

# Kubota HRDIP

## Dimension Handbook

NS-type

Size 500 (J20") - 1000 (J40")

## CONTENTS

### Pipes

Table 1 NS - Pipes .....	1
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### Fittings

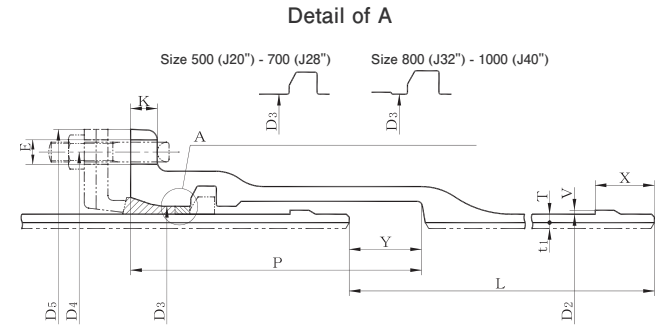
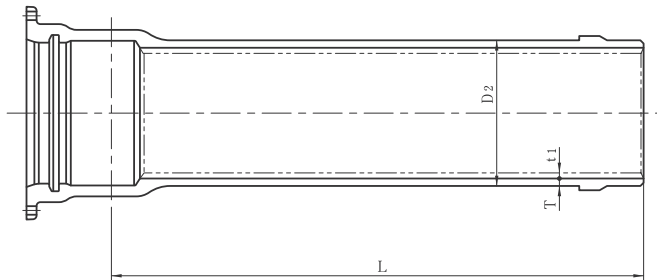
Table 2 NS - Fittings .....	4
Table 3 NS - Triple Socket Crosses .....	5
Table 4 NS - Double Socket Tees .....	6
Table 5 NS - Double Socket Tees (GX Branch) .....	7
Table 6 NS - Socket Spigot Reducers .....	8
Table 7 NS - Socket Spigot Reducers (NS-GX) .....	9
Table 8 NS - Spigot Socket Reducers .....	10
Table 9 NS - Spigot Socket Reducers (NS-GX) .....	11
Table 10 NS - Socket Spigot Bends 90° .....	12
Table 11 NS - Socket Spigot Bends 45° .....	13
Table 12 NS - Socket Spigot Bends 22 1/2° .....	14
Table 13 NS - Socket Spigot Bends 11 1/4° .....	15
Table 14 NS - Socket Spigot Bends 5 5/8° .....	16
Table 15 NS - Double Socket Bends 45° .....	17
Table 16 NS - Double Socket Bends 22 1/2° .....	18
Table 17 NS - Socket Flanged Tees with Flanged Branch .....	19
( For use in Gate Valve Chamber )	
Table 18 NS - Flanged Spigot Tees with Flanged Branch .....	20
( For use in Gate Valve Chamber )	
Table 19 NS - Socket Spigot Tees with Flanged Branch .....	21
( For Air Valves, Fire Hydrants and Manholes )	
Table 20 NS - Double Socket Level Invert Tees with Socket Branch .....	22
Table 21 NS - Double Socket Level Invert Tees with Socket Branch (GX Branch) .....	23
Table 22 NS - Collars .....	24
Table 23 NS - Flanged Sockets .....	25
Table 24 NS - Flanged Spigots .....	26
Table 25 NS - Plugs .....	27

### Accessories

Table 26 NS - Accessories (1) Gland .....	29
Table 27 NS - Accessories (2) Lock Ring .....	30
Table 28 NS - Accessories (3) Liner .....	31
Table 29 NS - Accessories (4) Spigot Ring for Cut Pipe .....	33
Table 30 NS - Accessories (5) T-head Bolts and Nuts .....	35
Table 31 NS - Accessories (6) Rubber Gasket .....	36
Table 32 NS - Accessories (7) Backup Ring .....	37

Table 1 NS -

Pipes



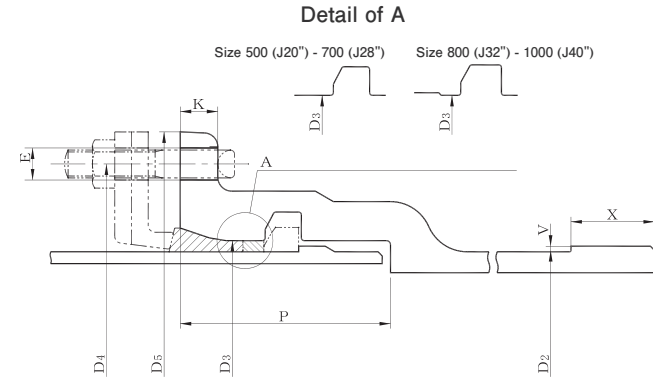
Dimensions in inches

Size	Thickness	Dimensions								
	T	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	D <sub>5</sub>	E	P	V	X	Y
500 (J20")	0.33	20.79	21.42	25.75	27.56	0.91	11.61	0.16	2.36	2.95
600 (J24")	0.39	24.83	25.46	29.84	31.65	0.91	11.61	0.16	2.36	2.95
700 (J28")	0.43	28.86	29.65	34.49	36.61	1.06	13.07	0.24	3.15	2.95
800 (J32")	0.47	32.91	33.70	38.78	40.91	1.06	13.39	0.24	3.15	2.95
900 (J36")	0.51	36.97	37.76	43.23	45.83	1.30	13.39	0.24	3.15	2.95
1000 (J40")	0.57	40.98	41.77	47.52	50.12	1.30	13.70	0.24	3.15	3.15

Dimensions in inches

No. of Bolt	Nominal laying length L	Mass (lb)			Lining	Size
		Iron per piece	Lining per piece	Total per piece	Thickness	
					t <sub>1</sub>	
14	19.69	1541	298	1839	0.24	500 (J20")
14	19.69	2114	357	2471	0.24	600 (J24")
16	19.69	2734	553	3287	0.31	700 (J28")
20	19.69	3417	631	4048	0.31	800 (J32")
20	19.69	4167	710	4877	0.31	900 (J36")
20	19.69	5115	981	6096	0.39	1000 (J40")

