

AQUAFIT[®]

Agri Pressure & Non Pressure
Pipes & Fittings

Aquafit UPVC pipes are made from highest grade quality resin. These pipes & fittings are mainly used for water supply in agriculture, drip irrigation sprinkler lines etc as well as for drinking water distribution. However, these can also be used in cable ducting, ventilation pipe lines, slurry lines etc.



*ZERO DEFECT MANUFACTURING PROCESS



Pipes as per
IS:4985



Fittings as per
IS:7834



ANY PRESSURE.
NO FEAR.



► SPECIFICATIONS

	Fittings	Pipes
Material	Unplasticized Polyvinyl Chloride (UPVC)	Unplasticized Polyvinyl Chloride (UPVC)
Colour	Light Grey	Light Grey
Reference Standards	IS 7834 : 1987	IS 4985 : 2000
Working temperature of fluids	Up to - 60° C – Continuous Up to - 90° C – Short time - up to 3 mins	Up to - 60° C – Continuous Up to - 90° C – Short time - up to 3 mins
Working pressure (kg/cm ²)	4, 6, 10 & 16	2.5, 4, 6, 8, 10 & 12.5
End Connections	Solvent sockets, Threads (For transition fittings)	Solvent sockets, Rubber Ring sockets

Note: ISI & Non ISI Pipes & Fittings are available.



PIPES

► PRODUCT NAMES / RANGE

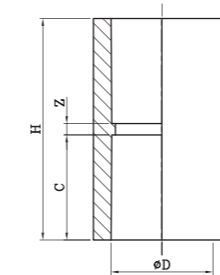
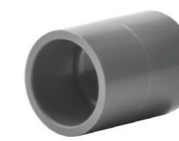
(All dimensions are in mm)

Dimensions for aquafit pipes - As per IS: 4985 ; 2000

Nominal Outside Diameter (Nominal Size)	Mean Outside Diameter		Outside Diameter at Any Point		Wall Thickness												Mean Socket Internal Diameter of Main Point of Socket Length	
					Class 1 0.25 MPa 2.5 kg/cm ²		Class 2 0.40 MPa 4.0 kg/cm ²		Class 3 0.60 MPa 6.0 kg/cm ²		Class 4 0.80 MPa 8.0 kg/cm ²		Class 5 1.00 MPa 10.0 kg/cm ²		Class 6 1.25 MPa 12.5 kg/cm ²			
					Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		
20	20.0	20.3	19.5	20.5	-	-	-	-	-	-	-	-	1.1	1.5	1.4	1.8	20.1	20.3
25	25.0	25.0	24.5	25.5	-	-	-	-	-	-	1.2	1.6	1.4	1.8	1.7	2.1	25.1	25.3
32	32.0	32.3	31.5	32.5	-	-	-	-	-	-	1.5	1.9	1.8	2.2	2.2	2.7	32.1	32.3
40	40.0	40.3	39.5	40.5	-	-	-	-	1.4	1.8	1.8	2.2	2.2	2.7	2.8	3.3	40.1	40.3
50	50.0	50.3	49.4	50.6	-	-	-	-	1.7	2.1	2.3	2.8	2.8	3.3	3.4	4.0	50.1	50.3
63	63.0	63.3	62.2	63.8	-	-	1.5	1.9	2.2	2.7	2.8	3.3	3.5	4.1	4.3	5.0	63.1	63.3
75	75.0	75.3	74.1	75.9	-	-	1.8	2.2	2.6	3.1	3.4	4.0	4.2	4.9	5.1	5.9	75.1	75.3
90	90.0	90.3	88.9	91.1	1.3	1.7	2.1	2.6	3.1	3.7	4.0	4.6	5.0	5.7	6.1	7.1	90.1	90.3
110	110.0	110.4	108.6	111.4	1.6	2.0	2.5	3.0	3.7	4.3	4.9	5.6	6.1	7.1	7.5	8.7	110.1	110.4
125	125.0	125.4	123.5	126.5	1.8	2.2	2.9	3.4	4.3	5.0	5.6	6.4	6.9	8.0	8.5	9.8	125.1	125.4
140	140.0	140.5	138.3	141.7	2.0	2.4	3.2	3.8	4.8	5.5	6.3	7.3	7.7	8.9	9.5	11.0	140.2	140.5
160	160.0	160.5	158.0	162.0	2.3	2.8	3.7	4.3	5.4	6.2	7.2	8.3	8.8	10.2	10.9	12.6	160.2	160.5
180	180.0	180.6	177.8	182.2	2.6	3.1	4.2	4.9	6.1	7.1	8.0	9.2	9.9	11.4	12.2	14.1	180.2	180.5
200	200.0	200.6	197.6	202.4	2.9	3.4	4.6	5.3	6.8	7.9	8.9	10.3	11.0	12.7	13.6	15.7	200.3	200.6
225	225.0	225.7	222.3	227.7	3.3	3.9	5.2	6.0	7.6	8.8	10.0	11.5	12.4	14.3	15.3	17.6	225.3	225.7
250	250.0	250.8	247.0	253.0	3.6	4.2	5.7	6.5	8.5	9.8	11.2	12.9	13.8	15.9	17.0	19.6	250.4	250.8
280	280.0	280.9	276.6	283.4	4.1	4.8	6.4	7.4	9.5	11.0	12.5	14.4	15.4	17.8	19.0	21.9	280.4	280.9
315	315.0	316.0	311.2	318.8	4.6	5.3	7.2	8.3	10.7	12.4	14.0	16.1	17.3	19.9	21.4	24.7	315.4	316.0
355	355.0	356.1	350.7	359.3	5.1	5.9	8.1	9.4	12.0	13.8	15.8	18.2	19.6	22.6	24.1	27.8	355.4	356.0
400	400.0	401.2	395.2	404.8	5.8	6.7	9.1	10.5	13.5	15.6	17.8	20.5	22.0	25.3	27.2	31.3	400.4	401.0

