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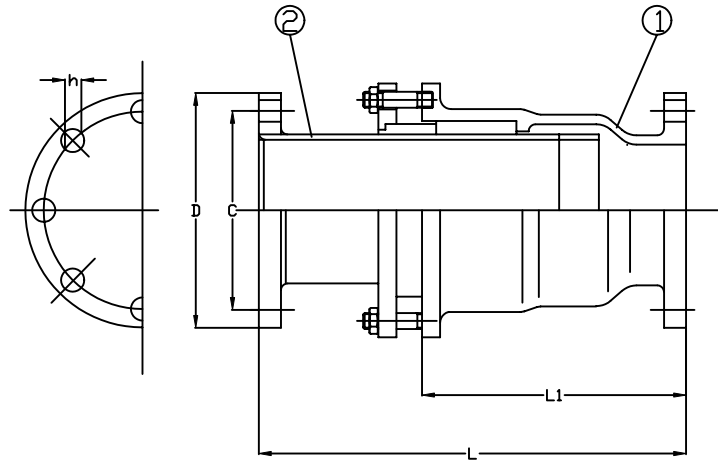
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SERIES F3017 - JIS 5K, 10K, and 16K

Sleeve Type Expansion Joint

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K, 10K, or 16K



Part Nr.	Material	Code
1 - Body	Ductile Iron	FCD45
2 - Sleeve	Stainless Steel	SUS 304

Nominal Pressure	Test Pressure MPa [kgf/cm ²]	
	Body	Seat
5K	0.98 [10]	0.78 [8]
10K	1.96 [20]	1.57 [16]
16K	3.92 [40]	3.14 [32]

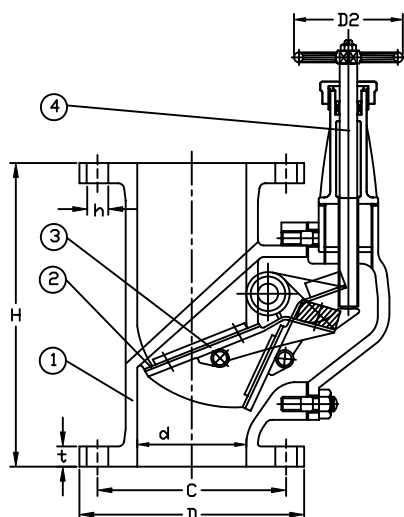
Size	JIS 5K						JIS 10K						JIS 16K					
	L	L1	D	C	No.	h	L	L1	D	C	No.	h	L	L1	D	C	No.	h
50	345	208	130	105	4	15	368	229	155	120	4	19	432	251	155	120	8	19
65	350	213	155	130	4	15	382	236	175	140	4	19	456	259	175	140	8	19
80	385	243	180	145	4	19	415	277	185	150	8	19	469	295	200	160	8	23
100	390	249	200	165	8	19	415	277	210	175	8	19	476	295	225	185	8	23
125	390	249	235	200	8	19	432	282	250	210	8	23	520	300	270	225	8	25
150	400	254	265	230	8	19	439	287	280	240	8	23	522	305	305	260	12	25
200	420	282	320	280	8	23	458	306	330	290	12	23	544	327	350	305	12	25
250	435	292	385	345	12	23	475	311	400	355	12	25	576	332	430	380	12	27
300	455	305	430	390	12	23	510	338	445	400	16	25	588	362	480	430	16	27
350	465	310	480	435	12	25	517	343	490	445	16	25	612	367	540	480	16	33

SERIES F3059 - JIS 5K
Cast Steel Vertical Storm Valve

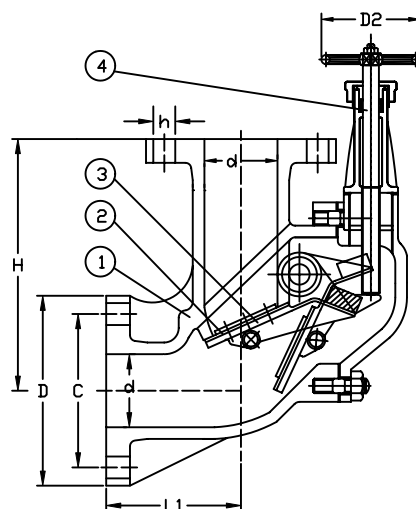
SERIES F3060 - JIS 5K
Cast Steel Angle Storm Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K



Series F3059



Series F3060

Part Nr.	Material	Code
1 - Body	Cast Steel	SC49
2 - Seat	Rubber	NBR
3 - Disc	Bronze	BC6
4 - Stem	Stainless Steel	SUS403

Nominal Dia	Test pressure [kgf/cm ²]
50 to 200	5.1

Type	Size	H	D	C	No.	h	t	L1	D2	Kg
F3059 Vertical	050	210	130	105	4	15	16	-	100	11.5
	065	240	155	130	4	15	18	-	100	16.5
	080	260	180	145	4	19	18	-	125	21.6
	100	280	200	165	8	19	20	-	125	29.6
	125	330	235	200	8	19	20	-	125	43.6
	150	360	265	230	8	19	22	-	125	51.6
	200	459	320	280	8	23	24	-	125	106.5
F3060 Angle	050	170	130	105	4	15	16	90	100	13
	065	200	155	130	4	15	18	110	100	19
	080	220	180	145	4	19	18	120	125	23.8
	100	250	200	165	8	19	20	130	125	34.5
	125	270	235	200	8	19	20	150	125	50
	150	310	265	230	8	19	22	170	125	67
	200	400	320	280	8	23	24	190	125	111

SERIES F3059 - JIS 10K

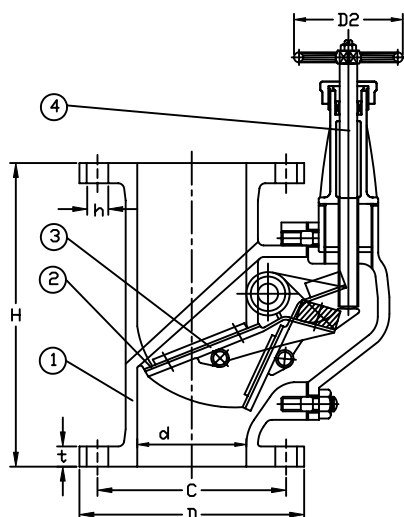
Cast Steel Vertical Storm Valve

SERIES F3060 - JIS 10K

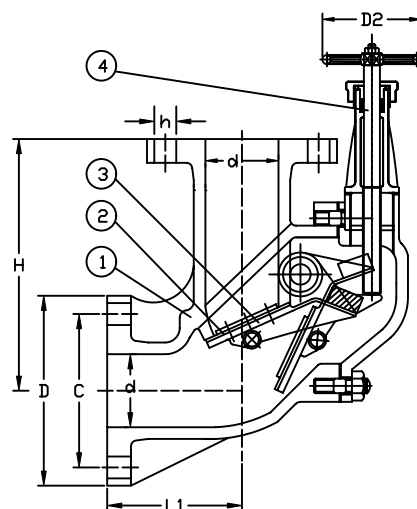
Cast Steel Angle Storm Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220-10K



Series F3059



Series F3060

Part Nr.	Material	Code
1 - Body	Cast Steel	SC49
2 - Seat	Rubber	NBR
3 - Disc	Bronze	BC6
4 - Stem	Stainless Steel	SUS403

Nominal Dia	Test pressure [kgf/cm ²]
50 to 200	5.1

Type	Size	H	D	C	No.	h	t	L1	D2	Kg
F3059 Vertical	050	210	155	120	4	19	16	-	100	11.5
	065	240	175	140	4	19	18	-	100	16.5
	080	260	185	150	8	19	18	-	125	21.6
	100	280	210	175	8	19	18	-	125	29.6
	125	330	250	210	8	23	20	-	125	43.6
	150	360	280	240	8	23	22	-	125	51.6
	200	459	330	290	12	23	22	-	125	106.5
F3060 Angle	050	170	155	120	4	19	16	90	100	13
	065	200	175	140	4	19	18	110	100	19
	080	220	185	150	8	19	18	120	125	23.8
	100	250	210	175	8	19	18	130	125	34.5
	125	270	250	210	8	23	20	150	125	50
	150	310	280	240	8	23	22	170	125	67
	200	400	330	290	12	23	22	190	125	111

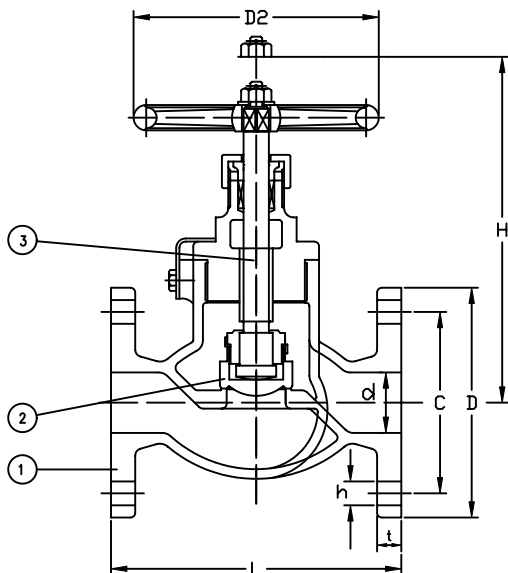
SERIES F7301 - JIS 5K

SERIES F7303 - JIS 16K

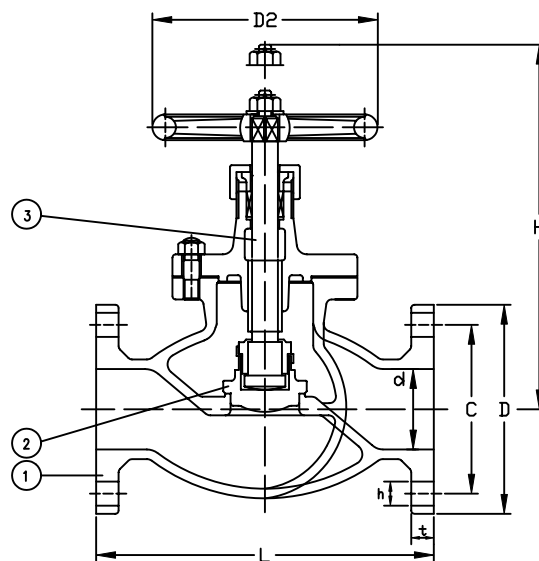
Bronze Globe Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K or 16K



Screwed Bonnet
for sizes 15A-40A



Bolted Bonnet
for sizes 50A-65A

Part Nr.	Material	Code
1 - Body	Bronze	BC6
2 - Disc	Bronze	BC6
3 - Stem	Brass	C3771BD

Nominal Pressure		5K	16K
Hydraulic	Body	12kg	38kg
Inspection	Seat	8kg	23kg

Type	Size	L	D	C	No.	h	t	H	D2
F7301 5K	15	100	80	60	4	12	9	130	80
	20	110	85	65	4	12	10	140	100
	25	120	95	75	4	12	10	160	125
	32	140	115	90	4	15	12	170	125
	40	160	120	95	4	15	12	190	140
	50	210	130	105	4	15	14	235	140
	65	250	155	130	4	15	14	260	160
F7303 16K	15	110	95	70	4	15	12	130	80
	20	120	100	75	4	15	14	140	100
	25	130	125	90	4	19	14	160	125
	32	160	135	100	4	19	16	170	125
	40	180	140	105	4	19	16	190	140

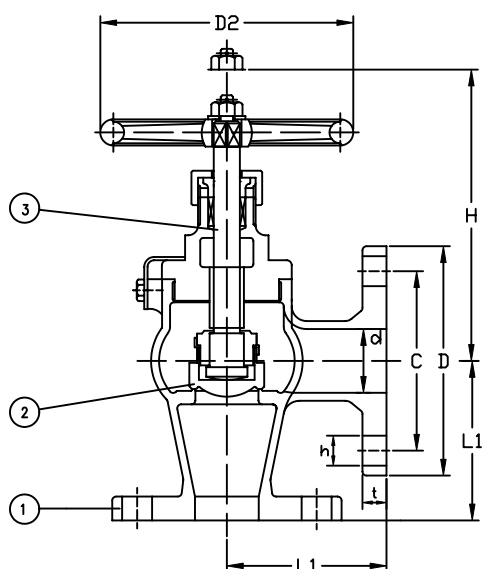
SERIES F7302 - JIS 5K

SERIES F7304 - JIS 16K

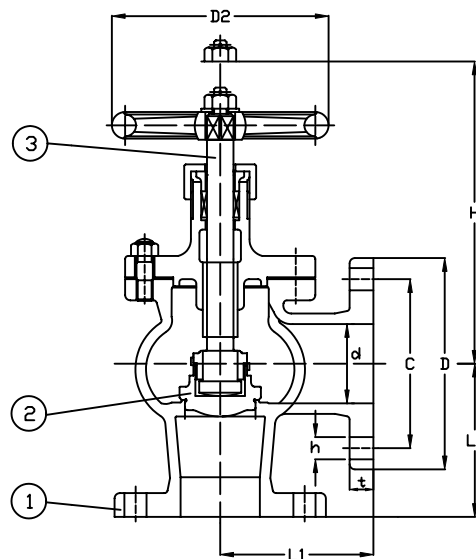
Bronze Angle Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K or 16K



Screwed Bonnet
for sizes 15A-40A



Bolted Bonnet
for sizes 50A-65A

Part Nr.	Material	Code
1 - Body	Bronze	BC6
2 - Disc	Bronze	BC6
3 - Stem	Brass	C3771BD

Nominal Pressure		5K	16K
Hydraulic	Body	12kg	38kg
Inspection	Seat	8kg	23kg

Type	Size	L	D	C	No.	h	t	H	D2
F7302 5K	15	55	80	60	4	12	9	120	80
	20	60	85	65	4	12	10	130	100
	25	65	95	75	4	12	10	145	125
	32	80	115	90	4	15	12	150	125
	40	85	120	95	4	15	12	165	140
	50	100	130	105	4	15	14	200	140
	65	115	155	130	4	15	14	220	160
F7304 16K	15	70	95	70	4	15	12	120	80
	20	75	100	75	4	15	14	130	100
	25	85	125	90	4	19	14	145	125
	32	95	135	100	4	19	16	150	125
	40	100	140	105	4	19	16	165	140

SERIES F7305 - JIS 5K

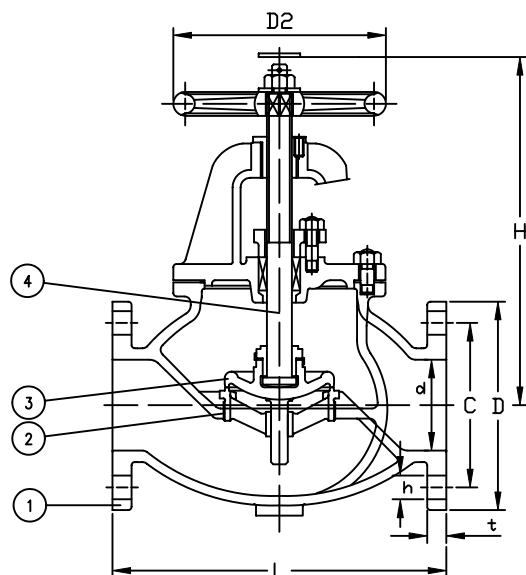
Cast Iron Globe Valve

Manufactured in accordance to JIS F7400

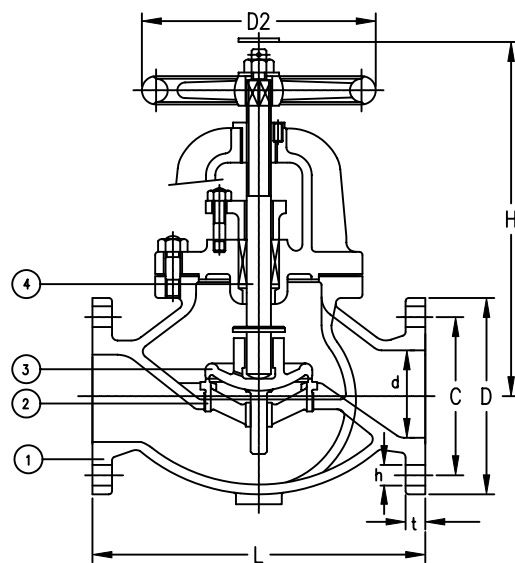
SERIES F7353 - JIS 5K

Cast Iron Globe Valve (SDNR)

Flanges as per JIS B2220 -5K



Series F7305



Series F7353 -SDNR

Part Nr.	Material	Code
1 - Body	Cast Iron	FC20
2 - Seat	Bronze	BC6
3 - Disc	Bronze	BC6
4 - Stem	Brass	C3771BD

Nominal	Test Pressure MPa [kgf/cm2]	
Diameter	Body	Seat
300 or less	1.03 [10.5]	0.76 [7.7]
350 and 400	0.88 [9]	0.65 [6.6]

Size	L	D	C	No.	h	t	H	D2	Kg
050	210	130	105	4	15	16	270	160	14.7
065	250	155	130	4	15	18	300	180	21.3
080	280	180	145	4	19	18	310	180	27.7
100	340	200	165	8	19	20	360	224	40.8
125	410	235	200	8	19	20	390	250	57.6
150	480	265	230	8	19	22	445	280	80.3
200	570	320	280	8	23	24	530	315	139
250	740	385	345	12	23	26	650	355	216
300	840	430	390	12	23	28	740	400	346
350	940	480	435	12	25	30	840	500	418
400	1050	540	495	16	25	30	940	630	600

