

1. Clear PVC Fittings

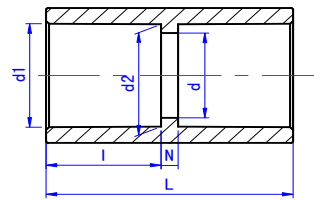
Description:

- 1) Size: 1/2" - 6"
- 2) Standard: ASTM SCH80
- 3) Operating temperature : 0 ~ 55 °C
- 4) Body Color: transparent with a slight purple tint
- 5) UV resistant powder added
- 6) Materials meet drinking water standard
- 7) Typical applications: double containment, sight glass, aquarium, etc.
- 8) PN16 can be produced as per requirement

Note : Do not recommend to service or test with compressed air or gases.

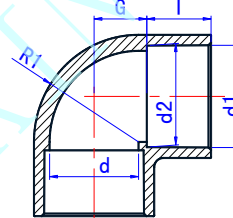
3.1 Coupling (SxS)

Nominal Size	Socket Type			Structural Diameter		
	d1	d2	l	d	N	L
1/2"	21.54	21.23	24.00	16.00	4.00	52.00
3/4"	26.87	26.57	27.00	22.00	4.00	58.00
1"	33.65	33.27	30.00	30.00	4.00	64.00
1 1/4"	42.42	42.04	34.00	38.00	4.00	72.00
1 1/2"	48.56	48.11	37.00	44.00	4.00	78.00
2"	60.63	60.17	41.00	54.00	4.00	88.00
2 1/2"	73.38	72.85	46.50	67.00	5.00	98.00
3"	89.31	88.70	50.00	82.00	7.00	107.00
4"	114.76	114.10	60.00	106.00	7.00	127.00
5"	141.81	141.00	77.00	133.00	8.00	162.00
6"	168.83	168.00	79.00	158.00	10.00	168.00



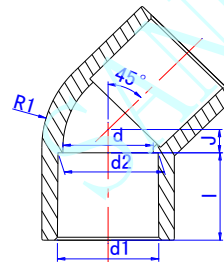
3.2 90 Degree Elbow (SxS)

Nominal Size	Socket Type			Structural Diameter		
	d1	d2	l	d	G	R1
1/2"	21.54	21.23	24.00	16.00	13.00	23.00
3/4"	26.87	26.57	27.00	22.00	15.00	28.50
1"	33.65	33.27	30.00	30.00	18.00	37.00
1 1/4"	42.42	42.04	34.00	38.00	23.00	46.00
1 1/2"	48.56	48.11	37.00	44.00	26.00	51.50
2"	60.63	60.17	41.00	54.00	32.00	63.50
2 1/2"	73.38	72.85	46.50	67.00	39.00	77.50
3"	89.31	88.70	50.00	82.00	47.00	93.50
4"	114.76	114.10	60.00	106.00	59.00	119.00
5"	141.81	141.00	77.00	133.00	76.50	147.50
6"	168.83	168.00	79.00	158.00	89.00	174.50



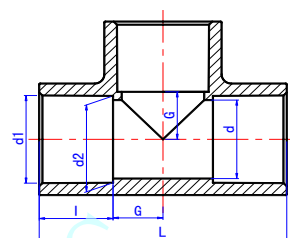
3.3 45 Degree Elbow (SxS)

Nominal Size	Socket Type			Structural Diameter		
	d1	d2	l	d	J	R1
1/2"	21.54	21.23	24.00	16.00	6.50	23.00
3/4"	26.87	26.57	27.00	22.00	8.00	28.50
1"	33.65	33.27	30.00	30.00	8.00	37.00
1 1/4"	42.42	42.04	34.00	38.00	10.00	46.00
1 1/2"	48.56	48.11	37.00	44.00	12.00	51.50
2"	60.63	60.17	41.00	54.00	16.00	63.50
2 1/2"	73.38	72.85	46.50	67.00	18.00	77.50
3"	89.31	88.70	50.00	82.00	19.50	93.50
4"	114.76	114.10	60.00	106.00	26.00	119.00
5"	141.81	141.00	77.00	133.00	35.00	147.50
6"	168.83	168.00	79.00	158.00	45.00	174.50



3.4 Tee (SxSxS)

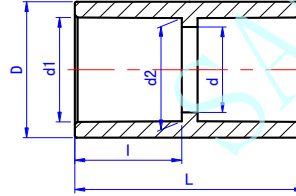
Nominal Size	Socket Type			Structural Diameter		
	d1	d2	l	d	G	L
1/2"	21.54	21.23	24.00	16.00	13.00	74.00
3/4"	26.87	26.57	27.00	22.00	15.00	84.00
1"	33.65	33.27	30.00	30.00	18.00	96.00
1 1/4"	42.42	42.04	34.00	38.00	23.00	114.00
1 1/2"	48.56	48.11	37.00	44.00	26.00	126.00
2"	60.63	60.17	41.00	54.00	32.00	146.00
2 1/2"	73.38	72.85	46.50	67.00	39.00	171.00
3"	89.31	88.70	50.00	82.00	47.00	194.00
4"	114.76	114.10	60.00	106.00	59.00	238.00
5"	141.81	141.00	77.00	133.00	76.50	307.00
6"	168.83	168.00	79.00	158.00	89.00	336.00



2. DIN PN16 Fittings

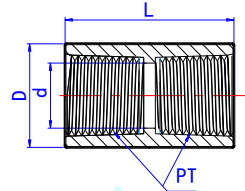
2.1 Coupling (SxS)

Nominal Size	Socket Type			Structural Diameter		
	d1	d2	l	D	d	L
DN15	20.3	20.1	16.0	27.0	16.0	36.0
DN20	25.3	25.1	20.0	32.0	21.0	44.0
DN25	32.3	32.1	24.0	40.0	28.0	52.0
DN32	40.3	40.1	28.0	50.0	36.0	60.0
DN40	50.3	50.1	32.0	63.0	46.0	68.0
DN50	63.3	60.1	38.0	75.0	57.0	80.0
DN65	75.3	75.1	44.0	90.0	70.0	92.0
DN80	90.3	90.1	51.0	110.0	86.1	107.0
DN100	110.4	110.1	61.0	127.0	106.1	128.0
DN125	140.5	140.2	77.0	162.0	133.0	162.0
DN150	160.5	160.2	86.0	186.0	154.0	180.0
DN180	200.6	200.2	130.0	240.0	185.0	310.0
DN200	225.7	225.3	130.0	261.0	218.0	310.0
DN250	250.8	250.3	145.0	290.0	239.0	340.0
DN300	316.0	315.4	168.0	364.0	304.0	386.0



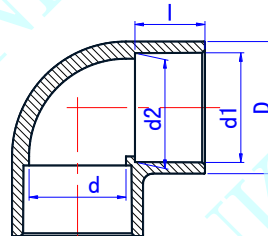
2.2 Coupling (TxT)

Nominal Size	Outside Dia D	Structural Diameter		
		d	L	PT/inch
DN15	27	16	36	14
DN20	32	21	44	14
DN25	40	28	52	11
DN32	50	36	60	11
DN40	63	46	68	11
DN50	75	57	80	11



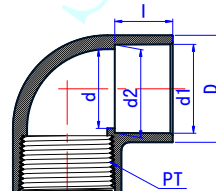
2.3 90 Degree Elbow (SxS)

Nominal Size	Socket Type			Structural Diameter	
	d1	d2	l	D	d
DN15	20.3	20.1	16.0	27.0	17.0
DN20	25.3	25.1	19.0	33.0	23.0
DN25	32.3	32.1	22.0	41.0	29.0
DN32	40.3	40.1	26.0	50.0	37.0
DN40	50.3	50.1	32.0	61.0	47.0
DN50	63.3	60.1	38.0	75.0	60.0
DN65	75.3	75.1	44.0	92.0	72.0
DN80	90.3	90.1	51.0	110.6	87.1
DN100	110.4	110.1	61.0	127.0	106.1
DN125	140.5	140.2	77.0	162.0	133.0
DN150	160.5	160.2	86.0	186.0	154.0
DN180	200.6	200.2	130.0	240.0	185.0
DN200	225.7	225.3	130.0	261.0	218.0
DN250	250.8	250.3	148.0	290.0	239.0
DN300	316.0	315.4	168.0	364.0	304.0



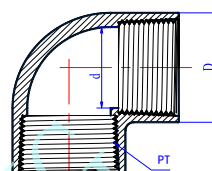
2.4 90 Degree Elbow (SxT)

Nominal Size	Outside Dia D	Socket Type			Structural Diameter	
		d1	d2	l	d	PT/inch
DN15	27	20.3	20.1	16	17	14
DN20	33	25.3	25.1	19	23	14
DN25	41	32.3	32.1	22	29	11
DN32	50	40.3	40.1	26	37	11
DN40	61	50.3	50.1	32	47	11
DN50	75	63.3	60.1	38	60	11



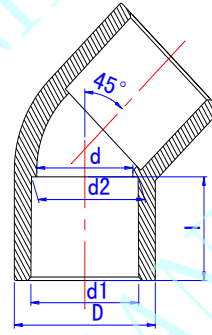
2.5 90 Degree Elbow (TxT)

Nominal Size	Outside Dia D	Structural Diameter	
		d	PT/inch
DN15	27	17	14
DN20	33	23	14
DN25	41	29	11
DN32	50	37	11
DN40	61	47	11
DN50	75	60	11



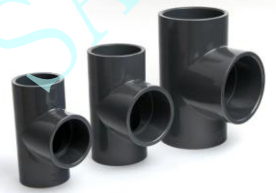
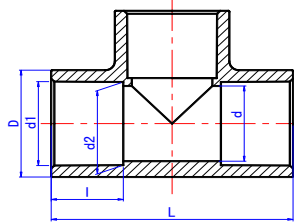
2.6 45 Degree Elbow (SxS)

