



Plastic Pipes & Fittings Factory
Yousif Khalid Al-Adasani Ent.



POLYBUTYLENE
PIPING SYSTEM

POLYBUTYLENE (PB) PIPING SYSTEM

MATERIAL :

Polybutylene is a polymer of Hydrocarbon Butylene (C₄ H₈)

MANUFACTURING STANDARDS :

DIN 16968, DIN 16969, DIN 16831, DIN EN ISO/ BS EN ISO 15876

MAJOR ADVANTAGES OF AL-ADASANI PB PIPES

- High chemical resistance
- Internal/ External corrosion resistance
- Non-toxic and resistant to microbiological attack
- Low friction loss
- Light weight and easy installation
- Has got good insulating properties (Low thermal conductivity)

APPLICATION FIELD

- Drinking water systems
- Service Hot & Cold water systems
- Industrial projects
- Agricultural projects
- Central heating system
- House Connections

GENERAL PROPERTIES OF PB MATERIAL

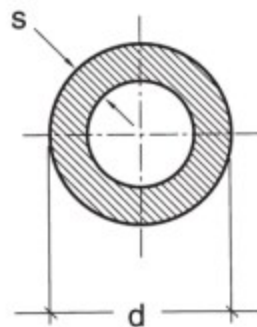
PROPERTIES	PB	UNIT
Density	0.93	g/cm ³
Mean Coefficient of Linear Thermal Expansion	1.3 × 10 ⁻⁴	K ⁻¹
Thermal Conductivity	0.22	W/ K. M
Modulus of Elasticity	350	N/mm ²
Tenstile Strength	20	N/mm ²
Heat Reversion	< 2%	-
Minimum required strength (MRS)	12.5	N/mm ²
Surface Resistance	>10 ¹²	Ω

* Minimum required strength, MRS (i.e. the resistance to internal hydrostatic pressure) in water at 20°C for 50 years. (ref. DIN 16969 St.)

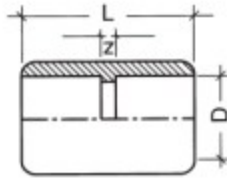
PB PIPES :

DIN 16968, DIN 16969, DIN EN ISO/ BS EN ISO 15876

NOMINAL SIZE mm	PIPE SERIES , S		
	5	4	3.2
	SDR		
	11	9	7.4
	PN 16	PN 20	PN 25
	WALL THICKNESS (MM)		
20	1.9	2.3	2.8
25	2.3	2.8	3.5
32	2.9	3.6	4.4
40	3.7	4.5	
50	4.6	5.6	
63	5.8	7.1	
75	6.8	8.4	
90	8.2	10.1	
110	10	12.3	
160	14.6	17.9	

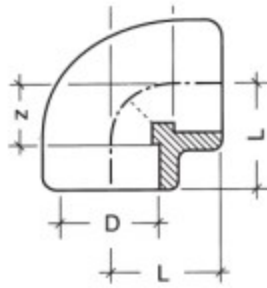
PN : Nominal Pressure in bar**d : outside diameter
s : wall thickness
measurements in mm**

AL-ADASANI PB PIPES FITTINGS
PN : 25 BARS - DIN16831 - DIN EN ISO/ BS EN ISO 15876



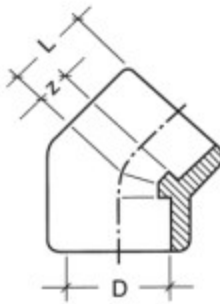
**WELDING SOCKET
(COPB)**

D mm	L mm	Z mm
20	32	3
25	35	3
32	43	3
40	43	3
50	52	4
63	61	6
75	73	6
90	73	6
110	84	8



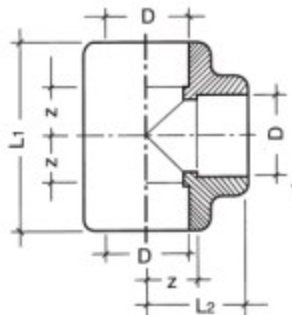
**WELDING ELBOW
(BEPB 90°)**

D mm	L mm	Z mm
20	29	14
25	33	17
32	40	21
40	47	26
50	51	28
63	60	32
75	59	28
90	79	46
110	94	58



