

$$b = 19 + 0.028 DN$$

$$S = 2e$$

$$e = 7 + 0.02 DN$$

Nominal Diameter (DN)	Internal Diameter ID	Flange Dimension						Holes		Dia. of Bolts	Mass of Flange	Total Mass Incl. Flange 5.5Mtr
		C	D	b	a	r	s	Number	Dia.			
								A	d			
80	94	160	200	21.0	42	6	17	4	19	16	4.3	104
100	114	180	220	22.0	44	6	18	8	19	16	5.0	131
125	140	210	250	22.5	45	6	19	8	19	16	6.6	171
150	166	240	285	23.0	46	6	20	8	23	20	8.2	214
200	218	295	340	24.5	49	6	22	8	23	20	11.4	309
250	270	350	395	26.0	52	6	24	12	23	20	14.7	418
300	322	400	445	27.5	55	6	26	12	23	20	18.6	540
350	373	460	505	29.0	58	8	28	16	23	20	21.2	672
400	424	515	565	30.0	61	8	30	16	28	24	27.3	822
450	475	565	615	31.5	64	8	32	16	28	24	32.6	983
500	527	620	670	33.0	67	8	34	20	28	24	38.1	1158
600	630	725	780	36.0	70	8	38	20	31	27	52.4	1551
700	-----	840	895	38.5	-----	-----	-----	24	31	27	71.9	2004
750	-----	900	960	40.0	-----	-----	-----	24	31	27	84.4	2262
800	-----	950	1015	41.5	-----	-----	-----	24	34	30	96.9	2521
900	-----	1050	1115	44.0	-----	-----	-----	28	34	30	113.5	3068
1000	-----	1160	1230	47.0	-----	-----	-----	28	37	33	134.0	3674
1050	-----	1194	1258	48.0	-----	-----	-----	28	37	33	169.8	4263

This Pipes are horizontally cast in sand moulds

The flange dimensions of the pipes confirming to IS – 1538/1993.

HYDROSTATIC PRESSURE (Kgf/cm ²)		
Size	Work Test Pressure Kgf/Cm ²	Suggested Maximum Hydraulic Working Pressure Including Surge Kgf/Cm ²
80 - 300	25	12
350 - 600	20	10
700 - 750	15	06

TOLERANCE

Tolerance On Length : ± 10 mm.

Tolerance On Mass : ± 5 percent for DN 200 & above

$\left. \begin{matrix} +8 \\ -5 \end{matrix} \right\}$ Percent for DN upto 150mm.

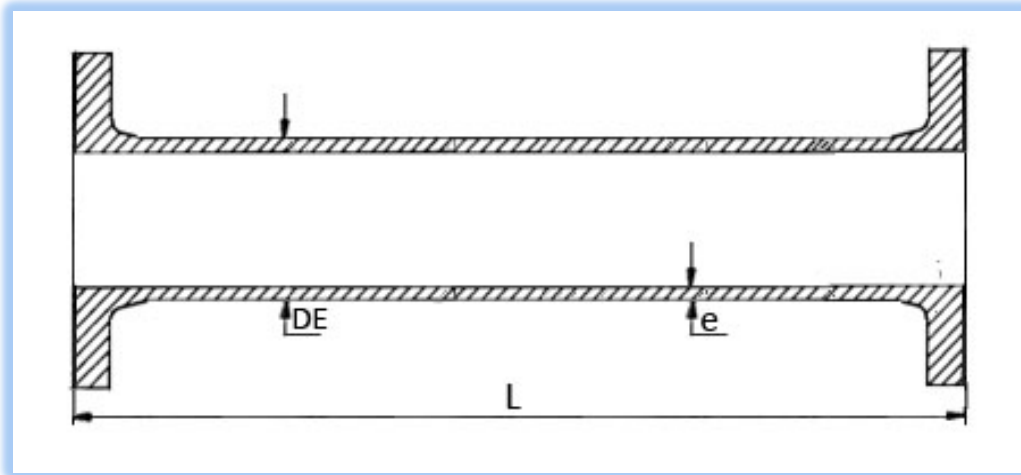
The standard working length of Pipes is 2.75 mtr. Long (9' approx) upto 600mm. dia and 2.00 mtr. Long above 600 mm. dia.

HYDROSTATIC TEST

Pipes are tested hydraulically to prevent leakage, sweating or other defects of any kind. The pressure is applied internally, and steadily maintained for a period of 15 seconds, when pipes are struck moderately with a 700 gm. Hammer.

NOTE :

1. The dimension of pipes only upto 1500mm. dia is given. However pipes with dia greater than 1500mm may also be manufactured to suit specific requirement on request.
2. Similarly to withstand greater pressure than shown above, Pipes with greater wall thickness may also be manufactured for specific requirement on request.



$$e = 14/12 (7 + 0.02 DN)$$

Nominal Diameter (DN)	Barrel Outside Dia (DE)	Barrel Thick e	Barrel / Mtr. Mass App.	Mass / Flange App.	App. Mass of Pipe Including Flanges (Pipe Length In Mtr.)							
					0.30	0.50	0.60	0.75	1.00	1.50	2.00	2.75
50		9.0	12.5	2.3	8	11	12	14	17	23	30	39
80	98	10.0	19.8	3.7	13	17	19	22	27	37	47	62
100	118	10.5	25.4	4.2	16	21	24	27	34	47	59	78
125	144	11.1	33.1	5.3	21	27	31	35	44	60	77	102
150	170	11.7	41.6	6.7	26	34	38	45	55	76	97	128
200	222	12.8	60.1	9.3	37	49	55	64	79	109	139	184
250	274	14.0	81.8	12.0	49	65	73	85	106	147	188	249
300	326	15.2	106.1	14.8	61	83	93	109	136	189	242	321
350	378	16.3	133.5	19.0	78	105	118	138	172	238	305	405
400	429	17.5	162.6	23.4	96	128	144	169	209	291	372	494
450	480	18.7	197.0	26.5	112	152	171	201	250	349	447	595
500	532	19.8	229.3	32.1	133	179	202	236	294	408	523	695
600	635	22.2	306.5	44.0	180	241	272	318	395	548	701	931
700	738	24.5	394.3	59.9	238	317	356	416	514	711	908	1204
750	790	25.6	443.8	69.7	273	361	406	472	583	805	1027	1360