Nominal	Socket Type			Outside Dia	Structural Diameter
Size	d1	d2	l	D	d
DN15	20.3	20.1	16.0	27.0	17.0
DN20	25.3	25.1	19.0	33.0	23.0
DN25	32.3	32.1	22.0	41.0	29.0
DN32	40.3	40.1	26.0	50.0	37.0
DN40	50.3	50.1	32.0	61.0	47.0
DN50	63.3	60.1	38.0	75.0	60.0
DN65	75.3	75.1	44.0	92.0	72.1
DN80	90.3	90.1	49.5	110.6	87.1
DN100	110.4	110.1	61.0	127.0	106.1
DN125	140.5	140.2	77.0	162.0	133.0
DN150	160.5	160.2	86.0	186.0	154.0
DN180	200.6	200.2	130.0	240.0	185.0
DN200	225.7	225.3	130.0	261.0	218.0
DN250	250.8	250.3	148.0	290.0	239.0
DN300	316.0	315.4	168.0	364.0	304.0



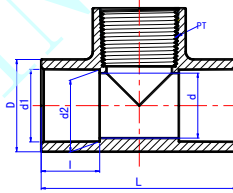
2.7 Tee (SxSxS)

Nominal	Socket Type			Structural Diameter		
Size	d1	d2	l	D	d	L
DN15	20.3	20.1	16.0	27.0	17.0	56.0
DN20	25.3	25.1	19.0	33.0	23.0	66.0
DN25	32.3	32.1	22.0	41.0	29.0	80.0
DN32	40.3	40.1	26.0	50.0	37.0	96.0
DN40	50.3	50.1	32.0	61.0	47.0	118.0
DN50	63.3	60.1	38.0	75.0	60.0	143.0
DN65	75.3	75.1	44.0	92.0	72.1	171.0
DN80	90.3	90.1	51.0	110.6	87.1	197.0
DN100	110.4	110.1	61.0	127.0	106.1	238.0
DN125	140.5	140.2	77.0	162.0	133.0	307.0
DN150	160.5	160.2	86.0	186.0	154.0	335.0
DN180	200.6	200.2	130.0	240.0	185.0	540.0
DN200	225.7	225.3	130.0	261.0	218.0	540.0
DN250	250.8	250.3	148.0	290.0	239.0	696.0
DN300	316.0	315.4	168.0	364.0	304.0	816.0



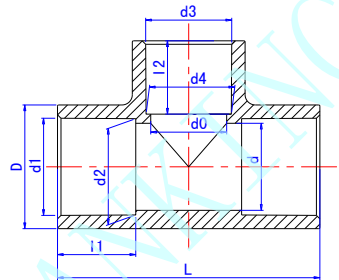
2.8 Tee (SxSxT)

Nominal	Outside Dia	Socket Type		Structural Diameter		
Size	D	d1	d2	l	d	PT/inch
DN15	27	20.3	20.1	16	17	14
DN20	33	25.3	25.1	19	23	14
DN25	41	32.3	32.1	22	29	11
DN32	50	40.3	40.1	26	37	11
DN40	61	50.3	50.1	32	47	11
DN50	75	63.3	60.1	38	60	11



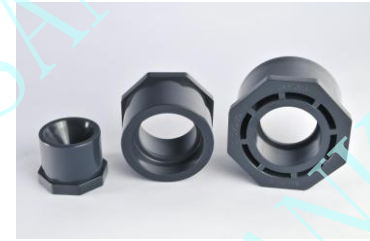
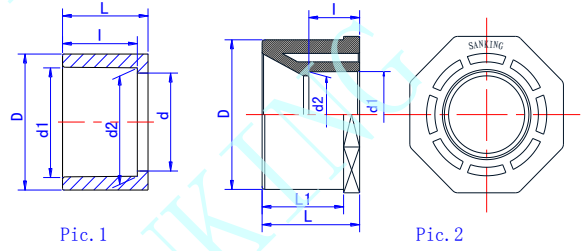
2.9 Reducing Tee (SxSxS)

Nominal	Outside Dia	Socket Type						Structural Diameter		
Size	D (MM)	d1	d2	l1	d3	d4	l2	d	d0	L
DN20*DN20*DN15	33.00	25.30	25.10	20.00	20.30	20.10	17.00	23.00	17.00	66.00
DN25*DN25*DN15	41.00	32.30	32.10	23.00	20.30	20.10	17.00	29.00	17.00	80.00
DN25*DN25*DN20	41.00	32.30	32.10	23.00	25.30	25.10	20.00	29.00	23.00	80.00
DN32*DN32*DN15	50.00	40.30	40.10	28.00	20.30	20.10	17.00	37.00	17.00	96.00
DN32*DN32*DN20	50.00	40.30	40.10	28.00	25.30	25.10	20.00	37.00	23.00	96.00
DN32*DN32*DN25	50.00	40.30	40.10	28.00	32.30	32.10	23.00	37.00	29.00	96.00
DN40*DN40*DN15	62.00	50.30	50.10	32.00	20.30	20.10	17.00	47.00	17.00	118.00
DN40*DN40*DN20	62.00	50.30	50.10	32.00	25.30	25.10	20.00	47.00	23.00	118.00
DN40*DN40*DN25	62.00	50.30	50.10	32.00	32.30	32.10	23.00	47.00	29.00	118.00
DN40*DN40*DN32	62.00	50.30	50.10	32.00	40.30	40.10	28.00	47.00	37.00	118.00
DN50*DN50*DN15	76.00	63.30	63.10	38.00	20.30	20.10	17.00	60.00	17.00	143.00
DN50*DN50*DN20	76.00	63.30	63.10	38.00	25.30	25.10	20.00	60.00	23.00	143.00
DN50*DN50*DN25	76.00	63.30	63.10	38.00	32.30	32.10	23.00	60.00	29.00	143.00
DN50*DN50*DN32	76.00	63.30	63.10	38.00	40.30	40.10	28.00	60.00	37.00	143.00
DN50*DN50*DN40	76.00	63.30	63.10	38.00	50.30	50.10	32.00	60.00	47.00	143.00
DN65*DN65*DN25	92.00	75.30	75.10	45.00	32.30	32.10	23.00	72.00	29.00	171.00
DN65*DN65*DN32	92.00	75.30	75.10	45.00	40.30	40.10	28.00	72.00	37.00	171.00
DN65*DN65*DN40	92.00	75.30	75.10	45.00	50.30	50.10	32.00	72.00	47.00	171.00
DN65*DN65*DN50	92.00	75.30	75.10	45.00	63.30	63.10	38.00	72.00	60.00	171.00
DN80*DN80*DN25	110.60	90.30	90.10	51.00	32.30	32.10	23.00	87.10	29.00	182.00
DN80*DN80*DN32	110.60	90.30	90.10	51.00	40.30	40.10	28.00	87.10	37.00	182.00
DN80*DN80*DN40	110.60	90.30	90.10	51.00	50.30	50.10	32.00	87.10	47.00	182.00
DN80*DN80*DN50	110.60	90.30	90.10	51.00	63.30	63.10	38.00	87.10	60.00	182.00
DN80*DN80*DN65	110.60	90.30	90.10	51.00	75.30	75.10	45.00	87.10	72.00	182.00
DN100*DN100*DN25	127.00	110.40	110.10	61.00	32.30	32.10	23.00	106.10	29.00	219.00
DN100*DN100*DN32	127.00	110.40	110.10	61.00	40.30	40.10	28.00	106.10	37.00	219.00
DN100*DN100*DN40	127.00	110.40	110.10	61.00	50.30	50.10	32.00	106.10	47.00	219.00
DN100*DN100*DN50	127.00	110.40	110.10	61.00	63.30	63.10	38.00	106.10	60.00	219.00
DN100*DN100*DN65	127.00	110.40	110.10	61.00	75.30	75.10	45.00	106.10	72.00	219.00
DN100*DN100*DN80	127.00	110.40	110.10	61.00	90.30	90.10	51.00	106.10	87.10	219.00



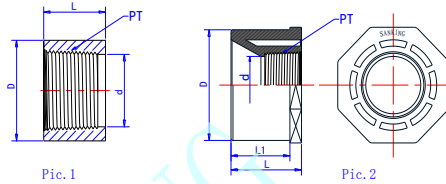
2.10 Reducing Bushing (SxS)

Nominal	Outside Dia	Socket Type			Structural Diameter			Pic.
Size	D (MM)	d1	d2	l	d	L1	L	
DN20*DN15	25.0	20.3	20.1	16.0	16.0		20.0	Pic.1
DN25*DN20	32.0	25.3	25.1	20.0	21.0		24.0	
DN32*DN25	40.0	32.3	32.1	23.0	28.0		28.0	
DN40*DN32	50.0	40.3	40.1	28.0	36.0		32.0	
DN50*DN40	63.0	50.3	50.1	32.0	46.0		38.0	
DN63*DN50	75.0	63.3	60.1	38.0	57.0		42.0	
DN80*DN50	90.0	63.3	60.1	38.0	57.0	51.0	61.0	Pic.2
DN80*DN65	90.0	75.3	75.1	45.0	71.0	51.0	61.0	
DN100*DN50	110.0	63.3	60.1	38.0	57.0	61.0	73.0	
DN100*DN80	110.0	90.3	90.1	51.0	86.0	61.0	73.0	
DN125*DN50	140.0	63.3	63.1	39.0	50.0	76.0	91.0	
DN125*DN80	140.0	90.3	90.1	51.0	80.0	76.0	91.0	
DN125*DN100	140.0	110.4	110.1	61.0	100.0	76.0	91.0	
DN150*DN80	160.0	90.3	90.1	51.0	80.0	86.0	101.0	
DN150*DN100	160.0	110.4	110.1	61.0	100.0	86.0	101.0	
DN150*DN125	160.0	140.5	140.2	76.0	125.0	86.0	101.0	
DN200*DN100	225.0	110.4	110.1	61.0	100.0	119.0	137.0	
DN200*DN125	225.0	140.5	140.2	76.0	125.0	119.0	137.0	
DN200*DN150	225.0	160.5	160.2	86.0	150.0	119.0	137.0	
DN280*DN100	280.0	110.4	110.1	61.0	100.0	146.0	166.0	
DN280*DN150	280.0	160.5	160.2	86.0	150.0	146.0	166.0	
DN280*DN200	280.0	225.7	225.3	119.0	200.0	146.0	166.0	