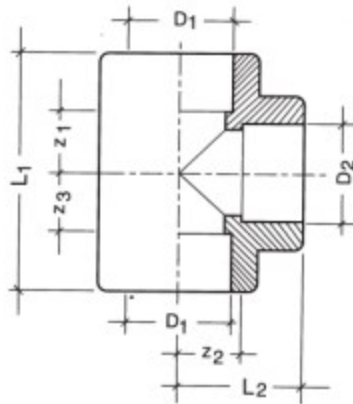
**WELDING ELBOW
(BEPB 45°)**

D mm	L mm	Z mm
20	22	4
25	26	7
32	30	9
40	34	12
50	34	12
63	42	14
75	46	16
90	65	35
110	74	42



**WELDING TEE
(TEPB)**

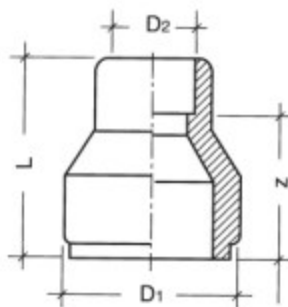
D mm	L ₁ mm	L ₂ mm	Z mm
20	54	27	12
25	63	31	13
32	75	38	16
40	86	44	21
50	105	52	26
63	122	62	33
75	139	70	39
90	159	82	49
110	179	94	59



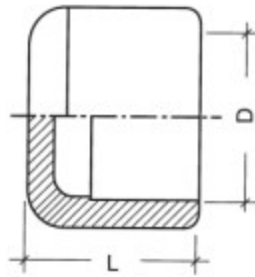
REDUCED WELDING TEE (TRPB)

D_1 mm	D_2 mm	L_1 mm	L_2 mm	Z_1 mm	Z_2 mm	Z_3 mm
25	20	62	31	13	13	13
32	20	75	38	17	22	17
32	25	75	38	17	20	17
40	20	86.5	40.0	21.4	21.0	21.4
40	25	86.5	38.25	21.4	21.25	21.4
40	32	86	44	21	25	21
50	20	104	42.8	25.5	26.8	25.3
50	25	105	52	33	35	33
50	32	105	52	33	33	33
63	25	126	49.5	34	31.5	34
63	32	126	55.5	34	36.4	34
63	40	126	54.5	34	31.5	34
63	50	126	57.5	34	32.5	34
75	25	144	58	39.5	38.5	39.5
75	32	144	60	39.5	38	39.5
75	40	145	59.5	40.0	35.0	40.0
75	50	144	62	39.5	35.0	39.5
75	63	144	65	39.5	34.5	39.5

REDUCED WELDING SOCKET (REPB)

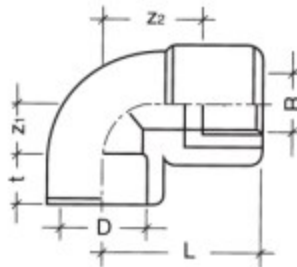


D_1 mm	D_2 mm	L mm	Z mm
25	20	39	23
32	20	42	26
32	25	43	26
40	20	50	30
40	25	50	30
40	32	50	30
50	20	55	35
50	25	55	35
50	32	55	37
50	40	54	34
63	25	65	48
63	32	65	45
63	40	65	44
63	50	72	45
75	32	65	45
75	40	67	45
75	50	68	43
75	63	72	44
90	40	65	41
90	50	76	51
90	63	79	51
90	75	82	52
110	63	88	60
110	75	92	60
110	90	95	63



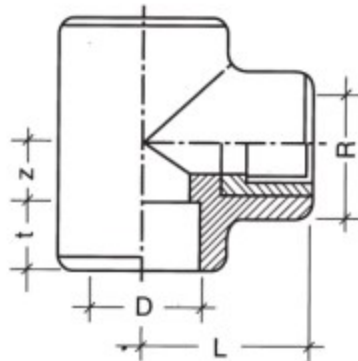
**WELDING END CAP
(EPPB)**

D mm	L mm
20	25
25	28
32	33
40	38
50	46
63	55
75	58
90	68



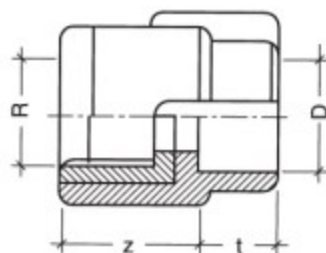
**WELDING ELBOW ADAPTOR,
FEMALE THREAD (ABPB)**

