
Saturated steam			0.49 [5]	
Air & gas			-	
Oil & pulsation water			0.98 [10]	
Non-shock water of 120°C or less	1.37 [14]			

Hydraulic Inspection

Nominal dia. mm	Test pressure MPa [kgf/cm²]	
	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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
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							
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 pressur MPa [kgf/cm²]	
	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/cm²]
Hydraulic inspection for body	3.24 MPa [33.0 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
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
舶用可鍛鋳鉄玉形及びアングル弁　船用铸铁球阀和直角

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/cm²]	
	Class B	Class S
Steam of 300°C	-	0.49 [5]
Steam of 220°C or less	-	0.59 [6]
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/cm²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
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)

Unit Per Pc.

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	85	65	4	12	2.65
13	25	65	95	75	4	12	3.85
14	32	80	115	90	4	15	5.29
15	40	85	120	95	4	15	6.86

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

Hierro naval maleable válvulas esféricas/válvulas de ángulo
舶用可鍛鋳鉄玉形及びアングル弁　船用铸铁球阀和直角

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

Globe Valve – ex JIS F-7323
Angle Valve – ex JIS F-7324

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]	
	Class B	Class S
Steam or 350°C or less	-	1.57 [16]
Steam of 300°C or less		1.57 [18]
Steam of 220°C or less	1.57 [16]	1.96 [20]
Steam of 205°C or less		
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/cm²]
Hydraulic inspection for body	3.24 MPa [33.0 kgf/cm²]

How to order: CODE
GLOBE or ANGLE valve, cast iron, 16 kgf/cm², SIZE mm

Unit Per Pc.

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	15	3.85
23	25	130	125	90	4	19	5.57
24	32	160	135	100	4	19	7.40
25	40	180	140	105	4	19	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	15	3.75
33	25	85	125	90	4	19	5.36
34	32	95	135	100	4	19	7.05
35	40	100	140	105	4	19	8.80

Ductile Iron 10K Globe Valves B-2051

Válvula de bola 10K de hierro dúctil
ダクタイル鋳鉄10K玉形弁　球墨铸铁 10K 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 Pc.

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	70	4	15	2.1
43	20	95	100	75	4	15	2.6
44	25	110	125	90	4	19	4.0
45	32	130	135	100	4	19	5.4
75 03 46	40	150	140	105	4	19	6.8
47	50	180	155	120	4	19	9.2

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

Válvula de bola 10K de hierro dúctil
ダクタイル鋳鉄10K玉形弁
球墨铸铁 10K 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	1.2
Steam, Air, Gas, Oil	300°C	1.0

Unit Per Pc.

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	65	216	175	140	4	4	21.1
53	80	241	185	150	8	8	27.4
54	100	292	210	175	8	8	37.0
55	125	356	250	210	8	8	58.3
75 03 56	150	406	280	240	8	8	83.5
57	200	495	330	290	12	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
船用鋳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/cm²]
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/cm²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm²]

F-7311

F-7312

How to order: CODE

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

Unit Per Pc.

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

船用鋳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/cm²]
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/cm²]
Hydraulic inspection for body	2.06 MPa [21.0 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	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)

Unit Per Pc.

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

船用鋳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/cm²]
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	
Non-shock water of 120°C or less	3.33 [34]

Hydraulic Inspection

Watertight inspection for valve seat	3.67 MPa [37.4 kgf/cm²]
Hydraulic inspection for body	5.0 MPa [51 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	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
船用鋳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/cm²]	
	Carbon steel	Molybdenum steel
Steam of 450°C	-	3.33 [34]
Steam of 425°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/cm²]
Hydraulic inspection for body	6.76 MPa [59 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
Globe Valve F-7315							
75 04 61	100	410	240	195	8	25	115
62	125	460	275	230	8	25	168
63	150	500	325	275	12	27	242
Angle Valve F-7316							
75 04 66	100	205	240	195	8	25	106
67	125	230	275	230	8	25	154
68	150	250	325	275	12	27	223

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

Válvulas de Globo,Paso Recto y en Acero Fundido
船用鋳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/cm²]		
	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/cm²]
Hydraulic inspection for body	9.12 MPa [93 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

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/cm²	Shape
75 05 01-05	F-7346	Bronze	5	Globe, Angle
11-15	F-7347			
75 05 21-25	F-7348		16	Globe, Angle
31-35	F-7349			

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/cm²]
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/cm²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm²]

F-7346

F-7347

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
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
船用青铜活接头阀盖式球形阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
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/cm²]
Hydraulic inspection for body	3.24 MPa [33 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

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

(to be continued)

(c) Screw or Union End Valves

CODE	JIS No.	Material	Pressure kgf/cm²	Shape
75 05 51-57	F-7388	Bronze	20	Globe, Angle
61-62	F-7389			
75 06 01-13	F-7421	Forged Steel	20	Globe, Angle
21-28	F-7422			
75 06 41-63	F-7329		40	Globe, Angle
71-83	F-7330			

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　　船用青铜球阀

F-7388

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
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/cm²]
Hydraulic inspection for body	4.12 MPa [42 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm			Weight Kg
		Pipe Out. Diam.		Thread	
		Copper	Steel		
Type S (Screwed)					
75 05 51	6	8 & 10	10.5	M20×1.5	0.81
52	10	15	17.3	M24×2	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/cm²]
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/cm²]
Hydraulic inspection for body	4.12 MPa [42 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm			Weight Kg
		Pipe Out. Diam.		Thread	
		Copper	Steel		
75 05 61	6	8 & 10	10.5	M20×1.5	0.83
62	10	15	17.3	M24×2	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/cm²]
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/cm²]
Hydraulic inspection for body	5.0 MPa [51 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm			Weight Kg
		Pipe Out. Diam.		Thread	
		Copper	Steel		
Type S (Screwe Thread Type)					
75 06 01	6	8 & 10	10.5	M20×1.5	1.47
02	10	15	17.3	M24×2	1.75
Type U (Union Type)					
75 06 06	6	8 & 10	10.5	-	1.55
07	10	15	17.3	-	1.85

Type F (Flange Type)

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		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/cm²]
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/cm²]
Hydraulic inspection for body	5.0 MPa [51 kgf/cm²]

How to order: CODE

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

Type S (Screw Thread Type)

Unit Per Pc.

CODE	Size mm	Dimensions mm			Weight Kg
		Pipe Out. Diam.		Thread	
		Copper	Steel		
75 06 21	6	8 & 10	10.5	M20 × 1.5	1.47
22	10	15	17.3	M24 × 2	1.75

Type F (Flange Type)

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		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/cm²]
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/cm²]
Hydraulic inspection for body	9.12 MPa [93 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm			Weight Kg
		Length End to End	Thread	Hight Fully Opened	
Type S (Screw Thread Type)					
75 06 41	6	89	M20 ×1.5	152	1.6
42	10	108	M24 ×2	152	2.0
Type U (Union Type)					
75 06 46	6	102	-	152	1.8
47	10	126	-	152	2.3
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	5.2
62	20	170	120	85	4	19	6.8
63	25	200	130	95	4	19	8.9

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/cm²]
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/cm²]
Hydraulic inspection for body	9.12 MPa [93 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm			Weight Kg
		Length End to End	Thread	Hight Fully Opened	
Type S (Screw Thread Type)					
75 06 71	6	51	M20 ×1.5	136	1.6
72	10	51	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	Number	Hole	
75 06 81	15	90	115	80	4	19	5.2
82	20	95	120	85	4	19	6.8
83	25	100	130	95	4	19	8.5

(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
船用鑄鋼空気玉形弁　　船用锻钢球形气阀

Pressure Rating

Maximum working pressure	4.51 MPa [46 kgf/cm2]

Hydraulic Inspection

Watertight Inspection for valve seat	4.96 MPa [50.6 kgf/cm2]
Hydraulic inspection for body	6.76 MPa [69 kgf/cm2]

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-7475

Válvulas de Ángulo Aire de Acero Fundido Marino
船用鋳鋼空気アングル弁　船用锻钢角形气阀

Pressure Rating

Maximum working pressure	4.51 MPa [46 kg/cm²]

Hydraulic Inspection

For body	6.76 MPa [69 kg/cm²]

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-7336

Válvulas de Globo Aire de Acero Forjado Marino
船用鍛鋼空気玉形弁　船用锻钢球形气阀

Pressure Rating

Maximum working pressure	4.51 MPa [46 kgf/cm²]

Hydraulic Inspection

Watertight Inspection for valve seat	4.96 MPa [50.6kgf/cm²]
Hydraulic inspection for body	6.76 MPa [69 kgf/cm²]

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	17.3	M24 × 2	1.80
Type U (Both Side Union Nut Type)					
75 07 36	6	8 & 10	10.5	-	1.30
37	10	15	17.3	-	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-7337

Válvulas de Ángulo para Aire de Acero Forjado Marino
船用鍛鋼空気アングル弁　船用锻钢角形气阀

Pressure Rating

Maximum working pressure	4.51 MPa [46 kgf/cm²]

Hydraulic Inspection

Watertight Inspection for valve seat	4.96 MPa [50.6 kgf/cm²]
Hydraulic inspection for body	6.76 MPa [69 kgf/cm²]

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.		Thread	
		Copper	Steel		
Type S (Union Nut Type)					
75 07 51	6	8 & 10	10.5	M20 × 1.5	1.23
52	10	15	17.3	M24 × 2	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/cm²	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 look 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
船用鍛鋼圧力形弁　船用锻钢压力计阀

Pressure Rating

Maximum working pressure	10.40 MPa [106 kgf/cm²]

Hydraulic Inspection

Watertight Inspection for valve seat	11.44 MPa [116.6 kgf/cm²]
Hydraulic inspection for body	15.60 MPa [159 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

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
船用黄銅くい込形止め弁　　船用黄铜 截止阀

Pressure Rating

Fluid condition	Maximum working pressue MPa [kgf/cm²]
Non-shock fluid of 80°C or less	2.94 [30]

Hydraulic Inspection

Watertight Inspection for valve seat	3.23 MPa [33.0 kgf/cm²]
Hydraulic inspection for body	4.41 MPa [45.0 kgf/cm²]

Globe valve
with both bite joints

Screwed globe valve
with bite joint

Screwed angle valve
with bite joint

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 Pc.

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)

Unit Per Pc.

CODE	Size mm	Dimensions 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/cm²
75 08 01-15	F-7363	Cast Iron	5
21-35	F-7364		10
41-43	F-7369		16
75 09 01-11	F-7366	Cast Steel	10
75 09 51-55	F-7367	Bronze	5
61-65	F-7368		10

No.	Component	No.	Component
1	Body	16	Stud
2	Bonnet	17	Stud
3	Stuffing 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	Vlave set of disc	22	Hexagon nut
8	Screwed piece	23	Hexagon nut
9	Guide bush	24	Cross recessed pan head machine
10	Guide bush		Screw
11	Packing gland	25	Split pin
12	Indicator	26	Packing
13	Indicator plate	27	Gasket
14	Stem	28	Gasket
15	Stud/Hexagon head bolt	29	Name plate

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

Válvulas de Compuerta de Hierro Fundido Marino
船用鋳鉄仕切弁
船用铸铁 闸阀

F-7363

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]		
	Nominal dia. 200 mm or less	Nominal dia. 250 mm to 400 mm	Nominal dia. 450 mm to 600 mm
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]

Hydraulic Inspection

Nominal Dia. mm	Test pressure MPa [kgf/cm²]	
	Watertight inspection for valve seat	Hydarulic inspection for body
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

Unit Per Pc.

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
02	65	190	155	130	4	15	19.0
03	80	200	180	145	4	19	24.2
04	100	230	200	165	8	19	35.3
05	125	250	235	200	8	19	48.1
75 08 06	150	270	265	230	8	19	65.3
07	200	290	320	280	8	23	103
08	250	330	385	345	12	23	164
09	300	370	430	390	12	23	236
10	350	410	480	435	12	25	307
75 08 11	400	470	540	495	16	25	405
12	450	500	605	555	16	25	556
13	500	550	655	605	20	25	700
14	550	600	720	665	20	27	878
15	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

船用铸铁仕切弁　船用铸铁 闸阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]		
	Nominal dia. 200 mm or less	Nominal dia. 250 mm to 400 mm	Nominal dia. 450 mm to 600 mm
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/cm²]	
	Watertight inspection for valve seat	Hydarulic inspection for body
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

Unit Per Pc.

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	140	4	19	27.6
23	80	230	185	150	8	19	33.0
24	100	250	210	175	8	19	45.8
25	125	270	250	210	8	23	65.9
75 08 26	150	290	280	240	8	23	86
27	200	320	330	290	12	23	136
28	250	380	400	355	12	25	230
29	300	440	445	400	16	25	331
30	350	500	490	445	16	25	433
75 08 31	400	590	560	510	16	27	597
32	450	640	620	565	20	27	704
33	500	710	675	620	20	27	901
34	550	780	745	680	20	33	1,192
35	600	850	795	730	24	33	1,490

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

Válvulas de Compuerta de Hierro Fundido Marino

船用鑄鉄仕切弁　船用铸铁 闸阀

Pressure Rating

Maximum working pressure	1.57 MPa [16 kg/cm²]

Hydraulic Inspection

Waterlight inspection for valve seat	1.73 MPa [17.6 kg/cm²]
Hydarulic inspection for body	2.36 MPa [24 kg/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
75 08 41	300	490	480	430	16	27	430
42	350	540	540	480	16	33	580
43	400	610	605	540	16	33	780

Marine Cast Steel 10 kgf/cm² Gate Valves F-7366

Válvulas de Compuerta de Acero Fundido Marino

船用鑄鋼仕切弁　船用锻钢 闸阀

F-7366

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]	
	Nominal dia. 200 mm or less	Nominal dia. 250 mm or less
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/cm²]
Hydraulic inspection for body	2.06 MPa [21 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

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/cm²]
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/cm²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

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/cm²]
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/cm²]
Hydraulic inspection for body	2.06 MPa [21 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

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
ダクタイル鋳鉄10K仕切弁
球墨铸铁10K分流阀

Temperature & Pressure Rating

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm²]
Static Water	120°C	1.4
Steam, Air, Gas, Oil	220°C	1.2
Steam, Air, Gas, Oil	300°C	1.0

Unit Per Pc.

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

Temperature & Pressure Rating

Fluid Condition	Temperature	Pressure Rating MPa [kgf/cm²]
Static Water	120°C	1.4
Steam, Air, Gas, Oil	220°C	1.2
Steam, Air, Gas, Oil	300°C	1.0

Unit Per Pc.

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/cm²	Shape
75 10 51-55	F-7351	Bronze	5	Globe
61-65	F-7352			Angle
75 10 71-75	F-7409		16	Globe
81-85	F-7410			Angle
75 11 01-11	F-7353	Cast Iron	5	Globe
16-29	F-7354			Angle
75 11 31-37	F-7375		10	Globe
41-47	F-7376			Angle
75 11 51-57	F-7377		16	Globe
61-66	F-7378			Angle
75 12 01-12	F-7471	Cast Steel	10	Globe
16-27	F-7472			Angle
75 12 31-41	F-7473		20	Globe
46-56	F-7474			Angle
75 12 61-65	F-7411	Bronze	5	Globe
66-70	F-7412			Angle
75 12 81-85	F-7413		16	Globe
86-90	F-7414			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/cm²]
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	
Inlet side	0.76 MPa [7.7 kgf/cm²]
Outlet side	0.76 MPa [7.7 kgf/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	1.03 MPa [10.5 kgf/cm²]

F-7351

F-7352

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm: Face to Face	Flange Diam.	Flange Bolt Hole: Pitch	Number	Hole	Weight Kg
Globe Valve F-7351							
75 10 51	15	100	80	60	4	12	1.96
52	20	110	85	65	4	12	2.77
53	25	120	95	75	4	12	3.41
54	32	140	115	90	4	15	4.86
55	40	160	120	95	4	15	6.30
Angle Valve F-7352							
75 10 61	15	55	80	60	4	12	1.92
62	20	60	85	65	4	12	2.64
63	25	65	95	75	4	12	3.30
64	32	80	115	90	4	15	4.63
65	40	85	120	95	4	15	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/cm²]
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	
Inlet side	2.37 MPa [24.2 kgf/cm²]
Outlet side	2.37 MPa [24.2 kgf/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	3.23 MPa [33 kgf/cm²]

How to order: CODE

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

Unit Per Pc..

CODE	Size mm	Dimensions mm: Face to Face	Flange Diam.	Flange Bolt Hole: Pitch	Number	Hole	Weight Kg
Globe Valve F-7409							
75 10 71	15	100	95	70	4	15	2.70
72	20	120	100	75	4	15	3.63
73	25	130	125	90	4	19	5.09
74	32	160	135	100	4	19	6.77
75	40	180	140	105	4	19	8.25
Angle Valve F-7410							
75 10 81	15	70	95	70	4	15	2.67
82	20	75	100	75	4	15	3.56
83	25	85	125	90	4	19	5.02
84	32	95	135	100	4	19	6.58
85	40	100	140	105	4	19	7.95

Marine Cast Iron 5 kgf/cm 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/cm²]			
	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/cm²]		
	Watertight inspection for valve seat		Hydraulic inspection for body
	Inlet Side	Outlet Side	
300 or less	0.76 [7.7]	0.76 [7.7] to 0.39 [4]	1.03 [10.5]
350, 400	0.65 [6.6]	0.65 [6.6] to 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 Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
75 11 01	50	210	130	105	4	15	14.8
02	65	250	155	130	4	15	21.3
03	80	280	180	145	4	19	27.6
04	100	340	200	165	8	19	40.4
05	125	410	235	200	8	19	57.9
75 11 06	150	480	265	230	8	19	80.9
07	200	570	320	280	8	23	139
08	250	740	385	345	12	23	243
09	300	840	430	390	12	23	377
10	350	940	480	435	12	25	463
75 11 11	400	1,050	540	495	16	25	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/cm²]				
	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]				
Oil & pulsation water			0.49 [5]		0.39 [4]
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/cm²]		
	Watertight inspection for valve seat		Hydraulic inspection for body
	Inlet Side	Outlet Side	
300 or less	0.76 [7.7]	0.76 [7.7] to 0.39 [4]	1.03 [10.5]
350, 400	0.65 [6.6]	0.65 [6.6] to 0.29 [3]	0.88 [9]
450 or more	0.54 [5.5]	0.54 [5.5] to 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 Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
75 11 16	50	100	130	105	4	15	13.0
17	65	115	155	130	4	15	18.2
18	80	130	180	145	4	19	23.3
19	100	150	200	165	8	19	33.5
20	125	170	235	200	8	19	46.5
75 11 21	150	190	265	230	8	19	64
22	200	220	320	280	8	23	104
23	250	275	385	345	12	23	175
24	300	310	430	390	12	23	243
25	350	360	480	435	12	25	336
75 11 26	400	395	540	495	16	25	455
27	450	440	605	555	16	25	618
28	500	485	655	605	20	25	800
29	550	530	720	665	20	27	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/cm²]	
	Class B	Class S
Steam of 230°C or less	-	0.98 [10]
Steam of 205°C or less	0.98 [10]	
Air, gas, oil & pulsation water	0.98 [10]	
Non-shock water of 120°C or less	1.37 [14]	

Hydraulic Inspection

Watertight Inspection for valve seat	
Inlet side	1.51 MPa [15.4 kgf/cm²]
Outlet side	1.51 MPa [15.4 kgf/cm²] to 0.39 MPa [4 kgf/cm²]
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 Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
Globe Valve F-7375							
75 11 31	50	220	155	120	4	19	19.9
32	65	270	175	140	4	19	28.6
33	80	300	185	150	4	19	32.5
34	100	350	210	175	8	19	48.7
35	125	420	250	210	8	23	73.0
75 11 36	150	490	280	240	8	23	104
37	200	570	330	290	12	23	161

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	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/cm²]	
	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 Inlet side Outlet side	 2.37 MPa [24.2 kgf/cm²] 2.37 MPa [24.2 kgf/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	3.24 MPa [33 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	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							
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	Maximum working pressure MPa [kgf/cm²]
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 Inlet side Outlet side	 1.51 MPa [15.4 kgf/cm²] 1.51 MPa [15.4 kgf/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	2.06 MPa [21 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	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	Maximum working pressure MPa [kgf/cm²]
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 Inlet side Outlet side	 1.51 MPa [15.4 kgf/cm²] 1.51 MPa [15.4 kgf/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	2.06 MPa [21 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	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)

Unit Per Pc.

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
船用锻钢 拧紧检查球阀及角阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
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/cm²] 3.66 MPa [37.4 kgf/cm²] to 0.98 MPa [10 kgf/cm²]
Hydraulic inspection for body	5.00 MPa [51.0 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

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	40	200	140	105	4	19	16.0
33	50	230	155	120	8	19	21.6
34	65	270	175	140	8	19	30.1
35	80	300	200	160	8	23	43.5
75 12 36	90	320	210	170	8	23	52.1
37	100	350	225	185	8	23	62.1
38	125	430	270	225	8	25	97.0
39	150	500	305	260	12	25	136
40	200	560	350	305	12	25	212
75 12 41	250	660	430	380	12	27	349
Angle Valve F-7374							
75 12 46	32	100	135	100	4	19	13.0
47	40	110	140	105	4	19	15.1
48	50	125	155	120	8	19	19.9
49	65	135	175	140	8	19	26.7
50	80	150	200	160	8	23	38.8
75 12 51	90	160	210	170	8	23	46.2
52	100	170	225	185	8	23	54.2
53	125	200	270	225	8	25	83
54	150	225	305	260	12	25	115
55	200	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
Angle Valves Union Bonnet Type F-7412

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

F-7411 F-7412

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
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 Inlet side Outlet side	 0.76 MPa [7.7 kgf/cm²] 0.76 MPa [7.7 kgf/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

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	20	110	85	65	4	12	2.91
63	25	120	95	75	4	12	3.82
64	32	140	115	90	4	15	5.09
65	40	160	120	95	4	15	6.71
Angle Valve F-7412							
75 12 66	15	55	80	60	4	12	2.07
67	20	60	85	65	4	12	2.81
68	25	65	95	75	4	12	3.67
69	32	80	115	90	4	15	4.85
70	40	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/cm²]
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/cm²] 2.38 MPa [24.2 kgf/cm²] to 0.39 MPa [4 kgf/ cm²]
Hydraulic inspection for body	3.24 MPa [33.0 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	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/cm²	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　船用青铜提升止回阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
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/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	1.03 MPa [10.5 kgf/cm²]

How to order : CODE

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

Unit Per Pc..

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	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
船用鋳鉄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/cm²]
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/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	1.03 MPa [10.5 kgf/cm²]

F-7358

F-7359

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	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
船用黄铜帽式提升阀接头

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
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/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm²]

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 Pc.

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
船用黄铜帽式提升阀接头

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
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/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	3.24 MPa [33.0 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
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/cm²
75 14 01-03	F-7371	Bronze	5
75 14 21-28	F-7372	Cast Iron	5
31-37	F-7373		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

F-7371

Válvulas de Retención de Charnela de Bronce Marino
船用青銅スウィング逆止め弁　船用黄铜 回转止回阀

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
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/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	1.04 MPa [10.5 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	Hole	
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
船用鋳鉄スウィング逆止め弁　船用铸铁 回转止

F-7372

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
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/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	1.03 MPa [10.5 kgf/cm²]

How to order: CODE

Swing check valve, cast iron, 5 kgf/cm², JIS F-7372, SIZE mm

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		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
船用鋳鉄スウィング逆止め弁　船用铸铁 回转止

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
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/cm²] to 0.39 MPa [4 kgf/cm²]
Hydraulic inspection for body	2.06 MPa [21.0 kgf/cm²]

How to order: CODE

Swing check valve, cast iron, 10 kgf/cm², JIS F-7373, SIZE mm

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		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.

Unit Per Pc.

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

(to be continued)

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

Name of Mfr.: Alligator

(j) Marine Cocks

CODE	JIS No.	Material	Pressure kgf/cm²
75 16 01-15	F-7381	Bronze	5
31-36	F-7387		16
51-54	F-7343		20
61-64	F-7390		w/Lock

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

F-7381

Pressure Rating

Fluid condition	Maximum working pressure MPa [kgf/cm²]
Water & Oil	0.49 [5]

Hydraulic Inspection

Watertight Inspection for plug	0.54 MPa [5.5 kgf/cm²]
Hydraulic inspection for body	0.74 MPa [7.5 kgf/cm²]

How to order: CODE

Flanged cock, bronze, 5 kgf/cm², JIS F-7381, TYPE, SIZE mm

Unit Per Pc.

CODE	Size mm	Dimensions mm					Weight Kg
		Face to Face	Flange Diam.	Flange Bolt Hole			
				Pitch	Number	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-7387

Bronce 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/cm²]	
	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/cm²]	
	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 Pc.

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　船用青铜 压力计旋塞

F-7343

Pressure Rating

Maximum working pressure	1.96 MPa [20 kgf/cm²]

Hydraulic Inspection

Watertight Inspection for plug	2.16 MPa [22.0 kgf/cm²]
Hydraulic inspection for body	2.94 MPa [30.0 kgf/cm²]

How to order: CODE

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

Unit Per Pc.

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

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

7390

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

Hydraulic Inspection

Watertight Inspection for cock plug	0.20 MPa [2 kgf/cm²]
Hydraulic inspection for body	

Unit Per Pc.

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/cm²
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　船用青铜水带阀

Pressure Rating

Fluid Condition	Maximum working pressure MPa [kgf/cm²]					
	Nominal pressure 5 kgf/cm²			Nominal pressure 10 kgf/cm²		
	Nominal diameter mm			Nominal diameter mm		
	15	25	40/50	15	25	40~65
Steam of 205°C or less	0.49 [5]	-	-	0.981 [10]	-	-
Air		0.49 [5]			0.981 [10]	
Pulsation water			0.49 [5]			0.981 [10]
Non-shock water of 120°C or less	0.69 [7]			1.37 [14]		

Hydraulic Inspection

Nominal pressure kgf/cm²	Test pressure MPa [kgf/cm²]		
	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		Shape		Application
Nominal pressure kgf/cm²	Nominal Dia. mm			
5	15	Globe valve		Steam for cleaning sea chest strainer, boiler and machinery, and for soda boiling
		Angle valve		
	25	Globe valve		For air motor
		Angle valve		
	40	Globe valve		Fire extinguishing, deck washing, reserve water shifting, draining of boiler water, etc.
		Angle valve		
	50	Globe valve		
		Angle valve		
10	15	Globe valve		Steam for cleaning sea chest strainer, boiler and machinery, and for soda boiling
		Angle valve		
	25	Globe valve		For air motor
		Angle valve		
	40	Globe valve		Fire extinguishing, deck washing, reserve water shifting, draining of boiler water, etc.
		Angle valve		
	50	Globe valve		
		Angle valve		
	65	Globe valve		Fire extinguishing, deck washing, etc.
		Angle valve		
10	15	Screwed type	Globe valve	Steam or other fluid for cleaning boiler and machinery, and for soda boiling
			Angle valve	

F-7334 Globe

F-7334 Angle

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

Unit Per Pc.

Globe Hose Valve

	CODE		75 17 01	75 17 02	75 17 03	75 17 04
Dimensions	Size		15 mm		25 mm	
	Pressure		5 kgf/cm²	10 kgf/cm²	5 kgf/cm²	10 kgf/cm²
	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	
	Pressure		5 kgf/cm²	10 kgf/cm²	5 kgf/cm²	10 kgf/cm²
	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		40 mm	
	Pressure		5 kgf/cm²	10 kgf/cm²	5 kgf/cm²	10 kgf/cm²
	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
	Pressure		5 kgf/cm2	10 kgf/cm2	10 kgf/cm2
	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
	Pressure		5 kgf/cm2	10 kgf/cm2	10 kgf/cm2
	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/cm²]	
	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/cm²	Test pressure MPa [kgf/cm²]		
	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/cm²	Nominal Dia. mm	Shape	
5	50	Globe valve	Fire extinguishing, deck washing, water shifting etc.
		Angle valve	
10		Globe valve	
		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 Pc.

Globe Hose Valve

CODE			75 17 31	75 17 32	75 17 33
Dimensions	Size		50 mm		65 mm
	Pressure		5 kgf/cm²	10 kgf/cm²	10 kgf/cm²
	Coupling		Nakajima System Coupling		
	L		165 mm	170 mm	200 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		110 mm	115 mm	140 mm
	Weight		14.7 kg	18.9 kg	28.2 kg

Angle Hose Valve

Unit Per Pc.

CODE			75 17 35	75 17 36	75 17 37
Dimensions	Size		50 mm		65 mm
	Pressure		5 kgf/cm²	10 kgf/cm²	10 kgf/cm²
	Coupling		Nakajima System Coupling		
	L		155 mm	170 mm	185 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	115 mm	125 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/cm²]
Pulsation water	0.98 [10]
Non-shock water of 120°C or less	1.37 [14]

Test Pressure

Nominal pressure kgf/cm²	Watertight inspection for valve seat	Hydraulic inspection for body
10	1.47 MPa [15 kgf/cm²]	2.35 MPa [24 kgf/cm²]

Classification

Type	Main material	Nominal diameter inch	Nominal pressure kgf/cm²	Fluid	Application
Globe	Bronze	1-1/2	10	Water	Fire Extinguishing
Angle					
Globe		2-1/2			
Angle					
Globe	Cast Iron	2-1/2			Deck Washing
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 Pc.

CODE			75 17 51	75 17 52
Type			Globe	Angle
Nominal Size			1-1/2"	
Nominal Pressure			10 kgf/cm²	
Thread (d3)	Size		1-1/2"	ANSI-NFPA 1963
	Per inch		9	
L			105 mm	95 mm
L_1			90 mm	100 mm
L_2			85 mm	75 mm
Flange	Diam (D)		140 mm	
	Bolt Hole	Pitch	105 mm	
		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 Pc.

CODE			75 17 53	75 17 54
Type			Globe	Angle
Nominal Size			2-1/2"	
Nominal Pressure			10 kgf/cm²	
Thread (d3)	Size		2-1/2"	ANSI-NFPA 1963
	Per inch		7.5	
L			165 mm	145 mm
L_1			135 mm	130 mm
L_2			140 mm	120 mm
Flange	Diam (D)		175 mm	
	Bolt Hole	Pitch	140 mm	
		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 Pc.

CODE			75 17 56	75 17 57
Type			Globe	Angle
Nominal Size			2-1/2"	
Nominal Pressure			10 kgf/cm²	
Thread (d3)	Size		2-1/2"	ANSI-NFPA 1963
	Per inch		7.5	
L			200 mm	185 mm
L_1			135 mm	130 mm
L_2			140 mm	125 mm
Flange	Diam (D)		175 mm	
	Bolt Hole	Pitch	140 mm	
		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**

Unit Per Pc.

CODE	Type	Size mm				Weight
		d	L	H	D	kg
87 45 01	ESG-005-025	25	120	265	100	7
02	ESG-005-040	40	160	270	100	11
03	ESG-005-050	50	210	270	100	15
04	ESG-005-065	65	250	320	125	20
05	ESG-005-080	80	280	325	125	25
87 45 06	ESG-005-100	100	340	410	160	35
07	ESG-005-125	125	410	430	160	45
08	ESG-005-150	150	480	460	160	65
09	ESG-005-200	200	570	615	315	100
10	ESG-005-250	250	740	655	315	135

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

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

Unit Per Pc.

CODE	Type	Size mm				Weight
		d	L	H	D	kg
87 45 11	ESG-005-025-W	25	120	265	100	7
12	ESG-005-040-W	40	160	270	100	11
13	ESG-005-050-W	50	210	270	100	15
14	ESG-005-065-W	65	250	320	125	20
15	ESG-005-080-W	80	280	325	125	25

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

JIS 10K

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

Unit Per Pc.

CODE	Type	Size mm				Weight
		d	L	H	D	kg
87 45 41	ESG-010-025	25	130	265	100	9
42	ESG-010-040	40	170	270	100	12
43	ESG-010-050	50	220	270	100	16.5
44	ESG-010-065	65	270	320	125	22
45	ESG-010-080	80	300	325	125	27
87 45 46	ESG-010-100	100	350	410	160	41
47	ESG-010-125	125	420	430	160	58
48	ESG-010-150	150	490	460	160	68
49	ESG-010-200	200	570	615	315	110
50	ESG-010-250	250	740	655	315	150

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

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

Unit Per Pc.

CODE	Type	Size mm				Weight
		d	L	H	D	kg
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**

Unit Per Pc.

CODE	Type	Size mm				Weight
		d	L	H	D	kg
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**

Unit Per Pc.

CODE	Type	Size mm				Weight
		d	L	H	D	kg
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**

Unit Per Pc.

CODE	Type	Size mm				Weight
		d	L	H	D	kg
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**

Unit Per Pc.

CODE	Type	Size mm				Weight
		d	L	H	D	kg
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**

Unit Per Pc.

CODE	Type	Size mm				Weight
		d	L	H	D	kg
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)

Unit Per Pc.

CODE	Type	Size mm d	L	H	D	Weight kg
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**

Unit Per Pc.

CODE	Type	Size mm d	L	H	D	Weight kg
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**

Unit Per Pc.

CODE	Type	Size mm d	L	H	D	Weight kg
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**

Unit Per Pc.

CODE	Type	Size mm d	L	H	D	Weight kg
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

Unit Per Pc.

CODE	Type	Model	d	H	L	Weight Kg
87 46 61	Spring type	39A-50	50	165	375	7
62		39A-65	65	180	375	10
63		39A-80	80	240	470	16
64		39A-100	100	280	465	23
87 46 65	Counter-weight type	39A-A-50	50	165	155	8
66		39A-A-65	65	180	192	12
67		39A-A-80	80	240	228	20
68		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 Nodular 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

Unit Per Pc.

CODE	DN	Size mm					Weight
		Hcd	D	L	H	M	Kg
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

Unit Per Pc.

CODE	DN	Size mm					Weight
		Hcd	D	L	H	M	Kg
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/cm²]
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.

Unit Per Pc.

CODE	Size		Taper Pipe Thread	Distance between Faces mm	Max. Extend Height mm
	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-2011 Angle Valves B-2011

Válvulas 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/cm²]
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: CODE

Screwed valve, GLOBE or ANGLE, bronze, 10 kgf/cm², JIS B-2011, SIZE mm

Unit Per Pc.

CODE	Size mm		Taper Pipe Thread	Distance Between Faces mm	Max. Extended Height mm
	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-2011

Bronce 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/cm²]
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.

Unit Per Pc.

CODE	Size Nominal	Size Diam. mm	Taper Pipe Thread	Distance Between Faces mm	Max. Extend Height mm
75 18 52	1/2	15	PT 1/2	50	145
53	3/4	20	3/4	60	165
54	1	25	1	65	190
55	1-1/4	32	1-1/4	75	225
56	1-1/2	40	1-1/2	85	255
75 18 57	2	50	PT 2	95	305
58	2-1/2	65	2-1/2	115	400
59	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 闸阀 B-2011

Temperature & Pressure Rating

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	171°C	1.0

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

Unit Per Pc.

CODE	Size Nominal	Size Diam. mm	Taper Pipe Thread	Distance Between Faces mm	Max. Extend Height mm
75 18 71	1/2	15	PT 1/2	55	150
72	3/4	20	3/4	65	175
73	1	25	1	70	205
74	1-1/4	32	1-1/4	80	245
75	1-1/2	40	1-1/2	90	275
75 18 76	2	50	PT 2	100	325
77	2-1/2	65	2-1/2	120	430
78	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/cm²]
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.

Unit Per Pc.

CODE	Size	Dimensions mm L	Dimensions mm H	Dimensions mm D
75 19 01	PT 1/2	48	69	55
02	3/4	53	80	60
03	1	63	94	70
04	1-1/4	73	104	80
05	1-1/2	81	127	90
75 19 06	PT 2	94	147	100
07	2-1/2	115	179	115
08	3	131	200	135
09	4	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/cm²]
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 Pc.

CODE	Size	Dimensions mm L	Dimensions mm H	Dimensions mm D
75 19 16	PT 1/4	44	66	50
17	3/8	44	68	50
18	1/2	53	79	60
19	3/4	65	93	70
20	1	77	104	80
75 19 21	PT 1-1/4	85	127	90
22	1-1/2	100	145	100
23	2	119	174	115
24	2-1/2	139	199	135
25	3	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/cm²]
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 Pc.

CODE	Size	Dimensions mm		
		L	H	D
75 19 31	PT 1/4	21	66	50
32	3/8	24	68	50
33	1/2	28	79	60
34	3/4	34	93	70
35	1	40	104	80
75 19 36	PT 1-1/4	47	127	90
37	1-1/2	52	145	100
38	2	61	174	115
39	2-1/2	74	199	135
40	3	85	215	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 Pc.

CODE	Size	Dimensions mm		
		L	H	D
75 19 51	PT 3/8	38	75	50
52	1/2	42	75	50
53	3/4	47	86	55
54	1	50	97	60
55	1-1/4	60	117	70
75 19 56	PT 1-1/2	63	126	80
57	2	72	154	90
58	2-1/2	80	167	100
59	3	90	200	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"		
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 Pc.

CODE	Size	Dimensions mm		
		L	H	D
75 19 70	PT 3/8	43	86	50
71	1/2	48	98	55
72	3/4	53	113	60
73	1	62	124	70
74	1-1/4	69	143	80
75 19 75	PT 1-1/2	75	167	90
76	2	86	201	100
77	2-1/2	105	225	115
78	3	116	261	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 Pc.

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	80	0.8
83	3/4	80	125	80	1.04
84	1	90	145	100	1.6
85	1-1/4	110	162	115	2.3
75 19 86	PT 1-1/2	120	180	115	3.2
87	2	140	198	135	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 Pc.

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	70	0.818
93	1	75	198	80	1.212
94	1-1/4	85	233	90	1.849
95	1-1/2	95	274	110	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

Bronze Two Way Air Cocks
with Lever Handle Male & Hose Ends

Grifos Purga 2 Vías 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
青銅錠前カラン 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 青铜管阀

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 d_1	Thread d_2	Length L mm	Height M mm
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

真鍮ニードルアングル弁 黄铜针型角阀

Unit Per Pc.

CODE	Nominal Size	For Tube OD "D" mm	Thread d_1	Thread d_2	Length L mm	Height M mm
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

Unit Per Pc.

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

Unit Per Pc.

CODE	Nominal Size	For Hose ID. mm	Thread d_1	Thread d_2	Length L mm	Height M mm
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
真鍮ニードルアングル弁　黄铜针型角阀

Unit Per Pc.

CODE	Nominal Size	For Hose ID. mm	Thread d_1	Thread d_2	Length L mm	Height M mm
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 Aguja 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.

Brass Needle Straight Valves
Both 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 Pc.

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 Pc.

CODE	Nominal Size	Thread d_1	Thread d_2	Dimensions mm 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

Brass Needle Angle Valves
Male & Female Ends

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

Unit Per Pc.

CODE	Nominal Size	Thread d_1	Thread d_2	Dimensions mm 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)	
	Ductile iron, JIS FCD 450 (80 to 300 mm)	Ductile iron, JIS FCD 450 (with hard chrome plating)
Stem	SUS420J2	
Seat Ring	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.

Wafer Type
Model: 700G

Semi Lugged Type
Model: 705G

Model 700G (Wafer Type)

How to order: CODE

Butterfly valve, wafer type with lock lever, NOMINAL SIZE

Unit Per Pc.

CODE	Nom Size		Dimension (mm)								Weight
	mm	Inch	φd	φD	L	H1	H2	H3	W		kg
75 22 08	40	1-1/2	45	80	35	61	132	66	200		2.1
01	50	2	56	90	43	68	138	66	200		2.4
02	65	2-1/2	69	115	46	79	151	66	200		3.1
03	80	3	84	126	46	86	156	66	200		3.2
04	100	4	104	146	52	103	167	66	200		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 Pc.

CODE	Nom Size		Dimension (mm)								Weight
	mm	Inch	φd	φD	L	H1	H2	H3	W		kg
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 Pc.

CODE	Nom Size		Dimension (mm)								Weight
	mm	Inch	φd	φD	L	H1	H2	H3	F	W	kg
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 Pc.

CODE	Nom Size		Dimension (mm)								Weight
	mm	Inch	φd	φD	L	H1	H2	H3	F	W	kg
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 Pc.

CODE	Nom Size		Dimension (mm)							Weight
	mm	Inch	φd	φD	L	H1	H2	H3	W	Kg
75 22 31	40	1-1/2	45	80	35	61	132	136	100	4.4
32	50	2	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

Unit Per Pc.

CODE	Nom Size		Dimension (mm)								Weight
	mm	Inch	φd	φD	L	H1	H2	H3	F	W	kg
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-M36x100x78
1,350	54	24-M30x475x65	16-M30x85x66	24-M42x525x80	16-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 1/4x110x70	16-M20x200x45	-
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	20-U1 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 pneumaic 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/cm^2), ANSI (lbs)BS, DIN, etc.
··· 3. Nominal diameter ····· mm
··· 4. Name of fluid ·····
··· 5. Pressure and temperature of fluid ·····
··· 6. Flow ····· m^3/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, Undrille Model: KL700

Válvulas de Mariposa バタフライバルブ 碟形阀

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

Unit Per Pc.

CODE	Size mm			Product No.
	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 碟形阀

A nodular cast iron double flanged butterfly valve with gear box.
Nominal Pressure: 5 kgf/cm²
Disc: Stainless steel, Seat: NB

Unit Per Pc.

CODE	Size mm	Dimensions mm					Product No.
		Face to Face	Flange Dia	Flange Bolt Hole			
				Pitch	Number	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 碟形阀

A nodular cast iron double flanged butterfly valve with gear box.
Nominal Pressure: 10 kgf/cm²
Disc: Stainless Steel, Seat: NBR

Unit Per Pc.

CODE	Size mm	Dimensions mm					Product No.
		Face to Face	Flange Dia	Flange Bolt Hole			
				Pitch	Number	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 隔膜阀

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

Unit kgf/cm²

Diaphragm	Rubgber Diaphragm		Teflon Diaphragm	
Body / Nominal Size	Cast Iron Stainless Steel Bronze Rubber Lined	Glss Lined	Cast Iron Stainless Steel	Glass Lined Rubber lined Teflon Lined
15	14	10	10	10
20	14	10	10	10
25	14	10	7	7
40	14	10	7	7
50	14	7	7	7
65	10	7	7	7
80	10	7	7	7
100	10	5	7	5

Dimensions

Size in mm

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

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　螺旋式铸造黄铜球阀

Service fluid	Water, oil, gas, air, etc.
Max. working pressure	1.96 MPa [20 kgf/cm²]
Range of temperature used	-10°C +120°C

Unit Per Pc.

CODE	Size	Dimensions mm			
		d	L	H	W
75 24 01	PT 3/8	10	51.1	46	22
02	1/2	15	61	48	27
03	3/4	20	74.5	55	32
04	1	25	90.5	59	41
05	1-1/4	32	103.8	74	50
75 24 06	PT 1-1/2	40	117	80	55
07	2	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 corrosiive chemical liquid
Max. working pressure	3.29 MPa [40 kgf/cm²]

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 Pc.

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	40
13	1/2	9	54.5	26.5	80	42
14	3/4	12.5	61	30	100	51
15	1	16	68.5	34.5	100	54
75 24 16	PT 1-1/4	21	78	39	150	66
17	1-1/2	24	82	41	150	69
18	2	32	100	50	150	75

* Screwed end available BSPT, NPT.

Ball Valves
Reduced Bore Type

Válvulas de bola, Tipo de paso reducido
ボールバルブ レデュースドボアタイプ
球阀缩径型

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 Pc.