- Notes : 1. The total mass of the pipe is the sum of the mass of the iron and lining.  
 2. The spigot projection shall be formed by welding, cast-on, or any suitable method. In this case, the pull-out resistance shall be 17,000 D lb or more. (D: pipe size in inches)



Dimensions in inches

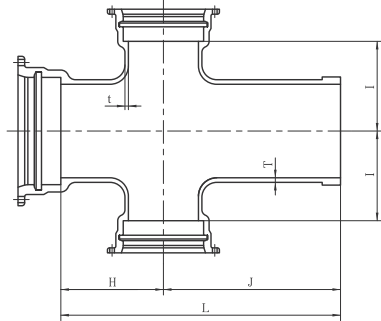
Size	Mass (lb)				
	Bell	Iron of Body per ft	Lining of Body per ft	Body per ft	Spigot Projection
500 (J20")	243	66.7	15.3	81.9	2.11
600 (J24")	291	93.7	18.3	112	2.51
700 (J28")	406	120	28.4	148	5.49
800 (J32")	509	149	32.5	182	6.26
900 (J36")	622	182	36.5	218	7.01
1000 (J40")	741	225	50.6	275	14.2

Note : The mass of pipe body is the sum of the mass of the iron and lining.

Dimensions in inches

Size	Outside Diameter	Dimensions							No. of Bolt	Mass (lb)	
		D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	D <sub>5</sub>	E	P	V		X	Bell
500 (J20")	20.79	21.42	25.75	27.56	0.91	5.94	0.16	2.36	14	190	6.3
600 (J24")	24.83	25.46	29.84	31.65	0.91	5.94	0.16	2.36	14	231	7.5
700 (J28")	28.86	29.65	34.49	36.61	1.06	7.36	0.24	3.15	16	346	17.6
800 (J32")	32.91	33.70	38.78	40.91	1.06	7.68	0.24	3.15	20	421	20.0
900 (J36")	36.97	37.76	43.23	45.83	1.30	7.68	0.24	3.15	20	505	22.5
1000 (J40")	40.98	41.77	47.52	50.12	1.30	7.95	0.24	3.15	20	595	24.7

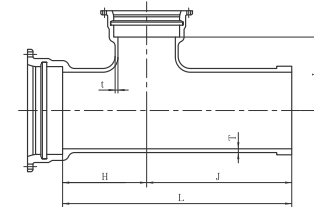
Table 3 NS - Triple Socket Crosses



Dimensions in inches

Size		Thickness		Dimensions				Mass (lb)
D	d	T	t	H	I	J	L	
500 (J20")	400 (J16")	0.59	0.55	18.90	18.11	33.46	52.36	981
600 (J24")	400 (J16")	0.63	0.55	21.65	20.87	36.22	57.87	1237
700 (J28")	500 (J20")	0.67	0.59	24.41	23.62	38.58	62.99	1814
800 (J32")	600 (J24")	0.71	0.63	27.17	26.38	40.55	67.72	2293
900 (J36")	700 (J28")	0.75	0.67	30.31	29.53	42.91	73.23	3020

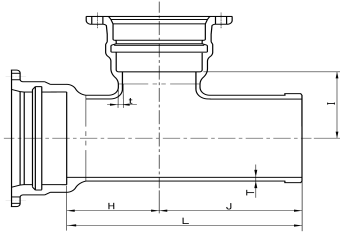
Table 4 NS - Double Socket Tees



Dimensions in inches

Size		Thickness		Dimensions				Mass (lb)
D	d	T	t	H	I	J	L	
500 (J20")	400 (J16")	0.59	0.55	18.90	18.11	33.46	52.36	842
500 (J20")	500 (J20")	0.59	0.59	18.90	18.11	33.46	52.36	946
600 (J24")	400 (J16")	0.63	0.55	21.65	20.87	36.22	57.87	1096
600 (J24")	500 (J20")	0.63	0.59	21.65	20.87	36.22	57.87	1197
600 (J24")	600 (J24")	0.63	0.63	21.65	20.87	36.22	57.87	1254
700 (J28")	500 (J20")	0.67	0.59	24.41	23.62	38.58	62.99	1572
700 (J28")	600 (J24")	0.67	0.63	24.41	23.62	38.58	62.99	1627
700 (J28")	700 (J28")	0.67	0.67	24.41	23.62	38.58	62.99	1761
800 (J32")	500 (J20")	0.71	0.59	27.17	26.38	40.55	67.72	1940
800 (J32")	600 (J24")	0.71	0.63	27.17	26.38	40.55	67.72	1995
800 (J32")	700 (J28")	0.71	0.67	27.17	26.38	40.55	67.72	2127
800 (J32")	800 (J32")	0.71	0.71	27.17	26.38	40.55	67.72	2227
900 (J36")	600 (J24")	0.75	0.63	23.62	27.17	37.01	60.63	2136
900 (J36")	700 (J28")	0.75	0.67	30.31	29.53	42.91	73.23	2579
900 (J36")	800 (J32")	0.75	0.71	30.31	29.53	42.91	73.23	2668
900 (J36")	900 (J36")	0.75	0.75	30.31	29.53	42.91	73.23	2778
1000 (J40")	600 (J24")	0.79	0.63	26.77	30.31	38.98	65.75	2601
1000 (J40")	800 (J32")	0.79	0.71	33.07	32.28	44.88	77.95	3153
1000 (J40")	1000 (J40")	0.79	0.79	33.07	32.28	44.88	77.95	3395

Table 5 NS - Double Socket Tees (GX Branch)

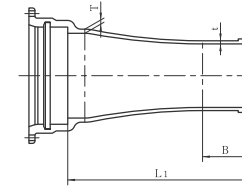


Dimensions in inches

Size		Thickness		Dimensions				Mass (lb)
D	d	T	t	H	I	J	L	
500 (J20")	12	0.59	0.49	18.90	18.11	33.46	52.36	842
600 (J24")	12	0.59	0.63	21.65	20.87	36.22	57.87	946

Note : "d" is AWWA GX Bell.

