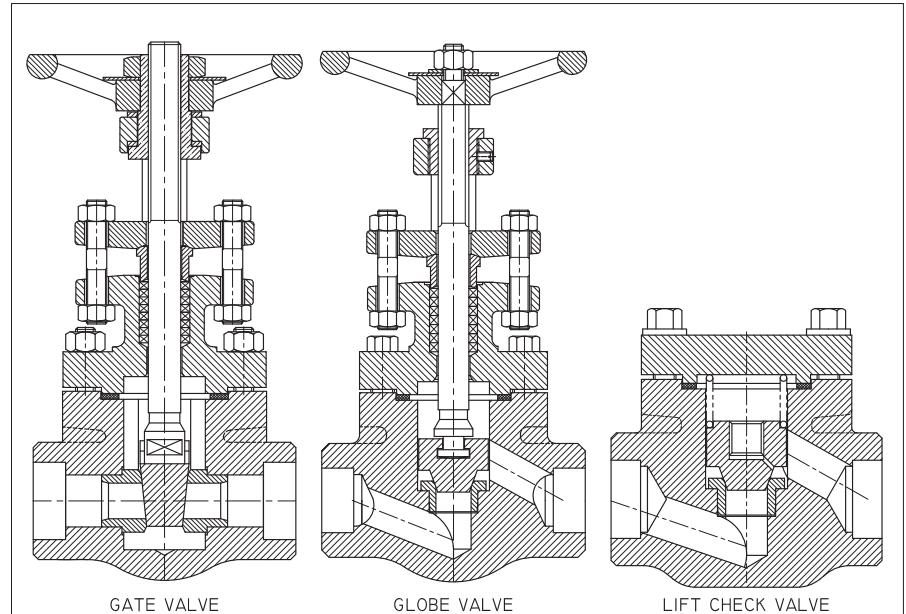


08

FORGED -GATE/ GLOBE/CHECK VALVE



GATE VALVE

GLOBE VALVE

LIFT CHECK VALVE

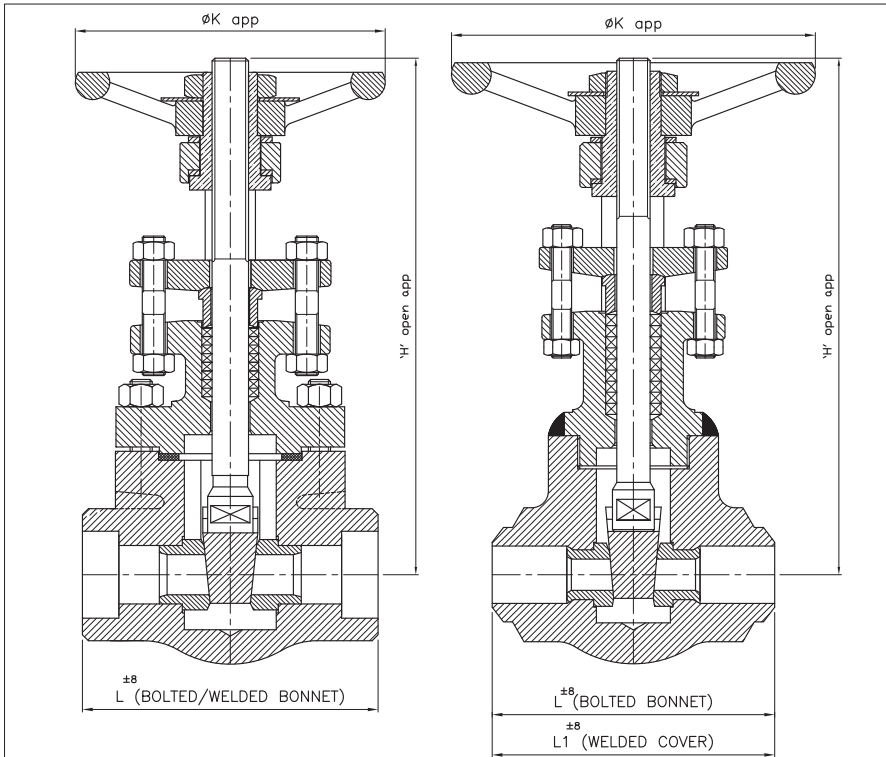
MATERIAL SPECIFICATION

PARTS	MATERIAL		
BODY	A 105	A 182 F304	A 182 F316
BONNET/COVER	A 105	A 182 F304	A 182 F316
WEDGE/PLUG	13% Cr.	T304	T316
SEAT RING	13% Cr.	T304	T316
SPINDLE	T410	T304	T316
GLAND BUSH	T410	T304	T316
GLAND FLANGE	A 105	ASTM A 182 F304	
YOKE SLEEVE	A 439 D2	AL-BRONZE	
HAND WHEEL	CARBON STEEL		
HAND WHEEL NUT	A 194 Gr.2H/AISI 1020		
COLLAR BOLT / STUD & NUT	A 193 B7/A 194 2H	A 193 B8/A 194 8 OR A 193 B7/A 194 2H	
GLAND STUD & NUT	A 193 B7/A 194 2H	A 193 B8/A 194 8	
GASKET	SPW SS 304 / SS 316 WITH CAF / GRAFOIL		
GLAND PACKING	GRAPHITE ASBESTOS INHIB. & INCONEL WIRE REIN.		
SCREW/RIVET & WASHER	STEEL		
BEARING WASHER	HARDENED STEEL	T304	T316
GRUB SCREW	A 193 B7		
GREASE NIPPLE	C.S (NICKLE PLATED)		
NAME PLATE	ALUMINIUM / SS		

1 - STELLITED ON WEDGE / SEAT OPTIONAL

GATE VALVE CLASS 800, 1500, 2500, 4500.

API 602/BS EN ISO 15761/B 16.34



DIMENSION TABLE 800 CLASS

VALVE SIZE in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.2 81	3.2 81	3.2 81	3.4 86	4 100	110/ 128	5.6 142
H app	165	165	165	175	215	270	285
ϕK_{app}	95	95	95	95	105	150	150
Wt. kg app	2.0	2.0	2.0	2.5	3.5	7.5	9.0

DIMENSION TABLE 2500 CLASS

VALVE SIZE in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.3 86	3.3 86	3.9 100	110/ 128	5.5 142	5.5 142	-
L1	3.3 86	3.3 86	3.7 95	3.9 100	110/ 128	5.5 142	-
H app	165	165	210	265	280	280	-
ϕK_{app}	105	105	140	150	150	150	-
Wt. kg app	2.6	2.6	3.6	7.6	7.6	10	-

DIMENSION TABLE 1500 CLASS

VALVE SIZE in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.3 86	3.3 86	3.3 86	3.9 100	110/ 128	5.5 142	-
L1	3.3 86	3.3 86	3.7 95	3.7 95	3.9 100	5.5 142	-
H app	165	165	210	210	265	280	-
ϕK_{app}	105	105	140	140	150	150	-
Wt. kg app	2.6	2.6	3.6	3.6	7.6	10	-

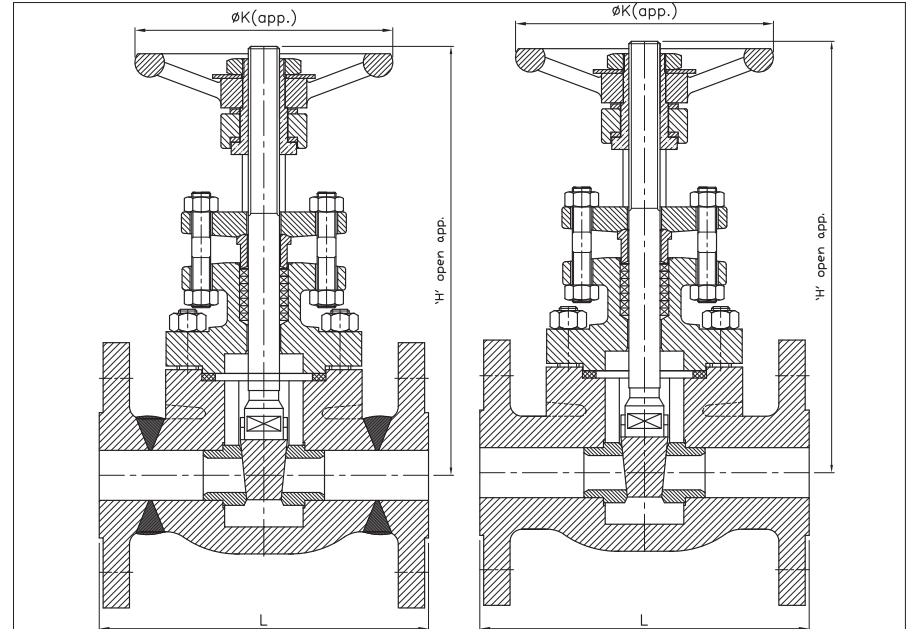
DIMENSION TABLE 4500 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40	2 50
L	5.0 128	5.0 128	-	6.3 160	7.9 200
H app	300	310	-	335	550
ϕK_{app}	150	150	-	150	300
Wt. kg app	-	-	-	-	-

INTEGRAL/WELDED FLANGE GATE VALVE

CLASS 150, 300, 600, 900, 1500, 2500.