Note: Pipes available with ISI mark except 400mm.

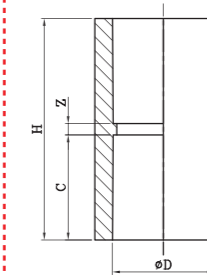
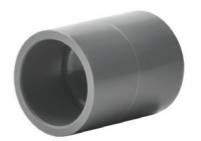
COUPLER HEAVY (10 KG. - ISI)



Size	ØD	C	Z	H
20mm	20.00	16.20	3.00	35.40
25mm	25.00	19.20	3.00	41.40
32mm	32.00	22.20	3.00	47.40
40mm	40.00	26.20	3.00	55.40
50mm	50.00	31.20	3.40	65.80
63mm	63.00	38.20	3.00	79.40
75mm	75.00	44.20	4.00	92.40
90mm	90.00	51.20	5.00	107.40

NOTE: 20 to 32mm Conceal (ISI)

COUPLER HEAVY (6 KG. - ISI)



Size	ØD	C	Z	H
75mm	75.00	44.20	3.00	91.40
90mm	90.00	51.20	5.20	107.60
110mm	110.00	61.20	6.00	128.40
140mm	140.00	76.20	8.10	160.50
160mm	160.00	86.20	8.10	180.50

COUPLER (LW)



Size	ØD	C	Z	H	Figure
40mm	40.00	26.20	3.20	55.60	A
50mm	50.00	31.20	3.00	65.40	A
63mm	63.00	34.00	3.00	71.00	A
75mm	75.00	40.00	4.00	84.00	B
90mm	90.00	51.20	5.00	107.40	A
110mm	110.00	58.00	4.00	120.00	A
140mm	140.00	68.50	5.00	145.00	A
160mm	160.00	86.20	8.00	180.40	A
200mm	200.00	106.20	8.00	220.40	A
250mm	250.00	131.20	10.00	272.40	A

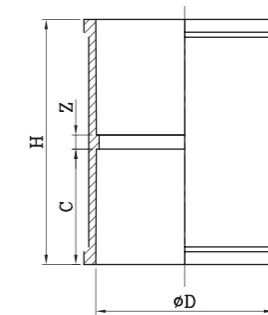


Figure 'A'