SERIES F7306 - JIS 5K

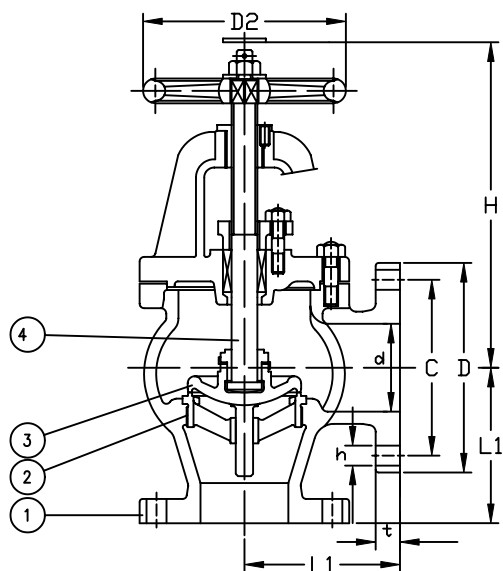
Cast Iron Angle Valve

SERIES F7354 - JIS 5K

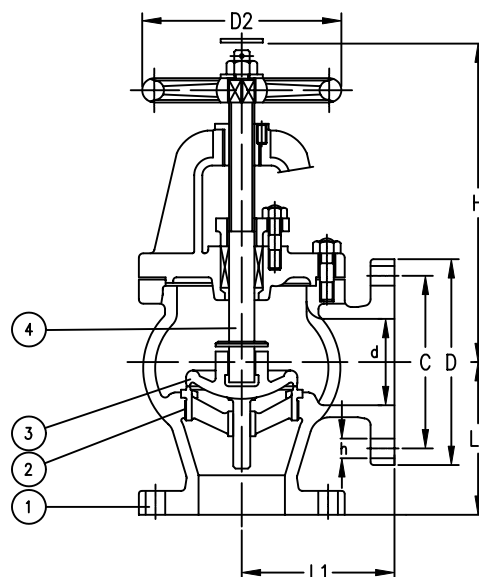
Cast Iron Angle Valve (SDNR)

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K



Series F7306



Series F7354 -SDNR

Part Nr.	Material	Code
1 - Body	Cast Iron	FC20
2 - Seat	Bronze	BC6
3 - Disc	Bronze	BC6
4 - Stem	Brass	C3771BD

Nominal Diameter	Test Pressure MPa [kgf/cm ²]	
	Body	Seat
300 or less	1.03 [10.5]	0.76 [7.7]
350 and 400	0.88 [9]	0.65 [6.6]
450 and over	0.74 [7.5]	0.54 [5.5]

Size	L1	D	C	No.	h	t	H	D2	Kg
050	100	130	105	4	15	16	240	160	12.9
065	115	155	130	4	15	18	255	180	18.2
080	130	180	145	4	19	18	265	180	23.4
100	150	200	165	8	19	20	310	224	33.7
125	170	235	200	8	19	20	330	250	46.2
150	190	265	230	8	19	22	380	280	63.4
200	220	320	280	8	23	24	450	315	105
250	275	385	345	12	23	26	540	355	166
300	310	430	390	12	23	28	610	400	243
350	360	480	435	12	25	30	690	500	327
400	395	540	495	16	25	30	770	630	459
450	440	605	555	16	25	30	835	630	618
500	485	655	605	20	25	32	915	710	800

SERIES F7307 - JIS 10K

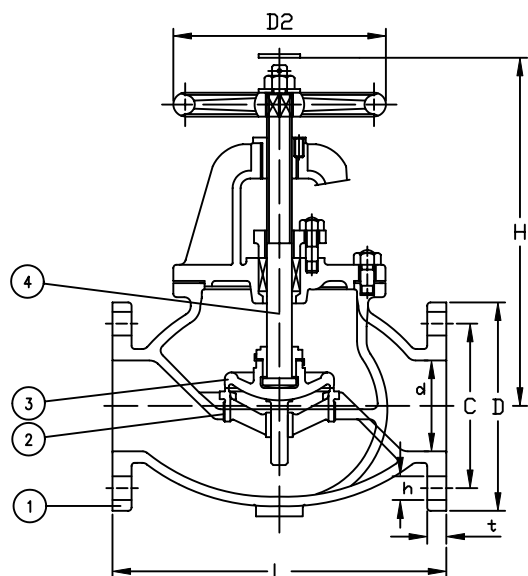
Cast Iron Globe Valve

SERIES F7375 - JIS 10K

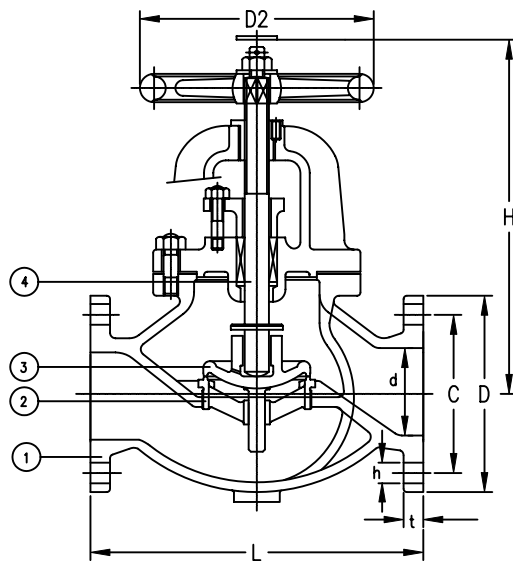
Cast Iron Globe Valve (SDNR)

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 10K



Series F7307



Series F7375 - SDNR

Part Nr.	Material	Code
1 - Body	Cast Iron	FC20
2 - Seat	Bronze	BC6
3 - Disc	Bronze	BC6
4 - Stem	Brass	C3771BD

Nominal Diameter	Test Pressure MPa (kgf/cm ²)	
	Body	Seat
200 or less	2.06 [21]	1.51 [15.4]
250 or more	1.47 [15]	1.08 [11]

Size	L	D	C	No.	h	t	H	D2	Kg
050	220	155	120	4	19	20	285	160	19.9
065	270	175	140	4	19	22	310	200	28.7
080	300	185	150	8	19	22	320	200	32.4
100	350	210	175	8	19	24	370	250	48.7
125	420	250	210	8	23	24	420	280	73.1
150	490	280	240	8	23	26	470	315	104
200	570	330	290	12	23	26	555	355	162
250	740	400	355	12	25	30	680	450	304
300	840	445	400	16	25	32	770	500	458

SERIES F7308 - JIS 10K

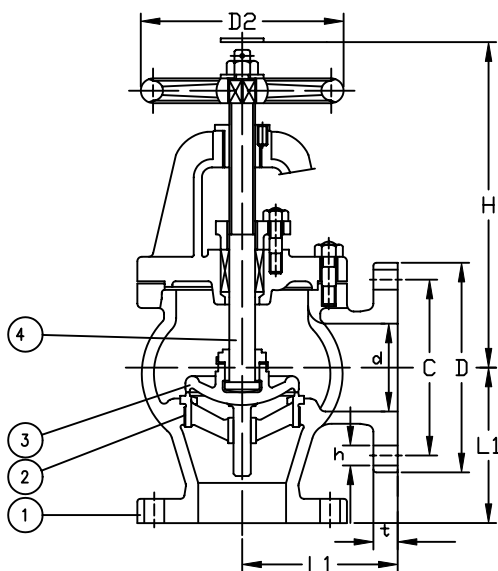
Cast Iron Angle Valve

Manufactured in accordance to JIS F7400

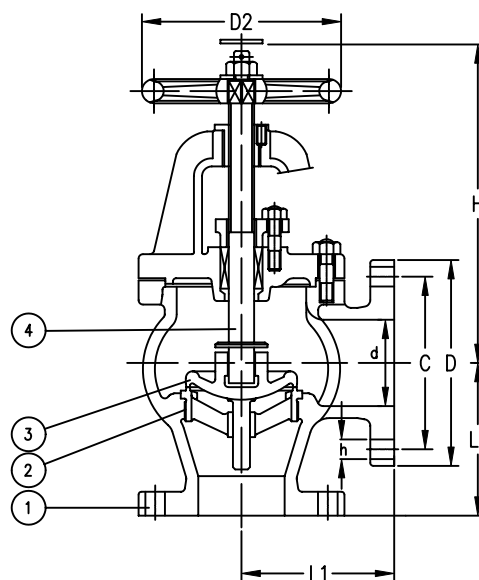
SERIES F7376 - JIS 10K

Cast Iron Angle Valve (SDNR)

Flanges as per JIS B2220 -10K



Series F7308



Series F7376- SDNR

Part Nr.	Material	Code
1 - Body	Cast Iron	FC20
2 - Seat	Bronze	BC6
3 - Disc	Bronze	BC6
4 - Stem	Brass	C3771BD

Nominal Diameter	Test Pressure MPa (kgf/cm2)	
	Body	Seat
200 or less	2.06 [21]	1.51 [15.4]
250 or more	1.47 [15]	1.08 [11]

Size	L1	D	C	No.	h	t	H	D2	Kg
050	120	155	120	4	19	20	255/255	160	18.2
065	130	175	140	4	19	22	270/260	200	25.4
080	140	185	150	8	19	22	275/270	200	27.4
100	160	210	175	8	19	24	315/305	250	40.6
125	180	250	210	8	23	24	360/350	280	69.9
150	205	280	240	8	23	26	405/390	315	81
200	230	330	290	12	23	26	475/450	355	125
250	290	400	355	12	25	30	570	450	211
300	320	445	400	16	25	32	645	500	293
350	360	490	445	16	25	34	710	560	386
400	420	560	510	16	27	36	790	630	544

SERIES F7309 - JIS 16K

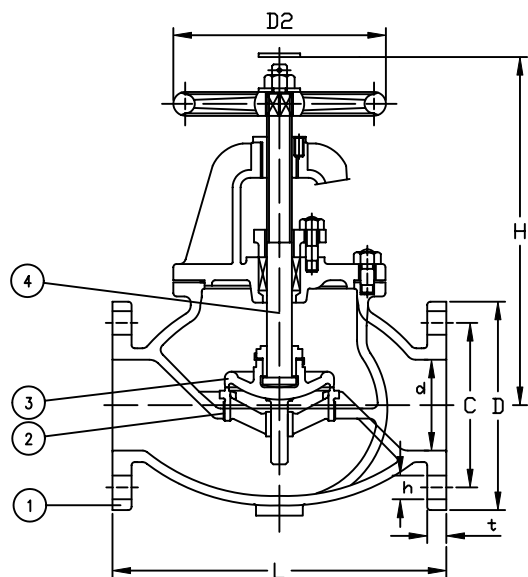
Cast Iron Globe Valve

Manufactured in accordance to JIS F7400

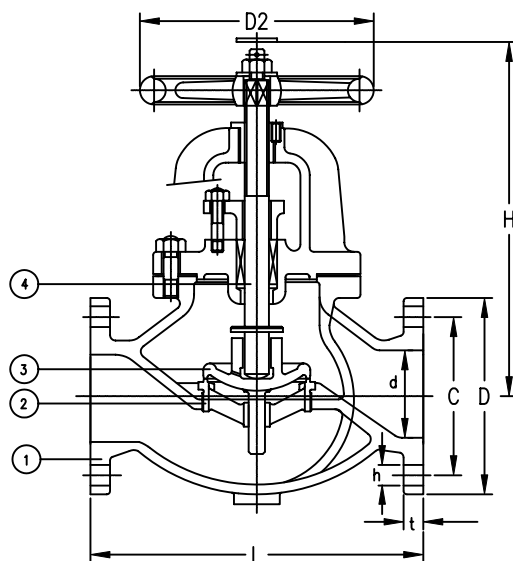
SERIES F7377 - JIS 16K

Cast Iron Globe Valve (SDNR)

Flanges as per JIS B2220 - 16K



Series F7309



Series F7377 - SDNR

Part Nr.	Material	Code
1 - Body	Cast Iron	FC20
2 - Seat	Bronze	BC6
3 - Disc	Bronze	BC6
4 - Stem	Brass	C3771BD

Nominal Diameter	Test Pressure MPa (kgf/cm ²)	
	Body	Seat
50 to 200	3.2 [33]	2.38 [24.2]

Size	L	D	C	No.	h	t	H	D2	Kg
050	220	155	155	8	19	20	285	160	19.6
065	270	175	175	8	19	22	310	200	28.3
080	300	200	200	8	23	24	340	224	40.4
100	350	225	225	8	23	26	385	250	56.9
125	430	270	270	8	25	26	455	315	89.5
150	500	305	305	12	25	28	510	355	123
200	570	350	350	12	25	30	630	450	188

SERIES F7310 - JIS 16K

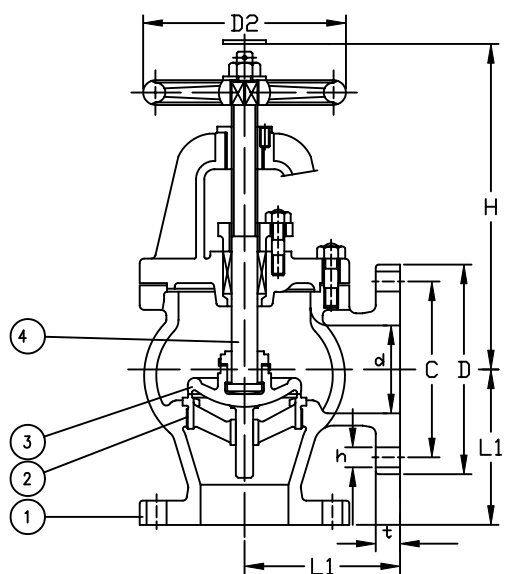
Cast Iron Angle Valve

Manufactured in accordance to JIS F7400

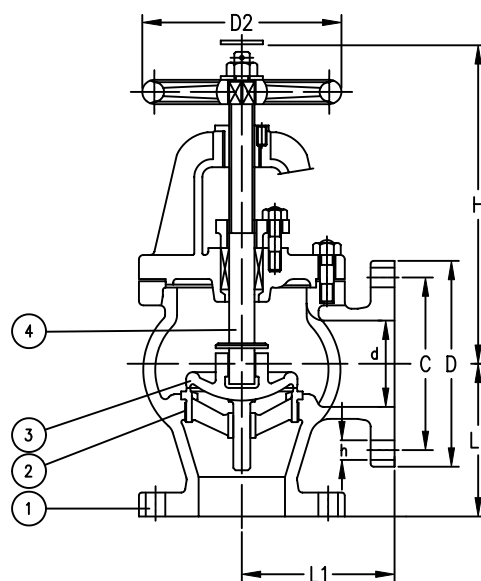
SERIES F7378 - JIS 16K

Cast Iron Angle Valve (SDNR)

Flanges as per JIS B2220 - 16K



Series F7310



Series F7378 - SDNR

Part Nr.	Material	Code
1 - Body	Cast Iron	FC20
2 - Seat	Bronze	BC6
3 - Disc	Bronze	BC6
4 - Stem	Brass	C3771BD

Nominal Diameter	Test Pressure MPa (kgf/cm ²)	
	Body	Seat
50 to 200	3.2 [33]	2.38 [24.2]

Size	L1	D	C	No.	h	t	H	D2	Kg
050	120	155	120	8	19	20	255	160	18
065	130	175	140	8	19	22	270	200	25
080	150	200	160	8	23	24	295	224	35.7
100	170	225	185	8	23	26	330	250	49.2
125	200	270	225	8	25	26	390	315	76.1
150	225	305	260	12	25	28	435	355	103
200	250	350	305	12	25	30	540	450	155

SERIES F7311 - JIS 5K

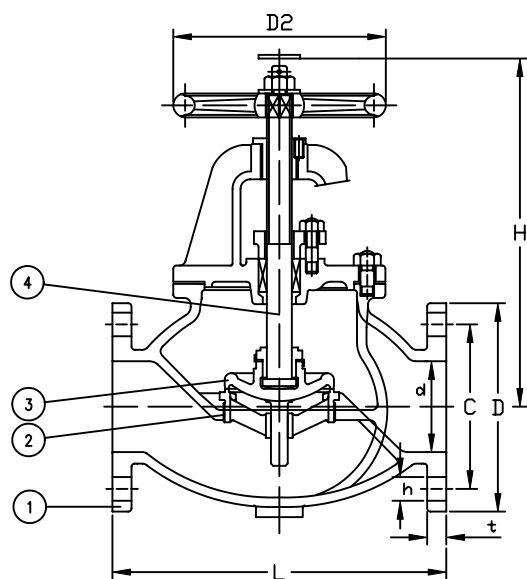
Cast Steel Globe Valve

SERIES F7312 - JIS 5K

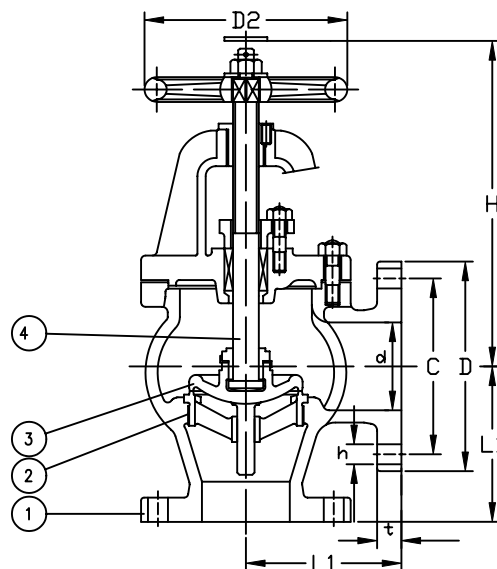
Cast Steel Angle Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K



Series F7311



Series F7312

Part Nr.	Material	Code
1 - Body	Cast Steel	SC46
2 - Seat	Stainless Steel	SCS2
3 - Disc	Stainless Steel	SCS2
4 - Stem	Stainless Steel	SUS403

	Test Pressure MPa [kg/cm ²]
Body	1.04 [10.5]
Seat	0.76 [7.7]