API 602/BS EN ISO 15761



DIMENSION TABLE 150 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40	2 50
L	4.2 108	4.6 118	5.0 127	6.4 165	8.5 216
'H' app	165	175	215	270	280
K app	95	95	105	150	150
Wt.kg (app)	3.0	4.5	6.0	10.0	15

DIMENSION TABLE 300 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40	2 50
L	5.5 140	7.0 152.5	6.5 165	7.5 190	8.5 216
'H' app	165	175	215	270	280
K app	95	95	105	150	150
Wt. kg (app)	4.0	5.0	7.5	13.5	15

DIMENSION TABLE 600 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40	2 50
L	6.5 165	7.5 190	8.5 216	9.4 241	11.4 292
'H' app	165	175	215	270	280
K app	95	95	105	150	150
Wt.kg (app)	4.5	5.5	8.5	17.5	20

DIMENSION TABLE 900 CLASS

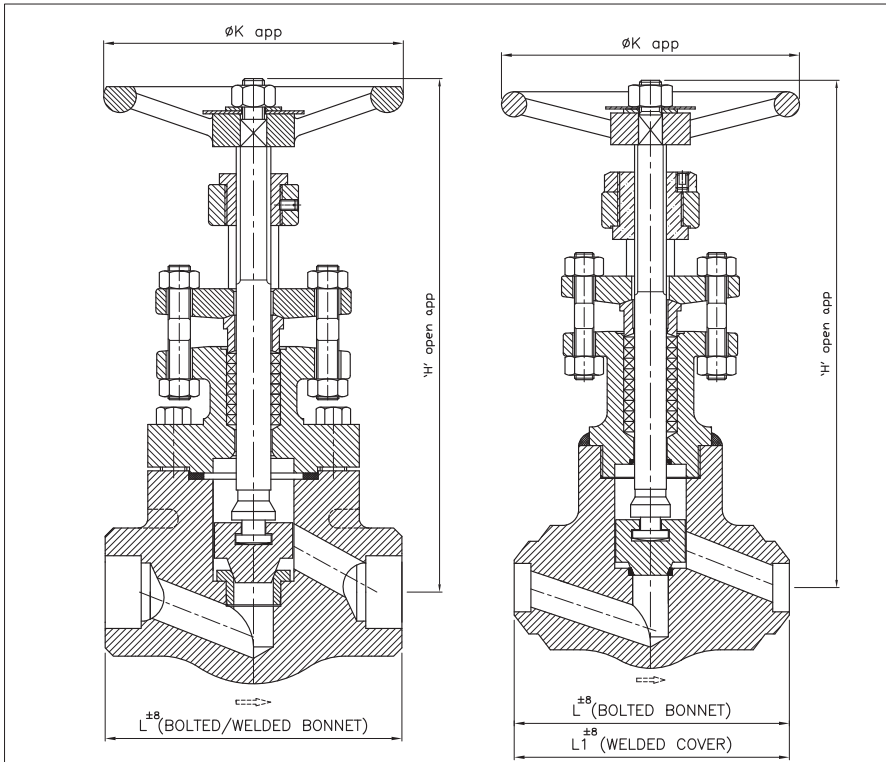
VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40
L	-	9.0 229	10 254	12 305
'H' app	-	260	260	275
K app	-	150	150	150
Wt.kg (app)	-	13	15.5	24

DIMENSION TABLE 1500 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40
L	-	9.0 229	10 254	12 305
'H' app	-	260	260	275
K app	-	150	150	150
Wt. kg (app)	-	13	15.5	24

DIMENSION TABLE 2500 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40
L	10.3 264	10.7 273	12.1 308	15.1 384
'H' app	205	270	270	280
K app	140	150	150	150
Wt.kg (app)	11.6	16.5	19.5	34



DIMENSION TABLE 800 CLASS

VALVE SIZE in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.2 81	3.2 81	3.2 81	3.4 86	3.9 100	110/ 128	5.6 142
H app	170	170	170	180	210	280	290
ϕK_{app}	6.0	6.0	9.0	12.0	17.5	29.5	35.0
Wt. kg app	2.0	2.0	2.0	2.5	4.0	8.5	9.0

DIMENSION TABLE 2500 CLASS

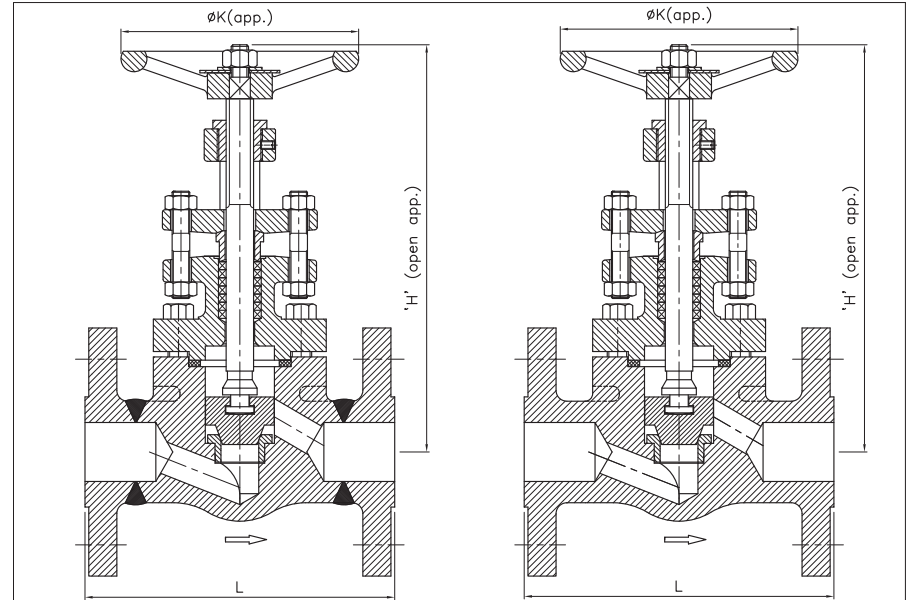
VALVE SIZE in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.3 86	3.3 86	3.9 100	110/ 128	5.5 142	5.5 142	-
L1	3.3 86	3.3 86	3.7 95	3.9 100	110/ 128	5.5 142	-
H app	165	165	210	275	285	285	-
ϕK_{app}	105	105	140	150	150	150	-
Wt. kg app	2.6	2.6	3.6	7.6	7.6	10	-

DIMENSION TABLE 1500 CLASS

VALVE SIZE in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.3 86	3.3 86	3.3 86	3.9 100	110/ 128	5.5 142	-
L1	3.3 86	3.3 86	3.7 95	3.7 95	3.9 100	5.5 142	-
H app	165	165	210	210	275	285	-
ϕK_{app}	105	105	140	140	150	150	-
Wt. kg app	2.6	2.6	3.6	3.6	7.6	10	-

DIMENSION TABLE 4500 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40	2 50
L	5.0 128	5.0 128	-	6.3 160	7.9 200
H app	290	295	-	325	510
ϕK_{app}	150	150	-	150	300
Wt. kg app	-	-	-	-	-



DIMENSION TABLE 150 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40	2 50
L	4.25 108	4.6 117	5 127	6.5 165	7.9 203
'H' app	170	180	210	280	280
K app	95	95	105	150	150
Wt.kg (app)	3.0	4.5	6.0	10.0	15

DIMENSION TABLE 900 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40
L	216	9.0 229	10.0 254	12.0 305
'H' app	205	205	270	280
K app	140	140	150	150
Wt.kg (app)	8.6	13	15.5	24

DIMENSION TABLE 300 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40	2 50
L	6.0 152	7.0 178	8.0 203	9.0 229	10.5 267
'H' app	170	180	210	280	280
K app	95	95	105	150	150
Wt.kg (app)	4.0	6.0	8.0	17.0	20

DIMENSION TABLE 1500 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40
L	8.5 216	9.0 229	10.0 254	12.0 305
'H' app	205	205	270	280
K app	140	140	150	150
Wt.kg (app)	8.6	13	15.5	24

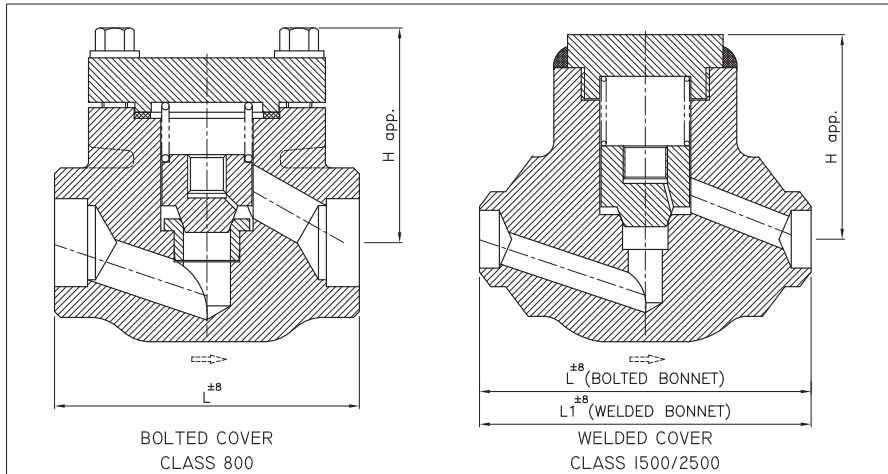
DIMENSION TABLE 600 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40	2 50
L	6.5 165	7.5 190	8.5 216	9.5 241	11.4 292
'H' app	180	210	280	290	290
K app	95	105	150	150	150
Wt.kg (app)	4.5	6.5	8.5	17.5	22

DIMENSION TABLE 2500 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40
L	10.3 264	10.7 273	12.1 308	15.1 384
'H' app	205	270	270	280
K app	140	150	150	150
Wt.kg (app)	11.6	16.5	19.5	34

FORGED STEEL LIFT CHECK VALVE
CLASS 800, 1500, 2500,4500.
BS EN ISO 15761/B 16.34



MATERIAL SPECIFICATION

PART NAME	MATERIAL		
BODY	A 105	A 182 F304	A 182 F316
PLUG	13% Cr.	T304	T316
SEAT RING	13% Cr.	T304	T316
COVER	ASTM A 105	A 182 F304	A 182 F316
COLLER BOLT/ STUD & NUT	B7/2H	B8/8 OR B7/2H	
GASKET	SPW S.S 304/316 WITH GRAFOIL		
NAME PLATE	ALUMINIUM/S.S.		
SPRING	T304/T316		

MATERIAL SPECIFICATION

PART NAME	MATERIAL		
BODY	A 105	A 182 F304	A 182 F316
PLUG	13% Cr. STELLITED	T304 STELLITED	T316 STELLITED
SEAT RING	STELLITED	STELLITED	STELLITED
TOP COVER	ASTM A 105	A 182 F304	A 182 F316
NAME PLATE	ALUMINIUM/S.S.		
SPRING	T304/T316		