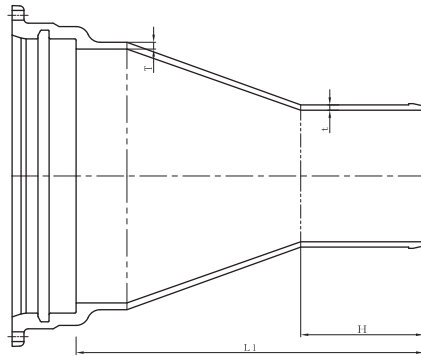
Table 6 NS - Socket Spigot Reducers



Dimensions in inches

Size		Thickness		Dimensions		Mass (lb)
D	d	T	t	B	L <sub>1</sub>	
500 (J20")	300 (J12")	0.59	0.49	7.87	31.89	408
500 (J20")	400 (J16")	0.59	0.55	8.66	32.68	456
600 (J24")	300 (J12")	0.63	0.49	7.87	32.28	494
600 (J24")	400 (J16")	0.63	0.55	8.66	33.07	542
600 (J24")	500 (J20")	0.63	0.59	9.06	33.46	597
700 (J28")	400 (J16")	0.67	0.55	8.66	41.34	783
700 (J28")	500 (J20")	0.67	0.59	9.06	41.73	849
700 (J28")	600 (J24")	0.67	0.63	9.06	41.73	917
800 (J32")	500 (J20")	0.71	0.59	9.06	42.13	992
800 (J32")	600 (J24")	0.71	0.63	9.06	42.13	1056
800 (J32")	700 (J28")	0.71	0.67	9.45	42.52	1144
900 (J36")	500 (J20")	0.75	0.59	9.06	42.52	1160
900 (J36")	600 (J24")	0.75	0.63	9.06	42.52	1219
900 (J36")	700 (J28")	0.75	0.67	9.45	42.91	1301
900 (J36")	800 (J32")	0.75	0.71	9.45	42.91	1380
1000 (J40")	600 (J24")	0.79	0.63	9.06	43.31	1413
1000 (J40")	700 (J28")	0.79	0.67	9.45	43.70	1490
1000 (J40")	800 (J32")	0.79	0.71	9.45	43.70	1563
1000 (J40")	900 (J36")	0.79	0.75	10.24	44.49	1664

Table 7 NS - Socket Spigot Reducers (NS-GX)

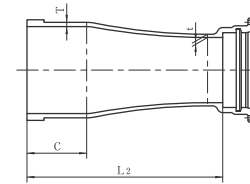


Dimensions in inches

Size		Thickness		Dimensions		Mass (lb)
D	d	T	t	B	L <sub>1</sub>	
500 (J20")	12	0.59	0.49	11.42	31.89	408
600 (J24")	12	0.63	0.49	11.42	32.28	456

Note : "d" is AWWA GX Spigot.

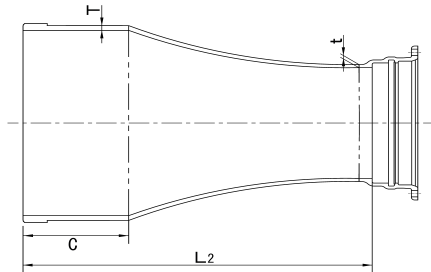
Table 8 NS - Spigot Socket Reducers



Dimensions in inches

Size		Thickness		Dimensions		Mass (lb)
D	d	T	t	C	L <sub>2</sub>	
500 (J20")	300 (J12")	0.59	0.49	9.06	31.89	320
500 (J20")	400 (J16")	0.59	0.55	9.06	32.28	384
600 (J24")	300 (J12")	0.63	0.49	9.06	31.89	375
600 (J24")	400 (J16")	0.63	0.55	9.06	32.28	434
600 (J24")	500 (J20")	0.63	0.59	9.06	33.07	564
700 (J28")	400 (J16")	0.67	0.55	9.45	40.55	584
700 (J28")	500 (J20")	0.67	0.59	9.45	41.34	725
700 (J28")	600 (J24")	0.67	0.63	9.45	41.73	827
800 (J32")	500 (J20")	0.71	0.59	9.45	41.34	802
800 (J32")	600 (J24")	0.71	0.63	9.45	41.73	899
800 (J32")	700 (J28")	0.71	0.67	9.45	42.13	1078
900 (J36")	500 (J20")	0.75	0.59	10.24	42.13	910
900 (J36")	600 (J24")	0.75	0.63	10.24	42.52	1001
900 (J36")	700 (J28")	0.75	0.67	10.24	42.91	1175
900 (J36")	800 (J32")	0.75	0.71	10.24	43.31	1321
1000 (J40")	600 (J24")	0.79	0.63	10.24	42.52	1105
1000 (J40")	700 (J28")	0.79	0.67	10.24	42.91	1272
1000 (J40")	800 (J32")	0.79	0.71	10.24	43.31	1411
1000 (J40")	900 (J36")	0.79	0.75	10.24	43.70	1572

Table 9 NS - Spigot Socket Reducers (NS-GX)

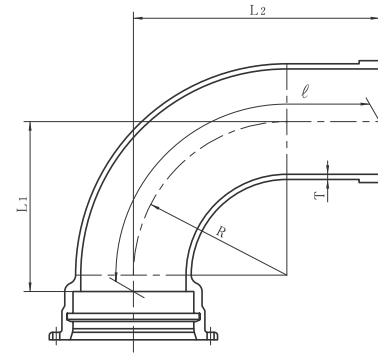


Dimensions in inches

Size		Thickness		Dimensions		Mass (lb)
D	d	T	t	C	L <sub>2</sub>	
500 (J20")	12	0.59	0.49	9.06	31.89	320
600 (J24")	12	0.63	0.49	9.06	31.89	384

Note : "d" is AWWA GX Bell.