Size	JIS F7311			JIS F7312								
	L	H	Kg	L1	H	Kg	D	C	No.	h	t	D2
050	210	270	15.5	100	240	13.3	130	105	4	15	14	160
065	250	300	25.8	115	255	19.5	155	130	4	15	14	180
080	280	310	32.3	130	265	25.5	180	145	4	19	14	180
100	340	360	47.6	150	310	34.8	200	165	8	19	16	224
125	410	390	71.3	170	330	46.5	235	200	8	19	16	250
150	480	445	86	190	380	66.5	265	230	8	19	18	280
200	570	530	147	220	450	111	320	280	8	23	20	315
250	740	791	230	275	641	178	385	345	12	23	22	355
300	840	929	309	310	748	275	430	390	12	23	22	400

SERIES F7313 - JIS 20K

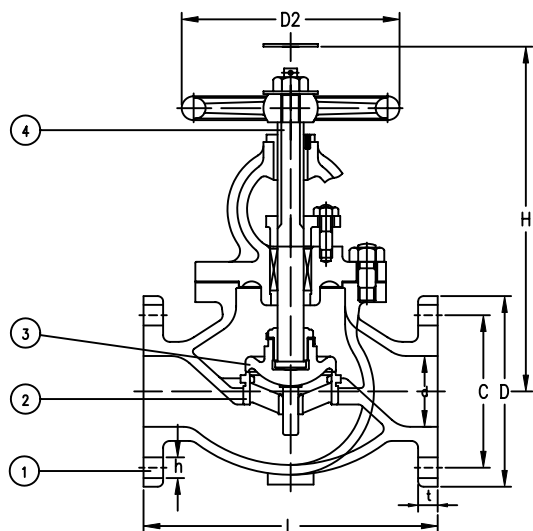
Cast Steel Globe Valve

SERIES F7473 - JIS 20K

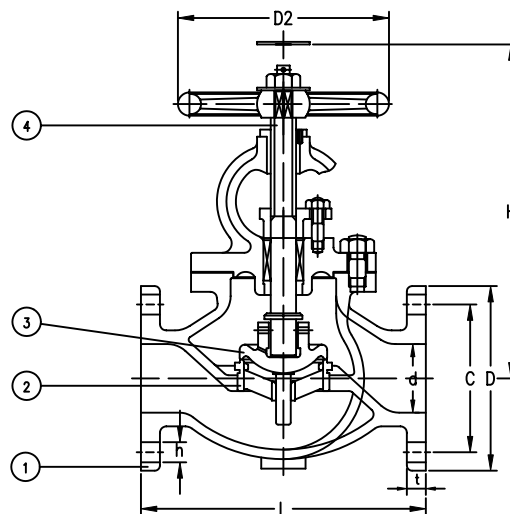
Cast Steel Globe Valve (SDNR)

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 20K



Series F7313



Series F7473 - SDNR

Part Nr.	Material	Code
1 - Body	Cast Steel	SC49
2 - Seat	Stainless Steel	SCS2
3 - Disc	Stainless Steel	SCS2
4 - Stem	Stainless Steel	SUS403

	Test pressure MPa [kgf/cm ²]
Body	5.00 [51.0]
Seat	3.67 [37.4]

Size	L	D	C	No.	h	t	H	D2	Kg
032	190	135	100	4	19	18	270	160	14.4
040	200	140	105	4	19	18	190	160	16
050	230	155	120	8	19	18	305	200	21.6
065	270	175	140	8	19	20	345	224	30.4
080	300	200	160	8	23	22	385	250	43.5
100	350	225	185	8	23	24	440	280	62.3
125	430	270	225	8	25	26	500	315	94.8
150	500	305	260	12	25	28	550	355	132
200	560	350	305	12	25	30	630	450	204
250	660	430	380	12	27	34	725	560	336

SERIES F7314 - JIS 20K

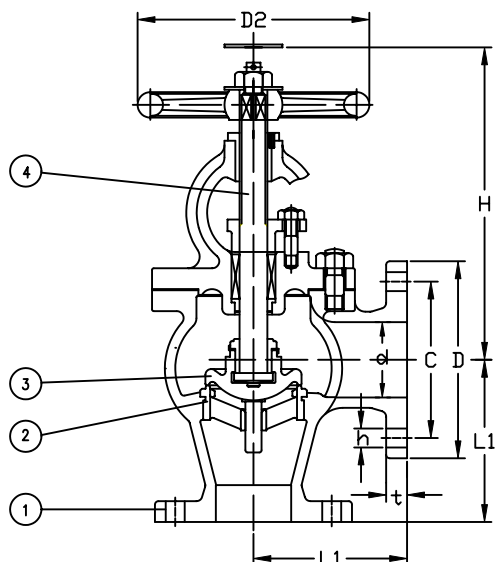
Cast Steel Angle Valve

SERIES F7474 - JIS 20K

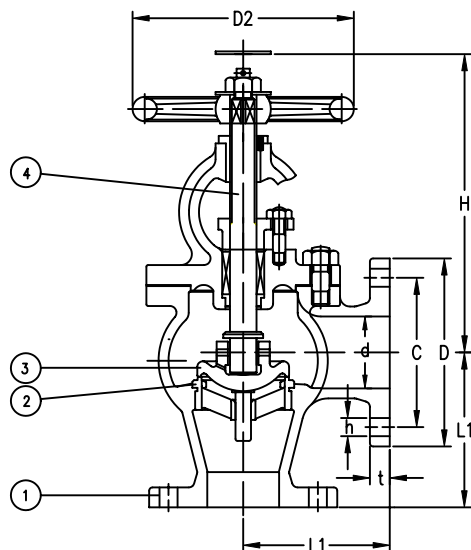
Cast Steel Angle Valve (SDNR)

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 20K



Series F7314



Series F7474 - SDNR

Part Nr.	Material	Code
1 - Body	Cast Steel	SC49
2 - Seat	Stainless Steel	SCS2
3 - Disc	Stainless Steel	SCS2
4 - Stem	Stainless Steel	SUS403

	Test pressure MPa [kgf/cm ²]
Body	5.00 [51.0]
Seat	3.67 [37.4]

Size	L	D	C	No.	h	t	H	D2	Kg
032	100	135	100	4	19	18	250	160	13
040	110	140	105	4	19	18	265	160	15.2
050	125	155	120	8	19	18	275	200	20
065	135	175	140	8	19	20	305	224	26.9
080	150	200	160	8	23	22	340	250	38.9
100	170	225	185	8	23	24	385	280	54.4
125	200	270	225	8	25	26	440	315	79.9
150	225	305	260	12	25	28	485	355	111
200	280	350	305	12	25	30	540	450	181
250	310	430	380	12	27	34	620	560	283

SERIES F7317 - JIS 40K

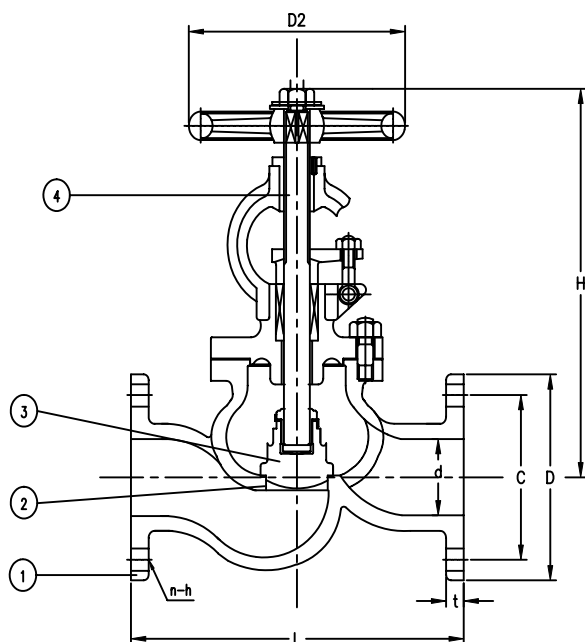
Cast Steel Globe Valve

SERIES F7318 - JIS 40K

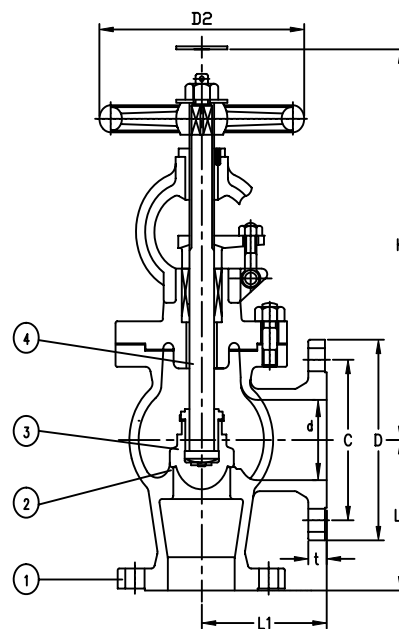
Cast Steel Angle Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 40K



Series F7317



Series F7318

Part Nr.	Material	Code
1 - Body	Cast Steel	SC49
2 - Stem	Stainless Steel	SUS403
3 - Disc	Stainless Steel	SCS2
4 - Seat	Stainless Steel	SCS2

	Test pressure MPa [kgf/cm ²]
Body	9.12 [93.0]
Seat	6.69 [68.2]

Size	JIS F7317			JIS F7318								
	L	H	KG	L1	H	Kg	D	C	No.	h	t	D2
032	229	370	25.4	114	350	24.9	140	105	4	19	24	200
040	241	395	30.2	121	370	29.4	160	120	4	23	24	200
050	292	435	41.0	146	405	40.0	165	130	8	19	26	224
065	330	490	62.3	165	455	60.3	200	160	8	23	30	250
080	356	540	79.0	178	500	76.2	210	170	8	23	32	315
100	432	640	140	216	590	135	250	205	8	25	36	400
125	508	720	197	254	660	189	300	250	8	27	40	450
150	559	815	298	279	740	284	355	295	12	33	44	500

SERIES F7319 - JIS 10K

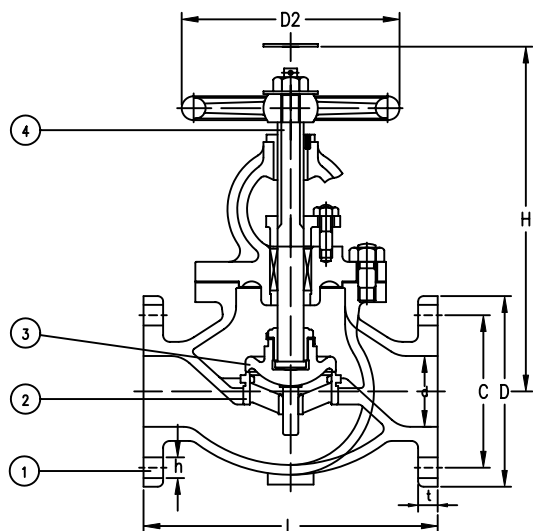
Cast Steel Globe Valve

SERIES F7471 - JIS 10K

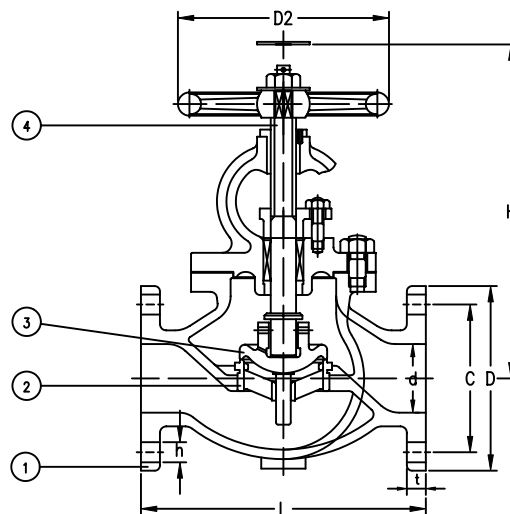
Cast Steel Globe Valve (SDNR)

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 10K



Series F7319



Series F7471 - SDNR

Part Nr.	Material	Code
1 - Body	Cast Steel	SC49
2 - Seat	Stainless Steel	SCS2
3 - Disc	Stainless Steel	SCS2
4 - Stem	Stainless Steel	SUS403

	Test pressure MPa [kgf/cm ²]
Body	2.06 [21.0]
Seat	1.51 [15.4]

Size	L	D	C	No.	h	t	H	D2	Kg
050	220	155	120	4	19	20	285	160	19.9
065	270	175	140	4	19	22	310	200	28.7
080	300	185	150	8	19	22	320	200	32.4
100	350	210	175	8	19	24	370	250	48.7
125	420	250	210	8	23	24	420	280	73.1
150	490	280	240	8	23	26	470	315	104
200	570	330	290	12	23	26	555	355	162
250	740	400	355	12	25	30	680	450	304
300	840	445	400	16	25	32	770	500	458

SERIES F7320 - JIS 10K

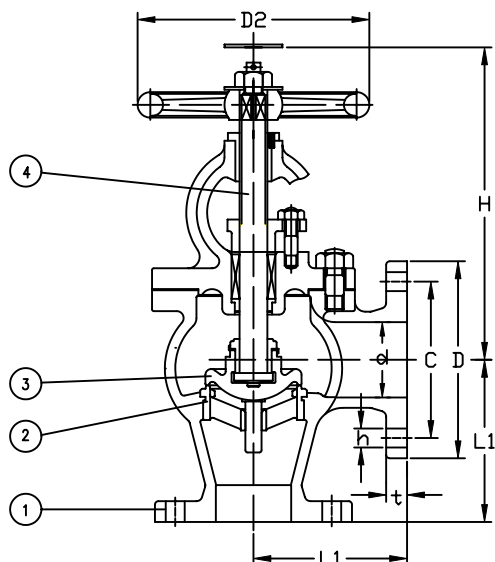
Cast Steel Angle Valve

SERIES F7472 - JIS 10K

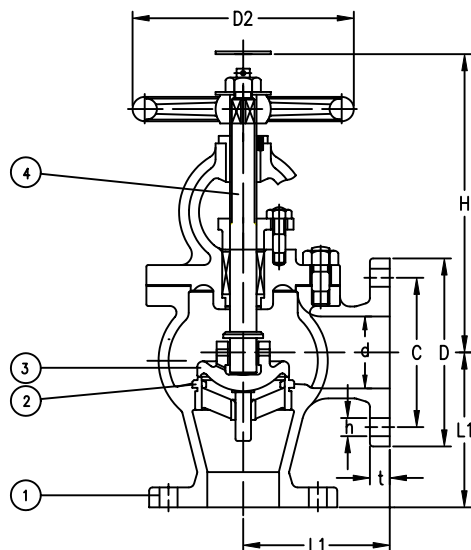
Cast Steel Angle Valve (SDNR)

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 10K



Series F7320



Series F7472

Part Nr.	Material	Code
1 - Body	Cast Steel	SC49
2 - Seat	Stainless Steel	SCS2
3 - Disc	Stainless Steel	SCS2
4 - Stem	Stainless Steel	SUS403

	Test pressure MPa [kgf/cm ²]
Body	2.06 [21.0]
Seat	1.51 [15.4]

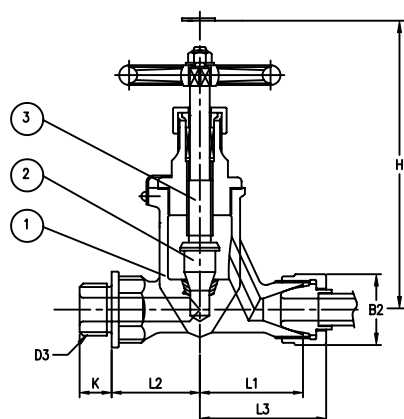
Size	L	D	C	No.	h	t	H	D2	Kg
050	120	155	120	4	19	16	240	160	16.3
065	130	175	140	4	19	18	260	200	23
080	140	185	150	8	19	18	265	200	25.3
100	160	210	175	8	19	18	300	250	37
125	180	250	210	8	23	20	350	280	57.1
150	205	280	240	8	23	22	400	315	77.2
200	230	330	290	12	23	22	480	355	116
250	290	400	355	12	25	24	535	400	188
300	320	445	400	16	25	24	610	450	256

SERIES F7329 - JIS 40K

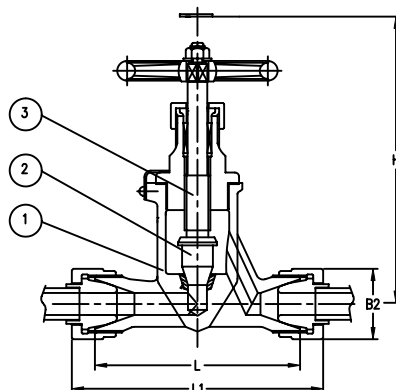
Forged Steel Globe Valve

Manufactured in accordance to JIS F7400

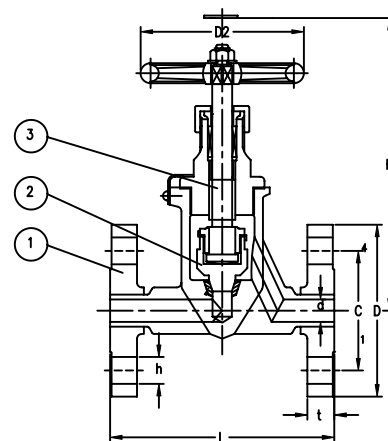
Flanges as per JIS B2220 - JIS 40K



“S” Type



“U” Type



“F” Type

Part Nr.	Material	Code
1 - Body	Forged Steel	SF45
2 - Stem	Stainless Steel	SUS403
3 - Disc	Stainless Steel	SUS402J1

	Test Pressure MPa [kg/cm2]
Body	9.12 [93.0]
Seat	6.69 [68.2]

Type	Type of Connection	Nominal Dia.
S	Screw thread type	6 and 10
U	Union type	6 and 10
F	Flange type	15 to 25