DIMENSION TABLE 800 CLASS

VALVE SIZE in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.1 81	3.1 81	3.1 81	3.3 86	3.9 100	110/ 128	5.6 142
H app	60	60	60	70	80	105	115
Wt. kg app	1.5	1.5	1.5	2.0	2.5	6	8

DIMENSION TABLE 1500 CLASS

VALVE SIZE in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.3 86	3.3 86	3.3 86	3.9 100	110/ 128	5.6 142	—
L1	3.3 86	3.3 86	3.7 95	3.7 95	3.9 100	5.6 142	—
H app	70	70	70	100	100	125	—
Wt. kg app	2	2	2	4	8	10	—

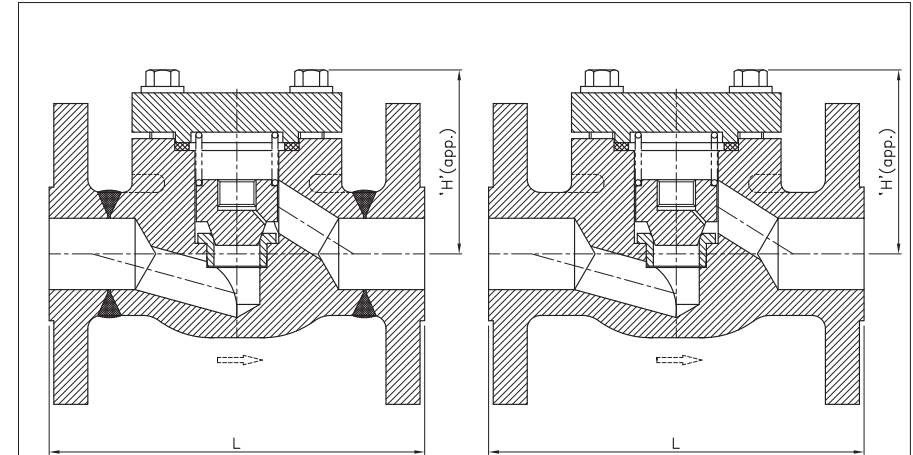
DIMENSION TABLE 2500 CLASS

VALVE SIZE in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.3 86	3.3 86	3.3 100	3.9 128	110/ 142	5.6 142	—
L1	3.3 86	3.3 86	3.7 95	3.7 100	3.9 128	5.6 142	—
H app	70	70	70	100	125	125	—
Wt. kg app	2	2	4	8	10	10	—

DIMENSION TABLE 4500 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40	2 50
L	5.0 128	5.0 128	—	6.3 160	7.9 200
H app	120	125	—	150	175
Wt. kg app	—	—	—	—	—

FORGED STEEL LIFT CHECK VALVE
CLASS 150, 300, 600, 900, 1500, 2500.
BS EN ISO 15761/ASME B 16.34



DIMENSION TABLE 150 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40
L	4.25 108	4.6 117	5 127	6.5 165
H app	60	70	80	105
Wt. kg app	2	3	3.8	11.5

DIMENSION TABLE 300 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40
L	6.0 152	7.0 178	8.0 203	9.0 229
H app	60	70	80	105
Wt. kg app	2.5	3.5	7.5	12

DIMENSION TABLE 600 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40
L	6.5 165	7.5 190	8.5 216	9.5 241
H app	70	80	105	115
Wt. kg app	2.75	3.7	8.5	13.5

DIMENSION TABLE 900 CLASS

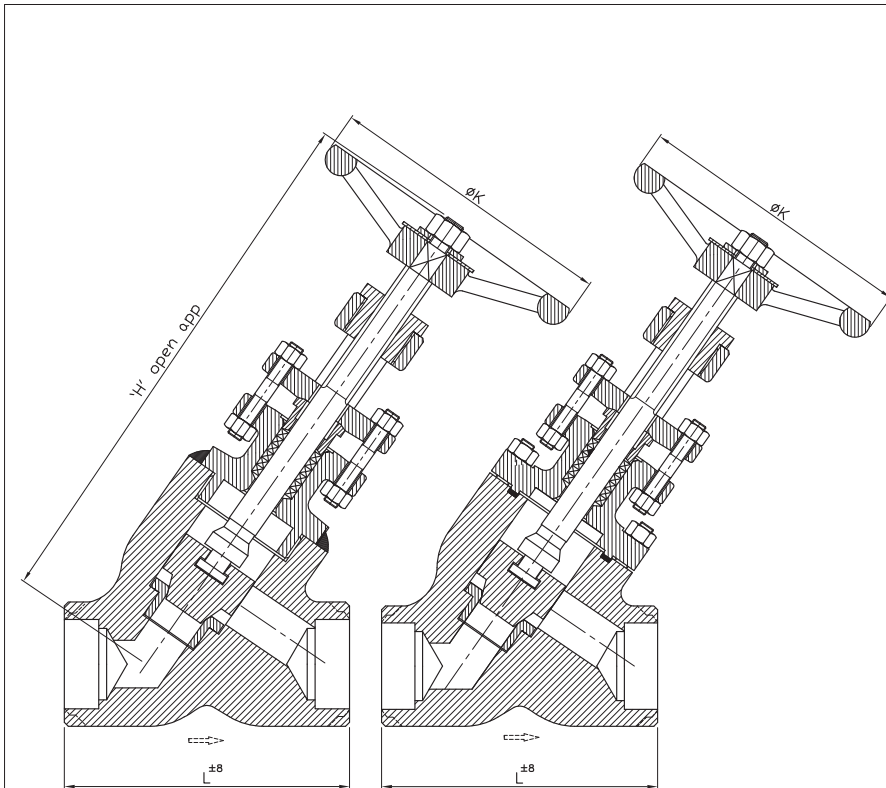
VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40
L	—	9.0 229	10.0 254	12.0 305
H app	—	80	105	115
Wt. kg app	—	3.7	8.5	13.5

DIMENSION TABLE 1500 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40
L	8.5 216	8.9 227	10.0 254	12.0 305
H app	70	80	105	115
Wt. kg app	2.7	3.7	8.5	13.5

DIMENSION TABLE 2500 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40
L	10.3 264	10.7 273	12.1 308	15.1 384
H app	70	80	105	115
Wt. kg app	2.7	3.7	8.5	13.5



DIMENSION TABLE 800 CLASS

VALVE SIZE in mm	0.75 20	1 25	1.5 40	2 50
L	3.9 100	5.1 130	5.7 145	-
H app	200	270	270	-
ϕK	105	150	150	-

DIMENSION TABLE 1500 CLASS

VALVE SIZE in mm	0.75 20	1 25	1.5 40	2 50
L	-	-	-	-
H app	-	-	-	-
ϕK	-	-	-	-

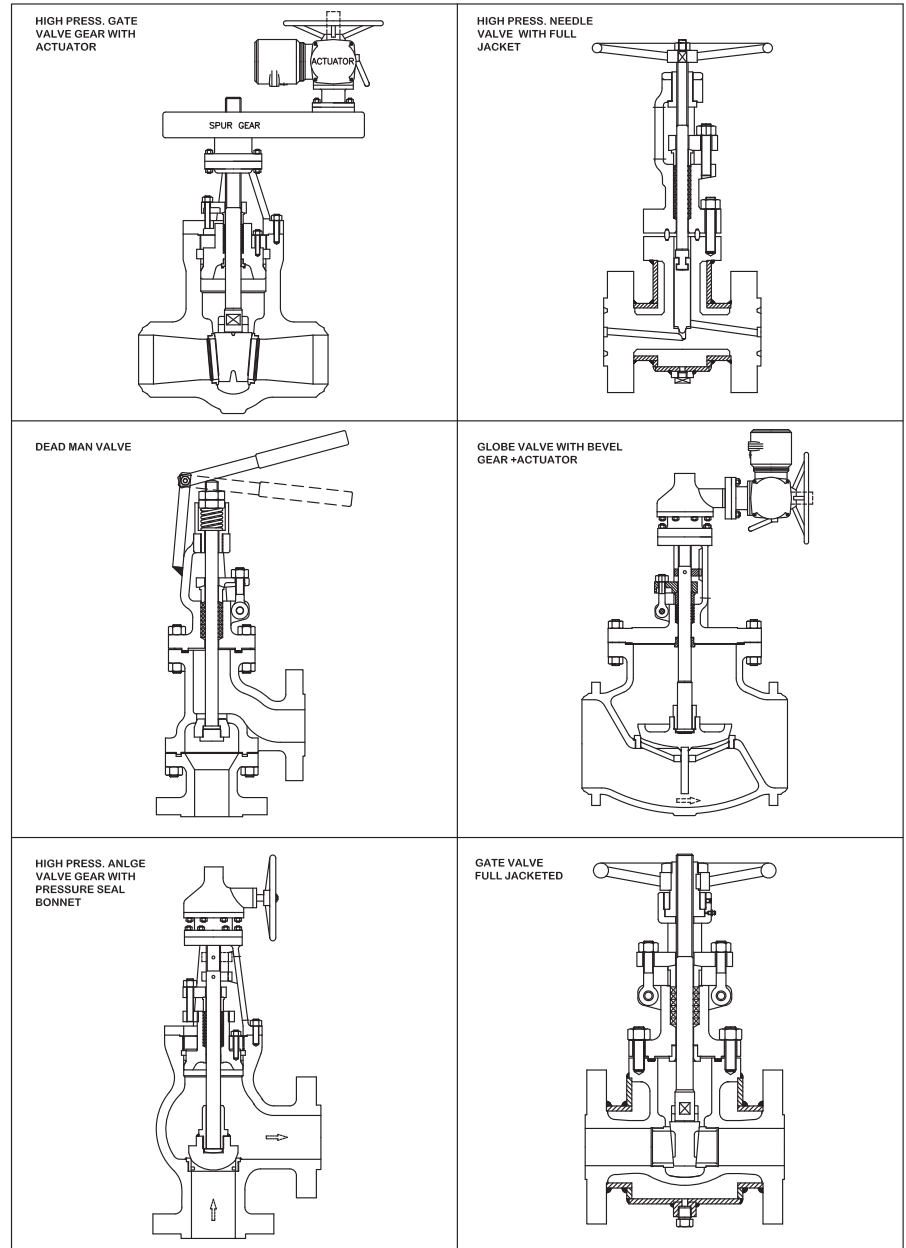
DIMENSION TABLE 2500 CLASS

VALVE SIZE in mm	0.75 20	1 25	1.5 40	2 50
L	5.7 145	-	-	-
H app	300	-	-	-
ϕK	150	-	-	-