CODE	Size BSPT Female	Alligator No.	CODE	Size BSPT Female	Alligator No.
75 33 01	1/4"	KR265006	**75 33 05**	1"	KR265025
02	3/8"	KR265010	**06**	1-1/4"	KR265032
03	1/2"	KR265015	**07**	1-1/2"	KR265040
04	3/4"	KR265020	**08**	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 paraOleoducto　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	16 kgf/cm²
	Flanged type	10 kgf/cm²
Max working temperature		120°c
Material	Body	Bronze Casting (CAC406)
	Screen	Stainless Steel (SUS304)
Connection	Screw thread	Rc
	Flange rating	JIS 10 kgf/cm²

How to order: CODE

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

Unit Per Pc.

CODE	Size		Dimensions mm		Screen mm	
	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

Standard Feature

Max working pressure	Screwed type	20 kgf/cm² *65·80A 16 kgf/cm²
	Flanged type	10 kgf/cm²
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)
	Screen	Stainless Steel (SUS304)
Connection	Screw thread	Rc
	Flange rating	JIS 10 kgf/cm²

How to order: CODE

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

Unit Per Pc.

CODE	Size		Dimensions mm		Screen mm	
	mm(A)	Inch	L	H	Φd	L
Screwed Type (20 kgf/cm²) *65·80A 16 kgf/cm²						
75 24 46	8A	1/4	80	60	18	45
47	10A	3/8	80	60	18	45
48	15A	1/2	90	60	18	45
49	20A	3/4	105	75	23	50
50	25A	1	125	85	30	60
75 24 51	32A	1-1/4	145	100	39	70
52	40A	1-1/2	160	105	44	75
53	50A	2	180	125	56	90
54	65A	2-1/2	230	180	78	120
55	80A	3	240	190	88	130
Flanged Type (10 kgf/cm²)						
75 24 56	10A	3/8	125	70	18	45
57	15A	1/2	125	70	18	45
58	20A	3/4	140	75	23	50
59	25A	1	160	85	30	60
60	32A	1-1/4	180	105	39	70
75 24 61	40A	1-1/2	190	110	44	75
62	50A	2	220	130	56	90
63	65A	2-1/2	270	180	78	120
64	80A	3	290	200	88	130
65	100A	4	350	240	110	180
75 24 66	125A	5	390	260	140	200
67	150A	6	440	320	170	240
68	200A	8	540	380	210	300
69	250A	10	680	480	270	370
70	300A	12	840	600	320	480

Marine Can Water Filters

Marine Can Water Filters

Filtros Marinos de Agua　筒型水こし　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

Unit Per Pc.

CODE	Nominal Diam. mm	Flange					Total Height mm	Weight Kg
		Face to Face mm	Diam. mm	Bolt				
				P.C.D. mm	No.	Diam. mm		
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

Repurstos 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.

Unit Per Pc.

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
		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

Unit Per Pc.

CODE	Size		L	H	H1	W	Weight
	mm (A)	Inch	mm	mm	mm	mm	kg
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

Unit Per Pc.

CODE	Size mm (A)	Size Inch	L mm	H mm	H1 mm	W mm	Weight kg
75 24 91	15	1/2	175	120	70	71	3.5
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	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

Unit Per Pc.

CODE	Size mm (A)	Size Inch	L mm	H mm	H1 mm	Weight Kg
75 24 80	8	1/4	50	77	37	0.35
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
Connection	Screwed		Rc (PT)
	Flanged		JIS 10KFF/20KRF ASME/JPI Class 150RF/300RF

Discharge Capacity

Dimensions

TLV J3X (Screwed)

J3X Screwed

Unit Per Pc.

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

TLV JF3X (Flanged)

JF3X Flanged

Unit Per Pc.

CODE	Size mm (A)	Size Inch	L mm	H mm	H1 mm	Weight kg
75 24 98	15	1/2	175	130	80	3.8
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
フラ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/cm²
Maximum working temperature		150
Connection	Screw thread	Rc
	Flange rating	JIS 10 kgf/cm²

How to order: CODE

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

Unit Per Pc.

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　油流量计

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 ±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	± 0.5%
Max. working pressure	10 kgf/cm²
Hydraulic test pressure	20 kgf/cm²
Max. working temperature	50°C for kerosene and light oil, 100°C for heavy oil

Flange rating		JIS kgf/cm² FF
Material	Body	Cast Iron
	Rotor	Gear type: Bronze or phenol resin
		Roots type: Aluminium alloy casting
Counter unit		Integrating pointer and integrating counter (a reset counter is also available.)
Electrical transmitter unit	Transmitter	Reed switch (S): Microswitch (M)
	Power supply	AC 100V 50/60 Hz as standard
	Number of pulse	0 - 5 PPS
	Output signal	ON-OFF contact
	Transmission cable	2-core cabtyre cable
Flow direction		Right → Left

Specifications for each type-1

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

Specifications for each type-2

Type	Type of Transmitter	Flow range (ltr / 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	100 - 7,000
			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	A2	
Gear type	15	95	130	-	181	6.0
	20	100	170	-	176	7.0
	25	125	200	-	187	10.0
Roots type	40	140	200	77	177	17.0
	50	155	250	99	190	20.0
	80	185	300	125	206	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 líquido 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 Pc.

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　发动机指示阀

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

Images	Specifications
1715 Long	- Divided spindle - 3/4" connection for SKL engine - Option with thread cup - Height: 148 mm
1715	- With divided spindle - All connection thread customer wish - Option with thread cup - Height: 105 mm - Angle: 45°
1715/1	- Swinging, divided spindle - All connection thread customer wish - Option with thread cup - Height: 128 mm - Angle: 45°
1720	- Divided spindle - Corner Valve - All connection thread customer wish - Option with thread cup - Height: 116 mm
1725	- All connection thread customer wish - Option with thread cup - Height: 116 mm

Unit Per Pc.

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 Pc.

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 Pc.

CODE	Model	Dimensions mm Φd	H	A	L	Weight Kg
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

Unit Per Pc.

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 Pc.

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 Pc.

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 Dúctil Conforme al Tipo DIN-HNA
DIN型ダクタイル鋳鉄波止弁
DIN-HNA 型延性鑄鐵止浪閥附 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 Specificatiom

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

Unit Per Pc.

CODE	DN	Size mm						Weight Kg
		D	A	A1	L1	H1	Lift Height	
75 42 71	50	68	165	200	180	90	30	10.5
72	65	85	185	220	200	99	41	12.5
73	80	100	200	250	215	108	47	16.5
74	100	130	220	285	250	130	44	25.5
75	125	158	250	315	290	152	73	35.0
75 42 76	150	190	285	340	330	176	65	46.5

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

Unit Per Pc.

CODE	DN	Size mm						Weight Kg
		D	A1	L3	H1	H2	Lift Height	
75 42 77	50	68	200	103	90	333	30	12.0
78	65	85	220	118	99	341	41	14.0
79	80	100	250	135	108	352	47	18.0
80	100	130	285	154	130	413	44	27.0
81	125	158	315	188	152	438	73	37.0
75 42 82	150	190	340	210	176	465	65	49.0

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

Unit Per Pc.

CODE	DN	Size mm						Weight Kg
		A	b	c	L1	H1	Lift Height	
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

Unit Per Pc.

CODE	DN	Size mm						Weight Kg
		A	L1	L2	H1	H2	Lift Height	
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

Unit Per Pc.

CODE	Model	Φd	H	L*1	Weight (Kg)*2, *3
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

Unit Per Pc.

CODE	Model	Φd	H	L*1	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 真空逃がし弁 真空泄压阀

VV-E-65 to 250

VV-IIB-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 -7.0kPa. 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 defferent 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/cm² Flanged	Straight	F-7303	15-40mm	75 01 41 - 45	410.5.5.5.1 -	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	411.5.5.5.1 -	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/cm² 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/cm² 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/cm² 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/cm²	Flanged	F-7364	50-600mm	75 08 21 - 35	- - - - - -	75 55 71 - 86 75 56 01 - 14 15 - 24 32 - 40 41 - 50 51 - 60	PN 10 PN 10 PN 10 PN 10 PN 10 PN 10/16	40-600mm 40-600mm 40-300mm 50-300mm 40-300mm 40-300mm
Cast Steel 10 kgf/cm²	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/cm² Flanged	Straight	F-7417	15-40mm	75 13 61 - 65	- - -	75 58 11 - 21 41 - 68 71 - 98	PN 16 PN 16 PN 16	15-150mm 15-300mm 15-300mm
	Angle	F-7418	15-40mm	75 13 66 - 70	- - -	75 58 25 - 35 55 - 67 85 - 97	PN 16 PN 16 PN 16	15-150mm 15-200mm 15-200mm

Swing Check Valves

Material & W.P.	Type	JIS No.	Nom. Size	CODE	DIN Model	CODE	Flanged to	DN
Cast Iron 10 kgf/cm² 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/cm² 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/cm²	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/cm²	-	-	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/cm²	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/cm²	Screwed	-	1/4" - 2"	75 24 21 - 28	-	75 68 01 - 10	16 bar	1/4" - 3"
Cast Iron 16 kgf/cm²	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 / cm2	1/4" - 4"
	Angle	-	1/4" - 2"	75 51 11 - 18	B-2011	75 18 31 - 42	10 kgf / cm2	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 / cm2	15-40mm
	Angle	411.5.5.5.1	20-125mm	75 51 32 - 38	F-7304	75 01 51 - 55	16 kgf / cm2	15-40mm
Bronze 16 - 6 bar Flanged	Straight	-	15-300mm	75 51 61 - 75	F-7303	75 01 41 - 45	16 kgf / cm2	15-40mm
	Angle	-	15-300mm	75 51 76 - 90	F-7304	75 01 51 - 55	16 kgf / cm2	15-40mm
Cast Iron 16 - 10 bar Flanged	Straight	-	15-300mm	75 52 31 - 45	F-7309	75 02 61 - 67	16 kgf / cm2	50-200mm
	Angle	-	15-300mm	75 52 46 - 60	F-7310	75 02 71 - 77	16 kgf / cm2	50-200mm
Cast Iron 16 - 10 bar Flanged	Straight	-	15-300mm	75 52 61 - 75	F-7309	75 02 61 - 67	16 kgf / cm2	50-200mm
	Angle	-	15-300mm	75 52 76 - 90	F-7310	75 02 71 - 77	16 kgf / cm2	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 / cm2	32-250mm
	Angle	-	15-400mm	75 53 15 - 25 75 52 94 - 99	F-7314	75 04 41 - 50	20 kgf / cm2	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 / cm2	32-150mm
	Angle	411.3.4.4.1	15-150mm	75 53 41 - 51	F-7318	75 04 81 - 88	40 kgf / cm2	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 / cm2	50-200mm
	Angle	411.2.5.5.1	15-250mm	75 54 16 - 29	F-7310	75 02 71 - 77	16 kgf / cm2	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 / cm2	50-600mm
Cast Iron 10 - 2 bar	Flanged	-	40-600mm	75 56 01 - 14	F-7364	75 08 21 - 35	10 kgf / cm2	50-600mm
Cast Iron 10 - 2 bar	Flanged	-	40-300mm	75 56 15 - 24	F-7364	75 08 21 - 35	10 kgf / cm2	50-600mm
Cast Iron 10 - 8 bar	Flanged	-	50-300mm	75 56 32 - 40	F-7364	75 08 21 - 35	10 kgf / cm2	50-600mm
Cast Iron 10 - 8 bar	Flanged	-	40-300mm	75 56 41 - 50	F-7364	75 08 21 - 35	10 kgf / cm2	50-600mm
Cast Iron 10 bar	Flanged	-	40-300mm	75 56 51 - 60	F-7364	75 08 21 - 35	10 kgf / cm2	50-600mm
Cast Iron 10 bar	Flanged	-	50-300mm	75 56 72 - 80	F-7366	75 09 01 - 11	10 kgf / cm2	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 / cm2	15-40mm
Bronze 16 - 8 bar Flanged	Angle	-	15-150mm	75 58 25 - 35	F-7418	75 13 66 - 70	16 kgf / cm2	15-40mm
Cast Iron 16 - 13 bar Flanged	Straight	-	15-300mm	75 58 41 - 68	F-7417	75 13 61 - 65	16 kgf / cm2	15-40mm
Cast Iron 16 - 13 bar Flanged	Angle	-	15-200mm	75 58 55 - 67	F-7418	75 13 66 - 70	16 kgf / cm2	15-40mm
Cast Iron 16 - 13 bar Flanged	Straight	-	15-300mm	75 58 71 - 98	F-7417	75 13 61 - 65	16 kgf / cm2	15-40mm
Cast Iron 16 - 13 bar Flanged	Angle	-	15-200mm	75 58 85 - 97	F-7418	75 13 66 - 70	16 kgf / cm2	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 / cm²	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 / cm²	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 / cm²	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 / cm²	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 / cm²	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 / cm²	1/4" - 2"
Cast Iron 16 bar	Flanged	-	15-400mm	75 68 25 - 38 / 69 15	-	75 24 46 - 55	16 kgf / cm²	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 / cm²	50-200mm
Ductile Cast Iron 10 bar	Angle	-	50-150mm	75 42 77 - 82	-	75 42 51- 57	5 kgf / cm²	50-200mm
Ductile Cast Iron 10 bar	Vertical	-	50-150mm	75 42 91 - 96	F-3060	75 42 41 - 47	5 kgf / cm²	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・アングル弁
截止阀（DIN）青铜，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 Pc.

Straight					Angle					Weight
CODE	DN	Size mm			CODE	DN	Size mm			kg
		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・アングル弁
截止阀（DIN）青铜，DIN 法兰

Metal seated glove 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

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

Unit Per Pc.

CODE	DN	Size mm					Weight
		D	Hcd	L	H	M	kg
75 51 21	15	95	65	130	140	100	2.5
22	20	105	75	150	150	100	3.0
23	25	115	85	160	160	100	3.8
24	32	140	100	180	165	100	5.0
25	40	150	110	200	195	140	7.0
75 51 26	50	165	125	230	205	140	9.6
27	65	185	145	290	255	160	13.6
28	80	200	160	310	290	200	19.0
29	100	220	180	350	335	200	26.9
93	125	250	210	400	405	250	44.0

MESON Model No.: 410.5.5.5.1

Angle

Unit Per Pc.

CODE	DN	Size mm					Weight
		D	Hcd	L	H	M	kg
75 51 32	20	105	75	95	130	100	3.1
33	25	115	85	100	150	100	4.0
34	32	140	100	105	155	100	6.0
35	40	150	110	115	180	140	6.9
36	50	165	125	125	185	140	9.3
75 51 37	65	185	145	145	225	160	13.9
38	80	200	160	155	260	200	18.4
75 52 00	100	220	180	175	290	200	26.0
91	125	285	240	225	335	320	64.0

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・アングル弁
截止阀（DIN）青铜，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.

Straight

Angle

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	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Stem	Brass	CuZn35Ni3Mn2AlPb (CuZn35Ni)
Gland Packing	Asbestos-free	
Bonnet Gasket	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 Pc.

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)Bronce, rosca hembra BSP
DIN 型青銅玉形弁
截止阀（DIN）青铜，英制锥螺纹内螺纹

Unit Per Pc.

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
截止阀（DIN）青铜，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.

Straight

Angle

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

Unit Per Pc.

CODE	DN	Pressure Rating	Size mm A	L	H	M	Weight Kg
75 51 61	15		95	120	175	100	4.3
62	20		105	120	175	100	5.0
63	25	PN16	115	140	178	125	6.0
64	32		140	150	200	125	8.7
65	40		150	155	220	140	10.0
75 51 66	50		165	180	250	140	13.2
67	65		185	200	260	140	23.0
68	80	PN16	200	240	300	180	31.9
69	100		220	270	350	200	42.8
70	125		250	320	380	220	62.0
75 51 71	150	PN16	285	370	440	280	88.0
73	200	PN10	340	500	620	315	136.0
74	250	PN 6	395	730	670	400	165.0
75	300		445	850	750	400	295.0

Angle Type

Unit Per Pc.

CODE	DN	Pressure Rating	Size mm A	L1	H1	M	Weight Kg
75 51 76	15	PN16	95	65	175	100	4.0
77	20		105	65	175	100	5.5
78	25		115	70	178	125	6.2
79	32		140	90	200	125	8.4
80	40		150	90	220	140	10.0
75 51 81	50	PN16	165	105	250	140	12.8
82	65		185	115	260	140	23.2
83	80		200	125	300	180	31.0
84	100		220	145	350	200	41.0
85	125		250	170	380	220	65.0
75 51 86	150	PN16	285	200	440	280	89.0
88	200	PN10	340	250	570	315	127.0
89	250		395	325	550	400	155.0
90	300	PN 6	445	375	620	400	225.0

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 型鑄鉄玉形弁・アングル弁
截止阀（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.

Straight

Angle

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

Unit Per Pc.

CODE	DN	Size mm A	L	H	M	Weight Kg
75 52 31	15	95	130	172	100	3.3
32	20	105	150	173	100	3.9
33	25	115	160	182	120	5.0
34	32	140	180	200	120	6.6
35	40	150	200	255	160	8.4
75 52 36	50	165	230	273	160	12.0
37	65	185	290	295	180	17.3
38	80	200	310	332	200	22.7
39	100	220	350	369	250	35.8
40	125	250	400	432	250	52.8
75 52 41	150	285	480	483	320	74.2
43	200	340	600	606	360	126.0
44	250	405	730	758	360	200.0
45	300	460	850	830	500	315.0

Angle Type

Unit Per Pc.

CODE	DN	Size mm A	L1	H1	M	Weight Kg
75 52 46	15	95	90	168	100	3.1
47	20	105	95	166	100	3.5
48	25	115	100	180	120	4.8
49	32	140	105	187	120	6.6
50	40	150	115	234	160	8.7
75 52 51	50	165	125	236	160	11.8
52	65	185	145	271	180	14.0
53	80	200	155	291	200	20.5
54	100	220	175	332	250	32.2
55	125	250	200	387	250	46.0
75 52 56	150	285	225	437	320	62.0
58	200	340	275	532	360	106.0
59	250	405	325	651	360	-
60	300	460	375	830	500	-

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 型鑄鉄玉形弁・アングル弁
截止阀（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.

Straight

Angle

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

Unit Per Pc.

CODE	DN	Size mm A	L	H	M	Weight Kg
75 52 61	15	95	130	172	100	3.3
62	20	105	150	173	100	3.9
63	25	115	160	182	120	5.0
64	32	140	180	200	120	6.6
65	40	150	200	255	160	8.4
75 52 66	50	165	230	273	160	12.0
67	65	185	290	295	180	17.3
68	80	200	310	332	200	22.7
69	100	220	350	369	250	35.8
70	125	250	400	432	250	52.8
75 52 71	150	285	480	483	320	74.2
73	200	340	600	606	360	126.0
74	250	395	730	758	360	200.0
75	300	445	850	830	500	315.0

Angle Type

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		A	L1	H1	M	
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 型鋳鋼玉形弁・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)
Yoke Bush	Steel	- (9S20)
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

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		A	L	H	M	
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 05	150	285	480	521	400	84
07	200	340	600	643	520	160
08	250	405	730	780	520	265
09	300	460	850	890	520	377
10	350	520	980	976	640	510
75 53 11	400	580	1,100	1,006	640	780

Angle Type

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		A	L1	H1	M	
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 型鋳鋼玉形弁・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.

Straight

Angle

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

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

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		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

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		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 型鑄鉄玉形弁・アングル弁
截止阀（DIN）铸铁，DIN 法兰

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

Unit Per Pc.

CODE	DN	Size mm				Item No.
		Flange Diam.	Face to Face	Pitch	Hole Dia × No. mm	
75 53 12	15	95	130	65	4×14	AA210015
13	20	105	150	75	4×14	AA210020
14	25	115	160	85	4×14	AA210025
69	32	140	180	100	4×18	AA210032
70	40	150	200	110	4×18	AA210040
75 53 78	50	165	230	125	4×18	AA210050
79	65	185	290	145	4×18	AA210065
80	80	200	310	160	8×18	AA210080
95	100	220	350	180	8×18	AA210100
96	125	250	400	210	8×18	AA210125

Name of Mfr.: Alligator

Angle Type

Unit Per Pc.

CODE	DN	Size mm				Item No.
		Flange Diam.	Face to Face	Pitch	Hole Dia × No. mm	
75 53 97	15	95	130	65	4×14	AA225015
98	20	105	150	75	4×14	AA225020
99	25	115	160	85	4×14	AA225025
75 54 00	32	140	180	100	4×18	AA225032
88	40	150	200	110	4×18	AA225040
75 54 89	50	165	230	125	4×18	AA225050
90	65	185	290	145	4×18	AA225065
91	80	200	310	160	8×18	AA225080
92	100	220	350	180	8×18	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
截止阀（DIN）钢

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

Unit Per Pc.

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
截止阀（DIN）不锈钢

Forged steel globe valves with threaded bonnet, SS trim and inside screwed stem.

Application : liquids, gases and steam.

Straight

Angle

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)
Butt Welding Stub	Steel	- (St.37-1)
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

Unit Per Pc.

CODE	D ["]	d mm	Size mm					Weight Kg
			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

Unit Per Pc.

CODE	D ["]	d mm	Size mm						Weight Kg
			H max.	L	L1	M	S1	S2	
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 型ふし状鋳鉄玉形弁・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

Straight

Angle

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

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		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

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		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 Acero forjado y acero fundido

DIN 型鍛造鋼及び鋳鋼玉形弁　截止阀（DIN）锻钢和铸钢

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	Ductule 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 Pc.

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 Pc.

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
Cast Steel						
75 54 71	65	205	340	360	280	34.0
72	80	215	380	400	280	47.0
73	100	250	430	410	360	72.0
74	125	295	500	535	360	117.0
75	150	345	550	555	450	160.0

(to be continued)

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 Pc.

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	180	8.6
78	20	130	230	220	180	10.4
79	25	140	230	220	180	10.9
80	32	155	260	285	225	19.0
75 54 81	40	170	260	285	225	21.0
82	50	195	300	345	225	24.1
Cast Steel						
75 54 83	65	220	340	360	280	34.0
84	80	230	380	400	280	47.0
85	100	265	430	410	360	72.0
86	125	315	500	535	360	120.0
87	150	355	550	555	450	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 Pc.

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	180	8.6
33	20	130	230	220	180	10.4
34	25	140	230	220	180	10.9
35	32	155	260	285	225	19.0
75 54 36	40	170	260	285	225	21.0
37	50	195	300	345	225	25.0
Cast Steel						
75 54 38	65	220	340	360	280	39.0
39	80	230	380	400	280	51.0
40	100	265	430	410	360	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
截止阀（DIN）耐热钢

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 Packing	Graphite	
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 Pc.

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

DIN Gate Valves

Gate Valves (DIN)

Brass, BSPP Female Threaded Ends, Non-Rising Stem

Válvulas de compuerta (DIN) Bronce y latón

DIN 型真鍮仕切弁　闸阀（DIN）青铜和黄铜

Brass body gate valve, brass wedge. Non rising stem, screwed bonnet. BSPP female threaded ends.

Pressure and Temperature Rang: 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

PN16

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		Inch	H	L	A	M	
75 55 03	15	1/2"	74	42	14	55	0.2
04	20	3/4"	79	44	19	55	0.3
05	25	1"	91	47	24	60	0.4
06	32	1-1/2"	112	53	32	70	0.6
07	40	1-1/2"	126	58	36	80	0.8
75 55 08	50	2"	143	67	46.5	90	1.2
09	65	2-1/2"	178	76	60	110	2.1
10	80	3"	206	82	69.5	120	2.8

MESON Model No. : 600.5.5.5.1

Gate Valves (DIN)

Bronze, 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 Pc.

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

Gate Valves (DIN)

Bronze, DIN Flanged Ends Bolted Bonnet Inside Screwed Stem

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 4/6/10/16, flat faced flanges acc. to DIN PN 10/16, bolted bonnet, position indicator, inside screwed stem, non-rising stem and handwheel, face to face acc. to EN 558-1, 14 (DIN 3202-F4).
Heavy duty construction with flat faced flanges. A position indicator is a standard feature of the valve. Possible certification by various classification societies.

Application: especially suitable for use in shipbuilding.

Pressure and Temperature Range

Bore	Pressure and Temperature Range
DN 40 thru DN 150	16 bar - 100°C, 11 bar - 225°C
DN 200	10 bar - 100°C, 6 bar - 225°C
DN 250	6 bar - 100°C, 4 bar - 225°C
DN 300	4 bar - 100°C, 2.5 bar - 225°C

Material Specification

Component	Material	EN and/or (DIN)
Body Bonnet and Wedge	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Stem	Brass	CuZn35Ni3Mn2AlPb (CuZn35Ni)
Bonnet Gasket	Asbestos-free	
Gland Packing	Asbestos-free	
Position Indicator	Brass	CuZn35Ni3Mn2AlPb (CuZn35Ni)

How to order: CODE

Gate valve (DIN), bronze, DIN flanged ends, bolted bonnet inside screwed stem, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight
		A	H	L	M	Kg
75 55 51	40	150	260	140	140	11.5
52	50	165	260	150	140	14
53	65	185	320	170	160	18
54	80	200	350	180	160	21
55	100	220	410	190	200	29
75 55 56	125	250	440	200	200	38
57	150	285	520	210	250	50
59	200	340	630	230	250	79
60	250	395	720	250	315	108
61	300	445	820	270	400	187

Gate Valves (DIN)

Cast Iron, DIN Flanged Ends, Inside Screwed Stem, Short Face to Face, Bronze Seat

Válvulas de compuerta (DIN) Hierro fundido, bridas DIN
DIN 型鋳鉄仕切弁
闸阀（DIN）铸铁，DIN 法兰端

Cast iron gate valve with bronze seat, pressure rating PN 2.5/6/10, flanged ends acc. to DIN PN 10, bolted bonnet, inside screwed stem, non-rising stem, non-rising handwheel, solid wedge, short Face To Face acc. to EN 558-1, 14 (DIN 3202-F4). This model has standard a position indicator and drain plug.

Application: cold and hot fresh water, seawater, lubricating oil, steam, etc.

Pressure and Temperature Range

Bore	Stem and Hot Water	Other Media
DN 40 thru DN 300	8 bar - 150°C	10 bar - 120°C
DN 350 thru DN500	2 bar - 150°C	6 bar - 120°C
DN 600	-	2.5 bar - 120°C

Material Specification

Component	Material	EN and/or (DIN)
Body and Bonnet	Cast iron	GJL-250 (GG-25)
Body Seat Rings	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Wedge (DN40-DN100)	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Wedge (DN125-DN600)	Cast iron	GJL-250 (GG-25)
Wedge Set Rings (DN125-600)	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Stem	Brass	- (CuZn41Pb62)
Handwheel	Cast iron	
Bonnet Gasket	Novus 34	
Gland Packing	PTFE	
Position Indicator	Brass	- (CuZn41Pb62)

How to order: CODE

Gate valve (DIN), cast iron, DIN flanged ends, inside screwed stem, short face to face, bronze seat, with position indicator and drain plug, SIZE DN

Unit Per Pc.

CODE	DN	Size mm					Weight
		A	L	H1	M	G	Kg
75 55 71	40	150	140	255	125	-	10
72	50	165	150	270	150	1/2"	12
73	65	185	170	323	175	1/2"	17
74	80	200	180	355	175	1/2"	22
75	100	220	190	405	200	1/2"	27
75 55 76	125	250	200	460	200	1/2"	33
77	150	285	210	518	225	1/2"	43
78	200	340	230	608	225	3/4"	65
79	250	395	250	708	250	3/4"	100
80	300	445	270	818	300	3/4"	142
75 55 81	350	505	290	997	400	1"	207
82	400	565	310	1,087	400	1"	246
84	500	670	350	1,308	500	1"	416
86	600	780	390	1,493	500	1"	624

Gate Valves (DIN)

Cast Iron, DIN Flanged Ends, Inside Screwed Stem, Short Face to Face, Bronze Seat

Válvulas de compuerta (DIN), Hierro fundido, bridas DIN
DIN 型鋳鉄仕切弁
闸阀（DIN）铸铁，DIN 法兰端

Cast iron gate valve with bronze seat, pressure rating PN 2.5/6/10, flanged ends acc. to DIN PN 10, bolted bonnet, inside screwed stem, non-rising stem, non-rising handwheel, solid wedge, short Face To Face acc. to EN 558-1, 14 (DIN 3202-F4).

Application: cold and hot fresh water, seawater, lubricating oil steam etc.
*Drain Plug is available in option.

Pressure and Temperature Range

Bore	Stem and Hot Water	Other Media
DN 40 thru DN 300	8 bar - 150°C	10 bar - 120°C
DN 350 thru DN500	2 bar - 150°C	6 bar - 120°C
DN 600	-	2.5 bar - 120°C

Material Specification

Component	Material	EN and/or (DIN)
Body and Bonnet	Cast iron	GJL-250 (GG-25)
Body Seat Rings	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Wedge (DN40-DN100)	Bonze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Wedge (DN125-DN600)	Cast iron	GJL-250 (GG-25)
Wedge Set Rings (DN125-600)	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Stem	Brass	- (CuZn41Pb62)
Handwheel	Cast iron	
Bonnet Gasket	Novus 34	
Gland Packing	PTFE	

How to order: CODE

Gate valve (DIN), cast iron, DIN flanged ends, inside screwed stem, short face to face, bronze seat, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight
		A	L	H	M	Kg
75 56 01	40	150	140	230	125	10
02	50	165	150	245	150	12
03	65	185	170	290	175	17
04	80	200	180	315	175	22
05	100	220	190	355	200	27
75 56 06	125	250	200	415	200	33
07	150	285	210	460	225	43
08	200	340	230	545	225	65
09	250	395	250	635	250	100
10	300	445	270	728	300	142
75 56 11	350	505	290	888	400	207
12	400	565	310	964	400	246
13	500	670	350	1,150	500	416
14	600	780	390	1,320	500	624

Gate Valves (DIN)

Cast Iron, DIN Flanged Ends
Outside Screw & Yoke, Short Face to Face
Bronze Seat

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

DIN 型铸铁仕切弁

闸阀（DIN）铸铁，DIN 法兰端

Cast iron gate valve with bronze seat, pressure rating PN 10, flanged ends acc. to DIN PN 10, bolted bonnet, outside screwed stem and yoke, rising stem, non-rising handwheel, solid wedge, short face to face acc. to EN 558-1, 14 (DIN 3202-F4). Purpose: cold and hot fresh water, saltwater, lubricating oil, steam etc.

Pressure and Temperature Range

Bore	Pressure and Temperature Range	Max. Temperature
DN 40 thru DN 300	8 bar - 150°C 10 bar - 120°C	150°C

Material Specification

Component	Material	EN and/or (DIN)
Body and Bonnet	Cast iron	GJL-250 (GG-25)
Body Seat Rings	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Wedge (DN40-DN100)	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Wedge (DN125-DN300)	Cast iron	GJL-250 (GG-25)
Wedge Set Rings (DN125-300)	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Stem	Brass	-(CuZn41Pb62)
Handwheel	Cast iron	
Bonnet Gasket	Novus 34	
Gland Packing	PTFE	

How to order: CODE

Gate valve (DIN), cast iron, DIN flanged ends, outside screw & yoke, short face to face, bronze seat, SIZE DN

Unit Per Pc.

CODE	DN	Size mm					Weight
		A	L	H	H Open	M	Kg
75 56 15	40	150	140	265	310	150	10
16	50	165	150	275	330	150	12
17	65	185	170	335	405	175	17
18	80	200	180	355	440	175	22
19	100	220	190	400	505	200	27
75 56 20	125	250	200	495	625	200	33
21	150	285	210	585	740	225	43
22	200	340	230	700	910	225	65
23	250	395	250	830	1,090	250	100
24	300	445	270	960	1,270	300	142

Gate Valves (DIN)

Cast Iron, DIN Flanged Ends
Outside Screw & Yoke, Short Face to Face
Bronze Seat

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

DIN 型铸铁仕切弁

闸阀（DIN）铸铁，DIN 法兰端

Cast iron gate valves with bronze seat, pressure rating PN 10, flanged ends acc. to DIN PN 10, bolted bonnet, outside screwed stem and yoke, rising stem, non-rising handwheel, solid wedge, short face to face acc. to EN558-1, 14 (DIN 3202-F4). This model has a double pitch threaded stem (fast opening/closing) and drain plug.

Purpose: cold and hot fresh water, saltwater, lubricating oil, steam etc.

Pressure and Temperature Range

Bore	Pressure and Temperature Range	Max. Temperature
DN 40 thru DN 300	8 bar - 150°C 10 bar - 120°C	150°C

Material Specification

Component	Material	EN and/or (DIN)
Body and Bonnet	Cast iron	GJL-250 (GG-25)
Body Seat Rings	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Wedge (DN40-DN100)	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Wedge (DN125-DN300)	Cast iron	GJL-250 (GG-25)
Wedge Set Rings (DN125-300)	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Stem	Brass	-(CuZn41Pb62)
Handwheel	Cast iron	
Bonnet Gasket	Novus 34	
Gland Packing	PTFE	

How to order: CODE

Gate valve (DIN), cast iron, DIN flanged ends, outside screw & yoke, short face to face, bronze seat, with double pitch threaded stem and drain plug SIZE DN

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		A	L	H	M	Drain Plug	
75 56 32	50	165	150	275	150	1/2"	12
33	65	185	170	335	175	1/2"	17
34	80	200	180	355	175	1/2"	22
35	100	220	190	400	200	1/2"	27
36	125	250	200	495	200	1/2"	33
75 56 37	150	285	210	585	225	1/2"	43
38	200	340	230	700	225	3/4"	65
39	250	395	250	830	250	3/4"	100
40	300	445	270	960	300	3/4"	142

Gate Valves (DIN)

Cast Iron, DIN Flanged ends Outside Screw & Yoke. Short Face to Face Stainless Steel Seat, Pressure Rating PN 10

Válvulas de compuerta (DIN), Hierro fundido, DIN Extremos con bridas
DIN 型铸鉄仕切弁
闸阀（DIN）铸铁，DIN 法兰端

Cast iron gate valves with stainless steel seat, pressure rating PN 10, flanged ends acc. to DIN PN 10, bolted bonnet, outside screwed stem and yoke, rising stem, non-rising handwheel, solid wedge, drain plug, grease nipple, short face to face acc. to EN 558-1, 14 (DIN 3202-F4).

Application: cold and hot fresh water, lubricating oil, steam etc. Application due to the absence of cupriferous parts, these valves are especially suitable for aggressive media.

Pressure and Temperature Range

Bore	Pressure and Temperature Range	Max. Temperature
DN 40 thru DN 300	8 bar - 150°C 10 bar - 120°C	150°C

Material Specification

Component	Material	EN and/or (DIN)
Body and Bonnet	Cast iron	GJL-250 (GG-25)
Body Seats	Stainless steel	X5CrNi18-10
Wedge (DN40-DN100)	Cast steel	GP240GH + N (GS-C25N)
Wedge (DN125-DN300)	Cast iron	GJL-250 (GG-25)
Wedge Seats	Stainless steel	X5CrNi18-10
Stem	Stainless steel	X5CrNi18-10
Handwheel	Cast iron	
Bonnet Gasket	Novus 34	
Gland Packing	PTFE	

How to order: CODE

Gate valve (DIN), cast iron, DIN flanged ends, outside screw & yoke, short face to face, stainless steel seat, SIZE DN

Unit Per Pc.

CODE	DN	Size mm					Weight
		A	L	H	M	G	Kg
75 56 41	40	150	140	265	150	-	10
42	50	165	150	275	150	1/2"	12
43	65	185	170	335	175	1/2"	17
44	80	200	180	355	175	1/2"	22
45	100	220	190	400	200	1/2"	27
75 56 46	125	250	200	495	200	1/2"	33
47	150	285	210	585	225	1/2"	43
48	200	340	230	700	225	3/4"	65
49	250	395	250	830	250	3/4"	100
50	300	445	270	960	300	3/4"	142

Gate Valves (DIN)

Cast Iron, DIN Flanged Ends, Inside Screwed Stem, Long Face to Face, Bronze Seat

Válvulas de compuerta (DIN), Hierro fundido, bridas DIN
DIN 型铸鉄仕切弁
闸阀（DIN）铸铁，DIN 法兰端

Cast iron gate valve with brass seat, pressure rating PN 16, flanged ends acc. to DIN PN 10/16, bolted bonnet, inside screwed stem, non-rising stem, non-rising handwheel, solid wedge, long face to face acc. to EN 558-1, 15 (DIN 3202-F5).

Application: as standard, these valves can be used for cold and warm water.

Pressure and Temperature Range

Bore	Pressure and Temperature Range	Max. Temperature
DN 40 thru DN 300	16 bar - 80°C	80°C (due to NBR bonnnet gasket)
For higher temperatures, use a different bonnet gasket		

Material Specification

Component	Material	EN and/or (DIN)
Body and Bonnet	Cast iron	GJL-250 (GG-25)
Body Seats	Brass	- (CuZn41Pb62)
Wedge (DN40-DN65)	Brass	- (CuZn41Pb62)
Wedge (DN80-DN300)	Cast iron	GJL-250 (GG-25)
Wedge Seats (DN80-DN300)	Brass	- (CuZn41Pb62)
Stem	Brass	- (CuZn41Pb62)
Handwheel	Cast iron	
Bonnet Gasket	NBR	
Gland Packing	PTFE	

How to order: CODE

Gate valve (DIN), cast iron, DIN flanged ends, inside screwed stem, long face to face, bronze seat, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight
		A	L	H	M	Kg
75 56 51	40	150	240	230	180	10
52	50	165	250	245	180	13
53	65	185	270	290	225	17
54	80	200	280	315	225	24
55	100	220	300	355	280	31
75 56 56	125	250	325	415	320	41
57	150	285	350	460	320	55
58	200	340	400	545	400	89
59	250	395	450	635	500	140
60	300	445	500	725	500	180

Gate Valves (DIN)

Cast Iron, DIN Flanged Ends, Inside Screwed Stem, Short Face to Face, Pressure Rating PN16

Válvulas de compuerta (DIN), Hierro fundido, bridas DIN
DIN 型铸鉄仕切弁
闸阀（DIN）铸铁，DIN 法兰端

Cast steel gate valve with stainless steel seat, pressure rating PN 16, flanged ends acc. to DIN PN 16, bolted bonnet, inside screwed stem, non-rising stem, non-rising handwheel, flexible wedge, position indicator, short face to face acc. to EN 558-1, 14 (DIN 3202-F4).

Application suitable for general applications; due to the special trim, these valves are especially suitable for seawater, and they are used aboard ships as ship-side valve and in cooling water systems.

Pressure and Temperature Range

	-10/20°C	100°C	150°C	200°C	250°C
PN 16	16 bar	16	16	13.3	12.2
	300°C	350°C	400°C	425°C	450°C
PN 16	11	10.3	9.9	9.7	9.5

Material Specification

Component	Material	EN and/or (DIN)
Body, Bonnet and Wedge	Cast steel	GP240GH + N (GS-C 25N)
Wedge Seats	Stainless steel	- (X2CrNiMo19 12)
Body Seats	Stainless steel	- (X2CrNiMo19 12)
Stem	Stainless steel	X6CrNiMoTi17-12-2
Handwheel	Steel	
Bonnet Gasket, Gland Packing (SS insert)	Graphite	
Position Indicator	Brass	

How to order: CODE

Gate valve (DIN), cast steel, DIN flanged ends, inside screwed stem, short face to face, pressure rating PN 16, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight
		A	H	L	M	Kg
75 56 72	50	165	330	150	200	16
73	65	185	390	170	200	23
74	80	200	420	180	200	26
75	100	220	440	190	200	32
76	125	250	490	200	250	39
75 56 77	125	285	580	210	250	52
78	200	340	690	230	300	84
79	250	405	860	250	400	160
80	300	460	930	270	400	190

Gate Valves (DIN)

Cast steel, DIN Flanged Ends Rising Stem, Short Face to Face Pressur Rating PN16

Válvulas de compuerta (DIN), Acero fundido, DIN Extremos con bridas
DIN 型鑄鋼仕切弁
闸阀（DIN）铸钢，DIN 法兰端

Cast steel body gate valve, Cast Steel wedge, Stainless Steel seat. Rising stem and bolted bonnet. Raised face flanges.

Pressure and Temperature Range

	-10/20°C	100°C	150°C	200°C	250°C
PN 16	16 bar	16	14	11	10
	300°C	350°C	400°C	427°C	
PN 16	8	7	5	5	

ASTM A216 WCB is not recommended for long-term duty above 427°C.

Material Specification

No	Part	Material	Code
1	Body	Cast Steel	ASTM A216-WCB
2	Bonnet	Cast Steel	ASTM A216-WCB
3	Wedge	Cast Steel	ASTM A216-WCB
4	Seat	Stainless Steel	Deposited 13Cr
5	Stem	Stainless Steel	ASTM A182-F6a
6	Bonnet Gasket	Graphite	
7	Packing	Graphite	
8	Yoke	Cast Steel	ASTM A216-WCB
9	Stem nut	Aluminium Bronze	
10	Handwheel	Cast Iron	

How to order: CODE

Gate valve (DIN), cast steel, DIN flanged ends, rising stem, short face to face, pressure rating PN16, SIZE DN

Unit Per Pc.

CODE	DN	Size mm					Weight
		Hcd	D	L	H	M	Kg
75 56 91	40	110	150	140	300	200	26.5
82	50	125	165	150	358	240	29
83	65	145	185	170	375	240	33
84	80	160	200	180	433	280	45
85	100	180	220	190	502	320	63
75 56 86	125	210	250	200	612	380	108
87	150	240	285	210	676	380	134
88	200	295	340	230	820	400	192
89	250	355	405	250	969	450	273
90	300	410	460	270	1,142	580	379

MESON Model No.: 622.3.4.4.1

Gate Valves (DIN)

Cast Steel, DIN Flanged Ends, Risinbg Stem, Long Face to Face, Pressure Rating PN 16-40

Válvulas de compuerta (DIN), Acero fundido, DIN Extremos con bridas
DIN 型鑄鋼仕切弁
闸阀（DIN）铸钢，DIN 法兰端

Cast steel gate valve with stainless steel seat, pressure rating PN 16, 25 and 40, flanged ends acc. to DIN PN 16 - 40, bolted bonnet with yoke, outside screwed stem and yoke, rising stem, raised face flanges, long type.

Application:
Corrosive fluids, Steam, Thermal oil, Fuel oil, Lubricating oil, Flammable hydraulic oil, Cargo oil, Non-flammable hydraulic fluid, Boiler feedwater, Condensate, Sea water,

Pressure and Temperature Range

Pressure Rating	0/50°C	100°C	150°C	200°C	250°C	300°C	350°C	375°C	427°C
PN16	16 bar	14	13	11	10	8	7	6	5
PN25	25 bar	23	21	19	17	14	13	12	10

ASTM A216 WCB is not recommended for long-term duty above 427°C

Material Specification

Component	Material	Code
Body	Cast Steel	ASTM A216-WCB
Bonnet	Cast Steel	ASTM A216-WCB
Wedge	Cast Steel	ASTM A216-WCB
Seat	Stainless Steel	Deposited 13Cr
Stem	Stainless Steel	ASTM A182-F6a
Bonnet Gasket	Graphite	
Packing	Graphite	
Yoke	Cast Steel	ASTM A216-WCB
Stem nut	Aluminium Bronze	
Handwheel	Cast Iron	

How to order: CODE

Gate valve (DIN), cast steel, DIN flanged ends, rising stem, long face to face, PRESSURE RATING PN, SIZE DN

PN 16

Unit Per Pc.