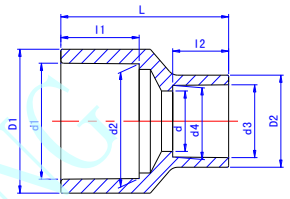
2.11 Reducing Bushing (SxT)

Nominal	Outside Dia	Structural Diameter			Pic.	
Size	D (MM)	d	L1	L		PT/inch
DN20*DN15	25	16		20	14	Pic.1
DN25*DN20	32	21		24	14	
DN32*DN25	40	28		28	11	
DN40*DN32	50	36		32	11	
DN50*DN40	63	46		38	11	
DN63*DN50	75	57		42	11	
DN80*DN50	90	57	51.0	61	11	Pic.2
DN80*DN65	90	71	51.0	61	11	
DN100*DN50	110	57	61.0	73	11	
DN100*DN80	110	86	61.0	73	11	



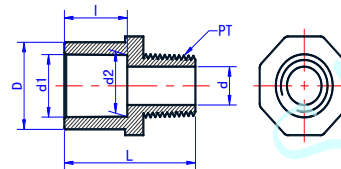
2.12 Reducing Socket (SxS)

Nominal	Outside Dia		Socket Type				Structural Diameter			
Size	D1	D2	d1	d2	l1	d3	d4	l2	d	L
DN20*DN15	32.0	27.0	25.3	25.1	20.0	20.3	20.1	16.0	16.0	44.0
DN25*DN15	40.0	27.0	32.3	32.1	24.0	20.3	20.1	16.0	16.0	52.0
DN25*DN20	40.0	32.0	32.3	32.1	24.0	25.3	25.1	20.0	21.0	52.0
DN32*DN15	50.0	27.0	40.3	40.1	28.0	20.3	20.1	16.0	16.0	60.0
DN32*DN20	50.0	32.0	40.3	40.1	28.0	25.3	25.1	20.0	21.0	60.0
DN32*DN25	50.0	40.0	40.3	40.1	28.0	32.3	32.1	24.0	28.0	60.0
DN40*DN15	63.0	27.0	50.3	50.1	32.0	20.3	20.1	16.0	16.0	68.0
DN40*DN20	63.0	32.0	50.3	50.1	32.0	25.3	25.1	20.0	21.0	68.0
DN40*DN25	63.0	40.0	50.3	50.1	32.0	32.3	32.1	24.0	28.0	68.0
DN40*DN32	63.0	50.0	50.3	50.1	32.0	40.3	40.1	28.0	36.0	68.0
DN50*DN15	75.0	27.0	63.3	60.1	38.0	20.3	20.1	16.0	16.0	80.0
DN50*DN20	75.0	32.0	63.3	60.1	38.0	25.3	25.1	20.0	21.0	80.0
DN50*DN25	75.0	40.0	63.3	60.1	38.0	32.3	32.1	24.0	28.0	80.0
DN50*DN32	75.0	50.0	63.3	60.1	38.0	40.3	40.1	28.0	36.0	80.0
DN50*DN40	75.0	63.0	63.3	60.1	38.0	50.3	50.1	32.0	46.0	80.0



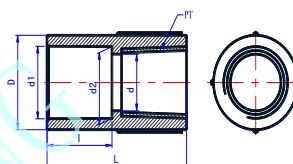
2.13 Male Adaptor (SxT)

Nominal	Outside Dia	Socket Type			Structural Diameter		
Size	D	d1	d2	l	d	L	PT/inch
DN15	30	20.3	20.1	16	13.2	50	14
DN20	35	25.3	25.1	19	19	50.5	14
DN25	44	32.3	32.1	22	24	59	11
DN32	54	40.3	40.1	26	32	63.4	11
DN40	60	50.3	50.1	32	38	67	11
DN50	73	63.3	60.1	38	50	73	11



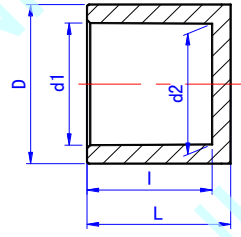
2.14 Female Adaptor (SxT)

Nominal	Outside Dia	Socket Type			Structural Diameter		
Size	D	d1	d2	l	d	L	PT/inch
DN15	30	20.3	20.1	16	13.2	52	14
DN20	35	25.3	25.1	19	19	58	14
DN25	44	32.3	32.1	22	24	64	11
DN32	54	40.3	40.1	26	32	72	11
DN40	60	50.3	50.1	32	38	78	11
DN50	73	63.3	60.1	38	50	86	11



2.15 Cap

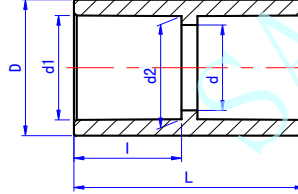
Nominal Size	Outside Dia D	Socket Type			Structural Diameter L
		d1	d2	I	
DN15	27.0	20.3	20.1	16.0	20.0
DN20	32.0	25.3	25.1	20.0	24.0
DN25	40.0	32.3	32.1	24.0	28.0
DN32	50.0	40.3	40.1	28.0	32.0
DN40	63.0	50.3	50.1	32.0	38.0
DN50	75.0	63.3	60.1	38.0	42.0
DN65	92.0	75.3	75.1	47.0	55.5
DN80	110.0	90.3	90.1	52.5	62.5
DN100	133.0	110.4	110.1	63.0	72.0
DN150	186.0	160.5	160.2	86.0	180.0
DN200	261.0	225.7	225.3	130.0	310.0



3. ASTM Schedule 80 Fittings

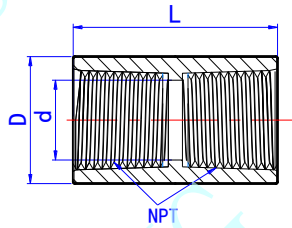
1.1 Coupling (SxS)

Nominal Size	Outside Dia D	Socket Type			Structural Diameter	
		d1	d2	l	d	L
1/2"	29.00	21.54	21.23	24.00	16.00	52.00
3/4"	35.00	26.87	26.57	27.00	22.00	58.00
1"	44.00	33.65	33.27	30.00	30.00	64.00
1 1/4"	54.00	42.42	42.04	34.00	38.00	72.00
1 1/2"	60.00	48.56	48.11	37.00	43.00	78.00
2"	73.00	60.63	60.17	40.00	54.00	84.00
2 1/2"	88.00	73.38	72.85	46.50	67.00	98.00
3"	105.00	89.31	88.70	50.00	82.00	107.00
4"	132.00	114.76	114.10	60.00	106.00	126.00
5"	162.00	141.81	141.00	69.00	133.00	143.00
6"	191.00	168.83	168.00	79.00	158.00	168.00
8"	261.00	219.84	218.70	104.60	214.00	215.00
10"	305.80	273.81	272.67	128.00	265.00	266.00
12"(fabricated)	360.00	324.61	323.47	168.00	190.00	386.00



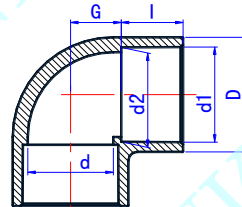
1.2 Coupling (TxT)

Nominal Size	Outside Dia D	Structural Diameter		
		d	L	NPT/inch
1/2"	30.00	16.00	52.00	14
3/4"	35.00	22.00	58.00	14
1"	44.00	30.00	64.00	11.5
1 1/4"	54.00	38.00	72.00	11.5
1 1/2"	60.00	44.00	78.00	11.5
2"	73.00	54.00	84.00	11.5



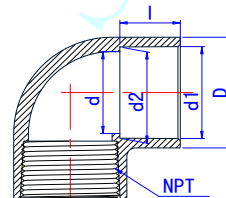
1.3 90 Degree Elbow (SxS)

Nominal Size	Outside Dia D (MM)	Socket Type			Structural Diameter	
		d1	d2	l	d	G
1/2"	30.00	21.54	21.23	24.00	16.00	13.00
3/4"	35.00	26.87	26.57	27.00	22.00	15.00
1"	44.00	33.65	33.27	30.00	30.00	18.00
1 1/4"	54.00	42.42	42.04	34.00	38.00	23.00
1 1/2"	60.00	48.56	48.11	37.00	44.00	26.00
2"	73.00	60.63	60.17	41.00	54.00	32.00
2 1/2"	88.00	73.38	72.85	46.50	67.00	39.00
3"	105.00	89.31	88.70	50.00	82.00	47.00
4"	132.00	114.76	114.10	60.00	106.00	59.00
5"	162.00	141.81	141.00	69.00	133.00	76.50
6"	191.00	168.83	168.00	79.00	158.00	89.00
8"	246.00	219.84	218.70	102.00	200.00	115.00
10"	304.80	273.81	272.67	128.00	265.00	145.00
12"(fabricated)	360.00	324.61	323.47	168.00	190.00	175.00