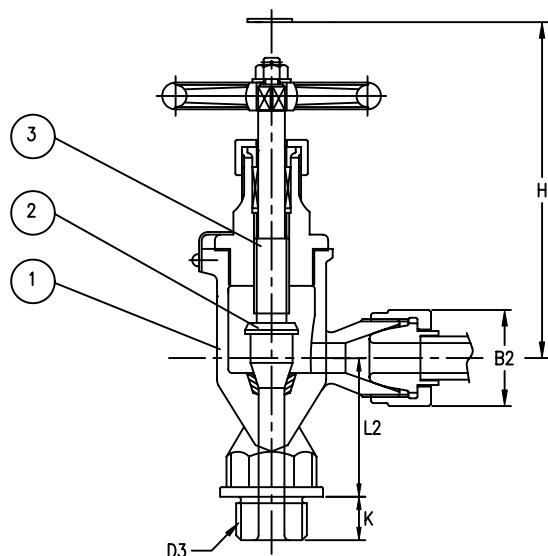
	Size	L	L1	L2	L3	K	D	C	n	h	t	H	B2	D3	Kg
Type	6	-	42	38	51	12	-	-	-	-	-	150	30	M20x1.5	1.5
“S”	10	-	51	45	63	16	-	-	-	-	-	160	41	M42x2	1.8
Type	6	84	102	-	-	-	-	-	-	-	-	150	30	-	1.54
“U”	10	102	126	-	-	-	-	-	-	-	-	160	41	-	1.91
Type	15	150	-	-	-	-	115	80	4	19	20	215	-	-	5.91
“F”	20	170	-	-	-	-	120	85	4	19	20	250	-	-	7.4
	25	200	-	-	-	-	130	95	4	19	22	270	-	-	9.79

SERIES F7330 - JIS 40K

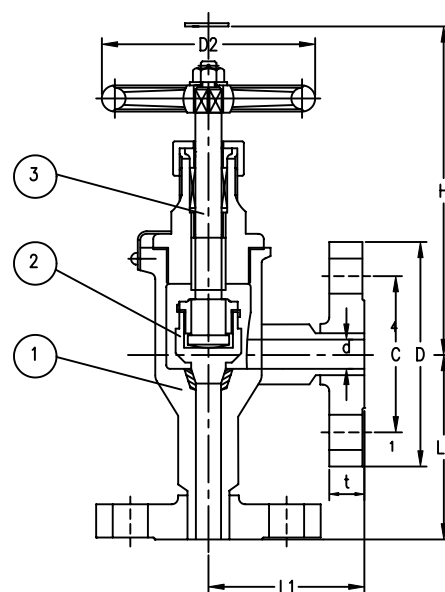
Forged Steel Angle Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 40K



“S” Type



“F” Type

Part Nr.	Material	Code
1 - Body	Forged Steel	SF45
2 - Stem	Stainless Steel	SUS403
3 - Disc	Stainless Steel	SUS402J1

	Test Pressure MPa [kg/cm ²]
Body	9.12 [93.0]
Seat	6.69 [68.2]

Type	Type of Connection	Nominal Dia.
S	Screw thread type	6 and 10
F	Flange type	15 to 25

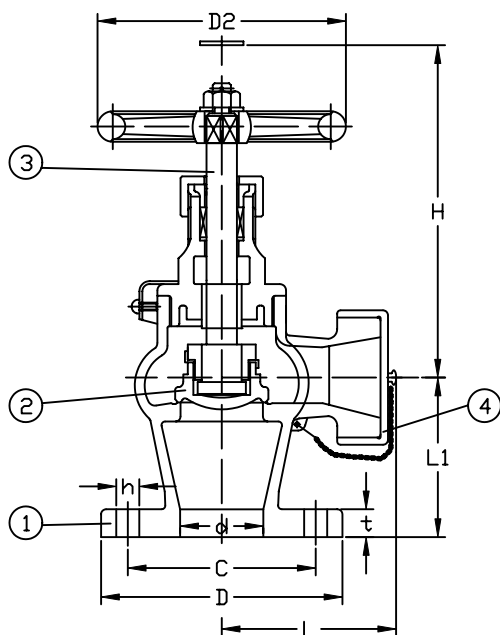
	Size	L	L1	L2	L3	K	D	C	n	h	t	H	B2	D3	Kg
Type	6	-	42	38	51	12	-	-	-	-	-	140	30	M20x1.5	1.47
“S”	10	-	46	45	58	16	-	-	-	-	-	145	41	M24x2	1.7
Type	15	90	-	-	-	-	115	80	4	19	20	190	-	-	5.89
“F”	20	95	-	-	-	-	120	85	4	19	20	220	-	-	7.27
	25	100	-	-	-	-	130	95	4	19	22	235	-	-	9.38

SERIES F7334 - JIS 5K & 10K Bronze Hose Angle Valve

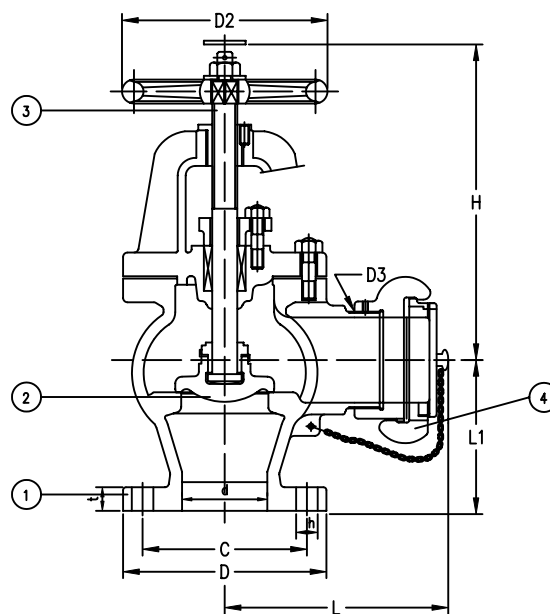
Nakajima System

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K or 10K



Screwed Bonnet
for sizes 15A-25A



Bolted Bonnet
for sizes 40A-65A

Part Nr.	Material	Code	Nominal Pressure		5K	10K
1 - Body	Bronze	BC6	Hydraulic	Body	12kg	24kg
2 - Disc	Bronze	BC6		Seat	8kg	12kg
3 - Stem	Brass	C3771BD	Inspection			
4 - Coupling	Bronze	BC6				

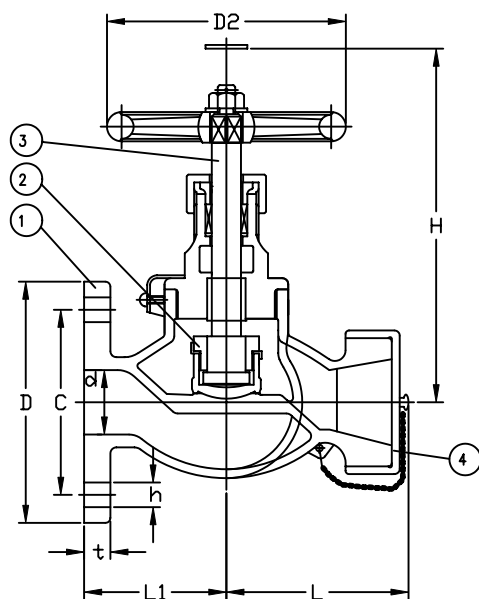
Flange	Size	L	L1	D	C	No.	h	t	H	D2	D3
5K	15	68	55	80	60	4	12	9	129	80	M42x2
	25	78	65	95	75	4	12	10	161	125	M42x2
	40	124	85	120	95	4	15	12	193	140	M52x2
	50	155	100	130	105	4	15	14	256	160	M64x2
10K	15	73	70	95	70	4	15	12	129	80	M42x2
	25	83	85	125	90	4	19	14	161	125	M42x2
	40	124	100	140	105	4	19	16	193	140	M52x2
	50	160	120	155	120	4	19	16	271	160	M64x2
	65	180	130	175	140	4	19	18	298	200	M80x2

SERIES F7334 - JIS 5K & 10K Bronze Hose Globe Valve

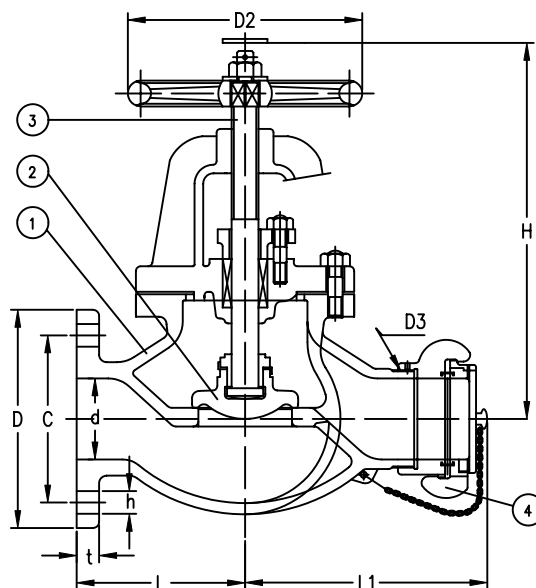
Nakajima System

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K or 10K



Screwed Bonnet
for sizes 15A-25A



Bolted Bonnet
for sizes 40A-65A

Part Nr.	Material	Code	Nominal Pressure		5K	10K
1 - Body	Bronze	BC6	Hydraulic	Body	12kg	24kg
2 - Disc	Bronze	BC6		Seat	8kg	12kg
3 - Stem	Brass	C3771BD	Inspection			
4 - Coupling	Bronze	BC6				

Type	Size	L	L1	D	C	No.	h	t	H	D2	D3
5K	15	73	50	80	60	4	12	9	129	80	M42x2
	25	78	60	95	75	4	12	10	161	125	M42x2
	40	128	80	120	95	4	15	12	193	140	M52x2
	50	160	105	130	105	4	15	14	256	160	M64x2
10K	15	73	55	95	70	4	15	12	129	80	M42x2
	25	83	65	125	90	4	19	14	161	125	M42x2
	40	133	90	140	105	4	19	16	193	140	M52x2
	50	165	110	155	120	4	19	16	271	160	M64x2
	65	200	135	175	140	4	19	18	298	200	M80x2

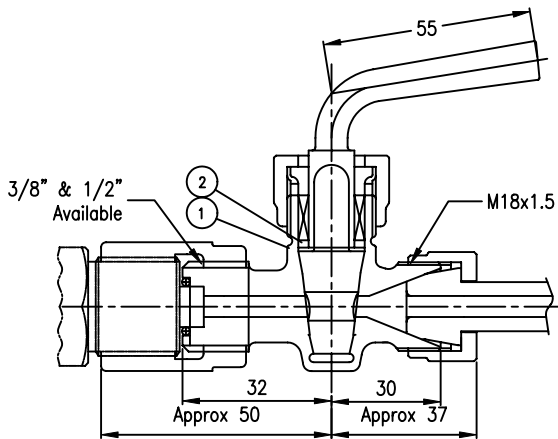
SERIES F7343 - JIS 20K

Bronze Guage Cock

Manufactured in accordance to JIS F7400

Part Nr.	Material	Code
1 - Body	Bronze	BC6
2 - Plug	Bronze	BC6

Hydraulic	Body	30kg
Inspection	Seat	22kg



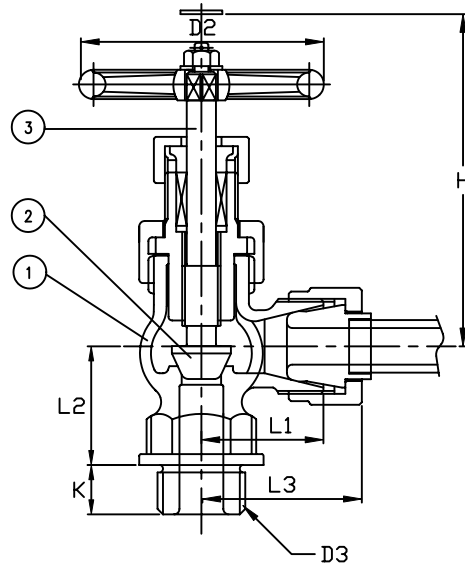
SERIES F7389 - JIS 20K

Bronze Angle Valve

Manufactured in accordance to JIS F7400

Part Nr.	Material	Code
1 - Body	Bronze	BC6
2 - Disc	Bronze	BC6
3 - Stem	Bronze	C3771BD

Hydraulic	Body	48kg
Inspection	Seat	29kg



Size	Pipe Out Dia		L1	L2	L3	d3	K	H	D2
	Copper	Steel							
6	8 / 10	10.5	32	32	41	M20x1.5	12	95	63
10	15	17.3	39	35	51	M24x2	16	105	80

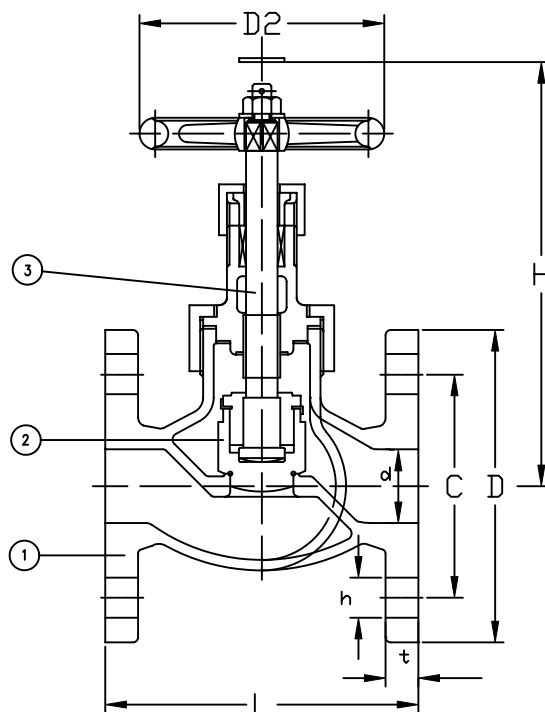
SERIES F7346 - JIS 5K

SERIES F7348 - JIS 16K

Bronze Globe Valve -Union Bonnet

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K or 16K



Part Nr.	Material	Code
1 - Body	Bronze	BC6
2 - Disc	Bronze	BC6
3 - Stem	Brass	C3771BD

Nominal Pressure		5K	16K
Hydraulic	Body	12kg	38kg
Inspection	Seat	8kg	23kg

Type	Size	L	D	C	No.	h	t	H	D2
F7346 5K	15	100	80	60	4	12	9	155	80
	20	110	85	65	4	12	10	165	100
	25	120	95	75	4	12	10	185	125
	32	140	115	90	4	15	12	195	125
	40	160	120	95	4	15	12	210	140
F7348 16K	15	110	95	70	4	15	12	155	80
	20	120	100	75	4	15	14	165	100
	25	130	125	90	4	19	14	185	125
	32	160	135	100	4	19	16	195	125
	40	180	140	105	4	19	16	210	140

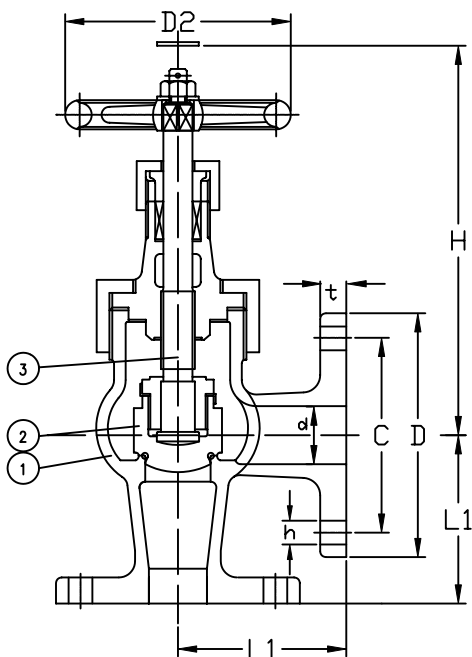
SERIES F7347 - JIS 5K

SERIES F7349 - JIS 16K

Bronze Angle Valve - Union Bonnet

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K or 16K



Part Nr.	Material	Code
1 - Body	Bronze	BC6
2 - Disc	Bronze	BC6
3 - Stem	Brass	C3771BD

Nominal Pressure		5K	16K
Hydraulic	Body	12kg	38kg
Inspection	Seat	8kg	23kg

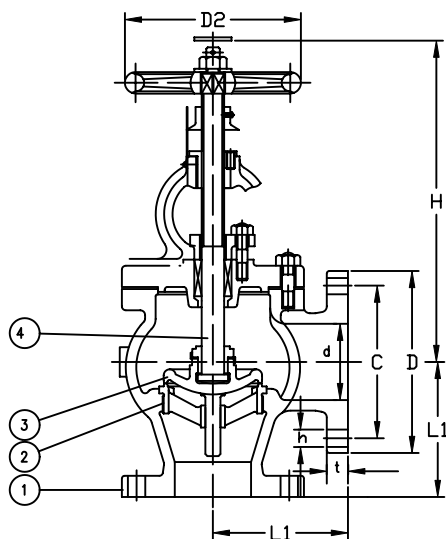
Type	Size	L	D	C	No.	h	t	H	D2
F7347 5K	15	55	80	60	4	12	9	145	80
	20	60	85	65	4	12	10	155	100
	25	65	95	75	4	12	10	175	125
	32	80	115	90	4	15	12	175	125
	40	85	120	95	4	15	12	190	140
F7349 16K	15	70	95	70	4	15	12	145	80
	20	75	100	75	4	15	14	155	100
	25	85	125	90	4	19	14	175	125
	32	95	135	100	4	19	16	175	125
	40	100	140	105	4	19	16	190	140

SERIES F7350 - JIS 10K

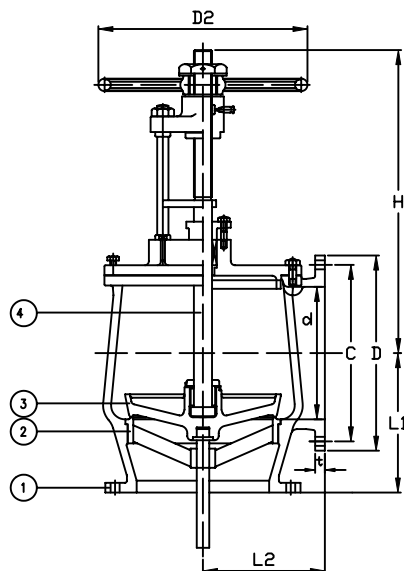
Cast Steel Angle Hull Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 10K



