

PEARL PLASTIC INDUSTRY

BRAND: PPI (UPVC PIPING SYSTEMS)

UPVC PIPES TECHNICAL SPECIFICATION SHEET

Engineering Data, Dimensional Standards, Pressure Ratings & Installation Guidelines

Manufacturer:	Pearl Plastic Industry (PPI)
Product Family:	Unplasticized Polyvinyl Chloride (uPVC)
Standards Compliance:	BSS 3505 / BSS 3506 / PS 3051 / DIN 8061-62
Size Range:	01" (32mm) to 06" (160mm) Diameter
Pressure Classes:	Light (Cream) / Medium (Double) / Heavy (Triple)
Official Portal:	https://utcs.pk
Factory Location:	Samundri Road, Faisalabad, Pakistan
Technical Desk:	041-2568056 / 0300-0471963
Issue Date:	August 2026 (Official Spec Sheet)

1. MATERIAL & PHYSICAL PROPERTIES OF PPI UPVC

Property Description	Test Standard	Unit	Value / Rating
Specific Gravity (Density)	ISO 1183 / ASTM D792	g/cm³	1.40 – 1.45
Tensile Strength at Yield	ISO 527 / ASTM D638	MPa (N/mm²)	≥ 45.0 MPa
Modulus of Elasticity	ISO 527 / ASTM D638	MPa	≥ 3,000 MPa
Vicat Softening Temperature	ISO 306 / ASTM D1525	°C	≥ 80.0 °C
Coefficient of Linear Expansion	ASTM D696	mm / m / °C	0.08 mm/m/°C
Thermal Conductivity	DIN 52612	W / m · K	0.15 W/m·K
Water Absorption	ISO 62	mg / cm²	4.0 mg/cm²
Flammability Rating	UL94 / BS 476	-	Self-Extinguishing (Class 1)
Hazen-Williams Roughness (C)	Hydraulic Design	-	C = 150 (Ultra Smooth)

2. MASTER DIMENSIONAL & PRESSURE CLASS MATRIX

Nominal Size	Outer Dia (OD)	PPI Pipe Grade	Wall Thickness (mm)	Working Pressure	Standard Length	Primary Application
01" (25 mm)	32.0 mm	Standard	1.5 – 1.8 mm	6 Bar (87 PSI)	10 / 13 ft	Electrical Conduit & Plumbing
1.1/4" (32 mm)	40.0 mm	Standard / Filter	1.6 – 2.0 mm	6 Bar (87 PSI)	10 / 13 ft	Conduit & Tube Well Strainer
1.1/2" (40 mm)	50.0 mm	Standard / Filter	1.8 – 2.2 mm	6 Bar (87 PSI)	10 / 13 ft	Conduit, Drainage & Filter
1.3/4" (45 mm)	56.0 mm	Standard / Filter	1.8 – 2.2 mm	6 Bar (87 PSI)	10 / 13 ft	Drainage & Agriculture
02" (50 mm)	60.0 mm	Cream Grade	2.0 – 2.5 mm	6 Bar (87 PSI)	10 / 13 ft	Soil & Waste Water (SWR)
03" (75 mm)	88.9 mm	Cream (Light)	2.2 – 2.6 mm	4 Bar (58 PSI)	10 / 13 ft	Rainwater & Vent Pipes
		Double (Medium)	3.0 – 3.5 mm	6 Bar (87 PSI)	10 / 13 ft	Soil, Waste & Underground
		Triple (Heavy)	4.2 – 4.8 mm	10 Bar (145 PSI)	10 / 13 ft	Heavy Pressure & Industrial
04" (110 mm)	114.3 mm	Cream (Light)	2.5 – 3.0 mm	4 Bar (58 PSI)	10 / 13 ft	Building Drainage & Stacks
		Double (Medium)	3.6 – 4.2 mm	6 Bar (87 PSI)	10 / 13 ft	Underground Sewerage & Waste
		Triple (Heavy)	5.2 – 6.0 mm	10 Bar (145 PSI)	10 / 13 ft	Municipal & High-Pressure Lines
05" (125 mm)	140.0 mm	Cream (Light)	3.0 – 3.5 mm	4 Bar (58 PSI)	10 / 13 ft	Commercial Drainage & Stacks
		Double (Medium)	4.5 – 5.2 mm	6 Bar (87 PSI)	10 / 13 ft	Sewer Main Lines
		Triple (Heavy)	6.5 – 7.4 mm	10 Bar (145 PSI)	10 / 13 ft	Industrial Effluent & Pressure