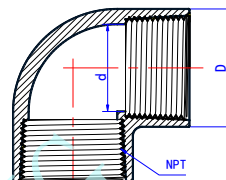
1.4 90 Degree Elbow (SxT)

Nominal Size	Outside Dia D	Socket Type			Structural Diameter	
		d1	d2	l	d	NPT/inch
1/2"	30.00	21.54	21.23	24.00	16.00	14
3/4"	35.00	26.87	26.57	27.00	22.00	14
1"	44.00	33.65	33.27	30.00	30.00	11.5
1 1/4"	54.00	42.42	42.04	34.00	38.00	11.5
1 1/2"	60.00	48.56	48.11	37.00	44.00	11.5
2"	73.00	60.63	60.17	41.00	54.00	11.5



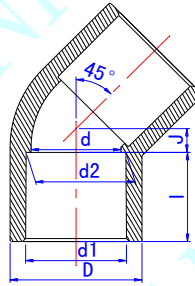
1.5 90 Degree Elbow (TxT)

Nominal Size	Outside Dia D	Structural Diameter	
		d	NPT/inch
1/2"	30.00	16.00	14
3/4"	35.00	22.00	14
1"	44.00	30.00	11.5
1 1/4"	54.00	38.00	11.5
1 1/2"	60.00	44.00	11.5
2"	73.00	54.00	11.5



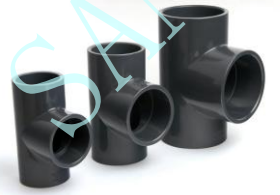
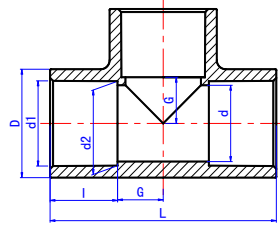
1.6 45 Degree Elbow (SxS)

Nominal Size	Outside Dia D (MM)	Socket Type			Structural Diameter	
		d1	d2	l	d	J
1/2"	30.00	21.54	21.23	24.00	16.00	6.50
3/4"	35.00	26.87	26.57	27.00	22.00	8.00
1"	44.00	33.65	33.27	30.00	30.00	8.00
1 1/4"	54.00	42.42	42.04	34.00	38.00	10.00
1 1/2"	60.00	48.56	48.11	37.00	44.00	12.00
2"	73.00	60.63	60.17	41.00	54.00	16.00
2 1/2"	88.00	73.38	72.85	46.50	67.00	18.00
3"	105.00	89.31	88.70	50.00	82.00	19.50
4"	132.00	114.76	114.10	60.00	106.00	26.00
5"	162.00	141.81	141.00	69.00	133.00	35.00
6"	191.00	168.83	168.00	79.00	158.00	45.00
8"	246.00	219.84	218.70	102.00	200.00	51.00
10" (fabricated)	304.00	273.81	272.67	148.00	240.00	58.00
12" (fabricated)	360.00	324.61	323.47	168.00	290.00	64.00



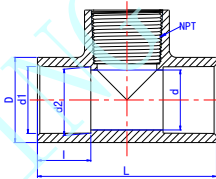
1.7 Tee (SxSxS)

Nominal Size	Outside Dia D (MM)	Socket Type			Structural Diameter		
		d1	d2	l	d	G	L
1/2"	30.00	21.54	21.23	24.00	16.00	13.00	74.00
3/4"	35.00	26.87	26.57	27.00	22.00	15.00	84.00
1"	44.00	33.65	33.27	30.00	30.00	18.00	96.00
1 1/4"	54.00	42.42	42.04	34.00	38.00	23.00	114.00
1 1/2"	60.00	48.56	48.11	37.00	44.00	26.00	126.00
2"	73.00	60.63	60.17	41.00	54.00	32.00	146.00
2 1/2"	88.00	73.38	72.85	46.50	67.00	39.00	171.00
3"	105.00	89.31	88.70	50.00	82.00	47.00	194.00
4"	132.00	114.76	114.10	60.00	106.00	59.00	238.00
5"	162.00	141.81	141.00	69.00	133.00	76.50	291.00
6"	191.00	168.83	168.00	79.00	158.00	89.00	336.00
8"	246.00	219.84	218.70	102.00	200.00	115.00	433.00
10"	300.80	273.81	272.67	128.00	235.00	145.00	546.00
12" (fabricated)	360.00	324.61	323.47	168.00	190.00	175.00	686.00



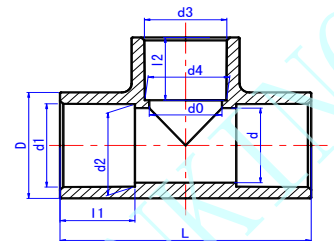
1.8 Tee (SxSxT)

Nominal Size	Outside Dia D	Socket Type			Structural Diameter	
		d1	d2	l	d	NPT/inch
1/2"	30.00	21.54	21.23	24.00	16.00	14
3/4"	35.00	26.87	26.57	27.00	22.00	14
1"	44.00	33.65	33.27	30.00	30.00	11.5
1 1/4"	54.00	42.42	42.04	34.00	38.00	11.5
1 1/2"	60.00	48.56	48.11	37.00	44.00	11.5
2"	73.00	60.63	60.17	41.00	54.00	11.5



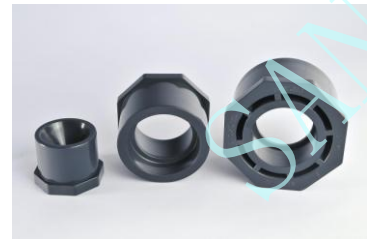
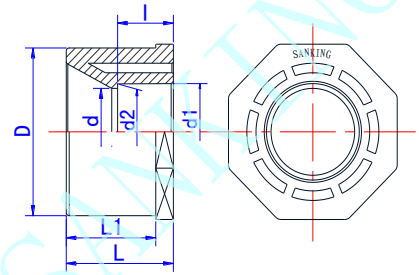
1.9 Reducing Tee (SxSxS)

Nominal Size	Outside Dia D (MM)	Socket Type			Structural Diameter					
		d1	d2	l1	d3	d4	l2	d	d0	L
3/4" x 3/4" x 1/2"	35.00	26.87	26.57	27.00	21.54	21.23	24.00	22.00	16.00	78.00
1" x 1" x 1/2"	44.00	33.65	33.27	30.00	21.54	21.23	24.00	30.00	16.00	90.00
1" x 1" x 3/4"	44.00	33.65	33.27	30.00	26.87	26.57	27.00	30.00	22.00	90.00
1 1/4" x 1 1/4" x 1/2"	54.00	42.42	42.04	34.00	21.54	21.23	24.00	38.00	16.00	106.00
1 1/4" x 1 1/4" x 3/4"	54.00	42.42	42.04	34.00	26.87	26.57	27.00	38.00	22.00	106.00
1 1/2" x 1 1/2" x 1"	60.00	48.56	48.11	37.00	33.65	33.27	30.00	44.00	30.00	126.00
1 1/2" x 1 1/2" x 1 1/2"	60.00	48.56	48.11	37.00	26.87	26.57	27.00	43.00	22.00	120.00
1 1/2" x 1 1/2" x 1"	60.00	48.56	48.11	37.00	33.65	33.27	30.00	43.00	30.00	120.00
1 1/2" x 1 1/2" x 1 1/4"	60.00	48.56	48.11	37.00	42.42	42.04	34.00	43.00	38.00	120.00
2" x 2" x 1 1/2"	73.00	60.63	60.17	41.00	21.54	21.23	24.00	54.00	16.00	135.00
2" x 2" x 3/4"	73.00	60.63	60.17	41.00	26.87	26.57	27.00	54.00	22.00	135.00
2" x 2" x 1"	73.00	60.63	60.17	41.00	33.65	33.27	30.00	54.00	30.00	135.00
2" x 2" x 1 1/4"	73.00	60.63	60.17	41.00	42.42	42.04	34.00	54.00	38.00	135.00
2" x 2" x 1 1/2"	73.00	60.63	60.17	41.00	48.56	48.11	37.00	54.00	43.00	135.00
2 1/2" x 2 1/2" x 1/2"	88.00	73.38	72.85	46.50	21.54	21.23	24.00	67.00	16.00	159.00
2 1/2" x 2 1/2" x 3/4"	88.00	73.38	72.85	46.50	26.87	26.57	27.00	67.00	22.00	159.00
2 1/2" x 2 1/2" x 1"	88.00	73.38	72.85	46.50	33.65	33.27	30.00	67.00	30.00	159.00
2 1/2" x 2 1/2" x 1 1/4"	88.00	73.38	72.85	46.50	42.42	42.04	34.00	67.00	38.00	159.00
2 1/2" x 2 1/2" x 1 1/2"	88.00	73.38	72.85	46.50	48.56	48.11	37.00	67.00	43.00	159.00
2 1/2" x 2 1/2" x 2"	88.00	73.38	72.85	46.50	60.63	60.17	41.00	67.00	54.00	159.00
3" x 3" x 1"	105.50	89.31	88.70	50.00	33.65	33.27	30.00	82.00	30.00	179.00
3" x 3" x 1 1/4"	105.50	89.31	88.70	50.00	42.42	42.04	34.00	82.00	38.00	179.00
3" x 3" x 1 1/2"	105.50	89.31	88.70	50.00	48.56	48.11	37.00	82.00	43.00	179.00
3" x 3" x 2"	105.50	89.31	88.70	50.00	60.63	60.17	41.00	82.00	54.00	179.00
3" x 3" x 2 1/2"	105.50	89.31	88.70	50.00	73.38	72.85	46.50	82.00	67.00	179.00
4" x 4" x 1"	133.00	114.76	114.10	60.00	33.65	33.27	30.00	106.00	30.00	214.00
4" x 4" x 1 1/4"	133.00	114.76	114.10	60.00	42.42	42.04	34.00	106.00	38.00	214.00
4" x 4" x 1 1/2"	133.00	114.76	114.10	60.00	48.56	48.11	37.00	106.00	43.00	214.00
4" x 4" x 2"	133.00	114.76	114.10	60.00	60.63	60.17	41.00	106.00	54.00	214.00
4" x 4" x 2 1/2"	133.00	114.76	114.10	60.00	73.38	72.85	46.50	106.00	67.00	214.00
4" x 4" x 3"	133.00	114.76	114.10	60.00	89.31	88.70	50.00	106.00	82.00	214.00
6" x 6" x 1"	191.00	168.83	168.00	79.00	33.65	33.27	30.00	158.00	30.00	311.00
6" x 6" x 2"	191.00	168.83	168.00	79.00	60.63	60.17	39.00	158.00	54.00	311.00
6" x 6" x 3"	191.00	168.83	168.00	79.00	89.31	88.71	50.00	158.00	82.00	311.00
6" x 6" x 4"	191.00	168.83	168.00	79.00	114.76	114.10	60.00	158.00	106.00	311.00
6" x 6" x 5"	191.00	168.83	168.00	79.00	141.81	141.00	68.00	158.00	133.00	311.00