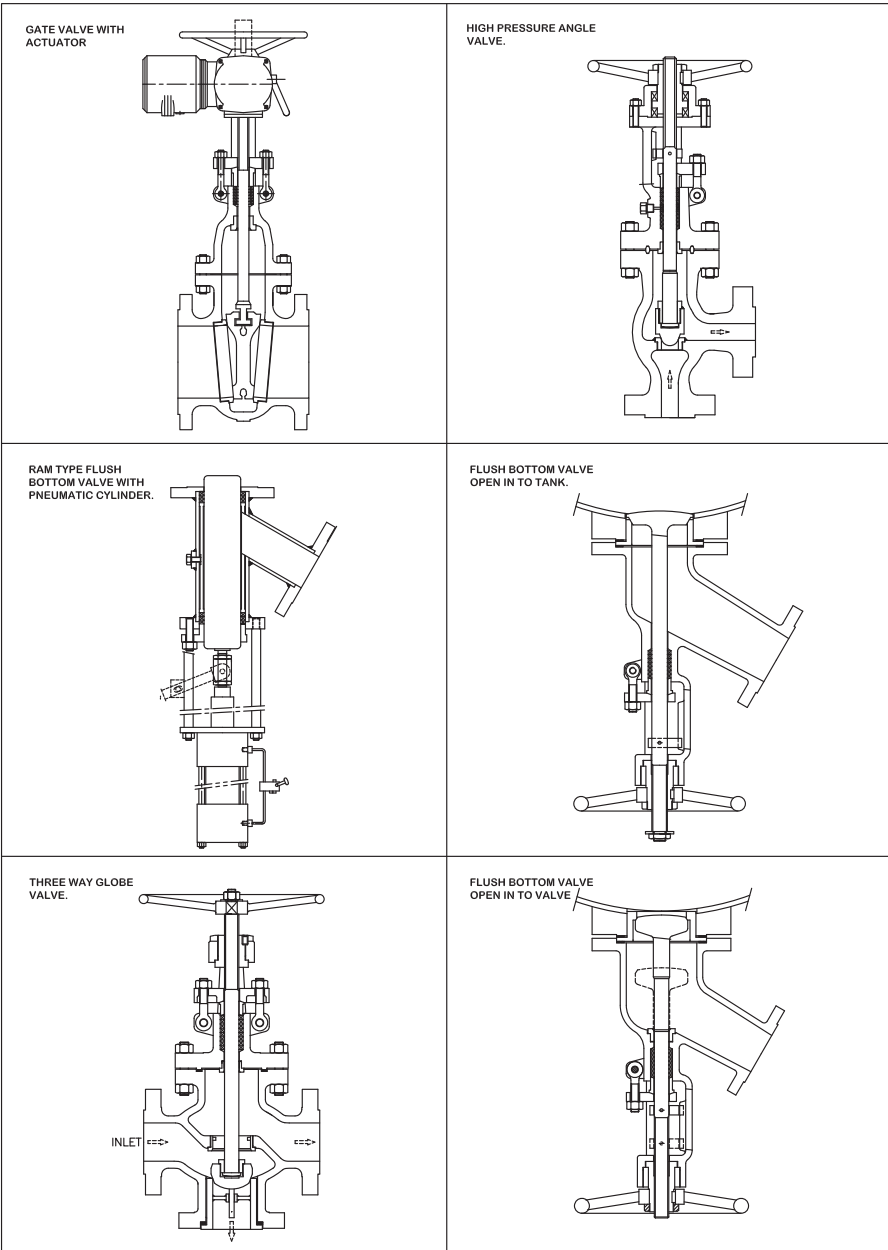
DIMENSION TABLE 4500 CLASS

VALVE SIZE in mm	0.5 15	0.75 20	1 25	1.5 40	2 50
L	-	-	-	-	-
H app	-	-	-	-	-
ϕK app	-	-	-	-	-