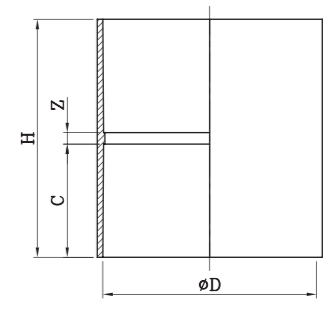
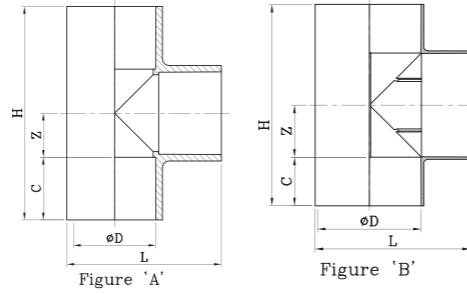


Figure 'B'

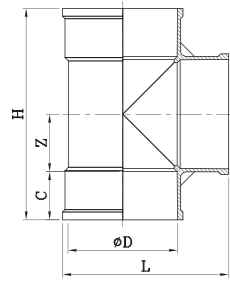
TEE (PN 6)



Size	ØD	C	Z	H	L	Figure
25mm	25.00	19.20	13.50	65.40	47.35	A
40mm	40.00	26.20	21.00	94.40	69.72	A
63mm	63.00	38.20	33.00	142.40	105.60	A
75mm	75.00	44.20	39.00	166.40	123.95	A
90mm	90.00	51.20	46.00	194.40	145.55	A
110mm	110.00	61.20	58.00	238.40	171.75	A
180mm	180.00	96.20	91.00	374.40	282.55	A
250mm	250.00	118.00	126.00	488.00	375.41	B

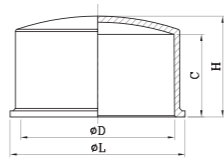


TEE (PRESTIGE)



Size	ØD	C	Z	H	L
63mm	63.00	28.00	33.25	122.50	96.15
75mm	75.00	30.50	39.75	140.50	110.55
90mm	90.00	35.00	47.00	164.00	130.00
110mm	110.00	45.00	57.00	204.00	160.25
160mm	160.00	65.00	81.00	292.00	230.25

END CAP (LW) COLLAR TYPE



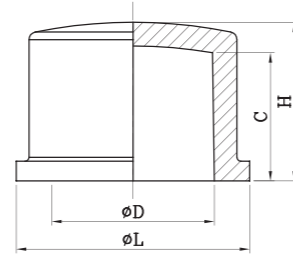
Size	ØD	C	H	ØL
63mm	63.00	34.00	41.50	72.00
75mm	75.00	44.20	52.00	86.00
90mm	90.00	51.20	60.30	101.50
110mm	110.00	55.00	66.00	122.50

END CAP (HEAVY - ISI)



Size	ØD	C	H	ØL
20mm	20.00	16.20	20.05	29.50
25mm	25.00	19.20	24.00	34.00
32mm	32.00	22.20	28.20	42.00
40mm	40.00	26.20	33.50	50.00
50mm	50.00	31.20	38.00	67.00
63mm	63.00	38.20	48.50	77.00
75mm	75.00	44.20	54.20	88.30
90mm	90.00	51.20	63.50	105.20
110mm	110.00	61.20	71.30	126.10

NOTE: 20 to 40mm 10Kg. & 50 to 110mm 6Kg. (ISI)

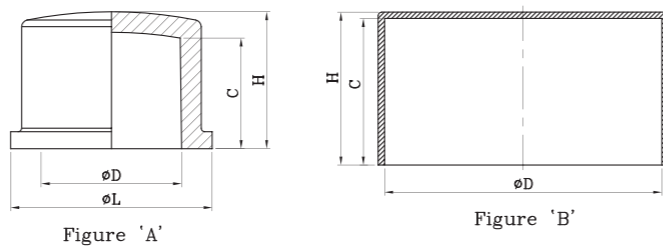


END CAP (HY)



Figure 'A' Figure 'B'