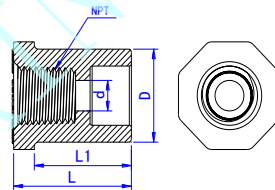
1.10 Reducing Bushing (SxS)

Nominal Size	Outside Dia D	Socket Type			Structural Diameter		
		d1	d2	l	d	L1	L
1/2**1/4"	21.34	14.02	13.61	19.00	10.00	24.00	29.00
1/2**3/8"	21.34	17.45	17.04	22.00	12.00	24.00	29.00
3/4**1/2"	26.67	21.54	21.23	24.00	17.00	27.00	33.00
1**1/2"	33.40	21.54	21.23	24.00	17.00	30.00	36.00
1**3/4"	33.40	26.87	26.57	27.00	22.50	30.00	36.00
1 1/2**1/2"	42.16	21.54	21.23	24.00	17.00	34.00	42.00
1 1/2**3/4"	42.16	26.87	26.57	27.00	22.50	34.00	42.00
1 1/2**1"	42.16	33.65	33.27	30.00	28.00	34.00	42.00
1 1/2**1 1/2"	48.26	21.54	21.23	24.00	17.00	37.00	45.00
1 1/2**3/4"	48.26	26.87	26.57	27.00	22.50	37.00	45.00
1 1/2**1"	48.26	33.65	33.27	30.00	28.00	37.00	45.00
1 1/2**1 1/4"	48.26	42.42	42.04	34.00	38.00	37.00	45.00
2**1/2"	60.33	21.54	21.23	24.00	17.00	41.00	53.00
2**3/4"	60.33	26.87	26.57	27.00	22.50	41.00	53.00
2**1"	60.33	33.65	33.27	30.00	28.00	41.00	53.00
2**1 1/4"	60.33	42.42	42.04	34.00	38.00	41.00	53.00
2**1 1/2"	60.33	48.56	48.11	37.00	42.00	41.00	53.00
2 1/2**1 1/2"	73.03	48.56	48.11	37.00	44.00	46.50	56.50
2 1/2**2"	73.03	60.63	60.17	41.00	54.00	46.50	56.50
3**1"	88.90	33.65	33.27	30.00	28.00	50.00	60.00
3**1 1/2"	88.90	48.56	48.11	37.00	42.00	50.00	60.00
3**2"	88.90	60.63	60.17	41.00	54.00	50.00	60.00
3**2 1/2"	88.90	73.38	72.85	46.50	66.00	50.00	60.00
4**2"	114.30	60.63	60.17	41.00	54.00	60.00	72.00
4**2 1/2"	114.30	73.38	72.85	46.50	65.00	60.00	72.00
4**3"	114.30	89.31	88.70	50.00	80.00	60.00	72.00
5**2"	141.30	60.63	60.17	39.00	55.00	76.00	91.00
5**3"	141.30	89.31	88.70	51.00	80.00	76.00	91.00
5**4"	141.30	114.76	114.10	61.00	100.00	76.00	91.00
6**3"	168.28	88.31	88.70	51.00	80.00	79.00	94.00
6**4"	168.28	114.76	114.10	61.00	100.00	79.00	94.00
6**5"	168.28	141.81	141.00	76.00	125.00	79.00	94.00
8**4"	219.10	114.76	114.10	61.00	100.00	102.00	120.00
8**5"	219.10	141.81	141.00	76.00	125.00	102.00	120.00
8**6"	219.10	168.83	168.00	86.00	150.00	102.00	120.00
10**4"	273.50	114.76	114.10	61.00	100.00	128.00	148.00
10**6"	273.50	168.83	168.00	86.00	150.00	128.00	148.00
10**8"	273.50	219.84	218.69	119.00	200.00	128.00	148.00



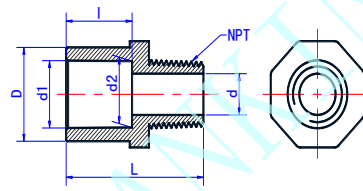
1.11 Reducing Bushing (SxT)

Nominal Size	Outside Dia D	Structural Diameter d	Structural Diameter		NPT/inch
			L1	L	
1/2**1/4"	21.34	7.00	24.00	29.00	18.00
3/4**1/2"	26.67	16.00	27.00	33.00	14.00
1**1/2"	33.40	16.00	30.00	36.00	14.00
1**3/4"	33.40	21.00	30.00	36.00	14.00



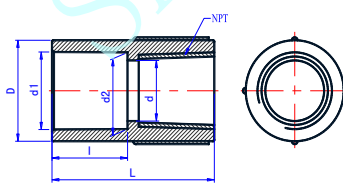
1.12 Male Adaptor (SxT)

Nominal Size	Outside Dia D	Socket Type			Structural Diameter		
		d1	d2	l	d	L	NPT/inch
1/2"	30.0	21.54	21.23	24.00	13.2	50	14
3/4"	35.0	26.87	26.57	27.00	19	50.5	14
1"	44.0	33.65	33.27	30.00	24	59	11.5
1 1/4"	54.0	42.42	42.04	34.00	32	63.4	11.5
1 1/2"	60.0	48.56	48.11	37.00	38	67	11.5
2"	73.0	60.63	60.17	41.10	50	73	11.5



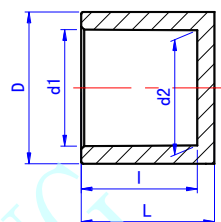
1.13 Female Adaptor (SxT)

Nominal Size	Outside Dia D	Socket Type			Structural Diameter		
		d1	d2	l	d	L	NPT/inch
1/2"	30.0	21.54	21.23	24.00	13.2	52	14
3/4"	35.0	26.87	26.57	27.00	19	58	14
1"	44.0	33.65	33.27	30.00	24	64	11.5
1 1/4"	54.0	42.42	42.04	34.00	32	72	11.5
1 1/2"	60.0	48.56	48.11	37.00	38	78	11.5
2"	73.0	60.63	60.17	41.10	50	86	11.5



1.14 Cap

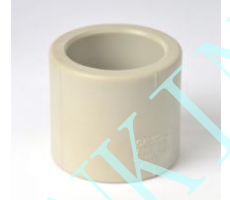
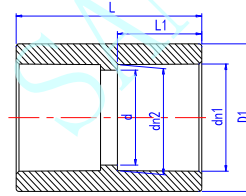
Nominal Size	Outside Dia D	Socket Type			Structural Diameter L
		d1	d2	l	
1/2"	30.00	21.54	21.23	24.00	28
3/4"	35.00	26.87	26.57	27.00	31
1"	44.00	33.65	33.27	30.00	35
1 1/4"	54.00	42.42	42.04	34.00	40
1 1/2"	60.00	48.56	48.11	37.00	43
2"	73.00	60.63	60.17	41.00	48
2 1/2"	88.00	73.38	72.85	46.50	54
3"	105.00	89.31	88.70	50.00	58
4"	132.00	114.76	114.10	60.00	69



4. PPH Fittings

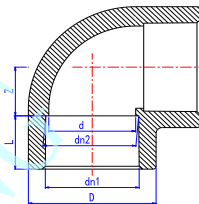
4.1 Coupling (SxS)

Size	D	d	dn1		dn2		L1	L
			min	max	min	max		
DN15	26.50	17.05	19.00	19.50	18.80	19.30	15.00	33.00
DN20	33.00	21.80	23.80	24.40	23.50	24.10	16.50	36.00
DN25	42.20	28.70	30.70	31.30	30.40	31.00	18.60	40.20
DN32	53.00	36.60	38.70	39.30	38.30	38.90	21.00	45.00
DN40	66.00	46.60	48.70	49.30	48.30	48.90	24.00	51.00
DN50	83.50	59.40	61.60	62.20	61.10	61.70	28.00	59.00
DN65	95.00	70.30	73.20	74.00	71.90	72.70	31.50	67.00
DN80	113.50	84.90	87.80	88.80	86.40	87.40	36.00	77.00
DN100	138.50	104.30	107.30	108.50	105.80	106.80	42.00	90.00



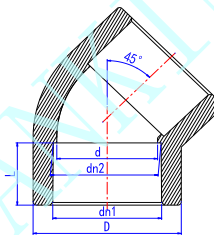
4.2 90 Degree Elbow (SxS)