CODE	DN	Size mm					Weight
		Hcd	D	L	H	M	Kg
75 57 09	50	125	165	250	358	240	29
01	65	145	185	270	375	240	33
02	80	160	200	280	433	280	45
03	100	180	220	300	502	320	63
04	125	210	250	325	612	360	108
75 57 05	150	240	285	350	676	360	134
06	200	295	340	400	820	400	192
08	300	410	460	500	1142	560	379

MESON Model No. : 623.3.4.4.1

PN 25

Unit Per Pc.

CODE	DN	Size mm					Weight
		Hcd	Kg	L	H	M	Kg
75 57 19	50	125	165	250	358	240	28
12	80	160	200	280	433	280	46
13	100	190	235	300	502	320	64
14	125	220	270	325	612	360	116
15	150	250	350	350	676	360	141
75 57 16	200	310	360	400	820	400	213
17	250	370	425	450	969	450	290

MESON Model No. : 623.3.4.4.1

PN 40

Unit Per Pc.

CODE	DN	Size mm					Weight
		Hcd	D	L	H	M	Kg
75 57 34	50	125	165	250	372	280	32
21	65	145	185	290	395	280	39
22	80	160	200	310	457	320	52
23	100	190	235	350	552	360	80
24	125	220	270	400	634	400	127
75 57 25	150	250	300	450	708	400	154
26	200	320	375	550	858	450	263

MESON Model No. : 623.3.4.4.1

DIN Check Valves

Check Valves (DIN)

Bronze, BSP Female Threaded Ends, Lift Type

Válvulas de retención (DIN), Bronce, extremos roscados hembra BSP Tipo de elevación
逆止弁（DIN）青銅、BSP 雌ネジ端 リフトタイプ
止回阀（DIN）青铜
英制锥螺纹内螺纹端 提升式

Bronze check valves for horizontal installation.

Pressure and Temperature Range

Model	Pressure and Temperature Range	
500BR	16 bar - 120°C	12 bar - 200°C
500TE	16 bar - 120°C	10 bar - 185°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Disc and Bonnet	Brass	- (CuZn41Pb62)
Gasket	Asbestos-free	
Disc Ring (500TE)	PTFE	

How to orde: CODE

Check valve (DIN), bronze, BSP female threaded ends, lift type, SIZE DN

Unit Per Pc.

Max. 200°C at 12 bar				Max. 185°C at 10 bar				Weight Kg
CODE	DN	Size mm		CODE	DN	Size mm		
		L	H			L	H	
75 57 51	1/4"	50	37	**75 57 61**	1/4"	50	37	0.3
52	3/8"	50	38	**62**	3/8"	50	38	0.3
53	1/2"	60	39	**63**	1/2"	60	39	0.4
54	3/4"	70	48	**64**	3/4"	70	48	0.5
55	1"	80	53	**65**	1"	80	53	0.8
75 57 56	1-1/4"	95	56	**75 57 66**	1-1/4"	95	56	1.2
57	1-1/2"	105	63	**67**	1-1/2"	105	63	1.6
58	2"	130	72	**68**	2"	130	72	2.5
59	2-1/2"	163	100	**69**	2-1/2"	163	100	5.2
60	3"	185	110	**70**	3"	185	110	6.0

Check Valves (DIN)

Bronze, BSP Female Threaded Ends, Swing Type

Válvulas de retención (DIN), Bronce, extremos roscados hembra BSP, tipo pivotante
逆止弁（DIN）青銅、BSP 雌ネジ端、スイングタイプ
止回阀（DIN），青铜，英制锥螺纹内螺纹端，摆动

Bronze check valves for horizontal and vertical (upward flow) installation.

Pressure and Temperature Range

Type	Pressure and Temperature Range	
Metal Seated	16 bar - 120°C	12 bar - 200°C
PTFE Disc Seal	16 bar - 120°C	10 bar - 185°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Disc and Bonnet	Brass	- (CuZn41Pb62)
Gasket	Asbestos-free	
Disc Ring (505TE)	PTFE	

How to order: CODE

Check valve (DIN), bronze, BSP female threaded ends, swing type, SIZE DN

Unit Per Pc.

Metal Seated				PTFE Disc Seal				Weight Kg
CODE	D	Size mm		CODE	D	Size mm		
		L	H			L	H	
75 57 71	3/8"	50	35	**75 57 81**	3/8"	50	35	0.3
72	1/2"	60	38	**82**	1/2"	60	38	0.4
73	3/4"	70	49	**83**	3/4"	70	49	0.5
74	1"	80	54	**84**	1"	80	54	0.8
75	1-1/4"	95	60	**85**	1-1/4"	95	60	1.1
75 57 76	1-1/2"	105	70	**75 57 86**	1-1/2"	105	70	1.5
77	2"	130	77	**87**	2"	130	77	2.1
78	2-1/2"	160	94	**88**	2-1/2"	160	94	4.6
79	3"	185	130	**89**	3"	185	130	6.9

Check Valves (DIN)

Bronze, BSP Female Threaded Ends, Vertical Installation

Válvulas de retención (DIN), Bronce, extremos roscados hembra BSP, instalación vertical
逆止弁（DIN），ブロンズ、BSP 雌ネジ端、垂直設置
止回阀（DIN）青铜，英制锥螺纹内螺纹端，垂直安装

Bronze check valves with BSP female threaded ends, only suitable for vertical (upward flow) installation.

Pressure and Temperature Range:
16 bar - 120°C
12 bar - 200°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Disc and Disc Guide	Brass	- (CuZn41Pb62)

How to order: CODE

Check valve (DIN), bronze, BSP female threaded ends, Vertical installation, SIZE DN

Unit Per Pc.

CODE	D	L mm	Weight Kg	CODE	D	L mm	Weight Kg
75 57 91	3/8"	55	0.18	**75 57 95**	1-1/4"	80	0.6
92	1/2"	55	0.18	**96**	1-1/2"	85	0.85
93	3/4"	65	0.25	**97**	2"	112	1.45
94	1"	72	0.38				

Check Valves (DIN)

Bronze, DIN Flanges, Lift Type, Straight and Angle

Válvulas de retención (DIN), Bronce, bridas DIN, tipo elevador, rectas y en ángulo
逆止弁（DIN）,青銅、DIN フランジ、リフトタイプ、ストレート及びアングル
止回阀（DIN）青铜，DIN 法兰，提升式，直通式和角式

Bronze lift type check valves with bronze disc and seat, pressure rating PN 16, straight and angle pattern, flat faced flanges as per DIN PN 16 and bolted bonnet. Only suitable for installation in horizontal pipelines. These check valves offer very good resistance to the corrosive action of seawater, fresh water and waste water.
Application area: aboard ships but also in installations where corrosion (in- or external) is undesirable.

Straight Angle

Pressure and Temperature Range

Pressure Raiting	Pressure and Temperature Range	Max. Temperature
PN 16	16 bar - 120°C 12 bar - 200°C	200°C 200°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Disc	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Bonnet	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Bonnet Gasket	Graphite	

How to order: CODE

Check valve (DIN), bronze, DIN flanges, lift type, STRAIGHT or ANGLE, SIZE DN

Straight Type

Unit Per Pc.

CODE	DN	Size mm			Weight
		A	L	H	Kg
75 58 11	15	95	120	65	3.5
12	20	105	120	65	4.2
13	25	115	140	75	5.0
14	32	140	150	75	6.8
15	40	150	155	95	8.4
75 58 16	50	165	180	105	10.2
17	65	185	200	120	21.3
18	80	200	240	130	26.5
19	100	220	270	160	34.0
20	125	250	320	175	50.0
75 58 21	150	285	370	195	62

Angle Type

Unit Per Pc.

CODE	DN	Size mm			Weight
		A	L1	H	Kg
75 58 25	15	95	65	55	3.3
26	20	105	65	55	4.6
27	25	115	70	65	4.8
28	32	140	90	65	6.4
29	40	150	90	80	8.6
75 58 30	50	165	105	85	11.1
31	65	185	115	95	20.3
32	80	200	125	100	25.0
33	100	220	145	120	33.0
34	125	250	170	135	43.0
75 58 35	150	285	200	150	63

Check Valves (DIN)

Cast Iron, DIN Flanges, Lift Type with Spring Stainless Steel Seat/Straight and Angle

Válvulas de retención (DIN), Hierro fundido, bridas DIN, tipo elevador con muelle
逆止弁（DIN），鋳鉄、DIN フランジ、バネ付きリフトタイプ
止回阀（DIN）铸铁，DIN 法兰，提升式，带弹簧

Cast iron lift type check valves with stainless steel disc and seat, spring loaded disc, pressure rating PN 16, straight and angle pattern with bolted bonnet, flanged connection acc. to DIN PN 16. Suitable for horizontal and vertical (rising flow) installation.
Application area: general industrial use.
Purpose: cold and hot water, air, gases, steam and other neutral media.

Straight

Angle

Pressure and Temperature Range

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

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast iron	GJL-250 (GG-25)
Bonnet	Cast iron	GJL-250 (GG-25)
Disc	Stainless steel	X20Cr13
Spring	Stainless steel	X17CrNi16-2 (X20CrNi17 2)
Seat	Stainless steel	X12Cr13 (X10Cr13)
Stem	Stainless steel	X20Cr13
Bonnet Gasket (SS insert)	Graphite	

How to order: CODE

Check valve (DIN), cast iron, DIN flanges, lift type with spring, Stainless steel seat, STRAIGHT or ANGLE, SIZE DN

Straight Type

Unit Per Pc.

CODE	DN	Size mm			Weight
		A	L	H	Kg
75 58 41	15	95	130	56	2.1
42	20	105	150	56	2.7
43	25	115	160	67	3.8
44	32	140	180	76	5.5
45	40	150	200	89	7.4
75 58 46	50	165	230	96	9.5
47	65	185	290	104	15
48	80	200	310	124	20
49	100	220	350	161	29
50	125	250	400	174	41
75 58 51	150	285	480	197	66
53	200	340	600	248	111
54	250	405	730	333	196
68	300	460	800	375	302

Angle Type

Unit Per Pc.

CODE	DN	Size mm			Weight
		A	L1	H1	Kg
75 58 55	15	95	90	50	2.2
56	20	105	95	47	2.8
57	25	115	100	57	3.9
58	32	140	105	60	5.5
59	40	150	115	70	7.0
75 58 60	50	165	125	73	9.2
61	65	185	145	79	12.0
62	80	200	155	77	17.2
63	100	220	175	112	25.0
64	125	250	200	119	36.0
75 58 65	150	285	225	123	55
67	200	340	275	157	97

Check Valves (DIN)

Cast Iron, DIN Flanges, Lift Type with Spring Bronze Seat/Straight and Angle

Válvulas de retención (DIN), Hierro fundido, bridas DIN, tipo elevador con muelle
逆止弁（DIN），鋳鉄、DIN フランジ、バネ付きリフトタイプ
止回阀（DIN）铸铁，DIN 法兰，提升式，带弹簧

Cast iron life type check valves with zinc-free bronze disc and seat, spring loaded disc, pressure rating PN 16, straight and angle pattern with bolted bonnet, flanges acc. to DIN PN 16.
Suitable for horizontal and vertical (upward flow) installation.

Application area : maritime use in particular, due to the zinc free bronze trim.
Application: in particular for cold and warm (sea) water, air, gases, other neutral media.

Straight

Angle

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	Cast iron	GJL-250 (GG-25)
Bonnet	Cast iron	GJL-250 (GG-25)
Disc	Zinc-free bronze	CuSn10-Cu (G-CuSn10)
Spring	Zinc-free bronze	
Seat	Zinc-free bronze	CuSn10-Cu (G-CuSn10)
Stem	Zinc-free bronze	CuSn10-Cu (G-CuSn10)
Bonnet Gasket (SS insert)	Graphite	

How to order: CODE

Check valve (DIN), cast iron, DIN flanges, lift type with spring, Bronze seat, STRAIGHT or ANGLE, SIZE DN

Straight Type

Unit Per Pc.

CODE	DN	Size mm			Weight Kg
		A	L	H	
75 58 71	15	95	130	56	2.1
72	20	105	150	56	2.7
73	25	115	160	67	3.8
74	32	140	180	76	5.5
75	40	150	200	89	7.4
75 58 76	50	165	230	96	9.5
77	65	185	290	104	15
78	80	200	310	124	20
79	100	220	350	161	29
80	125	250	400	174	41
75 58 81	150	285	480	197	66
83	200	340	600	248	111
84	250	405	730	333	196
98	300	460	800	375	302

Angle Type

Unit Per Pc.

CODE	DN	Size mm			Weight Kg
		A	L1	H1	
75 58 85	15	95	90	50	2.2
86	20	105	95	47	2.8
87	25	115	100	57	3.9
88	32	140	105	60	5.5
89	40	150	115	70	7.0
75 58 90	50	165	125	73	9.2
91	65	185	145	79	12.0
92	80	200	155	77	17.2
93	100	220	175	112	25.0
94	125	250	200	119	36.0
75 58 95	150	285	225	123	55
97	200	340	275	157	97

Check Valves (DIN)

Cast Iron, DIN Flanges, Swing Type, Bronze Disc Seat, Pressure Rating PN 10 - 16

Válvulas de retención (DIN), Hierro fundido, Bridas DIN, Tipo pivotante, Asiento de disco de bronce

逆止弁（DIN）鋳鉄、DIN フランジ、スイングタイプ、青銅製ディスクシート

止回阀（DIN），铸铁，DIN 法兰，摆动式，青铜盘座

Cast iron swing type check valves, bronze seat or rubber seal, pressure rating PN 10/16, straight pattern, full bore, bolted bonnet, flanges acc. to DIN PN 10/16 and flange drilling acc. to DIN PN 10/16. Suitable for horizontal and vertical (upward flow) installation.

Application area: cold and hot water, fresh and seawater.

Pressure and Temperature Range

Size	Pressure and Temperature Range
DN 40 - DN 150 DN 200 - DN 300	16 bar - 120°C 10 bar - 120°C
Max. Temperature	120°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast iron	GJL-250 (GG-25)
Bonnet	Cast iron	GJL-250 (GG-25)
Seat	Bronze	CuSn5ZnPb5-C(G-CuSn5ZnPb (Rg 5))
Hinge Pin	Brass	CuZn40Pb2
Hinge Arm	Cast iron	GJL-250 (GG-25)
Disc (DN40-DN125)	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Disc (DN150-DN300)	Cast iron	GJL-250 (GG-25)
Disc Seat	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Bonnet Gasket	Novus 34	

How to order: CODE

Check valve (DIN), cast iron, DIN flanges, swing type, Bronze disc seat, SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight
		A	L	H	
75 59 01	40	150	180	115	8
02	50	165	200	125	10
03	65	185	240	130	15
04	80	200	260	140	20
05	100	220	300	160	26
75 59 06	125	250	350	180	35
07	150	285	400	200	48
08	200	340	500	220	72
09	250	392	600	290	135
10	300	445	700	330	196

Check Valves (DIN)

Cast Iron, DIN Flanges, Swing Type, Rubber Disc Seal, Pressure Rating PN 10 - 16

Válvulas de retención (DIN), Hierro fundido, Bridas DIN, Tipo pivotante, Sello de disco de goma

逆止弁（DIN）鋳鉄、DIN フランジ、スイングタイプ、ゴム製ディスクシール

止回阀（DIN）铸铁，DIN 法兰，摆动式，橡胶盘密封

Cast iron swing type check valves, bronze seat or rubber seal, pressure rating PN 10/16, straight pattern, full bore, bolted bonnet, flanges acc. to DIN 10/16 and flange drilling acc. to DIN PN 10/16. Suitable for horizontal and vertical (upward flow) installation.

Application area: cold and hot water, fresh and seawater.

Pressure and Temperature Range

Size	Pressure and Temperature Range
DN 40 - DN 150 DN 200 - DN 300	16 bar - 80°C 10 bar - 80°C
Max. Temperature	80°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast iron	GJL-250 (GG-25)
Bonnet	Cast iron	GJL-250 (GG-25)
Seat	Bronze	CuSn5ZnPb5-C (G-CuSn5ZnPb (Rg 5))
Hinge Pin	Brass	CuZn40Pb2
Hinge Arm	Cast iron	GJL-250 (GG-25)
Disc (DN40DN125)	Bronze	CuSn5ZnPb5-C (G-CuSn5ZnPb (Rg 5))
Disc (DN150-DN300)	Cast iron	GJL-250 (GG-25)
Disc Seal	Rubber	
Bonnet Gasket	Novus 34	

How to order: CODE

Check valve (DIN), cast iron, DIN flanges, swing type, rubber disc seal, SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight
		A	L	H	Kg
75 59 11	40	150	180	115	8
12	50	165	200	125	10
13	65	185	240	130	15
14	80	200	260	140	20
15	100	220	300	160	26
75 59 16	125	250	350	180	35
17	150	285	400	200	48
18	200	340	500	220	72
19	250	395	600	290	135
20	300	445	700	330	196

Check and Storm Valves (DIN)

Cast Steel, DIN Flanges
Pressure Rating PN 16

Válvulas antirretorno y antitormenta (DIN)
逆止弁および波止弁（DIN）
止回阀和防暴阀（DIN）

Cast steel body, full bore swing check valve with cast steel disc and stainless steel seat. Raised face flanges. Pressure rating is PN16. Suitable for horizontal and vertical (upward flow) installation.

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

Pressure and Temperature Range

	-10/20°C	100°C	150°C	200°C	250°C
PN 40	40 bar	37.3	34.7	30.2	28.4
	300°C	350°C	400°C	427°C	
PN 40	25.8	24	23.1	21.1	

ASTM A216 WCB is not recommended for long-term duty above 427°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast Steel	ASTM A216
Bonnet	Cast Steel	ASTM A216
Disc	Cast Steel	ASTM A216
Seat	Stainless steel	Deposited 13Cr
Hinge	Cast Iron	ASTM A216-WCB
Hinge pin	Stainless Steel	ASTM A276-420
Gasket	Graphite	

How to order: CODE

Check and storm valve (DIN), cast steel, DIN flanges, pressure raiting PN 16, STRAIGHT or ANGLE, SIZE DN

Straight Type

Unit Per Pc.

CODE	DN	Size mm				Weight
		Hcd	D	L	H	Kg
75 59 25	40	110	150	180	130	18.0
26	50	125	165	200	135	21.0
27	65	145	185	240	142	28.0
28	80	160	200	260	165	38.0
29	100	180	220	300	180	58.0
75 59 30	125	210	250	350	210	92.0
31	150	240	285	400	233	130
33	200	295	340	500	304	210
90	250	355	405	600	348	294
91	300	410	460	700	390	367
75 59 93	400	525	580	900	468	461

MESON Model No.: 311.3.4.4.1

Check Valves (DIN)

Cast Steel, DIN Flanges, Swing Type
Pressure Rating PN 16

Válvulas de retención (DIN), Acero fundido, Bridas DIN, Tipo pivotante
逆止弁（DIN）鋳鋼、DIN フランジ、スイングタイプ
止回阀（DIN）铸钢，DIN 法兰，摆动式

Cast steel swing type check valves, stainless steel disc and seat, pressure rating DIN PN 16, straight pattern with bolted bonnet, full bore, flanged acc. to DIN PN 16. Suitable for horizontal and vertical (upward flow) installation.

Application: general industrial use, such as hot water installations, aboard ships for ships side, etc.

Pressure and Temperature Range

	20°C	50°C	100°C	150°C	200°C
PN 16	16 bar	14.9	13.6	12.7	11.4
	250°C	300°C	350°C	375°C	400°C
PN 16	10.4	9.4	8.8	8.6	8.4

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast steel	GP240GH (GS-C25)
Bonnet	Cast steel	GP240GH (GS-C25)
Seat	Stainless steel	X20Cr13
Disc	Stainless steel	X20Cr13
Hinge Pin	Stainless steel	X20Cr13
Hinge Arm	Cast steel	GP240GH (GS-C25)
Bonnet Gasket (SS insert)	Graphite	

How to order: CODE

Check valve (DIN), cast steel, DIN flanges, swing type, Pressure raiting PN 16, SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight
		A	L	H	Kg
75 59 52	50	165	200	150	18
53	65	185	240	180	25
54	80	200	260	200	29
55	100	220	300	225	39
56	125	250	350	270	60
75 59 57	150	285	400	300	82
58	200	340	500	355	151
59	250	405	600	390	215
60	300	460	700	445	290

Carbon Steel Check Valves

Wafer Style Long PN16, Series No.4012

Válvulas antirretorno de acero al carbono
鋳鋼チェッキ弁　碳钢止回阀

For mounting between flanges according to DIN 2501-PN16.

Material

Part No.	Material	Code
1. Body	Carbon Steel	GSC-25N
2. Disc	Stainless Steel	AISI 316L
3. Arm	Stainless Steel	AISI 316L
4. Seat	Viton	FKM
5. Spring	Stainless Steel	AISI 316L

Pressure

Size DN	Nominal Pressure	Hydraulic Inspection	
	PN	Body	Seat
40 to 200	16	25	16
250 to 500	10	16	10

Unit Per Pc.

CODE	DN	Size mm			Weight
		A	L	H	Kg
75 59 61	50	45	109	33	1.8
62	65	48	129	43	2.4
63	80	51	144	52	3.2
64	100	57	164	76	5.4
65	125	64	194	95	7.3
75 59 66	150	70	220	121	9.2
67	200	73	275	164	14.6
68	250	79	331	194	23.6
69	300	86	386	241	34.4
70	350	108	446	267	75.0
75 59 71	400	108	498	318	91.0
72	450	108	558	356	100.0
73	500	140	620	387	154.0

Name of Mfr. : World Wide Metric

Bronze Swing Check Valves

Wafer Style Short PN16, Series No.4022

Válvulas antirretorno de charnela de bronce
青銅製スイングチェックバルブ　　青铜旋启式止回阀

For mounting between flanges according to DIN2501-PN16

Material

Part No.	Material	Code
1. Body	Gunmetal	DIN 1705
2. Disc	Gunmetal	DIN 1705
3. Seat	NBR	NBR

Pressure

Size DN	Nominal Pressure	Hydraulic Inspection	
	PN	Body	Seat
40 to 200	16	25	16
250 to 500	10	16	10

Unit Per Pc.

CODE	DN	Size mm			Weight
		L	D	D2	Kg
75 59 76	40	16	94	26	0.9
77	50	19	109	26	0.9
78	65	19	129	38	1.3
79	80	19	144	47	1.5
80	100	19	164	70	2.0
75 59 81	125	19	195	92	3.0
82	150	19	221	114	4.8
83	200	29	276	143	11
84	250	29	330	190	15
85	300	38	386	214	25
75 59 86	350	44	446	263	37
87	400	51	498	305	55
88	450	60	558	342	65
89	500	64	620	400	105

Name of Mfr. : World Wide Metric

The following optional material for each part are available on your selection;

Part No.	Material	Code
1. Body	Gunmetal Stainless Steel	DIN 1705 AISI 316L
2. Disc	Gunmetal Stainless Steel	DIN 1705 AISI 316L
3. Seat	NBR EPDM Viton Teflon	NBR EPDM FKM PTFE

Duo Check Valves

Cast Iron & Cast Steel, Series No.4101 & 4111

Válvulas antirretorno Duo, Hierro fundido y acero fundido
鋳鉄・鋳鋼デュオチェックバルブ　　双止回阀，铸铁和铸钢

Material

Part No.	Cast Iron (#4101)		Cast Iron (#4111)	
	Material	Code	Material	Code
1. Body	Cast Iron	GG25	Cast Steel	GSC-25N
2. Disc	Bronze	RG5	Stainless Steel	316
3. Spring	Stainless Steel	316	Stainless Steel	316
4. Seat Ring	NBR Viton	NBR Viton	NBR	NBR

Cast Iron (Series 4101)

Unit Per Pc.

CODE	DN	Size mm			Weight
		L	A	E	Kg
75 60 71	50	43	105	54	2.7
72	65	46	124	67	4.5
73	80	64	136	79	5.9
74	100	64	174	105	7.7
75	125	70	196	130	12
75 60 76	150	76	222	155	16
77	200	89	279	209	32
78	250	114	340	257	48
79	300	114	410	308	78
80	350	127	451	358	91
75 60 81	400	140	514	409	125
82	450	152	549	460	143
83	500	152	606	511	197

Name of Mfr. : World Wide Metric
*According to DIN3202 Series 16.

Cast Iron (Series 4111)

Unit Per Pc.

CODE	DN	Size mm			Weight
		L	A	E	Kg
75 60 86	50	60	105	54	2.7
87	65	67	124	67	4.5
88	80	73	136	79	5.9
89	100	73	174	105	7.7
90	125	86	196	130	12
75 60 91	150	98	222	155	16
92	200	127	279	209	32
93	250	146	340	257	48
94	300	181	410	308	78
95	350	184	451	358	91
75 60 96	400	190	514	409	125
97	450	203	549	460	143
98	500	212	606	511	197

Name of Mfr. : World Wide Metric
*According to API609.

DIN Fire and Deckwash Valves

Firefighting and Deckwash Valves (DIN)

Bronze, BSP Threaded

Válvulas contraincendios y de lavado de cubiertas (DIN)
消火及び甲板洗浄弁（DIN）
消防和甲板清洗阀门（DIN）

Fire fighting valves with threaded ends are available in two patterns; straight and 30° angled, with BSP threaded inlet. These valves all feature a threaded bonnet.

30° Angle

Straight
BSP Male Threaded Ends

Straight
BSP Female Threaded Ends

Pressure and Temperature Rang: 16 bar - 60°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Bonnet	Brass	CuZn39Pb3
Stem, Disc, Coupling	Brass	CuZn35Ni3Mn2AlPb (CuZn35Ni)
Disc, Sealing Ring	NBR	
Handwheel	Cast iron	GJL-200 (GG-20)

How to order: CODE

Firefighting and deckwash valve (DIN), Bronze,BSP threaded, STRAIGHT TYPE or 30°, ANGLE TYPE, SIZE DN

30° Angle Type

Unit Per Pc.

CODE	DN	Size mm			Cam Distance	Weight kg
		L2	H2	M		
75 60 01	1"	84	145	80	31	1.0
02	1-1/4"	87	160	80	44	1.9
03	1-1/2"	100	190	100	52	2.6
05	2"	120	200	120	81	3.5
06	2-1/2"	127	240	120	81	4.3
75 60 07	3"	157	275	140	89	6.9

Straight Type with BSP Male Threaded Ends

Unit Per Pc.

CODE	DN	Size mm			Cam Distance	Weight Kg
		L	H	M		
75 60 11	1"	118	110	80	31	1.0
12	1-1/4"	130	125	80	44	1.9
13	1-1/2"	138	140	100	52	2.7
15	2"	176	160	120	81	3.7
16	2-1/2"	212	195	120	81	5.5
75 60 17	3"	225	200	140	89	8.0

Straight Type with BSP Female Threaded Ends

Unit Per Pc.

CODE	Inch	Size mm			Cam Distance	Weight Kg
		L	H	M		
75 60 21	1"	118	110	80	31	1.0
22	1-1/4"	130	125	80	44	1.9
23	1-1/2"	138	140	100	52	2.7
25	2"	176	160	120	81	3.7
26	2-1/2"	212	195	120	81	5.5
75 60 27	3"	225	200	140	89	8.0

Firefighting and Deckwash Valves (DIN)

Bronze, DIN Flanged, Globe Type, Threaded Bonnet Pressure Rating PN 16

Válvulas contraincendios y de lavado de cubiertas (DIN)
消火及び甲板洗浄弁（DIN）
消防和甲板清洗阀门（DIN）

Flanged fire fighting valves are available in two patterns; straight and 30°angled with PN 16 flanged inlet. Designed for straight hose connection and has a rising stem with a bolted bonnet. The inlet has a raised face flange, and the outlet is threaded with BSP male thread. Comes with a Storz-C coupling, cap and chain.

Applications: Sea water, Water

30° Angle

Straight

Pressure and Temperature Range: PN16 maximum + 60°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CC491L
Bonnet	Bronze	CC491L
Stem	Bronze	CW710R
Disc	Bronze	CW710R
Disc sealing ring	Rubber	NBR

How to order: CODE

Firefighting and deckwash valve (DIN), bronze,DIN flanged, globe type, threaded bonnet, pressure rating PN 16, TYPE, SIZE DN

30° Angle Type

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		Hcd	D	L	H	M	
75 60 33	40	110	150	80	165	130	3.4
34	50	125	165	100	195	140	4.4
36	65	145	185	105	230	150	5.4

MESON Model No.: 470.5.6.5.5

Straight Type

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		Hcd	D	L	H	M	
75 60 44	50	125	165	165	181	140	7.0
46	65	145	185	200	185	150	10.9

MESON Model No.: 470.5.6.5.1

Firefighting and Deckwash Valves (DIN)

Bronze, DIN Flanged, Globe Type, Bolted Bonnet Pressure Rating PN 16

Válvulas contraincendios y de lavado de cubiertas (DIN)
消火及び甲板洗浄弁（DIN）　　消防和甲板清洗阀门（DIN）

Flanged fire fighting valves are available in two patterns; straight and 30° angled with PN 16 flanged inlet. All valves are fitted with a "Storz" coupling on the outlet.

Straight

Angle

Pressure and Temperature Range: 16 bar - 60°C

Material Specification

Component	Material	EN and/or (DIN)
Body, Bonnet	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Stem, Disc, Coupling	Brass	CuZn35Ni3Mn2AlPb (CuZn35Ni)
Disc, Sealing Ring	NBR	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Handwheel	Bronze	

How to order: CODE

Firefighting and deckwash valve (DIN), bronze,DIN flanged, globe type, bolted bonnet, pressure rating PN 16, STRAIGHT or ANGLE, SIZE DN

Straight Type

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		A	L	H	M	
75 60 51	40	150	168	160	140	6.0
52	50	165	185	175	140	6.5
53	65	185	222	205	160	10.4

Angle Type

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		A	L1	L2	H1	M	
75 60 55	40	150	82	70	150	140	4.8
56	50	165	96	75	150	140	5.8
57	65	185	117	90	200	160	10.4

Fire Hydrant (DIN)

Brass, BSP Threaded AB510

Boca de incendios (DIN)
消火栓（DIN） 消防栓（DIN）

Unit Per Pc.

CODE	Nom. Size	Male Thread × Female Thread	Item No.
75 60 54	DN50	2"	AB510050
58	DN65	2-1/2"	AB510065

Name of Mfr.: Alligator

Fire Hydrant (DIN)

Brass, BSP Male Threaded and Flanged, AB520

Boca de incendios (DIN)
消火栓（DIN） 消防栓（DIN）

Flange is undrilled.

Unit Per Pc.

CODE	Nom.Size	Thread Size	Flange Diam.	Item No.
75 60 59	DN40	1-1/2" BSP male	150 mm	AB520038
60	DN50	2" BSP male	165 mm	AB520050
70	DN65	2-1/2" BSP male	185 mm	AB520065

Name of Mfr.: Alligator

Fire Hydrant, Angle (DIN)

Brass, BSP Male Threaded End AB530

Boca de incendios, ángulo (DIN)
消火栓、アングル（DIN） 角式消防栓（DIN）

75 60 84	Fire hydrant, DIN, Brass, Angle, DN 50, 2" BSP male threaded end, AB530050	Pc.

Name of Mfr.: Alligator

Fire Hydrant, Angle (DIN)

Brass, Flanged End and BSP Male Threaded End, AB550

Boca de incendios, ángulo (DIN)
消火栓、アングル（DIN） 角式消防栓（DIN）

Flange is undrilled.

Unit Per Pc.

CODE	Nom. Size	Flange Diam.	Thread Size	Item No.
75 60 85	DN38	150 mm	1-1/2" BSP male	AB520038
99	DN50	165 mm	2" BSP male	AB520050
75 61 00	DN65	185 mm	2-1/2" BSP male	AB520065

Name of Mfr.: Alligator

Sealing Cap with Chain

"Storz" blind cap for Firefighting and Deckwash Valves (DIN)

Tapa selladora con cadena para válvulas para extinción de fuegos y limpieza de cubiertas Storz DIN
"STORZ" DIN 型消火及び甲板洗浄弁用キャップ
"STORZ" DIN 型灭火及甲板洗涤阀盖

Sealing Cap with Chain is available in "Storz" system, suitable for firefighting and deckwash applications.
Available in Brass and Aluminium body.
Please specify the size and material when ordering.

How to order: CODE

Sealing Cap with Chain, "STORZ" blind cap for Firefighting and deckwash valve, BRASS or ALUMINIUM, SIZE

Unit Per Pc.

CODE	Lug Distance (Reported)	Material	Material Chain
75 60 08	31 mm	Brass	Stainless Steel
09	44 mm	Brass	Stainless Steel
10	51 mm	Brass	Stainless Steel
18	66 mm	Brass	Stainless Steel
19	81 mm	Brass	Stainless Steel
20	89 mm	Brass	Stainless Steel
28	133 mm	Brass	Stainless Steel
75 60 29	31 mm	Aluminium	Galvanized Steel
30	44 mm	Aluminium	Galvanized Steel
38	51 mm	Aluminium	Galvanized Steel
39	66 mm	Aluminium	Galvanized Steel
40	81 mm	Aluminium	Galvanized Steel
48	89 mm	Aluminium	Galvanized Steel
49	115 mm	Aluminium	Galvanized Steel
50	160 mm	Aluminium	Galvanized Steel

Sealing Cap with Chain
for Firefighting and Deckwash Valves (JIS/ANSI)

Tapa selladora con cadena para válvulas para extinción de fuegos y limpieza de cubiertas JIS/ANSI
JIS/ANSI型消火及び甲板洗浄弁用キャップ
JIS/ANSI型灭火及甲板洗涤阀盖

JIS Type

Machino Type

Nakajima Type

How to order: CODE

Sealing Cap with Chain for Firefighting and deckwash valve, JIS Type, Specify the NAME OF MAKER, SIZE

Unit Per Pc.

MACHINO TYPE				NAKAJIMA TYPE						
CODE	Size	Size (mm)		CODE	Size	Size (mm)				
		A (±3)	B (±3)			D1	D2	D3	D4	D5
75 60 64	40	72	40	**75 60 67**	40	91	38	27.5	61	67
65	50	91	47	**68**	50	110	50	33	73	80
66	65	107	52	**69**	65	133.5	63	36	91	98

ANSI Type

How to order: CODE

Sealing Cap with Chain for Firefighting and deckwash valve, ANSI Type, SIZE

CODE	Size	Thread Per Inch	Basic O.D. Male Part
75 61 19	1-1/2"	9	1.990"
20	2-1/2"	7-1/2	3.0686"

DIN Cocks

Plug Valves (DIN)
Bronze, DIN Flanges, 2-way and 3-way

Llave de Empaquetadura de Bronce (según DIN)
DIN型青銅プラグバルブ　DIN型青铜密封旋阀

Flanged plug valves are available in a 2 and 3 way patterns. The 3-way pattern is available with L or T-plug. All versions are executed with gland packing. Cock wrench is available in separated order.

2 way

2 way

3 way

Pressure and Temperature Range: 10 bar - 90°C

Material Specification

Component	Material	EN and/or (DIN)
Body, Plug	Bronze	- (CuSn8)

How to order: CODE

Plug valve (DIN), bronze, DIN flanges, TYPE, SIZE DN

2 way Type

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	A	H	S	
75 61 21	15	120	95	72	10	1.7
22	20	130	105	90	12	2.5
23	25	150	115	94	14	3.1
24	32	170	140	105	17	4.7
25	40	190	150	118	22	5.3
75 61 26	50	200	165	133	27	7.5
27	65	230	185	159	30	12
28	80	260	200	176	32	21
29	100	310	220	241	46	26

3 way L-Plug Type

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	A	H	S	
75 61 31	15	120	95	72	10	1.7
32	20	130	105	90	12	2.5
33	25	150	115	94	14	3.1
34	32	170	140	105	17	4.7
35	40	190	150	118	22	5.3
75 61 36	50	200	165	133	27	7.5
37	65	230	185	159	30	12
38	80	260	200	176	32	21
39	100	310	220	241	46	26

3 way T-Plug Type

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	A	H	S	
75 62 61	15	120	95	72	10	1.7
62	20	130	105	90	12	2.5
63	25	150	115	94	14	3.1
64	32	170	140	105	17	4.7
65	40	190	150	118	22	5.3
75 62 66	50	200	165	133	27	7.5
67	65	230	185	159	30	12
68	80	260	200	176	32	21
69	100	310	220	241	46	26

Plug Valves (DIN)
Cast Iron, DIN Flanges, 2 Way Type

Válvulas de Enchufe (DIN) Hierro Fundido, Bridas DIN
DIN型鋳鉄プラグバルブ　旋塞阀（DIN）铸铁，DIN法兰

Flanged plug valves are available in 2-way patterns. Cock wrench is available in separated order.

Pressure and Temperature Range: 10 bar - 90°C

Material Specification

Component	Material	EN and/or (DIN)
Body, Plug	Cast iron	GJL-200 (GG-20)

How to order: CODE

Plug valve (DIN), cast iron, DIN flanges, 2 way type SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	A	H	S	
75 61 61	15	130	95	87	12	2.5
62	20	150	105	102	17	3.3
63	25	160	115	108	19	4.5
64	32	180	140	127	22	7.4
65	40	200	150	147	24	9.0
75 61 66	50	230	165	165	32	13.5
67	65	290	185	204	41	20.5
68	80	310	200	228	46	27
69	100	350	220	275	55	39

Plug Valves (DIN)

Cast Iron, DIN Flanges, 2 Way Type

Válvulas de obturador (DIN), Hierro fundido, bridas DIN, 2 vías
プラグバルブ（DIN）鋳鉄、DIN フランジ、2 方向タイプ
旋塞阀（DIN）铸铁，DIN 法兰，2 通型

Flanged plug valve in 2-way pattern. All versions are executed with gland packing. Cock wrench is available in separated order.

Pressure and Temperature Range: 10 bar - 90°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast iron	GJL-200 (GG-20)
Plug	Bronze	- (CuSn8)

How to order: CODE

Plug valve (DIN), cast iron, DIN flanges, with bronze plug 2 way type, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	A	H	S	
75 61 71	15	130	95	87	12	2.5
72	20	150	105	102	17	3.3
73	25	160	115	108	19	4.5
74	32	180	140	127	22	7.4
75	40	200	150	147	24	9.0
75 61 76	50	230	165	165	32	13.5
77	65	290	185	204	41	20.5
78	80	310	200	228	46	27
79	100	350	220	275	55	39

Cock Wrenches (DIN)

Malleable Iron

Palanca para Llave de Paso (según DIN)
DIN型コックレンチ　DIN型旋阀扳手

How to order: CODE

Cock wrench (DIN), malleable iron, SIZE mm

Unit Per Pc.

CODE	Size mm		CODE	Size mm	
	For S Size	L		For S Size	L
75 61 80	8	100	**75 61 89**	19	190
81	9	100	**90**	22	210
82	10	123	**91**	24	230
83	11	125	**93**	27	250
84	12	135	**95**	32	290
75 61 86	14	150	**75 61 96**	41	360
70	15	130	**97**	46	390
87	17	175	**98**	55	470

DIN Needle Valves

Needle Valves (DIN)

Brass, BSP Female Threaded Ends

Válvulas de aguja (DIN), Latón, extremos roscados hembra BSP
ニードルバルブ（DIN）真鍮、BSP 雌ネジ端
针阀（DIN）黄铜，英制锥螺纹内螺纹端头

Needle valves, especially suitable for accurate regulation of gases and liquids. Not suitable for steam.

Straight

Angle

Pressure and Temperature Range:
100 bar - 30°C
40 bar - 150°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Brass	CuZn40Pb2
Bonnet	Brass	CuZn39Pb3
Stem with fixed needle tip	Brass	CuZn39Pb3
Gland Packing	PTFE	
Handwheel	PF (Bakelite)	

How to order: CODE

Needle valve (DIN), brass, BSP female threaded ends, STRAIGHT or ANGLE, SIZE DN

Straight Type

Unit Per Pc.

CODE	Threaded Connection	Size mm				Weight Kg
		d	L	H	M	
75 62 02	1/4"	4	46	82	50	0.22
03	3/8"	5	50	95	50	0.30
04	1/2"	6	55	95	65	0.35
05	3/4"	8	64	105	65	0.55
06	1"	8	75	105	65	0.65

Angle Type

Unit Per Pc.

CODE	Threaded Connection	Size mm					Weight Kg
		d	L1	L2	H	M	
75 62 12	1/4"	4	13	24.5	82	50	0.25
14	1/2"	6	16	32	95	65	0.35
16	1/4"	8	13	24.5	82	50	0.55

Needle Valves (DIN)

Stainless Steel, Straight and Angle Pattern BSP/NPT Female Threaded Ends

Válvulas de aguja (DIN), Acero inoxidable, modelo recto y en ángulo
ニードルバルブ（DIN）ステンレス鋼、ストレート及びアングルパターン
针阀（DIN）不锈钢，直通型和角型

Needle valve, especially suitable for accurate regulation of gases and liquids.

Features
- Fitted with external screwed stem, making it suitable for high temperatures.
- Secured bonnet.
- "Backseat" construction ; In fully open position, the gland

packing is relieved.
- One-piece PTFE gland packing, adjustable by means of secureable gland.
- Stem with non-rotating needle tip ensures 100% sealing.
- Plastic dust cap protects threaded stem.

BSP Female Thread

Straight Angle

NPT Female Thread

Pressure and Temperature Range:
420 bar - 20°C
320 bar - 200°C
250 bar - 250°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Stainless steel	X5CrNiMo17-12 2
Bonnet	Stainless steel	X5CrNiMo17-12 2
Stem	Stainless steel	X5CrNiMo17-12 2
Needle tip	Stainless steel	- (X4CrNiMnMoN19 16 5)
Gland Packing	PTFE	
Lever	Stainless steel	X8CrNiS 18-9 (X12CrNiS18 8)
Dust Cap	Plastic	

How to order: CODE

Needle valve (DIN), stainless steel, BSP or NPT female threaded ends, STRAIGHT or ANGLE, SIZE DN

BSP Female Thread

Straight Type

Unit Per Pc.

CODE	Threaded Connection	Size mm				Weight Kg
		d	L	H	M	
75 62 21	1/4"	3	50	78	50	0.3
22	3/8"	5	55	78	50	0.3
23	1/2"	6	60	80	50	0.7
24	3/4"	8	80	97	60	0.7
25	1"	8	80	99	60	0.7

Angle Type

Unit Per Pc.

CODE	Threaded Connection	Size mm							Weight Kg
		d	B	H	H1	L1	L2	M	
75 62 31	1/4"	3	12	78	12	25	14	50	0.3
32	1/2"	4	15	83	12	30	17.5	50	0.3

NPT Female Thread

Straight Type

Unit Per Pc.

CODE	Threaded Connection	Size mm				Weight Kg
		d	L	H	M	
75 62 41	1/4"	3	50	78	50	0.3
42	3/8"	5	55	78	50	0.3
43	1/2"	6	60	80	50	0.7
44	3/4"	8	80	97	60	0.7
45	1"	8	80	99	60	0.7

DIN Butterfly Valves

Butterfly Valves (DIN)

Ductile Cast Iron, Rubber Lined Flange Type Series 46, Bonded Liner

Válvulas de mariposa (DIN), Fundición dúctil

バタフライバルブ (DIN), ダクタイル鋳鉄　蝶阀 (DIN) 球墨铸铁

Ductile cast iron butterfly valve, double-flanged type with centric disc, one piece shaft supported by bronze radial bearings, rubber lined body. The rubber liner is vulcanized integrally to body and bearings ensuring reduced torque and a long lifetime. This liner extends along the valve faces, eliminating the use of gaskets. The double flanged body is suitable for mounting between flanges acc. to DIN PN10 or PN16. Face to face dimensions are acc. to ISO5752 /EN558 basic series 13, DIN3202 F16 and BS5155. Valve is also suitable for end of line applications. For easy mounting of both manual and automatic actuators the valve is executed with a topflange according to the ISO5211 standard. Further applications of series 46 butterfly valves can be found amongst others in general industrial and maritime systems for media such as (ballast) water, gases, hydrocarbons and light corrosive media up to a maximum of 16 bar.