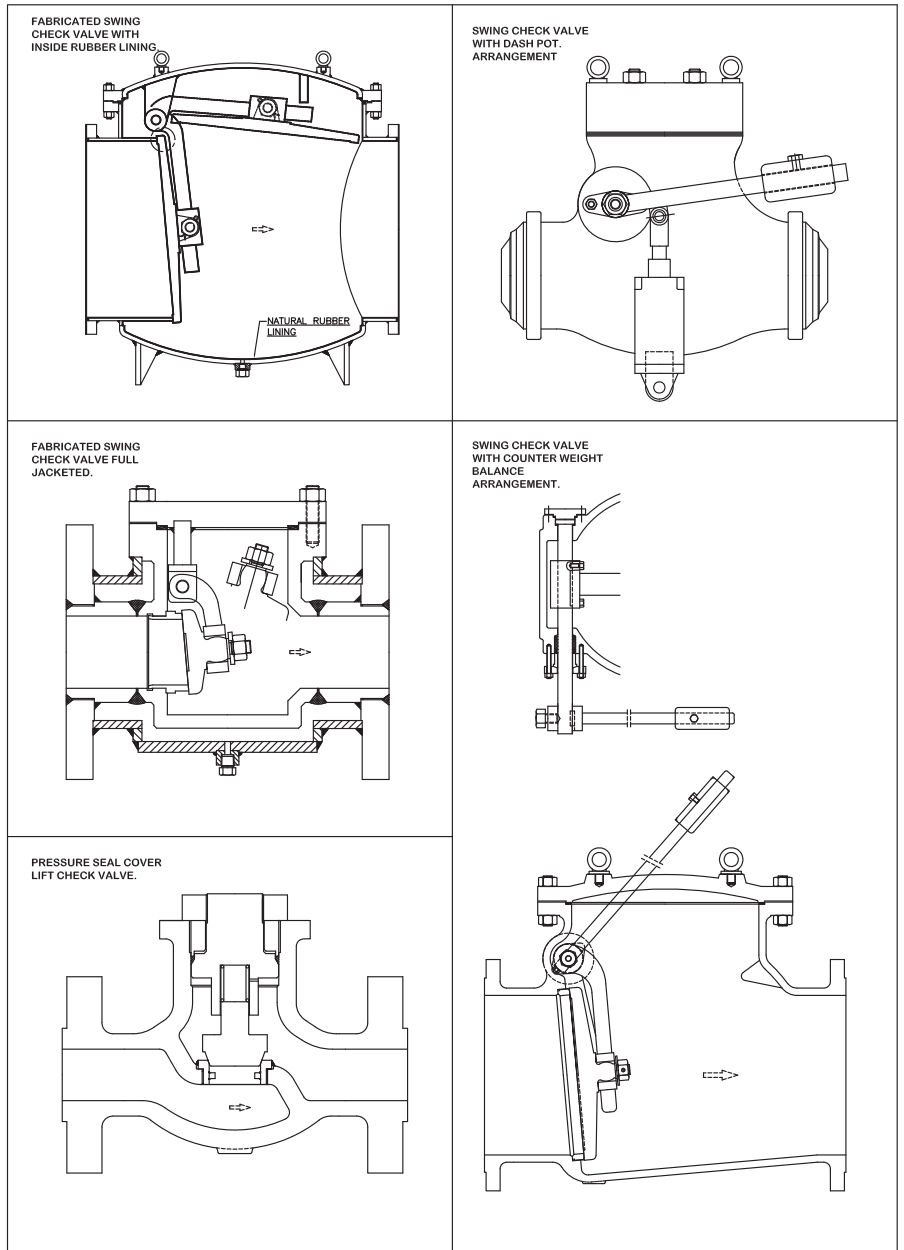
SPECIAL VALVES



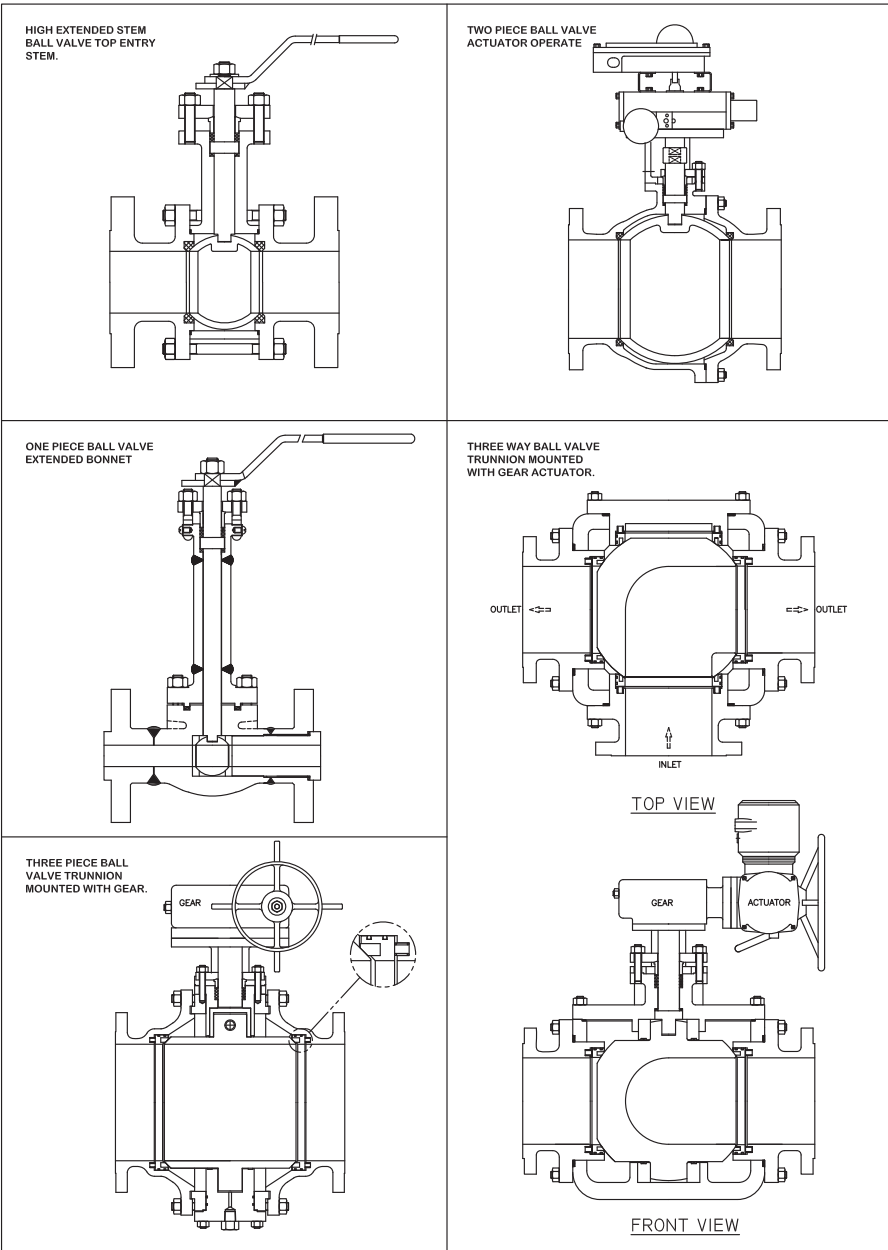
SPECIAL VALVES



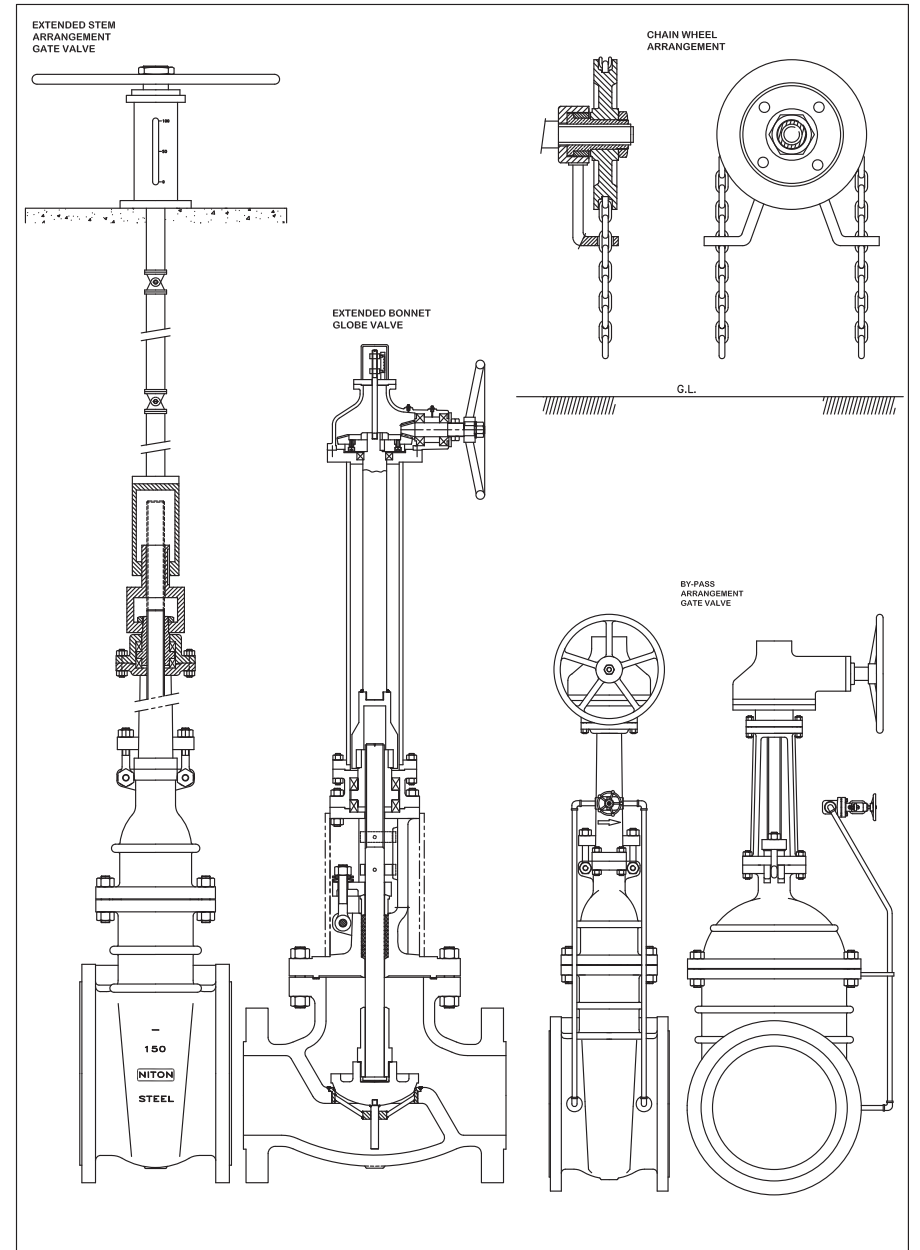
SPECIAL VALVES



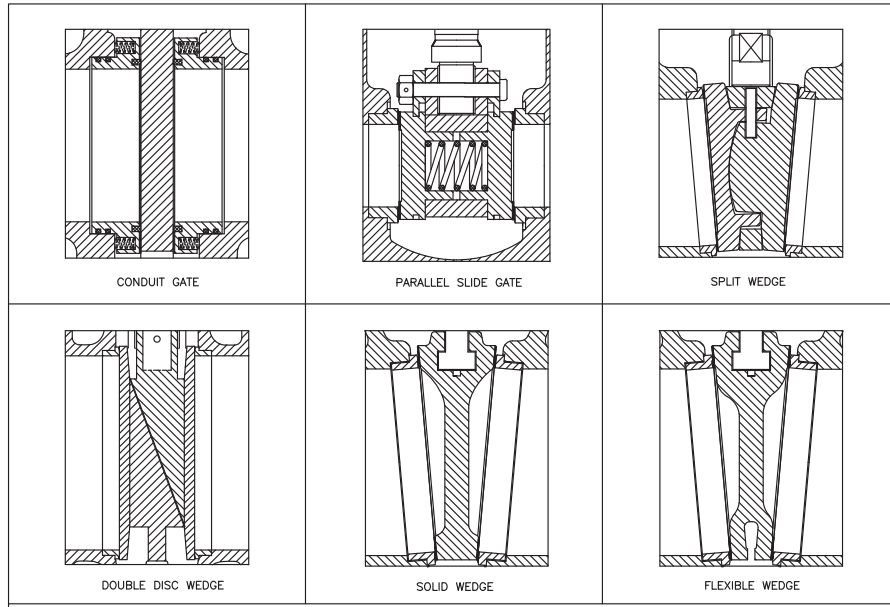
SPECIAL VALVES



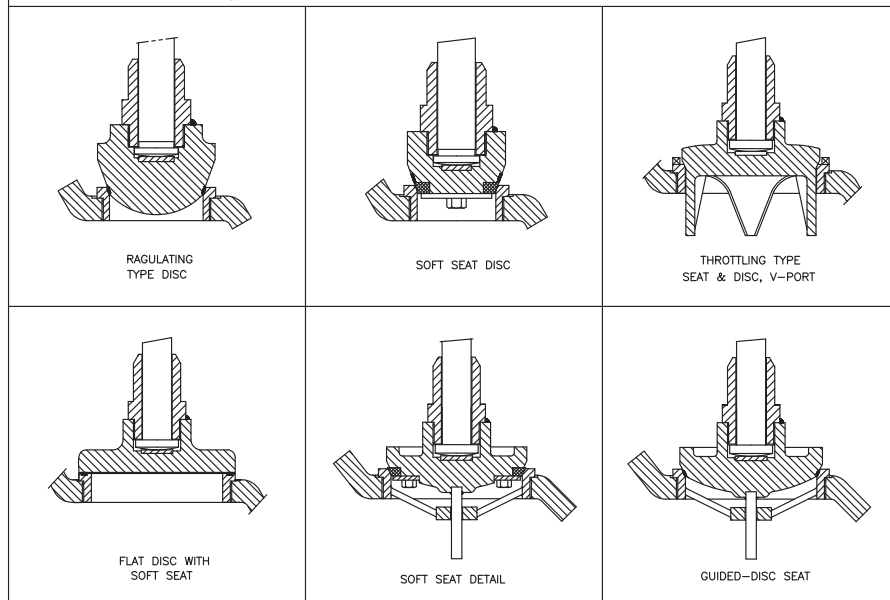
SPECIAL COMPONENT & ACCESSORIES



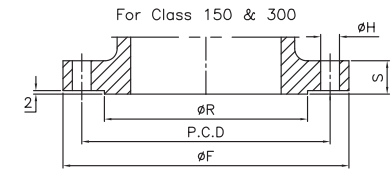
VARIOUS WEDGE DESIGNS



VARIOUS PLUG DESIGNS



ASME B 16.5



Class 150 Steel Flange Dimensions

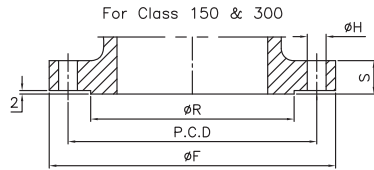
Nominal Size		øF		PCD		øR		S		øH		N	STUD
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	No.	Size (in)
1/2	15	3.50	90	2.38	60.5	1.38	35	0.45	11.5	0.62	16	4	1/2
3/4	20	3.88	100	2.75	70.0	1.69	43	0.51(0.45)	13.1(11.5)	0.62	16	4	1/2
1	25	4.25	110	3.12	79.2	2.00	51	0.58(0.45)	14.7(11.5)	0.62	16	4	1/2
1 1/4	32	4.62	115	3.50	89.0	2.50	64	0.64(0.51)	16.3(13.1)	0.62	16	4	1/2
1 1/2	40	5.00	125	3.88	98.5	2.88	73	0.70(0.58)	17.9(14.7)	0.62	16	4	1/2
2	50	6.00	150	4.75	120.5	3.62	92	0.77(0.64)	19.5(16.3)	0.75	19	4	5/8
2 1/2	65	7.00	180	5.50	139.5	4.12	105	0.89(0.70)	22.7(17.9)	0.75	19	4	5/8
3	80	7.50	190	6.00	152.5	5.00	127	0.95(0.77)	24.3(19.5)	0.75	19	4	5/8
4	100	9.00	230	7.50	190.5	6.19	157	0.95	24.3	0.75	19	8	5/8
5	125	10.00	255	8.50	216.0	7.31	188	0.95	24.3	0.88	22	8	3/4
6	150	11.00	280	9.50	241.5	8.50	216	1.01	25.8	0.88	22	8	3/4
8	200	13.50	345	11.75	298.5	10.62	270	1.14	29.0	0.88	22	8	3/4
10	250	16.00	405	14.25	362.0	12.75	324	1.20	30.6	1.00	25	12	7/8
12	300	19.00	485	17.00	432.0	15.00	381	1.27	32.2	1.00	25	12	7/8
14	350	21.00	535	18.75	476.0	16.26	413	1.39	35.4	1.12	29	12	1
16	400	23.50	595	21.25	539.5	18.50	470	1.45	37.0	1.12	29	16	1
18	450	25.00	635	22.75	578.0	21.00	533	1.58	40.1	1.25	32	16	1 1/8
20	500	27.50	700	25.00	635.0	23.00	584	1.70	43.3	1.25	32	20	1 1/8
24	600	32.00	815	29.50	749.5	27.25	692	1.89	48.1	1.38	35	20	1 1/4

Class 300 Steel Flange Dimensions

DIMENSION IN () ARE FOR VALVE FLANGES ONLY

Nominal Size		øF		PCD		øR		S		øH		N	STUD
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	No.	Size (in)
1/2	15	3.75	95	2.62	66.5	1.38	35	0.58	14.7	0.62	16	4	1/2
3/4	20	4.62	115	3.25	82.5	1.69	43	0.64	16.3	0.75	19	4	5/8
1	25	4.88	125	3.50	89.0	2.00	51	0.70	17.9	0.75	19	4	5/8
1 1/4	32	5.25	135	3.88	98.5	2.50	64	0.77	19.5	0.75	19	4	5/8
1 1/2	40	6.12	155	4.50	114.5	2.88	73	0.83	21.1	0.88	22	4	3/4
2	50	6.50	165	5.00	127.0	3.62	92	0.89	22.7	0.75	19	8	5/8
2 1/2	65	7.50	190	5.88	149.0	4.12	105	1.01	25.8	0.88	22	8	3/4
3	80	8.25	210	6.62	168.0	5.00	127	1.14	29.0	0.88	22	8	3/4
4	100	10.00	255	7.88	200.0	6.19	157	1.27	32.2	0.88	22	8	3/4
5	125	11.00	280	9.25	235.0	7.31	186	1.39	35.4	0.88	22	8	3/4
6	150	12.50	320	10.62	270.0	8.50	216	1.45	37.0	0.88	22	12	3/4
8	200	15.00	380	13.00	330.0	10.62	270	1.64	41.7	1.00	25	12	7/8
10	250	17.50	445	15.25	387.5	12.75	324	1.89	48.1	1.12	29	16	1
12	300	20.50	520	17.75	451.0	15.00	381	2.00	51.2	1.25	32	16	1 1/8