D mm	R Inch	T mm	Z ₁ mm	Z ₂ mm	L mm
20	1/2"	18	11	20	35
20	3/4"	18	17	24	39
25	1/2"	20	15	24	39
25	3/4"	20	15	24	39
32	3/4"	18	12	32	66
32	1"	18	12	32	66



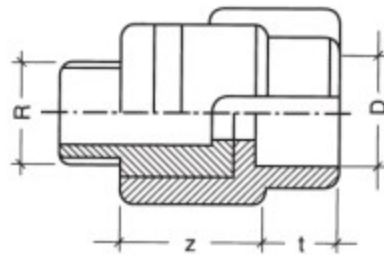
**WELDING TEE ADAPTOR
FEMALE THREAD (ATPB)**

D mm	R Inch	T mm	Z mm	L mm
20	1/2"	16	11	36
20	3/4"	18	14	40
25	1/2"	16	15	44
25	3/4"	18	14	40
32	1"	18	12	65



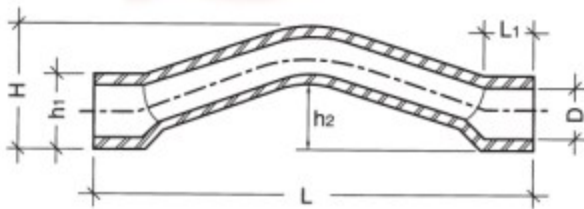
**FEMALE ADAPTOR
(FAPB)**

D mm	R Inch	T mm	Z mm
20	1/2"	16	25
20	3/4"	18	25
25	1/2"	16	26
25	3/4"	18	25
32	3/4"	20	40
32	1"	20	40
40	1 1/4"	20	46
50	1 1/2"	24	46
63	2"	28	48



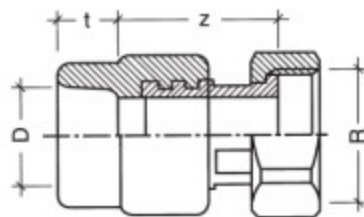
**MALE ADAPTOR
(MAPB)**

D mm	R Inch	T mm	Z mm
20	1/2"	16	25
20	3/4"	18	25
25	1/2"	16	26
25	3/4"	18	25
32	3/4"	20	37
32	1"	20	37
40	1 1/4"	20	45
50	1 1/2"	24	42
63	2"	28	52
75	2 1/2"	29	50



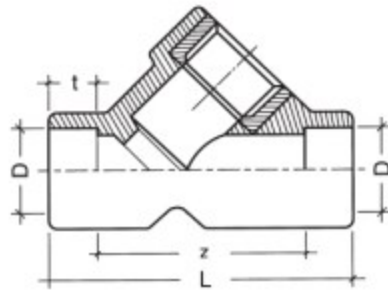
**STEP-OVER BEND
(SOPB)**

D mm	H mm	H ₁ mm	H ₂ mm	L ₁ mm	L mm
20	46	28.2	24	15.5	160
25	58.0	35	32	22	201
32	66	43	34.5	22.5	172
40	82	53	43	21.5	240



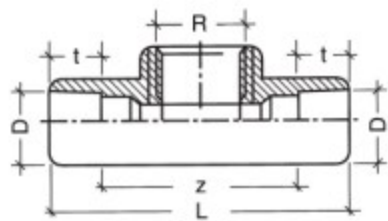
**WELDING UNION PB TO BRASS
(UBPB)**

D mm	R Inch	T mm	Z mm
20	3/4"	16	44
25	3/4"	16	44
32	1"	19	45
40	1 1/4"	21	48
50	1 1/2"	24	54
63	2"	30	60



**SLANTED SEAT VALVE
(GVPB)**

D mm	T mm	Z mm	L mm
25	16	86	118
32	18	82	118



**CONCEALED / SHUT OFF VALVE
(CVPB)**

D mm	R Inch	T mm	Z mm	L mm
20	3/4"	15	66	96
25	3/4"	16	64	96
32	1"	18	80	116
40	1"	21	73	115