Features
- Connections: Flange
- Body material: Cast iron, nodular
- Valve butterfly material: Bronze
- Operation: None

Pressure and Temperature Range

Size	Liner	Pressure Raiting	Temperature Range	Max. Operating Pressure
DN50-DN600	NBR or	PN 16	NBR -10° /+80°C or	16 bar
DN200-DN600	EPDM	PN 10	EPDM-10° /+120°C	10 bar

Material Specification

Component	Material	EN and/or (DIN)
Body	Ductile cast iron	GJS-400-15 (GGG-40)
Disc	Aluminium bronze	CuAl10Fe5Ni5-C(G-CuAl10Ni)
Stem	Stainless steel	X39CrMo17-1 (X35CrMo17)
Liner	NBR or EPDM	

How to order: CODE

Butterfly valve (DIN), ductile cast iron, Rubber-lined, flange type, bonded liner (NBR or EPDM), SIZE DN

Unit Per Pc.

CODE	DN	Size mm							Weight Kg
		A	E	H	H1	L	N	T	
75 63 01	50	165	11	118	67	108	70	22	10
02	65	185	11	126	74	112	70	22	12
03	80	200	11	133	82	114	70	22	14
04	100	228	11	147	100	127	70	23	16
05	125	254	14	160	112	140	70	26	20
75 63 06	150	285	14	180	134	140	70	26	27
07	200	243	17	204	159	152	70	29	35
08	250	405	22	245	195	165	102	32	51
09	300	445	22	270	220	178	102	32	62
10	350	505	27	315	282	190	125	32	90
75 63 11	400	565	27	350	307	216	125	33	124
12	450	615	36	375	352	222	140	33	180
13	500	670	36	415	387	229	140	35	210
14	600	780	46	465	452	267	165	36	302

Butterfly Valves (DIN)

Nudular Cast Iron, Vulcanized Liner, Wafer Type, Bare Stem Parallel

Válvulas de mariposa (DIN), Fundición dúctil, revestida de caucho
バタフライバルブ（DIN）ダクタイル鋳鉄、ゴムライニング
蝶阀（DIN）球墨铸铁，橡胶衬里

Nodular Cast Iron body, vulcanized liner wafer type butterfly valve with Aluminium Bronze disc. Centric free stem with standardized pattern for actuator mounting. Can handle negative pressure (vacuum), due to the meticulous vulcanization process.

Applications

Corrosive fluids, Fuel oil, Lubricating oil, Flammable hydraulic oil, Cargo oil, Non-flammable hydraulic fluid.

Pressure and Temperature Range

Size	Liner	Pressure Raiting	Temperature Range	Max. Operating Pressure
DN50-DN600 DN450-DN600	FKM or NBR of EPDM	PN 16 PN 10	FKM -30°/+180°C, NBR -15°/+80°C EPDM- 20° /+100°C	16 bar 10 bar

Material Specification

Component	Material	EN and/or (DIN)
Body	Ductile iron	GGG-40
Disc	Copper alloy	CC333G
Stem	Stainless steel	1.4401
Liner	FKM or NBR or EPDM	

How to order: CODE

Butterfly valve (DIN), nudular cast iron, rubber-lined, wafer type, bonded liner (FKM or NBR or EPDM), SIZE DN

Unit Per Pc.

CODE	DN	Size mm						Weight Kg
		D	L	H2	H1	S	D2	
75 63 67	40	72	33	113	67	11	90	1.5
31	50	92	43	118	71	11	90	2.5
32	65	107	46	126	86	11	90	3.1
33	80	126	46	133	88	11	90	3.6
34	100	151	52	147	106	11	90	4.8
75 63 35	125	183	56	160	118	14	90	7.2
36	150	210	56	180	140	14	90	9.0
37	200	266	60	204	167	17	90	14.0
38	250	318	68	270	202	22	90	22.0
39	300	373	78	270	240	22	90	43.0
75 63 40	350	437	78	315	288	27	150	43.0
41	400	492	102	350	305	27	150	70.0
42	450	540	114	375	335	36	175	110.0
43	500	595	127	415	379	36	175	138.0
44	600	697	154	465	431	46	210	208.0

MESON Model No. : 700.2.5.6.1

Semi Lug Type

Nodular Cast Iron body, vulcanized liner semi lug type butterfly valve with Aluminium Bronze disc. Centric free stem with standardized pattern for actuator mounting. Can handle negative pressure (vacuum), due to the meticulous vulcanization process.

Applications

- Boiler feedwater
- Condensate
- Sea water
- Water

How to order: CODE

Butterfly valve (DIN), nudular cast iron, rubber lined, semi lug type, vulcanized liner, SIZE PN10 DN

Material Specification

Component	Material	EN and/or (DIN)
Body	Ductile iron	GGG-40
Disc	Copper alloy	CC333G
Seat	NBR or EPDM or FKM	-
Stem	Stainless steel	1.4401
Liner	Stainless steel	1.4462

Unit Per Pc.

CODE	DN	Size mm							Weight Kg
		HCD	D	L	H2	H1	S	D2	
75 63 68	450	565	540	114	375	335	36	175	110
69	500	620	595	127	415	379	36	175	138
70	600	725	697	154	465	431	46	210	208

MESON Model No. : 700.2.5.6.1

Butterfly Valves (DIN)

Ductile Cast iron, Rubber Lined Mono-flange Type, Bonded Liner

Válvulas de mariposa (DIN), Fundición dúctil
バタフライバルブ（DIN），ダクタイル鋳鉄
蝶阀（DIN）球墨铸铁

Ductile iron butterfly valve, monoflange type with centric disc, one piece shaft supported by bronze radial bearings for smooth operation, rubber lined body. The rubber liner is vulcanized integrally to body and bearings ensuring reduced torque and a long lifetime. This liner extends along the valve faces, eliminating the use of gaskets. The body with monoflange is suitable for mounting between flanges according to DIN PN10 or PN16. Due to the monoflange design this valve can be used as end of line valve. Face to face dimensions are according to ISO5752/ EN558 basic series 20, API609, DIN3202 K1 and BS5155. For easy mounting of both manual and automatic actuators the valve is executed with a topflange according to the ISO5211 standard. Further applications of series 60 butterfly valves can be found amongst others in general industrial and maritime systems for media such as (ballast) water, gases, hydrocarbons and light corrosive media up to a maximum of 16 bar (PN16 execution).

Features

- Connections: Monoflange
- Valve butterfly material: Bronze
- Operation: None

Pressure and Temperature Range

Size	Liner	Pressure Raiting	Temperature Range	Max. Operating Pressure
DN50-DN400	NBR or	PN 16	NBR -10° /+80°C or	16 bar
DN200-DN400	EPDM	PN 10	EPDM-10° /+120°C	10 bar

Remark: Maximum operating pressure as end of line valve, 6 bar.

Material Specification

Component	Material	EN and/or (DIN)
Body	Ductile cast iron	GJS-400-15 (GGG-40)
Disc	Aluminium bronze	CuAl10Fe5Ni5-C(G-CuAl10Ni)
Stem	Stainless steel	X39CrMo17-1 (X35CrMo17)
Liner	NBR or EPDM	

How to order: CODE

Butterfly valve (DIN), ductile cast iron, rubber-lined, mono-flange type, bonded liner (NBR or EPDM), SIZE DN

Unit Per Pc.

CODE	DN	Size mm						Weight
		A	E	H	H1	L	N	Kg
75 63 45	50	165	11	118	67	43	70	3.5
46	65	185	11	126	74	46	70	4.6
47	80	200	11	133	82	46	70	5.7
48	100	228	11	147	100	52	70	7.8
49	125	254	14	160	112	56	70	11.9
75 63 50	150	285	14	180	134	56	70	15.0
51	200	340	17	204	159	60	70	24.4
52	250	405	22	245	195	68	102	47.0
53	300	460	22	270	220	78	102	56.6
54	350	533	27	315	282	78	125	78
75 63 55	400	585	27	350	307	102	125	101

Butterfly Valves (DIN)

Cast Iron, Rubber Lined, Mono-flange Type Bonded Liner, Centric Disc

Válvulas de mariposa (DIN). Hierro fundido

バタフライバルブ（DIN）鋳鉄製　蝶阀（DIN）铸铁

Ductile cast iron butterfly valve, the body with monoflange is suitable for mounting between flanges according to DIN PN10. Due to the monoflange design, this valve can be used as end of line valve. Face to face dimensions are according to ISO5752/EN558 basic series 16, API 609, DIN 3202 K3 and BS5155. For easy adaption of both manual and automatic actuators the valve is executed with a topflange according to ISO5211 standard. Further applications of series 60 butterfly valves can be found amongst others in general industrial and maritime systems for media such as (ballast) water, gases, hydrocarbons and light corrosive media up to a maximum of 10 bar.

Pressure and Temperature Range

Size	Liner	Pressure Raiting	Temperature Range	Max. Operating Pressure
DN50-DN400	NBR or EPDM	PN 10	NBR -10° /+80°C or EPDM-10° /+120°C	10 bar

Material Specification

Component	Material	EN and/or (DIN)
Body	Ductile cast iron	GJS-400-15 (GGG-40)
Disc (Rilsan Coating)	Ductile cast iron	GJS-400-15 (GGG-40)
Stem	Stainless steel	X39CrMo17-1 (X35CrMo17)
Liner	NBR or EPDM	

How to order: CODE

Butterfly valve (DIN), ductile cast iron, Rubber-lined, mono-flange type, centric disc, bonded liner (NBR or EPDM), SIZE DN

Unit Per Pc.

CODE	DN	Size mm							Weight
		A	E	H	H1	K	L	N	Kg
75 63 56	50	165	11	118	67	90	43	70	3.1
57	65	185	11	126	74	90	46	70	4.2
58	80	200	11	133	82	90	64	70	5.2
59	100	228	11	147	100	90	64	70	7.0
60	125	254	14	160	112	90	70	70	11.0
75 63 61	150	285	14	180	134	90	76	70	14.0
62	200	340	17	204	159	90	89	70	23.0
63	250	405	22	245	195	125	114	102	44.0
64	300	460	22	270	220	125	114	102	54.0
65	350	533	27	315	282	150	127	125	76
75 63 66	400	585	27	350	307	150	140	125	100

Butterfly Valves (DIN)

Stainless Steel and Cast Steel High Performance Type, Ring Type

Válvulas de mariposa (DIN), Acero inoxidable y acero fundido

バタフライバルブ（DIN）ステンレス鋼及び鋳鋼

蝶阀（DIN）不锈钢和铸钢

High-Performance butterfly valve, ring type with streamlined double eccentric disc and one-piece anti-blow out shaft, bi-directional sealing, anti-static design. Available in stainless steel and cast steel. Executed with replaceable seat in PTFE, Fire-safe, metal or double-seat version, for in-line sealing. For sealing to the atmosphere the valve is provided with a self-centering and re-adjustable gland packing of PTFE or graphite material. The body with centering holes for easy pipe alignment is suitable for mounting between flanges according to DIN PN 10/16 and ASME 150#. Face to Face dimensions are according to ISO 5752/EN558 basic series 20(DN 350, basic series 25). For easy adaption of both manual and automatic actuators the valve is executed with a topflange according to the ISO 5211 standard. Applications of series 96 butterfly valves can be found amongst others in general industrial and maritime systems for example in corrosive media, gases, steam and hot water up to a maximum of 20 bar (ASME class 150 execution). For application in cargo lines on chemical and liquefied gas tankers this valve has a BV type approval.

Pressure and Temperature Range

20 bar, -45°C to +260°C, depending on choice of material.
See pressure/temperature diagrams for precise specifications.

Stainless Steel Body　　Steel Body

Stainless Steel Body

Material Specification

Component	Material	US
Body	Stainless steel	ASTM A 351-CF8M
Disc	Stainless steel	ASTM A 351-CF8M
Pressure Ring	Stainless steel	AISI-316
Stem, Pins	Stainless steel	AISI-316
Seat and Shaft Seal*	PTFE	PTFE

Remark : * Double seat, fire-safe seat or metal seat is available on request.

How to order: CODE

Butterfly valve (DIN), High-Performance, ring type, stainless steel body, PTFE seat, SIZE DN

Unit Per Pc.

CODE	DN	Size mm						Weight Kg
		A	E	H	H1	L	N	
75 63 71	50	102	12	108	99	43	70	6.0
72	65	122	12	123	112	46	70	6.0
73	80	132	12	133	120	46	70	7.0
74	100	156	12	155	131	52	70	8.0
75	125	188	17	173	159	56	102	12.0
75 63 76	150	216	17	183	170	56	102	15.0
77	200	268	19	218	210	60	125	22.0
78	250	326	22	253	237	68	125	32.0
79	300	375	27	278	278	78	140	43.0
80	350	420	30	318	316	92	140	54.0
75 63 81	400	482	36	363	362	102	165	86.0
82	450	538	41	388	387	114	165	114
83	500	592	46	418	432	127	165	145
84	600	694	50	478	506	154	254	219

Cast Steel Body

Material Specification

Component	Material	US
Body	Cast steel	ASTM A216-WCB
Disc	Stainless steel	ASTM A351-CF8M
Pressure Ring	Forged steel	ASTM A105(N)
Stem, Pins	Stainless steel	AISI-316
Seat and Shaft Seal*	PTFE	PTFE

Remark : * Double seat, fire-safe seat or metal seat is available on request.

How to order: CODE

Butterfly valve (DIN), High-Performance, Ring type, stainless steel body, PTFE seat, SIZE DN

Unit Per Pc.

CODE	DN	Size mm						Weight Kg
		A	E	H	H1	L	N	
75 63 85	50	102	12	108	99	43	70	6.0
86	65	122	12	123	112	46	70	6.0
87	80	132	12	133	120	46	70	7.0
88	100	156	12	155	131	52	70	8.0
89	125	188	17	173	159	56	102	12.0
75 63 90	150	216	17	183	170	56	102	15.0
91	200	268	19	218	210	60	125	22.0
92	250	326	22	253	237	68	125	32.0
93	300	375	27	278	278	78	140	43.0
94	350	420	30	318	316	92	140	54.0
75 63 95	400	482	36	363	362	102	165	86.0
96	450	538	41	388	387	114	165	114
97	500	592	46	418	432	127	165	145
98	600	694	50	478	506	154	254	219

DIN Cast Iron Butterfly Valves

Series ISO 5752 S-20

Válvulas de mariposa de fundición DIN

DIN 鋳鉄製バタフライバルブ　　DIN 铸铁蝶阀

Wafer Type Series 50

Material Table

Part	Material	DIN code	ASTM Code
Body	Cast Iron	GG 25	ASTM A126 C1.B
Disc	Ductile Iron	GGG 40	ASTM A536 Gr 65-45-12
Stem	Stainless Steel	X2 CrNiMo 18.10	ASTM A276 316
Seat	NBR	Nitrile Rubber	Tem Range –25°C/+100°C
Packing	NBR	Nitrile Rubber	Tem Range –25°C/+100°C

Unit Per Pc.

CODE	Nom. Size	Body Size mm						Stem Size mm		Weight Kg
		D-1	d	L	H	h1	h2	S	T	
75 44 01	50	102	52	43	240	78	130	10	-	3.7
02	65	115	65	46	247	88	130	10	-	4.0
03	80	128	80	46	266	93	143	10	-	4.4
04	100	153	100	52	298	105	161	10	-	5.9
05	125	183	125	56	331	125	177	12	-	8.9
75 44 06	150	210	150	56	363	140	191	15	-	9.0
07	200	259	198	60	412	163	217	15	-	11.0
08	250	328	248	68	506	205	267	18	-	20.0
09	300	374	298	78	538	249	295	20	-	32.0
10	350	416	327	78	675	271	324	20	45	43.0
75 44 11	400	475	387	102	817	343	369	-	60	64.0
12	450	535	438	114	877	366	406	-	60	99.0
13	500	586	477	127	1,008	421	485	-	60	115.0
14	600	695	560	154	1,180	493	570	-	60	215.0

Name of Mfr.: World Wide Metric

Lug Type Series 52

Material Table

Part	Material	DIN code	ASTM Code
Body	Cast Iron	GG 25	ASTM A126 C1.B
Disc	Ductile Iron	GGG 40	ASTM A536 Gr 65-45-12
Stem	Stainless Steel	X2 CrNiMo 18.10	ASTM A276 316
Seat	NBR	Nitrile Rubber	Tem Range –25°C/+100°C
Packing	NBR	Nitrile Rubber	Tem Range –25°C/+100°C

PN6

Unit Per Pc.

CODE	Nom. Size	Body Size mm				Stem Size mm		Bolt Hose mm		Weight Kg
		D-1	d	L	H	S	T	C	Bolt	
75 44 16	50	102	52	43	240	10	-	110	4x14	4.1
17	65	115	65	46	247	10	-	130	4x14	5.5
18	80	128	80	46	266	10	-	150	4x18	6.8
19	100	153	100	52	298	10	-	170	4x18	8.6
20	125	183	125	56	331	12	-	200	8x18	10.5
75 44 21	150	210	150	56	363	15	-	225	8x18	12.5
22	200	259	198	60	412	15	-	280	8x18	21.4
23	250	328	248	68	506	18	-	335	12x18	29.3
24	300	374	298	78	538	20	-	395	12x22	44.0
25	350	416	327	78	675	20	45	445	12x22	62.2
75 44 26	400	475	387	102	817	-	60	495	16x22	112.0
27	450	535	438	114	877	-	60	550	16x22	153.0
28	500	586	477	127	1,008	-	60	600	20x22	199.0
29	600	695	560	154	1,180	-	60	705	20x26	283.0

Name of Mfr.: World Wide Metric

PN10

Unit Per Pc.

CODE	Nom. Size	Body Size mm				Stem Size mm		Bolt Hose mm		Weight Kg
		D-1	d	L	H	S	T	C	Bolt	
75 44 31	50	102	52	43	240	10	-	125	4x18	4.1
32	65	115	65	46	247	10	-	145	4x18	5.5
33	80	128	80	46	266	10	-	160	8x18	6.8
34	100	153	100	52	298	10	-	180	8x18	8.6
35	125	183	125	56	331	12	-	210	8x18	10.5
75 44 36	150	210	150	56	363	15	-	240	8x22	12.5
37	200	259	198	60	412	15	-	295	8x22	21.4
38	250	328	248	68	506	18	-	350	12x22	29.3
39	300	374	298	78	538	20	-	400	12x22	44.0
40	350	416	327	78	675	20	45	460	16x22	62.2
75 44 41	400	475	387	102	817	-	60	515	16x26	112.0
42	450	535	438	114	877	-	60	565	20x26	153.0
43	500	586	477	127	1,008	-	60	620	20x26	199.0
44	600	695	560	154	1,180	-	60	725	20x30	283.0

Name of Mfr.: World Wide Metric

PN16

Unit Per Pc.

CODE	Nom. Size	Body Size mm				Stem Size mm		Bolt Hose mm		Weight Kg
		D-1	d	L	H	S	T	C	Bolt	
75 44 46	50	102	52	43	240	10	-	125	4x18	4.1
47	65	115	65	46	247	10	-	145	4x18	5.5
48	80	128	80	46	266	10	-	160	8x18	6.8
49	100	153	100	52	298	10	-	180	8x18	8.6
50	125	183	125	56	331	12	-	210	8x18	10.5
75 44 51	150	210	150	56	363	15	-	240	8x22	12.5
52	200	259	198	60	412	15	-	295	12x22	21.4
53	250	328	248	68	506	18	-	355	12x26	29.3
54	300	374	298	78	538	20	-	410	12x26	44.0
55	350	416	327	78	675	20	45	470	16x26	62.2
75 44 56	400	475	387	102	817	-	60	525	16x30	112.0
57	450	535	438	114	877	-	60	585	20x30	153.0
58	500	586	477	127	1,008	-	60	650	20x33	199.0
59	600	695	560	154	1,180	-	60	770	20x36	283.0

Name of Mfr.: World Wide Metric

Flanged Type Series 55

Material Table

Part	Material	DIN code	ASTM Code
Body	Cast Iron	GG 25	ASTM A126 C1.B
Disc	Ductile Iron	GGG 40	ASTM A536 Gr 65-45-12
Stem	Stainless Steel	X2 CrNiMo 18.10	ASTM A276 316
Seat	NBR	Nitrile Rubber	Tem Range –25°C/+100°C
Packing	NBR	Nitrile Rubber	Tem Range –25°C/+100°C

PN6

Unit Per Pc.

CODE	Nom. Size	Body Size mm				Stem Size mm		Bolt Hose mm		Weight Kg
		D-1	d	L	H	S	T	C	Bolt	
75 44 61	50	140	52	43	240	10	-	110	4x14	6.8
62	65	160	65	46	247	10	-	130	4x14	8.9
63	80	190	80	46	266	10	-	150	4x18	10.2
64	100	210	100	52	298	10	-	170	4x18	14.5
65	125	240	125	56	331	12	-	200	8x18	16.8
75 44 66	150	265	150	56	363	15	-	225	8x18	19.8
67	200	320	198	60	412	15	-	280	8x18	31.2
68	250	375	248	68	506	18	-	335	12x18	46.2
69	300	440	298	78	538	20	-	395	12x22	58.8
70	350	490	327	78	675	20	45	445	12x22	67.0
75 44 71	400	540	387	102	817	-	60	495	16x22	96.0
72	450	595	438	114	877	-	60	550	16x22	147.0
73	500	645	477	127	1,008	-	60	600	20x22	161.0
74	600	755	560	154	1,180	-	60	705	20x26	292.0

Name of Mfr.: World Wide Metric

PN10

Unit Per Pc.

CODE	Nom. Size	Body Size mm				Stem Size mm		Bolt Hose mm		Weight Kg
		D-1	d	L	H	S	T	C	Bolt	
75 44 76	50	165	52	43	240	10	-	125	4x18	6.8
77	65	185	65	46	247	10	-	145	4x18	8.9
78	80	200	80	46	266	10	-	160	8x18	10.2
79	100	220	100	52	298	10	-	180	8x18	14.5
80	125	250	125	56	331	12	-	210	8x18	16.8
75 44 81	150	285	150	56	363	15	-	240	8x22	19.8
82	200	340	198	60	412	15	-	295	8x22	31.2
83	250	395	248	68	506	18	-	350	12x22	46.2
84	300	445	298	78	538	20	-	400	12x22	58.8
85	350	505	327	78	675	20	45	460	16x22	67.0
75 44 86	400	565	387	102	817	-	60	515	16x26	96.0
87	450	615	438	114	877	-	60	565	20x26	147.0
88	500	670	477	127	1,008	-	60	620	20x26	161.0
89	600	780	560	154	1,180	-	60	725	20x30	292.0

Name of Mfr.: World Wide Metric

PN16

Unit Per Pc.

CODE	Nom. Size	Body Size mm				Stem Size mm		Bolt Hose mm		Weight Kg
		D-1	d	L	H	S	T	C	Bolt	
75 45 01	50	165	52	43	240	10	-	125	4x18	6.8
02	65	185	65	46	247	10	-	145	4x18	8.9
03	80	200	80	46	266	10	-	160	8x18	10.2
04	100	220	100	52	298	10	-	180	8x18	14.5
05	125	250	125	56	331	12	-	210	8x18	16.8
75 45 06	150	285	150	56	363	15	-	240	8x22	19.8
07	200	340	198	60	412	15	-	295	12x22	31.2
08	250	405	248	68	506	18	-	350	12x26	46.2
09	300	460	298	78	538	20	-	400	12x26	58.8
10	350	520	327	78	675	20	45	470	16x26	67.0
75 45 11	400	580	387	102	817	-	60	525	16x30	96.0
12	450	640	438	114	877	-	60	585	20x30	147.0
13	500	715	477	127	1,008	-	60	650	20x33	161.0
14	600	840	560	154	1,180	-	60	770	20x36	292.0

Name of Mfr.: World Wide Metric

Top Flange Dimensions to ISO 5711

The following specifications are applicable to those butterfly valves series 50, 52 and 55.

Nominal Size mm	Size mm				
	R	U	V	N	M
50	14	90	70	4	9
65	14	90	70	4	9
80	14	90	70	4	9
100	16	90	70	4	9
125	19	90	70	4	9
150	19	90	70	4	9
200	22	90	70	4	9
250	28	125	102	4	12
300	28	125	102	4	12
350	32	125	102	4	12
400	35	175	140	4	18
450	38	175	140	4	18
500	45	210	165	4	22
600	50	210	165	4	22

DIN Cast Iron Butterfly Valves

Flanged Series ISO 5752

Válvulas de mariposa de fundición DIN

DIN 鋳鉄製バタフライバルブ　　DIN 铸铁蝶阀

Mono Flanged Type Series 56

Material Table

Part	Material	DIN code	ASTM Code
Body	Cast Iron	GG 25	ASTM A126 C1.B
Disc	Ductile Iron	GGG 40	ASTM A536 Gr 65-45-12
Stem	Stainless Steel	X2 CrNiMo 18.10	ASTM A276 316
Seat	NBR	Nitrile Rubber	Tem Range –25°C/+100°C
Packing	NBR	Nitrile Rubber	Tem Range –25°C/+100°C

PN6

Unit Per Pc.

CODE	Nom. Size	Body Size mm			Stem Size mm		Bolt Hose mm		Weight Kg
		d	H	L	S	T	C	Bolt	
75 45 21	50	50	215	43	10	34	110	4x14	2.8
22	65	65	231	46	10	34	130	4x14	3.6
23	80	80	245	64	10	34	150	4x18	6.5
24	100	100	277	64	12	34	170	4x18	7.5
25	125	125	303	70	12	34 *	200	8x18	11.0
75 45 26	150	150	347	76	16	34	225	8x18	14.0
27	200	200	396	89	16	34	280	8x18	18.0
28	250	250	484	114	24	45	335	12x18	28.0
29	300	300	534	114	24	45	395	12x22	38.0
30	350	336	616	127	24	45	445	12x22	50.0
75 45 31	400	386	721	140	30	50	495	16x22	95.0
32	450	436	772	152	30	50	550	16x22	115.0
33	500	486	823	152	30	50	600	20x22	155.0
34	600	586	986	178	40	50	705	20x26	230.0

Name of Mfr.: World Wide Metric

PN10

Unit Per Pc.

CODE	Nom. Size	Body Size mm			Stem Size mm		Bolt Hose mm		Weight Kg
		d	H	L	S	T	C	Bolt	
75 45 36	50	50	215	43	10	34	125	4x18	2.8
37	65	65	231	46	10	34	145	4x18	3.6
38	80	80	245	64	10	34	160	4x18	6.5
39	100	100	277	64	12	34	180	4x18	7.5
40	125	125	303	70	12	34	210	8x18	11.0
75 45 41	150	150	347	76	16	34	240	8x22	14.0
42	200	200	396	89	16	34	295	8x22	18.0
43	250	250	484	114	24	45	350	12x22	28.0
44	300	300	534	114	24	45	400	12x22	38.0
45	350	336	616	127	24	45	460	12x22	50.0
75 45 46	400	386	721	140	30	50	515	16x26	95.0
47	450	436	772	152	30	50	565	20x26	115.0
48	500	486	823	152	30	50	620	20x26	155.0
49	600	586	986	178	40	50	725	20x30	230.0

Name of Mfr.: World Wide Metric

PN16

Unit Per Pc.

CODE	Nom. Size	Body Size mm			Stem Size mm		Bolt Hose mm		Weight Kg
		d	H	L	S	T	C	Bolt	
75 45 51	50	50	215	43	10	34	125	4x18	2.8
52	65	65	231	46	10	34	145	4x18	3.6
53	80	80	245	64	10	34	160	8x18	6.5
54	100	100	277	64	12	34	180	4x18	7.5
55	125	125	303	70	12	34	210	8x18	11.0
75 45 56	150	150	347	76	16	34	240	8x22	14.0
57	200	200	396	89	16	34	295	12x22	18.0
58	250	250	484	114	24	45	355	12x26	28.0
59	300	300	534	114	24	45	410	12x26	38.0
60	350	336	616	127	24	45	470	16x26	50.0
75 45 61	400	386	721	140	30	50	525	16x30	95.0
62	450	436	772	152	30	50	585	20x30	115.0
63	500	486	823	152	30	50	650	20x33	155.0
64	600	586	986	178	40	50	770	20x36	230.0

Name of Mfr.: World Wide Metric

Flanged Type Short - Series 53

Material Table

Part	Material	DIN code	ASTM Code
Body	Cast Iron	GG 25	ASTM A126 C1.B
Disc	Ductile Iron	GGG 40	ASTM A536 Gr 65-45-12
Stem	Stainless Steel	X2 CrNiMo 18.10	ASTM A276 316
Seat	NBR	Nitrile Rubber	Tem Range –25°C/+100°C
Packing	NBR	Nitrile Rubber	Tem Range –25°C/+100°C

PN6

Unit Per Pc.

CODE	Nom. Size	Body Size mm			Stem Size mm		Bolt Hose mm			Weight Kg
		d	H	L	S	T	D	C	Bolt	
75 45 66	50	50	215	108	10	34	140	110	4x14	8.0
67	65	65	231	112	10	34	160	130	4x14	8.5
68	80	80	245	114	10	34	190	150	4x18	9.0
69	100	100	277	127	12	34	210	170	4x18	11.0
70	125	125	303	140	12	34	240	200	8x18	13.0
75 45 71	150	150	347	140	16	34	265	225	8x18	17.0
72	200	200	396	152	16	34	320	280	8x18	23.0
73	250	250	484	165	24	45	375	335	12x18	32.0
74	300	300	534	178	24	45	440	395	12x22	50.0
75	350	336	616	190	24	45	490	445	12x22	65.0
75 45 76	400	386	721	216	30	50	540	495	16x22	95.0
77	450	436	772	222	30	50	595	550	16x22	130.0
78	500	486	823	229	30	50	645	600	20x22	150.0
79	600	586	986	267	40	50	755	705	20x26	200.0

Name of Mfr.: World Wide Metric

PN10

Unit Per Pc.

CODE	Nom. Size	Body Size mm			Stem Size mm		Bolt Hose mm			Weight Kg
		d	H	L	S	T	D	C	Bolt	
75 45 81	50	50	215	108	10	34	165	125	4x18	8.0
82	65	65	231	112	10	34	185	145	4x18	8.5
83	80	80	245	114	10	34	200	160	8x18	9.0
84	100	100	277	127	12	34	220	180	8x18	11.0
85	125	125	303	140	12	34	250	210	8x18	13.0
75 45 86	150	150	347	140	16	34	285	240	8x22	17.0
87	200	200	396	152	16	34	340	295	8x22	23.0
88	250	250	484	165	24	45	395	350	12x22	32.0
89	300	300	534	178	24	45	445	400	12x22	50.0
90	350	336	616	190	24	45	505	460	16x22	65.0
75 45 91	400	386	721	216	30	50	565	515	16x26	95.0
92	450	436	772	222	30	50	615	565	20x26	130.0
93	500	486	823	229	30	50	670	620	20x26	150.0
94	600	586	986	267	40	50	780	725	20x30	200.0

Name of Mfr.: World Wide Metric

PN16

Unit Per Pc.

CODE	Nom. Size	Body Size mm			Stem Size mm		Bolt Hose mm			Weight Kg
		d	H	L	S	T	D	C	Bolt	
75 46 01	50	50	215	108	10	34	165	125	4x18	8.0
02	65	65	231	112	10	34	185	145	4x18	8.5
03	80	80	245	114	10	34	200	160	8x18	9.0
04	100	100	277	127	12	34	220	180	8x18	11.0
05	125	125	303	140	12	34	250	210	8x18	13.0
75 46 06	150	150	347	140	16	34	285	240	8x22	17.0
07	200	200	396	152	16	34	340	295	12x22	23.0
08	250	250	484	165	24	45	405	355	12x26	32.0
09	300	300	534	178	24	45	460	410	12x26	50.0
10	350	336	616	190	24	45	520	470	16x26	65.0
75 46 11	400	386	721	216	30	50	580	525	16x30	95.0
12	450	436	772	222	30	50	640	585	20x30	130.0
13	500	486	823	229	30	50	715	650	20x33	150.0
14	600	586	986	267	40	50	840	770	20x36	200.0

Name of Mfr.: World Wide Metric

Flanged Type Long - Series 54

Material Table

Part	Material	DIN code	ASTM Code
Body	Cast Iron	GG 25	ASTM A126 C1.B
Disc	Ductile Iron	GGG 40	ASTM A536 Gr 65-45-12
Stem	Stainless Steel	X2 CrNiMo 18.10	ASTM A276 316
Seat	NBR	Nitrile Rubber	Tem Range –25°C/+100°C
Packing	NBR	Nitrile Rubber	Tem Range –25°C/+100°C

PN6

Unit Per Pc.

CODE	Nom. Size	Body Size mm			Stem Size mm		Bolt Hose mm			Weight Kg
		d	H	L	S	T	D	C	Bolt	
75 46 21	50	50	215	150	10	34	140	110	4x14	10.6
22	65	65	231	170	10	34	160	130	4x14	12.5
23	80	80	245	180	10	34	190	150	4x18	17.0
24	100	100	277	190	12	34	210	170	4x18	20.0
25	125	125	303	200	12	34	240	200	8x18	26.0
75 46 26	150	150	347	210	16	34	265	225	8x18	31.0
27	200	200	396	230	16	34	320	280	8x18	45.0
28	250	250	484	250	24	45	375	335	12x18	70.0
29	300	300	534	270	24	45	440	395	12x22	90.0
30	350	336	616	290	24	45	490	445	12x22	120.0
75 46 31	400	386	721	310	30	50	540	495	16x22	165.0
32	450	436	772	330	30	50	595	550	16x22	200.0
33	500	486	823	350	30	50	645	600	20x22	230.0
34	600	586	986	390	40	50	755	705	20x26	320.0

Name of Mfr.: World Wide Metric

PN10

Unit Per Pc.

CODE	Nom. Size	Body Size mm			Stem Size mm		Bolt Hose mm			Weight Kg
		d	H	L	S	T	D	C	Bolt	
75 46 36	50	50	215	150	10	34	165	125	4x18	10.6
37	65	65	231	170	10	34	185	145	4x18	12.5
38	80	80	245	180	10	34	200	160	8x18	17.0
39	100	100	277	190	12	34	220	180	8x18	20.0
40	125	125	303	200	12	34	250	210	8x18	26.0
75 46 41	150	150	347	210	16	34	285	240	8x22	31.0
42	200	200	396	230	16	34	340	295	8x22	45.0
43	250	250	484	250	24	45	395	350	12x22	70.0
44	300	300	534	270	24	45	445	400	12x22	90.0
45	350	336	616	290	24	45	505	460	16x22	120.0
75 45 46	400	386	721	310	30	50	565	515	16x26	165.0
47	450	436	772	330	30	50	615	565	20x26	200.0
48	500	486	823	350	30	50	670	620	20x26	230.0
49	600	586	986	390	40	50	780	725	20x30	320.0

Name of Mfr.: World Wide Metric

PN16

Unit Per Pc.

CODE	Nom. Size	Body Size mm			Stem Size mm		Bolt Hose mm			Weight Kg
		d	H	L	S	T	D	C	Bolt	
75 46 51	50	50	215	150	10	34	165	125	4x18	10.6
52	65	65	231	170	10	34	185	145	4x18	12.5
53	80	80	245	180	10	34	200	160	8x18	17.0
54	100	100	277	190	12	34	220	180	8x18	20.0
55	125	125	303	200	12	34	250	210	8x18	26.0
75 46 56	150	150	347	210	16	34	285	240	8x22	31.0
57	200	200	396	230	16	34	340	295	12x22	45.0
58	250	250	484	250	24	45	405	355	12x26	70.0
59	300	300	534	270	24	45	460	410	12x26	90.0
60	350	336	616	290	24	45	520	470	16x26	120.0
75 46 61	400	386	721	310	30	50	580	525	16x30	165.0
62	450	436	772	330	30	50	640	585	20x30	200.0
63	500	486	823	350	30	50	715	650	20x33	230.0
64	600	586	986	390	40	50	840	770	20x36	320.0

Name of Mfr.: World Wide Metric

Top Flange Dimensions to ISO 5211

The following specifications are applicable to those butterfly valves Series 56, 53 and 54.

Nominal Size mm	Size mm			
	U	V	N	M
50	90	70	4	9
65	90	70	4	9
80	90	70	4	9
100	90	70	4	9
125	90	70	4	9
150	90	70	4	9
200	90	70	4	9
250	125	102	4	11
300	125	102	4	11
350	125	102	4	11
400	175	140	4	17
450	175	140	4	17
500	210	140	4	17
600	210	140	4	17

DIN Cast Iron Butterfly Valves

Teflon Lined Series ISO 5752 S-20

Válvulas de mariposa de fundición DIN

DIN 鋳鉄製バタフライバルブ　　DIN 铸铁蝶阀

Series 58

Material Table

Part	Material	DIN code	ASTM Code
Body	Cast Iron	GG 25	ASTM A126 C1.B
Disc	Ductile Iron	GGG 40	ASTM A536 Gr 65-45-12
Stem	Stainless Steel	X2 CrNiMo 18.10	ASTM A276 316
Seat	NBR	Nitrile Rubber	Tem Range –25°C/+100°C
Packing	NBR	Nitrile Rubber	Tem Range –25°C/+100°C

Unit Per Pc.

CODE	Nom. Size	Body Size mm						Stem Size mm		Weight Kg
		D	d	L	H	h1	h2	S	T	
75 46 71	50	102	52	43	227	67	130	10	38	4.3
72	65	115	65	46	241	71	140	10	38	4.5
73	80	128	80	46	263	83	150	10	38	4.9
74	100	153	100	52	290	95	163	10	38	6.8
75	125	183	125	56	319	110	178	12	38	8.9
75 46 76	150	210	150	56	347	124	191	15	38	9.4
77	200	259	198	60	433	163	238	18	38	11.5
78	250	328	248	68	546	227	285	20	45	21.0
79	300	374	298	78	601	252	315	20	45	32.0
80	350	416	327	78	675	271	324	20	45	44.0
75 46 81	400	475	387	102	817	343	369	-	60	64.0
82	450	535	438	114	877	366	406	-	60	100.0
83	500	586	477	127	1,008	421	485	-	60	115.0
84	550	643	543	154	1,085	440	528	-	60	164.0
85	600	695	560	154	1,180	493	570	-	60	215.0

Name of Mfr.: World Wide Metric

Top Flange Dimensions to ISO 5211

The following specifications are applicable to butterfly valve series 58.

Nominal Size mm	Size mm			
	U	V	N	M
50	90	70	4	9
65	90	70	4	9
80	90	70	4	9
100	90	70	4	9
125	90	70	4	9
150	90	70	4	9
200	90	70	4	9
250	125	102	4	12
300	125	102	4	12
350	125	102	4	12
400	175	140	4	18
450	175	140	4	18
500	210	165	4	22
550	210	165	4	22
600	210	165	4	22

Face to Face Dimension Chart for DIN Butterfly Valves

Unit in mm

Nominal Diameter		Wafer-Lug			Flanged		
mm	Inch	Series 20 ISO5752	Series 16 ISO 5752	700S	722F/720F Hull Valves	Series 13 ISO 5752	Series 14 ISO 5752
40	1-1/2	43/33	-	-	-	-	-
50	2	43	43	45	-	108	150
65	2-1/2	46	46	45	-	112	170
80	3	46	64	50	-	114	180
100	4	52	64	50	-	127	190
125	5	56	70	55	100	140	200
150	6	56	76	60	100	140	210
200	8	60	89	65	100	152	230
250	10	68	114	80	110	165	250
300	12	78	114	90	110	178	270
350	14	78	127	100	120	190	290
400	16	102	140	110	130	216	310
450	18	114	152	120	150	222	330
500	20	127	152	140	160	229	350
550	22	154	170	150	170	-	-
600	24	154	178	160	170	267	390
650	26	165	210	170	170	-	-
700	28	165	229	180	180	292	430
750	30	190	230	190	200	318	470
800	32	190	241	200	200	318	470
900	36	203	241	230	230	330	510
1000	40	216	300	250	250	410	550

Flange Dimension Chart for Butterfly Valve

Size	JIS				ANSI	
	5kgf/cm²		10kgf/cm²		150Lbs	
	C	n-h Bolt	C	n-h Bolt	C	n-h Bolt
40	95	4x15	105	4x19	98	4x16
50	105	4x15	120	4x19	121	4x20
65	130	4x15	140	4x19	140	4x20
80	145	4x19	150	8x19	152	8x20
100	165	8x19	175	8x19	190	8x20
125	200	8x19	210	8x23	216	8x23
150	230	8x19	240	8x23	241	8x23
200	280	8x23	290	12x23	298	8x23
250	345	12x23	355	12x25	362	12x26
300	390	12x23	400	16x25	432	12x26
350	435	12x25	445	16x25	476	12x28
400	495	16x25	510	16x27	540	16x27
450	555	16x25	565	20x27	578	16x32
500	605	20x25	620	20x27	635	20x32
550	665	20x27	680	20x33	-	-
600	715	20x27	730	24x33	750	20x35
650	770	24x27	780	24x33	807	24x33
700	820	24x27	840	24x33	864	28x35
750	880	24x33	900	24x33	914	28x35
800	930	24x33	950	28x33	978	28x41
900	1,030	24x33	1,050	28x33	1,086	32x41
1000	1,130	28x33	1,160	28x39	1,200	36x41

Notation : C = Bolt Circle, n-h = Number of Holes, Bolt = Size of Hole

Size	DIN					
	PN6		PN10		PN16	
	C	n-h Bolt	C	n-h Bolt	C	n-h Bo
40	100	4x14	110	4x18	110	4x1
50	110	4x14	125	4x18	125	4x1
65	130	4x14	145	4x18	145	4x1
80	150	4x18	160	8x18	160	8x1
100	170	4x18	180	8x18	180	8x1
125	200	8x18	210	8x18	210	8x1
150	225	8x18	240	8x22	240	8x2
200	280	8x18	295	8x22	295	12x2
250	335	12x18	350	12x22	355	12x2
300	395	12x22	400	12x22	410	12x2
350	445	12x22	460	16x22	470	16x2
400	495	16x22	515	16x26	525	16x3
450	550	16x22	565	20x26	585	20x3
500	600	20x22	620	20x26	650	20x3
550	-	-	-	-	-	-
600	705	20x26	725	20x30	770	20x3
650	-	-	-	-	-	-
700	810	24x27	840	24x30	840	24x3
750	-	-	-	-	-	-
800	920	24x30	950	24x33	950	24x3
900	1,020	24x30	1,050	28x33	1,050	28x3
1000	1,120	28x30	1,160	28x36	1,170	28x4

Notation : C = Bolt Circle, n-h = Number of Holes, Bolt = Size of Hole

Available materials for butterfly valve series: 50, 52, 53, 54, 55, 56 and 58

Part	Material	DIN Code	ASTM Code
Body	Cast Iron	GG 25	ASTM A126 C1.B
	Ductile Iron	GGG 40	ASTM A536 Gr 65-45-12
	Carbon Steel	GS-C 25	ASTM A216 WCB
	Stainless Steel	G-X6 CrNiMo 18.10	ASTM A351 Gr CF8-CF8M
	Bronze	RG5	ASTM B62
Disc	Ductile Iron	GGG 40	ASTM A536 Gr 65-45-12
	Stainless Steel	G-X6 CrNiMo 18.10	ASTM A351 Gr CF8-CF8M
	Aluminium Bronze	G-CuA110Ni	ASTM B 148 C1. C 95500
Stem	Stainless Steel	X2 CrNiMo 18.10	ASTM A276 316
Seat	NBR	Nitrile Rubber	Tem Range -25°C / +100°C
	EPDM	Copolymer EPDM	Tem Range -35°C / +130°C
	Viton	Fluoelastomer	Tem Range -20°C / +200°C
	Teflon	PTFE	Tem Range -80°C / +232°C
Packing	NBR	Nitrile Rubber	Tem Range -25°C / +100°C
	EPDM	Copolymer EPDM	Tem Range -35°C / +130°C
	Viton	Fluoelastomer	Tem Range -20°C / +200°C

When ordering butterfly valves, please specify the following information:

1) Type of Butterfly: Wafer, Lug, Mono, Double Flanged, or High Performance.
2) Nominal Size: Millimeters or Inches.
3) Face to Face: Reference the charts above.
4) Flange Drilling: Reference the chart above.
5) Actuation: Manual lock lever and manual worm gear. For pneumatic, electric and hydraulic actuators, include specifications.
6) Manufacturer: Manufacturer and model number is helpful in cases where dimensions are not provided, and essential when ordering replacement parts (seat rings, discs, etc.…).
7) Material: Specify the required materials for the body, disc, and Seat.
   - Body: Cast Iron, Ductile Iron, Cast Steel, Stainless, Steel, or Bronze.
   - Disc: Ductile Iron, Stainless Steel, Aluminium/Bronze, or Coated.
   - Seat: EPDM, NBR, Viton, Neoprene, or Teflon (PTFE).
8) Medium: Oil, Gas, Water, etc.…
9) Working Temperature: Degrees Celsius or Fahrenheit.