14	350	23.00	585	20.25	514.5	16.25	413	2.14	54.4	1.25	32	20	1 1/8
16	400	25.50	650	22.50	571.5	18.50	470	2.27	57.6	1.38	35	20	1 1/4
18	450	28.00	710	24.75	628.5	21.00	533	2.39	60.8	1.38	35	24	1 1/4
20	500	30.50	775	27.00	686.0	23.00	584	2.51	63.9	1.38	35	24	1 1/4
24	600	36.00	915	32.00	813.0	27.25	692	2.77	70.3	1.62	41	24	1 1/2

API 605



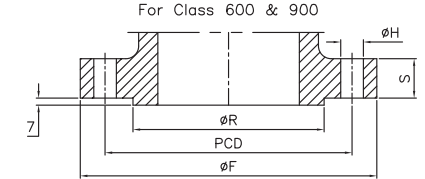
Class 150 Steel Flange Dimensions (26" & Larger)

Nominal Size		ϕF		PCD		ϕR		S		ϕH		N	STUD
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	No.	Size (in)
26	650	30.94	786	29.31	744.5	28.00	711.2	1.64	41.7	0.88	22.2	36	3/4
28	700	32.94	837	31.31	795.3	30.00	762.0	1.76	44.8	0.88	22.2	40	3/4
30	750	34.94	887	33.31	846.1	32.00	812.8	1.76	44.8	0.88	22.2	44	3/4
32	800	37.06	941	35.44	900.1	34.00	863.6	1.82	46.4	0.88	22.2	48	3/4
34	850	39.56	1005	37.69	957.3	36.25	920.8	1.95	49.6	1.00	25.4	40	7/8
36	900	41.62	1057	39.75	1009.6	38.25	971.6	2.07	52.8	1.00	25.4	44	7/8
38	950	44.25	1124	42.12	1070.0	40.25	1022.4	2.14	54.4	1.12	28.6	40	1
40	1000	46.25	1175	44.12	1120.8	42.50	1079.5	2.20	56.0	1.12	28.6	44	1
42	1050	48.25	1226	46.12	1171.6	44.50	1130.3	2.32	59.1	1.12	28.6	48	1
44	1100	50.25	1276	48.12	1222.4	46.50	1181.1	2.39	60.7	1.12	28.6	52	1
46	1150	52.81	1341	50.56	1284.3	48.62	1235.1	2.45	62.3	1.25	31.8	40	1 1/8
48	1200	54.81	1392	52.56	1335.1	50.75	1289.0	2.58	65.5	1.25	31.8	44	1 1/8
50	1250	56.81	1443	54.56	1385.9	52.75	1339.8	2.70	68.7	1.25	31.8	48	1 1/8
52	1300	58.81	1494	56.56	1436.7	54.75	1390.8	2.76	70.2	1.25	31.8	52	1 1/8
54	1350	61.00	1549	58.75	1492.2	56.75	1441.1	2.82	71.8	1.25	31.8	56	1 1/8
56	1400	63.00	1600	60.75	1543.0	58.75	1492.3	2.89	73.4	1.25	31.8	60	1 1/8
58	1450	65.94	1675	63.44	1611.3	60.75	1543.0	2.95	75.0	1.38	34.9	48	1 1/4
60	1500	67.94	1726	65.44	1662.1	63.00	1600.2	3.01	76.6	1.38	34.9	52	1 1/4

Class 300 Steel Flange Dimensions (26" & Larger)

Nominal Size		ϕF		PCD		ϕR		S		ϕH		N	STUD
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	No.	Size (in)
26	650	34.12	867	31.62	803.3	29.00	736.6	3.51	89.3	1.38	34.9	32	1 1/4
28	700	36.25	921	33.75	857.2	31.00	787.4	3.51	89.3	1.38	34.9	36	1 1/4
30	750	39.00	991	36.25	920.8	33.25	844.6	3.70	94.1	1.50	38.1	36	1 3/8
32	800	41.50	1054	38.50	977.9	35.50	901.7	4.07	103.6	1.62	41.3	32	1 1/2
34	850	43.62	1108	40.62	1031.9	37.50	952.5	4.07	103.6	1.62	41.3	36	1 1/2
36	900	46.12	1172	42.88	1089.0	39.75	1009.6	4.07	103.6	1.75	44.4	32	1 5/8
38	950	48.12	1222	44.88	1139.8	41.75	1060.4	4.39	111.5	1.75	44.4	36	1 5/8
40	1000	51.12	1273	46.88	1190.6	43.88	1114.4	4.58	116.3	1.75	44.4	40	1 5/8
42	1050	52.50	1334	49.00	1244.6	46.00	1168.4	4.70	119.5	1.88	47.6	36	1 3/4
44	1100	54.50	1384	51.00	1295.4	48.00	1219.2	5.01	127.4	1.88	47.6	40	1 3/4
46	1150	57.50	1460	53.75	1365.2	50.00	1270.2	5.07	129.0	2.00	50.8	36	1 7/8
48	1200	59.50	1511	55.75	1416.0	52.25	1327.2	5.07	129.0	2.00	50.8	40	1 7/8
50	1250	61.50	1562	57.75	1466.8	54.25	1378	5.44	138.2	2.00	50.8	44	1 7/8

