



الراجحي AL-RAJHI

FITTINGS



UPVC FITTINGS PROPERTIES

SCHEDULE 40 & 80

PROPERTY	VALUE	REFERENCE
Specific Gravity \pm 0.02	1.44	ASTM D-792
Tensile Strength psi @ 73°F.	7100	ASTM D-638
Modulus of Elasticity in tension, psi @ 73°F.	4,000,000	ASTM D-638
Flexural Strength (psi)	12000-14000	ASTM D-790
Izod Impact, Ft. lbs/in, Notch @ 73°F.	0.65	ASTM D-256
Heat Deflection °F @ 264 psi	160	ASTM D-648
Heat Resistance Deg. F.	140	
Thermal Conductivity, BTU/hr/sq.ft/Deg. F/in	1.2	ASTM D-177
Co-efficient of Expansion, in/in, Deg. Fx10 ⁻⁵	3	ASTM D-696
Water Absorption, % 24hrs @ 73°F	0.05	ASTM D-570
Cell Classification	12454B	ASTM D-1784
Colour Code	White (Sch. 40) Dark Grey (Sch. 80)	

Joining

Socket type jointing. For solvent cement use.

Operating Temperature

Maximum service temperature for UPVC schedule 40 and UPVC schedule 80 fittings is 140 Deg. F

Maximum service temperature for CPVC schedule 80 fittings is 210 Deg. F.

Chemical Properties

UPVC and CPVC fittings are resistant to corrosion by ground water, weathering and many chemicals. Further information on chemical resistance is available on request.



CPVC FITTINGS PROPERTIES

SCHEDULE 80

PROPERTY	TEST CONDITION	VALUE	REFERENCE
Specific Gravity	73 °F	1.55	ASTM D-792
Rockwell Hardness	73 °F	117	ASTM D-785
Heat Deflection @ 264 psi	73 °F	214	ASTM D-748
Tensile Strenght (psi)	73 °F	8200	ASTM D-738
Tensile Modulus (psi)	73 °F	430.000	ASTM D-738
Flexural Strenght (psi)	73 °F	15.000	ASTM D-790
Flexural Modulus (psi)	73 °F	438.000	ASTM D-790
Izod Impact, Ft. lbs/In. Notch	73 °F	1.6	ASTM D-756
Water Absorption (24 hrs)	73 °F	0.07+	ASTM D-570
Coefficient of Expansion (F), in./in. x 10 ⁻⁵		3.7	ASTM D-696
Flammability	.062"	V-0	UL-94
Cell Designation		23557B	ASTM D-1784

Jointing

Socket type jointing. For solvent cement use.

Operating Temperature

Maximum service temperature for UPVC schedule 40 and UPVC schedule 80 fittings is 140 Deg. F

Maximum service temperature for CPVC schedule 80 fittings is 210 Deg. F.

Chemical Properties

UPVC and CPVC fittings are resistant to corrosion by ground water, weathering and many chemicals. Further information on chemical resistance is available on request.

PRESSURE RATINGS

Water pressure rating (max) for UPVC schedule 40 fittings at 73 Deg. F.

PIPE SIZE inch	SOCKET FITTINGS (psi)
1/2	600
3/4	480
1	450
1 1/4	370
1 1/2	330
2	280
3	260
4	220
6	180

Water pressure rating (max) for UPVC schedule 80 fittings at 73 Deg. F.

PIPE SIZE inch	SOCKET FITTINGS (psi)
1/2	850
3/4	690
1	630
1 1/4	520
1 1/2	470
2	400

Water pressure rating (max) for CPVC schedule 80 fittings at 73 Deg. F.

PIPE SIZE inch	SOCKET FITTINGS (psi)	THREADED FITTINGS (psi)
1/2	850	420
3/4	690	340
1	630	320
1 1/4	520	260
1 1/2	470	240
2	400	200

ELBOW PVC



Dimensions mm					KG/PCS
D	H	W	L	A°	
50 mm	92.5	61	28.00	90°	0.111
75 mm	130	88	41.00	87.5°	0.254
110 mm	178	126	51.00	87.5°	0.655
160 mm	252	180	71.00	87.5°	1.465