DIN Diaphragm Valves

Diaphragm Valves (DIN)

Bronze, BSP Female Threaded Weir Type

Válvulas de diafragma (DIN), Bronce, rosca hembra BSP
ダイヤフラムバルブ（DIN）青銅、BSP 雌ネジ切り
隔膜阀（DIN）青铜，英制内螺纹

Weir type bronze diaphragm valve, BSP female threaded ends acc. to DIN 259, rising stem and handwheel.

Application :
In cold and warm water circuits for both tap water and central heating systems. As main valve in water and gas pipelines and in various industrial applications. The valve is KIWA type approved.

Pressure and Temperature Range

Diaphragm	EPDM	Neoprene (CR)
Max. Operating Pressure Max. Temperature	10 bar 120°C	10 bar 60°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CuSn5Zn5Pb5-C (G CuSn5ZnPb (Rg 5))
Bonnet	Brass	CuZn40Pb2
Stem	Brass	CuZn40Pb2
Handwheel	Steel	

How to order: CODE

Diaphragm valve (DIN), bronze, BSP female threaded, weir typ SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight Kg
		L	H	M	
75 64 12	1/2"	65	84	55	0.5
13	3/4"	77	93	65	0.84
14	1"	93	118	72	1.4
15	1-1/4"	113	132	80	2.6
16	1-1/2"	132	147	100	3.4
75 64 17	2"	160	165	120	5

Diaphragm Valves (DIN)

Cast iron, Flanged Ends
Full Bore, Pressure Rating PN 10

Válvulas de diafragma (DIN), Hierro fundido, extremos con bridas
ダイヤフラムバルブ（DIN）鋳鉄製、フランジ形
隔膜阀（DIN）铸铁，法兰端

Full bore cast iron diaphragm valve, lined and unlined body. Flanged ends DIN PN 16. Position indicator with integrated stem protector and rising handwheel.

Application: Cold and hot water, portable water, air, oil, abrasive and aggressive media.

Suitability for application is partly depending on selected diaphragm and/or lining material.

No Lining

Hard Rubber Lining

Pressure and Temperature Range

Diaphragm	EPDM	Butyl (IIR)	Hypalon (CSM)
Max. Operating Pressure Max. Temperature	10 bar 140°C	10 120	10 100
Diaphragm	Nitrile (NBR)	Natural Rubber (NR)	-
Max. Operating Pressure Max. Temperature	10 bar 90°C	10 80	-

No Lining

Material Specification

Component	Material	EN and/or (DIN)
Body and Bonnet	Cast iron	GJL-250 (GG-25)
Stem	Stainless steel	X14CrMoS17 (X12CrMoS17)
Handwheel (DN15-DN20)	ABS	
Handwheel (DN25-DN200)	Steel	
Diaphragm	EPDM	

Remark: The following diaphragm materials are available upon request : Butyl (IIR), Hypalon (CSM), Nitrile (NBR) or Natural Rubber (NR).

How to order: CODE

Diaphragm valve (DIN), cast iron, flanged ends, full bore, pressure rating PN 10, no lining, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		A	L	H max.	M	
75 65 15	15	95	130	93	63	2
16	20	105	150	93	63	3.5
17	25	115	160	155	100	4
18	32	140	180	155	100	6.5
19	40	150	200	155	100	7
75 65 20	50	165	230	220	125	10.3
21	65	185	290	280	200	16
22	80	200	310	320	200	20
23	100	220	350	370	250	26.5
24	125	250	400	360	320	55
75 65 25	150	285	480	440	400	75
26	200	340	600	560	500	125

Hard Rubber Lined

Material Specification

Component	Material	EN and/or (DIN)
Body and Bonnet	Cast iron	GJL-250 (GG-25)
Stem	Stainless steelABS	X14CrMoS17(X12CrMoS17)
Handwheel (DN15-DN20)	ABS	
Handwheel (DN25-DN200)	Steel	
Body Lining	Hard rubber (NR-H)	
Diaphragm Material	Butyl (IIR)	

Remark: The following diaphragm materials are available upon request : EPDM, Hypalon (CSM), Nitrile (NBR) or Natural Rubber (NR).

How to order: CODE

Diaphragm valve (DIN), cast iron, flanged ends, full bore, pressure rating PN 10, hard rubber lining, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		A	L	H max.	M	
75 65 31	15	95	130	93	63	2
32	20	105	150	93	63	3.5
33	25	115	160	155	100	4
34	32	140	180	155	100	6.5
35	40	150	200	155	100	7
75 65 36	50	165	230	220	125	10.3
37	65	185	290	280	200	16
38	80	200	310	320	200	20
39	100	220	350	370	250	26.5
40	125	250	400	360	320	55
75 65 41	150	285	480	440	400	75
42	200	340	600	560	500	125

DIN Pressure Reducing Valves

Pressure Reducing Valves

Gunmetal & Stainless Steel with Flange Connection

Válvulas reductoras de presión , Bronce de cañón y acero inoxidable con conexión de brida

フランジ式砲金＆ステンレス鋼減圧弁

炮铜和不锈钢，带法兰连接 减压阀

Marine Type Approvals held for these valves:

- DNV
- American Bureau of Shipping
- Russian Maritime Register of Shipping
- Lloyds Register EMEA
- Bureau Veritas,
- Registro Italiano Navale

Pressure reducer with flange connection made of gunmetal with balanced single seat valve and built-in dirt trap for the protection of domestic water supply systems and commercial and industrial plants against an excess supply pressure. Pressure reducers are used, if within a piping system despite of varying pressures on the inlet side a certain pressure must not be exceeded on the outlet side. The pressure can be adjusted via a non-rising valve stem. Flange connection according to DIN EN 1092-3. Pressure reducer equipped with pressure gauge ports; gauge connection G 1/4".

Available three models with

- EPDM (ethylene propylene diene) seal suitable for water, neutral and non-sticking liquids, compressed air and neutral gases.
- FKM (Fluorocarbon) seal suitable for non-neutral media i.e. oils, fuels, oil-laden compressed air, etc..

- Low pressure: 682/482mGFO-LP EPDM and FKM
- Standard pressure: 682/482mGFO-SP EPDM and FKM
- High pressure: 682/482mGFO-HP EPDM and FKM

Mesh sizes: DN15 to DN32 = 0.6 mm
DN40 and DN80 = 0.75 mm (682)
DN40 and DN100 = 0.75 mm (482)

Seats for 682:
DN15 to DN50 made of gunmetal/stainless steel
DN65 to DN100 made of stainless steel

All models also available in **Stainless Steel**: series **482**.

How to order: CODE

Pressure Reducing Valve (DIN), Gunmetal or Stainless Steel, with Flange Connection, SIZE DIN, Type of Pressure Rating (LOW, STANDARD, or HIGH), SPECIFY THE SEALS FROM "EPDM" or "FKM"

Series 682 (Gunmetal):

Component	Material	DIN EN	ASTM/AISI
Inlet body	Gunmetal	CC499K	CC499K
Outlet body	Gunmetal	CC499K	CC499K
Inner parts, wetted	Gunmetal Stainless steel	CC499K 1.4404	CC499K 316 L
Spring	Spring steel with anti-rust protection	1,1200	ASTM A228
Strainer	Stainless steel	1.4404	316 L

Model 682mGFO-LP (Low Pressure)

Unit Per Pc.

CODE	DN	PN	Size mm					Weight Kg
			D	L	H1	h	K/nxd	
75 65 44	15	40	95	130	128	46	65/4 x M12	3.1
54	20	40	105	150	150	50	75/4 x M12	4.6
58	25	40	115	160	150	55	85/4 x M12	5.1
59	32	40	140	180	150	68	100/4 x M16	6.3
60	40	40	150	200	185	73	110/4 x M16	9.3
75 65 67	50	40	165	230	185	80	125/4 x M16	11.2
Inlet Pressure			Up to 25 bar					
Outlet Pressure			0.5 - 2 bar					

Goetze KG: 682mGFO-LP
**Please specify the seal from EPDM or FKM when ordering.

Model 682m GFO-SP (Standard Pressure)

Unit Per Pc.

CODE	DN	PN	Size mm					Weight Kg
			D	L	H1	h	K/n × d	
75 65 45	15	40	95	130	102	46	65/4 x M12	2.8
68	20	40	105	150	130	50	75/4 x M12	4.2
69	25	40	115	160	130	55	85/4 x M12	4.7
70	32	40	140	180	130	68	100/4 x M16	5.9
76	40	40	150	200	165	73	110/4 x M16	8.6
75 65 77	50	40	165	230	165	80	125/4 x M16	10.5
55	65	16	185	290	235	89	145/4 x M16	20
56	65	40	185	290	235	89	145/8 x M16	20
57	80	40	200	310	235	96	160/8 x M16	22
46	100	16	200	350	320	112	180/8 x M16	40
Inlet Pressure			Up to 40 bar (PN40) & 16 bar (PN16)					
Outlet Pressure			1 - 8 bar					

Goetze KG: 682mGFO-SP
**Please specify the seal from EPDM or FKM when ordering.

Model 682mGFO-HP (High Pressure)

Unit Per Pc.

CODE	DN	PN	Size mm					Weight Kg
			D	L	H1	h	K/n × d	
75 65 47	15	40	95	130	102	46	65/4 x M12	2.8
78	20	40	105	150	130	50	75/4 x M12	4.2
79	25	40	115	160	130	55	85/4 x M12	4.7
80	32	40	140	180	130	68	100/4 x M16	5.9
81	40	40	150	200	165	73	110/4 x M16	8.6
75 65 82	50	40	165	230	165	80	125/4 x M16	10.5
Inlet Pressure			Up to 40 bar					
Outlet Pressure			5 - 15 bar					

Goetze KG: 682mGFO-HP
**Please specify the seal from EPDM or FKM when ordering.

Series 482 (Stainless Steel):

Seats for version 482: made of stainless steel

Component	Material	DIN EN	ASME
Inlet body	Stainless Steel	1.4408	CF8M
Outlet body	Stainless Steel	1.4408	CF8M
Internal Parts	Stainless Steel	1.4408/1.4404	CF8M/316 L
Spring	Spring steel with anti-rust protection	1.1200	ASTM A228
Strainer	Stainless steel	1.4404	316 L

Model 482mGFO-LP (Low Pressure)

Unit Per Pc.

CODE	DN	PN	Size mm					Weight Kg
			D	L	H1	h	K/n × d	
75 65 48	15	40	95	130	128	46	65/4 x M12	2.9
83	20	40	105	150	150	50	75/4 x M12	4.3
84	25	40	115	160	150	55	85/4 x M12	4.7
85	32	40	140	180	150	68	100/4 x M16	5.9
86	40	40	150	200	185	73	110/4 x M16	9.1
87	50	40	165	230	185	80	125/4 x M16	10.9
Inlet Pressure			Up to 25 bar					
Outlet Pressure			0.5 - 2 bar					

Goetze KG: 482mGFO-LP
**Please specify the seal from EPDM or FKM when ordering.

Model 482mGFO-SP (Standard Pressure)

Unit Per Pc.

CODE	DN	PN	Size mm					Weight Kg
			D	L	H1	h	K/n × d	
75 65 49	15	40	95	130	102	46	65/4 x M12	2.7
88	20	40	105	150	130	50	75/4 x M12	3.9
99	25	40	115	160	130	55	85/4 x M12	4.3
75 66 00	32	40	140	180	130	68	100/4 x M16	5.5
12	40	40	150	200	165	73	110/4 x M16	8.4
75 66 13	50	40	165	230	165	80	125/4 x M16	10.2
75 65 51	65	16	185	290	235	89	145/4 x M16	18.7
52	65	40	185	290	235	89	145/8 x M16	19
53	80	40	200	310	235	96	160/8 x M16	20.5
43	100	16	220	350	320	112	180/8 x M16	37
Inlet Pressure			Up to 40 bar					
Outlet Pressure			1 - 8 bar					

Goetze KG: 482mGFO-SP
**Please specify the seal from EPDM or FKM when ordering.

Model 482mGFO-HP (High Pressure)

Unit Per Pc.

CODE	DN	PN	Size mm					Weight Kg
			D	L	H1	h	K/n × d	
75 65 50	15	40	95	130	102	46	65/4 x M12	2.7
75 66 14	20	40	105	150	130	50	75/4 x M12	3.9
23	25	40	115	160	130	55	85/4 x M12	4.3
24	32	40	140	180	130	68	100/4 x M16	5.5
33	40	40	150	200	165	73	110/4 x M16	8.4
75 66 34	50	40	165	230	165	80	125/4 x M16	10.2
75 67 00	100	16	220	350	340	112	180/8 x M16	40
Inlet Pressure			Up to 40 bar (PN40) & 16 bar (PN16)					
Outlet Pressure			5 - 15 bar (DN100: 5-13 bar)					

Goetze KG: 482mGFO-HP
**Please specify the seal from EPDM or FKM when ordering.

Pressure Reducing Valves

Gunmetal & Stainless Steel with Threaded Connections

Válvulas Reductoras de Presión, Bronce de cañón y acero inoxidable con conexión roscada

ネジ式砲金・ステンレス鋼減圧弁

减压阀 ， 炮铜和不锈钢，带螺纹连接

Marine Type Approvals held for these valves:

- DNV
- American Bureau of Shipping
- Russian Maritime Register of Shipping
- Lloyd´s Register EMEA
- Bureau Veritas,
- Registro Italiano Navale

Pressure reducer with threaded connections made of gunmetal with balanced single seat valve and built-in dirt trap. Spring made of steel with anti-rust protection, and strainer made of stainless steel. Fabric reinforced diaphragm made of high-quality, heat-resistant moulded elastomer. Body with G 1/4" connection for pressure gauge on both sides. Adjustment by means of non-rising spindle.

Standard thread: BSPTm. Also available in female BSP-P and female NPT for sizes up to 1" (PLEASE CLEARLY INDICATE IN THE ORDER: "f/f", "BSPTm/BSPTm", or "NPTf/NPTf")

Available three models with

- EPDM (ethylene propylene diene, seals and diaphragm suitable for water, neutral and, non-sticking liquids, compressed air and neutral gases.
- FKM (Fluorocarbon) seals and diaphragm suitable for non-neutral media i.e. oils, fuels, oil-laden compressed air, etc.

- Low pressure 681/481mGFO-LP EPDM and FKM
- Standard pressure 681/481mGFO-SP EPDM and FKM
- High pressure 681/481mGFO-HP EPDM and FKM

Mesh sizes: DN15 to DN32 = 0.6 mm
DN40 and DN50 = 0.75 mm

Inlet pressure: up to 40 bar
Outlet pressure: 0.5 - 15 bar

All models also available in **Stainless Steel**: series **481**.

How to order: CODE

Pressure Reducing Valve (DIN), with threaded connection, Gunmetal or Stainless Steel, Type of Pressure Rating (LOW, STANDARD, and HIGH), SIZE DIN, SPECIFY THE SEALS FROM "EPDM" or "FKM"

Series 681 (Gunmetal):

Component	Material	DIN EN	ASTM/AISI
Inlet body	Gunmetal	CC499K	CC499K
Outlet body	Gunmetal	CC499K	CC499K
Internal Parts	Gunmetal/ Stainless Steel	CC499K/ 1.4404	CC499K/ 316L
Spring	Spring steel with anti-rust protection	1.1200	ASTM A228
Strainer	Stainless steel	1.4404	316L

Model 681mGFO-LP (Low Pressure)

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	l	H1	h	
75 66 43	15	142	80	128	33	1.5
44	20	158	90	128	33	1.6
53	25	180	100	150	45	2.9
54	32	193	105	150	45	3.1
63	40	226	130	185	70	6.2
75 66 64	50	252	140	185	70	6.7
Inlet Pressure	Up to 25 bar					
Outlet Pressure	0.5 - 2 bar					

Goetze KG: 681mGFO-LP

**Please specify the seal from EPDM or FKM when ordering.

Model 681mGFO-SP (Standard Pressure)

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	l	H1	h	
75 65 61	15	142	80	102	33	1.2
62	20	158	90	102	33	1.3
63	25	180	100	130	45	2.4
64	32	193	105	130	45	2.6
65	40	226	130	165	70	5.5
75 65 66	50	252	140	165	70	6.0
Inlet Pressure	Up to 40 bar					
Outlet Pressure	1 - 8 bar					

Goetze KG: 681mGFO-SP

**Please specify the seal from EPDM or FKM when ordering.

Model 681mGFO-HP (High Pressure)

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	l	H1	h	
75 66 97	15	142	80	102	33	1.2
98	20	158	90	102	33	1.3
99	25	180	100	130	45	2.4
75 69 16	32	193	105	130	45	2.6
17	40	226	130	165	70	5.5
75 69 18	50	252	140	165	70	6.0
Inlet Pressure	Up to 40 bar					
Outlet Pressure	5 - 15 bar					

Goetze KG: 681mGFO-HP

**Please specify the seal from EPDM or FKM when ordering.

Series 481 (Stainless Steel):

Seats for version 481: DN15 to DN50 made of stainless steel

Component	Material	DIN EN	ASME/ANSI
Body	Stainless Steel	1.4408	CF8M
Internal Parts	Stainless Steel	1.4408/1.4404	CF8M/316 L
Pressure Spring	Spring steel with anti-rust protection	1.1200	ASTM A228
Strainer	Stainless steel	1.4404	316 L

Model 481mGFO-LP (Low Pressure)

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	l	H1	h	
75 69 19	15	142	80	128	33	1.5
20	20	158	90	128	33	1.6
27	25	180	100	150	45	2.8
28	32	193	105	150	45	3.0
29	40	226	130	185	70	5.9
75 69 30	50	252	140	185	70	6.4
Inlet Pressure	Up to 25 bar					
Outlet Pressure	0.5 - 2 bar					

Goetze KG: 481mGFO-LP

**Please specify the seal from EPDM or FKM when ordering.

Model 481mGFO-SP (Standard Pressure)

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	l	H1	h	
75 69 37	15	142	80	102	33	1.2
38	20	158	90	102	33	1.3
39	25	180	100	130	45	2.3
40	32	193	105	130	45	2.5
49	40	226	130	165	70	5.2
75 69 50	50	252	140	165	70	5.7
Inlet Pressure	Up to 40 bar					
Outlet Pressure	1 - 8 bar					

Goetze KG: 481mGFO-SP

**Please specify the seal from EPDM or FKM when ordering.

Model 481mGFO-HP (High Pressure)

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	l	H1	h	
75 69 59	15	142	80	102	33	1.2
60	20	158	90	102	33	1.3
68	25	180	100	130	45	2.3
69	32	193	105	130	45	2.5
70	40	226	130	165	70	5.2
75 69 78	50	252	140	165	70	5.7
Inlet Pressure	Up to 40 bar					
Outlet Pressure	5 - 15 bar					

Goetze KG: 481mGFO-HP

**Please specify the seal from EPDM or FKM when ordering.

Pressure Reducing Valves

Gunmetal & Stainless Steel with Threaded Connection

Válvulas Reductoras de Presión, Gunmetal con conexión roscada
ネジ式砲金減圧弁　減压阀，炮铜色，带螺纹连接

Marine Type Approvals held for these valves:

- DNV
- Bureau Veritas,
- Lloyd's Register EMEA
- Russian Maritime Register of Shipping

Balanced single seat pressure reducing valves with threaded connections made of gunmetal/ stainless steel.
Either with Fabric reinforced diaphragm made of high-quality, heat-resistant moulded elastomer or with piston. Body with pressure gauge connection G1/4" on both sides of body.

Available in various versions:

- Version code: **mXXXSM**:
  with elastomere moulded diaphragm and seal made of FKM or EPDM
  max. inlet pressure: 60 bar, outlet pressure: 0.5 to 15 bar.
- Version code: **kXXXSK / kXXXHK**:
  with piston made of brass and seals made of FKM or EPDM
  kXXXSK: max. inlet pressure: 60 bar, outlet pressure: 5 to 30 bar
  kXXXHK: max. inlet pressure: 60 bar, outlet pressure:10 to 50 bar
- Version code: **xGSXX**:
  for compressed air and gases with secondary venting (for non-neutral, poisonous gases only in combination with ducted exhaust)
- Version code: **xGFOXX**:
  for liquids & gases (without secondary venting)

Also available in **Stainless Steel:** series **484**.

How to order: CODE

Pressure Reducing Valve (DIN), with threaded connection, Gunmetal, Version with diaphragm or piston – depending on pressure rating (mXXXSM, kXXXSK or kXXXHK), Version for which kind of medium (xGSXX or xGFOXX), SIZE DIN

Example code:
684mGSSM-20-f/f-20/20 FKM

series 684	**mXXXSM**:	**diaphragm**
	xGSXX:	**with secondary venting**
	20-f/f-20/20:	size DN**20** with female BSP-P threads
	FKM:	seals and diaphragm made of FKM

Series 684:

Component	Material	DIN EN	ASME
Body	Gunmetal	CC499K	CC499K
Internal Parts	Brass	CW617N	CW617N
Spring	Spring steel with anti-rust protection	1.1200	ASTM A228

DN8 to DN25

DN40 & DN50

Model 684mGSSM

with elastomer moulded diaphragm and seals for gases & compressed air **with secondary venting**.

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	H	h	SW	
75 74 56	8	68	120	33	26	1.2
57	10	68	120	33	26	1.2
58	15	60	120	33	26	1.2
59	20	78	180	40	32	2.8
60	25	102	215	56	44	5.3
75 74 61	40	136	260	63	58	9.4
62	50	136	270	70	70	10.2
Inlet Pressure		Up to 60 bar				
Outlet Pressure		0.5 - 15 bar				

Goetze KG: 684mGSSM

Model 684mGFOSM

with elastomer moulded diaphragm and seals for liquids & gases **without secondary venting**.

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	H	h	SW	
75 74 63	8	68	120	33	26	1.2
64	10	68	120	33	26	1.2
65	15	60	120	33	26	1.2
66	20	78	180	40	32	2.8
67	25	102	215	56	44	5.3
75 74 68	40	136	260	63	58	9.4
69	50	136	270	70	70	10.2
Inlet Pressure		Up to 60 bar				
Outlet Pressure		0.5 - 15 bar				

Goetze KG: 684mGFOSM

Model 684kGSSK

with piston made of brass and seal made of FKM or EPDM for gases & compressed air **with secondary venting**.

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	H	h	SW	
75 74 70	8	68	120	33	26	1.2
71	10	68	120	33	26	1.2
72	15	60	120	33	26	1.2
73	20	78	180	40	32	2.8
74	25	102	215	56	44	5.3
75 74 75	40	136	260	63	58	9.4
76	50	136	270	70	70	10.2
Inlet Pressure		Up to 60 bar				
Outlet Pressure		5 - 30 bar				

Goetze KG: 684kGSSK

Model 684kGFOSK

with piston made of brass and seals made of FKM or EPDM for liquids & gases **without secondary venting**.

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	H	h	SW	
75 74 77	8	68	120	33	26	1.2
78	10	68	120	33	26	1.2
79	15	60	120	33	26	1.2
80	20	78	180	40	32	2.8
81	25	102	215	56	44	5.3
75 74 82	40	136	260	63	58	9.4
83	50	136	270	70	70	10.2
Inlet Pressure		Up to 60 bar				
Outlet Pressure		5 - 30 bar				

Goetze KG: 684kGFOSK

Model 684kGSHK
with piston made of brass and seals made of FKM or EPDM for gases & compressed air **with secondary venting**.

Unit Per Pc.

CODE	DN	Size mm				Weight
		L	H	h	SW	Kg
75 74 84	8	68	120	33	26	1.2
85	10	68	120	33	26	1.2
86	15	60	120	33	26	1.2
87	20	78	180	40	32	2.8
88	25	102	215	56	44	5.3
75 74 89	40	136	260	63	58	9.4
90	50	136	270	70	70	10.2
Inlet Pressure		Up to 60 bar				
Outlet Pressure		10 - 50 bar				

Goetze KG: 684kGSHK

Model 684kGFOHK
with piston made of brass and seals made of FKM or EPDM for liquids & gases **without secondary venting**.

Unit Per Pc.

CODE	DN	Size mm				Weight
		L	H	h	SW	Kg
75 74 91	8	68	120	33	26	1.2
92	10	68	120	33	26	1.2
93	15	60	120	33	26	1.2
94	20	78	180	40	32	2.8
95	25	102	215	56	44	5.3
75 74 96	40	136	260	63	58	9.4
97	50	136	270	70	70	10.2
Inlet Pressure		Up to 60 bar				
Outlet Pressure		10 - 50 bar				

Goetze KG: 684kGFOHK

Series 484 (Stainless Steel)

Component	Material	DIN EN	ASME
Body	Stainless steel	1.4408	CF8M
Internal Parts	Stainless steel	1.4404	316 L
Spring	Stainless steel	1.4568	631

Model 484mGSSM
with elastomer moulded diaphragm and seals made of FKM or EPDM for gases & compressed air **with secondary venting**.

Unit Per Pc.

CODE	DN	Size mm				Weight
		L	H	h	SW	Kg
75 78 01	8	68	120	33	26	1.1
02	10	68	120	33	26	1.1
03	15	60	120	33	26	1.1
04	20	78	180	40	32	2.5
05	25	102	215	56	44	4.5
75 78 06	40	136	260	63	58	8.1
07	50	136	270	70	70	8.8
Inlet Pressure		Up to 60 bar				
Outlet Pressure		0.5 - 15 bar				

Goetze KG: 484mGSSM

Model 484mGFOSM
with elastomer moulded diaphragm and seals made of FKM or EPDM for liquids & gases **without secondary venting.**

Unit Per Pc.

CODE	DN	Size mm				Weight
		L	H	h	SW	Kg
75 78 08	8	68	120	33	26	1.1
09	10	68	120	33	26	1.1
10	15	60	120	33	26	1.1
11	20	78	180	40	32	2.5
12	25	102	215	56	44	4.5
75 78 13	40	136	260	60	58	8.1
14	50	136	270	70	70	8.8
Inlet Pressure		Up to 60 bar				
Outlet Pressure		0.5 - 15 bar				

Goetze KG: 484mGFOSM

Model 484kGSSK
with piston made of Stainless steel and seals made of FKM or EPDM for gases & compressed air **with secondary venting.**

Unit Per Pc.

CODE	DN	Size mm				Weight
		L	H	h	SW	Kg
75 78 15	8	68	120	33	26	1.1
16	10	68	120	33	26	1.1
17	15	60	120	33	26	1.1
18	20	78	180	40	32	2.5
19	25	102	215	56	44	4.5
75 78 20	40	136	260	63	58	8.1
21	50	136	270	70	70	8.8
Inlet Pressure		Up to 60 bar				
Outlet Pressure		5 - 30 bar				

Goetze KG: 484kGSSK

Model 484kGFOSK
with piston made of Stainless steel and seals made of FKM or EPDM for liquids & gases **without secondary venting.**

Unit Per Pc.

CODE	DN	Size mm				Weight
		L	H	h	SW	Kg
75 78 22	8	68	120	33	26	1.1
23	10	68	120	33	26	1.1
24	15	60	120	33	26	1.1
25	20	78	180	40	32	2.5
26	25	102	215	56	44	4.5
75 78 27	40	136	260	63	58	8.1
28	50	136	270	70	70	88
Inlet Pressure		Up to 60 bar				
Outlet Pressure		5 - 30 bar				

Goetze KG: 484kGFOSK

Model 484kGSHK
with piston made of Stainless steel and seals made of FKM or EPDM for neutral gases (compressed air) **with secondary venting.**

Unit Per Pc.

CODE	DN	Size mm				Weight
		L	H	h	SW	Kg
75 78 29	8	68	120	33	26	1.1
30	10	68	120	33	26	1.1
31	15	60	120	33	26	1.1
32	20	78	180	40	32	2.5
33	25	102	215	56	44	4.5
75 78 34	40	136	260	60	58	8.1
35	50	136	270	70	70	8.8
Inlet Pressure		Up to 60 bar				
Outlet Pressure		10 - 50 bar				

Goetze KG: 484kGSHK

Model 484kGFOHK
with piston made of Stainless steel and seals made of FKM or EPDM for liquids & gases **without secondary venting.**

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	H	h	SW	
75 78 36	8	68	120	33	26	1.1
37	10	68	120	33	26	1.1
38	15	60	120	33	26	1.1
39	20	78	180	40	32	2.5
40	25	102	215	56	44	4.5
75 78 41	40	136	260	63	58	8.1
42	50	136	270	70	70	8.8
Inlet Pressure		Up to 60 bar				
Outlet Pressure		10 - 50 bar				

Goetze KG: 484kGFOHK

Pressure Reducing Valves
Gunmetal with Female Connections

Válvulas Reductoras de Presión, Bronce de cañón con conexiones hembra
ソケット式砲金減圧弁　　减压阀，炮铜色，内螺纹连接

Marine Type Approvals held for these valves:
- DNV
- American Bureau of Shipping
- Russian Maritime Register of Shipping
- Lloyd's Register EMEA
- Bureau Veritas

Pressure reducer with female connections made of gunmetal with balanced single seat valve for use in shipbuilding and offshore plants. Suitable for compressed air and neutral gases. Body with G 1/4" connection for pressure gauge on both sides.

Largest reduction ratio: 10:1

Component	Material	DIN EN	ASME
Body, Insert	Gunmetal	CC499K	CC499K
Outlet body	Gunmetal	CC499K	CC499K
Internal parts	Brass	CW617N	CW617N
Spring	Spring steel	1.1200	ASTM A228

Unit Per Pc.

CODE	DN	Size mm			Weight Kg
		L	H	h	
75 65 71	10	73	100	22	0.5
72	15	73	100	22	0.5
73	20	70	120	30	0.8
74	25	87	165	35	1.4
75	32	100	175	43	2.0
Inlet Pressure		Up to 50 (DN32 – 30 bar)			
Outlet Pressure		1.5 - 10 bar			

Goetze KG: 683GO

Pressure Relief Valves
Gunmetal with threaded connections

Válvulas de alivio de presión, Gunmetal con conexiones roscadas
砲金・減圧安全弁
泄压阀，炮铜材质，螺纹连接

Marine Type Approvals held for these valves:
- DNV
- American Bureau of Shipping
- Russian Maritime Register of Shipping
- Lloyd's Register EMEA
- Bureau Veritas

Pressure relief valve for the protection of pressure tanks, systems for neutral / non-neutral vapours, gases and liquids, steam boilers and steam plants.

Available models:
- 628 sGFL with lifting lever
- 628 tGFO gastight version without lifting lever

Available seals:
- NBR
- FKM
- PTFE

Series 628 (Gunmetal):

Component	Material	DIN EN	ASTM/AISI
Body	Gunmetal	CC499K	CC499K
Internal parts	Brass/Gunmetal	CW617N / CC499K	CW617N / CC499K
Spring	Stainless steel	1.4310	302

628 sGFL with lifting lever

Unit Per Pc.

CODE		75 78 51	75 78 52	75 78 53	75 78 54	75 78 55	75 78 56	75 78 57
Nom Dia (DN)		10	15	20	25	32	40	50
Range of Adjustment		0.2 - 20 bar						
Size mm	L	27	30	33	40	45	50	60
	Lmax	84	84	84	84	120	120	120
	H/H1	55/66	62/74	73/83	90/100	11-/117	130/136	135/146
	H2/Hmax	73/100	82/108	89/117	108/134	127/168	149/190	158/197
	h	26	30	35	41	45	51	60
	d0	10	13	19	25	30	38	50
Weight Kg		0.3	0.4	0.6	1.0	1.6	2.3	3.2

Goetze KG: Model 628 sGFL

628 tGFO gastight version (without lifting lever)

Unit Per Pc.

CODE		75 78 58	75 78 59	75 78 60	75 78 61	75 78 62	75 78 63	75 78 64
Nom Dia (DN)		10	15	20	25	32	40	50
Range of Adjustment		0.2 - 20 bar						
Size mm	L	27	30	33	40	45	50	60
	Lmax	84	84	84	84	120	120	120
	H1	66	74	83	100	117	136	146
	h	26	30	35	41	45	51	60
	d0	10	13	19	25	30	38	50
Weight Kg		0.3	0.4	0.6	1.0	1.6	2.3	3.2

Goetze KG: Model 628 tGFO

DIN Ball Valves

Ball Valves (DIN)
Bronze, BSP Female Threaded Ends
Pressure Rating PN40

Bronce, extremos roscados hembra BSP
DIN 型青銅 BSP 雌ネジボールバルブ　　青铜，BSP 内螺纹端头

Two piece, full bore, bronze body ball valve with hard chromed brass ball and PTFE seat. BSPP female threaded ends.

Pressure and Temperature Range: PN40, -10°C/+120°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Copper Alloy	CC491K
Ball	Brass	CW617N
Seat	Plastic	PTFE
Stem	Brass	CW614N
Lever	DN8-65	AISI304
Lever	DN80	Galvanized steel

How to order: CODE

Ball valve (DIN), bronze, BSP female threaded ends, pressure rating PN40, SIZE DN

Unit Per Pc.

CODE	DN	Inch	Size mm			Weight
			L	H	L1	Kg
75 66 01	8	1/4"	51	47.5	85	0.2
02	10	3/8"	51	47.5	85	0.2
03	15	1/2"	62	45	85	0.3
04	20	3/4"	70	57.5	104	0.4
05	25	1"	85	57.5	104	0.6
75 66 06	32	1-1/4"	99	75	122	1.0
07	40	1-1/2"	110	77.5	122	1.3
08	50	2"	134	93	153	2.4
09	65	2-1/2"	142	119.5	200	3.5
10	80	3"	178	134	280	6.0

MESON Model No.: 503.5.5.7.1

Ball Valves (DIN)

Stainless Steel, BSP Female Threaded Ends, Full Bore

Válvulas de bola (DIN), Acero inoxidable, extremos roscados, hembra BSP Paso total
ボールバルブ（DIN）ステンレス鋼、BSP 雌ネジフルボア
球阀（DIN）不锈钢，BSP 内螺纹端全孔

Two-piece ball valve with full bore, stainless steel body, stainless steel ball and PTFE seat, BSP or NPT female thread connection. Actuated by means of a lockable lever with PVC sleeve.

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

Pressure and Temperature Range: 69 bar, -20°C to +170°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Stainless steel	A351 CF8M
Cap	Stainless steel	A351 CF8M
Ball	Stainless steel	A351 CF8M
Seat	PTFE	PTFE
Stem	Stainless steel	AISI 316
Handle	Stainless steel	AISI 304

BSP Female Threaded Ends

How to order: CODE

Ball valve (DIN), stainless steel, BSP female threaded ends, full bore, SIZE DN

Unit Per Pc.

CODE	DN	Inch	Size mm				Weight
			ΦA	H	L	L1	Kg
75 66 65	8	1/4"	9.2	54	54	110	0.2
66	10	3/8"	12.8	55	54	110	0.2
67	15	1/2"	15	58	57	115	0.3
68	20	3/4"	20	61	68	115	0.5
69	25	1"	25	77	80	128	0.8
75 66 70	32	1-1/4"	32	81	91	128	1.0
71	40	1-1/2"	38	90	103	155	1.5
72	50	2"	50	108	124	155	2.7
73	65	2-1/2"	65	132	160	260	4.9
74	80	3"	80	145	185	260	7.2

MESON Model No.: 503.4.4.7.6

NPT Female Threaded Ends

How to order: CODE

Ball valve (DIN), stainless steel, NPT female threaded ends, full bore, SIZE DN

Unit Per Pc.

CODE	DN	Inch	Size mm				Weight
			ΦA	H	L	L1	Kg
75 65 89	8	1/4"	9.2	54	54	110	0.2
90	10	3/8"	12.8	55	54	110	0.2
91	15	1/2"	15	58	57	115	0.3
92	20	3/4"	20	61	68	115	0.5
93	25	1"	25	77	80	128	0.8
75 65 94	32	1-1/4"	32	81	91	128	1.0
95	40	1-1/2"	38	90	103	155	1.5
96	50	2"	50	108	124	155	2.7
97	65	2-1/2"	65	132	160	260	4.9
98	80	3"	80	145	185	260	7.2

MESON Model No.: 503.4.4.7.6

Ball Valves (DIN)

Bronze, DIN Flanges, Two-Piece, Full Bore Pressure Rating PN 16

Válvulas de bola (DIN) Bronce, bridas DIN, dos piezas, paso total
ボールバルブ（DIN）青銅、DIN フランジ、ツーピース、フルボア
球阀（DIN）青铜，DIN 法兰，两件式，全孔

Two-piece bronze body ball valve with full bore, stainless steel ball and PTFE seat, raised face flange connection rated DIN PN 16. Actuated by lever.

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

Pressure and Temperature Range: 16 bar, -20°C to +150°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CC491K
Ball	Stainless steel	AISI316
Cap	Bronze	CC491K
Seat	PTFE	PTFE
Stem	Stainless steel	AISI316

How to order: CODE

Ball valve (DIN), bronze, DIN flanges, two-piece, full bore, pressure rating PN 16, SIZE DN

Unit Per Pc.

CODE	DN	Size mm					Weight
		Hcd	Φd	H	L	L1	Kg
75 69 98	15	65	95	84	115	160	2.8
75 66 75	20	75	105	84	120	160	3.0
76	25	85	115	96	125	170	4.8
77	32	100	140	101	130	170	6.5
78	40	110	150	125	140	230	9.3
75 66 79	50	125	165	135	150	230	11.5
80	65	145	185	143	170	230	16.0
81	80	160	200	165	180	280	20.6
82	100	180	220	180	190	360	28.4
83	125	210	250	225	200	520	41.2

MESON Model No.: 500.5.4.7.1

Ball Valves (DIN)

Cast Iron, DIN Flanges, 2-way, Full Bore Pressure Rating PN 16

Válvulas de bola (DIN), Hierro fundido, bridas DIN, 2 vías, paso total
ボールバルブ（DIN）鋳鉄、DIN フランジ、2 方向、フルボア
球阀（DIN）铸铁，DIN 法兰，2 通，全孔

Ball valve with full bore, floating ball and flange connection rated DIN PN 16. Actuated by lever. Also available with a pneumatic or electric actuator. This type of ball valve is generally used in heating, air conditioning and industrial systems for water and gases up to a maximum of 16 bar (PN 16 version).

Pressure and Temperature Range

Size	Pressure Rating	Temperature Range	-10°C	+70°C	+90°C	+150°C
DN20-DN200	PN 16	-10°C /+150°C	16 bar	16	16	8

Brass Ball & Stem Type

DN 20 - DN 40

DN 50 - DN 200

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast iron	GJL-250 (GG-25)
Ball and Stem	Brass	CuZn40Pb2
Ball Seat (+ Graphite)	PTFE	
Lever (Lacquered)	Steel	
O-rings	NBR	

How to order: CODE

Ball valve (DIN), Cast Iron, DIN flanges, 2-way, full bore, brass ball and stem, pressure rating PN 16 SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight
		d	H	L	M	Kg
75 66 86	20	20	85	120	130	2.5
87	25	25	95	125	170	3.2
88	32	32	100	130	170	4.4
89	40	40	118	140	220	5.5
90	50	50	125	150	220	8.5
75 66 91	65	63	152	170	284	11.5
92	80	76	166	180	284	15.5
93	100	95	180	190	360	20
94	125	120	225	200	447	30
95	150	145	242	210	560	36
75 66 96	200	190	320	400	1,000	93

Stainless Steel Ball & Stem Type

DN 20 - DN 40

DN 50 - DN 200

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast iron	GJL-250 (GG-25)
Ball and Stem	Stainless steel	X5CrNi18-10
Ball Seat (+ Graphite)	PTFE	
Lever (Lacquered)	Steel	
O-rings	NBR	

How to order: CODE

Ball valve (DIN), cast iron, DIN flanges, 2-way, full bore, pressure rating PN 16, stainless steel ball and stem, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight
		d	H	L	M	Kg
75 67 01	20	20	85	120	130	2.5
02	25	25	95	125	170	3.2
03	32	32	100	130	170	4.4
04	40	40	118	140	220	5.5
05	50	50	125	150	220	8.5
75 67 06	65	63	152	170	284	11.5
07	80	76	166	180	284	15.5
08	100	95	180	190	360	20
09	125	120	225	200	447	30
10	150	145	242	210	560	36
75 67 11	200	190	320	400	1,000	93

Ball Valves (DIN)

Cast Steel, DIN Flange, Non-direct Mounting Pad, Pressure Rating PN40

Válvulas de bola (DIN), Acero fundido, brida DIN, pie de montaje no directo
ボールバルブ（DIN）鋳鋼、DIN フランジ
球阀（DIN），铸钢，DIN 法兰，非直接安装垫板

Two piece, full bore, cast steel body ball valve with stainless steel ball with relief hole and TFM4215 seat. Raised face flanges, pressure rating PN40.

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

Material Specification

Component	Material	EN and/or (DIN)
Body	Stainless steel	A351 CF8M
Cap	Stainless steel	A351 CF8M
Ball	Stainless steel	A351 CF8M
Seat	PTFE	PTFE
Stem	Stainless steel	AISI 316
Handle	Stainless steel	AISI 304

How to order: CODE

Ball valve (DIN), cast steel, DIN flanged, non-direct mounting pad, pressure rating PN 40, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight
		Hcd	Φd	L	L1	Kg
75 67 51	15	65	95	115	153	2.5
52	20	75	105	120	153	3.1
53	25	85	115	125	188	4.6
54	32	100	140	130	188	5.6
55	40	110	150	140	245	7.1
75 67 56	50	125	165	150	245	9.7
18	65	145	185	170	288	14.8

MESON Model No. : 500.3.4.9.1

Ball Valves (DIN)

Stainless Steel, DIN Flanges, Two Pieces, Full Bore Pressure Rating PN 16 - 40

Válvulas de bola (DIN), Acero inoxidable, bridas DIN, dos piezas, paso total
ボールバルブ（DIN）,ステンレス鋼、DIN フランジ
球阀（DIN），不锈钢，DIN 法兰，两件式，全孔

Two-piece, full bore, stainless steel body ball valve with stainless steel ball and SS+PTFE seat. Raised face flanges. With direct mounting pad. Pressure Rating is PN 16 – 40.