Sizes 150A to 300A



Sizes 350A to 700A

Part Nr.	Material	Code
1 - Body	Cast Steel	SC49
2 - Stem	Stainless Steel	SUS403
3 - Disc	Stainless Steel	SUS420J1
4 - Seat	Stainless Steel	SUS420J1

Nominal Diameter	Test Pressure MPa [kgf/cm ²]	
	Body	Seat
200 or less	1.47 [15]	1.08 [11]
250 and 300	1.03 [10.5]	0.76 [7.7]
300 more	0.5 [5.1]	0.25 [2.5]

Size	L1	L2	D	C	No.	h	t	H	D2	Kg
150	205	-	280	240	8	23	22	400	315	78
200	230	-	330	290	12	23	22	480	355	117
250	290	-	400	355	12	25	24	535	400	190
300	320	-	445	400	16	25	24	610	450	258
350	360	320	490	445	16	25	26	1010	500	376
400	400	350	560	510	16	27	28	1130	600	490
450	450	380	620	565	20	27	30	1250	710	632
500	500	430	675	620	20	33	30	1380	800	839
550	550	460	745	680	24	33	32	1505	900	1060
600	610	500	795	730	24	33	32	1630	900	1270
650	660	540	845	780	24	33	34	1765	1000	1590
700	710	570	905	840	24	33	34	1890	1000	1930

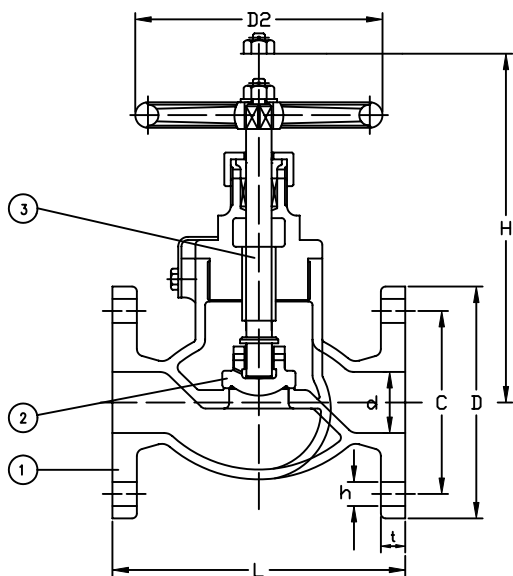
SERIES F7351 - JIS 5K

SERIES F7409 - JIS 16K

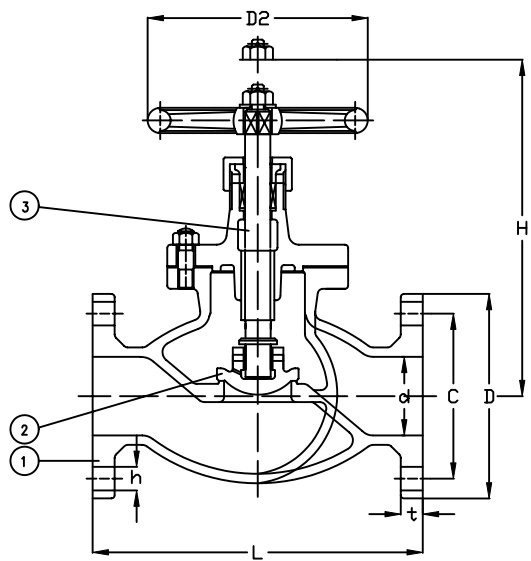
Bronze Globe Valve (SDNR)

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K or 16K



Screwed Bonnet
for sizes 15A-40A



Bolted Bonnet
for sizes 50A-65A

Part Nr.	Material	Code
1 - Body	Bronze	BC6
2 - Disc	Bronze	BC6
3 - Stem	Brass	C3771BD

Nominal Pressure		5K	16K
Hydraulic	Body	12kg	38kg
Inspection	Seat	8kg	23kg

Type	Size	L	D	C	No.	h	t	H	D2
F7351 5K	15	100	80	60	4	12	9	130	80
	20	110	85	65	4	12	10	140	100
	25	120	95	75	4	12	10	160	125
	32	140	115	90	4	15	12	170	125
	40	160	120	95	4	15	12	190	140
	50	210	130	105	4	15	14	235	140
	65	250	155	130	4	15	14	260	160
F7409 16K	15	110	95	70	4	15	12	130	80
	20	120	100	75	4	15	14	140	100
	25	130	125	90	4	19	14	160	125
	32	160	135	100	4	19	16	170	125
	40	180	140	105	4	19	16	190	140

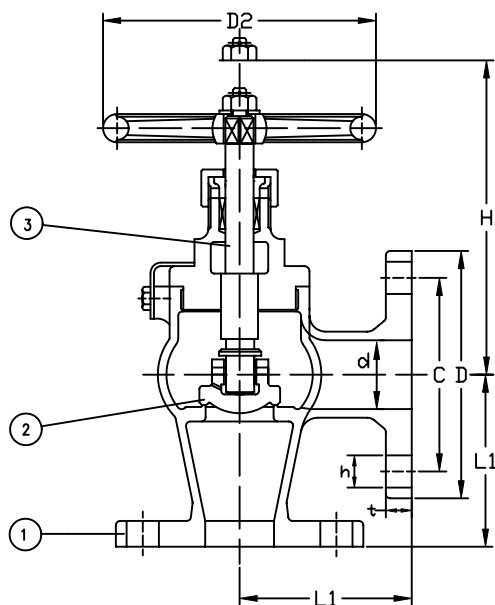
SERIES F7352 - JIS 5K

SERIES F7410 - JIS 16K

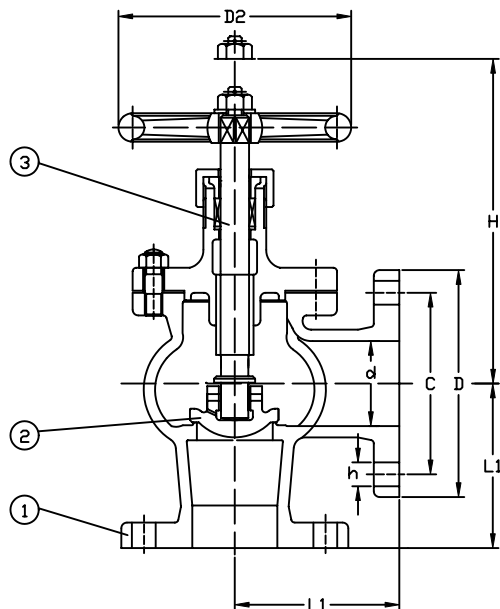
Bronze Angle Valve (SDNR)

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K or 16K



Screwed Bonnet
for sizes 15A-40A



Bolted Bonnet
for sizes 50A-65A

Part Nr.	Material	Code
1 - Body	Bronze	BC6
2 - Disc	Bronze	BC6
3 - Stem	Brass	C3771BD

Nominal Pressure		5K	16K
Hydraulic	Body	12kg	38kg
Inspection	Seat	8kg	23kg

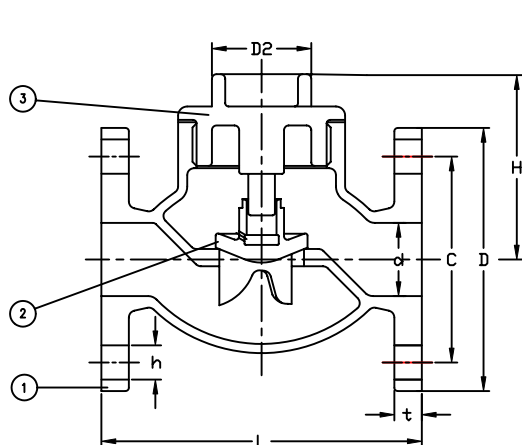
Type	Size	L	D	C	No.	h	t	H	D2
F7352 5K	15	55	80	60	4	12	9	120	80
	20	60	85	65	4	12	10	130	100
	25	65	95	75	4	12	10	145	125
	32	80	115	90	4	15	12	150	125
	40	85	120	95	4	15	12	165	140
	50	100	130	105	4	15	14	200	140
	65	115	155	130	4	15	14	220	160
F7410 16K	15	70	95	70	4	15	12	120	80
	20	75	100	75	4	15	14	130	100
	25	85	125	90	4	19	14	145	125
	32	95	135	100	4	19	16	150	125
	40	100	140	105	4	19	16	165	140

SERIES F7356 - JIS 5K
Bronze Lift Check Valve

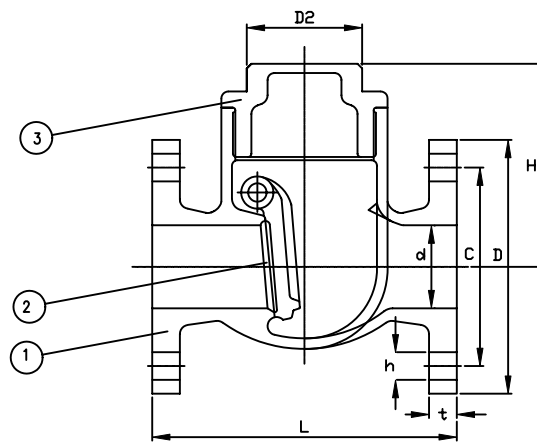
SERIES F7371- JIS 5K
Bronze Swing Check Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K



Series F7356



Series F7371

Part Nr.	Material	Code	Nominal Pressure		5K
1 - Body	Bronze	BC6	Hydraulic	Body	12kg
2 - Disc	Bronze	BC6			
3 - Bonnet	Bronze	BC6	Inspection	Seat	8kg

DIMENSION TABLE FOR JIS F7356

Size	L	D	C	No.	h	t	H	D2
15	100	80	60	4	12	9	72	35
20	100	85	65	4	12	10	78	37
25	120	95	75	4	12	10	77	41
32	140	115	90	4	15	12	81	41
40	160	120	95	4	15	12	91	46

DIMENSION TABLE FOR JIS F7371

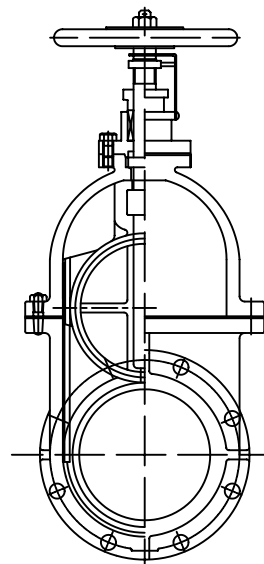
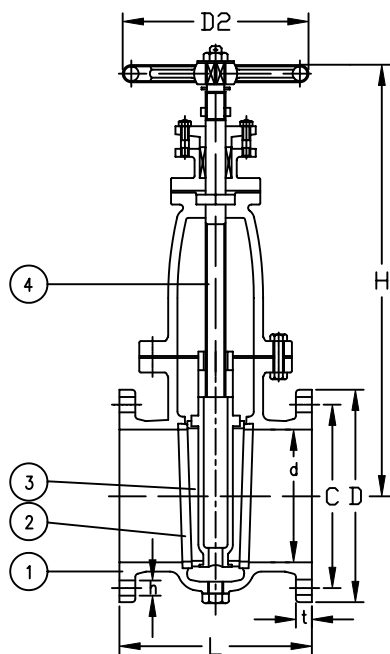
Size	L	D	C	No.	h	t	H	D2
15	100	80	60	4	12	9	65	37
20	110	85	65	4	12	10	68	39
25	110	95	75	4	12	10	69	41
32	130	115	90	4	15	12	79	41
40	140	120	95	4	15	12	93	46

SERIES F7363 - JIS 5K

Cast Iron Gate Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K



Part Nr.	Material	Code
1 - Body	Cast Iron	FC20
2 - Seat	Bronze	BC6
3 - Disc	Bronze	BC6
4 - Stem	Brass	C3771BD

Nominal Diameter	Test Pressure MPa [kgf/cm ²]	
	Body	Seat
400 or less	1.03 [10.5]	0.76 [7.7]
450 to 500	0.74 [7.5]	0.54 [5.5]

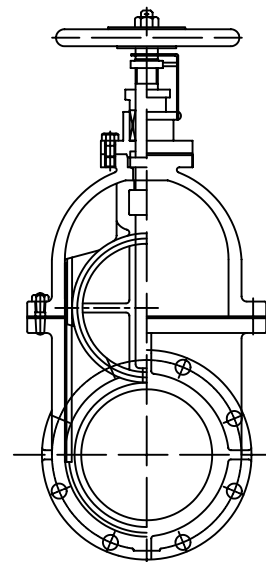
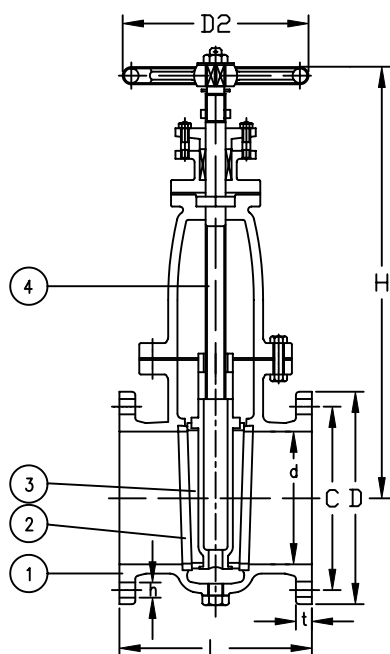
Size	L	D	C	No.	h	t	H	D2	Kg
050	180	130	105	4	15	16	285	125	13.5
065	190	155	130	4	15	18	330	140	19
080	200	180	145	4	19	18	380	160	24.2
100	230	200	165	8	19	20	430	180	35.3
125	250	235	200	8	19	20	495	200	48.1
150	270	265	230	8	19	22	560	224	65.3
200	290	320	280	8	23	24	680	280	103
250	330	385	345	12	23	26	800	355	164
300	370	430	390	12	23	28	920	400	236
350	410	480	435	12	25	30	1000	450	307
400	470	540	495	16	25	30	1100	500	405
450	500	605	555	16	25	30	1400	560	581
500	550	655	605	20	25	32	1500	560	725

SERIES F7363 (S) - JIS 5K

Cast Steel Gate Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K



Part Nr.	Material	Code
1 - Body	Cast Steel	SC49
2 - Seat	Stainless Steel	SUS420J1
3 - Disc	Stainless Steel	SUS420J1
4 - Stem	Stainless Steel	SUS403

Nominal Diameter	Test Pressure MPa [kgf/cm ²]	
	Body	Seat
50 to 400	1.03 [10.5]	0.76 [7.7]

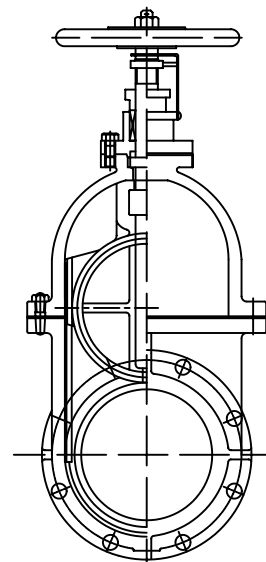
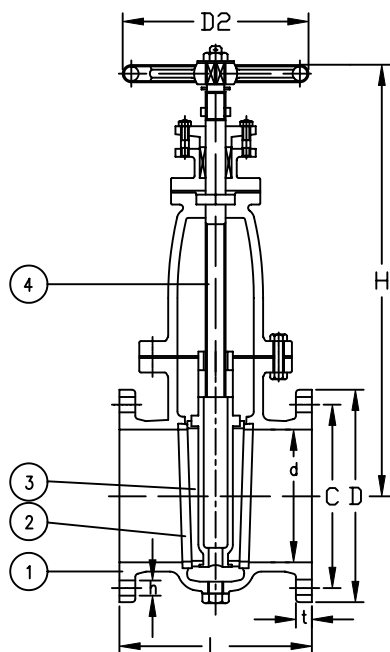
Size	L	D	C	No.	h	t	H	D2	Kg
050	180	130	105	4	15	16	285	125	14.6
065	190	155	130	4	15	18	330	140	20.6
080	200	180	145	4	19	18	380	160	26.2
100	230	200	165	8	19	20	430	180	38.2
125	250	235	200	8	19	20	495	200	52.1
150	270	265	230	8	19	22	560	224	70.7
200	290	320	280	8	23	24	680	280	111.5
250	330	385	345	12	23	26	800	355	177.6
300	370	430	390	12	23	28	920	400	255.5
350	410	480	435	12	25	30	1000	450	382.5
400	470	540	495	16	25	30	1100	500	438.5

SERIES F7364 - JIS 10K

Cast Iron Gate Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 10K



Part Nr.	Material	Code
1 - Body	Cast Iron	FC20
2 - Seat	Bronze	BC6
3 - Disc	Bronze	BC6
4 - Stem	Brass	C3771BD

Nominal Diameter	Test Pressure MPa [kgf/cm ²]	
	Body	Seat
400 or less	2.06 [21]	1.57 [15.4]
450 to 500	1.77 [18]	1.29 [13.2]