BS / EN STANDARD

BSEN 1329 / 1401

ELBOW 45°



Nominal Pipe Size inch	C mm	C1 mm	M mm
1 1/2 (43mm)	37.4	28	48
2 (56mm)	42.7	31	61.2
3 (82mm)	76.7	45	94
4 (110mm)	75.7	50.5	119.5
6 (160mm)	122.3	77.5	172

TEE 90°



Nominal Pipe Size inch	C mm	C1 mm	M mm
1 1/2	45.12	22.4	50
2 (56mm)	71.5	31	61.2
3 (82mm)	106.1	45	94
4 (110mm)	131.9	50.5	119.5
6 (160mm)	191.4	77.5	172

WYE 45°



Nominal Pipe Size inch	C mm	C1 mm	D mm	E mm
4 (110 mm)	264	119.5	186.5	136
6 (160 mm)	395	172	272.1	194.6



REDUCING BUSHING



**P-TRAP
4" (110mm)**



**GULLY TRAP
4" x 3" x 1 1/2"**



ACCESS CAP

Under Ground - Orange Brown (BSEN - 1401)
Cement & Soil - Cement Grey (BSEN - 1329)

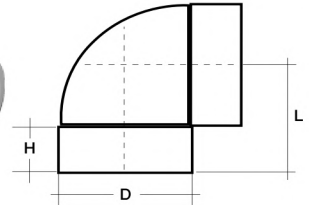
ASTM D-2466 SCHEDULE 40



ASTM STANDARD

AMERICAN SOCIETY FOR TESTING & MATERIALS

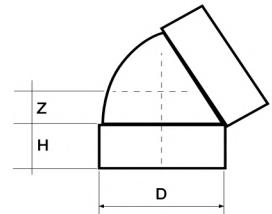
Size inch	D mm	L mm	H mm
1 1/2	56.7	56.37	29.36
2	69.22	64.29	39.95
3	99.7	94.4	48.13
4	126.8	110.0	51.30
6	180.5	168.5	80.0



BEND 90°

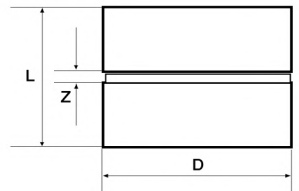
Size inch	D mm	H mm	Z mm
1 1/2	56.5	32	11
2	69	33	17
3	99.7	48.13	23.53
4	126.8	57.30	25.65
6	180.5	80.00	41.00

BEND 45°



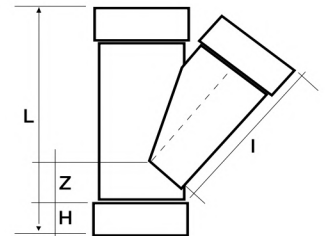
Size inch	D mm	L mm	Z mm
1 1/2	56.7	61.91	3.18
2	69.22	65.07	3.18
3	101.5	100.0	4.76
4	127.8	106.5	4.76
6	184.1	157.4	5.00

COUPLING



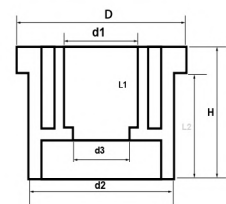
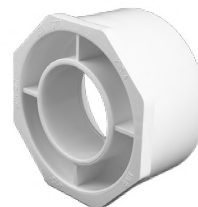
Size inch	D mm	L mm	I mm	H mm	Z mm
4	126.8	275.6	193.5	51.3	30
6	180.5	410.20	285.52	85.0	40

WYE eq. 45°



Size	D	d1	d2	d3	H	L1	L2
4 x 2	125.70	114.30	60.48	55.0	58.50	30.0	52.8
6 x 4	178.40	168.20	114.76	105.0	81.0	56.80	75.40

REDUCER





ASTM D-2466 SCHEDULE 40

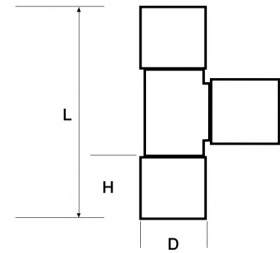


ASTM STANDARD

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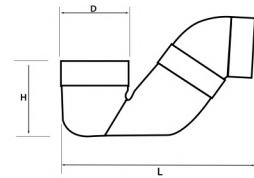
Size inch	D mm	L mm	H mm
1 1/2	59.0	121.7	36.0
2	73.20	139.0	38.0
3	99.7	94.4	48.13
4	126.8	220.0	51.3
6	180.5	337.0	80.0