Applications: Corrosive Fluids

Pressure and Temperature Range

Size	Temp. Range	-30°C	+60°C	+100°C	+150°C	+180°C	+230°C
PN 16							
DN15-DN150	-30°C/+230°C	16 bar	16	15	8	0	0
DN200		16 bar	16	15	8	0	0
PN 40							
DN15-DN150	-30°C/+230°C	43 bar	43	30	15	0	0
DN200		43 bar	43	30	15	0	0

Material Specification

Component	Material	EN and/or (DIN)
Body	Stainless steel	A351-CF8M
Cap	Stainless steel	A351-CF8M
Ball	Stainless steel	A351-CF8M
Seat	Plastic	PTFE
Stem	Stainless steel	AISI 316
Handle	Stainless steel + plastic cover	AISI 430

How to order: CODE

Ball valve (DIN), stainless steel, DIN flanges, two-pieces, full bore, pressure rating PN 16, SIZE DN

PN16

Unit Per Pc.

CODE	DN	Size mm						Weight
		Hcd	Φd	L	H2	L1	H1	Kg
75 67 71	65	145	185	170	137.0	277.5	118.5	14.8
72	80	160	200	180	148.0	277.5	129.5	19.0
73	100	180	220	190	163.5	377.5	145.0	26.5
74	125	210	250	325	205.0	415.0	158.0	48.0
75	150	240	285	350	222.0	415.0	175.0	65.5
75 67 76	200	295	340	400	304.0	920.0	268.0	118.7

MESON Model No.: 500.4.4.7.1

How to order: CODE

Ball valve (DIN), stainless steel, DIN flanges, two-pieces, full bore, pressure rating PN 40, SIZE DN

PN40

Unit Per Pc.

CODE	DN	Size mm						Weight
		Hcd	Φd	L	H2	L1	H1	Kg
75 67 65	15	65	95	115	56	110	46.6	2.2
66	20	75	105	120	61	110	51.5	3.0
67	25	85	115	125	67	136	57.5	3.8
68	32	100	140	130	87	175	71.5	5.8
69	40	110	150	140	92	203	76.5	6.9
75 67 70	50	125	165	150	99	203	83.5	9.5
75 68 00	65	145	185	170	137	277.5	118.5	15.7
24	80	160	200	180	148	277.5	129.5	20.4
39	100	190	235	190	163.5	337.5	145.0	30.0
40	125	220	270	325	202.1	500	158.5	50.0
75 68 41	150	250	300	350	221.3	600	175.0	67.4

MESON Model No.: 500.4.4.7.1

Ball Valves (DIN)

Cast Steel, DIN wafer Type, 2-way Pressure Rating PN 16 and 40

Válvulas de bola (DIN), Acero fundido, Tipo oblea DIN, 2 vías
ボールバルブ（DIN）鋳鋼、DIN ウェハータイプ
球阀（DIN），铸钢，DIN 对夹式，2 通

Wafer type ball valve with full bore, floating ball and flange connection to DIN PN16 or PN40. Actuated by means of a lever or T-bar. This type of ball valve is generally used in industrial systems such as steam, water, gases, and corrosive media, up to a maximum of 40 bar (PN40 version).

DN 15 - DN 80

DN 100 - DN 150

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast steel	GP240GH (GS-C25)
Ball	Stainless steel	GX5CrNi19-10(G-X6CrNi18 9)
Stem	Stainless steel	X5CrNi18-10
Ball Seat	PTFE(TFM1600)	
Stem Seal	PTFE	
O-ring	FKM(Viton)	
Body Gasket	PTFE	
Lever(DN15-80) *1	Stainless steel	X5CrNi18-10
T-bar(DN100-150) *1	Galvanized Steel	

*1 Covered with PVC sleeve, colour blue.

PN 16

Pressure and Temperature Range

Size	Pressure Rating	Temp. Range	-30°C	+50°C	+100°C	+150°C	+200°C	+230°C
DN15 - DN150	PN16	-30°C / +230°C	16 bar	15	13	13	11	7.6

How to order: CODE

Ball valve (DIN), cast steel, DIN wafer type, 2-way, pressure rating PN 16, SIZE DN

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		d	L	M	H	H1	
75 68 43	15	15	42	145	49	77	1.4
44	20	20	44	145	55	82	1.8
45	25	25	50	175	62	94	2.4
46	32	32	60	175	72	104	3.9
47	40	38	65	194	78	114	4.9
75 68 48	50	50	80	194	86	120	8.6
75 67 87	65	63.5	110	265	108	158	10.1
88	80	76	120	265	116	165	14.5
89	100	95	150	400	139	182	22.7
75 68 49	125	118	180	600	176	224	50
75 68 50	150	142	225	800	192	268	70

PN 40

Pressure and Temperature Range

Size	Pressure Rating	Temp. Range	-30°C	+50°C	+100°C	+150°C	+200°C	+230°C
DN15 -DN50	PN40	-30°C / +230°C	39 bar	37	34	32	19	7.6
DN65 -DN100			39 bar	37	34	28	16	7.6
DN125-DN150			30 bar	28	25	19	12	7.6

How to order: CODE

Ball valve (DIN), cast steel, DIN wafer type, 2-way, pressure rating PN 40, SIZE DN

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		d	L	M	H	H1	
75 67 81	15	15	42	145	49	77	1.4
82	20	20	44	145	55	82	1.8
83	25	25	50	175	62	94	2.4
84	32	32	60	175	72	104	3.9
85	40	38	65	194	78	114	4.9
75 67 86	50	50	80	194	86	120	8.6
75 68 57	65	63.5	110	265	108	158	10.1
58	80	76	120	265	116	165	14.5
59	100	95	150	400	139	182	22.7
60	125	118	180	600	176	224	50
75 68 64	150	142	225	800	192	268	70

Ball Valves (DIN)

Stainless Steel, DIN Wafer Type, 2-way
Pressure rating PN 16 and 40

Válvulas de bola (DIN), Acero inoxidable, DIN Tipo Wafer, 2 vías
ボールバルブ（DIN），ステンレス鋼、DIN ウエハータイプ
球阀（DIN），不锈钢，DIN 对夹式，2 通

Wafer type ball valve with full bore, floating ball and flange connection to DIN PN16 or PN40. Actuated by means of a lever or T-bar. This type of ball valve is generally used in industrial systems such as steam, water, gases, and corrosive media, up to a maximum of 40 bar (PN40 version).

DN 15 - DN 80

DN 100 - DN 150

Material Specification

Component	Material	EN and/or (DIN)
Body	Stainless steel	GX5CrNiMo19-11-2 (G-X6CrNiMo 18-10)
Ball	Stainless steel	GX5CrNiMo19-11-2 (G-X6CrNiMo 18-10)
Stem	Stainless steel	X5CrNiMo 17-12-2
Ball Seat (Reinforced)	PTFE(TFM1600)	
Stem Seal	PTFE	
O-ring	FKM (Viton)	
Body Gasket	PTFE	
Lever(DN15-80) *1	Stainless steel	X5CrNi18-10
T-bar(DN100-150) *1	Galvanized steel	

*1 Covered with PVC sleeve, color blue.

PN 16

Pressure and Temperature Range

Size	Pressure Rating	Temp. Range	-30°C	+50°C	+100°C	+150°C	+200°C	+230°C
DN15 - DN150	PN16	-30°C / +230°C	16 bar	15	13	13	11	7.6

How to order: CODE

Ball valve (DIN), stainless steel,DIN wafer type, 2-way, pressure rating PN 16, SIZE DN

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		d	L	M	H	H1	
75 68 74	15	15	42	145	49	77	1.4
92	20	20	44	145	55	82	1.8
93	25	25	50	175	62	94	2.4
94	32	32	60	175	72	104	3.9
95	40	38	65	194	78	114	4.9
75 68 96	50	50	80	194	86	120	8.6
75 67 97	65	63.5	110	265	108	158	10.1
98	80	76	120	265	116	165	14.5
99	100	95	150	400	139	182	22.7
75 68 97	125	118	180	600	176	224	50
75 68 98	150	142	225	800	192	268	70

PN 40

Pressure and Temperature Range

Size	Pressure Rating	Temp. Range	-30°C	+50°C	+100°C	+150°C	+200°C	+230°C
DN15 -DN50	PN40	-30°C / +230°C	39 bar	37	33	30	19	7.6
DN65 -DN100			39 bar	37	33	28	16	7.6
DN125 -DN150			30 bar	28	25	19	12	7.6

How to order: CODE

Ball valve (DIN), stainless steel, DIN wafer type, 2-way, pressure rating 40, SIZE DN

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		d	L	M	H	H1	
75 67 91	15	15	42	145	49	77	1.4
92	20	20	44	145	55	82	1.8
93	25	25	50	175	62	94	2.4
94	32	32	60	175	72	104	3.9
95	40	38	65	194	78	114	4.9
75 67 96	50	50	80	194	86	120	8.6
75 68 99	65	63.5	110	265	108	158	10.1
75 69 00	80	76	120	265	116	165	14.5
12	100	95	150	400	139	182	22.7
13	125	118	180	600	176	224	50
75 69 14	150	142	225	800	192	268	70

DIN Strainers

Strainers (DIN)

Bronze, Y-Type. Standard Type

Filtros (DIN) Bronce, Tipo Y. Tipo estándar
ストレーナ（DIN）青銅 Y タイプ
过滤器（DIN）青铜，Y 型。标准类型

BSP female threaded connection acc. to DIN 259 or DIN flanged ends, stainless steel strainer element and threaded cap.
Suitable for use in horizontal and vertical pipelines with a downward flow.

BSP Female Threaded

Perforation Size

Size	Perforation Size		
	Standard Φ mm	Fine Φ mm	Coarse Φ mm
1/4" thru 2"	1.0	0.25	3.0
2-1/2" thru 3"	1.25	0.25	3.0

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Threaded Cap	Brass	
Strainer Element	Stainless steel	X5CrNi18-10

Pressure and Temperature Range

Maximum operating pressure 16 bar
Maximum operating temperature 200°C

How to order: CODE

Strainer (DIN), bronze, Y-type, BSP female threaded, SIZE DN

Unit Per Pc.

CODE	DN	Size mm		Weight Kg	Strainer		
					Diam.	Height	Area
		L	H		mm		[cm²]
75 68 01	1/4"	72	45	0.4	18	48	27
02	3/8"	72	45	0.4	18	48	27
03	1/2"	85	55	0.5	23	56	40
04	3/4"	100	65	0.8	28	68	60
05	1"	120	75	1.2	36	82	93
75 68 06	1-1/4"	140	90	1.9	42	98	129
07	1-1/2"	160	100	2.5	50	114	179
08	2"	205	160	6.0	62	119	230
09	2-1/2"	245	185	11	79	134	330
10	3"	265	205	13	90	149	419

DIN Flanged End

DN 15 - DN 40

DN 50 - DN 250

Perforation Size

Size	Perforation Size		
	Standard Φ mm	Fine Φ mm	Coarse Φ mm
DN 15 thru DN 50	1.0		
DN 65 and DN 80	1.25	0.25	3.0
DN 100 thru DN 250	0.6		

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Threaded Cap thru DN80	Brass	
Bolted Cover starting from DN100	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Strainer Element up to DN80	Stainless steel	X5CrNi18-10
Strainer Element from DN 100	Nickel	

How to order: CODE

Strainer (DIN), bronze, Y-type, DIN flanged end, SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight Kg	Strainer		
						Diam.	Height	Area
		A	L	H		mm		[cm²]
75 68 11	15	95	125	70	1.5	23	56	40
12	20	105	140	80	2.4	28	68	60
13	25	115	160	95	3.2	36	82	93
14	32	140	180	115	5.5	42	98	129
15	40	150	200	125	6.6	50	114	179
75 68 16	50	165	230	165	11	62	119	230
17	65	185	265	185	15	79	134	330
18	80	200	285	205	20	90	149	419
19	100	220	360	295	35.5	105	265	874
20	125	250	420	330	58	130	310	1,265
75 68 21	150	285	460	380	87	155	340	1,655
22	200	340	590	485	128	205	450	2,897
23	250	395	750	640	210	258	595	4,820

Strainers (DIN)

Cast Iron , DIN Flanged Ends
Pressure Rating PN 16

Filtros (DIN) Hierro fundido , DIN Extremos con bridas
ストレーナー（DIN） 鋳鉄、DIN フランジ
过滤器（DIN） 铸铁 ，DIN 法兰端

Suitable for use in horizontal and vertical pipelines with a downward flow.

Perforation Size

Size	Perforation Size		
	Standard Φ mm	Fine Φ mm	Coarse Φ mm
DN 10 thru DN 50	1.0		
DN 65 and DN 80	1.25	0.25	3.0
DN 100 thru DN 400	1.6		

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast iron	GJL-250 (GG-25)
Bolted Cover	Cast iron	GJL-250 (GG-25)
Strainer Element	Stainless steel	X5CrNi18-10

Pressure and Temperature Range
16 bar – 120°C
13 bar – 200°C

How to order: CODE
Strainer (DIN), cast iron, Y-type, DIN flanged end, pressure rating PN 16, SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight Kg	Strainer		
						Diam.	Height	Area [cm²]
		A	L	H		mm		
75 68 25	15	95	130	90	4	23	56	40
26	20	105	150	100	5	28	68	60
27	25	115	160	115	6	36	82	93
28	32	140	180	125	8	42	98	129
29	40	150	200	150	10	50	114	179
75 68 30	50	165	230	160	13	61.5	119	230
31	65	185	290	180	19	78.5	134	330
32	80	200	310	215	24.5	89.5	149	419
33	100	220	350	235	35	109.5	169	581
34	125	250	400	275	51	138	199	859
75 68 35	150	285	480	305	71	160	224	1,125
36	200	340	600	390	144	210	284	1,873
37	250	395	730	540	175	258	434	3,516
38	300	445	850	680	290	308	555	5,368
75 69 15	400	580	1,100	835	461	415	695	8,947

Strainers (DIN)
Single Basket, DIN Flanges PN10/16 Ductile Cast Iron

Filtros (DIN), Cesta simple, bridas DIN PN10/16, Fundición dúctil
ストレーナー（DIN）DIN フランジ　ダクタイル鋳鉄
过滤器（DIN）　单篮筐，DIN 法兰 PN10/16，球墨铸铁

Simplex Basket Strainer for general use. Fitted with a fluid drain plug and suitable for use in horizontal pipe lines only. Ductile Cast Iron body with epoxy coating treatment on the surface (internal and external). Maximum differential pressure at 20°C is 1 bar.

Material specification

Component	Material	EN and/or (DIN)
Body and cover	Ductile cast iron	GJS-500-7(GGG-50)
Cover seal	NBR	
Drain plug	Stainless Steel	
Material bleed screw	Stainless steel	

How to order: CODE
Strainer (DIN), single, basket, ductile cast iron, DIN flanges PN 10/16, SIZE DN

Unit Per Pc.

CODE	DN	L	D	H1	H2	H3	H4	G	Weiht Kg
87 20 52	20	171	81	156	178	220	330	3/8"	6
53	25	171	81	156	178	220	330	3/8"	6
54	32	189	102	164	214	250	420	3/8"	15
55	40	189	102	164	214	250	420	3/8"	15
56	50	189	102	164	214	250	420	3/8"	15
87 20 57	65	230	127	214	282	315	530	3/8"	25
58	80	279	168	235	313	350	610	3/8"	28
59	100	317	176	324	427	465	810	3/8"	42
60	125	379	222	324	452	510	900	3/8"	55
61	150	461	262	389	540	580	1,090	3/8"	75

(to be continued)

Unit Per Pc.

CODE	DN	L	D	H1	H2	H3	H4	G	Weiht Kg
87 20 62	200	605	322	489	694	745	1,340	3/8"	140
63	250	604	402	605	815	880	1,550	3/8"	195
64	300	719	472	730	974	1,035	1,860	3/8"	300

DIN Mud Boxes

Cast Iron Mud Boxes (DIN)
Basket Type, Raised face flanged according to DIN PN 10

Cajas de lodo de hierro fundido (DIN)
Tipo cesta, cara elevada con brida según DIN PN 10
鋳鉄製マッドボックス（DIN）
铸铁泥浆箱（DIN），篮式，
凸面法兰，符合 DIN PN 10
标准

Sraight

Angle

Mud boxes are installed in suction pipes aboard vessels to protect pumps against large solids. Straight type, Cast Iron body and bonnet mud box with Stainless Steel strainer. Fitted with bonnet lifting eyebolt. Raised face flanges.

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast Iron	GG-25
Disk	Stainless Steel	1.4432
O-ring	Rubber	NBR
Bonnet	Cast Iron	GG25

Applications
Fuel oil, Lubricating oil, Flammable hydraulic oil, Sea water, Water.

How to order : CODE
Mud box (DIN), basket type, cast iron, flat flanged according to DIN PN 10, STRAIGHT or ANGLE, SIZE DN

Straight

Unit per Pc.

CODE	DN	Size mm						Weight kg
		Hcd	D	L	H	D1	H1	
87 20 65	40	110	150	200	191	111	95	6.9
66	50	125	165	230	208	136	106	10
67	65	145	185	290	239	172	134	14
68	80	160	200	310	270	190	156	17
69	100	180	220	350	309	350	185	24
87 20 70	125	210	250	400	385	400	229	36
71	150	240	285	480	436	480	268	47
73	200	295	340	600	538	387	335	84
74	250	350	395	600	589	479	355	116
84	300	400	478	600	640	479	380	135

MESON Model No.: 100.1.9.9.1

Angle

Unit per Pc.

CODE	DN	Size mm						Weight kg
		Hcd	D	L	H	D_1	H_2	
87 20 75	40	110	150	125	228	136	179	8.9
76	50	125	165	135	241	172	198	12
77	65	145	185	150	265	190	231	15
78	80	160	200	175	297	229	263	21
79	100	180	220	195	347	270	318	27
87 20 80	125	210	250	220	381	302	365	38
81	150	240	285	270	455	387	424	56
83	200	295	340	300	523	479	528	92
85	250	350	395	390	635	479	655	113
86	300	400	478	450	729	639	769	172
87 20 87	350	460	505	400	735	665	862	250

MESON Model No.: 101.1.9.9.1

DIN Sight Glasses

Sightglasses (DIN)

Brass, BSP Female Threaded Ends

Mirillas (DIN), Latón, extremos roscados hembra BSP
サイトグラス（DIN）、黄銅、BSP 雌ネジ端
视镜（DIN）黄铜，英制锥螺纹内螺纹端头

The small sizes are generally used to check the operation of the steam traps. For checking the liquid flow in open systems as well as a possible discolouring of liquids in open and closed systems (such as lubricating oil).

Single-window Double-window

Material Specification

Component	Material	EN and/or (DIN)
Single-window		
Body	Brass	
Glass	Soda lime	
Gaskets	Graphite	
Double-window		
Body and cover (1/2" thru 1")	Brass	
Body (DN 1/" thru 2")	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Glass	Soda lime	
Gaskets	Graphite	

Pressure and Temperature Range

Pressure and Temperature Range	Max. Pressure	Max. Temperature
5 bar – 90°C/3.5 bar – 148°C	5 bar	148°C

Single Window Type

How to order: CODE

Sight glass (DIN), brass BSP female threaded ends, single window, SIZE DN

Unit Per Pc.

CODE	DN	Size mm		Weight Kg	CODE	DN	Size mm		Weight Kg
		E	L				E	L	
75 68 61	1/2"	50	89	0.6	**75 68 63**	1"	50	89	0.9
62	3/4"	50	89	0.7					

Double Window Type

How to order: CODE

Sight glass (DIN), brass or bronze, BSP female threaded ends, double window, SIZE DN

Unit Per Pc.

CODE	d	Size mm		Weight Kg	CODE	d	Size mm		Weight Kg
		E	L				E	L	
75 68 75	1/2"	50	89	0.9	**75 68 78**	1-1/4"	50	108	1.8
76	3/4"	50	89	0.9	**79**	1-1/2"	50	108	1.9
77	1"	50	89	1.2	**80**	2"	50	114	2.5

Note: Material of body 1/2" to 1" = Brass, 1-1/4" to 2"= Bronze

DIN Overflow Valves

Overflow & Pressure Control Valves

Gunmetal

Válvulas de rebose y de control de presión, Bronce de cañón
DIN 型砲金圧力逃がし弁
溢流阀和压力控制阀，炮铜色

Marine Type Approvals held for these valves:

- DNV
- Lloyd's Register EMEA
- American Bureau of Shipping
- Bureau Veritas
- Russian Maritime Register of Shipping

Overflow and pressure control valves made of gunmetal with stainless steel spring. Suitable for liquids, steam and gaseous media.

Available models:

- **618 tGFO** Gastight version

Available seals:

- **NBR**
- **PTFE**
- **FKM**

Ranges of adjustment: 0.2 - 0.8 bar
0.5 - 2.5 bar
2.0 - 12 bar
12 - 20 bar with PTFE seal

Valves can be delivered unset within a pressure range or set and sealed at the factory.

Component	Material	DIN EN	ASME
Inlet body	Gunmetal	CC499K	CC499K
Outlet body	Gunmetal	CC499K	CC499K
Internal parts	Brass/Gunmetal	CW617N/CC499K	CW617N/CC499K
Spring	Stainless steel	1.4310	302

618tGFO

618tGFO Gastight version

NBR Seal

Unit Per Pc.

CODE	DN	Size mm					Weight Kg
		L	H	h	SW	d0	
75 69 71	G3/8"	27	66	26	24	10	0.3
72	G1/2"	29	74	30	28	13	0.4
73	G3/4"	34	83	35	34	19	0.7
74	G1"	42	100	43	41	25	1.2
75	G1-1/4"	46	117	46	52	30	1.9
75 69 76	G1-1/2"	51	136	52	58	38	2.5
77	G2"	60	146	61	70	50	3.8
Range of Adjustment		0.2 - 20 bar					

Goetze KG : Models 618tGFO NBR

PTFE Seal

Unit Per Pc.

CODE	DN	Size mm					Weight
		L	H	h	SW	d0	Kg
75 69 61	G3/8"	27	66	26	24	10	0.3
62	G1/2"	29	74	30	28	13	0.4
63	G3/4"	34	83	35	34	19	0.7
64	G1"	42	100	43	41	25	1.2
65	G1-1/4"	46	117	46	52	30	1.9
75 69 66	G1-1/2"	51	136	52	58	38	2.5
67	G2"	60	146	61	70	50	3.8
Range of Adjustment		0.2 - 20 bar					

Goetze KG : Models 618tGFO PTFE

Overflow Valves

Gunmetal & Stainless Steel

Válvulas de rebose , Bronce de cañón y acero inoxidable
砲金ステンレス製オーバーフロー弁
溢流阀 、炮铜和不锈钢

Marine Type Approvals held for these valves:
- DNV
- Lloyd's Register EMEA
- American Bureau of Shipping
- Bureau Veritas
- Russian Maritime Register of Shipping

Overflow and pressure control valves made of gunmetal with stainless steel spring. Suitable for liquids, steam and gaseous media. Adjustable under operating conditions without medium escaping in the atmosphere. Gastight version of spring housing.

Available models:
- **617tGFO gastight version for gases and liquids - without lifting device**

Available seals :
- **NBR**
- **FKM**
- **EPDM**
- **PTFE**

Ranges of adjustment: 0.5 – 2.5 bar
2.0 – 8.0 bar
2.0 – 12 bar
12 – 20 bar (with PTFE seal)

Valves can be delivered unset within a pressure range or set and sealed at the factory.
All models are also available in **Stainless Steel** : series **417**.

Series 617 (Gunmetal)

Component	Material	DIN EN	ASME
Inlet Body	Gunmetal	CC499K	CC499K
Outlet Body	Gunmetal	CC499K	CC499K
Internal Parts	Brass	CW617N	CW617N
Spring	Stainless steel	1.4310	302

How to order: CODE

Overflow Valve (DIN), Gunmetal, MODEL "617tGFO", SIZE DN, SPECIFY THE SEALS FROM "NBR", "FKM", or "PTFE"

Model 617tGFO gastight version for gases and liquids - without lifting device

Unit Per Pc.

CODE	DN	Size mm					Weight
		L	H	h	SW	d0	Kg
75 71 61	G3/8"	27	60	26	24	10	0.3
62	G1/2"	30	69	30	28	13	0.4
63	G3/4"	33	86	35	34	19	0.7
64	G1"	40	101	41	41	25	1.2
65	G1-1/4"	45	118	45	52	30	1.9
75 71 66	G1-1/2"	50	139	51	58	38	2.5
67	G2"	60	149	60	70	50	3.8
Range of Adjustment		0.2 - 20 bar					

Goetze KG : Models 617tGFO
**Please specify the seal from NBR, FKM and PTFE when ordering.

Series 417 (Stainless Steel)

Component	Material	DIN EN	ASTM / AISI
Inlet Body	Stainless steel	1.4404/1.4408	316L/CF-8M
Outlet body	Stainless steel	1.4404/1.4408	316L/CF-8M
Internal Parts	Stainless steel	1.4404	316L
Spring	Stainless steel	1.4310	302

How to order: CODE

Overflow Valve (DIN), Stainless Steel, MODEL "417tGFO", SIZE DN, SPECIFY THE SEALS FROM "NBR", "FKM", or "PTFE"

Model 417tGFO gastight version for gases and liquids without lifting device

Unit Per Pc.

CODE	DN	Size mm						Weight
		L	H	h	SW1	SW2	d0	Kg
75 71 68	G3/8"	30	60	29	26	24	10	0.3
69	G1/2"	34	69	33	30	27	13	0.4
70	G3/4"	40	86	36	36	31	19	0.7
71	G1"	46	101	48	46	41	25	1.2
72	G1-1/4"	50	118	52	55	50	30	1.9
75 71 73	G1-1/2"	61	139	60	58	65	38	2.5
74	G2"	67	149	66	70	70	50	3.8
Range of Adjustment		0.2 - 20 bar						

Goetze KG : Models 417tGFO
**Please specify the seal from NBR, FKM and PTFE when ordering.

Overflow Valves

Gunmetal & Stainless Steel with Stainless Steel Spring

Válvulas de rebose , Bronce de cañón y acero inoxidable con muelle de acero inoxidable
砲金ステンレス製オーバーフロー弁
溢流阀 、炮铜和不锈钢材质，带不锈钢弹簧

Marine Type Approvals held for these valves:
- DNV
- Lloyd's Register EMEA
- American Bureau of Shipping
- Bureau Veritas
- Russian Maritime Register of Shipping
- Resistro Italiano Navale

Angular shaped spring loaded overflow valves made of gunmetal with stainless steel spring – externally adjustable. Suitable for the protection of pumps against overloading in closed circuits for neutral / non neutral, non-sticking liquids and for the control of systems under pressure for neutral / non-neutral gases and vapours and – depending on the sealing material – also for steam. with bellows without lifting device.

Available models:
- **853 bGFO**
  with bellows, for gases and liquids
  without lifting device

Available seals :
- **NBR**
- **EPDM**
- **FKM**
- **PTFE**
- **FFKM**

Valves can be delivered unset within a pressure range or set and sealed at the factory.

Series also available in **Stainless Steel**: Series **453**.

Series 853 (Gunmetal)

Component	Material	DIN EN	ASME
Inlet body	Gunmetal	CC499K	CC499K
Outlet body	Gunmetal	CC499K	CC499K
Internal parts	Stainless steel	1.4404	316L
Bellows	Stainless steel	1.4571	316Ti
Spring	Stainless steel	1.4310	302

How to order: CODE
Overflow Valve (DIN), Gunmetal, with Stainless Steel Spring, MDL "853bGFO", SIZE DN, SPECIFY THE SEALS FROM "NBR", "EPDM", "FKM", "PTFE", or "FFKM"

Model 853bGFO

Unit Per Pc.

CODE	DN	Connection	Size mm									Weight Kg
			G1	L	H	H1	h	h1	SW1	SW2	d0	
75 71 75	15	G1/2"	1"	40	102	120	30	16	30	40	16	0.5
76	20	G3/4"	1-1/4"	43	169.5	190.5	39	14	36	50	18	1
77	25	G1"	1-1/2"	50	223	248.5	45	19	46	58	23	2
78	32	G1-1/4"	2"	61	318	344	55	21	55	70	30	4.2
79	32	G1-1/2"	2"	61	318	344	69	22.5	55	70	30	4.5
75 71 80	32	G2"	2"	61	318	344	74	25	70	70	30	4.7
Range of Adjustment			0.5 - 50 bar									

Goetze KG: 853bGFO
**Please specify the seal from NBR, EPDM, FKM, PTFE or FFKM when ordering.

Series 453 (Stainless Steel)

Component	Material	DIN EN	ASME
Inlet body	Stainless Steel	1.4404	316L
Outlet body	Stainless Steel	1.4408	CF8M
Internal parts	Stainless Steel	1.4404	316L
Bellows	Stainless Steel	1.4571	316Ti
Spring	Stainless Steel	1.4310	302

How to order: CODE
Overflow Valve (DIN), Stainless Steel, with Stainless Steel Spring, MDL "453bGFO", SIZE DN, SPECIFY THE SEALS FROM "NBR", "EPDM", "FKM", "PTFE", or "FFKM"

Model 453bGFO

Unit Per Pc.

CODE	DN	Connection	Size mm									Weight Kg
			G1	L	H	H1	h	h1	SW1	SW2	d0	
75 71 81	15	G1/2"	1"	40	102	120	30	16	30	40	16	0.5
82	20	G3/4"	1-1/4"	43	169.5	190.5	39	14	36	50	18	1
83	25	G1"	1-1/2"	50	223	248.5	45	19	46	58	23	2
84	32	G1-1/4"	2"	61	318	344	55	21	55	70	30	4.2
85	32	G1-1/2"	2"	61	318	344	69	22.5	55	70	30	4.5
75 71 86	32	G2"	2"	61	318	344	74	25	70	70	30	4.7
Range of Adjustment			0.5 - 70 bar									

Goetze KG: 453bGFO
**Please specify the seal from NBR, EPDM, FKM, PTFE or FFKM when ordering.

Overflow Valves
Gunmetal & Stainless Steel

Válvulas de rebose de bronce industrial y acero inoxidable
砲金/ステンレス製オーバーフロー弁
炮铜/不锈钢制 溢流阀

Marine Type Approvals held for these valves:
- DNV
- Lloyd's Register EMEA
- American Bureau of Shipping
- Bureau Veritas
- Russian Maritime Register of Shipping
- Resistro Italiano Navale

Overflow and pressure control valves made of gunmetal and spring made of Spring steel with anti-rust protection with threaded connections. For protection of pumps against overloading in closed circuits for neutral, non-neutral, non-sticking liquids and for control of systems under pressure for air, neutral / non-neutral gases and vapours.

Standard thread: BSPTm. Also available in female BSP-P for sizes up to 1" (PLEASE CLEARLY INDICATE IN THE ORDER:"f/f" or "BSPTm/BSPTm").

Valves can be delivered unset within a pressure range or set and sealed at the factory (against surcharge).

Set pressure: 0.5 – 10 bar

Ranges of adjustment: 0.5 – 2 bar
1.5 – 6 bar
5.5 – 10 bar

Available seals : EPDM, FKM

Also available in **Stainless Steel**: **series 430**.

How to order: CODE
Overflow Valve (DIN), Gunmetal, MDL "630mGFO" SIZE DN, SPECIFY THE SEALS FROM "EPDM" or "FKM"

Series 630 (Gunmetal)

Component	Material	DIN EN	ASME
Inlet body	Gunmetal	CC499K	CC499K
Outlet body	Gunmetal	CC499K	CC499K
Internal parts	Gunmetal brass Stainless steel	CC499K/ CW617N	CC499K/CW617N 316L
Valve seat	Stainless steel	1.4404	ASTM A228
Spring	Spring steel with anti-rust protection	1.1200	

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	l	H	h	
75 71 87	15	142	80	102	33	1.2
88	20	158	90	102	33	1.4
89	25	180	100	130	45	2.4
90	32	193	105	130	45	2.6
91	40	226	130	165	70	5.5
75 71 92	50	252	140	165	70	6
Range of Adjustment		0.5 - 10 bar				

Goetze KG: 630mGFO
**Please specify the seal from EPDM or FKM when ordering.

Series 430 (Stainless Steel)

Component	Material	DIN EN	ASME
Body	Stainless steel	1.4408	CF-8M
Internal parts	Stainless steel	1.4408/1.4404	CF-8M / 316L
Valve seat	Stainless steel	1.4404	316L
Spring	Spring steel with anti-rust protection	1.1200	ASTM A228

How to order: CODE

Overflow Valve (DIN), Stainless Steel, MDL "430mGFO" SIZE DN, SPECIFY THE SEALS FROM "EPDM" or "FKM"

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		L	l	H	h	
75 71 93	15	142	80	102	33	1.2
94	20	158	90	102	33	1.3
95	25	180	100	130	45	2.3
96	32	193	105	130	45	2.5
97	40	226	130	165	70	5.2
75 71 98	50	252	140	165	70	5.7
Range of Adjustment		0.5 - 10 bar				

Goetze KG: 430mGFO
**Please specify the seal from EPDM or FKM when ordering.

Overflow & Pressure Control Valves

Stainless Steel

Válvulas de rebose y de control de presión, Acero inoxidable
ステンレス製オーバーフロー弁
溢流阀和压力控制阀、不锈钢

Marine Type Approvals held for these valves:
- DNV
- Lloyd's Register EMEA
- American Bureau of Shipping
- Bureau Veritas
- Russian Maritime Register of Shipping

Overflow and pressure control valves made of Stainless steel. Suitable for liquids, steam and gaseous media. Gastight version of spring housing.

Available models:
- **418tGFO gastight version for gases and liquids - without lifting device**

Available seals :
- **NBR**
- **FKM**
- **PTFE**
- **EPDM**

Ranges of adjustment: 0.2 – 1.2 bar
1.2 – 3.0 bar
2.0 – 12 bar
12 – 30 bar

Valves can be delivered unset within a pressure range or set and sealed at the factory.

Component	Material	DIN EN	ASME
Inlet body	Stainless steel	1.4404	316L
Outlet body	Stainless steel	1.4408	CF8M
Internal parts	Stainless steel	1.4404	316L
Spring	Stainless steel	1.4310	302

How to order: CODE

Overflow Valve (DIN), Stainless Steel, SIZE DN, MODEL "418tGFO", SPECIFY THE SEAL FROM "NBR", "FKM", "EPDM", or "PTFE"

Model 418tGFO

Unit Per Pc.

CODE	DN	Size mm						Weight Kg
		L	H	h	SW1	SW2	d0	
75 69 79	G3/8"	34	73	33	30	28	10	0.5
80	G1/2"	34	73	33	30	28	14	0.5
88	G3/4"	40	84	36	36	32	16	0.8
89	G1"	50	98	48	50	41	25	1.8
90	G1-1/4"	50	98	48	50	50	25	1.9
Range of Adjustment		0.2 - 30 bar						

Goetze KG: 418tGFO
**Please specify the seal from NBR, FKM, EPDM, and PTFE when ordering.

Overflow Valves

Gunmetal & Stainless Steel

Válvulas de rebose , Bronce de cañón y acero inoxidable
砲金・ステンレス製オーバーフロー弁
溢流阀 、炮铜和不锈钢

Marine Type Approvals held for these valves:

- DNV
- Lloyd's Register EMEA
- American Bureau of Shipping
- Bureau Veritas
- Russian Maritime Register of Shipping
- Resistro Italiano Navale

Overflow and pressure control valves made of gunmetal and spring made of Spring steel with anti-rust protection with flange connections. For protection of pumps against overloading in closed circuits for neutral, non-neutral, non-sticking liquids and for control of systems under pressure for air, neutral / non-neutral gases and vapours.

Ranges of adjustment:

0.5 – 2 bar	(From DN15 to DN 50)
1.5 – 6 bar	(From DN15 to DN 50)
5.5 – 10 bar	(From DN15 to DN 50)
1 – 5.5 bar	(DN100)
1 - 6 bar	(DM65 and DN80)

Available seals: EPDM, FKM

Also available in **Stainless Steel: series 431**.

How to order: CODE

Overflow Valve (DIN), Gunmetal, MDL "631mGFO" SIZE DN, SPECIFY THE SEALS FROM "EPDM" or "FKM"

Series 631 (Gunmetal)

Component	Material	DIN EN	ASME
Body	Gunmetal	CC499K	CC499K
Internal parts	Gunmetal Brass Stainless steel	CC499K CW617N 1.4404	CC499K CW617N 316L
Valve seat	Stainless steel	1.4404	316L
Spring	Spring steel with anti-rust protection	1.1200	ASTM A228

Unit Per Pc.

CODE	DN	PN	Size mm				Weight Kg
			L	D	H	h	
75 71 99	15	40	130	95	102	46	2.8
75 72 09	20	40	150	105	130	50	4.2
10	25	40	160	115	130	55	4.7
18	32	40	180	140	130	68	5.9
19	40	40	200	150	166	73	8.6
75 72 20	50	40	230	165	166	80	10.5
27	65	16	290	185	245	89	20
28	65	40	290	185	245	89	20
29	80	40	310	200	245	97	22
75 72 00	100	16	350	220	320	112	40
Range of Adjustment			0.5 - 10 bar (depending on size)				

Goetze KG : 631mGFO
**Please specify the seal from EPDM or FKM when ordering.

Series 431 (Stainless Steel)

Component	Material	DIN EN	ASME
Body	Stainless Steel	1.4408	CF-8M
Internal Parts	Stainless Steel	1.4408/1.4404	CF-8M/316L
Valve seat	Stainless Steel	1.4404	316M
Pressure Spring	Spring steel with anti-rust protection.	1.1200	ASTM A228

How to order: CODE

Overflow Valve (DIN), Stainless Steel, MDL "431mGFO", SIZE DN, SPECIFY THE SEALS FROM "EPDM" or "FKM"

Unit Per Pc.

CODE	DN	PN	Size mm				Weight Kg
			L	D	H	h	
75 73 00	15	40	130	95	102	46	2.8
75 72 30	20	40	150	105	130	50	3.9
37	25	40	160	115	130	55	4.3
38	32	40	180	140	130	68	5.5
39	40	40	200	150	166	73	8.4
75 72 40	50	40	230	165	166	80	10.2
53	65	16	290	185	245	89	18.7
54	65	40	290	185	245	89	19
55	80	40	310	200	245	97	20.5
75 77 81	100	16	350	220	320	112	38
Range of Adjustment			0.5 - 10 bar (depending on size)				

Goetze KG : 431mGFO
**Please specify the seal from EPDM or FKM when ordering.

DIN Saftv Valves

Safety Relief Valves (DIN)

Brass, Spring-loaded, BSP Female Threaded Ends Low Capacity Maximum 10 bar

Válvulas de Seguridad de Latón (según DIN)
DIN型真ちゅうネジ式安全弁　　DIN型黄铜安全阀

Safety relief valves with threaded connection, can be used for many simple applications. Suitable for gases, vapours and liquids.

Specific features and applications:

Viton Disc Seal:	Saturated steam and hot water, available including Stoomwezen/Lloyd's Register test certificate on request.
Nitrile Disc Seal:	Including diaphragm, for water, air and other non-aggressive gases.

Viton Disc Seal

W/O Disc Lever　W/Disc Lever　Nitrile Disc Seal

Material Specification

Component	Material	EN and/or (DIN)
	Viton Disc Seal	
Body, Disc, Bonnet Disc Sealing Ring Spring	Brass FPM(Viton) Spring steel	CuZn39Pb3
	Nitrile Disc Seal	
Body, Bonnet Diaphragm Spring	Brass NBR Spring steel	CuZn40Pb2

Temperature Range
Viton Disc Seal +150°C
Nitril Disc Seal +95°C (for oil +30°C)

Viton Disc Seal without Disc Lever

How to order: CODE

Safety relief valve (DIN), brass, spring-loaded, BSP female threaded ends, viton disc seal w/o disc lever, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		do	L1	L2	H	
75 70 01	1/2"	13	32	26	70	0.4
02	3/4"	19	37	30	75	0.6
03	1"	25	43	36	105	1.0
04	1-1/4"	31	50	40	105	1.4
05	1-1/2"	36	60	40	125	2.3
75 70 06	2"	50	70	52	130	3.2

Viton Disc Seal with Disc Lever

How to order: CODE

Safety relief valve (DIN), brass, spring-loaded, BSP female threaded ends, viton disc seal w/o disc lever, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		do	L1	L2	H	
75 70 11	1/2"	13	32	26	110	0.8
12	3/4"	19	37	30	121	1.0
13	1"	25	43	36	147	1.5
14	1-1/4"	31	50	40	150	2.0
15	1-1/2"	36	60	40	175	3.3
75 70 16	2"	50	70	52	171	4.0

Nitrile Disc Seal with Disc Lever

How to order: CODE

Safety relief valve (DIN), brass, spring-loaded, BSP female threaded ends, nitrile disc deal w/disc lever, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight Kg
		do	L1	L2	H	
75 70 21	1/2"	13	26	21	95	0.4
22	3/4"	14	30	26	116	0.6
23	1"	16	36	30	123	0.7

Overflow Valves (DIN)

Bronze, DIN Flanges, Globe Type Straight and Angle Pattern

Válvulas de Seguridad de Alivio (según DIN)
DIN型青銅安全レリーフ弁　DIN型安全溢流阀

Bronze overflow valves are primarily applied in the maritime segment for pressure regulation in liquid systems. Suitable for salt and fresh water, oil, steam and air.

Remark: This valve may also be used as a safety valve aboard ships. In connection with the PED guidelines, this is not permitted for installations on land, if the set pressure is >0.5 bar.

Straight

Angle

Temperature Range: 120°C

Material Specification

Component	Material	EN and/or (DIN)
Body	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))
Disc, Stem, Guide Bush	Brass	CuZn39Pb3
Spring	Spring steel	
Gasket	Graphite	
Bonnet DN15-DN20	Brass	CuZn39Pb3
Bonnet DN25-DN125	Bronze	CuSn5Zn5Pb5-C (G-CuSn5ZnPb (Rg 5))

Capacity for Water in kg/hour at 20°C

P [bar]	DN [mm]									
	15	20	25	32	40	50	65	80	100	125
0.5	341	607	948	1553	2427	3792	6408	9706	15166	23697
1	483	858	1341	2196	3432	5362	9062	13727	21448	33513
1.5	591	1051	1642	2690	4203	6567	11098	16812	26268	41044
2	682	1213	1896	3106	4853	7583	12815	19412	30332	47394
3	836	1486	2322	3804	5944	9287	15695	23775	37148	58044
4	965	1716	2681	4393	6863	10724	18124	27453	42896	67025
5	1079	1918	2997	4911	7673	11990	20262	30693	47958	
6	1182	2101	3284	5380	8406	13134	22196	33623	52536	
7	1277	2270	3547	5811	9079	14187	23975	36317		
8	1365	2427	3792	6212	9706	15166	25631	38825		
9	1448	2574	4021	6589	10295	16086	27184			
10	1526	2713	4239	6945	10852	16956	28656			
11	1601	2845	4446	7284	11381	17784				
12	1672	2972	4644	7608	11887	18574				
13	1740	3093	4833	7919	12373	19333				
14	1806	3210	5016	8218	12840	20063				
15	1869	3323	5192	8506	13291	20767				
16	1930	3432	5362							

How to order: CODE

Overflow valve (DIN), bronze, DIN flanges, STRAIGHT or ANGLE, SIZE DN

Straight

Unit Per Pc.

CODE	DN	Max. Set Pressure (bar)	Size mm			Weight Kg
			A	L	H	
75 70 31	15	0 - 16	95	120	185	4.0
32	20	0 - 16	105	120	185	4.1
33	25	0 - 16	115	140	200	5.5
34	32	0 - 15	140	150	200	7.8
35	40	0 - 15	150	155	235	9.8
75 70 36	50	0 - 15	165	180	245	14.0
37	65	0 - 10	185	200	330	18.0
38	80	0 - 8	200	240	345	23.2
39	100	0 - 6	220	270	435	35.5
40	125	0 - 4	250	320	450	50

Angle

Unit Per Pc.