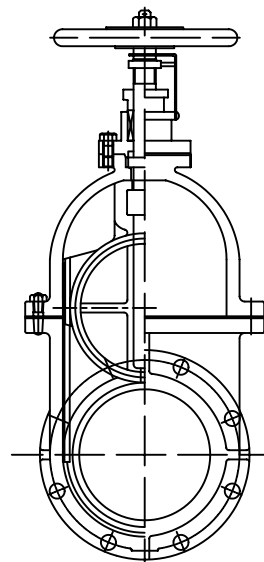
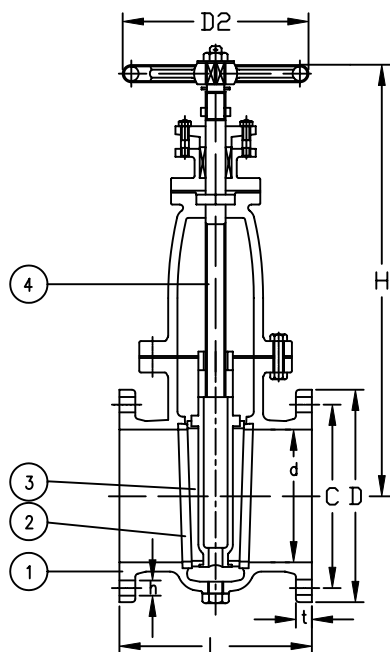
Size	L	D	C	No.	h	t	H	D2	Kg
050	200	155	120	4	19	20	300	140	19.4
065	220	175	140	4	19	22	350	160	27.6
080	230	185	150	8	19	22	400	180	33
100	250	210	175	8	19	24	450	200	45.8
125	270	250	210	8	23	24	520	224	65.9
150	290	280	240	8	23	26	580	250	86
200	320	330	290	12	23	26	700	315	136
250	380	400	355	12	25	30	840	400	230
300	440	445	400	16	25	32	960	450	331
350	500	490	445	16	25	34	1050	500	433
400	590	560	510	16	27	36	1150	560	597
450	640	620	565	20	27	38	1260	600	704
500	710	675	620	20	27	40	1380	680	901

SERIES F7366 - JIS 10K

Cast Steel Gate Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 10K



Part Nr.	Material	Code
1 - Body	Cast Steel	SC49
2 - Seat	Stainless Steel	SUS420J1
3 - Disc	Stainless Steel	SUS420J1
4 - Stem	Stainless Steel	SUS403

Nominal Diameter	Test Pressure MPa [kgf/cm ²]	
	Body	Seat
50 to 400	2.06 [21.0]	1.51 [15.4]

Size	L	D	C	No.	h	t	H	D2	Kg
050	200	155	120	4	19	16	300	140	17.1
065	220	175	140	4	19	18	350	160	26.5
080	230	185	150	8	19	18	400	180	31.5
100	250	210	175	8	19	18	450	200	44.9
125	270	250	210	8	23	20	520	224	63.2
150	290	280	240	8	23	22	580	250	82.3
200	310	330	290	12	23	22	700	315	130
250	340	400	355	12	25	24	840	400	203
300	380	445	400	16	25	24	960	450	291
350	420	490	445	16	25	26	1050	500	368
400	480	560	510	16	27	28	1150	560	507

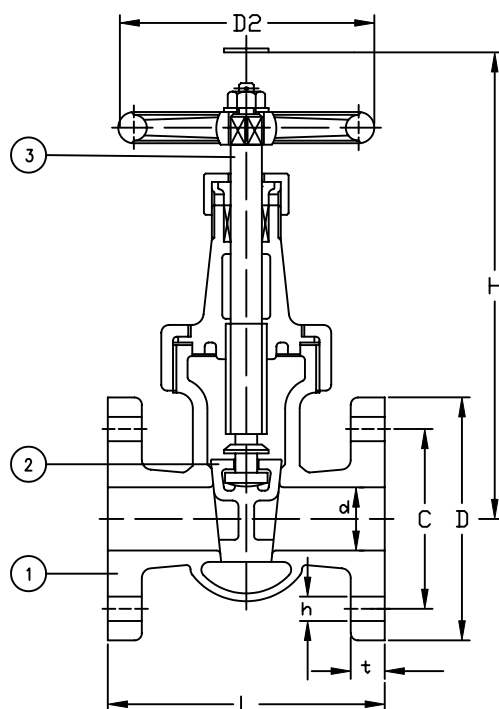
SERIES F7367 - JIS 5K

SERIES F7368 - JIS 10K

Bronze Gate Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K and 10K



Part Nr.	Material	Code
1 - Body	Bronze	BC6
2 - Disc	Bronze	BC6
3 - Stem	Brass	C3771BD

Nominal Pressure		5K	10K
Hydraulic	Body	10.5kg	21kg
Inspection	Seat	7.7kg	15.4kg

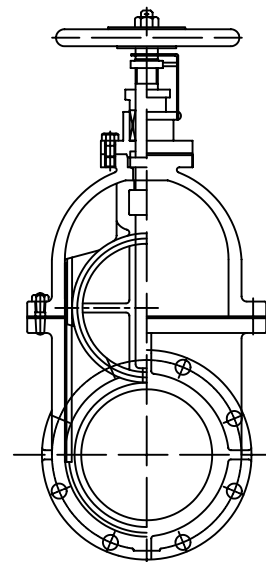
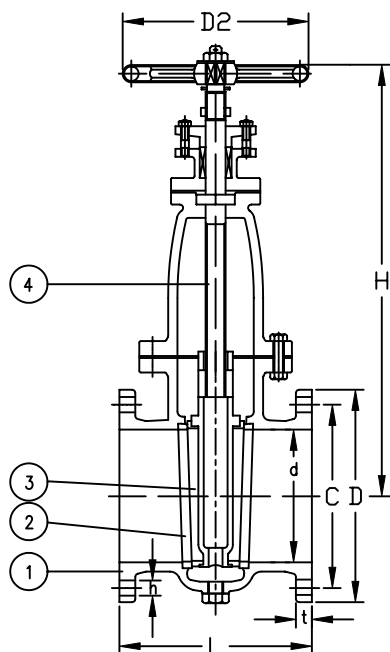
Type	Size	L	D	C	No.	h	t	H	D2
F7367 5K	15	90	80	60	4	12	9	175	80
	20	100	85	65	4	12	10	200	100
	25	110	95	75	4	12	10	220	125
	32	130	115	90	4	15	12	250	125
	40	140	120	95	4	15	12	290	140
F7368 10K	15	100	95	70	4	15	12	175	80
	20	110	100	75	4	15	14	200	100
	25	120	125	90	4	19	14	220	125
	32	140	135	100	4	19	16	250	125
	40	150	140	105	4	19	16	290	140

SERIES F7369 - JIS 16K

Cast Iron Gate Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 16K



Part Nr.	Material	Code
1 - Body	Cast Iron	FC20
2 - Seat	Bronze	BC6
3 - Disc	Bronze	BC6
4 - Stem	Brass	C3771BD

Nominal Diameter	Test Pressure MPa [kgf/cm2]	
	Body	Seat
50 to 400	2.36 [24.0]	1.73 [17.6]

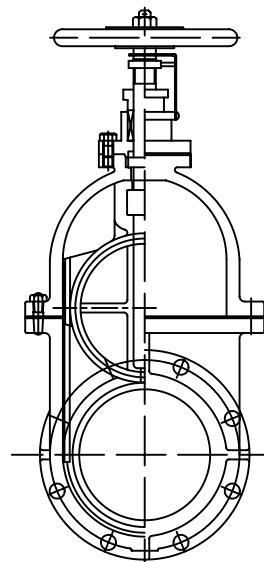
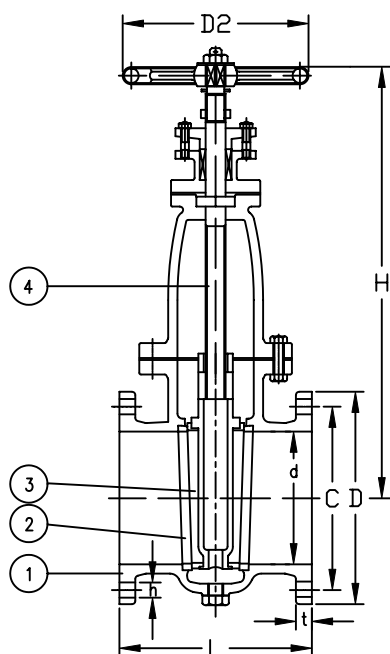
Size	L	D	C	No.	h	t	H	D2	Kg
050	210	155	120	8	19	20	300	140	19.5
065	240	175	140	8	19	22	350	160	28
080	260	200	160	8	23	24	400	180	35
100	290	225	185	8	23	26	450	200	50
125	310	270	225	8	25	26	520	250	70
150	330	305	260	12	25	28	580	280	100
200	370	350	305	12	25	30	700	355	150
250	430	430	380	12	27	34	845	450	250
300	490	480	430	16	27	36	1010	500	423
350	540	540	480	16	33	38	1070	560	580
400	610	605	540	16	33	42	1160	630	780

SERIES F7369 - JIS 16K

Cast Iron Gate Valve - Korean Standard

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 16K



Part Nr.	Material	Code
1 - Body	Cast Iron	FC20
2 - Seat	Bronze	BC6
3 - Disc	Bronze	BC6
4 - Stem	Brass	C3771BD

Nominal Diameter	Test Pressure MPa [kgf/cm ²]	
	Body	Seat
50 to 400	2.36 [24.0]	1.73 [17.6]

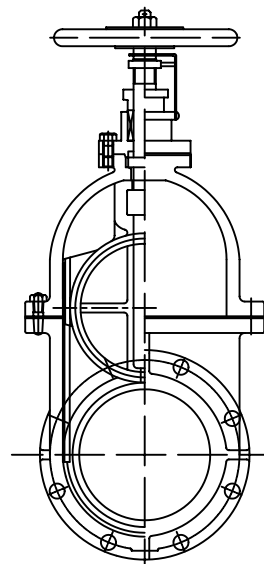
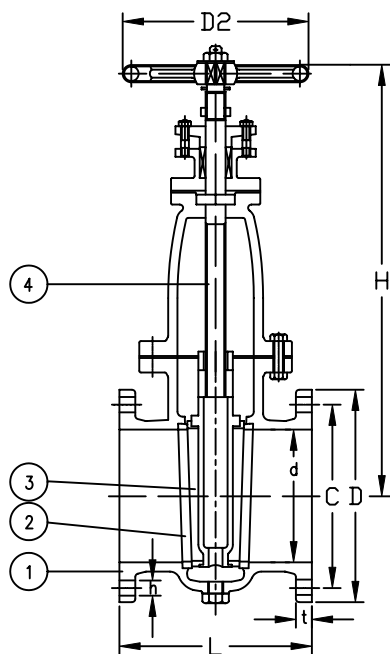
Size	L	D	C	No.	h	t	H	D2	Kg
050	200	155	120	8	19	16	300	140	22.5
065	220	175	140	8	19	18	350	160	25
080	230	200	160	8	23	20	400	180	33
100	250	225	185	8	23	22	450	200	52
125	270	270	225	8	25	22	520	250	72
150	290	305	260	12	25	24	580	280	95
200	310	350	305	12	25	26	700	355	143
250	350	430	380	12	27	28	845	450	203
300	490	480	430	16	27	36	1010	500	430
350	540	540	480	16	33	38	1070	560	580
400	610	605	540	16	33	42	1160	630	780

SERIES F7369 - JIS 16K

Cast Steel Gate Valve - Korean Standard

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 16K



Part Nr.	Material	Code
1 - Body	Cast Steel	SC49
2 - Seat	Stainless Steel	SUS420J1
3 - Disc	Stainless Steel	SUS420J1
4 - Stem	Stainless Steel	SUS403

Nominal Diameter	Test Pressure MPa [kgf/cm ²]	
	Body	Seat
50 to 400	2.36 [24.0]	1.73 [17.6]

Size	L	D	C	No.	h	t	H	D2	Kg
050	200	155	120	8	19	16	300	140	22.5
065	220	175	140	8	19	18	350	160	25
080	230	200	160	8	23	20	400	180	33
100	250	225	185	8	23	22	450	200	52
125	270	270	225	8	25	22	520	250	72
150	290	305	260	12	25	24	580	280	95
200	310	350	305	12	25	26	700	355	143
250	350	430	380	12	27	28	845	450	203
300	490	480	430	16	27	36	1010	500	465
350	540	540	480	16	33	38	1070	560	628
400	610	605	540	16	33	42	1160	630	844

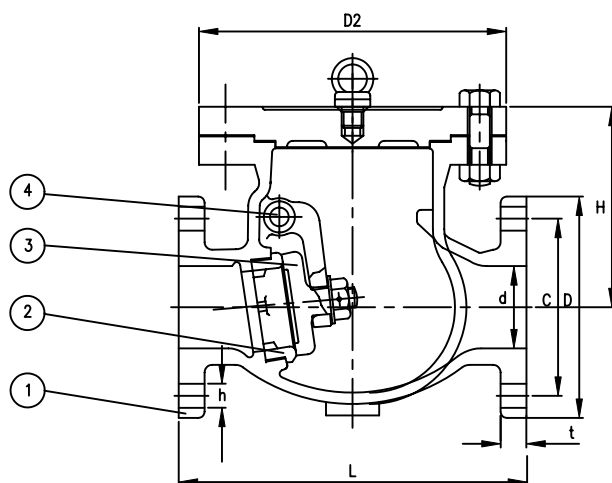
SERIES F7372 - JIS 5K

SERIES F7373 - JIS 10K

Cast Iron Swing Check Valves

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K & 10K



Part Nr.	Material	Code
1 - Body	Cast Iron	FC20
2 - Hinge	Brass	C3771BD
3 - Disc	Bronze	BC6
4 - Seat	Bronze	BC6

Nominal Pressure		5K	16K
Hydraulic	Body	1.03 [10.5]	2.06 [21.0]
Inspection	Seat	0.76 [7.7]	1.51 [15.4]

Type	Size	L	D	C	No.	h	t	H	D2	KG
F7372 5K	050	190	155	120	4	19	16	97	135	9.06
	065	220	175	140	4	19	18	119	155	13.9
	080	250	185	150	8	19	18	129	185	19.1
	100	280	210	175	8	19	18	146	205	27.1
	125	330	250	210	8	23	20	171	235	39
	150	380	280	240	8	23	22	198	265	53.7
	200	460	330	290	12	23	22	235	300	94.4
	250	550	400	355	12	25	24	290	390	150
F7373 10K	050	210	155	120	4	19	20	109	150	13.6
	065	240	175	140	4	19	22	126	170	19.6
	080	270	185	150	8	19	22	136	185	22.6
	100	300	210	175	8	19	24	153	205	30.9
	125	350	250	210	8	23	24	180	250	49.2
	150	400	280	240	8	23	26	205	275	64.9
	200	480	330	290	12	23	26	242	330	103

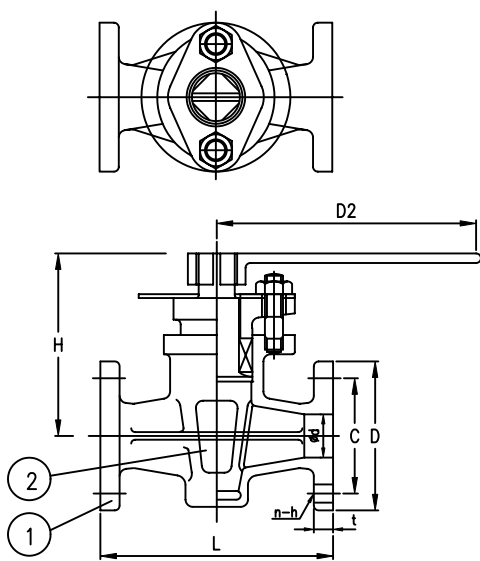
SERIES F7381 - JIS 5K

Bronze Cocks - 2 & 3 Way

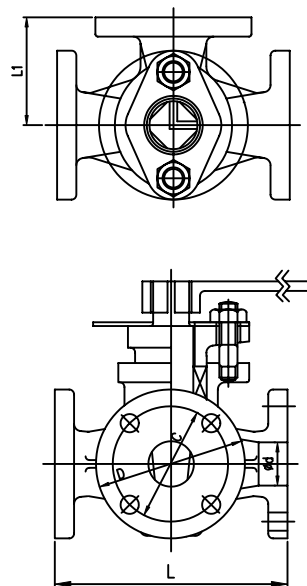
Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K

Two-Way Cock



Three-Way Cock



TYPE L



TYPE T



GROOVE INDICATING THE DIRECTION OF PORT

Part Nr.	Material	Code
1 - Body	Bronze	BC6
2 - Plug	Bronze	BC6

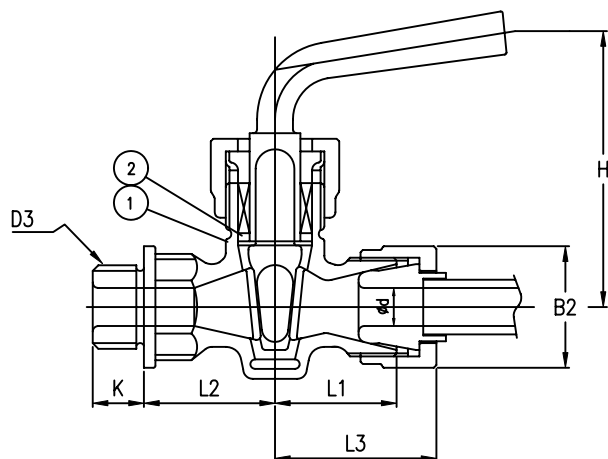
Hydraulic	Body	7.5kg
Inspection	Plug	5.5kg

Size	L	L1	D	C	No.	h	t	H	D2
25	130	65	95	75	4	12	10	105	160
32	160	80	115	90	4	15	12	125	180
40	170	85	120	95	4	15	12	135	190
50	190	95	130	105	4	15	14	163	200
65	220	110	155	130	4	15	14	201	250