TEE . 90°



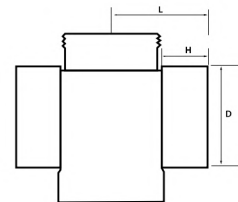
ELBOW 45° + SYPHON + P-TRAP

Size inch	D mm	L mm	H mm
2	68.50	184.0	75.0
3	99.64	267.0	124.0
4	126.80	333.0	151.0



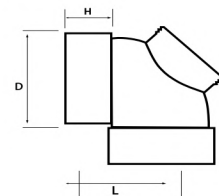
TEE WITH DOOR

Size inch	D mm	L mm	H mm
4	126.80	110.50	57



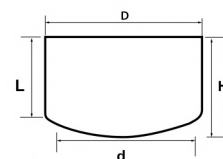
BEND 90° WITH DOOR

Size inch	D mm	L mm	Z mm
4	126.80	108.90	57



END CAP

Size inch	D mm	d mm	L mm	H mm
4	126.80	114.76	60	79.5



ASTM D-2467 SCHEDULE 80

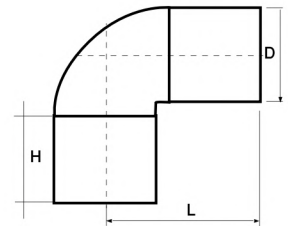
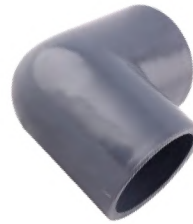


ASTM STANDARD

AMERICAN SOCIETY FOR TESTING & MATERIALS

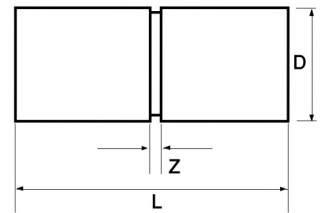
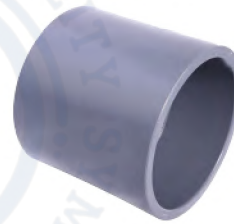
Size inch	D mm	L mm	H mm
1/2	29.85	36.52	23.02
3/4	35.54	41.27	26.19
1	43.56	48.42	29.77
1 1/4	52.93	56.36	32.94

ELBOW 90°



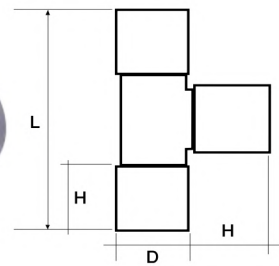
Size inch	D mm	L mm	Z mm
1/2	29.85	45.21	3.18
3/4	35.54	55.56	3.18
1	43.56	62.71	3.18
1 1/4	52.93	69.06	3.18

COUPLING



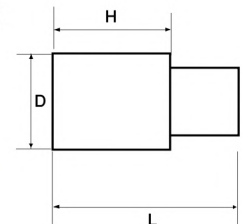
Size inch	D mm	L mm	H mm
1/2	29.85	73.03	23.02
3/4	35.54	82.55	26.19
1	43.56	96.84	29.77

TEE eq. 90°



Size inch	D mm	L mm	Z mm
1/2	29.85	47.0	23.02
3/4	35.54	52.5	26.19
1	43.56	61.5	29.72

MALE ADAPTOR





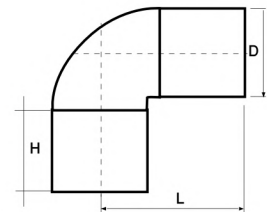
ASTM STANDARD

AMERICAN SOCIETY FOR TESTING & MATERIALS

ASTM F-439 SCHEDULE 80 (CPVC)

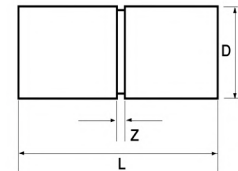
Size inch	D mm	L mm	H mm
1/2	29.85	36.52	23.02
3/4	35.54	41.27	26.19
1	43.56	48.42	29.77
1 1/4	52.93	56.36	32.94