CODE	DN	Max. Set Pressure (bar)	Size mm			Weight Kg
			A	L1	H1	
75 70 41	15	0 - 16	95	65	175	4.0
42	20	0 - 16	105	65	175	4.1
43	25	0 - 16	115	70	185	5.5
44	32	0 - 15	140	90	185	7.8
45	40	0 - 15	150	90	220	9.8
75 70 46	50	0 - 15	165	105	225	14.0
47	65	0 - 10	185	115	320	18.0
48	80	0 - 8	200	125	335	23.2
49	100	0 - 6	220	145	395	35.5
50	125	0 - 4	250	174	490	50

Safety Valves (DIN)

Cast Steel, Spring-Loaded, DIN Flanges, High Capacity Pressure Rating PN 40/16

Válvulas de Alivio de Seguridad (DIN) Acero Fundido, Brida DIN

DIN型鋳鋼フランジ式安全弁　　安全阀（DIN）铸钢，DIN法兰

Full lift Safety Valves are mainly applied to vapours (including steam) and gases. Suitable for liquids in large volumes. Type of Approval: TUV-SV,,, -576 D/G/F, PED, ASME NB, BV, DNV, GL, LROS and RINA.

Material Specification

Component	Material	EN and/or (DIN)
Body	Cast steel	GP240GH +N (GS-C25)
Seat	Stainless steel	X2CrNiMo17-12-2 (G-X2CrNiMo 18 10)
Disc	Stainless steel	X39CrMo17-1 (X35CrMo17)
Stem	Stainless steel	X20Cr13
Spring	Spring steel	
Bonnet	Ductile cast iron	GJS-400-15 (GGG-40)

Temperature Range (DIN EN): -85/+45°C*

*Above 200°C, provided with heat-resistant spring and above 400°C also provided with SS bolts and nuts for the bonnet.

Flange:
Inlet flange (on the bottom) – according to DIN PN40
Outlet flange (on the side) – according to DIN PN16

How to order: CODE

Safety valve (DIN), cast steel, spring-loaded, DIN flanged ends, pressure rating PN 40/16 SIZE DN

Unit Per Pc.

CODE	DN		do	Max. Set Pressure (bar)	a	b	H	Weight Kg
	Inlet	Outlet						
75 70 51	25	40	25	40	100	105	234	9
52	32	50	29	40	110	115	331	12
53	40	65	37	40	115	140	372	16
54	50	80	46	40	120	150	419	22
55	65	100	60	40	140	170	529	32
75 70 56	80	125	74	32	160	195	606	56
57	100	150	92	40	180	220	663	75
58	125	200	98	28	200	250	663	85
59	150	250	125	17	225	285	735	131
60	200	300	165	20	300	290	1,090	285

Capacity Table

I Saturated steam in kg/h
II Air at 0°C and 1,013 mbar in mn³/h
III Water at 20°C in 10³ kg/h

DN	20			25			32		
do	18			23			29		
p	I	II	III	I	II	III	I	II	III
0.2	85	99	3.19	139	161	5.21	222	257	8.28
0.5	134	157	4.51	219	257	7.37	348	409	11.7
1	198	237	6.11	324	386	9.97	515	614	15.9
2	317	383	8.64	517	625	14.1	822	993	22.4
3	427	522	10.6	697	852	17.3	1,108	1,354	27.5
4	533	655	12.2	870	1,069	19.9	1,382	1,700	31.7
5	638	788	13.7	1,041	1,287	22.3	1,656	2,047	35.5
6	743	922	15.0	1,213	1,505	24.4	1,928	2,393	38.8
7	845	1,055	16.2	1,380	1,723	26.4	2,193	2,739	42.0
8	949	1,189	17.3	1,550	1,941	28.2	2,464	3,086	44.8
9	1,053	1,322	18.3	1,719	2,159	29.9	2,733	3,432	47.6
10	1,157	1,456	19.3	1,889	2,377	31.5	3,003	3,778	50.1
12	1,365	1,722	21.2	2,228	2,812	34.6	3,542	4,471	54.9
14	1,568	1,989	22.9	2,560	3,248	37.3	4,070	5,164	59.3
16	1,775	2,256	24.4	2,898	3,684	39.9	4,608	5,856	63.4
18	1,983	2,523	25.9	3,237	4,119	42.3	5,147	6,549	67.3
20	2,191	2,790	27.3	3,577	4,555	44.6	5,686	7,242	70.9
22	2,392	3,057	28.7	3,906	4,991	46.8	6,209	7,934	74.4
24	2,600	3,324	29.9	4,246	5,427	48.9	6,750	8,627	77.7
26	2,809	3,590	31.1	4,586	5,862	50.9	7,291	9,320	80.9
28	3,018	3,857	32.3	4,928	6,298	52.8	7,835	10,012	83.9
30	3,228	4,124	35.5	5,271	6,734	54.6	8,379	10,705	86.3
32	3,439	4,391	34.6	5,615	7,169	56.4	8,926	11,398	89.7
34		4,658	35.6		7,605	58.2		12,090	92.5
36		4,925	36.7		8,041	59.8		12,783	95.1
38		5,192	37.7		8,476	61.5		13,476	97.7
40		5,459	38.6		8,912	63.1		14,169	100

DN	40			50			65		
do	37			46			60		
p	I	II	III	I	II	III	I	II	III
0.2	361	418	13.5	558	646	20.8	949	1,099	35.4
0.5	566	665	19.1	875	1,028	29.5	1,489	1,749	50.1
1	839	999	25.8	1,296	1,545	39.9	2,205	2,628	67.9
2	1,339	1,617	36.5	2,069	2,499	56.4	3,520	4,251	69.0
3	1,804	2,204	44.7	2,788	3,406	69.1	4,744	5,795	118
4	2,250	2,768	51.6	3,478	4,278	79.8	5,918	7,278	136
5	2,695	3,331	57.7	4,165	5,149	89.2	7,087	8,761	152
6	3,138	3,895	63.2	4,850	6,021	97.7	8,252	10,243	166
7	3,570	4,459	68.3	5,518	6,892	106	9,388	11,726	180
8	4,010	5,023	73.0	6,198	7,763	113	10,545	13,208	192
9	4,450	5,587	77.4	6,878	8,635	120	11,701	14,691	204
10	4,889	6,150	81.6	7,556	9,506	126	12,856	16,173	215
12	5,766	7,278	89.4	8,913	11,249	138	15,163	19,138	235
14	6,625	8,405	96.6	10,241	12,992	149	17,423	22,104	254
16	7,501	9,533	103	11,594	14,735	160	19,725	25,069	271
18	8,378	10,661	110	12,949	16,478	169	22,030	28,034	288
20	9,256	11,788	115	14,306	18,220	178	24,339	30,999	304
22	10,107	12,916	121	15,623	19,963	187	26,579	33,964	318
24	10,987	14,043	126	16,982	21,706	195	28,892	36,929	333
26	11,869	15,171	132	18,345	23,449	203	31,211	39,894	346
28	12,753	16,298	137	19,712	25,192	211	33,537	42,859	359
30	13,640	17,426	141	21,083	26,935	219	35,869	45,824	372
32	14,530	18,554	146	22,459	28,677	226	38,210	48,790	384
34		19,681	151		30,420	233		51,755	396
36		20,809	155		32,163	239		54,720	407
38		21,936	159		33,906	246		57,685	418
40		23,064	163		35,649	252		60,650	429

DN	80			100			125		
do	74			92			98		
p	I	II	III	I	II	III	I	II	III
0.2	1,444	1,672	53.9	2,232	2,584	83.3	2,532	2,932	94.6
0.5	2,265	2,661	76.3	3,502	4,113	118	3,973	4,667	134
1	3,355	3,998	103	5,185	6,179	160	5,883	7,011	181
2	5,355	6,467	146	8,277	9,995	226	9,392	11,341	256
3	7,216	8,816	179	11,153	13,626	276	12,655	15,461	314
4	9,002	11,071	206	13,913	17,111	319	15,787	19,416	362
5	10,780	13,326	231	16,662	20,597	357	18,906	23,371	45
6	12,552	15,581	253	19,401	24,083	391	22,014	27,326	444
7	14,281	17,836	273	22,073	27,568	422	25,046	31,281	479
8	16,041	20,091	292	24,794	31,054	451	28,133	35,237	512
9	17,799	22,346	310	27,510	34,540	479	31,216	39,192	543
10	19,555	24,601	326	30,225	38,025	505	34,296	43,147	573
12	23,065	29,112	358	35,650	44,997	553	40,452	51,057	627
14	26,502	33,622	386	40,962	51,968	597	46,479	58,967	678
16	30,004	38,132	413	46,376	58,939	638	52,622	66,878	724
18	33,510	42,642	438	51,795	65,910	677	58,772	74,788	768
20	37,023	47,153	462	57,224	72,882	714	64,932	82,698	810
22	40,430	51,663	484	62,491	79,853	748	70,907	90,608	849
24	43,948	56,173	506	67,928	86,824	782	77,078	98,519	887
26	47,475	60,684	526	73,380	93,796	814		106,429	923
28	51,013	65,194	546	78,848	100,767	844		114,339	958
30	54,561	69,704	565	84,333	107,738	874		122,249	992
32	58,121	74,214	584	89,835	114,710	903		130,160	1,024
34		78,725	602		121,681	931		138,070	1,056
36		83,235	619		128,652	957		145,980	1,086
38		87,745	636		135,623	984		153,890	1,116
40		92,255	653		142,595	1,009		161,801	1,145

DN	150			200		
do	125			165		
p	I	II	III	I	II	III
0.2	4,120	4,770	154	7,178	8,311	268
0.5	6,464	7,593	218	11,263	13,230	379
1	9,572	11,407	295	16,678	19,876	513
2	15,280	18,452	417	26,623	32,150	726
3	20,589	25,154	510	35,873	43,828	889
4	25,685	31,589	589	44,753	55,040	1,027
5	30,758	38,023	659	53,593	66,252	1,148
6	35,815	44,458	722	62,404	77,463	1,257
7	40,748	50,893	779	71,000	88,675	1,358
8	45,770	57,327	833	79,750	99,887	1,452
9	50,786	63,762	884	88,489	111,099	1,540
10	55,797	70,197	932	97,221	122,311	1,623
12	65,812	83,066	1,021	114,671	144,734	1,778
14	75,619	95,936	1,102	131,758	167,158	1,921
16	85,612	108,805	1,178	149,170	189,582	2,053
18	95,617	121,674	1,250	166,603	212,005	2,178
20	105,639	134,544	1,317	184,066	234,429	2,296
22	115,361	147,413	1,382	201,005	256,853	2,408
24	124,339	160,282	1,443	218,496	279,276	2,515
26		173,152	1,502			
28		186,021	1,559			
30		198,891	1,614			
32		211,760	1,666			
34		224,629	1,718			
36		237,499	1,768			
38		250,368	1,816			
40		263,238	1,863			

Remark: I - Saturated steam in kg/hour
II - Air in mn³/hour at 0°C and 1,013 mbar
III - Water at 20°C in 10³kg/hour

Safety Valves
Gunmetal with Stainless Steel Spring

Válvulas de seguridad , Bronce de cañón con muelle de acero inoxidable
砲金安全弁
安全阀 、炮铜色，带不锈钢弹簧

Angular shaped spring-loaded safety valves use for the protection of thermostatically protected closed-circuit water heating systems with flow temperatures of up to 120°C for all static heights or rated output above 350 kW according to TRD 721, DIN 4751 and DIN EN 12828. Should the thermostatic limiting and control unit fail, the safety valve has to blow-off the total heating output of the boiler as hot water and steam. As these valves are completely made of metal they can also be installed at high environmental or radiation temperatures.

Component	Material	DIN EN	ASME
Inlet Body	Gunmetal	CC499K	CC499K
Outlet Body	Gunmetal	CC499K	CC499K
Internal Parts	Stainless steel	1.4404	316L
Spring	Stainless steel	1.4310	302
Bellows	Elastomere	EPDM	-

Unit Per Pc.

CODE		75 62 79	75 62 80
Connection		DN 40 / PN 40	DN 50 / PN 40
Ranges of Adjustment		0.5 - 25 bar	
Size mm	DN1 / PN1	DN 65 / PN 16	DN 80 / PN 16
	H	345	345
	h	140	150
	L	115	120
	Lmax	150	150
	D	150	165
	D1	185	200
	K / n x d	110 / 4 x 18	125 / 4 x 18
	K1 / n1 x d1	145 / 4 x 18	160 / 8 x 18
	d0	37	46
Weight Kg		17	19

Goetze KG : Model 852 bHL

Safety Valves
Gunmetal with Stainless Steel Spring

Válvulas de seguridad , Bronce de cañón con muelle de acero inoxidable
砲金安全弁
安全阀 ， 炮铜色，带不锈钢弹簧

Angular shaped spring-loaded safety valves made of gunmetal with stainless steel spring. Internal parts are made of stainless steel. Suitable for the protection of pressure tanks and systems for neutral / non-neutral vapours, gases and liquids, steam boilers and steam plants, bulk transport vehicles for liquid, granular and dusty goods[1]. Available four versions; Model 852 tGFO gastight without lifting device, Model 852 tGFL gastight with lifting lever, Model 852 bGFO with bellows and without lifting device and Model 852 bGFL with bellows and with lifting lever .

Model 852 tGFO/tGFL:
Sealed cap prevents unauthorized changing of set pressure.

Model 852 bGFO/bGFL:
Set pressure is protected by seal. Spring and sliding parts are protected by bellows.

[1]only for versions with bellows

Component	Material	DIN EN	ASME
Inlet Body	Gunmetal	CC499K	CC499K
Outlet Body	Gunmetal	CC499K	CC499K
Internal Parts	Stainless steel	1.4404	316L
Spring	Stainless steel	1.4310	302
Bellows	Stainless steel	1.4571	316Ti

Model 852tGFO: Gastight without Lifting Device

Unit Per Pc.

CODE		75 62 81	75 62 82
Connection		DN 40 / PN 40	DN 50 / PN 40
Ranges of Adjustment		0.5 - 25 bar	
Size mm	DN1/PN1	DN 65 / PN 16	DN 80 / PN 16
	H	345	345
	h	140	150
	L	115	120
	D	150	165
	D1	185	200
	K / n x d	110 / 4 x 18	125 / 4 x 18
	K1 / n1 x d1	145 / 4 x 18	160 / 8 x 18
	d0	37	46
Weight kg		17	19

Goetze KG : Model 852tGFO

Model 852tGFL: Gastight with Lever for Lifting

Unit Per Pc.

CODE		75 62 83	75 62 84
Connection		DN 40 / PN 40	DN 50 / PN 40
Ranges of Adjustment		0.5 - 25 bar	
Size mm	DN1/PN1	DN 65 / PN 16	DN 80 / PN 16
	H	345	345
	h	140	150
	Lmax	150	150
	D	150	165
	D1	185	200
	K / n x d	110 / 4 x 18	125 / 4 x 18
	K1 / n1 x d1	145 / 4 x 18	160 / 8 x 18
	d0	37	46
Weight Kg		17	19

Goetze KG : Model 852tGFL

Model 852bGFO: with Bellows, without Lifting Device

Unit Per Pc.

CODE		75 62 85	75 62 86
Connection		DN 40 / PN 40	DN 50 / PN 40
Ranges of Adjustment		0.5 - 25 bar	
Size mm	DN1/PN1	DN 65 / PN 16	DN 80 / PN 16
	H[1]	362	362
	h	140	150
	L	115	120
	Lmax.	150	150
	D	150	165
	D1	185	200
	K / n x d	110 / 4 x 18	125 / 4 x 18
	K1 / n1 x d1	145 / 4 x 18	160 / 8 x 18
	d0	37	46
Weight Kg		18	20

[1]for bellow version
Goetze KG : Model 852bGFO

Model 852bGFL: with Bellows with Lever for Lifting

Unit Per Pc.

CODE		75 62 87	75 62 88
Connection		DN 40 / PN 40	DN 50 / PN 40
Ranges of Adjustment		0.5 - 25 bar	
Size mm	DN1 / PN1	DN 65 / PN 16	DN 80 / PN 16
	H[1]	362	362
	h	140	150
	L	115	120
	Lmax	150	150
	D	150	165
	D1	185	200
	K / n x d	110 / 4 x 18	125 / 4 x 18
	K1 / n1 x d1	145 / 4 x 18	160 / 8 x 18
	d0	37	46
Weight Kg		18	20

[1]for bellow version
Goetze KG : Model 852bGFL

Diaphragm Safety Valves
Red Brass

Válvula de Seguridad de Diafragma Latón Rojo
丹銅ダイヤフラム安全弁　红铜隔膜式安全阀

Angular shape, spring loaded diaphragm safety valve made of Gunmetal. Seal cap prevents unauthorized changing of set pressure. Twist-type lifting mechanism. Installed diaphragm prevents medium from entering the spring chamber. Suitable for protecting closed-circuit water heating systems from -10°C to +95°C.

Component	Material	DIN EN	ASM
Inlet Body	Gunmetal	CC499K	CC499K
Outlet Body	Gunmetal	CC499K	CC499K
Internal Parts	Brass	CW617N	CW617N
Spring	Spring steel with anti-rust protection	1.1200	ASTM A228

Unit Per Pc.

CODE		75 70 71	75 70 72	75 70 73
Connection		G 1/2"	G 3/4"	G 1"
Ranges of Adjustment		6; 8; 10 bar[1]		
Size mm	L	26	31	35
	H	70	70	80
	h	17	18	22
	SW	27	32	40
	D0	10	13	16
Weight Kg		0.2	0.3	0.5
CODE		75 70 74	75 70 75	75 70 76
Connection		G1-1/4"	G1-1/2"	G 2"
Ranges of Adjustment		6; 8; 10 bar[1]		
Size mm	L	40	46	54
	H	100	140	155
	h	25	28	34
	SW	49	56	68
	D0	18	22	25
Weight Kg		0.7	1.2	1.6

[1]Other set pressures available on request against surcharge.
Goetze KG : Model 651mWIK

Diaphragm Safety Valves

for heating and cooling, Gunmetal

Válvulas de seguridad de diafragma para calefacción y refrigeración Gunmetal
砲金ダイヤフラム安全弁 、冷暖房用
隔膜安全阀　用于加热和冷却 枪色

Angular shaped diaphragm safety valves made of gunmetal. Installed diaphragm prevents medium from entering spring chamber. Suitable for protecting thermostatically protected closed-circuit water heating systems with flow temperatures of up to 120 deg. C.

Component	Material	DIN EN	ASME
Inlet Body	Gunmetal	CC499K	CC499K
Outlet Body	Gunmetal	CC499K	CC499K
Internal Parts	Brass	CW617N	CW617N
Spring	Spring steel with anti-rust protection	1.1200	ASTM A228

Unit Per Pc.

CODE		75 70 81	75 70 82	75 70 83	75 70 84	75 70 85
Connection		G 1/2"	G 3/4"	G 1"	G 1-1/4"	G 1-1/2"
Set Pressures		2.5; 3; 3.5 bar				
Size mm	H	65	72	86	160	183
	h	24	28	30	40	40
	L	26	30	38	42	53
	SW	26	32	39	49	56
Weight Kg		0.25	0.4	0.7	1.6	2.5

[1]Other set pressures available on request against surcharge
Goetze KG : Model 651 mHIK

Safety Valves

Gunmetal & Stainless Steel with Stainless Steel Spring

Válvulas de seguridad, Bronce de cañón y acero inoxidable con muelle de acero inoxidable
砲金ステンレス製安全弁
安全阀 炮铜和不锈钢材质、带不锈钢弹簧

Marine Type Approvals held for these valves:

- DNV
- Lloyd's Register EMEA
- American Bureau of Shipping
- Bureau Veritas
- Russian Maritime Register of Shipping

Angular shaped spring loaded safety valves made of gunmetal/stainless steel with stainless steel spring. Sealing cap prevents unauthorized changing of set pressure. Suitable for the protection of pressure-vessels/-systems for neutral / non-neutral vapours, gases and liquids, steam boilers and steam plants, stationary silos and bulk transport vehicles for liquid, granular and powdery goods.

Available models:

- 851 sGK with twist-type lifting mechanism
- 851 sGL with lifting lever
- 851bGFK with bellows and twist-type lifting mechanism
- 851bGFL with bellows and lifting lever

Available seals:

- NBR
- EPDM
- FKM
- PTFE
- PTFE + carbon (standard from 25 bar)
- FFKM
- metal-to-metal sealing

All models are also available in **Stainless Steel**: series **451**.

Series 851 (Gunmetal)

Component	Material	DIN EN	ASME
Inlet Body	Gunmetal	CC499K	CC499K
Outlet Body	Gunmetal	CC499K	CC499K
Internal Parts	Brass	CW617N	CW617N
Spring	Stainless Steel	1.4310	302
Bellows (optional)	Bronze	CW452K	C51900

851sGK, 851bGFK
Size G1/2"

851sGK, 851bGFK
Size over G1/2"

851sGL. 851bGFL

851sGK with twist-type lifting mechanism

Unit Per Pc.

CODE		75 70 70	75 70 77	75 70 78	75 70 30	75 70 79
Connection		G 1/2"	G 1/2"	G 1/2"	G 3/4"	G 3/4"
Ranges of Adjustment		0.5-25 bar		25.1-50 bar	0.5-50 bar	
Size mm	G1	G 1/2"	1"	1"	3/4"	1-1/4"
	L	34	40	40	42	43
	Lmax	65	65	65	91	91
	H	79	77	131	137	138
	H1	93	91	149	154	158
	H2	79	77	131	138	139
	Hmax	105	103	164	169	173
	h	28	30	30	31	39
	h1	15	15	15	16	16
	SW1	30	30	30	36	36
	SW2	-	40	40	32	50
	d0	15.8	15.8	15.8	15.8	18
Weight Kg		0.4	0.4	0.8	1	1

Unit Per Pc.

CODE		75 70 80	75 70 95	75 70 96	75 70 97
Connection		G1"	G1-1/4"	G1-1/2"	G 2"
Ranges of Adjustment		0.5 - 50 bar			
Size mm	G1	G 1-1/2"	2"	2"	2"
	L	50	61	61	61
	Lmax	92	92	92	92
	H	178	241	241	241
	H1	192	264	264	264
	H2	175	241	241	241
	Hmax	207	277	277	277
	h	45	55	69	74
	h1	18	20	23	25
	SW1	46	55	55	70
	SW2	58	70	70	70
	d0	23	30.3	30.3	30.3
Weight Kg		1.8	4.0	4.0	4.0

Goetze KG : Model 851sGK

851sGL with lifting lever

Unit Per Pc.

CODE		75 70 98	75 70 99	75 71 09	75 70 90	75 71 10
Connection		G 1/2"	G 1/2"	G 1/2"	G 3/4"	G 3/4"
Ranges of Adjustment		0.5-25 bar		25.1-50 bar	0.5 - 50 bar	
Size mm	G1	G 1/2"	1"	1"	3/4"	G1-1/4"
	L	34	40	40	42	43
	Lmax	65	65	65	91	91
	H	79	77	131	137	138
	H1	93	91	149	154	158
	H2	79	77	131	138	139
	Hmax	105	103	164	169	173
	h	28	30	30	31	39
	h1	15	15	15	16	16
	SW1	30	30	30	36	36
	SW2	-	40	40	32	50
	d0	15.8	15.8	15.8	15.8	18
Weight Kg		0.4	0.4	0.8	1	1

Unit Per Pc.

CODE		75 71 19	75 71 20	75 71 32	75 71 33
Connection		G1"	G1-1/4"	G1-1/2"	G 2"
Ranges of Adjustment		0.5 - 50 bar			
Size mm	G1	G 1-1/2"	2"	2"	2"
	L	50	61	61	61
	Lmax	92	92	92	92
	H	178	241	241	241
	H1	192	264	264	264
	H2	175	241	241	241
	Hmax	207	277	277	277
	h	45	55	69	74
	h1	18	20	23	25
	SW1	46	55	55	70
	SW2	58	70	70	70
	d0	23	30.3	30.3	30.3
Weight Kg		1.8	4.0	4.0	4.0

Goetze KG : Model 851sGL

851bGFK with bellows and twist-type lifting mechanism

Unit Per Pc.

CODE		75 71 34	75 70 86	75 71 35	75 71 00	75 70 87
Connection		G 1/2"	G 1/2"	G 1/2"	G 3/4"	G 3/4"
Ranges of Adjustment		0.5-25 bar		25.1-50 bar	0.5 - 50 bar	
Size mm	G1	G 1/2"	1"	1"	3/4"	G 1-1/4"
	L	34	40	40	42	43
	Lmax	65	65	65	91	91
	H	79	77	131	137	138
	H1	93	91	149	154	158
	H2	79	77	131	138	139
	Hmax	105	103	164	169	173
	h	28	30	30	31	39
	h1	15	15	15	16	16
	SW1	30	30	30	36	36
	SW2	-	40	40	32	50
	d0	15.8	15.8	15.8	15.8	18
Weight Kg		0.4	0.4	0.8	1	1.8

Unit Per Pc.

CODE		75 70 88	75 70 89	75 71 36	75 71 37
Connection		G 1"	G1-1/4"	G1-1/2"	G 2"
Ranges of Adjustment		0.5 - 50 bar			
Size mm	G1	G 1-1/2"	2"	2"	2"
	L	50	61	61	61
	Lmax	92	92	92	92
	H	178	241	241	241
	H1	192	264	264	264
	H2	175	241	241	241
	Hmax	207	277	277	277
	h	45	55	69	74
	h1	18	20	23	25
	SW1	46	55	55	70
	SW2	58	70	70	70
	d0	23	30.3	30.3	30.3
Weight Kg		1.8	4.0	4.0	4.0

Goetze KG : Model 851bGFK

851bGFL with bellows and lifting lever

Unit Per Pc.

CODE		75 71 38	75 70 91	75 71 39	75 71 49	75 70 92
Connection		G 1/2"	G 1/2"	G 1/2"	G 3/4"	G 3/4"
Ranges of Adjustment		0.5-25 bar		25.1-50 bar	0.5 - 50 bar	
Size mm	G1	G 1/2"	1"	1"	3/4"	G 1-1/4"
	L	34	40	40	42	43
	Lmax	65	65	65	91	91
	H	79	77	131	137	138
	H1	93	91	149	154	158
	H2	79	77	131	138	139
	Hmax	105	103	164	169	173
	h	28	30	30	31	39
	h1	15	15	15	16	16
	SW1	30	30	30	36	36
	SW2	-	40	40	32	50
	d0	15.8	15.8	15.8	15.8	18
Weight Kg		0.4	0.4	0.8	1	1

Unit Per Pc.

CODE		75 70 93	75 70 94	75 71 40	75 71 48
Connection		G 1"	G1-1/4"	G1-1/2"	G 2"
Ranges of Adjustment		0.5 - 50 bar			
Size mm	G1	G 1-1/2"	2"	2"	2"
	L	50	61	61	61
	Lmax	92	92	92	92
	H	178	241	241	241
	H1	192	264	264	264
	H2	175	241	241	241
	Hmax	207	277	277	277
	h	45	55	69	74
	h1	18	20	23	25
	SW1	46	55	55	70
	SW2	58	70	70	70
	d0	23	30.3	30.3	30.3
Weight Kg		1.8	4.0	4.0	4.0

Goetze KG : Model 851bGFL

Series 451 (Stainless Steel):

Component	Material	DIN EN	ASTM/AISI
Inlet Body	Stainless Steel	1.4404	316 L
Outlet Body	Stainless Steel	1.4408	CF8M
Internal Parts	Stainless Steel	1.4404	316 L
Spring	Stainless Steel	1.4310	302
Bellos (optional)	Stainless Steel	1.4571	315 Ti

451sGK, 451bGFK
Size G1/2"

451sGK, 451bGFK
Size over G1/2"

451sGL. 451bGFL

451sGK with twist-type lifting mechanism

Unit Per Pc.

CODE		75 72 56	75 72 57	75 72 58	75 71 50	75 72 59
Connection		G 1/2"	G 1/2"	G 1/2"	G 3/4"	G 3/4"
Ranges of Adjustment		0.5-25 bar		25.1-70 bar	0.5 - 70 bar	
Size mm	G1	G 1/2"	1"	1"	3/4"	G1-1/4"
	L	34	40	40	42	43
	Lmax	65	65	65	91	91
	H	79	77	131	137	138
	H1	93	91	149	154	158
	H2	79	77	131	138	139
	Hmax	105	103	164	169	173
	h	28	30	30	31	39
	h1	15	15	15	16	16
	SW1	30	30	30	36	36
	SW2	-	40	40	32	50
	d0	15.8	15.8	15.8	15.8	18
Weight Kg		0.4	0.4	0.8	1	1

Unit Per Pc.

CODE		75 72 60	75 72 68	75 72 69	75 72 70
Connection		G 1"	G1-1/4"	G1-1/2"	G 2"
Ranges of Adjustment		0.5 - 70 bar			
Size mm	G1	G1-1/2"	2"	2"	2"
	L	50	61	61	61
	Lmax	92	92	92	92
	H	178	241	241	241
	H1	192	264	264	264
	H2	175	241	241	241
	Hmax	207	277	277	277
	h	45	55	69	74
	h1	18	20	23	25
	SW1	46	55	55	70
	SW2	58	70	70	70
	d0	23	30.3	30.3	30.3
Weight Kg		1.8	4.0	4.0	4.0

Goetze KG : Model 451sGK

451sGL with lifting lever

Unit Per Pc.

CODE		75 72 78	75 72 79	75 72 80	75 71 58	75 72 81
Connection		G 1/2"	G 1/2"	G 1/2"	G 3/4"	G 3/4"
Ranges of Adjustment		0.5-25 bar		25.1-70 bar	0.5 - 50 bar	
Size mm	G1	G 1/2"	1"	1"	3/4"	G 1-1/4"
	L	34	40	40	42	43
	Lmax	65	65	65	91	91
	H	79	77	131	137	138
	H1	93	91	149	154	158
	H2	79	77	131	138	139
	Hmax	105	103	164	169	173
	h	28	30	30	31	39
	h1	15	15	15	16	16
	SW1	30	30	30	36	36
	SW2	-	40	40	32	50
	d0	15.8	15.8	15.8	15.8	18
Weight Kg		0.4	0.4	0.8	1	1

Unit Per Pc.

CODE		75 72 82	75 72 83	75 72 84	75 72 85
Connection		G 1"	G1-1/4"	G1-1/2"	G 2"
Ranges of Adjustment		0.5 - 70 bar			
Size mm	G1	G 1-1/2"	2"	2"	2"
	L	50	61	61	61
	Lmax	92	92	92	92
	H	178	241	241	241
	H1	192	264	264	264
	H2	175	241	241	241
	Hmax	207	277	277	277
	h	45	55	69	74
	h1	18	20	23	25
	SW1	46	55	55	70
	SW2	58	70	70	70
	d0	23	30.3	30.3	30.3
Weight Kg		1.8	4.0	4.0	4.0

Goetze KG : Model 451sGL

451bGFK with bellows and twist-type lifting mechanism

Unit Per Pc.

CODE		75 72 86	75 72 87	75 72 88	75 71 59	75 72 89
Connection		G 1/2"	G 1/2"	G 1/2"	G 3/4"	G 3/4"
Ranges of Adjustment		1-25 bar		25.1-70 bar	1-70 bar	0.5-70 bar
Size mm	G1	G 1/2"	1"	1"	3/4"	G 1-1/4"
	L	34	40	40	42	43
	Lmax	65	65	65	91	91
	H	79	77	131	137	150
	H1	93	91	149	154	170
	H2	79	77	131	138	151
	Hmax	105	103	164	169	185
	h	28	30	30	31	39
	h1	15	15	15	16	16
	SW1	30	30	30	36	36
	SW2	-	40	40	32	50
	d0	15.8	15.8	15.8	15.8	18
Weight Kg		0.4	0.4	0.8	1	1

Unit Per Pc.

CODE		75 72 90	75 72 91	75 72 92	75 72 93
Connection		G 1"	G1-1/4"	G1-1/2"	G 2"
Ranges of Adjustment		0.5 - 70 bar			
Size mm	G1	G 1-1/2"	2"	2"	2"
	L	50	61	61	61
	Lmax	92	92	92	92
	H	193	263	263	263
	H1	207	286	286	282
	H2	190	263	263	263
	Hmax	223	299	299	299
	h	45	55	69	74
	h1	18	20	23	25
	SW1	46	55	55	70
	SW2	58	70	70	70
	d0	23	30.3	30.3	30.3
Weight Kg		1.8	4.0	4.0	4.0

Goetze KG: Model 451bGFK

451bGFL with bellows and lifting lever

Unit Per Pc.

CODE		75 72 94	75 72 95	75 72 96	75 71 60	75 72 97
Connection		G 1/2"	G 1/2"	G 1/2"	G 3/4"	G 3/4"
Ranges of Adjustment		1-25 bar		25.1-70 bar	1-70 bar	0.5-70 bar
Size mm	G1	G 1/2"	1"	1"	3/4"	G 1-1/4"
	L	34	40	40	42	43
	Lmax	65	65	65	91	91
	H	79	77	131	137	150
	H1	93	91	149	154	170
	H2	79	77	131	138	151
	Hmax	105	103	164	169	185
	h	28	30	30	31	39
	h1	15	15	15	16	16
	SW1	30	30	30	36	36
	SW2	-	40	40	32	50
	d0	15.8	15.8	15.8	15.8	18
Weight Kg		0.4	0.4	0.8	1	1

Unit Per Pc.

CODE		75 72 98	75 72 99	75 73 07	75 73 08
Connection		G 1"	G1-1/4"	G1-1/2"	G 2"
Ranges of Adjustment		0.5 - 70 bar			
Size mm	G1	G 1-1/2"	2"	2"	2"
	L	50	61	61	61
	Lmax	92	92	92	92
	H	193	263	263	263
	H1	207	286	286	286
	H2	190	263	263	263
	Hmax	223	299	299	299
	h	45	55	69	74
	h1	18	20	23	25
	SW1	46	55	55	70
	SW2	58	70	70	70
	d0	23	30.3	30.3	30.3
Weight Kg		1.8	4.0	4.0	4.0

Goetze KG: Model 451bGFL

Safety Valves

Brass & Stainless Steel with Stainless Steel Spring

Válvulas de seguridad de latón y acero inoxidable con resorte de acero inoxidable

真鍮・ステンレス安全弁　黄铜不锈钢安全阀（带不锈钢弹簧）

Atmospheric discharge safety valves made of brass with stainless steel spring. Suitable for the protection of pressure tanks and systems for air and other neutral, non-poisonous and non-flammable gases which can be freely discharge into the environment. with twist-type lifting mechanism.

Available models:
- 810sGK: Available in 1/4" up to 2"

Also available in **Stainless Steel**: series **410**. (Up to 1")

Series 810 (Brass):

- 810sGK FKM with FKM seal (0.2 – 25 bar)
- 810sGK PTFE with PTFE seal (0.2 - 50 bar)

Component	Material	DIN EN	ASME
Body	Brass	CW617N	CW617N
Internal Parts	Brass	CW617N	CW617N
Spring	Stainless steel	1.4568	631

810sGK FKM with FKM seal (0.2 – 25 bar)

Unit Per Pc.

CODE		75 73 09	75 73 10	75 73 17	75 73 18	75 73 19	75 73 40	75 77 10	75 77 11
Connection (DN)		8/¼"	10/3/8"	15/½"	20/3/4"	25/1"	32/1¼"	40/1½"	50/2"
Ranges of Adjustment		0.2 - 50 bar							
Size mm	H	60	65/78	66/79	94/104	111	133	164	171
	h	10	10	12	12	14	20	22	24
	SW	19	24	27	34	41	50	60	68
	d0	7.5	10	11	16	20	25	32	40
Weight Kg		0.1	0.4/0.16	0.17/0.19	0.35/0.4	0.6	0.97	1.85	2.45

Goetze KG : Model 810sGK FKM

810sGK PTFE with PTFE seal (0.2 – 50 bar)

Unit Per Pc.

CODE		75 73 20	75 73 29	75 73 30	75 73 38	75 73 39	75 77 12	75 77 13	75 77 14
Connection (DN)		8/¼"	10/3/8"	15/½"	20/3/4"	25/1"	32/1¼"	40/1½"	50/2"
Ranges of Adjustment		0.2 - 50 bar							
Size mm	H	60	65/78	66/79	94/104	111	133	164	171
	h	10	10	12	12	14	20	22	24
	SW	19	24	27	34	41	50	60	68
	d0	7.5	10	11	16	20	25	32	40
Weight Kg		0.1	0.4/0.16	0.17/0.19	0.35/0.4	0.6	0.97	1.85	2.45

Goetze KG : Model 810sGK PTFE

Series 410 (Stainless Steel)

Component	Material	DIN EN	ASME
Body	Stainless steel	1.4404	316L
Internal Parts	Stainless steel	1.4404	316L
Spring	Stainless steel	1.4568	631

410sGK FKM with FKM seal (0.2 – 25 bar)
(Also possible with NBR)

Unit Per Pc.

CODE		75 73 48	75 73 49	75 73 50	75 73 51	75 73 52
Connection		DN8/1/4"	DN10/3/8"	DN15/1/2"	DN20/3/4"	DN25/1"
Ranges of Adjustment		0.2 - 25 bar				
Size mm	H	60	78	79	104	111
	h	10	10	12	12	14
	SW	19	24	27	34	41
	d0	7.5	10	11	16	20
Weight Kg		0.1	0.16	0.19	0.4	0.6

Goetze KG: Model 410sGK FKM

410sGK PTFE with PTFE seal (0.2 – 50 bar)

Unit Per Pc.

CODE		75 73 53	75 73 54	75 73 55	75 73 56	75 73 57
Connection		DN8/1/4"	DN10/3/8"	DN15/1/2"	DN20/3/4"	DN25/1"
Ranges of Adjustment		0.2 - 50 bar				
Size mm	H	60	78	79	104	111
	h	10	10	12	12	14
	SW	19	24	27	36	41
	d0	7.5	10	11	16	20
Weight Kg		0.1	0.16	0.19	0.4	0.6

Goetze KG: Model 410sGK PTFE

Safety Valves

Brass & Stainless Steel with Stainless Steel Spring

Válvulas de seguridad de latón y acero inoxidable con resorte de acero inoxidable

真鍮・ステンレス安全弁　黄铜不锈钢安全阀（带不锈钢弹簧）

Marine Type Approvals held for these valves:
- DNV
- Lloyd's Register EMEA
- American Bureau of Shipping
- Bureau Veritas
- Russian Maritime Register of Shipping
- Resistro Italiano Navale

Atmospheric discharge safety valves made of brass (or Stainless Steel) with stainless steel spring. Suitable for the protection of pressure tanks and systems for air and other neutral, non-poisonous and non-flammable gases which can be freely discharge into the environment. With twist-type lifting mechanism.

Available models:
- 812/412 sGK

Available seals:
- NBR
- FKM
- EPDM
- PTFE

Available in 1/2" up to 2".

All models are also available in **Stainless Steel**: Series **412**.

How to order: CODE

Safety Valve (DIN), Brass or Stainless Steel, with Stainless Steel Spring, SIZE DN, SPECIFY THE SEALS FROM "NBR", "FKM", "EPDM" or "PTFE"

Series 812 (Brass)

Component	Material	DIN EN	ASME
Body	Brass	CW617N	CW617N
Internal Parts	Brass/Stainless steel	CW617N/1.4404	CW617N/316 L
Spring	Stainless steel	1.4310/1.4568	302/631
Sealing Cap	Stainless steel	1.4310	304

Model 812 sGK

Unit Per Pc.

CODE	DN	Connection	Size mm H	h	SW	d0	Range of Adjustment	Weight Kg
75 73 58	15	1/2"	144	12	32	14	0.2-50 bar	0.6
59	20	3/4"	177	15	41	20		1.3
60	25	1"	177	15	41	24		1.3
61	32	1-1/4"	215	22.5	55	31		2.6
62	40	1-1/2"	215	22.5	55	31		2.6
75 73 63	50	2"	282	26	80	48	0.2-30 bar	5.4

Goetze KG: 812 sGK
**Please specify the seal from "NBR", "FKM" or "PTFE" when ordering.

Series 412 (Stainless Steel)

Component	Material	DIN EN	ASME
Body	Stainless steel	1.4404	316 L
Internal Parts	Stainless steel	1.4404	316 L
Spring	Stainless steel	1.4310/1.4568	302/631
Sealing Cap	Stainless steel	1.4310	304

Model 412 sGK

Unit Per Pc.

CODE	DN	Connection	Size mm H	h	SW	d0	Range of Adjustment	Weight Kg
75 73 64	15	1/2"	144	12	32	14	0.2-50 bar	0.6
65	20	3/4"	177	15	41	20		1.3
66	25	1"	177	15	41	24		1.3
67	32	1-1/4"	215	22.5	55	31		2.6
68	40	1-1/2"	215	22.5	55	31		2.6
75 73 69	50	2"	282	26	80	48	0.2-30 bar	5.4

Goetze KG: 412 sGK
**Please specify the seal from "NBR", "FKM" or "PTFE" when ordering.

Safety Valves

Gunmetal & Stainless Steel with Stainless Steel Spring

Válvulas de seguridad, Bronce de cañón y acero inoxidable con muelle de acero inoxidable
砲金・ステンレス製安全弁
安全阀　炮铜和不锈钢材质，带不锈钢弹簧

Marine Type Approvals held for these valves:
- DNV
- Lloyd's Register EMEA
- American Bureau of Shipping
- Bureau Veritas
- Russian Maritime Register of Shipping
- Resistro Italiano Navale

Angular shaped spring loaded safety valves made of gunmetal with stainless steel spring and inlet body. Sealing cap prevents unauthorized changing of set pressure. Suitable for the protection of pressure tanks and systems for neutral /non-neutral vapours, gases and liquids, steam boilers and steam plants.

Available models:
- 861sGK non-gastight version with twist-type lifting mechanism
- 861sGL non-gastight version with lifting lever
- 861tGO gastight for gases without lifting device
- 861tFO gastight for liquids without lifting device
- 861tGFO gastight for gases and liquids without lifting device

Available seals:
- PTFE up to 25 bar
- PTFE + carbon from 25.1 bar up to 50 bar

All models are also available in **Stainless Steel:** series **461**.

Series 861 (Gunmetal)

Component	Material	DIN EN	ASME
Inlet Body	Stainless Steel	1.4404	316L
Outlet Body	Gunmetal	CC499K	CC499K
Internal Parts	Brass	CW617N	CW617N
Spring	Stainless Steel	1.4310	302

861sGK"

851tGO, 861tFO, 861tFGO

861sGL

861sGK non-gastight version with twist-type lifting mechanism

Unit Per Pc.

CODE		75 73 71	75 73 72	75 73 73	75 73 70
Connection		DN8 / G 1/4"	DN10 / G 3/8"	DN15 / G 1/2"	DN15 / G 1/2"
Range of Adjustment		0.5-50 bar		0.5-30 bar	30.1-50 bar
Size mm	G1	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"
	L	34	34	34	34
	Lmax	78	78	78	78
	H	79	79	79	133
	H1	93	93	93	150
	Hmax	111	111	111	168
	h	31	31	31	31
	h1	12	12	15	15
	SW	30	30	30	30
	d0	6	8	10	10
Weight Kg		0.5	0.5	0.6	1.0

Goetze KG : Model 861 sGK

861sGL non-gastight version with lifting lever

Unit Per Pc.