Size	D	d	dn1		dn2		L	Z
			min	max	min	max		
DN15	26.50	17.05	19.00	19.50	18.80	19.30	15.00	11.00
DN20	33.00	21.80	23.80	24.40	23.50	24.10	16.50	13.50
DN25	42.20	28.70	30.70	31.30	30.40	31.00	18.60	17.00
DN32	53.00	36.60	38.70	39.30	38.30	38.90	21.00	21.00
DN40	66.00	46.60	48.70	49.30	48.30	48.90	24.00	26.00
DN50	83.50	59.40	61.60	62.20	61.10	61.70	28.00	32.50
DN65	95.00	70.30	73.20	74.00	71.90	72.70	31.50	38.50
DN80	113.50	84.90	87.80	88.80	86.40	87.40	36.00	46.00
DN100	138.50	104.30	107.30	108.50	105.80	106.80	42.00	56.00



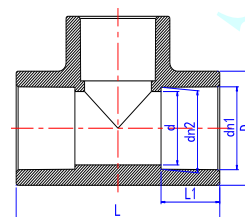
4.3 45 Degree Elbow (SxS)

Size	D	d	dn1		dn2		L
			min	max	min	max	
DN15	26.50	17.05	19.00	19.50	18.80	19.30	15.00
DN20	33.00	21.80	23.80	24.40	23.50	24.10	16.50
DN25	42.20	28.70	30.70	31.30	30.40	31.00	18.60
DN32	53.00	36.60	38.70	39.30	38.30	38.90	21.00
DN40	66.00	46.60	48.70	49.30	48.30	48.90	24.00
DN50	83.50	59.40	61.60	62.20	61.10	61.70	28.00
DN65	95.00	70.30	73.20	74.00	71.90	72.70	31.50
DN80	113.50	84.90	87.80	88.80	86.40	87.40	36.00
DN100	138.50	104.30	107.30	108.50	105.80	106.80	42.00



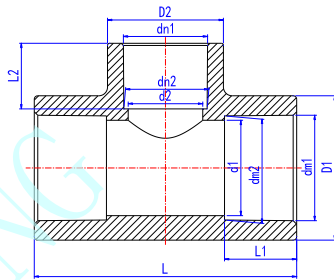
4.4 Tee (SxSxS)

Size	D	d	dn1		dn2		L1	L
			min	max	min	max		
DN15	26.50	17.05	19.00	19.50	18.80	19.30	15.00	52.00
DN20	33.00	21.80	23.80	24.40	23.50	24.10	16.50	60.00
DN25	42.20	28.70	30.70	31.30	30.40	31.00	18.60	71.20
DN32	53.00	36.60	38.70	39.30	38.30	38.90	21.00	84.00
DN40	66.00	46.60	48.70	49.30	48.30	48.90	24.00	100.00
DN50	83.50	59.40	61.60	62.20	61.10	61.70	28.00	121.00
DN65	95.00	70.30	73.20	74.00	71.90	72.70	31.50	140.00
DN80	113.50	84.90	87.80	88.80	86.40	87.40	36.00	164.00
DN100	138.50	104.30	107.30	108.50	105.80	106.80	42.00	196.00



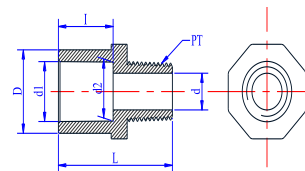
4.5 Reducing Tee (SxSxS)

Size	Outside Dia		Socket Type										Structural Diameter		
	D1	D2	dm1		dm2		L1	dn1		dn2		L2	d1	d2	L
			min	max	min	max		min	max	min	max				
DN20xDN15	33.00	26.50	23.80	24.40	23.50	24.10	16.50	19.00	19.50	18.80	19.30	15.00	21.80	17.05	58.05
DN25xDN20	42.20	33.00	30.70	31.30	30.40	31.00	18.60	23.80	24.40	23.50	24.10	16.50	28.70	21.80	67.00
DN25xDN15	42.20	26.50	30.70	31.30	30.40	31.00	18.60	19.00	19.50	18.80	19.30	15.00	28.70	17.05	62.25
DN32xDN25	53.00	42.20	38.70	39.30	38.30	38.90	21.00	30.70	31.30	30.40	31.00	18.60	36.60	28.70	78.70
DN32xDN20	53.00	33.00	38.70	39.30	38.30	38.90	21.00	23.80	24.40	23.50	24.10	16.50	36.60	21.80	71.80
DN32xDN15	53.00	26.50	38.70	39.30	38.30	38.90	21.00	19.00	19.50	18.80	19.30	15.00	36.60	17.05	67.05
DN40xDN32	66.00	53.00	48.70	49.30	48.30	48.90	24.00	38.70	39.30	38.30	38.90	21.00	46.60	36.60	92.60
DN40xDN25	66.00	42.20	48.70	49.30	48.30	48.90	24.00	30.70	31.30	30.40	31.00	18.60	46.60	28.70	84.70
DN40xDN20	66.00	33.00	48.70	49.30	48.30	48.90	24.00	23.80	24.40	23.50	24.10	16.50	46.60	21.80	77.80
DN40xDN15	66.00	26.50	48.70	49.30	48.30	48.90	24.00	19.00	19.50	18.80	19.30	15.00	46.60	17.05	73.05
DN50xDN40	83.50	66.00	61.60	62.20	61.10	61.70	28.00	48.70	49.30	48.30	48.90	24.00	59.40	46.60	110.60
DN50xDN32	83.50	53.00	61.60	62.20	61.10	61.70	28.00	38.70	39.30	38.30	38.90	21.00	59.40	36.60	100.60
DN50xDN25	83.50	42.20	61.60	62.20	61.10	61.70	28.00	30.70	31.30	30.40	31.00	18.60	59.40	28.70	92.70
DN50xDN20	83.50	33.00	61.60	62.20	61.10	61.70	28.00	23.80	24.40	23.50	24.10	16.50	59.40	21.80	85.80
DN50xDN15	83.50	26.50	61.60	62.20	61.10	61.70	28.00	19.00	19.50	18.80	19.30	15.00	59.40	17.05	81.05
DN65xDN50	95.00	83.50	73.20	74.00	71.90	72.70	31.50	61.60	62.20	61.10	61.70	28.00	70.30	59.40	130.40
DN65xDN40	95.00	66.00	73.20	74.00	71.90	72.70	31.50	48.70	49.30	48.30	48.90	24.00	70.30	46.60	117.60
DN65xDN32	95.00	53.00	73.20	74.00	71.90	72.70	31.50	38.70	39.30	38.30	38.90	21.00	70.30	36.60	107.60
DN65xDN25	95.00	42.20	73.20	74.00	71.90	72.70	31.50	30.70	31.30	30.40	31.00	18.60	70.30	28.70	99.80
DN65xDN20	95.00	33.00	73.20	74.00	71.90	72.70	31.50	23.80	24.40	23.50	24.10	16.50	70.30	21.80	92.80
DN65xDN15	95.00	26.50	73.20	74.00	71.90	72.70	31.50	19.00	19.50	18.80	19.30	15.00	70.30	17.05	88.00
DN80xDN65	113.50	95.00	87.80	88.80	86.40	87.40	36.00	73.20	74.00	71.90	72.70	31.50	84.90	70.30	150.30
DN80xDN50	113.50	83.50	87.80	88.80	86.40	87.40	36.00	61.60	62.20	61.10	61.70	28.00	84.90	59.40	139.40
DN80xDN40	113.50	66.00	87.80	88.80	86.40	87.40	36.00	48.70	49.30	48.30	48.90	24.00	84.90	46.60	126.60
DN80xDN32	113.50	53.00	87.80	88.80	86.40	87.40	36.00	38.70	39.30	38.30	38.90	21.00	84.90	36.60	116.60
DN80xDN25	113.50	42.20	87.80	88.80	86.40	87.40	36.00	30.70	31.30	30.40	31.00	18.60	84.90	28.70	108.70
DN80xDN20	113.50	33.00	87.80	88.80	86.40	87.40	36.00	23.80	24.40	23.50	24.10	16.50	84.90	21.80	101.80
DN80xDN15	113.50	26.50	87.80	88.80	86.40	87.40	36.00	19.00	19.50	18.80	19.30	15.00	84.90	17.05	97.00
DN100xDN80	138.50	113.50	107.30	108.50	105.80	106.80	42.00	87.80	88.80	86.40	87.40	36.00	104.30	84.90	176.90
DN100xDN65	138.50	95.00	107.30	108.50	105.80	106.80	42.00	73.20	74.00	71.90	72.70	31.50	104.30	70.30	162.30
DN100xDN50	138.50	83.50	107.30	108.50	105.80	106.80	42.00	61.60	62.20	61.10	61.70	28.00	104.30	59.40	151.40
DN100xDN40	138.50	66.00	107.30	108.50	105.80	106.80	42.00	48.70	49.30	48.30	48.90	24.00	104.30	46.60	138.60
DN100xDN32	138.50	53.00	107.30	108.50	105.80	106.80	42.00	38.70	39.30	38.30	38.90	21.00	104.30	36.60	128.60
DN100xDN25	138.50	42.00	107.30	108.50	105.80	106.80	42.00	30.70	31.30	30.40	31.00	18.60	104.30	28.70	120.70
DN100xDN20	138.50	33.00	107.30	108.50	105.80	106.80	42.00	23.80	24.40	23.50	24.10	16.50	104.30	21.80	113.80
DN100xDN15	138.50	26.50	107.30	108.50	105.80	106.80	42.00	19.00	19.50	18.80	19.30	15.00	104.30	17.05	109.00



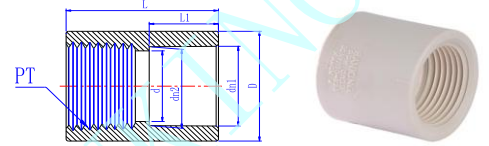
4.6 Male Adaptor (SxT)