Nominal Size	Outer Dia (OD)	PPI Pipe Grade	Wall Thickness (mm)	Working Pressure	Standard Length	Primary Application
06" (160 mm)	168.3 mm	Cream (Light)	3.5 – 4.2 mm	4 Bar (58 PSI)	10 / 13 ft	Main Sewerage & Outfalls
		Double (Medium)	5.2 – 6.0 mm	6 Bar (87 PSI)	10 / 13 ft	Municipal Sewer Networks
		Triple (Heavy)	8.0 – 9.2 mm	10 Bar (145 PSI)	10 / 13 ft	Heavy Infrastructure & Main Lines

3. OFFICIAL PPI UPVC PRODUCTS SCHEDULE

ID	Product Title	Item Code / SKU	Grade / Type	Official Price (PKR)
#33	01" PPI PIPES	PPI-01	Cream (Light)	PKR 252.00
#34	1.1/4" PPI PIPES	PPI-11-4	Cream (Light)	PKR 360.00
#35	1.1/4" PPI PIPES FILTER	PPI-11-4-FILTER	Filter Grade	PKR 370.00
#36	1.1/2" PPI PIPES	PPI-11-2	Cream (Light)	PKR 360.00
#37	1.3/4" PPI PIPES	PPI-13-4	Cream (Light)	PKR 360.00
#38	1.3/4" PPI PIPES FILTER	PPI-13-4-FILTER	Filter Grade	PKR 370.00
#39	02" PPI PIPES CREAM	PPI-02-CREAM	Cream (Light)	PKR 540.00
#40	03" PPI PIPES CREAM	PPI-03-CREAM	Cream (Light)	PKR 1,050.00
#41	03" PPI PIPES DOUBLE	PPI-03-DOUBLE	Double (Medium)	PKR 1,250.00
#42	03" PPI PIPES TRIPLE	PPI-03-TRIPLE	Triple (Heavy)	PKR 1,750.00
#43	04" PPI PIPES CREAM	PPI-04-CREAM	Cream (Light)	PKR 1,400.00
#44	04" PPI PIPES DOUBLE	PPI-04-DOUBLE	Double (Medium)	PKR 1,750.00
#45	04" PPI PIPES TRIPLE	PPI-04-TRIPLE	Triple (Heavy)	PKR 2,250.00
#46	05" PPI PIPES CREAM	PPI-05-CREAM	Cream (Light)	PKR 2,450.00
#47	05" PPI PIPES DOUBLE	PPI-05-DOUBLE	Double (Medium)	PKR 3,000.00
#48	05" PPI PIPES TRIPLE	PPI-05-TRIPLE	Triple (Heavy)	PKR 5,500.00
#49	06" PPI PIPES CREAM	PPI-06-CREAM	Cream (Light)	PKR 3,150.00
#50	06" PPI PIPES DOUBLE	PPI-06-DOUBLE	Double (Medium)	PKR 4,000.00
#51	06" PPI PIPES TRIPLE	PPI-06-TRIPLE	Triple (Heavy)	PKR 6,500.00
#52	1/1/2 PPI FILTTER	PPI-1-1-2-FILTER	Cream (Light)	PKR 360.00
#53	2" PPI PIPES FILTER	PPI-2-FILTER	Filter Grade	PKR 540.00

4. SOLVENT CEMENT JOINTING SOP

- Cutting & Chamfering:** Cut square (90°) and chamfer the spigot edge at 15° to prevent wiping off cement inside socket.
- Cleaning & Degreasing:** Clean mating surfaces thoroughly with clean cloth and PVC Primer/Cleaner.
- Cement Application:** Apply a smooth, even layer of PPI Heavy Duty PVC Solvent Cement to the socket and spigot.
- Insertion:** Push spigot fully into socket with a 1/4-turn twist to distribute cement evenly. Hold firmly for 20–30 seconds.
- Curing Time:** Allow joint to set for minimum 2 hours before handling, and 24 hours before hydrostatic pressure testing.

PEARL PLASTIC INDUSTRY

Samundri Road near Total Petroleum Sangam 2, Faisalabad, Pakistan

Landline: 041-2568056 | **Mobile & Orders:** 0300-0471963 / 0334-6290963 | **WhatsApp:** +92 305 6628741 | **Web:**
<https://utcs.pk>

© 2026 Pearl Plastic Industry (PPI). Distributed nationwide by UTCS.PK.