CODE		75 73 74	75 73 75	75 73 76	75 77 01
Connection		DN8 / G 1/4"	DN10 / G 3/8"	DN15 / G 1/2"	DN15 / G 1/2"
Range of Adjustment		0.5-50 bar		0.5-30 bar	30.1-50 bar
Size mm	G1	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"
	L	34	34	34	34
	Lmax	78	78	78	78
	H	79	79	79	133
	H1	93	93	93	150
	Hmax	111	111	111	168
	h	31	31	31	31
	h1	12	12	15	15
	SW	30	30	30	30
	d0	6	8	10	10
Weight Kg		0.5	0.5	0.6	1.0

Goetze KG: Model 861sGL

861tGO gastight for gases without lifting device

Unit Per Pc.

CODE		75 73 77	75 73 78	75 73 79	75 77 02
Connection		DN8 / G 1/4"	DN10 / G 3/8"	DN15 / G 1/2"	DN15 / G 1/2"
Range of Adjustment		0.5-50 bar		0.5-30 bar	30.1-50 bar
Size mm	G1	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"
	L	34	34	34	34
	Lmax	78	78	78	78
	H	79	79	79	133
	H1	93	93	93	150
	Hmax	111	111	111	168
	h	31	31	31	31
	h1	12	12	15	15
	SW	30	30	30	30
	d0	6	8	10	10
Weight Kg		0.5	0.5	0.6	1.0

Goetze KG: Model 861tGO

861tFO gastight for liquids without lifting device

Unit Per Pc.

CODE		75 73 80	75 73 81	75 73 82	75 77 03
Connection		DN8 / G 1/4"	DN10 / G 3/8"	DN15 / G 1/2"	DN15 / G 1/2"
Range of Adjustment		0.5-50 bar		0.5-30 bar	30.1-50 bar
Size mm	G1	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"
	L	34	34	34	34
	Lmax	78	78	78	78
	H	79	79	79	133
	H1	93	93	93	150
	Hmax	111	111	111	168
	h	31	31	31	31
	h1	12	12	15	15
	SW	30	30	30	30
	d0	6	8	10	10
Weight Kg		0.5	0.5	0.6	1.0

Goetze KG: Model 861tFO

861tGFO gastight for gases and liquids without lifting device

Unit Per Pc.

CODE		75 73 83	75 73 84	75 73 85	75 77 04
Connection		DN8 / G 1/4"	DN10 / G 3/8"	DN15 / G 1/2"	DN15 / G 1/2"
Range of Adjustment		0.5-50 bar		0.5-30 bar	30.1-50 bar
Size mm	G1	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"
	L	34	34	34	34
	Lmax	78	78	78	78
	H	79	79	79	133
	H1	93	93	93	150
	Hmax	111	111	111	168
	h	31	31	31	31
	h1	12	12	15	15
	SW	30	30	30	30
	d0	6	8	10	10
Weight Kg		0.5	0.5	0.6	1.0

Goetze KG: Model 861tGFO

Series 461 (Stainless Steel)

Component	Material	DIN EN	ASME
Inlet Body	Stainless steel	1.4404	316 L
Outlet Body	Stainless steel	1.4408	CF8 M
Internal Parts	Stainless steel	1.4404	316L
Spring	Stainless steel	1.4310	302

461sGK	461tGO 461tFO 461tGFO	461sGL

461sGK non-gastight version with twist-type lifting mechanism

Unit Per Pc.

CODE		75 73 86	75 73 87	75 73 88	75 77 05
Connection		DN8 / G 1/4"	DN10 / G 3/8"	DN15 / G 1/2"	DN15 / G 1/2"
Range of Adjustment		0.5-70 bar		0.5-30 bar	30.1-70 bar
Size mm	G1	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"
	L	34	34	34	34
	Lmax	78	78	78	78
	H	79	79	79	133
	H1	93	93	93	150
	Hmax	111	111	111	168
	h	31	31	31	31
	h1	12	12	15	15
	SW	30	30	30	30
	d0	6	8	10	10
Weight Kg		0.5	0.5	0.6	1.0

Goetze KG: Model 461sGK

461sGL non-gastight version with lifting lever

Unit Per Pc.

CODE		75 73 89	75 73 90	75 73 91	75 77 06
Connection		DN8 / G 1/4"	DN10 / G 3/8"	DN15 / G 1/2"	DN15 / G 1/2"
Range of Adjustment		0.5-70 bar		0.5-30 bar	30.1-70 bar
Size mm	G1	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"
	L	34	34	34	34
	Lmax	78	78	78	78
	H	79	79	79	133
	H1	93	93	93	150
	Hmax	111	111	111	168
	h	31	31	31	31
	h1	12	12	15	15
	SW	30	30	30	30
	d0	6	8	10	10
Weight Kg		0.5	0.5	0.6	1.0

Goetze KG: Model 461sGL

461tGO gastight for gases without lifting device

Unit Per Pc.

CODE		75 73 92	75 73 93	75 73 94	75 77 07
Connection		DN8 / G 1/4"	DN10 / G 3/8"	DN15 / G 1/2"	DN15 / G 1/2"
Range of Adjustment		0.5-70 bar		0.5-30 bar	30.1-70 bar
Size mm	G1	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"
	L	34	34	34	34
	Lmax	78	78	78	78
	H	79	79	79	133
	H1	93	93	93	150
	Hmax	111	111	111	168
	h	31	31	31	31
	h1	12	12	15	15
	SW	30	30	30	30
	d0	6	8	10	10
Weight Kg		0.5	0.5	0.6	1.0

Goetze KG: Model 461tGO

461tFO gastight for liquid without lifting device

Unit Per Pc.

CODE		75 73 95	75 73 96	75 73 97	75 77 08
Connection		DN8 / G 1/4"	DN10 / G 3/8"	DN15 / G 1/2"	DN15 / G 1/2"
Range of Adjustment		0.5-70 bar		0.5-30 bar	30.1-70 bar
Size mm	G1	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"
	L	34	34	34	34
	Lmax	78	78	78	78
	H	79	79	79	133
	H1	93	93	93	150
	Hmax	111	111	111	168
	h	31	31	31	31
	h1	12	12	15	15
	SW	30	30	30	30
	d0	6	8	10	10
Weight Kg		0.5	0.5	0.6	1.0

Goetze KG: Model 461tFO

461tGFO gastight for gases and liquids without device

Unit Per Pc.

CODE		75 73 98	75 73 99	75 74 00	75 77 09
Connection		DN8 / G 1/4"	DN10 / G 3/8"	DN15 / G 1/2"	DN15 / G 1/2"
Range of Adjustment		0.5-70 bar		0.5-30 bar	30.1-70 bar
Size mm	G1	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"	DN15 / G 1/2"
	L	34	34	34	34
	Lmax	78	78	78	78
	H	79	79	79	133
	H1	93	93	93	150
	Hmax	111	111	111	168
	h	31	31	31	31
	h1	12	12	15	15
	SW	30	30	30	30
	d0	6	8	10	10
Weight Kg		0.5	0.5	0.6	1.0

Goetze KG: Model 461GFO

Safety Valves

Spheroidal Graphite Cast Iron
Angle type with flange connections

Válvulas de seguridad, Fundición de grafito esferoidal
Tipo de ángulo con conexiones de brida
ダクタイル鋳鉄フランジ式安全弁
安全阀、球墨铸铁、带法兰连接的角型

Marine Type Approvals held for these valves:

- DNV
- Lloyd's Register EMEA
- American Bureau of Shipping
- Bureau Veritas
- Russian Maritime Register of Shipping

Full-lift safety valve for the protection of pressure tanks and systems for neutral / non-neutral vapours and gases, steam plants and silo containers for liquid, granular and dusty materials[1].

Maintenance-friendly construction, single trim for gases, vapours and liquids, replaceable seat, easily detachable cone-stroke ring connection, freely rotatable spindle-taper connection, extensive range of spare parts, and vertical and horizontal installation position possible. Flanges according to DIN EN 1092-2 standard.

[1]Only for version with bellows and gas-tight spring housing

Available models:

- 355 sGL with lifting lever
- 355 sGO without lifting lever
- 355 bGFL with bellows and lifting lever
- 355 bGFO with bellows, without lifting lever
- 355 tGFL gastight with lifting lever
- 355 tGFO gastight without lifting lever
- 355 tbGFL gastight with bellows and lifting lever
- 355 tbGFO gastight with bellows, without lifting lever

Available seals:

- MD (Metal-to-metal sealing)
- EPDM
- FKM
- FFKM
- PTFE
- PTFE + carbon

Series 355 (Spheroidal Graphite Cast Iron)

Component	Material	DIN EN	ASME
Body and spring housing	Spheroidal graphite cast iron	5.3103	Gr.60-40-18
Valve seat	Stainless steel	1.4404	316 L
Internal parts	Steel	1.4021/1.4104/1.4122	420/30F/1.4122
Spring	Steel	1.8159 / FDSiCr	
Bellows (optional)	Stainless steel	1.4571	316 Ti

355sGL with lifting lever

Unit Per Pc.

CODE		75 77 15	75 77 16	75 77 17	75 77 18	75 62 57
Connection Nom. DN/PN		15 / 40	20 / 40	25 / 40	32 / 40	40 / 40
Ranges of Adjustment		0.2 – 40 bar				
Size mm	Outlet DN1/PN	25 / 16	32 / 16	40 / 16	50 / 16	65 / 16
	L	80	95	100	110	115
	Lmax	75	85	95	120	130
	H2	206	204	229	321	363
	h	90	85	105	115	140
	D	95	105	115	140	150
	d0	15.0	18.0	22.5	29.3	36
Weight Kg		6.0	7.0	9.5	19.0	22.0

Unit Per Pc.

CODE		75 62 58	75 77 19	75 77 20	75 77 21
Connection Nom. DN/PN		50 / 40	65 / 40	80 / 40	100 / 40
Ranges of Adjustment		0.2-40 bar	0.2-24 bar	0.2-25.5 bar	0.2-20 bar
Size mm	Outlet DN1/PN	80 / 16	100 / 16	125 / 16	150 / 16
	L	120	140	160	180
	Lmax	160	205	215	255
	H2	413	497	556	647
	h	150	170	195	220
	D	165	185	200	235
	d0	45.0	59.0	72.0	90.0
Weight Kg		28.5	47.5	60.5	93.5

Goetze KG : Model 355sGL

355sGO without lifting lever

Unit Per Pc.

CODE		75 77 22	75 77 23	75 77 24	75 77 25	75 62 55
Connection Nom. DN/PN		15 / 40	20 / 40	25 / 40	32 / 40	40 / 40
Ranges of Adjustment		0.2 – 40 bar				
Size mm	Outlet DN1/PN	25 / 16	32 / 16	40 / 16	50 / 16	65 / 16
	L	80	95	100	110	115
	Lmax	75	85	95	120	130
	H	167	165	190	260	302
	h	90	85	105	115	140
	D	95	105	115	140	150
	d0	15.0	18.0	22.5	29.3	36
Weight Kg		5.5	6.5	9.0	16.5	19.5

Unit Per Pc.

CODE		75 62 56	75 77 26	75 77 27	75 77 28
Connection Nom. DN/PN		50 / 40	65 / 40	80 / 40	100 / 40
Ranges of Adjustment		0.2-40 bar	0.2-24 bar	0.2-25.5 bar	0.2-20 bar
Size mm	Outlet DN1/PN	80 / 16	100 / 16	125 / 16	150 / 16
	L	120	140	160	180
	Lmax	160	205	215	255
	H	352	427	486	577
	h	150	170	195	220
	D	165	185	200	235
	d0	45.0	59.0	72.0	90.0
Weight Kg		26.0	44.0	57.0	90.0

Goetze KG : Model 355sGO

355bGFL with bellows and lifting lever

Unit Per Pc.

CODE		75 77 29	75 77 30	75 77 31	75 77 32	75 62 77
Connection Nom. DN/PN		15 / 40	20 / 40	25 / 40	32 / 40	40 / 40
Ranges of Adjustment		1.2 - 40 bar	0.8 – 40 bar	0.5 – 40 bar	1.0 – 40 bar	0.9 – 40 bar
Size mm	Outlet DN1/PN	25 / 16	32 / 16	40 / 16	50 / 16	65 / 16
	L	80	95	100	110	115
	Lmax	75	85	95	120	130
	H3	246	244	269	361	391
	h	90	85	105	115	140
	D	95	105	115	140	150
	d0	15.0	18.0	22.5	29.3	36
Weight Kg		6.5	7.5	10.0	21.0	24.0

Unit Per Pc.

CODE		75 62 78	75 77 33	75 77 34	75 77 35
Connection Nom. DN/PN		50 / 40	65 / 40	80 / 40	100 / 40
Ranges of Adjustment		0.5-40 bar	0.3-40 bar	0.2-40 bar	0.2-40 bar
Size mm	Outlet DN1/PN	80 / 16	100 / 16	125 / 16	150 / 16
	L	120	140	160	180
	Lmax	160	205	215	255
	H3	453	532	600	694
	h	150	170	195	220
	D	165	185	200	235
	d0	45.0	59.0	72.0	90.0
Weight Kg		31.0	51.0	66.5	102.5

Goetze KG : Model 355bGFL

355bGFO with bellows, without lifting lever

Unit Per Pc.

CODE		75 77 36	75 77 37	75 77 38	75 77 39	75 62 75
Connection Nom. DN/PN		15 / 40	20 / 40	25 / 40	32 / 40	40 / 40
Ranges of Adjustment		1.2 – 40 bar	0.8 – 40 bar	0.5 – 40 bar	1.0 – 40 bar	0.9 – 40 bar
Size mm	Outlet DN1/PN	25 / 16	32 / 16	40 / 16	50 / 16	65 / 16
	L	80	95	100	110	115
	Lmax	75	85	95	120	130
	H1	207	205	230	300	330
	h	90	85	105	115	140
	D	95	105	115	140	150
	d0	15.0	18.0	22.5	29.3	36
Weight Kg		6.0	7.0	9.5	19.0	21.5

Unit Per Pc.

CODE		75 62 76	75 77 40	75 77 41	75 77 42
Connection Nom. DN/PN		50 / 40	65 / 40	80 / 40	100 / 40
Ranges of Adjustment		0.5-40 bar	0.3-40 bar	0.2-40 bar	0.2-40 bar
Size mm	Outlet DN1/PN	80 / 16	100 / 16	125 / 16	150 / 16
	L	120	140	160	180
	Lmax	160	205	215	255
	H1	392	462	530	624
	h	150	170	195	220
	D	165	185	200	235
	d0	45.0	59.0	72.0	90.0
Weight Kg		28.5	48.0	63.0	99.0

Goetze KG : Model 355bGFO

355tGFL gastight with lifting lever

Unit Per Pc.

CODE		75 77 43	75 77 44	75 77 45	75 77 46	75 62 73
Connection Nom. DN/PN		15 / 40	20 / 40	25 / 40	32 / 40	40 / 40
Ranges of Adjustment		0.2 – 40 bar				
Size mm	Outlet DN1/PN	25 / 16	32 / 16	40 / 16	50 / 16	65 / 16
	L	80	95	100	110	115
	Lmax	75	85	95	120	130
	H2	206	204	229	321	363
	h	90	85	105	115	140
	D	95	105	115	140	150
	d0	15.0	18.0	22.5	29.3	36
Weight Kg		6.0	7.0	9.5	19.0	22.0

Unit Per Pc.

CODE		75 62 74	75 77 47	75 77 48	75 77 49
Connection Nom. DN/PN		50 / 40	65 / 40	80 / 40	100 / 40
Ranges of Adjustment		0.2-40 bar	0.2-24 bar	0.2-25.5 bar	0.2-20 bar
Size mm	Outlet DN1/PN	80 / 16	100 / 16	125 / 16	150 / 16
	L	120	140	160	180
	Lmax	160	205	215	255
	H2	413	497	556	647
	h	150	170	195	220
	D	165	185	200	235
	d0	45.0	59.0	72.0	90.0
Weight Kg		28.5	47.5	60.5	93.5

Goetze KG : Model 355tGFL

355tGFO gastight without lifting lever

Unit Per Pc.

CODE		75 77 50	75 77 51	75 77 52	75 77 53	75 62 71
Connection Nom. DN/PN		15 / 40	20 / 40	25 / 40	32 / 40	40 / 40
Ranges of Adjustment		0.2 – 40 bar				
Size mm	Outlet DN1/PN	25 / 16	32 / 16	40 / 16	50 / 16	65 / 16
	L	80	95	100	110	115
	Lmax	75	85	95	120	130
	H	167	165	190	260	302
	h	90	85	105	115	140
	D	95	105	115	140	150
	d0	15.0	18.0	22.5	29.3	36
Weight Kg		5.5	6.5	9.0	16.5	19.5

Unit Per Pc.

CODE		75 62 72	75 77 54	75 77 55	75 77 56
Connection Nom. DN/PN		50 / 40	65 / 40	80 / 40	100 / 40
Ranges of Adjustment		0.2-40 bar	0.2-24 bar	0.2-25.5 bar	0.2-20 bar
Size mm	Outlet DN1/PN	80 / 16	100 / 16	125 / 16	150 / 16
	L	120	140	160	180
	Lmax	160	205	215	255
	H	352	427	486	577
	h	150	170	195	220
	D	165	185	200	235
	d0	45.0	59.0	72.0	90.0
Weight Kg		26.0	44.0	57.0	90.0

Goetze KG : Model 355tGFO

355tbGFL gastight with bellows and lifting leverr

Unit Per Pc.

CODE		75 77 57	75 77 58	75 77 59	75 77 60	75 77 61
Connection Nom. DN/PN		15 / 40	20 / 40	25 / 40	32 / 40	40 / 40
Ranges of Adjustment		1.2 - 40 bar	0.8 – 40 bar	0.5 – 40 bar	1.0 – 40 bar	0.9 – 40 bar
Size mm	Outlet DN1/PN	25 / 16	32 / 16	40 / 16	50 / 16	65 / 16
	L	80	95	100	110	115
	Lmax	75	85	95	120	130
	H3	246	244	269	361	391
	h	90	85	105	115	140
	D	95	105	115	140	150
	d0	15.0	18.0	22.5	29.3	36
Weight Kg		6.5	7.5	10.0	21.0	24.0

Unit Per Pc.

CODE		75 77 62	75 77 63	75 77 64	75 77 65
Connection Nom. DN/PN		50 / 40	65 / 40	80 / 40	100 / 40
Ranges of Adjustment		0.5-40 bar	0.3-40 bar	0.2-40 bar	0.2-40 bar
Size mm	Outlet DN1/PN	80 / 16	100 / 16	125 / 16	150 / 16
	L	120	140	160	180
	Lmax	160	205	215	255
	H3	453	532	600	694
	h	150	170	195	220
	D	165	185	200	235
	d0	45.0	59.0	72.0	90.0
Weight Kg		31.0	51.0	66.5	102.5

Goetze KG : Model 355tbGFL

355tbGFO gastight with bellows, without lifting lever

Unit Per Pc.

CODE		75 77 66	75 77 67	75 77 68	75 77 69	75 77 70
Connection Nom. DN/PN		15 / 40	20 / 40	25 / 40	32 / 40	40 / 40
Ranges of Adjustment		1.2 – 40 bar	0.8 – 40 bar	0.5 – 40 bar	1.0 – 40 bar	0.9 – 40 bar
Size mm	Outlet DN1/PN	25 / 16	32 / 16	40 / 16	50 / 16	65 / 16
	L	80	95	100	110	115
	Lmax	75	85	95	120	130
	H1	207	205	230	300	330
	h	90	85	105	115	140
	D	95	105	115	140	150
	d0	15.0	18.0	22.5	29.3	36
Weight Kg		6.0	7.0	9.5	19.0	21.5

Unit Per Pc.

CODE		75 77 71	75 77 72	75 77 73	75 77 74
Connection Nom. DN/PN		50 / 40	65 / 40	80 / 40	100 / 40
Ranges of Adjustment		0.5-40 bar	0.3-40 bar	0.2-40 bar	0.2-40 bar
Size mm	Outlet DN1/PN	80 / 16	100 / 16	125 / 16	150 / 16
	L	120	140	160	180
	Lmax	160	205	215	255
	H1	392	462	530	624
	h	150	170	195	220
	D	165	185	200	235
	d0	45.0	59.0	72.0	90.0
Weight Kg		28.5	48.0	63.0	99.0

Goetze KG : Model 355tbGFO

American National Standard Institute (ANSI) for Marine Services

The following tables are a cross comparison from JIS (Japan Industrial Standard) to ANSI (American National Standard Institute), and from ANSI 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 ANSI standard.
We are not held responsible for any possible accident or damage caused by using these tables.

Comparison List - JIS to equivalent design ANSI Valves

Globe Valves

Material & W.P.	Type	JIS No.	Size	CODE	ANSI Model	CODE	Class	Size
Cast Steel 10 kgf/cm^2 Flanged	Straight	F-7319	50-300mm	75 04 11 - 19	-	75 71 41 - 47	150	2" - 12"
Cast Steel 120 kgf/cm^2 Flanged	Straight	F-7313	32-250mm	75 04 31 - 40	-	75 71 51 - 57	300	2" - 12"

Gate Valves

Material & W.P.	Type	JIS No.	Size	CODE	ANSI Model	CODE	Class	Size
Cast Iron 10 kgf/cm^2	Flanged	F-7364	50-600mm	75 08 21 - 35	-	75 72 41 - 48	125	2" - 12"
Cast Iron 16 kgf/cm^2	Flanged	F-7369	300-400mm	75 08 41 - 43	-	75 72 41 - 48	125	2" - 12"
Cast steel 10 kgf/cm^2	Flanged	F-7366	50-400mm	75 09 01 - 11	-	75 72 61 - 67	150	2" - 12"

Swing Check Valves

Material & W.P.	Type	JIS No.	Size	CODE	ANSI Model	CODE	Class	Size
Cast Iron 10 kgf/cm^2 Flanged	Straight	F-7373	50-200mm	75 14 31 - 37	- 311.3.4.4.2	75 73 21 - 28 75 73 31 - 37/98	125 150	2" - 12" 2" - 12"

Remark : ANSI model is referred to MENSON products.

Comparison List - ANSI to equivalent design JIS Valves

Globe Valves

Material & W.P.	Type	ANSI Model	Size	CODE	JIS No.	CODE	Max. W/P	Size
Carbon Steel Class 150 Flanged	Straight	-	2" - 12"	75 71 41 - 47	F-7319	75 04 11 - 19	10 kgf/cm^2	50-300mm
Carbon Steel Class 300 Flanged	Straight	-	2" - 12"	75 71 51 - 57	F-7313	75 04 31 - 40	20 kgf/cm^2	32-250mm

Gate Valves

Material & W.P.	Type	ANSI Model	Size	CODE	JIS No.	CODE	Max. W/P	Size
Cast Iron Class 125	Flanged	-	2" - 12"	75 72 41 - 48	F-7364 F-7369	75 08 21 - 35 75 08 41 - 43	10 kgf/cm^2 16 kgf/cm^2	50-600mm 300-400mm
Carbon Steel Class 150	Flanged	-	2" - 12"	75 72 61 - 67	F-7366	75 09 01 - 11	10 kgf/cm^2	50-400mm

Swing Check Valves

Material & W.P.	Type	ANSI Model	Size	CODE	JIS No.	CODE	Max. W/P	Size
Cast Iron Class 125 Flanged	Straight	-	2" - 12"	75 73 21 - 27	F-7373	75 14 31 - 37	10 kgf/cm^2	50-200mm
Cast Steel Class 150 Flanged	Straight	311.3.4.4.2	2" - 12"	75 73 31 - 37/98	F-7373	75 14 31 - 37	10 kgf/cm^2	50-200mm

Remark : ANSI model is referred to MENSON products.

ANSI Globe Valves

Globe Valves (ANSI)

Bronze, NPT Female Threaded, Union Bonnet Metal Seated

Válvula de Globo de Bronce (según ANSI)
ANSI型青銅玉形弁　ANSI 型青铜球形阀

Globe valves with union bonnet, SS disc and hardened seat, renewable disc and seat, straight pattern, NPT female threaded connection according to ANSI B1.20.1, inside screwed stem and rising handwheel.
Application: Water, oil, air, gas, saturated steam etc.

Pressure and Temperature Range

1/2" - 2"	0/65°C	287°C
	27.5 bar	13.7 bar
	200 lbs SWP at 550° F and 400 lbs WOG at 150° F (non-shock)	

Material Specification

Component	Material	US
Body	Bronze	ASTM B61
Bonnet	Bronze	ASTM B61
Bonnet Nut	Bronze	ASTM B61
Disc	Stainless steel	AISI 420
Stem	Bronze	ASTM B61
Seat (Hardened)	Stainless steel	AISI 420
Gland Packing	Graphite	
Handwheel	Cast iron	

How to order: CODE

Globe valve (ANSI), bronze, NPT female threaded, union bonnet metal seated, SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight
		L	H	M	Kg
75 71 01	1/4"	56	106	57	0.4
02	3/8"	60	108	57	0.5
03	1/2"	64	114	76	0.7
04	3/4"	75	130	83	1.0
05	1"	86	133	102	1.6
75 71 06	1-1/4"	98	157	120	2.6
07	1-1/2"	114	184	140	3.5
08	2"	124	208	152	6.2

Globe Valves (ANSI)

Cast Steel, ASME Flanges, 150 lbs and 300 lbs

Válvula de Globo de Acero a Carbono (según ANSI)
ANSI型鋳鋼玉形弁　ANSI型碳钢球形阀

Cast steel globe valves with stainless steel trim, pressure rating 150 lbs and 300 lbs, straight pattern, flanged end acc. to ASME B16.5 ("raised face – smooth finish"), outside screw & yoke, rising handwheel. On request, supplied including EN 10204 3.1.B material and test certificate.

Application: Steam, water, oil, vapours and gases.

Pressure and Temperature Range

	ASTM A216 WCB						
	-29/38°C	93°C	149°C	204°C	260°C	316°C	343°C
150 lbs	19.7 bar	17.9	15.9	13.8	11.7	9.7	8.6
300 lbs	51 bar	46.5	45.2	43.8	41.4	37.9	36.9
	371°C	399°C	427°C	454°C	482°C	510°C	538°C
150 lbs	7.6 bar	6.6	5.5	4.5	3.4	2.4	1.4
300 lbs	36.9 bar	34.8	28.3	18.6	11.7	7.2	3.4
	ASTM A216 WCB is not recommended for long-term duty above 426°C.						

Material Specification

Component	Material	US
Body	Cast steel	ASTM A216-WCB
Bonnet	Cast steel	ASTM A216-WCB
Disc	Stainless steel	AISI 410
Seat (Body)	Stainless steel	AISI 410 stellited
Stem	Stainless steel	AISI 410
Gland	Forged steel	ASTM A105(N)
Gland Packing	Graphite	Grafiet
Bonnet gasket 1) (SS insert)	Graphite	Grafiet
Handwheel	Malleable cast iron	Malleable cast iron

1) Spiral wound gasket

Pressure Rating 150 lbs

How to order: CODE

Globe valve (ANSI), cast steel, ASME flanges, pressure rating 150 lbs, SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight
		L	H	M	Kg
75 71 41	2"	203	338	200	21
42	3"	241	396	250	35
43	4"	292	476	300	58
44	6"	406	524	350	100
45	8"	495	588	400	160
75 71 46	10"	622	738	500	253
47	12"	699	862	500	398

Pressure Rating 300 lbs

How to order: CODE

Globe valve (ANSI), cast steel, ASME flanges, pressure rating 300 lbs, SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight
		L	H	M	Kg
75 71 51	2"	267	354	200	25
52	3"	318	421	250	49
53	4"	356	496	350	76
54	6"	445	675	500	168
55	8"	559	912	560	282
75 71 56	10"	622	949	600	385
57	12"	711	1,032	650	724

ANSI Gate Valves

Gate Valves (ANSI)

Bronze, NPT Female Threaded Ends, Union Bonnet Pressure Rating 200 lbs

Válvulas de compuerta (ANSI), Bronce, Extremos roscados hembra NPT, Bonete de unión
ANSI 型青銅仕切弁
闸阀（ANSI）、青铜、NPT 内螺纹端、联合阀帽

Bronze gate valves with union bonnet, solid bronze wedge, stainless steel seat, NPT female threaded ends acc. to ANSI B1.20.1, inside screwed stem and rising stem and rising handwheel, complies with requirements of MSS SP-80 type 2.

Application: water, oil, air, gas, saturated steam etc.

Pressure and Temperature Range

	0/20°C	197°C
1/4" - 3"	27.5 bar	13.7 bar
	200 lbs SWP and 400 lbs WOG (non-shock)	

Material Specification

Component	Material	US
Body	Bronze	ASTM B61
Bonnet Nut	Bronze	ASTM B61
Stem	Bronze	ASTM B61
Wedge	Bronze	ASTM B61
Seats (Body)	Stainless steel	AISI 410
Gland Packing	Graphite	
Handwheel	Cast iron	

How to order: CODE

Gate valve (ANSI), bronze, NPT female threaded ends, union bonnet, pressure rating 200 lbs, SIZE DN

Unit Per Pc.

CODE	D	Size mm			Weight Kg
		L	H open	M	
75 72 01	1/4"	46	5.125	130	0.5
02	3/8"	48	5.125	130	0.6
03	1/2"	57	5.5	140	0.8
04	3/4"	64	6.25	159	1.0
05	1"	73	7.1875	183	1.4
75 72 06	1-1/4"	83	8.5625	218	2.0
07	1-1/2"	99	9.5625	243	2.9
08	2"	95	11.75	299	4.5

Gate Valves (ANSI)

Cast Iron, ASME Flanges
Pressure Rating 125 lbs

Válvula de Compuerta de Hierro Fundido (según ANSI)

ANSI 型鑄鉄仕切弁 ANSI型铸铁闸阀

Cast iron gate valves with solid wedge, bronze seats, pressure rating 125 lbs, full bore, rising stem, non-rising handwheel, bolted bonnet with yoke, flat flanges acc. to ASME B16.1 (125#), face to face acc. to ASME B16. 10, complies with requirements of MSS SP-70.

Pressure and Temperature Range

	0/20°C	178°C
2" - 12"	13.8 bar	8.6 bar
	125 lbs SWP and 200 lbs WOG (non-shock)	

Material Specification

Component	Material	US
Body	Cast iron	ASTM A126 Gr.B
Bonnet	Cast iron	ASTM A126 Gr.B
Wedge (2" – 3")	Bronze	ASTM B62
Wedge (4" – 12")	Cast iron	ASTM A126 Gr.B
Seats (Body)	Bronze	ASTM B62
Seats (Wedge)	Bronze	ASTM B62
Stem	Brass	
Gland	Cast iron	ASTM A126 gr.B
Gland Packing	Graphite	Graphite
Bonnet Gasket	Graphite	Graphite
Handwheel	Cast iron	

How to order: CODE

Gate valve (ANSI), cast iron, ASME flanges, pressure rating 125 lbs, SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight Kg
		L	H open	M	
75 72 41	2"	178	381	178	19
42	2-1/2"	191	429	203	25
43	3"	203	476	203	34
44	4"	229	578	254	51
45	6"	267	765	305	77
75 72 46	8"	292	1,019	356	124
47	10"	330	1,226	406	218
48	12"	356	1,445	457	299

Gate Valves (ANSI)

Cast Steel, ASME Flanges
Pressure Rating 150 lbs and 300 lbs

Válvula de Compuerta de Acero a Carbono (según ANSI)

ANSI型鑄鋼仕切弁 ANSI型碳钢闸阀

Cast steel gate valves with flexible wedge, stainless steel seats, pressure rating 150 lbs and 300 lbs, full bore, rising stem, non-rising handwheel, bolted bonnet with yoke, flanged connection acc. to ASME B16.5 ("raised face – smooth finish"), face to face acc. to ASME B16.10. On request, supplied including EN 10204 3.1.B material and test certificate.

Application: steam, water, oil, vapours and gases.

Pressures and Temperature Range

ASTM A216 WCB

	-29/38°C	93°C	149°C	204°C	260°C	316°C	343°C
150 lbs	19.7 bar	17.9	15.9	13.8	11.7	9.7	8.6
300 lbs	51 bar	46.5	45.2	43.8	41.4	37.9	36.9
	371°C	399°C	427°C	454°C	482°C	510°C	538°C
150 lbs	7.6 bar	6.6	5.5	4.5	3.4	2.4	1.4
300 lbs	36.9 bar	34.8	28.3	18.6	11.7	7.2	3.4
	ASTM A216 WCB is not recommended for long-term duty above 426°C						

Material Specification

Component	Material	US
Pressure Rating 150 lbs		
Body and Bonnet	Cast steel	ASTM A216-WCB
Wedge (2" – 10")	Alloyed steel	ASTM A217-CA15
Wedge (12")	Steel, armoured	ASTM A216 WCB/13Cr armoured
Seats (Body)	Steel, stellited	ASTM A105 stellited
Stem	Stainless steel	ASTM A182-F6a
Gland Packing	Graphite	Graphite
Bonnet Gasket (SS insert)	Graphite	Graphite
Handwheel	Malleable cast iron	Malleable cast iron
Pressure Rating 300 lbs		
Body and Bonnet	Cast steel	ASTM A216-WCB
Wedge (2" – 8")	Alloyed steel	ASTM A217-CA15
Wedge (10 - 12")	Steel, armoured	ASTM A216 WCB/13Cr armoured
Seats (Body)	Steel, stellited	ASTM A105 stellited
Stem	Stainless steel	ASTM A182-F6a
Gland Packing	Graphite	Graphite
Bonnet Gasket 1) (SS insert)	Graphite	Graphite
Handwheel	Malleable cast iron	Malleable cast iron

1) Spiral wound gasket

Pressure Rating 150 lbs

How to order: CODE

Gate valve (ANSI), cast steel, ASME flanges, Pressure rating 150 lbs, SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight
		L	H open	M	Kg
75 72 61	2"	178	387	200	18
62	3"	203	481	250	32
63	4"	229	585	300	50
64	6"	267	765	300	77
65	8"	292	956	350	121
75 72 66	10"	330	1,149	400	178
67	12"	356	1,351	450	265

Pressure Rating 300 lbs

How to order: CODE

Gate valve (ANSI), cast steel, ASME flanges, Pressure ratig 300 lbs, SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight
		L	H open	M	Kg
75 72 71	2"	216	410	200	23
72	3"	283	509	250	50
73	4"	305	612	250	71
74	6"	403	805	350	144
75	8"	419	1,000	400	209
75 72 76	10"	457	1,209	450	322
77	12"	502	1,416	500	482

ANSI Check Valves

Check Valves (ANSI)

Bronze. NPT Female Threaded Ends, Swing Type

Válvulas de retención (ANSI), Bronce. Extremos roscados hembra NPT, tipo pivotante.

逆止弁（ANSI）、青銅 NPT 雌ネジ端、スイングタイプ

止回阀（ANSI）、青铜、NPT 内螺纹端，摆动式

Bronze swing type check valves, bronze seat NPT female threaded ends acc. to ANSI B1.20.1, reduced bore and threaded bonnet. Suitable for horizontal installation.
Application: Steam, water, oil, vapours and gases.

Pressure and Temperature Range

	0/65°C	218°C
1/2" - 2"	27.5 bar	13.7 bar
	200 lbs SWP and 425° F and 400 lbs WOG at 150° F (non-shock)	

Material Specification

Component	Material	US
Body	Bronze	ASTM B61
Bonnet	Bronze	ASTM B61
Seats (Body and Disc)	Bronze	ASTM B61
Disc	Bronze	ASTM B61
Bonnet Gasket	Asbestos-free	

How to order: CODE

Check valve (ANSI), bronze, NPT female threaded ends, swing type, SIZE DN

Unit Per Pc.

CODE	DN	Size mm		Weight	CODE	DN	Size mm		Weight
		L	H	Kg			L	H	Kg
75 73 11	1/2"	41.3	44.5	0.22	**75 73 14**	1-1/4"	111.1	76.2	0.67
12	3/4"	76.2	49.2	0.33	**15**	1-1/2"	117.5	84.1	0.85
13	1"	93.7	63.5	0.48	**16**	2"	149.2	101.6	1.20

Check Valves (ANSI)

Cast Iron, ASME Flanges, Swing Type
Pressure Rating 125 lbs

Válvulas de retención (ANSI), Hierro fundido, Bridas ASME, Tipo Swing

逆止弁（ANSI）、鋳鉄、ASME フランジ、スイングタイプ

止回阀（ANSI）、铸铁，ASME 法兰，摆动式

Cast iron swing type check valves, bronze seat, pressure rating 125 lbs, straight pattern, full bore, bolted bonnet, flat faced flanges as per ASME B16.1 (125#), face to face as per ASME B16.10, complies with requirements of MSS SP-71 type 1.

Pressure and Temperature Range

	0/65°C	176°C
2" - 12"	13.8 bar	8.6 bar
	125 lbs SWP and 350° F and 200 lbs WOG at 150° F (non-shock)	

Material Specification

Component	Material	US
Body	Cast iron	ASTM A126 Gr.B
Bonnet	Cast iron	ASTM A126 Gr.B
Seat	Bronze	ASTM B62
Hinge Pin	Brass	
Hinge Arm	Cast iron	ASTM A126 Gr.B
Bonnet Gasket	Graphite	

Remark: 5" though 12" are manufactured with a cast iron disc with bronze sealing ring.

How to order: CODE

Check valve (ANSI), cast iron, ASME flanges, swing type, pressure rating 125 lbs, SIZE DN

Unit Per Pc.

CODE	DN	Size mm			Weight
		L	A	H	Kg
75 73 21	2"	203	152	100	19
28	2-1/2"	216	178	114	25
22	3"	241	191	130	34
23	4"	292	229	156	51
24	6"	356	279	203	77
75 73 25	8"	495	343	240	124
26	10"	622	406	306	218
27	12"	699	483	410	299

Check and Storm Valves (ANSI)

Cast Steel, ANSI Flanges, Swing Type
Pressure Rating 150 lbs

Válvulas antirretorno y antitormenta (ANSI), Acero fundido, bridas ANSI, tipo pivotante

逆止弁及び波止弁（ANSI）、鋳鋼、ANSI フランジ、スイングタイプ

止回阀和风暴阀（ANSI）、铸钢，ANSI 法兰，摆动式

Cast steel swing type check valves, stainless steel seat, pressure rating 150 lbs, straight pattern, full bore, bolted bonnet, flange sizes acc. to ASME B 16.5 ("raised face – smooth finish") and face to face acc. to ASME B16.10.

Applications:
Fuel oil, Lubricating oil, Flammable hydraulic oil, Cargo oil, No-flammable hydraulic fluid, Boiler feedwater, Condensate, Sea water, Water.

Pressure and Temperature Range

	ANSI A216 WCB				
	-29/38°C	93°C	149°C	204°C	260°C
150 lbs	19.7 bar	17.9	15.9	13.8	11.7
	316°C	343°C	371°C	399°C	427°C
150 lbs	9.7	8.6	7.6	6.6	5.5

ANSI A216 WCB is not recommended for long-term duty above 426°C

Material Specification

Component	Material	US
Body	Cast steel	A216-WCB
Bonnet	Cast steel	A216-WCB
Disc	Cast steel	A216-WCB
Seat	Stainless steel	

Pressure Rating 150 lbs

How to order: CODE

Check and Storm valve (ANSI), cast steel, ANSI flanges, swing type, pressure rating 150 lbs, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight
		Hcd	D	L	H	Kg
75 73 31	50	120.7	150	203	161	17
75 74 98	65	139.7	180	216	180	23
75 73 32	80	152.4	190	241	190	33
33	100	190.5	230	292	220	44
34	150	241.3	280	356	257	78
75 73 35	200	298.5	345	495	292	137
36	250	362	405	622	350	207
37	300	431.8	485	699	398	279

MESON Model No. : 311.3.4.4.2

ANSI Strainers

Strainers (ANSI)

Cast Steel, Y-Type, ASME Flanges
Pressure Rating 150 lbs and 300 lbs

Filtros (ANSI), Bridas de acero fundido, tipo Y, ASME

ストレーナ（ANSI）、鋳鋼、Y タイプ、ASME フランジ

过滤器（ANSI）、铸钢，Y 型，ASME 法兰

Application : steam, water, oil and other process liquids. Fitted with drain plug. On request, supplied including EN 10204 3.1B certificate.

Pressure and Temperature Range

	ASTM A216 WCB						
	-29/38°C	93°C	149°C	204°C	260°C	316°C	343°C
150 lbs	19.7 bar	17.9	15.9	13.8	11.7	9.7	8.6
300 lbs	51 bar	46.5	45.2	43.8	41.4	37.9	36.9
	371°C	399°C	427°C	454°C	482°C	510°C	538°C
150 lbs	7.6 bar	6.6	5.5	4.5	3.4	2.4	1.4
300 lbs	36.9 bar	34.8	28.3	18.6	11.7	7.2	3.4
	ASTM A216 WCB is not recommended for long-term duty above 426°C						

Material Specification

Component	Material	US
Body	Cast steel	ASTM A 216-WCB
Bolter Cover	Forged steel	ASTM A 105(N)
Drain Plug	Stainless steel	AISI 304
Strainer Screen	Stainless steel	AISI 304

Perforation Size 0.6 mm

Pressure Rating 150 lbs

How to order: CODE

Strainer (ANSI), cast steel, Y-type, ASME flanges, pressure rating 150 lbs, SIZE DN

Unit Per Pc.

CODE	DN	Size mm				Weight
		A	L	H	H1	Kg
75 76 01	2"	152	203	205	340	12
02	3"	191	241	255	420	24
03	4"	229	292	300	500	40
04	6"	280	406	390	630	71
05	8"	343	495	490	780	120
75 76 06	10"	406	622	550	850	175
07	12"	483	699	640	1,000	260

Pressure Rating 300 lbs

Unit Per Pc.

CODE	DN	Size mm				Weight
		A	L	H	H1	Kg
75 76 11	2"	165	267	235	370	22
12	3"	210	318	285	460	37
13	4"	254	356	320	555	56
14	6"	318	445	420	745	116
15	8"	381	559	480	750	180
75 76 16	10"	445	622	600	1,000	271
17	12"	521	711	690	1,100	400

Capacity for Water in kg/hour at 20°C

P [bar]	DN [mm]									
	15	20	25	32	40	50	65	80	100	125
0.5	341	607	948	1,553	2,427	3,792	6,408	9,706	15,166	23,697
1	483	858	1,341	2,196	3,432	5,362	9,062	13,727	21,448	33,513
1.5	591	1051	1,642	2,690	4,203	6,567	11,098	16,812	26,268	41,044
2	682	1,213	1,896	3,106	4,853	7,583	12,815	19,412	30,332	47,394
3	836	1,486	2,322	3,804	5,944	9,287	15,695	23,775	37,148	58,044
4	965	1,716	2,681	4,393	6,863	10,724	18,124	27,453	42,896	67,025
5	1,079	1,918	2,997	4,911	7,673	11,990	20,262	30,693	47,958	
6	1,182	2,101	3,284	5,380	8,406	13,134	22,196	33,623	52,536	
7	1,277	2,270	3,547	5,811	9,079	14,187	23,975	36,317		
8	1,365	2,427	3,792	6,212	9,706	15,166	25,631	38,825		
9	1,448	2,574	4,021	6,589	10,295	16,086	27,184			
10	1,526	2,713	4,239	6,945	10,852	16,956	28,656			
11	1,601	2,845	4,446	7,284	11,381	17,784				
12	1,672	2,972	4,644	7,608	11,887	18,574				
13	1,740	3,093	4,833	7,919	12,373	19,333				
14	1,806	3,210	5,016	8,218	12,840	20,063				
15	1,869	3,323	5,192	8,506	13,291	20,767				
16	1,930	3,432	5,362							

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