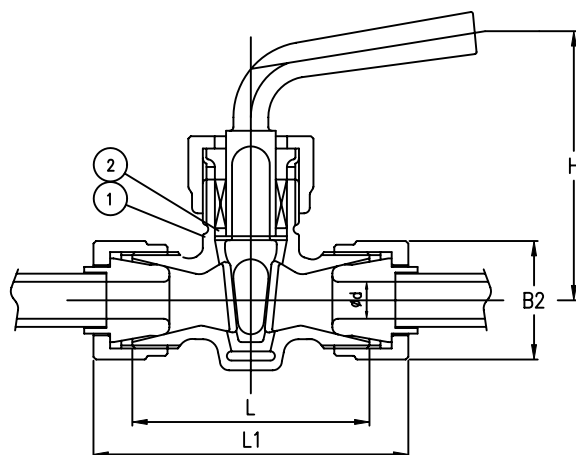
SERIES F7387 - JIS 16K

Bronze Cock - S & U Types

Manufactured in accordance to JIS F7400



“S” Type



“U” Type

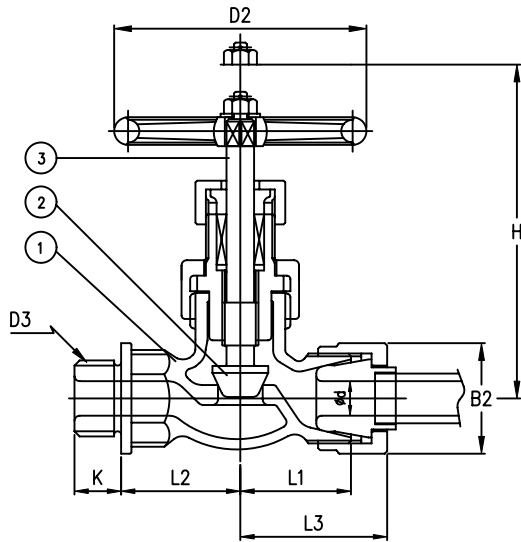
Part Nr.	Material	Code	Test Pressure	
			Nominal Diam	Body Plug
1 - Body	Bronze	BC6	6 and 10	30kg 22kg
2 - Plug	Bronze	BC6	15 and 20	24kg 17.6kg

Type	Size	Pipe Out Dia		L	L1	L2	L3	K	d3	B2	H
		Copper	Steel								
S Type	6	8 / 10	10.5	-	28	28	37	12	M20x1.5	30	65
	10	15	17.3	-	40	35	52	16	M24x2	41	73
	15	20	21.7	-	45	45	58	22	M30x2	46	92
	20	25	27.2	-	50	50	65	24	M36x2	50	104
U Type	6	8 / 10	10.5	56	74	-	-	-	-	30	65
	10	15	17.3	80	104	-	-	-	-	41	73

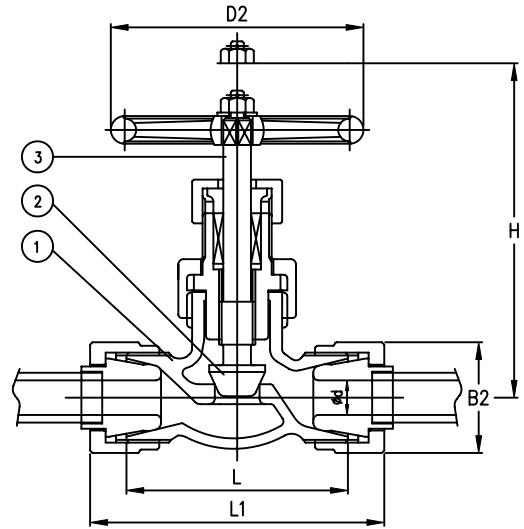
SERIES F7388 - JIS 20K

Bronze Globe - S & U Types

Manufactured in accordance to JIS F7400



“S” Type



“U” Type

Part Nr.	Material	Code	Test Pressure		
			Nominal Diam	Body	Plug
			6 and 10	42kg	30.8kg

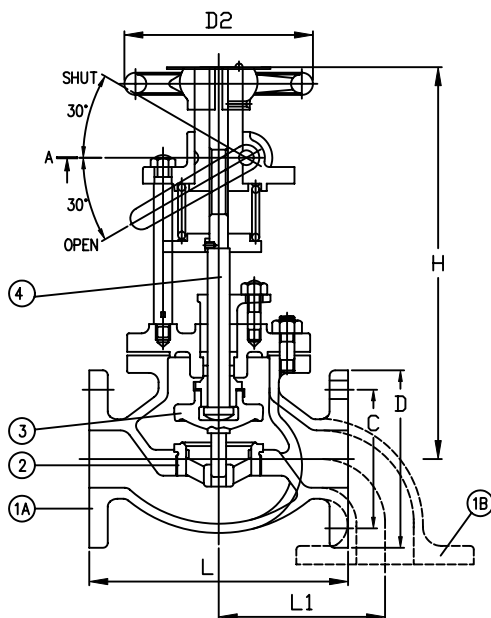
Type	Size	Pipe Out Dia		L	L1	L2	L3	K	d3	B2	H	D2
		Copper	Steel									
S Type	6	8 / 10	10.5	-	32	32	41	12	M20x1.5	30	100	63
	10	15	17.3	-	36	35	48	16	M24x2	41	115	80
U Type	6	8 / 10	10.5	64	82	-	-	-	-	30	100	63
	10	15	17.3	72	96	-	-	-	-	41	115	80

SERIES F7399 - JIS 5K and 10K

Emergency Shut-Off Valve - Types “A” and “B”

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K or 10K



Hydraulic	Body	7kg
Inspection	Seat	2kg

For Sizes 25A & 40A		
Part Nr.	Mat	Code
1A - Body	Bronze	BC6
3 - Disc	Bronze	BC6
4 - Stem	Brass	C3771BD

For Sizes 50A & Higher		
Part Nr.	Mat	Cod
1B - Body	Cast Steel	SC49
2 - Seat	Stainless Steel	SCS2
3 - Disc	Stainless Steel	SCS2
4 - Stem	Stainless Steel	SUS403

	5K Flanged								10K Flanged									
Size	L	L1	L2	D	C	No.	h	t	L	L1	L2	D	C	No.	h	t	H	D1
25	130	75	60	95	75	4	12	10	130	80	65	125	90	4	19	14	265	120
40	160	100	75	120	95	4	15	12	170	85	80	140	105	4	19	16	310	140
50	210	125	90	130	105	4	15	14	220	125	90	155	120	4	19	16	335	160
65	250	155	100	155	130	4	15	14	270	155	100	175	140	4	19	18	395	180
80	280	165	120	180	145	4	19	18	300	165	120	185	150	8	19	18	420	180
100	340	200	130	200	165	8	19	18	350	200	130	210	175	8	19	18	510	224
125	410	250	160	235	200	8	19	20	420	250	160	250	210	8	19	20	440	250
150	480	300	180	265	230	8	19	22	490	300	180	280	240	8	19	22	520	320

SERIES F7415 - JIS 5K

Bronze Globe Lift Check Valve

SERIES F7416 - JIS 5K

Bronze Angle Lift Check Valve

SERIES F7417 - JIS 16K

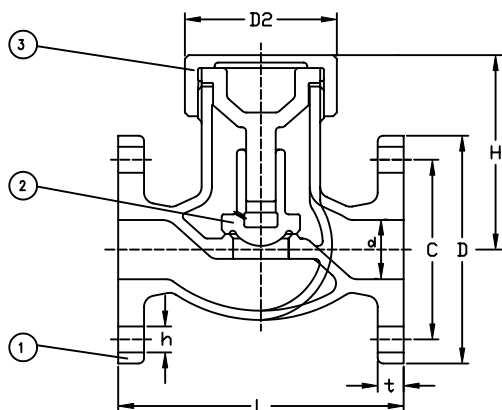
Bronze Globe Lift Check Valve

SERIES F7418 - JIS 16K

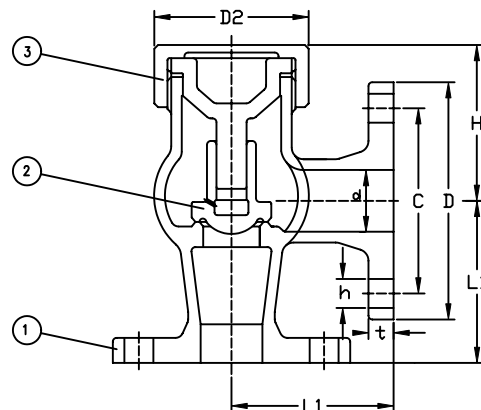
Bronze Angle Lift Check Valve

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 5K & 16K



Series F7415 & F7417



Series F7416 & F7418

Part Nr.	Material	Code	Nominal Pressure		5K	16K
1 - Body	Bronze	BC6	Hydraulic	Body	12kg	38kg
2 - Disc	Bronze	BC6				
3 - Bonnet	Bronze	BC6	Inspection	Seat	8kg	23kg

DIMENSION TABLE FOR JIS F7415 AND F7416

Size	L	L1	D	C	No.	h	t	H	H1	D2
15	100	55	80	60	4	12	9	66	56	55
20	110	60	85	65	4	12	10	71	59	55
25	120	65	95	75	4	12	10	81	67	60
32	140	80	115	90	4	15	12	83	65	70
40	160	85	120	95	4	15	12	91	69	80

DIMENSION TABLE FOR JIS F7417 AND F7418

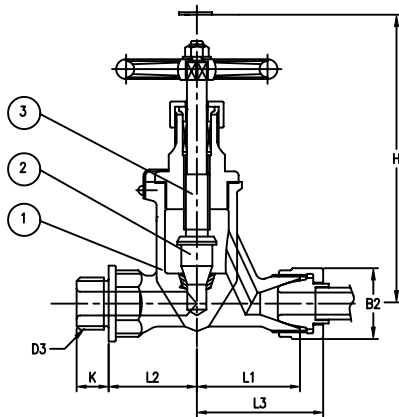
Size	L	L1	D	C	No.	h	t	H	H1	D2
15	110	70	95	70	4	15	12	66	56	55
20	120	75	100	75	4	15	14	71	59	55
25	130	85	125	90	4	19	14	81	67	60
32	160	95	135	100	4	19	16	83	65	70
40	180	100	140	105	4	19	16	91	69	80

SERIES F7421 - JIS 20K

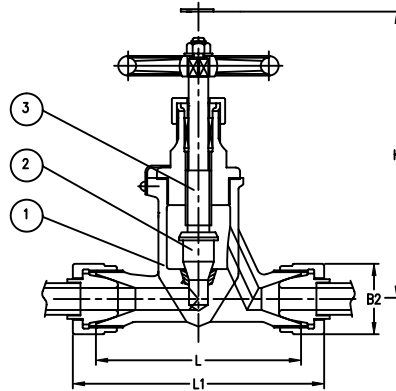
Forged Steel Globe Valve - Type “S”, “U” and “F”

Manufactured in accordance to JIS F7400

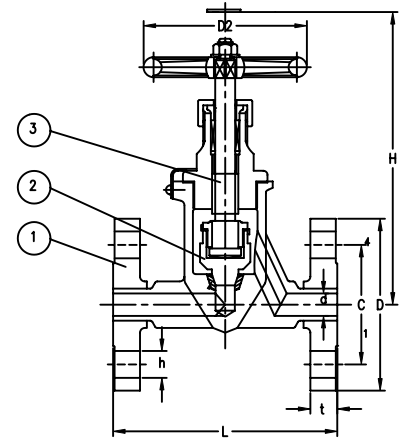
Flanges as per JIS B2220 - 20K



“S” Type



“U” Type



“F” Type

Part Nr.	Material	Code
1 - Body	Forged Steel	SF45
2 - Stem	Stainless Steel	SUS403
3 - Disc	Stainless Steel	SUS402J1

	Test Pressure MPa [kg/cm ²]
Body	5.0 [51.0]
Seat	3.67 [37.4]

Type	Type of Connection	Nominal Dia.
S	Screw thread type	6 and 10
U	Union type	6 and 10
F	Flange type	15 to 25

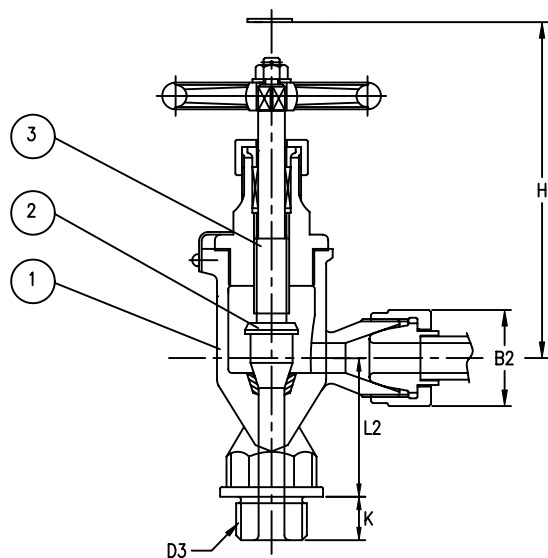
	Size	L	L1	L2	L3	K	D	C	n	h	t	H	B2	D3	Kg
Type	6	-	42	38	51	12	-	-	-	-	-	125	30	M20x1.5	1.23
“S”	10	-	51	45	63	16	-	-	-	-	-	140	41	M42x2	1.59
Type	6	84	102	-	-	-	-	-	-	-	-	125	30	-	1.26
“U”	10	102	126	-	-	-	-	-	-	-	-	140	41	-	1.72
Type	15	140	-	-	-	-	95	70	4	15	14	180	-	-	3.90
“F”	20	160	-	-	-	-	100	75	4	15	16	205	-	-	5.29
	25	180	-	-	-	-	125	90	4	19	16	225	-	-	7.49

SERIES F7422 - JIS 20K

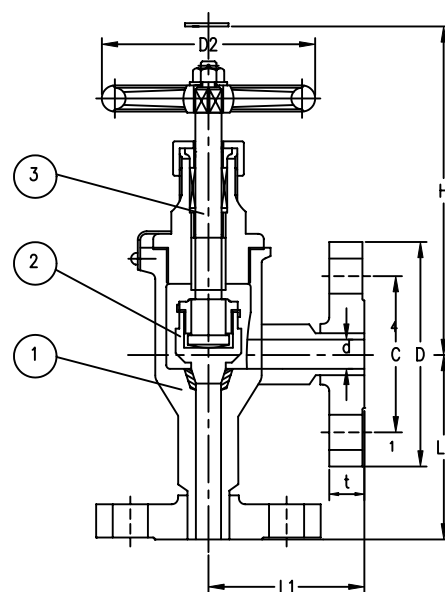
Forged Steel Angle Valve - Type “S” and “F”

Manufactured in accordance to JIS F7400

Flanges as per JIS B2220 - 20K



“S” Type



“F” Type

Part Nr.	Material	Code
1 - Body	Forged Steel	SF45
2 - Stem	Stainless Steel	SUS403
3 - Disc	Stainless Steel	SUS402J1

	Test Pressure MPa [kg/cm ²]
Body	5.0 [51.0]
Seat	3.76 [37.4]

Type	Type of Connection	Nominal Dia.
S	Screw thread type	6 and 10
F	Flange type	15 to 25

	Size	L	L1	L2	L3	K	D	C	n	h	t	H	B2	D3	Kg
Type	6	-	42	38	51	12	-	-	-	-	-	115	30	M20x1.5	1.20
“S”	10	-	46	45	58	16	-	-	-	-	-	125	41	M24x2	1.54
Type	15	75	-	-	-	-	95	70	4	15	14	160	-	-	3.8
“F”	20	80	-	-	-	-	100	75	4	15	16	180	-	-	5.05
	25	95	-	-	-	-	125	90	4	19	16	190	-	-	7.16



Butterfly Valves Material Selection

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 Cl. 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
	Aluminum Bronze	G-CuAl10Ni	ASTM B 148 Cl. C 95500
Stem:	Stainless Steel	X2 CrNiMo 18.10	ASTM A276 316
Seat:	NBR	Nitrile Rubber	Temp Range -25° C / + 100° C
	EPDM	Copolymer EPDM	Temp Range -35° C / + 130° C
	Viton	Fluoroelastomer	Temp Range -20° C / + 200° C
	Teflon	PTFE	Temp Range -80° C / + 232° C
Packing:	NBR	Nitrile Rubber	Temp Range -25° C / + 100° C
	EPDM	Copolymer EPDM	Temp Range -35° C / + 130° C
	Viton	Fluoroelastomer	Temp Range -20° C / + 200° C



Butterfly Valves Material Selection

Chemical Agent	Bronze	Cast Iron	Cast Steel	SS316	Monel	EPDM	NBR	VITON	Natural Rubber
Acetone	E	G	G	E	E	G	U	U	E
Acetylene	E	G	G	E	-	U	F	U	-
Alcohol methyl	E	U	-	E	E	E	G	U	G
Alumina	G	G	-	G	G	E	E	G	G
Ammonia solutions	U	F	-	E	G	E	G	U	G
Benzene	E	F	G	E	G	U	U	G	U
Bunker oil	F	U	U	E	E	U	F	F	U
Carbon dioxide	E	F	G	E	-	G	G	E	G
Chlorobenzene	E	F	F	E	E	U	U	G	U
Crude oil	U	U	G	E	E	U	F	E	U
Diesel fuel	F	U	E	E	E	U	E	E	U
Ethyl glycol	E	G	G	E	E	E	E	E	G
Fruit juices	U	U	-	E	-	G	G	-	-
Fuel oil	E	F	E	E	G	U	F	E	U
Gasoline	G	F	G	E	G	U	E	E	U
Glycerine glycerol	G	F	E	E	G	-	E	E	-
Hydraulic oil (petroleum based)	U	U	E	F	F	U	F	F	F
Hydraulic oil (water based)	E	U	E	E	U	E	F	U	F
Kerosene	E	E	E	E	E	U	E	E	U
Lubricating oil	E	E	E	E	E	U	E	E	U
Milk	-	U	E	E	-	E	E	E	E
Mineral oil	-	F	E	F	-	U	E	E	U
Naphthalene	E	F	E	E	-	U	U	G	U