ASME B 16.5



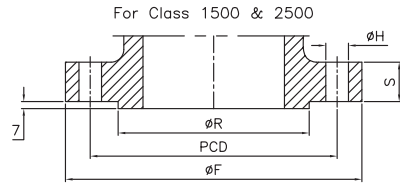
Class 600 Steel Flange Dimensions

Nominal Size		ϕF		PCD		ϕR		S		ϕH		N	STUD
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	No.	Size (in)
1/2	15	3.75	95	2.62	66.5	1.38	35	0.56	14.3	0.62	16	4	1/2
3/4	20	4.62	115	3.25	82.5	1.69	43	0.62	15.9	0.75	19	4	5/8
1	25	4.88	125	3.50	89.0	2.00	51	0.69	17.5	0.75	19	4	5/8
1 1/4	32	5.25	135	3.88	98.5	2.50	64	0.81	20.7	0.75	19	4	5/8
1 1/2	40	6.12	155	4.50	114.5	2.88	73	0.88	22.3	0.88	22	4	3/4
2	50	6.50	165	5.00	127.0	3.62	92	1.00	25.4	0.75	19	8	5/8
2 1/2	65	7.50	190	5.88	149.0	4.12	105	1.12	28.6	0.88	22	8	3/4
3	80	8.25	210	6.62	168.0	5.00	127	1.25	31.8	0.88	22	8	3/4
4	100	10.75	275	8.50	216.0	6.19	157	1.50	38.1	1.00	25	8	7/8
5	125	13.00	330	10.50	266.5	7.31	186	1.75	44.5	1.12	29	8	1
6	150	14.00	355	11.50	292.0	8.50	216	1.88	47.7	1.12	29	12	1
8	200	16.50	420	13.75	349.0	10.62	270	2.19	55.6	1.25	32	12	1 1/8
10	250	20.00	510	17.00	432.0	12.75	324	2.50	63.5	1.38	35	16	1 1/4
12	300	22.00	560	19.25	489.0	15.00	381	2.62	66.7	1.38	35	20	1 1/4
14	350	23.75	605	20.75	527.0	16.25	413	2.75	69.9	1.50	38	20	1 3/8
16	400	27.00	685	23.75	603.0	18.50	470	3.00	76.2	1.62	41	20	1 1/2
18	450	29.25	745	25.75	654.0	21.00	533	3.25	82.6	1.75	45	20	1 5/8
20	500	32.00	815	28.50	724.0	23.00	584	3.50	88.9	1.75	45	24	1 5/8
24	600	37.00	940	33.00	838.0	27.25	692	4.00	101.6	2.00	51	24	1 7/8

Class 900 Steel Flange Dimensions

Nominal Size		ϕF		PCD		ϕR		S		ϕH		N	STUD
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	No.	Size (in)
2	50	8.50	215	6.50	165.0	3.62	92	1.50	38.1	1.00	25	8	7/8
2 1/2	65	9.62	245	7.50	190.5	4.12	105	1.62	41.2	1.12	29	8	1
3	80	9.50	240	7.50	190.5	5.00	127	1.50	38.1	1.00	25	8	7/8
4	100	11.50	290	9.25	235.0	6.19	157	1.75	44.5	1.25	32	8	1 1/8
5	125	13.75	350	11.00	279.5	7.31	186	2.00	50.8	1.38	35	8	1 1/4
6	150	15.00	380	12.50	317.5	8.50	216	2.19	55.6	1.25	32	12	1 1/8
8	200	18.50	470	15.50	393.5	10.62	270	2.50	63.5	1.50	38	12	1 3/8
10	250	21.50	545	18.50	470.0	12.75	324	2.75	69.9	1.50	38	16	1 3/8
12	300	24.00	610	21.00	533.5	15.00	381	3.12	79.2	1.50	38	20	1 3/8
14	350	25.25	640	22.00	559.0	16.25	413	3.38	85.9	1.62	41	20	1 1/2
16	400	27.75	705	24.25	616.0	18.50	470	3.50	88.9	1.75	45	20	1 5/8
18	450	31.00	785	27.00	686.0	21.00	533	4.00	101.6	2.00	51	20	1 7/8
20	500	33.75	855	29.50	749.5	23.00	584	4.25	108.0	2.12	54	20	2
24	600	41.00	1040	35.50	901.5	27.25	692	5.50	139.7	2.62	67	20	2 1/2

ASME B 16.5



Class 1500 Steel Flange Dimensions

Nominal Size	ϕF		PCD		ϕR		S		ϕH		N	STUD	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	No.	Size (in)
2	50	8.50	215	6.50	165.0	3.62	92	1.50	38.1	1.00	25	8	7/8
2 1/2	65	9.62	245	7.50	190.0	4.12	105	1.62	41.2	1.12	29	8	1
3	80	10.50	265	8.00	203.0	5.00	127	1.88	47.8	1.25	32	8	1 1/8
4	100	12.25	310	9.50	241.5	6.19	157	2.12	53.9	1.38	35	8	1 1/4
5	125	14.75	375	11.50	292.0	7.31	186	2.88	73.2	1.62	41	8	1 1/2
6	150	15.50	395	12.50	317.5	8.50	216	3.25	82.6	1.50	38	12	1 3/8
8	200	19.00	485	15.50	393.5	10.62	270	3.62	92.0	1.75	45	12	1 5/8
10	250	23.00	585	19.00	482.5	12.75	324	4.25	108.0	2.00	51	12	1 7/8
12	300	26.50	675	22.50	571.5	15.00	381	4.88	124.0	2.12	54	16	2
14	350	29.50	750	25.00	635.0	16.25	413	5.25	133.4	2.38	60	16	2 1/4
16	400	32.50	825	27.75	705.0	18.50	470	5.75	146.1	2.62	67	16	2 1/2
18	450	36.00	915	30.50	774.5	21.00	533	6.38	162.1	2.88	73	16	2 3/4
20	500	38.75	985	32.75	832.0	23.00	584	7.00	177.8	3.12	79	16	3
24	600	46.00	1170	39.00	990.5	27.25	692	8.00	203.2	3.62	92	16	3 1/2

Class 2500 Steel Flange Dimensions

Nominal Size	ϕF		PCD		ϕR		S		ϕH		N	STUD	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	No.	Size (in)
2	50	9.25	235	6.75	171.5	3.62	92	2.00	50.8	1.12	29	8	1
2 1/2	65	10.50	265	7.75	197.0	4.12	105	2.25	57.2	1.25	32	8	1 1/8
3	80	12.00	305	9.00	228.5	5.00	127	2.62	66.5	1.38	35	8	1 1/4
4	100	14.00	355	10.75	273.0	6.19	157	3.00	76.2	1.62	41	8	1 1/2
5	125	16.50	420	12.75	324.0	7.31	186	3.62	91.9	1.88	48	8	1 3/4
6	150	19.00	485	14.50	368.5	8.50	216	4.25	108.0	2.12	54	8	2
8	200	21.75	550	17.25	438.0	10.62	270	5.00	127.0	2.12	54	12	2
10	250	26.50	675	21.25	540.0	12.75	324	6.50	165.1	2.62	67	12	2 1/2
12	300	30.00	760	24.38	629.5	15.00	381	7.25	184.2	2.88	73	12	2 3/4

MSS SP-44 Class 150, 300, & 600 RF Dimensions

Class 150 Steel Flange Dimensions

Nominal Size	ϕF		PCD		ϕR		S		ϕH		N	STUD	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	No.	Size (in)
22	550	29.5	750	27.25	692	25.25	641	1.81	46	1.38	35	20	1 1/4

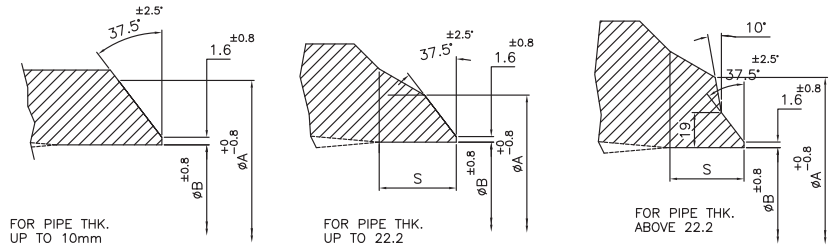
Class 300 Steel Flange Dimensions

Nominal Size	ϕF		PCD		ϕR		S		ϕH		N	STUD	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	No.	Size (in)
22	550	33.0	838	29.25	742.9	25.25	641	2.62	66.5	1.62	41	24	1 1/2

Class 600 Steel Flange Dimensions

Nominal Size	ϕF		PCD		ϕR		S		ϕH		N	STUD	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	No.	Size (in)
22	550	34.25	870	30.62	777.7	25.25	641	3.75	95.2	1.88	48.0	44	1 3/4

BUTT WELD END DIMENSION'S ASME B 16.25

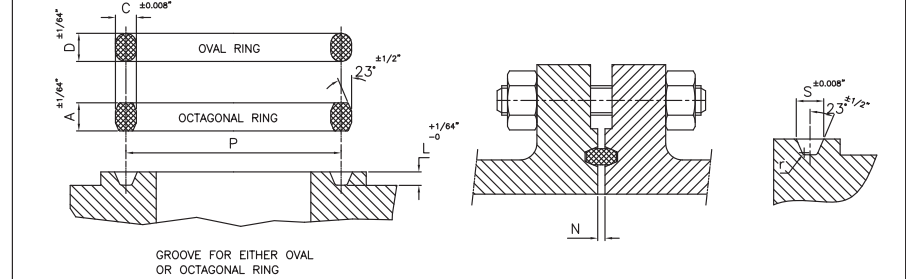


PIPE SIZE	SCH.	PIPE O.D.	ϕA	ϕB	S	PIPE SIZE	SCH.	PIPE O.D.	ϕA	ϕB	S
1"	40	33.4	35	26.59	5.1	2.5"	40	73.0	75	62.6	7.8
	60						60				
	80			24.4	6.75		80			59	10.5
	100						100				
	120						120				
	140						140				
	160			20.7	9.52		160			54	14.25
XXS	15.2	13.65	XXS	45	21						
1.25"	40	42.4	44	35.0	5.4	3"	40	88.9	91.2	77.93	8.23
	60						60				
	80			32.4	7.35		80			73.66	11.43
	100						100				
	120						120				
	140						140				
	160			29.5	9.52		160			66.65	16.68
XXS	22.78	14.55	XXS	58.42	22.86						
1.5"	40	48.3	50	40.9	5.55	4"	40	114.3	117.4	102.26	9.03
	60						60				
	80			38.1	7.65		80			97.18	12.84
	100						100				
	120						120			92.05	16.68
	140						140				
	160			34.0	10.72		160			87.33	20.23
XXS	27.9	15.3	XXS	80.06	25.68						
2"	40	60.3	62	52.5	5.85	5"	40	141.2	144.5	128.19	10
	60						60				
	80			49.3	8.25		80			122.25	14.2
	100						100				
	120						120			115.9	19
	140						140				
	160			42.9	13.05		160			109.55	23.81
XXS	38.1	16.65	XXS	103.2	28.57						