Vertically Cast Iron Pressure Pipes are sand casted generally in Double Flanged version in Class B and in Socket Spigot version in Class A & B, However for special uses Classes C, D, E, etc. may be derived after allowing corresponding increases of thickness of 30, 40, 50 percent extra over class LA.

The Flange dimensions of the pipes confirming to IS – 1538/1993.

The Socket dimensions of the pipes confirming to Table -

HYDROSTATIC PRESSURE (Kgf/cm ²)				
Size	S/S Pipe Work Test Pressure Kgf/Cm ²		D/F Pipe Kgf/Cm ²	Suggested Maximum Hydraulic Working Pressure Including Surge Kgf/Cm ²
	A	B	Class - B	
80 - 300	20	25	25	12
350 - 600	20	25	20	10
700 - 1000	15	20	15	06
1100 - 1500	10	15	10	04

TOLERANCE

Tolerance On Length : \pm 10mm.

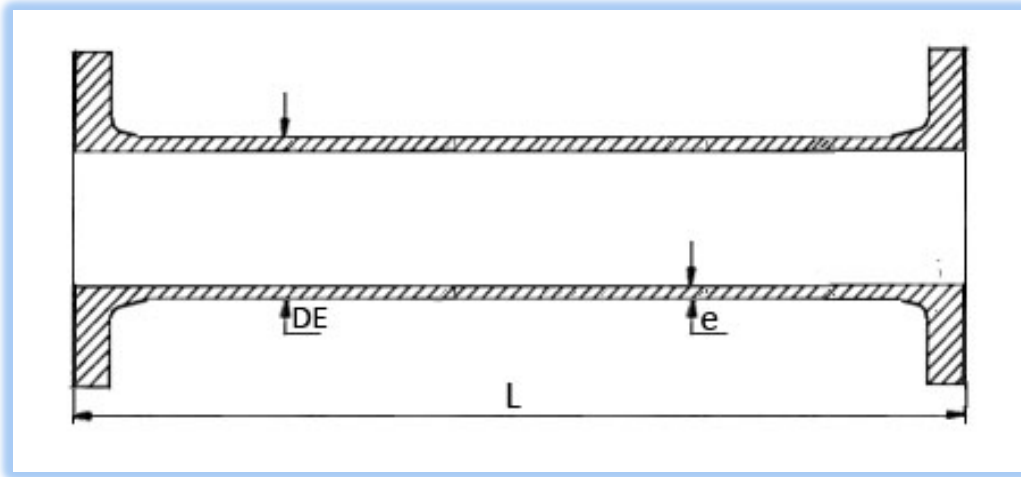
Tolerance On Mass : \pm 5 percent for DN 200 & above

HYDROSTATIC TEST

For Hydrostatic Test, the Pipes are kept under pressure for 15 second. They are struck moderately with a 700 gm. Hammer, withstanding the pressure test without showing leakage, sweating or other defects of any kind.

NOTE :

1. The dimension of pipes only upto 1500mm. dia is given. However pipes with dia greater than 1500mm may also be manufactured to suit specific requirement on request.
2. Similarly to withstand greater pressure than shown above, Pipes with greater wall thickness may also be manufactured for specific requirement on request.



$$e = 7 + 0.02 DN$$

Nominal Diameter (DN)	Barrel Outside Dia. (DE)	Barrel Thick e	Barrel / Mtr. Mass App.	Mass / Flange App.	App. Mass of Pipe Including Flanges (Pipe Length In Mtr.)		
					1.00mtr.	2.00mtr.	2.75mtr.
80	98	8.6	17.3	3.7	24.7	42.0	55.0
100	118	9.0	22.0	4.2	30.4	52.4	68.9
125	144	9.5	28.7	5.3	39.3	68.0	89.5
150	170	10.0	35.9	6.7	49.3	85.2	112.1
200	222	11.0	52.1	9.3	70.7	122.8	161.9
250	274	12.0	70.6	12.0	94.6	165.2	218.2
300	326	13.0	91.4	14.8	121.0	212.4	281.0
350	378	14.0	114.5	19.0	152.5	267.0	352.9
400	429	15.0	139.5	23.4	186.3	325.8	430.4
450	480	16.0	169.0	26.5	222.0	391.0	517.8
500	532	17.0	196.7	32.1	260.9	457.6	605.1
600	635	19.0	262.9	44.0	350.9	613.8	811.0
700	738	21.0	338.2	59.9	458.0	796.2	1050.0
750	790	22.0	380.6	69.8	520.2	900.8	1186.3
800	842	23.0	423.1	80.8	584.7	1007.8	1325.1
900	945	25.0	516.6	94.6	705.8	1222.4	1610.0
1000	1048	27.0	619.2	120.0	859.2	1478.4	1943.0
1100	1152	29.0	739.0	139.0	1017.0	1756.0	2310.3
1200	1256	31.0	851.6	173.0	1197.6	2049.2	2688.0
1500	1567	37.0	1333.1	276.2	1885.5	3214.6	4218.4