

# UPVC PRESSURE PIPES



## PVC PRESSURE PIPES

UPVC PRESSURE PIPES ARE MANUFACTURED AS PER THE FOLLOWING DIMENSIONS:

**Metric size Pressure Pipes: ISO 4422-2:1996**

**Superseded by ISO 1452-2/BS EN 1452:2009**

Nominal Outside Diameter	Nominal Wall Thickness (Minimum)					
	S 20 (SDR 41)	S 16 (SDR 33)	S 12.5 (SDR 26)	S 10 (SDR 21)	S 8 (SDR 17)	S 6.3 (SDR 13.6)
Nominal pressure PN Base on service (design) coefficient C=2.5 <sup>a</sup>						
		PN 6		PN 10		PN 16
20 mm	-	-	-	-	-	1.5
25 mm	-	-	-	-	-	1.9
32 mm	-	-	-	1.6	-	2.4
40 mm	-	1.5	-	1.9	-	3.0
50 mm	-	1.6	-	2.4	-	3.7
63 mm	-	2.0	-	3.0	-	4.7
75 mm	-	2.3	-	3.6	-	5.6
90 mm	-	2.8	-	4.3	-	6.7

Nominal pressure PN Base on service (design) coefficient C=2.0 <sup>a</sup>						
	PN 6		PN 10		PN 16	
110 mm	2.7	-	4.2	-	6.6	-
125 mm	3.1	-	4.8	-	7.4	-
140 mm	3.5	-	5.4	-	8.3	-
160 mm	4.0	-	6.2	-	9.5	-
180 mm	4.4	-	6.9	-	10.7	-
200 mm	4.9	-	7.7	-	11.9	-
225 mm	5.5	-	8.6	-	13.4	-
250 mm	6.2	-	9.6	-	14.8	-
280 mm	6.9	-	10.7	-	16.6	-
315 mm	7.7	-	12.1	-	18.7	-
355 mm	8.7	-	13.6	-	21.1	-
400 mm	9.8	-	15.3	-	23.7	-

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**Inch size Pressure Pipes: BS EN ISO 1452-2 : 2009**

Size	Mean Outside Dia.		Wall Thickness		Wall Thickness		Wall Thickness	
			PN-15(CLASS-E)		PN-12(CLASS-D)		PN-9(CLASS-C)	
	Min	Max	Min	Max	Min	Max	Min	Max
½"	21.2	21.5	1.7	2.1	-	-	-	-
¾"	26.6	26.9	1.9	2.5	-	-	-	-
1"	33.4	33.7	2.2	2.8	-	-	-	-
1 ¼"	42.1	42.4	2.7	3.3	2.2	2.7	-	-
1 ½"	48.1	48.4	3.1	3.7	2.5	3.0	-	-
2"	60.2	60.5	3.9	4.5	3.1	3.7	2.5	3.0
3"	88.7	89.1	5.7	6.6	4.6	5.3	3.5	4.1
4"	114.1	114.5	7.3	8.4	6.0	6.9	4.5	5.2
6"	168	168.5	10.8	12.5	8.8	10.2	6.6	7.6
8"	218.8	219.4	12.6	14.5	10.3	11.9	7.8	9.0
10"	272.6	273.4	15.7	18.1	12.8	14.8	9.7	11.2
12"	323.4	324.3	18.7	21.6	15.2	17.5	11.5	13.3

UPVC PRESSURE PIPES ARE MANUFACTURED AS PER THE FOLLOWING DIMENSIONS:

**Inch size Pressure Pipes: BS 3505:1986 For Cold Potable Water**

Size	Mean Outside Dia.		Wall Thickness		Wall Thickness		Wall Thickness	
			PN-15(CLASS-E)		PN-12(CLASS-D)		PN-9(CLASS-C)	
	Min	Max	Min	Max	Min	Max	Min	Max
½"	21.2	21.5	1.7	2.1	-	-	-	-
¾"	26.6	26.9	1.9	2.5	-	-	-	-
1"	33.4	33.7	2.2	2.8	-	-	-	-
1 ¼"	42.1	42.4	2.7	3.3	2.2	2.7	-	-
1 ½"	48.1	48.4	3.1	3.7	2.5	3.0	-	-
2"	60.2	60.5	3.9	4.5	3.1	3.7	2.5	3.0
3"	88.7	89.1	5.7	6.6	4.6	5.3	3.5	4.1
4"	114.1	114.5	7.3	8.4	6.0	6.9	4.5	5.2
6"	168	168.5	10.8	12.5	8.8	10.2	6.6	7.6
8"	218.8	219.4	12.6	14.5	10.3	11.9	7.8	9.0
10"	272.6	273.4	15.7	18.1	12.8	14.8	9.7	11.2
12"	323.4	324.3	18.7	21.6	15.2	17.5	11.5	13.3