ELBOW 90°



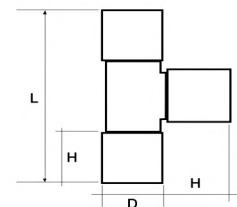
Size inch	D mm	L mm	Z mm
1/2	29.55	45.21	3.18
3/4	35.54	55.56	3.18
1	43.56	62.71	3.18
1 1/4	52.93	69.06	3.18

COUPLING



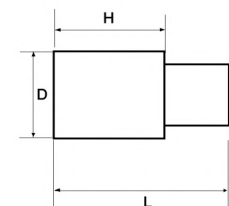
Size inch	D mm	L mm	H mm
1/2	29.85	73.03	23.02
3/4	35.54	82.55	26.19
1	43.56	96.84	29.77

TEE eq. 90°



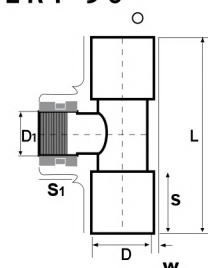
Size inch	D mm	L mm	Z mm
1/2	29.85	47.0	23.02
3/4	35.54	52.5	26.19
1	43.56	61.5	29.77

MALE ADAPTOR



Size inch	D mm	D1 mm	S mm	S1 mm	L mm	w mm
1/2 X 1/2	21.24	20.10	21.05	14.00	75	3.73
3/4 X 1/2	26.63	20.10	21.05	14.00	80	3.91

TEE BRASS INSERT 90





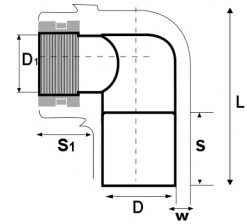
ASTM STANDARD

AMERICAN SOCIETY FOR TESTING & MATERIALS

ASTM F-439 SCHEDULE 80 (CPVC)

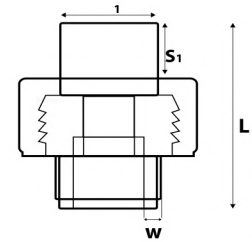
Size inch	D mm	D ₁ mm	S mm	S ₁ mm	L mm	W mm
1/2 X 1/2	21.50	18.50	24.00	16.50	60.00	3.73
3/4 X 3/4	26.87	24.40	25.00	17.50	70.00	3.91
1 x 1	33.50	30.50	28.00	20.50	80.00	4.55

ELBOW BRASS INSERT 90°



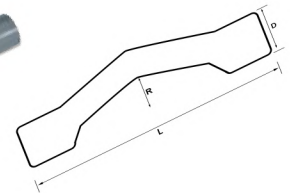
Size inch	D ₁ mm	S ₁ mm	W mm	L mm
3/4 X 3/4	26.87	25.60	4.00	60
1 x 1	33.66	28.60	4.55	68

UNION



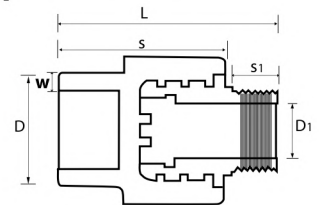
Size inch	D mm	L mm	R mm
3/4x3/4	26.79	163.0	8.0
1x1	33.59	173.0	10.0

CROSS OVER



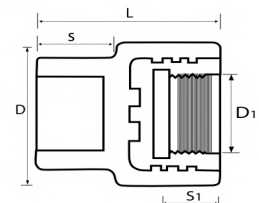
Size inch	D mm	D ₁ mm	S mm	S ₁ mm	L mm	W mm
1x1	33.30	33.10	26.60	17.50	51	4.65
3/4 x 3/4	26.60	25.30	20.10	16.50	50.50	4.35
1/2 x 1/2	21.30	21.54	18.25	15.50	43.50	4.00

MALE ADAPTER



Size inch	D mm	D ₁ mm	S mm	S ₁ mm	L mm	W mm
1/2 X 1/2	21.54	18.65	23.80	16.26	40	3.95
3/4 X 3/4	26.87	18.65	25.20	16.34	45	4.15

FEMALE ADAPTER





DIN 8063 PN 10

ELBOW WITH DOOR PVC



Dimensions mm					KG/PCS
D	H	W	A°		
75 mm	130	88	41.00	87.5°	0.300
110 mm	178	126	51.00	87.5°	0.723
160 mm	252	180	71.00	87.5°	1.550
160 mm	252	180	71.00	87.5°	1.465