BUTT WELD END DIMENSION'S ASME B 16.25

PIPE SIZE	SCH.	PIPE O.D.	øA	øB	S	PIPE SIZE	SCH.	PIPE O.D.	øA	øB	S
6"	40	168.3	172.2	154.05	10.66	16"	40	406.4	413	381	19.05
	60						60			373.08	24.99
	80			146.33	16.45		80			363.58	32.11
	100						100			354.03	39.28
	120			139.73	21.40		120			344.47	46.44
	140						140			333.35	54.78
	160			131.80	27.36		160			325.42	60.73
XXS	124.38	32.91	XXS								
8"	40	219.1	223	202.72	12.27	18"	40	457.2	464	428.65	21.4
	60			198.45	15.46		60			419.1	28.57
	80			193.67	19.05		80			409.6	35.7
	100			188.89	22.63		100			398.48	44.04
	120			182.6	27.36		120			387.35	52.38
	140			177.83	30.93		140			377.85	59.5
	160			173.05	34.51		160			366.73	67.86
	XXS			174.62	33.33		XS			431.8	19.05
	10"			40	273		278			254.51	13.90
60		247.65	19.05	60		466.75		30.93			
80		242.93	22.63	80		455.63		39.28			
100		236.52	27.36	100		442.93		48.81			
120		230.17	32.11	120		431.8		57.15			
140		222.2	38.1	140		419.1		66.67			
160		215.90	42.85	160		407.97		74.98			
XXS				XS		482.6		19.05			
12"		40	323.8	329		303.23		15.46	22"	40	559
	60	295.3			21.40	60	514.35	33.33			
	80	288.95			26.17	80	501.65	42.86			
	100	280.97			32.11	100	488.95	52.38			
	120	273.05			38.1	120	476.25	61.9			
	140	266.7			42.85	140	463.55	71.43			
	160	257.2			49.98	160	450.85	80.96			
	XS	298.45			19.05	XS	533.4	19.05			
	14"	40			355.6	362	333.35	16.68		24"	
60		325.48	22.63	60			560.43	36.88			
80		317.5	28.5	80			547.73	46.41			
100		308	35.7	100			531.83	58.33			
120		300.02	41.68	120			517.55	69.03			
140		292.1	47.62	140			504.85	78.55			
160		284.18	53.56	160			490.58	89.26			
XS		330.2	19.05	XS			584.2	19.05			

DIMENSION OF RING JOINT



Ring No.	P inches	S inches	L inches	r max. inches	A inches	C inches	D inches	N										
	mm	mm	mm	mm	mm	mm	mm	300#	600#									
R11	34.1	1 11/32	7.1	9/32	5.5	7/32	1	1/32	9.5	3/8	6.4	1/4	11.1	7/16	14.3	9/16	3.2	3.2
R12	39.7	1 9/16	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4	4	4
R13	42.9	1 11/16	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	3.9	3.9	4	4
R14	44.4	1 3/4	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4	4	4
R15	47.6	1 7/8	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4	4	4
R16	50.8	2	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	3.9	3.9	4	4
R17	57.1	2 1/4	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4	4	4
R18	60.3	2 3/8	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	3.9	3.9	4	4
R19	65.1	2 9/16	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4	4	4
R20	68.3	2 11/16	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	3.9	3.9	4	4
R21	72.2	2 27/32	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.5	11/16	4	4	4	4
R22	82.5	3 1/4	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4	4	4
R23	82.5	3 1/4	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.4	11/16	5.9	4.8	4	4
R24	95.2	3 3/4	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.5	11/16	3.2	3.2	4	4
R25	101.6	4	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4	4	4
R26	101.6	4	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.5	11/16	5.5	4.8	4	4
R27	107.9	4 1/4	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.5	11/16	3.2	3.2	4	4
R28	111.1	4 3/4	13.5	17/32	9.5	3/8	1.5	1/16	17.5	11/16	12.7	1/2	19.1	3/4	3.2	3.2	4	4
R29	114.3	4 1/2	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4	4	4
R30	117.5	4 5/8	11.9	15/32	7.9	5/16	1	1/32	117.5	5/8	12.7	1/2	7.9	5/16	4	4	4	4
R31	123.8	4 7/8	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.5	11/16	5.5	4.8	4	4
R32	127	5	13.5	17/32	9.5	3/8	1.5	1/16	17.5	5/8	12.7	1/2	19.1	3/4	3.2	3.2	4	4
R33	131.8	5 3/16	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4	4	4
R34	131.8	5 3/16	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.5	11/16	5.5	4.8	4	4
R35	136.5	5 31/8	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.5	11/16	3.2	3.2	4	4
R36	149.2	5 7/8	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4	4	4
R37	149.2	5 7/8	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.5	11/16	4	4	4	4
R38	157.1	6 3/16	16.7	21/32	11.1	7/16	1.5	1/16	20.6	3/16	15.9	5/8	22.2	7/8	4	4	4	4
R39	161.9	6 3/8	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.5	11/16	3.2	3.2	4	4
R40	171.4	6 3/4	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4	4	4
R41	181	7 1/8	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.4	11/16	5.5	4.8	4	4
R42	190.5	7 1/2	19.8	25/32	12.7	1/2	1.5	1/16	23.8	15/16	19.1	3/4	25.4	1	4	4	4	4
R43	193.7	7 5/8	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4	4	4
R44	193.7	7 5/8	11.9	15/32	7.9	5/16	1	1/32	15.9	5/16	11.1	7/16	17.5	11/16	3.2	3.2	4	4
R45	211.1	8 5/16	11.9	15/32	7.9	5/16	1	1/32	15.9	5/16	11.1	7/16	17.4	11/16	4	4	4	4
R46	211.1	8 51/6	13.5	17/32	9.5	3/8	1.5	1/16	17.5	11/16	12.7	1/2	19.1	3/4	3.2	3.2	4	4

DIMENSION OF RING JOINT

Ring No.	P		S		L		r max.		A		C		D		N	
	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	300#	600#
R47	228.6	9	19.8	25/32	12.7	1/2	1.5	1/16	23.8	15/16	19.1	3/4	25.4	1	4	4
R48	247.6	9 3/4	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4
R49	269.9	10 5/8	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.4	11/16	5.5	4.8
R50	269.9	10 5/8	16.7	21/32	11.1	7/16	1.5	1/16	20.6	13/16	15.9	5/8	22.2	7/8	4	4
R51	279.4	11	23	29/32	14.3	9/16	1.5	1/16	27	1 1/16	22.2	7/8	28.6	1 1/8	4.8	4.8
R52	304.8	12	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4
R53	323.8	12 3/4	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.4	11/16	5.5	4.8
R54	323.8	12 3/4	16.7	21/32	11.1	7/16	1.5	1/16	20.6	13/16	15.9	5/8	22.2	7/8	4	4
R55	342.9	13 1/2	30.2	1 3/16	17.4	11/16	2.5	3/32	34.9	1 3/8	28.6	1 1/8	36.5	1 7/16	6.4	6.4
R56	381	15	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	4	4
R57	381	15	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.4	11/16	5.5	4.8
R58	381	15	23	29/32	14.3	9/16	1.5	1/16	27	1 1/16	22.2	7/8	28.6	1 1/8	4.8	4.8
R59	396.9	15 3/8	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	3.2	3.2
R60	406.4	16	33.3	1 5/16	17.4	11/16	2.5	3/32	38.1	1 1/2	31.8	1 1/4	39.7	1 9/16	7.9	7.9
R61	419.1	16 1/2	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.4	11/16	5.5	4.8
R62	419.1	16 1/2	16.7	21/32	11.1	7/16	1.5	1/16	20.6	13/16	15.9	5/8	22.2	7/8	4	4
R63	419.1	16 1/2	27	1 1/16	15.9	5/8	2.5	3/32	31.8	1 1/4	25.4	1	33.3	1 5/16	5.5	5.5
R64	454	17 7/8	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	3.2	3.2
R65	469.9	18 1/2	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.4	11/16	5.5	5.5
R66	469.9	18 1/2	16.7	21/32	11.1	7/16	1.5	1/16	20.6	13/16	15.9	5/8	22.2	7/8	4	4
R67	469.9	18 1/2	30.2	1 3/16	17.4	11/16	2.5	3/32	34.9	1 3/8	28.6	1 1/8	36.5	1 7/16	7.9	7.9
R68	517.5	20 3/8	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	3.2	3.2
R69	533.4	21	11.9	15/32	7.9	5/16	1	1/32	15.9	5/8	11.1	7/16	17.4	11/16	5.5	4.8
R70	533.4	21	19.8	25/32	12.7	1/2	1.5	1/16	23.8	15/16	19.1	3/4	25.4	1	4.8	4.8
R71	533.4	21	30.2	1 3/16	17.4	11/16	2.5	3/32	34.9	1 3/8	28.6	1 1/8	36.5	1 7/16	7.9	7.9
R72	558.8	22	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	3.2	3.2
R73	584.2	23	13.5	17/32	9.5	3/8	1.5	1/16	17.4	11/16	12.7	1/2	19.1	3/4	5.5	4.8
R74	584.2	23	19.8	25/32	12.7	1/2	1.5	1/16	23.8	15/16	19.1	3/4	25.4	1	4.8	4.8
R75	584.2	23	33.3	1 5/16	17.4	11/16	2.5	3/32	38.1	1 1/2	31.8	1 1/4	39.7	1 9/16	9.5	9.5
R76	673.1	26 1/2	8.7	11/32	6.3	1/4	1	1/32	12.7	1/2	7.9	5/16	14.3	9/16	3.2	3.2
R77	692.1	27 1/4	16.7	21/32	11.1	7/16	1.5	1/16	20.6	13/16	15.9	5/8	22.2	7/8	6.4	5.5
R78	692.1	27 1/4	27	1 1/16	15.9	5/8	2.5	3/32	31.8	1 1/4	25.4	1	33.3	1 5/16	5.5	5.5
R79	692.1	27 1/4	36.5	1 7/16	20.6	13/16	2.5	3/32	41.3	1 5/8	34.9	1 3/8	44.5	1 3/4	11.1	11.1