Pressure Rating for Working Pressure at 20°C

Class E : 15.0 bar 217.0 lbf/in 500ft head  
 Class D : 12.0 bar 173.0 lbf/in 400ft head  
 Class C : 9.0 bar 130.0 lbf/in 300ft head

## PVC PRESSURE PIPES

UPVC PRESSURE PIPES ARE MANUFACTURED AS PER THE FOLLOWING DIMENSIONS:  
**Metric size Pressure Pipes: DIN 8061/62 : 2009 Equivalent to SASO 14-15 : 1998**

Size	Mean Outside Dia.		Mean Wall Thickness							
			PN-16(CLASS-16)		PN-10(CLASS-10)		PN-6(CLASS-6)		PN-4(CLASS-4)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
20 mm	20.0	20.2	1.5	1.9	-	-	-	-	-	-
25 mm	25.0	25.2	1.9	2.3	1.5	1.8	-	-	-	-
32 mm	32.0	32.2	2.4	2.9	1.8	1.9	-	-	-	-
40 mm	40.0	40.2	3.0	3.5	1.9	2.3	1.8	2.1	-	-
50 mm	50.0	50.2	3.7	4.3	2.4	2.9	1.8	2.2	-	-
63 mm	63.0	63.2	4.7	5.4	3.0	3.4	1.9	2.3	-	-
75 mm	75.0	75.3	5.6	6.4	3.6	4.2	2.2	2.6	1.8	2.2
90 mm	90.0	90.3	6.7	7.6	4.3	5.1	2.7	3.2	1.8	2.3
110 mm	110.0	110.3	8.2	9.3	5.3	5.9	3.2	3.8	2.2	2.6
125 mm	125.0	125.3	9.3	10.3	6.0	6.8	3.7	4.0	2.5	2.9
140 mm	140.0	140.4	10.4	11.8	6.7	7.5	4.1	4.5	2.8	3.3
160 mm	160.0	160.4	11.9	11.3	7.7	8.5	4.7	5.2	3.2	3.8
180 mm	180.0	180.4	13.4	15.0	8.6	9.4	5.3	5.7	3.6	4.2
200 mm	200.0	200.4	14.9	16.6	9.6	10.7	5.9	6.7	4.0	4.4
225 mm	225.0	225.5	16.7	18.6	10.8	11.6	6.6	7.2	4.5	4.9
250 mm	250.0	250.5	18.6	20.7	11.9	13.3	7.3	8.0	4.9	5.7
280 mm	280.0	280.5	20.8	23.1	13.4	14.9	8.2	9.0	5.5	6.3
315 mm	315.0	315.6	23.4	26.0	15.0	16.7	9.2	10.4	6.2	7.1

**PN: Working pressure at 20°C**

**Suitable for water supply, sewerage and ducting applications**

**The standard length is 6 meters or as required; Standard Colour : Grey or as required**



## PVC PRESSURE PIPES

UPVC PRESSURE PIPES ARE MANUFACTURED AS PER THE FOLLOWING DIMENSIONS:

**Inch size Pressure Pipes: BS 3506:1969 For Industrial Uses**

Nominal Size	Mean Outside Dia.		Nominal Wall Thickness									
			PN-15(CLASS-E)		PN-12(CLASS-D)		PN-9(CLASS-C)		PN-6(CLASS-B)		Non Pressure (CLASS-O)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
½"	21.2	21.5	1.7	2.1	-	-	-	-	-	-	-	-
¾"	26.6	26.9	1.9	2.5	-	-	-	-	-	-	-	-
1"	33.4	33.7	2.2	2.8	-	-	-	-	-	-	-	-
1 ¼"	42.1	42.4	2.7	3.3	2.2	2.7	-	-	-	-	1.8	2.2
1 ½"	48.1	48.4	3.1	3.7	2.5	3.0	-	-	-	-	1.8	2.2
2"	60.2	60.5	3.9	4.5	3.1	3.7	2.5	3.0	-	-	1.8	2.2
3"	88.7	89.1	5.7	6.6	4.6	5.3	3.5	4.1	2.9	3.4	1.8	2.2
4"	114.1	114.5	7.3	8.4	6.0	6.9	4.5	5.2	3.4	4.0	2.3	3.1
6"	168	168.5	10.8	12.5	8.8	10.2	6.6	7.6	4.5	5.2	3.1	3.7
8"	218.8	219.4	12.6	14.5	10.3	11.9	7.8	9.0	5.3	6.1	3.1	3.7
10"	272.6	273.4	15.7	18.1	12.8	14.8	9.7	11.2	6.6	7.6	3.1	3.7
12"	323.4	324.3	18.7	21.6	15.2	17.5	11.5	13.3	7.8	9.0	3.1	3.7

1bar =  $10^2 \text{ N/m}^2$  + Pipes to these nominal sizes are not normally available from stock.