ELBOW PVC 45°



Dimensions mm					KG/PCS
D	H	W	L	A°	
50 mm	98.7	61	28.00	45°	0.088
75 mm	136.8	88	41.00	45°	0.200
110 mm	181	126	51.00	45°	0.500
160 mm	260	180	71.00	45°	1.122

SOCKET PVC



Dimensions mm					KG/PCS
D	H	W	L	A°	
50 mm	60	61	28.00	N/A	0.060
75 mm	87	88	41.00	N/A	0.142
110 mm	108	126	51.00	N/A	0.332
160 mm	150	180	71.00	N/A	0.758

REDUCER SOCKET PVC



Dimensions mm					KG/PCS
D	H	W	L	A°	
110/50 mm	105	110.1	28.00	N/A	0.191
110/75 mm	117	110.1	41.00	N/A	0.223
160/110 mm	175	160.3	51.00	N/A	0.570

SOCKET WITH DOOR PVC



Dimensions mm					KG/PCS
D	H	W	L	A°	
50 mm	55	50.1	N/A	N/A	0.057
75 mm	72	75.1	N/A	N/A	0.136
110 mm	87	110.1	N/A	N/A	0.290
160 mm	120	160.3	N/A	N/A	0.509

TEE PVC



Dimensions mm					KG/PCS
D	H	W	A°		
50 mm	127	61	28.00	87.5°	0.161
75 mm	189	88	41.00	87.5°	0.400
110 mm	248	126	51.00	87.5°	0.958
160 mm	346	180	71.00	87.5°	2.162

THERMAL PPR

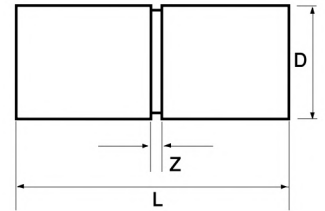
Size mm	D mm	L mm	Z mm
20	29.0	31.0	3.18
25	34.0	37.0	3.18
32	43.0	43.0	3.18
40	52.0	48.0	3.18
50	67.0	53.0	3.18

COUPLING



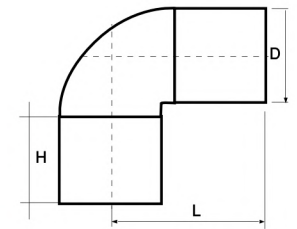
DIN STANDARD

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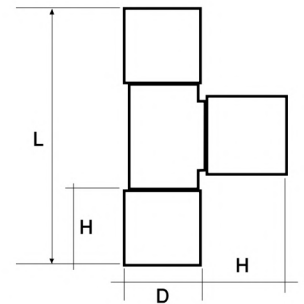
Size mm	D mm	L mm	H mm
20	29.0	40.0	23.02
25	34.0	46.0	26.19
32	43.0	56.0	29.77
40	52.0	67.0	32.94
50	67.0	83.0	

ELBOW 90°



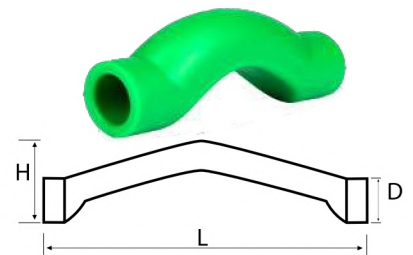
Size mm	D mm	L mm	H mm
20	29.0	51.0	40.0
25	34.0	58.0	46.0
32	43.0	69.0	56.0
40	52.0	82.0	67.0
50	67.0	99.0	83.0

TEE eq. 90°



Size mm	D mm	H mm	L mm
20	20	50.0	354.0
25	25	55.0	357.0
32	232	64.0	357.0

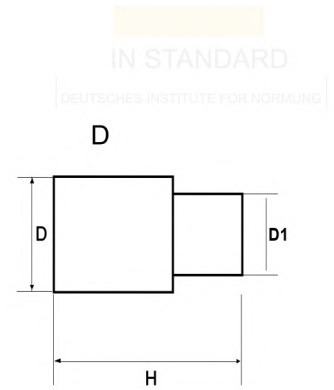
CROSS OVER





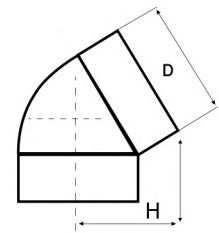
Size mm	D mm	H mm	D1 mm
25x20	34.0	36.50	29.0
32x20	32.0	43.0	29.0
40x25	40.0	48.0	34.0
50x32	50.0	55.0	43.0
50x40	52.0	55.0	50.0