Table 10 NS - Socket Spigot Bends 90°

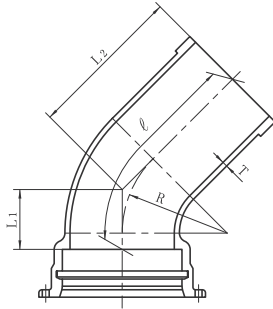


Dimensions in inches

Size	Thickness	Dimensions			Length of Pipe center	Mass (lb)
	T	R	L <sub>1</sub>	L <sub>2</sub>	ℓ	
500 (J20")	0.59	19.09	21.85	31.69	45.35	635
600 (J24")	0.63	22.83	25.79	35.43	51.42	875
700 (J28")	0.67	26.77	29.92	41.34	59.76	1279
800 (J32")	0.71	30.51	33.66	45.67	66.22	1667
900 (J36")	0.75	34.25	37.60	55.31	78.23	2249
1000 (J40")	0.79	37.99	41.34	59.65	84.68	2800



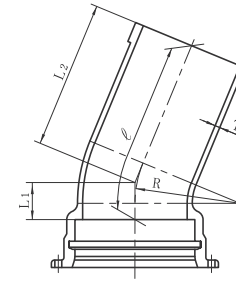
Table 11 NS - Socket Spigot Bends 45°



Dimensions in inches

Size	Thickness	Dimensions			Length of Pipe center	Mass (lb)
	T	R	L <sub>1</sub>	L <sub>2</sub>	ℓ	
500 (J20")	0.59	19.09	10.83	20.47	30.47	492
600 (J24")	0.63	22.83	12.40	22.05	33.46	653
700 (J28")	0.67	26.77	14.37	25.79	39.02	961
800 (J32")	0.71	30.51	15.75	27.76	42.20	1224
900 (J36")	0.75	34.25	17.52	35.24	51.30	1656
1000 (J40")	0.79	37.99	19.09	37.40	54.84	2028

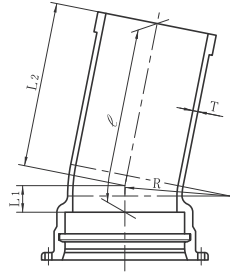
Table 12 NS - Socket Spigot Bends 22 1/2°



Dimensions in inches

Size	Thickness	Dimensions			Length of Pipe center	Mass (lb)
	T	R	L <sub>1</sub>	L <sub>2</sub>	ℓ	
500 (J20")	0.59	19.09	6.69	24.21	30.83	494
600 (J24")	0.63	22.83	7.48	24.61	31.97	635
700 (J28")	0.67	26.77	8.46	29.53	37.87	944
800 (J32")	0.71	30.51	9.25	32.28	41.38	1208
900 (J36")	0.75	34.25	10.04	38.39	48.27	1587
1000 (J40")	0.79	37.99	10.83	40.94	51.57	1944

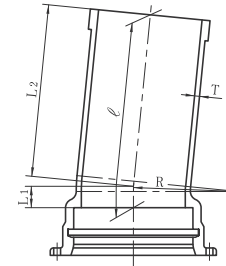
Table 13 NS - Socket Spigot Bends 11 1/4°



Dimensions in inches

Size	Thickness	Dimensions			Length of Pipe center $\ell$	Mass (lb)
	T	R	L <sub>1</sub>	L <sub>2</sub>		
500 (J20")	0.59	19.09	6.69	24.21	30.91	496
600 (J24")	0.63	22.83	7.48	24.41	31.89	633
700 (J28")	0.67	26.77	8.46	29.33	37.80	941
800 (J32")	0.71	30.51	9.25	32.28	41.54	1210
900 (J36")	0.75	34.25	10.04	38.19	48.19	1587
1000 (J40")	0.79	37.99	10.83	40.75	51.54	1944

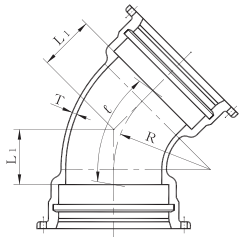
Table 14 NS - Socket Spigot Bends 5 5/8°



Dimensions in inches

Size	Thickness	Dimensions			Length of Pipe center $\ell$	Mass (lb)
	T	R	L <sub>1</sub>	L <sub>2</sub>		
500 (J20")	0.59	19.09	6.69	24.21	30.91	496
600 (J24")	0.63	22.83	7.48	24.41	31.89	633
700 (J28")	0.67	26.77	8.46	29.33	37.80	941
800 (J32")	0.71	30.51	9.25	32.28	41.54	1210
900 (J36")	0.75	34.25	10.04	38.19	48.23	1587
1000 (J40")	0.79	37.99	10.83	40.75	51.57	1944

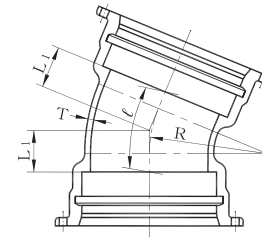
Table 15 NS - Double Socket Bends 45°



Dimensions in inches

Size	Thickness	Dimensions		Length of Pipe center	Mass (lb)
	T	R	L <sub>1</sub>	ℓ	
500 (J20")	0.59	19.09	10.83	20.83	582
600 (J24")	0.63	22.83	12.4	23.82	758
700 (J28")	0.67	26.77	14.37	27.6	1116
800 (J32")	0.71	30.51	15.75	30.2	1402
900 (J36")	0.75	34.25	17.52	33.58	1748
1000 (J40")	0.79	37.99	19.09	36.54	2130

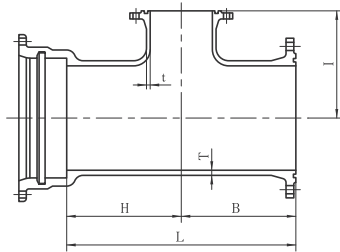
Table 16 NS - Double Socket Bends 22 1/2°



Dimensions in inches

Size	Thickness	Dimensions		Length of Pipe center	Mass (lb)
	T	R	L <sub>1</sub>	ℓ	
500 (J20")	0.59	19.09	6.69	13.31	509
600 (J24")	0.63	22.83	7.48	14.84	646
700 (J28")	0.67	26.77	8.46	16.81	950
800 (J32")	0.71	30.51	9.25	18.35	1182
900 (J36")	0.75	34.25	10.04	19.92	1446
1000 (J40")	0.79	37.99	10.83	21.46	1742