Chemical Agent	Bronze	Cast Iron	Cast Steel	SS316	Monel	EPDM	NBR	VITON	Natural Rubber
Natural gas	E	G	E	E	-	U	E	E	U
Olive oil	-	-	E	E	-	G	E	E	U
Oxygen 200 F	E	E	E	E	E	E	G	E	F
Oxygen 300 F	E	E	E	E	E	U	U	G	U
Petroleum	F	U	E	G	G	U	E	E	U
Phenol	-	U	E	E	E	U	U	E	U
Potassium nitrate	F	F	E	E	G	E	E	E	E
Potassium phosphate	-	U	-	G	-	-	E	E	-
Propane	E	F	E	E	-	U	E	E	-
Resins	E	U	-	E	-	-	-	G	F
Sea Water	G	F	F	G	E	E	G	E	-
Sodium chloride	E	U	G	E	E	E	E	E	E
Sodium nitrate	G	U	G	E	G	E	G	-	G
Steam 300 F	G	U	E	E	E	E	U	U	U
Sulphur molten	U	U	F	G	U	E	-	E	-
Sulphur dioxide	F	U	E	E	E	G	U	E	U
Sulphur trioxide	-	U	G	E	-	-	U	E	U
Tar	E	F	E	E	E	U	U	G	U
Turpentine	G	U	G	E		U	U	E	U
Varnish	E	E	E	E	E	U	F	E	U
Water distilled	U	U	G	E	-	E	G	-	-
Water fresh	E	F	G	E	E	E	G	-	E
Water sewage	E	U	G	E	E	E	G	-	-

(E) - Excellent

(G) - Good

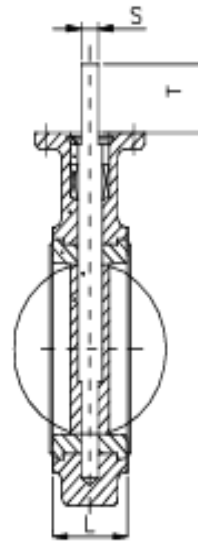
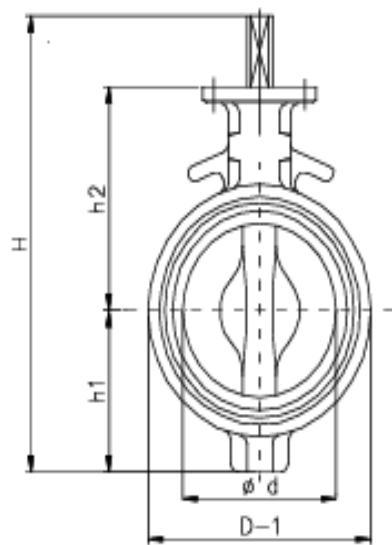
(F) - Fair

(U) - Unsatisfactory

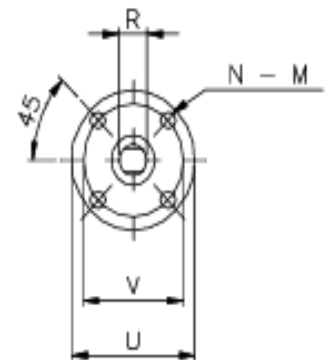
(-) - Insufficient Data Available



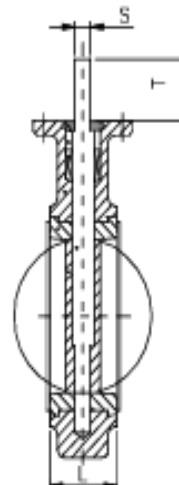
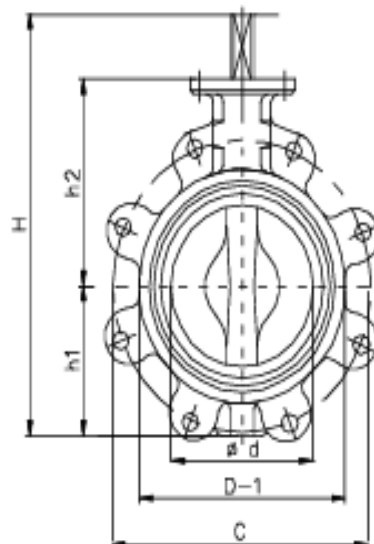
Wafer type.....Series 50



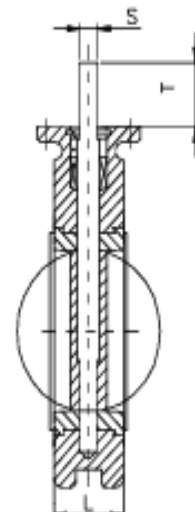
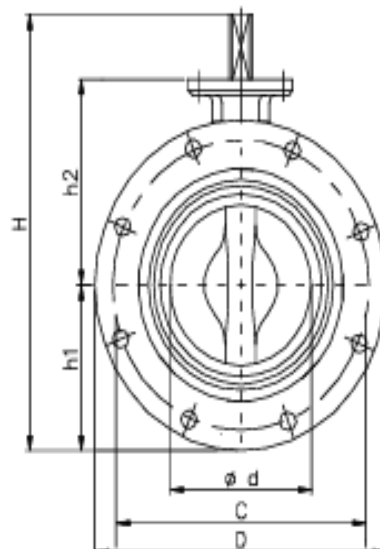
Top Flange to ISO5711



Lug type.....Series 52



Flanged type...Series 55





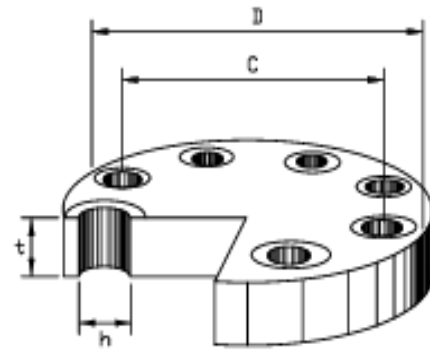
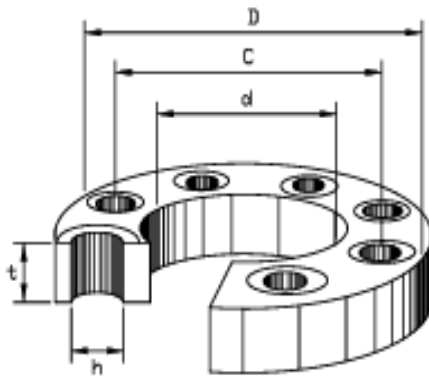
Butterfly Valve—Wafer, Lug & Flanged Series ISO 5752 - S20

Size							Stem			Top flange to ISO 5211			
	D-1	d	L	H	h1	h2	R	S	T	U	V	N	M
40	86	40	33	205	58	124	10	8	-	90	70	4	9
50	102	52	43	240	78	130	14	10	-	90	70	4	9
65	115	65	46	247	88	130	14	10	-	90	70	4	9
80	128	80	46	266	93	143	14	10	-	90	70	4	9
100	153	100	52	298	105	161	16	10	-	90	70	4	9
125	183	125	56	331	125	177	19	12	-	90	70	4	9
150	210	150	56	363	140	191	19	15	-	90	70	4	9
200	259	198	60	412	163	217	22	15	-	90	70	4	9
250	328	248	68	506	205	267	28	18	-	125	102	4	12
300	374	298	78	538	249	295	28	20	-	125	102	4	12
350	416	327	78	675	271	324	32	20	45	125	102	4	12
400	475	387	102	817	343	369	35	-	60	175	140	4	18
450	535	438	114	877	366	406	38	-	60	175	140	4	18
500	586	477	127	1008	421	485	45	-	60	210	165	4	22
600	695	560	154	1180	493	570	50	-	60	210	165	4	22
700	800	690	165	1355	580	574	70	-	120	300	254	8	18
750	857	729	190	1445	656	615	70	-	120	300	254	8	18
800	920	785	190	1495	630	669	80	-	140	300	254	8	18
900	1020	900	203	1625	690	671	80	-	140	350	298	8	22
1000	1125	990	216	1802	790	842	90	-	140	350	298	8	22

Size	Weight			JIS 5K			JIS 10K			JIS 16K		
	Wafer	Lug	Flanged	D	C	Bolt	D	C	Bolt	D	C	Bolt
40	3.1	3.5	6.2	120	95	4x15	140	105	4x19	140	105	4x19
50	3.7	4.1	6.8	130	105	4x15	155	120	4x19	155	120	8x19
65	4	5.5	8.9	155	130	4x15	175	140	4x19	175	140	8x19
80	4.4	6.8	10.2	180	145	4x19	185	150	8x19	200	160	8x23
100	5.9	8.6	14.5	200	165	8x19	210	175	8x19	225	185	8x23
125	8.9	10.5	16.8	235	200	8x19	250	210	8x23	270	225	8x25
150	9	12.5	19.8	265	230	8x19	280	240	8x23	305	260	12x25
200	11	21.4	31.2	320	280	8x23	330	290	12x23	350	305	12x25
250	20	29.3	46.2	385	345	12x23	400	355	12x25	430	380	12x27
300	32	44	58.8	430	390	12x23	445	400	16x25	480	430	16x27
350	43	62.2	67	480	435	12x25	490	445	16x25	540	480	16x33
400	64	112	96	540	495	16x25	560	510	16x27	605	540	16x33
450	99	153	147	605	555	16x25	620	565	20x27	675	605	20x33
500	115	199	161	655	605	20x25	675	620	20x27	730	660	20x33
600	215	283	292	770	715	20x27	795	730	24x33	845	770	24x39
700	377	490	539	875	820	24x27	905	840	24x33	960	875	24x42
750	460	598	658	945	880	24x33	970	900	24x33	1020	935	24x42
800	542	677	745	995	930	24x33	1020	950	28x33	1085	990	24x48
900	699	874	944	1095	1030	24x33	1120	1050	28x33	1185	1090	28x48
1000	977	1221	1307	1195	1130	28x33	1235	1160	28x39	1320	1210	28x56

JIS B2220 - Flanges 5K & 10K

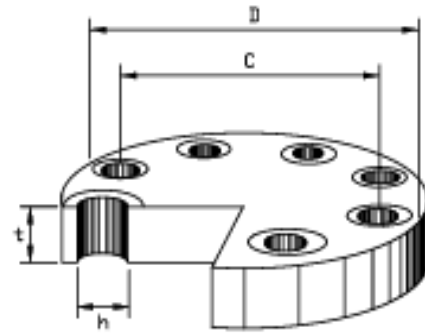
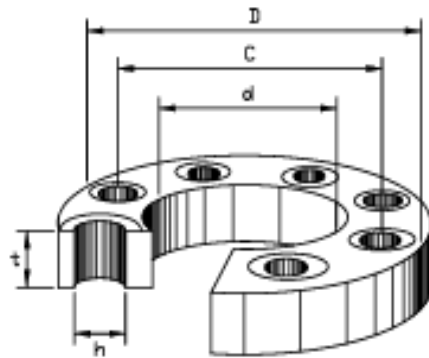
Available in Carbon Steel and 316L Stainless Steel



	JIS 5K								JIS 10K							
	Weight (kg)								Weight (kg)							
Size	d	D	C	No.	h	t	SO	BL	d	D	C	No.	h	t	SO	BL
010	17.8	75	55	4	12	9	0.27	0.30	17.8	90	65	4	15	12	0.52	0.54
015	22.2	80	60	4	12	9	0.30	0.40	22.2	95	70	4	15	12	0.57	0.61
020	27.7	85	65	4	12	10	0.37	0.50	27.7	100	75	4	15	14	0.73	0.79
025	34.5	95	75	4	12	10	0.45	0.60	34.5	125	90	4	19	14	1.13	1.24
032	43.2	115	90	4	15	12	0.78	0.90	43.2	135	100	4	19	16	1.48	1.66
040	49.1	120	95	4	15	12	0.83	1.00	49.1	140	105	4	19	16	1.56	1.81
050	61.1	130	105	4	15	14	1.07	1.40	61.1	155	120	4	19	16	1.88	2.23
065	77.1	155	130	4	15	14	1.49	2.00	77.1	175	140	4	19	18	2.60	3.24
080	90.0	180	145	4	19	14	1.99	2.70	90.0	185	150	8	19	18	2.61	3.50
090	102.6	190	155	4	19	14	2.09	3.00	102.6	195	160	8	19	18	2.76	4.00
100	115.4	200	165	8	19	16	2.39	3.70	115.4	210	175	8	19	18	3.14	4.60
125	141.2	235	200	8	19	16	3.23	5.20	141.2	250	210	8	23	20	4.77	7.30
150	166.6	265	230	8	19	18	4.41	7.50	166.6	280	240	8	23	22	6.34	10.10
175	192.1	300	260	8	23	18	5.51	9.50	192.1	302	265	12	23	22	6.82	11.80
200	218.0	320	280	8	23	20	6.33	12.20	218.0	330	290	12	23	22	7.53	14.00
250	269.5	385	345	12	23	22	9.45	19.30	269.5	400	355	12	25	24	11.80	22.70
300	321.0	430	390	12	23	22	10.30	24.30	321.0	445	400	16	25	24	13.50	29.50
350	358.1	480	435	12	25	24	14.00	33.20	358.1	490	445	16	25	26	16.40	37.10
400	409.0	540	495	16	25	24	16.90	41.90	409.0	560	510	16	27	28	23.00	52.50
450	460.0	605	555	16	25	24	21.60	53.00	460.0	620	565	20	27	30	29.50	68.80
500	511.0	655	605	20	25	24	23.10	61.90	511.0	675	620	20	27	30	33.50	82.10
550	562.0	720	665	20	27	26	30.30	81.20	562.0	745	680	20	33	32	43.10	105.80
600	613.0	770	715	20	27	26	32.70	93.20	613.0	795	730	24	33	32	45.70	120.20
650	664.0	825	770	24	27	26	35.90	106.90	664.0	845	780	24	33	34	52.10	145.00
700	715.0	875	820	24	27	26	38.20	120.60	715.0	905	840	24	33	34	59.50	167.20
750	766.0	945	880	24	33	28	48.70	150.50	766.0	970	900	24	33	36	73.20	204.20
800	817.0	995	930	24	33	28	51.60	167.40	817.0	1020	950	28	33	36	76.40	225.20
900	919.0	1095	1030	24	33	30	61.10	218.10	919.0	1120	1050	28	33	38	89.40	288.40
1000	1021.0	1195	1130	28	33	32	70.50	277.30	1021.0	1235	1160	28	39	40	109.20	367.70

JIS B2220 - Flanges 16K & 20K

Available in Carbon Steel and 316L Stainless Steel



	JIS 16K								JIS 20K							
	Weight (kg)								Weight (kg)							
Size	d	D	C	no	h	t	SO	BL	d	D	C	no	h	t	SO	BL
010	17.8	90	65	4	15	12	0.51	0.53	17.8	90	65	4	15	14	0.60	0.60
015	22.2	95	70	4	15	12	0.56	0.60	22.2	95	70	4	15	14	0.70	0.70
020	27.7	100	75	4	15	14	0.72	0.79	27.7	100	75	4	15	16	0.80	0.90
025	34.5	125	90	4	19	14	1.13	1.23	34.5	125	90	4	19	16	1.30	1.50
032	43.2	135	100	4	19	16	1.46	1.66	43.2	135	100	4	19	18	1.60	1.80
040	49.1	140	105	4	19	16	1.56	1.81	49.1	140	105	4	19	18	1.70	2.00
050	61.1	155	120	8	19	16	1.70	2.10	61.1	155	120	8	19	18	1.90	2.40
065	77.1	175	140	8	19	18	2.40	3.10	77.1	175	140	8	19	20	2.60	3.40
080	90.0	200	160	8	23	20	3.50	4.50	90.0	200	160	8	23	22	3.80	4.90
090	102.6	210	170	8	23	20	3.70	5.00	102.6	210	170	8	23	24	4.40	6.00
100	115.4	225	185	8	23	22	4.50	6.30	115.4	225	185	8	23	24	4.90	6.90
125	141.2	270	225	8	25	22	6.50	9.20	141.2	270	225	8	25	26	7.80	11.00
150	166.6	305	260	12	25	24	8.70	12.80	166.6	305	260	12	25	28	10.10	14.90
175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
200	218.0	350	305	12	25	26	10.90	18.60	218.0	350	305	12	25	30	12.60	21.40
250	269.5	430	380	12	27	28	18.00	30.60	269.5	430	380	12	27	34	21.90	37.20
300	321.0	480	430	16	27	30	21.50	40.70	321.0	480	430	16	27	36	25.80	48.80
350	358.1	540	480	16	33	34	30.80	57.80	358.1	540	480	16	33	40	36.20	68.00
400	409.0	605	540	16	33	38	42.80	82.20	409.0	605	540	16	33	46	51.70	99.40
450	460.0	675	605	20	33	40	55.10	107.60	460.0	675	605	20	33	48	66.10	129.10
500	511.0	730	660	20	33	42	65.10	133.10	511.0	730	660	20	33	50	77.40	158.40
550	562.0	795	720	20	39	44	77.90	164.10	562.0	795	720	20	39	52	92.20	194.00
600	613.0	845	770	24	39	46	86.00	193.20	613.0	845	770	24	39	54	101.10	226.90
650	664.0	895	820	24	39	48	96.30	227.50	664.0	945	850	24	48	60	147.60	311.60
700	715.0	960	875	24	42	50	114.10	272.60	715.0	995	900	24	48	64	168.00	370.90
750	766.0	1020	935	24	42	52	132.70	321.90	766.0	1080	970	24	56	68	212.70	460.10
800	817.0	1085	990	24	48	54	152.10	375.60	817.0	1140	1030	24	56	72	248.50	546.50
900	919.0	1185	1090	28	48	58	178.10	481.80	919.0	1250	1140	28	56	76	296.90	694.90
1000	1021.0	1320	1210	28	56	62	235.30	636.00	-	-	-	-	-	-	-	-