Nominal Size	Outside Dia D	Socket Type					Structural Diameter		
		d1		d2		l	d	L	PT/inch
		min	max	min	max				
DN15	30.0	19	19.5	18.8	19.3	24.00	11	50	14
DN20	35.0	23.8	24.4	23.5	24.1	27.00	16	50.5	14
DN25	44.0	30.7	31.3	30.4	31	30.00	21	59	11
DN32	54.0	38.7	39.3	38.3	38.9	34.00	28.5	63.4	11
DN40	60.0	48.7	49.3	48.3	48.9	37.00	34	67	11
DN50	75.0	61.6	62.2	61.1	61.7	41.00	46	77	11



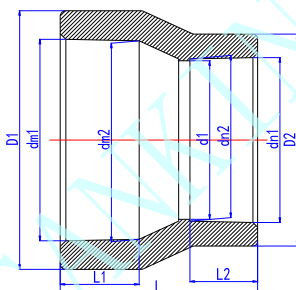
4.7 Female Adaptor (SxT)

Nominal	Outside Dia	Socket Type				Structural Diameter			
		d1		d2		L1	d	L	PT/inch
		min	max	min	max				
DN15	26.5	19	19.5	18.8	19.3	15.00	17.05	33	14
DN20	33	23.8	24.4	23.5	24.1	16.50	21.8	36	14
DN25	42.2	30.7	31.3	30.4	31	18.60	26.7	40.2	11
DN32	53	38.7	39.3	38.3	38.9	21.00	36.6	45	11
DN40	66	48.7	49.3	48.3	48.9	24.00	46.6	51	11
DN50	83.5	61.6	62.2	61.1	61.7	28.00	59.4	59	11



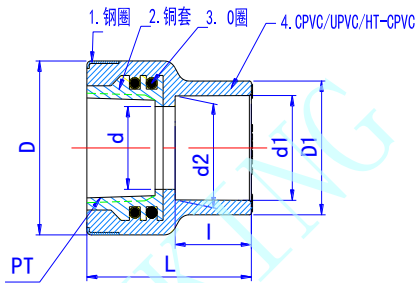
4.8 Reducing Socket (SxS)

Size	Outside Dia		Socket Type								Structural Diameter			
	D1	D2	dm1		dm2		L1	dn1		dn2		L2	d1	L
			min	max	min	max		min	max	min	max			
DN20xDN15	33.00	26.50	23.80	24.40	23.50	24.10	16.50	19.00	19.50	18.80	19.30	15.00	17.05	38.00
DN25xDN20	42.20	33.00	30.70	31.30	30.40	31.00	18.60	23.80	24.40	23.50	24.10	16.50	21.80	43.10
DN25xDN15	42.20	26.50	30.70	31.30	30.40	31.00	18.60	19.00	19.50	18.80	19.30	15.00	17.05	41.60
DN32xDN25	53.00	42.20	38.70	39.30	38.30	38.90	21.00	30.70	31.30	30.40	31.00	18.60	28.70	49.60
DN32xDN20	53.00	33.00	38.70	39.30	38.30	38.90	21.00	23.80	24.40	23.50	24.10	16.50	21.80	47.50
DN32xDN15	53.00	26.50	38.70	39.30	38.30	38.90	21.00	19.00	19.50	18.80	19.30	15.00	17.05	46.00
DN40xDN32	66.00	53.00	48.70	49.30	48.30	48.90	24.00	38.70	39.30	38.30	38.90	21.00	36.60	58.00
DN40xDN25	66.00	42.20	48.70	49.30	48.30	48.90	24.00	30.70	31.30	30.40	31.00	18.60	28.70	55.60
DN40xDN20	66.00	33.00	48.70	49.30	48.30	48.90	24.00	23.80	24.40	23.50	24.10	16.50	21.80	53.50
DN40xDN15	66.00	26.50	48.70	49.30	48.30	48.90	24.00	19.00	19.50	18.80	19.30	15.00	17.05	52.00
DN50xDN40	83.50	66.00	61.60	62.20	61.10	61.70	28.00	48.70	49.30	48.30	48.90	24.00	46.60	68.50
DN50xDN32	83.50	53.00	61.60	62.20	61.10	61.70	28.00	38.70	39.30	38.30	38.90	21.00	36.60	65.50
DN50xDN25	83.50	42.20	61.60	62.20	61.10	61.70	28.00	30.70	31.30	30.40	31.00	18.60	28.70	63.10
DN50xDN20	83.50	33.00	61.60	62.20	61.10	61.70	28.00	23.80	24.40	23.50	24.10	16.50	21.80	61.00
DN50xDN15	83.50	26.50	61.60	62.20	61.10	61.70	28.00	19.00	19.50	18.80	19.30	15.00	17.05	59.50
DN65xDN50	95.00	83.50	73.20	74.00	71.90	72.70	31.50	61.60	62.20	61.10	61.70	28.00	59.40	78.00
DN65xDN40	95.00	66.00	73.20	74.00	71.90	72.70	31.50	48.70	49.30	48.30	48.90	24.00	46.60	74.00
DN65xDN32	95.00	53.00	73.20	74.00	71.90	72.70	31.50	38.70	39.30	38.30	38.90	21.00	36.60	71.00
DN65xDN25	95.00	42.20	73.20	74.00	71.90	72.70	31.50	30.70	31.30	30.40	31.00	18.60	28.70	68.60
DN65xDN20	95.00	33.00	73.20	74.00	71.90	72.70	31.50	23.80	24.40	23.50	24.10	16.50	21.80	66.50
DN65xDN15	95.00	26.50	73.20	74.00	71.90	72.70	31.50	19.00	19.50	18.80	19.30	15.00	17.05	65.00
DN80xDN65	113.50	95.00	87.80	88.80	86.40	87.40	36.00	73.20	74.00	71.90	72.70	31.50	70.30	90.50
DN80xDN50	113.50	83.50	87.80	88.80	86.40	87.40	36.00	61.60	62.20	61.10	61.70	28.00	59.40	87.00
DN80xDN40	113.50	66.00	87.80	88.80	86.40	87.40	36.00	48.70	49.30	48.30	48.90	24.00	46.60	83.00
DN80xDN32	113.50	53.00	87.80	88.80	86.40	87.40	36.00	38.70	39.30	38.30	38.90	21.00	36.60	80.00
DN80xDN25	113.50	42.20	87.80	88.80	86.40	87.40	36.00	30.70	31.30	30.40	31.00	18.60	28.70	77.60
DN80xDN20	113.50	33.00	87.80	88.80	86.40	87.40	36.00	23.80	24.40	23.50	24.10	16.50	21.80	75.50
DN80xDN15	113.50	26.50	87.80	88.80	86.40	87.40	36.00	19.00	19.50	18.80	19.30	15.00	17.05	74.00
DN100xDN80	138.50	113.50	107.30	108.50	105.80	106.80	42.00	87.80	88.80	86.40	87.40	36.00	84.90	105.00
DN100xDN65	138.50	95.00	107.30	108.50	105.80	106.80	42.00	73.20	74.00	71.90	72.70	31.50	70.30	101.50
DN100xDN50	138.50	83.50	107.30	108.50	105.80	106.80	42.00	61.60	62.20	61.10	61.70	28.00	59.40	98.00
DN100xDN40	138.50	66.00	107.30	108.50	105.80	106.80	42.00	48.70	49.30	48.30	48.90	24.00	46.60	93.00
DN100xDN32	138.50	53.00	107.30	108.50	105.80	106.80	42.00	38.70	39.30	38.30	38.90	21.00	36.60	90.00
DN100xDN25	138.50	42.20	107.30	108.50	105.80	106.80	42.00	30.70	31.30	30.40	31.00	18.60	28.70	87.60
DN100xDN20	138.50	33.00	107.30	108.50	105.80	106.80	42.00	23.80	24.40	23.50	24.10	16.50	21.80	85.50
DN100xDN15	138.50	26.50	107.30	108.50	105.80	106.80	42.00	19.00	19.50	18.80	19.30	15.00	17.05	84.00



5. Brass Inserted Fittings

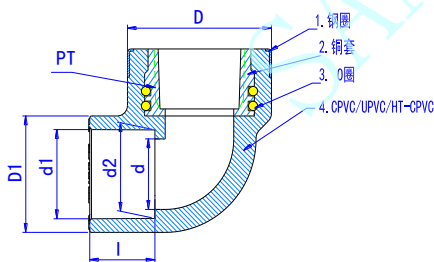
5.1 Coupling (SxT)



Unit: MM

Nominal	Socket Type			Structural Diameter				
Size	d1	d2	l	D	D1	d	L	PT/inch
DN15	20.30	20.10	16.00	34.00	34.00	16.00	36.50	14
DN20	25.30	25.10	19.00	42.00	33.00	20.00	41.00	14
DN25	32.30	32.10	23.00	52.00	41.00	28.00	48.00	11

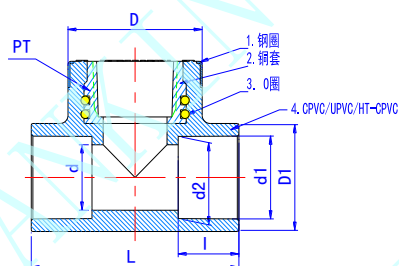
5.2 90 Degree Elbow (SxT)



Unit: MM

Nominal	Socket Type			Structural Diameter			
Size	d1	d2	l	D	D1	d	PT/inch
DN15	20.30	20.10	16.00	34.00	27.00	16.00	14
DN20	25.30	25.10	19.00	42.00	33.00	20.00	14
DN25	32.30	32.10	23.00	52.00	41.00	28.00	11