**Table 17**  
**NS - Socket Flanged Tees with Flanged Branch**  
 (For use in Gate Valve Chamber)

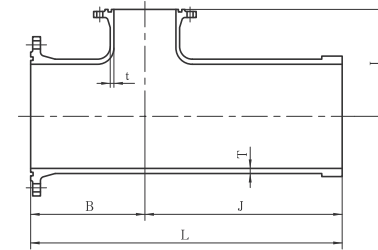


Dimensions in inches

Size		Thickness		Dimensions				Mass (lb)			
D	d	T	t	B	H	I	L	105 psi	145 psi	230 psi	290 psi
500 (J20")	100 (J4")	0.59	0.39	9.84	9.84	14.17	19.69	463	450	516	536
600 (J24")	100 (J4")	0.63	0.43	11.02	11.02	17.32	22.05	604	600	681	708
700 (J28")	150 (J6")	0.67	0.47	12.20	12.20	19.29	24.41	849	853	959	1060
800 (J32")	150 (J6")	0.71	0.51	12.99	12.99	21.65	25.98	1069	1069	1217	1398
900 (J36")	200 (J8")	0.75	0.55	14.57	14.57	24.02	29.13	1360	1347	1521	1744
1000 (J40")	200 (J8")	0.79	0.59	15.75	15.75	26.38	31.50	1653	1647	1889	—

**Note :** Detail of flange will conform to JIS G 5527  
 [105 psi (7.5K) to 290 psi (20K)] or AWWA Flange upon request.

**Table 18**  
**NS - Flanged Spigot Tees with Flanged Branch**  
 (For use in Gate Valve Chamber)



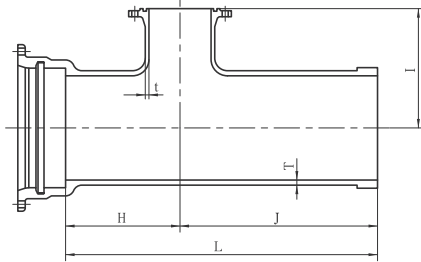
Dimensions in inches

Size		Thickness		Dimensions				Mass (lb)			
D	d	T	t	B	I	J	L	105 psi	145 psi	230 psi	290 psi
500 (J20")	100 (J4")	0.59	0.39	9.84	14.17	22.05	31.89	397	386	450	470
600 (J24")	100 (J4")	0.63	0.43	11.02	17.32	23.62	34.65	536	531	613	639
700 (J28")	150 (J6")	0.67	0.47	12.20	19.29	24.41	36.61	708	710	818	917
800 (J32")	150 (J6")	0.71	0.51	12.99	21.65	24.80	37.80	886	888	1034	1215
900 (J36")	200 (J8")	0.75	0.55	14.57	24.02	26.38	40.94	1138	1124	1299	1521
1000 (J40")	200 (J8")	0.79	0.59	15.75	26.38	27.56	43.31	1384	1380	1623	—

**Note :** Detail of flange will conform to JIS G 5527  
 [105 psi (7.5K) to 290 psi (20K)] or AWWA Flange upon request.

Table 19

NS - Socket Spigot Tees with Flanged Branch  
(For Air Valves, Fire Hydrants and Manholes)



Dimensions in inches

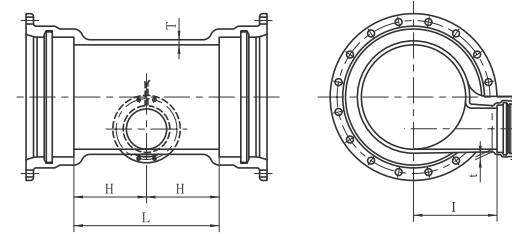
Size		Thickness		Dimensions				Mass (lb)			
D	d	T	t	H	I	J	L	105 psi	145 psi	230 psi	290 psi
500 (J20 <sup>n</sup> )	75 (J3 <sup>n</sup> )	0.59	0.39	9.06	14.17	22.05	31.10	509	505	507	507
500 (J20 <sup>n</sup> )	100 (J4 <sup>n</sup> )	0.59	0.39	9.06	15.75	22.05	31.10	514	509	511	511
600 (J24 <sup>n</sup> )	75 (J3 <sup>n</sup> )	0.63	0.43	9.45	16.14	22.44	31.89	646	642	644	644
600 (J24 <sup>n</sup> )	100 (J4 <sup>n</sup> )	0.63	0.43	9.45	17.72	22.44	31.89	650	646	648	648
700 (J28 <sup>n</sup> )	75 (J3 <sup>n</sup> )	0.67	0.47	10.24	18.90	22.83	33.07	882	880	882	882
700 (J28 <sup>n</sup> )	100 (J4 <sup>n</sup> )	0.67	0.47	10.24	18.90	22.83	33.07	884	882	884	884
800 (J32 <sup>n</sup> )	75 (J3 <sup>n</sup> )	0.71	0.51	10.63	20.47	23.23	33.86	1080	1078	1078	1080
800 (J32 <sup>n</sup> )	100 (J4 <sup>n</sup> )	0.71	0.51	10.63	20.47	23.23	33.86	1082	1078	1082	1082
800 (J32 <sup>n</sup> )	600 (J24 <sup>n</sup> )	0.71	0.63	27.17	26.38	40.55	67.72	1847	1847	1927	1951
900 (J36 <sup>n</sup> )	100 (J4 <sup>n</sup> )	0.75	0.55	11.81	23.23	24.41	36.22	1340	1336	1338	1340
900 (J36 <sup>n</sup> )	600 (J24 <sup>n</sup> )	0.75	0.63	23.62	27.17	37.01	60.63	1991	1991	2070	2094
1000 (J40 <sup>n</sup> )	150 (J6 <sup>n</sup> )	0.79	0.59	12.60	25.20	25.20	37.80	1614	1612	1616	1618
1000 (J40 <sup>n</sup> )	600 (J24 <sup>n</sup> )	0.79	0.63	26.77	30.31	38.98	65.75	2447	2447	2535	2557

Note : Detail of flange will conform to JIS G 5527

[105 psi (7.5K) to 290 psi (20K)] or AWWA Flange upon request.