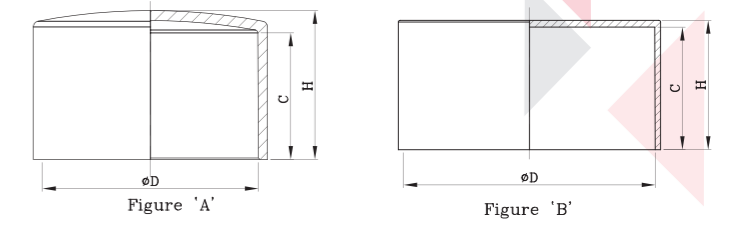
Size	ØD	C	H	ØL	Figure
140mm	140.00	68.50	75.50	156.00	A
160mm	160.00	86.20	93.50	179.50	A
200mm	200.00	112.20	121.00	221.00	A
225mm	225.00	119.20	124.00	N.A	B
250mm	250.00	131.20	137.00	274.75	A



END CAP (LW) WITHOUT COLLAR



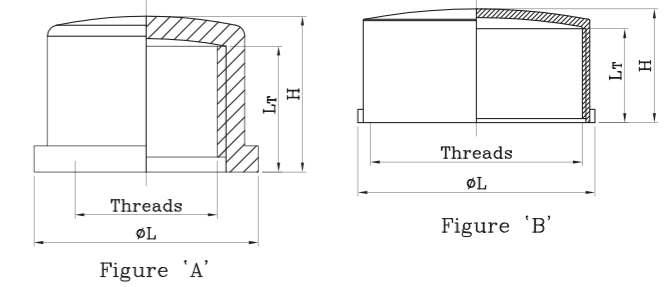
Size	ØD	C	H	Figure
75mm	75.00	44.20	52.00	A
90mm	90.00	48.50	59.00	A
110mm	110.00	58.00	66.00	A
125mm	125.00	69.20	75.50	A
140mm	140.00	68.50	72.30	B
160mm	160.00	86.20	104.60	A
180mm	180.00	91.20	100.15	B
200mm	200.00	106.20	120.00	A



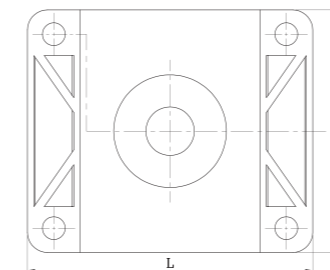
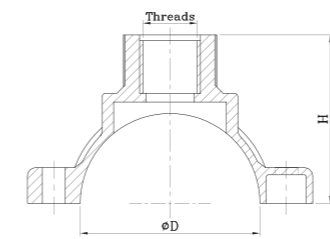
THD. END CAP



Size	Threads	L _T	H	ØL	Figure
20mm	1/2" (14-TPI)	16.80	20.80	29.95	A
25mm	3/4" (14-TPI)	19.00	24.60	37.25	A
32mm	1" (11-TPI)	21.40	28.00	44.75	A
40mm	1 1/4" (11-TPI)	22.30	31.50	58.25	A
50mm	1 1/2" (11-TPI)	25.80	34.50	65.55	A
63mm	2" (11-TPI)	28.60	40.00	77.90	A
75mm	2 1/2" (11-TPI)	35.00	47.00	94.10	A
90mm	3" (11-TPI)	42.00	54.00	110.25	A
110mm	4" (11-TPI)	42.50	54.00	139.45	A
140mm	5" (11-TPI)	68.50	82.20	156.00	A
160mm	6" (11-TPI)	71.00	86.00	181.00	B