5.2 Tee (SxSxT)



Unit: MM

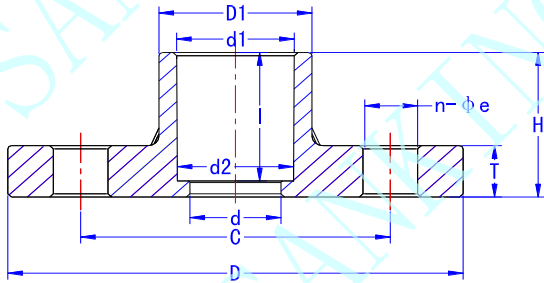
Nominal	Socket Type			Structural Diameter				
Size	d1	d2	l	D	D1	d	L	PT/inch
DN15	20.30	20.10	16.00	34.00	34.00	16.00	36.50	14
DN20	25.30	25.10	19.00	42.00	33.00	20.00	41.00	14
DN25	32.30	32.10	23.00	52.00	41.00	28.00	48.00	11

T/S Flange

DESCRIPTION:

- 1) Size: 1/2" ~ 10"; 20mm ~ 280mm ; DN15 ~ DN250
- 2) Standard: DIN PN10, JIS 10K
- 3) Joint End: Socket
- 4) Material & Color : PVC(dark gray), CPVC(light gray)
- 5) Operating Temperature: PVC(0~55°C); CPVC(0~95°C)

SPECIFICATIONS:



Unit: MM

Size	D	D1	C		d
			DIN	JIS	
1/2"(15)	95.00	32.00	65.00	70.00	15.00
3/4"(20)	105.00	35.00	75.00	75.00	20.00
1"(25)	125.00	42.00	85.00	90.00	25.00
1¼"(32)	140.00	52.00	100.00	100.00	32.00
1½"(40)	150.00	62.00	110.00	105.00	43.00
2"(50)	165.00	76.00	125.00	120.00	55.00
2½"(65)	185.00	90.00	145.00	140.00	65.00
3"(80)	200.00	108.00	160.00	150.00	80.00
4"(100)	220.00	132.00	180.00	175.00	100.00
5"(125)	250.00	162.00	210.00	210.00	125.00
6"(150)	285.00	187.00	240.00	240.00	150.00
10"(250)	335.00	309.00	350.00	—	250.00

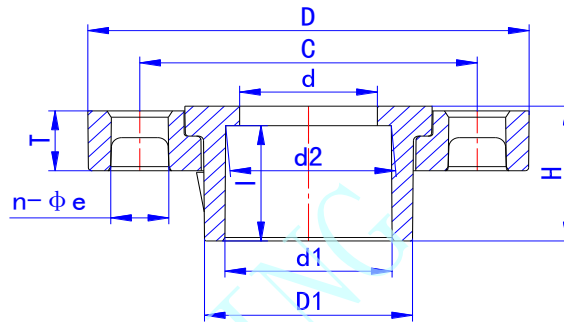
Size	d1		d2		H	T	I	n-φe	
	DIN	JIS	DIN	JIS				DIN	JIS
1/2"(15)	20.30	22.40	20.10	21.73	35.00	14.00	32.00	4-15	4-15
3/4"(20)	25.30	26.45	25.10	25.69	40.00	15.00	37.00	4-15	4-15
1"(25)	32.30	32.55	32.10	31.70	45.00	16.00	40.00	4-19	4-19
1¼"(32)	40.30	38.60	40.10	37.65	49.00	16.00	44.00	4-19	4-19
1½"(40)	50.30	48.70	50.10	47.74	59.00	18.00	54.00	4-19	4-19
2"(50)	63.30	60.80	63.10	59.78	66.00	20.00	61.00	4-19	4-19
2½"(65)	75.30	76.60	75.10	75.68	70.00	22.00	61.00	4-19	4-19
3"(80)	90.30	89.60	90.10	88.55	73.00	22.00	64.50	8-19	8-19
4"(100)	110.40	114.70	110.10	113.60	93.00	22.00	83.50	8-19	8-19
5"(125)	140.50	140.85	140.20	139.64	114.00	24.00	103.00	8-19	8-23
6"(150)	160.50	166.00	160.20	164.63	142.00	26.00	130.00	8-23	8-23
10"(250)	280.90	—	280.30	—	156.00	28.00	146.50	12-23	—

Van Stone Flange

DESCRIPTION:

- 1) Size: 1/2" ~ 12"; 20mm ~ 315mm ; DN15 ~ DN300
- 2) Standard: ANSI, DIN
- 3) Working pressure: 150PSI, DIN PN10
- 4) Joint End: Socket
- 5) Material & Color : PVC(dark gray), CPVC(light gray)
- 6) Operating Temperature: PVC(0~55°C); CPVC(0~95°C)

SPECIFICATIONS:



SCH80

UNIT: MM

Size	D	D1	C	d	d1	d2	H	T	l	n-Φe
1/2"	87.00	30.00	60.30	15.00	21.54	21.23	26.00	14.00	23.00	4-16
3/4"	98.00	38.00	70.00	20.00	26.87	26.57	29.00	15.00	26.00	4-16
1"	108.00	47.00	79.40	25.00	33.66	33.27	33.00	16.00	29.00	4-16
1 1/4"	117.00	55.00	88.90	32.00	42.42	42.04	37.00	18.00	32.00	4-16
1 1/2"	128.00	60.50	98.00	40.00	48.56	48.11	42.80	19.00	36.60	4-16
2"	155.50	73.80	121.00	51.00	60.63	60.17	45.50	21.00	40.00	4-19
2 1/2"	178.00	89.00	140.00	63.00	73.38	72.85	52.50	25.00	46.50	4-19
3"	192.00	108.00	152.00	77.00	89.31	88.70	56.50	27.00	50.00	4-19
4"	230.00	133.00	191.20	102.00	114.76	114.10	67.00	29.00	59.80	8-19
5"	256.00	161.80	216.00	129.00	141.81	141.00	77.50	31.00	69.40	8-22
6"	285.00	191.00	241.00	156.00	168.83	168.00	88.00	33.00	79.00	8-22
8"	343.00	243.00	298.00	204.00	219.84	218.70	118.00	36.00	102.00	8-22
10"	406.40	308.00	362.00	256.00	273.81	272.67	151.00	42.00	127.50	12-25
12"	483.00	364.00	432.00	307.00	324.61	323.47	173.00	42.00	153.00	12-25

DIN PN10

UNIT: MM

Size	D	D1	C	d	d1	d2	H	T	l	n-Φe
8" (200)	343.0	248.0	298.0	204.0	225.7	225.3	131.0	36.0	119.0	8-23
10" (250)	395.0	275.0	350.0	225.0	250.8	250.3	141.0	32.0	131.5	12-23
12" (300)	445.0	346.0	400.0	300.0	316.0	315.4	190.0	42.0	165.0	12-23

Union

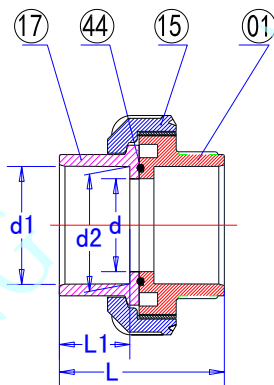
DESCRIPTION:

- 1) Size: 1/2" ~ 4"; 20mm ~ 110mm ; DN15 ~ DN100
- 2) Standard: ANSI, DIN, JIS, CNS
- 3) Joint End: Socket, Threaded(NPT, PT, BSPF), Fusion
- 4) Material & Color : PVC(dark gray/white), CPVC(light gray), PP & HT-CPVC(light yellow)
- 5) Operating Temperature: PVC(0~55 °C); CPVC, HT-CPVC & PP(0~95°C)

SPECIFICATIONS:



ITEM	PART	MATERIAL	QTY
01	BODY	PVC / CPVC / PP / HT-CPVC	1
15	UNION NUT	PVC / CPVC / PP / HT-CPVC	1
17	UNION END	PVC / CPVC / PP / HT-CPVC	1
44	ORING	EPDM / VITON	1



Unit: MM

SIZE	D	L		L1	
		ANSI/JIS/CNS	DIN	ANSI/JIS/CNS	DIN
1/2"(15)	54.00	53.50	41.00	22.30	16.00
3/4"(20)	63.00	60.00	47.50	25.50	19.00
1"(25)	73.50	67.00	53.50	28.60	22.00
1 1/4"(32)	84.50	76.00	63.00	32.00	26.00
1 1/2"(40)	98.00	83.00	78.00	35.00	32.00
2"(50)	119.00	90.00		38.00	
2 1/2"(65)	150.00	110.00		47.00	
3"(80)	169.00	127.00		51.00	
4"(100)	211.00	158.00		61.00	

SIZE	d	d1				d2			
		ANSI	DIN	JIS	CNS	ANSI	DIN	JIS	CNS
1/2"(15)	15	21.54	20.30	22.40	22.40	21.23	20.10	21.73	21.90
3/4"(20)	20	26.87	25.30	26.45	26.40	26.57	25.10	25.69	25.90
1"(25)	25	33.65	32.30	32.55	34.50	33.27	32.10	31.70	33.90
1 1/4"(32)	32	42.42	40.30	38.60	42.50	42.04	40.10	37.65	41.90
1 1/2"(40)	40	48.56	50.30	48.70	48.60	48.11	50.10	47.74	47.90
2"(50)	50	60.63	63.30	60.80	60.60	60.17	63.10	59.78	59.90
2 1/2"(65)	63	73.38	75.30	76.60	76.70	72.85	75.10	75.68	75.90
3"(80)	75	89.31	90.40	89.60	89.70	88.70	90.10	88.55	88.90
4"(100)	97	114.76	110.40	114.70	115.00	114.10	110.10	113.60	113.80