Table 20

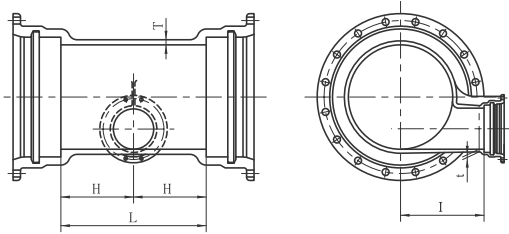
NS - Double Socket Level Invert Tees  
with Socket Branch



Dimensions in inches

Size		Thickness		Dimensions			Mass (lb)
D	d	T	t	H	I	L	
500 (J20 <sup>n</sup> )	200 (J8 <sup>n</sup> )	0.59	0.51	11.02	13.78	22.05	657
600 (J24 <sup>n</sup> )	200 (J8 <sup>n</sup> )	0.63	0.51	11.42	15.75	22.83	811
700 (J28 <sup>n</sup> )	300 (J12 <sup>n</sup> )	0.67	0.59	13.78	17.72	27.56	1213
800 (J32 <sup>n</sup> )	300 (J12 <sup>n</sup> )	0.71	0.59	14.17	19.69	28.35	1470
900 (J36 <sup>n</sup> )	300 (J12 <sup>n</sup> )	0.75	0.59	14.57	21.65	29.13	1759
1000 (J40 <sup>n</sup> )	400 (J16 <sup>n</sup> )	0.79	0.63	17.32	23.62	34.65	2227

Table 21  
 NS - Double Socket Level Invert Tees with  
 Socket Branch (GX Branch)

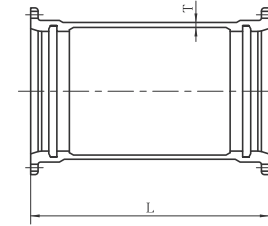


Dimensions in inches

Size		Thickness		Dimensions			Mass ( lb )
D	d	T	t	H	I	L	
500 (J20")	8	0.59	0.51	11.02	13.78	22.05	648
600 (J24")	8	0.63	0.51	11.42	15.75	22.83	802

Note : "d" is AWWA GX Bell.

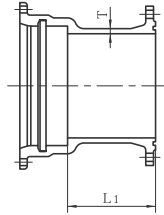
Table 22 NS - Collars



Dimensions in inches

Size	Thickness	Dimension	Mass ( lb )
	T	L	
500 (J20")	0.67	25.59	467
600 (J24")	0.71	25.59	575
700 (J28")	0.75	31.50	849
800 (J32")	0.83	31.50	1052
900 (J36")	0.87	31.50	1252
1000 (J40")	0.91	31.50	1459

Table 23 NS - Flanged Sockets

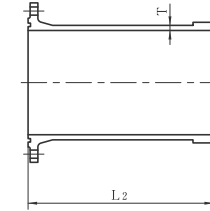


Dimensions in inches

Size	Thickness	Nominal laying length	Mass ( lb )			
	T	L <sub>1</sub>	105 psi	145 psi	230 psi	290 psi
500 (J20")	0.59	6.69	324	315	377	397
600 (J24")	0.63	9.84	437	439	516	542
700 (J28")	0.67	9.84	604	611	712	809
800 (J32")	0.71	9.84	747	750	893	1071
900 (J36")	0.75	9.84	906	895	1063	1283
1000 (J40")	0.79	9.84	1065	1063	1299	—

**Note :** Detail of flange will conform to JIS G 5527  
[105 psi (7.5K) to 290 psi (20K)] or AWWA Flange upon request.

Table 24 NS - Flanged Spigots



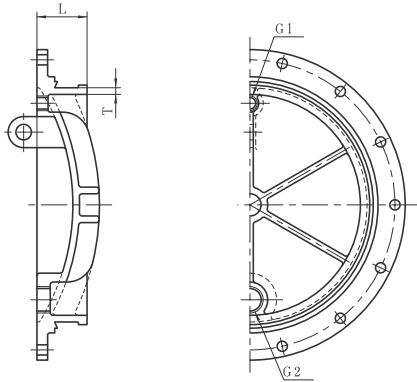
Dimensions in inches

Size	Thickness	Nominal laying length	Mass ( lb )			
	T	L <sub>2</sub>	105 psi	145 psi	230 psi	290 psi
500 (J20")	0.59	29.53	362	353	415	434
600 (J24")	0.63	29.53	456	456	536	560
700 (J28")	0.67	29.53	578	582	683	783
800 (J32")	0.71	29.53	710	714	855	1034
900 (J36")	0.75	31.50	902	891	1056	1276
1000 (J40")	0.79	31.50	1049	1047	1283	—

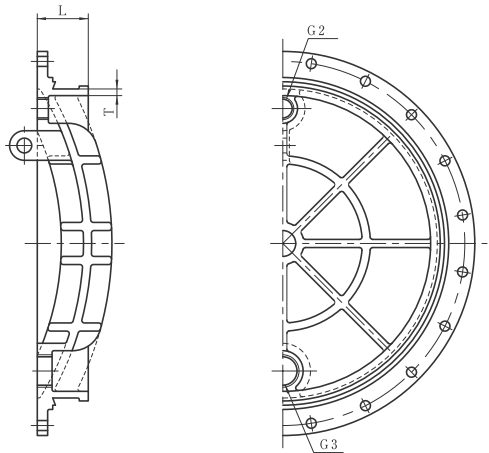
**Note :** Detail of flange will conform to JIS G 5527  
[105 psi (7.5K) to 290 psi (20K)] or AWWA Flange upon request.

Table 25 NS - Plugs

Size 500 (J20")



Size 600 (J24") - 1000 (J40")



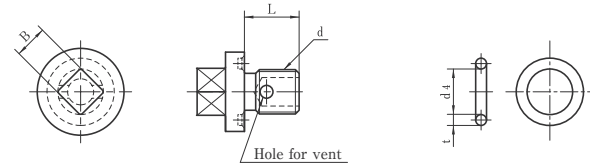
Dimensions in inches

Size	Thickness	Dimension	Mass (lb)
	T	L	
500 (J20")	0.59	4.65	195
600 (J24")	0.63	4.69	287
700 (J28")	0.67	5.39	412
800 (J32")	0.71	5.63	613
900 (J36")	0.75	5.67	814
1000 (J40")	0.79	5.79	1043

- Notes : 1. PFA (Allowable operating pressure) : 105 psi  
 2. Screw size of tapped holes will conform to parallel thread of JIS B 0202.