SERVICE SADDLE

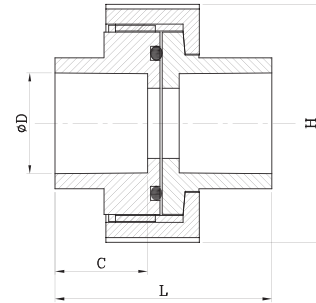


Size	ØD	H	L	W	Threads
40x20mm	40.00	41.00	80.00	59.50	1/2" (14-TPI)
40x25mm	40.00	43.50	80.00	59.50	3/4" (14-TPI)
50x20mm	50.00	48.00	92.00	75.00	1/2" (14-TPI)
50x25mm	50.00	49.00	92.00	75.00	3/4" (14-TPI)
63x20mm	63.00	59.00	100.00	85.00	1/2" (14-TPI)
63x25mm	63.00	59.00	100.00	85.00	3/4" (14-TPI)
63x32mm	63.00	59.00	100.00	85.00	1" (11-TPI)
75x20mm	75.00	61.00	114.00	92.00	1/2" (14-TPI)
75x25mm	75.00	62.00	114.00	92.00	3/4" (14-TPI)
75x32mm	75.00	62.50	114.00	92.00	1" (11-TPI)
90x20mm	90.00	71.00	132.00	94.50	1/2" (14-TPI)
90x25mm	90.00	71.00	132.00	94.50	3/4" (14-TPI)
90x32mm	90.00	72.00	132.00	94.50	1" (11-TPI)
110x20mm	110.00	82.00	154.00	98.00	1/2" (14-TPI)
110x25mm	110.00	82.00	154.00	98.00	3/4" (14-TPI)
110x32mm	110.00	82.00	154.00	98.00	1" (11-TPI)
140x20mm	140.00	95.00	188.00	104.00	1/2" (14-TPI)
140x25mm	140.00	96.00	188.00	104.00	3/4" (14-TPI)
140x32mm	140.00	97.50	188.00	104.00	1" (11-TPI)
140x40mm	140.00	98.50	188.00	104.00	1 1/4" (11-TPI)
140x50mm	140.00	99.50	188.00	104.00	1 1/2" (11-TPI)
140x63mm	140.00	103.00	188.00	104.00	2" (11-TPI)
160x20mm	160.00	108.00	210.00	108.00	1/2" (14-TPI)
160x25mm	160.00	107.00	210.00	108.00	3/4" (14-TPI)
160x32mm	160.00	109.00	210.00	108.00	1" (11-TPI)
160x40mm	160.00	108.50	210.00	108.00	1 1/4" (11-TPI)
160x50mm	160.00	109.00	210.00	108.00	1 1/2" (11-TPI)
160x63mm	160.00	114.00	210.00	108.00	2" (11-TPI)
200x20mm	200.00	130.00	250.00	135.00	1/2" (14-TPI)
200x25mm	200.00	130.00	250.00	135.00	3/4" (14-TPI)
200x32mm	200.00	130.00	250.00	135.00	1" (11-TPI)
200x40mm	200.00	130.00	250.00	135.00	1 1/4" (11-TPI)
200x50mm	200.00	130.00	250.00	135.00	1 1/2" (11-TPI)
200x63mm	200.00	135.00	250.00	135.00	2" (11-TPI)

UNION



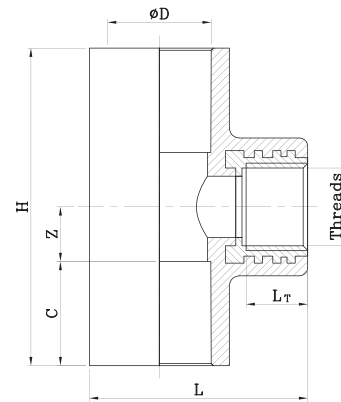
Size	ØD	C	H	L
20mm	20.00	16.20	51.00	46.45
25mm	25.00	19.20	58.00	51.00
32mm	32.00	22.20	67.60	57.70



RED. FEMALE THREADED TEE (BRASS INSERT)



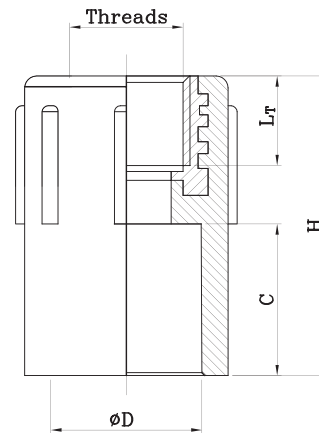
Size	ØD	C	Z	Threads	L _T	H	L
25mm x 1/2"	25.30	25.40	13.30	1/2" (14-TPI)	15.00	77.40	53.20



RED. FEMALE THREADED ADAPTOR (BRASS INSERT)



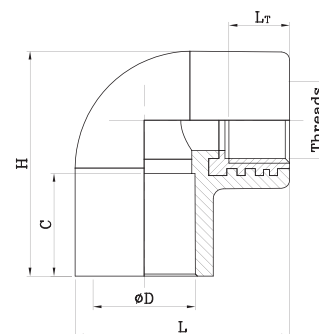
Size	ØD	C	Threads	L _T	H
25mm x 1/2"	25.00	25.40	1/2" (14-TPI)	15.00	50.20