REDUCER



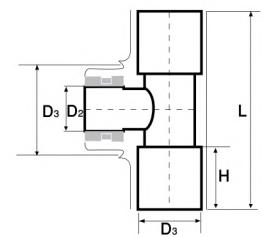
Size mm	D mm	H mm
20	29.0	44.5
25	34.0	50.5
32	43.0	60.0
40	52.0	70.6
50	67.0	86.6

ELBOW 45°



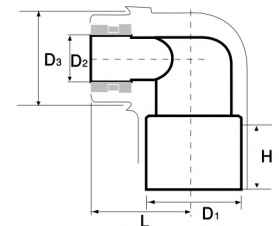
Size inch	D1 mm	D2 mm	D3 mm	H mm	L mm
1/2 X 1/2	30.45	0.5	38	22.45	78
3/4 X 1/2	36.1	0.5	38	22.95	80

TEE BRASS INSERT 90°



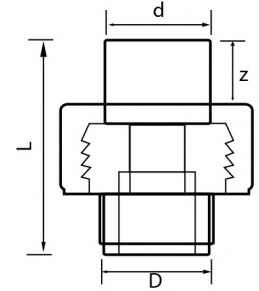
Size inch	D1 mm	D2 mm	D3 mm	H mm	L mm
1/2 X 1/2	30.45	0.5	38	22.45	28
3/4 X 1/2	36.1	0.5	38	22.95	33
1 X 1	43.50	0.5	40	30.45	42

ELBOW BRASS INSERT 90°



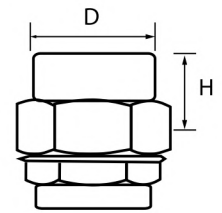
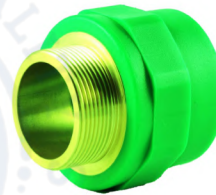
Size mm	d mm	mm	Z mm	L mm
20	19.00	29.00	14.50	48.00
25	24.00	34.00	16.00	55.00
32	31.00	43.00	18.00	72.00
40	39.00	52.00	20.00	75.00
50	49.00	67.00	23.50	86.00

UNION PPR



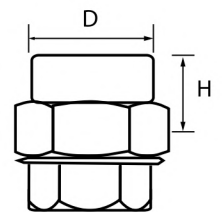
Size mm	D mm	H mm
20	27.00	22.50
25	33.00	26.00
32	41.00	28.00
40	51.00	36.50
50	65.00	43.00

UNION MALE ADAPTER



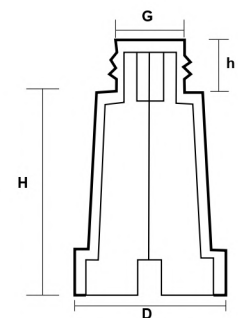
Size mm	D mm	H mm
20	27.0	22.50
25	33.0	26.0
32	41.0	28.0
40	51.0	36.0
50	65.0	43.0

UNION FEMALE THREADED



Size inch	G inch	D mm	h mm	H mm
1/2"	1/2"	30.0	13.0	52.0

TEST PLUG

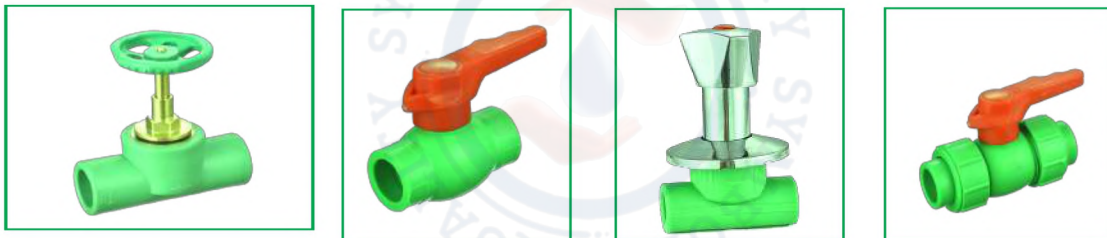




THERMAL PPR



STOP VALVES



END PLUG