Bolts for vent and drain  
(SUS304)

Seal ring  
(SBR I A-70)

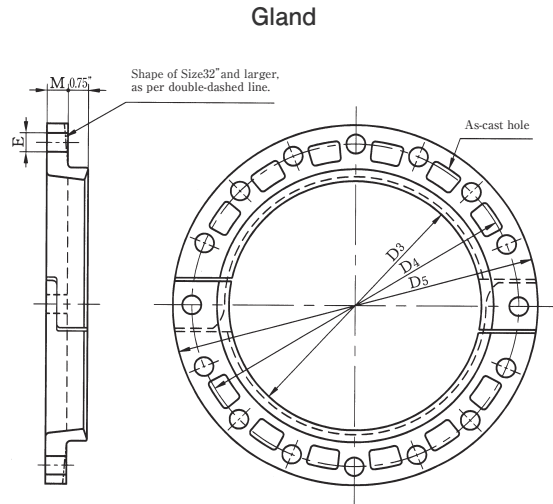


Dimensions in inches

Size	Bolts for vent and drain		Seal ring	
	Dimensions		Dimensions	
d	B	L	t	d4
G 1	0.87	1.06	0.20	1.38
G 2	0.98	1.18	0.22	2.36
G 3	1.14	1.57	0.22	3.54



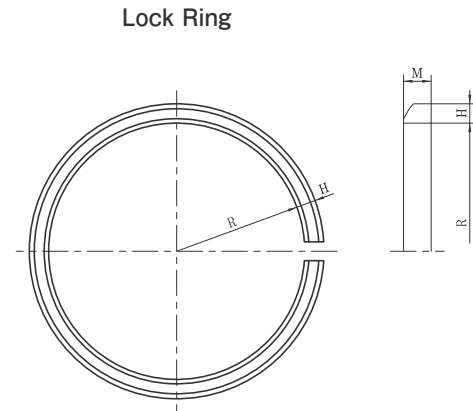
Table 26 NS - Accessories (1)



Dimensions in inches

Size	Dimensions					No. of Bolt	Mass (lb) (1 set)
	D <sub>3</sub>	D <sub>4</sub>	D <sub>5</sub>	E	M		
500 (J20")	20.94	25.75	27.56	0.91	0.94	14	46.7
600 (J24")	24.99	29.84	31.65	0.91	0.98	14	57.8
700 (J28")	29.06	34.49	36.61	1.06	1.02	16	77.8
800 (J32")	33.11	38.78	40.91	1.06	1.10	20	93.3
900 (J36")	37.17	43.23	45.83	1.30	1.14	20	117.7
1000 (J40")	41.22	47.52	50.12	1.30	1.18	20	138

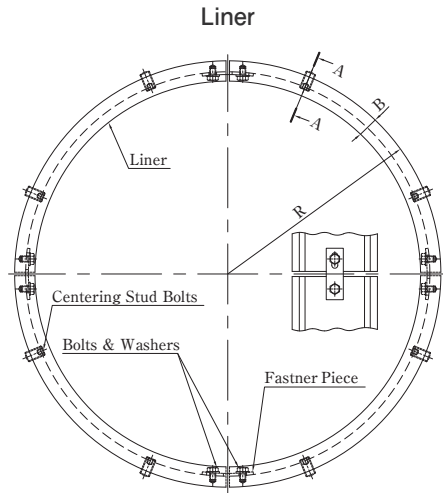
Table 27 NS - Accessories (2)



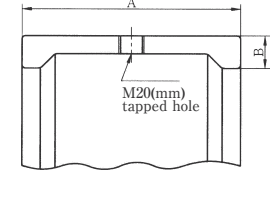
Dimensions in inches

Size	Dimensions			Mass (lb)
	H	M	R	
500 (J20")	0.69	0.98	10.31	9.9
600 (J24")	0.69	0.98	12.20	11.9
700 (J28")	0.77	1.20	14.17	19.6
800 (J32")	0.81	1.20	16.18	23.1
900 (J36")	0.85	1.20	18.15	26.9
1000 (J40")	0.93	1.40	20.12	37.9

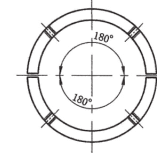
Table 28 NS - Accessories (3)



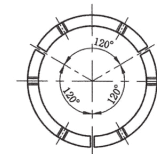
Section A-A



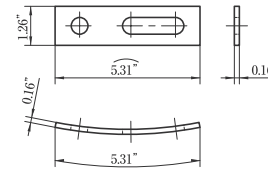
Size 500 (J20")  
(Dual partitioning)



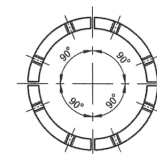
Size 600 (J24") - 700 (J28")  
(Trifurcation)



Attachments for Liner  
(SUS304)



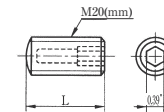
Size 800 (J32") - 1000 (J40")  
(Quarter)



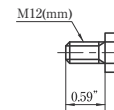
Dimensions in inches

Size	Dimensions			Mass (lb) (1 set)	Attachment for Liner No	Bolts for Liner No	Centering bolts for Liner	
	A	B	R				Dimensions	
							L	No
500 (J20")	5.63	1.06	10.63	69.0	2	4	1.26	4
600 (J24")	5.63	1.06	12.66	84.9	3	6	1.26	6
700 (J28")	5.71	1.14	14.72	106.7	3	6	1.61	6
800 (J32")	5.71	1.22	16.77	130.1	4	8	1.61	8
900 (J36")	5.71	1.22	18.78	149.9	4	8	1.73	8
1000 (J40")	5.75	1.22	20.79	172.2	4	8	1.73	8

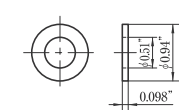
Centering Bolts for Liner  
(PA6)



Bolts for Liner

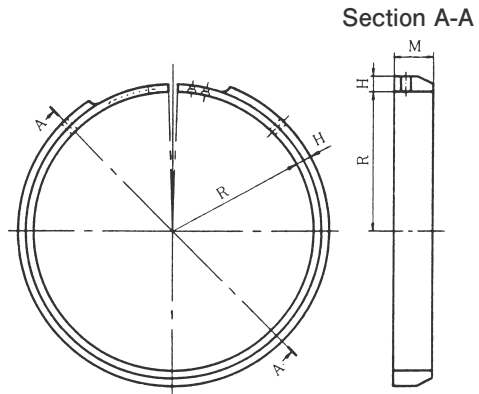


Washers for Liner

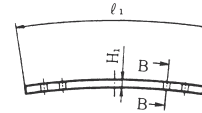


- Notes : 1. Bolts for Liner will be of SUS304, SUS304J3 or SUSXM7.  
2. Washer for Liner will be of SUS304.