Note 1: The pressure given at the top of the columns for classes B, C, D and E are the maximum sustained working pressure for which the pipe are suitable and are based on water temperature of 20°C.

BS 3506 pipes are suitable for water supply, sewerage and ducting applications.

UPVC PRESSURE PIPES ARE MANUFACTURED AS PER THE FOLLOWING DIMENSIONS:

**Inch size Pressure Pipes: ASTM D 1785 SCH 40/SCH 80**

Nominal Size Inch	Outside Dia. (mm)		SCH 40			SCH 80		
			Wall Thickness (mm)		Pressure Rating (BAR)	SCH 80		Pressure Rating (BAR)
	Min	Max	Min	Max		Min	Max	
½"	21.24	21.44	2.77	3.28	41.40	3.73	4.24	58.60
¾"	26.57	26.77	2.87	3.38	33.10	3.91	4.42	47.60
1"	33.27	33.53	3.38	3.89	31.00	4.55	5.08	43.40
1 ¼"	42.03	42.29	3.56	4.07	25.50	4.85	5.43	35.90
1 ½"	48.11	48.41	3.68	4.19	22.80	5.08	5.69	32.40
2"	60.17	60.47	3.91	4.42	19.30	5.54	6.20	29.0
3"	88.70	89.10	5.49	6.15	17.90	7.62	8.53	25.50
4"	114.07	114.53	6.02	6.73	15.20	8.56	9.58	22.10
6"	168.00	168.56	7.11	7.97	12.40	10.97	12.29	19.30
8"	218.70	219.46	8.18	9.17	11.00	12.70	14.22	17.20
10"	272.67	273.43	9.27	10.39	9.70	15.06	16.87	15.90
12"	323.47	324.23	10.31	11.55	9.00	17.45	19.53	15.90

Pressure rating based on water at 23°C for unthreaded pipes

## PVC PRESSURE PIPES

UPVC PRESSURE PIPES ARE MANUFACTURED AS PER THE FOLLOWING DIMENSIONS:  
**Inch size Pressure Pipes: ASTM D 2241**

Nominal Size Inch	Mean Outside Dia.		Mean Wall Thickness													
			PN-4.3 SDR 64		PN-6.9 SDR 41		PN-8.6 SDR 32.5		PN-11 SDR 26		PN-13.8 SDR 21		PN-17.2 SDR 17		PN 21.7 SDR 13.5	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
½"	21.24	21.44	-	-	-	-	-	-	-	-	-	-	-	-	1.57	2.08
¾"	26.57	26.77	-	-	-	-	-	-	-	-	1.52	2.03	1.57	2.08	1.98	2.48
1"	33.27	33.53	-	-	-	-	-	-	1.52	2.03	1.60	2.10	1.95	2.46	2.46	2.97
1¼"	42.03	42.29	-	-	-	-	1.52	2.03	1.62	2.13	2.01	2.51	2.48	2.99	3.12	3.67
1½"	48.11	48.41	-	-	-	-	1.52	2.03	1.85	2.36	2.28	2.79	2.84	3.53	3.58	4.08
2"	60.17	60.47	-	-	-	-	1.85	2.36	2.31	2.81	2.87	3.38	3.55	4.06	4.47	4.97
3"	88.70	89.10	-	-	2.16	2.67	2.74	3.25	3.42	3.93	4.24	4.75	5.23	5.86	6.57	7.36
4"	114.07	114.53	1.78	2.29	2.80	3.30	3.50	4.01	4.39	4.90	5.43	6.09	6.73	7.54	8.45	9.47
6"	168.00	168.56	2.64	3.15	4.12	4.62	5.18	5.79	6.47	7.26	8.02	8.99	9.90	11.10	10.46	11.70
8"	218.70	219.46	3.43	3.93	5.33	5.96	6.73	7.54	8.43	9.44	10.41	11.65	12.90	14.45	12.47	13.97
10"	272.67	273.43	4.26	4.77	6.65	7.44	8.40	9.42	10.49	11.76	12.97	14.53	16.05	17.98		
12"	323.47	324.23	5.05	5.64	7.90	8.85	9.95	11.15	12.44	13.94	15.39	17.24	19.05	21.33		



**CROWN PLASTIC**

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