RED. FEMALE THREADED ELBOW (BRASS INSERT)



Size	ØD	C	Threads	L _T	H	L
25mm x 1/2"	25.00	25.40	1/2" (14-TPI)	15.00	55.60	53.00



▶ FEATURES & BENEFITS



- ▶ Light weight, easy to transport, store, handle and install. Saves labour.
- ▶ Smooth bore ensures higher flow compared to G.I pipes and fittings of the same size. No clogging. Saves operational cost.
- ▶ Solvent cement joint, therefore quick installation.
- ▶ Corrosion resistant, UPVC is rustproof material, therefore bore diameter remains constant, ensuring constant flow over a lifetime.
- ▶ Long working life (if operated under normal/recommended working conditions).
- ▶ Cost effective. Added value for your money.

▶ APPLICATIONS



- ▶ **In agriculture**
 - Water supply and distribution schemes
 - Irrigation
- ▶ **Others**
 - Drinking water supply and distribution
 - Cable ducting
 - Ventilation pipelines
 - Slurry lines

Extensively used in:



AGRICULTURE

▶ JOINTING METHODS



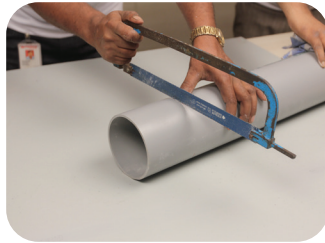
PROCESS:

- ▶ Solvent Joint

▶ DOs

CUTTING

It is imperative to mark the pipe from all sides so that pipe is cut with the help of a Hand Saw. It should be a right angle cut from all the sides. The cut piece should not be with burr on edges.



DEBURRING AND RIDGE REMOVAL

Remove all the burrs and ridges accumulated on the inner as well as the outer edges of the pipe with the help of a deburring knife, file or abrasive paper.



CLEANING

Thoroughly clean the pipe with dry cloth where the solvent cement is going to be applied, to avoid dust, dirt, oil, moisture and other foreign material during the installation process.



▶ DON'Ts

CUTTING

Do not cut/slant unevenly.



DEBURRING AND RIDGE REMOVAL

Do not proceed with the installation of pipe without deburring.



CLEANING

Do not join the pipes without cleaning the pipe ends.



▶ DOs

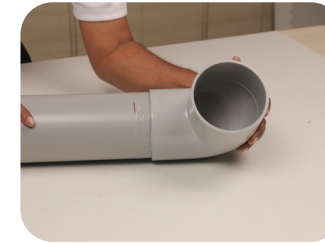
CHAMFERING

After cutting, the pipe needs to be chamfered from the outer sides. It is advisable to provide approximately 2 mm wide, 15° chamfer on spigot end.



DRYFIT TEST

Before applying solvent cement, insert the pipe end into the socket of the next pipe or fitting to check that interference occurs at about 1/3 to 2/3 of the socket depth.



APPLICATION OF SOLVENT CEMENT

Mark the pipe length to be inserted for jointing. Apply a liberal coat of solvent cement with the help of the brush on the marked surface.



JOINTING

Push the pipe inside the fitting so that it goes inside it equally from all the sides. Wipe off excess solvent cement that comes out from all the edges. Hold the joint for to 2 minutes so that the jointing is perfect.



INSTALLATION AND COMMISSIONING

- Pipe line should be installed in proper alignment and along with necessary clamps.
- Pressure testing to be done before concealing work.
- Pressure testing may be carried out after a curing period of 24 hrs.

▶ DON'Ts

CHAMFERING

Do not proceed with installation of pipe without chamfering.

DRYFIT TEST

Do not apply solvent cement without dryfit test.

APPLICATION OF SOLVENT CEMENT

Do not apply excess solvent cement on the pipe and do not use solvent cement by hand.



JOINTING

Do not use a hammer or half push the pipe.

FOR THREADED JOINTS

Don't over tighten with pipe wrench.



INSTALLATION AND COMMISSIONING

- Avoid loose joints and misalignments.
- Pressure testing should not be done before 24 hrs of curing.