Table 29 NS - Accessories (4)  
Spigot Ring for Cut Pipe



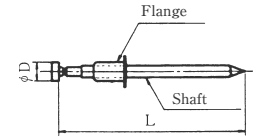
Connection piece for Spigot Ring



Section B-B



Rivet



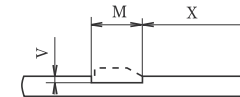
**Note :** In case of forming spigot projections by using spigot ring for cut pipe, Class S (DS) Pipes, Class 1 (D1) Pipes or Class PF (DPF) Pipes will be used, and forming groove of spigot.

Dimensions in inches

Size	Spigot Ring			Connected piece for Spigot Ring			Mass (lb) (1 set)	Rivet	
	Dimensions			Dimensions				D	L
	H	M	R	H <sub>1</sub>	l <sub>1</sub>	M <sub>1</sub>			
500 (J20")	0.28	0.79	10.20	0.12	4.37	0.75	3.4	0.13	1.52
600 (J24")	0.28	0.79	12.20	0.12	4.37	0.75	4.0	0.13	1.52
700 (J28")	0.39	0.98	14.17	0.20	4.49	0.94	8.0	0.16	1.57
800 (J32")	0.39	0.98	16.18	0.20	4.49	0.94	9.2	0.16	1.57
900 (J36")	0.39	0.98	18.23	0.20	4.49	0.94	10.3	0.16	1.57
1000 (J40")	0.43	1.18	20.20	0.20	4.49	1.14	15.0	0.16	1.57

**Note :** Rivet will be of SUS304, SUS305 or SUSXM7.

Spigot of Cutting Pipes

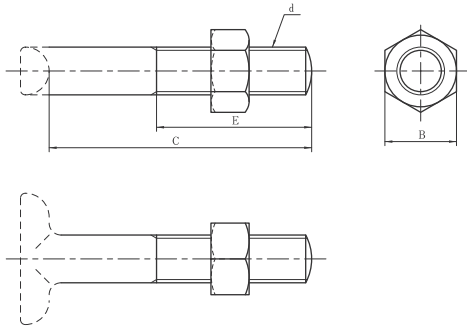


Dimensions in inches

Size	Dimensions and Tolerance					
	M		V		X	
500 (J20") - 600 (J24")	0.87		0.12		1.57	±0.079
700 (J28") - 900 (J36")	1.06	+0.059 -0.020	0.16	+0.039 -0.020	2.17	±0.157
1000 (J40")	1.26		0.20		1.97	

Table 30 NS - Accessories (5)

T-head Bolts and Nuts



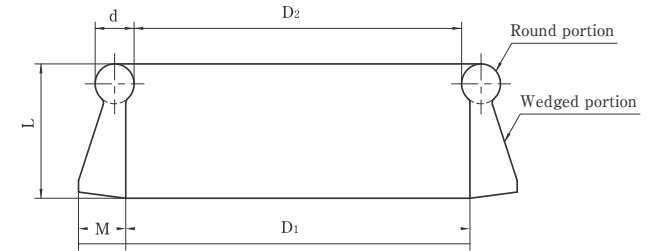
Dimensions in inches

Size	d (mm)	B	C	E	No
500 (J20 <sup>o</sup> )	M20	1.18	4.92	3.15	14
600 (J24 <sup>o</sup> )	M20	1.18	4.92	3.15	14
700 (J28 <sup>o</sup> )	M24	1.42	5.71	3.94	16
800 (J32 <sup>o</sup> )	M24	1.42	5.71	3.94	20
900 (J36 <sup>o</sup> )	M30	1.81	6.10	4.33	20
1000 (J40 <sup>o</sup> )	M30	1.81	6.10	4.33	20

Note : Shape of T-head Bolts is unregulated.

Table 31 NS - Accessories (6)

Rubber Gasket

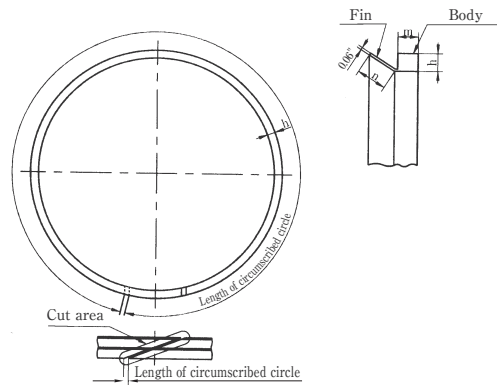


Dimensions in inches

Size	D <sub>1</sub>	D <sub>2</sub>	d	L	M
500 (J20 <sup>o</sup> )	20.39	20.16	0.63	2.13	0.67
600 (J24 <sup>o</sup> )	24.41	24.17	0.63	2.13	0.67
700 (J28 <sup>o</sup> )	28.27	27.95	0.83	2.60	0.83
800 (J32 <sup>o</sup> )	32.20	31.85	0.91	2.83	0.91
900 (J36 <sup>o</sup> )	36.14	35.79	0.91	2.83	0.91
1000 (J40 <sup>o</sup> )	40.08	39.69	0.94	2.91	0.94

Table 32 NS - Accessories (7)

Backup Ring



Dimensions in inches

Size	Dimensions			
	L	h	m	n
500 (J20")	67	0.24	0.35	0.43
600 (J24")	79	0.24	0.35	0.43
700 (J28")	93	0.31	0.35	0.53
800 (J32")	105	0.31	0.35	0.53
900 (J36")	118	0.31	0.35	0.53
1000 (J40")	131	0.31	0.35	0.53

Notes : 1. Circumferential shape of fin can be moved.

2. Cut area can be irregularity.