PP-R Pipes Technical Datasheet

Applications

Pestan PP-R pipes are used for hot and cold installation hygienic and sanitary water. They are also used in transport drinking liquids, irrigation in greenhouses, gardens, air distribution under pressure, vacuum installation, in the chemical industry when distributing different types of liquids.

Product description

They are produced in green, white or gray. Technology pipe production and marking fully correspond European norms and standards SRPS-ISO-EN15874.

Mechanical, technical and physical characteristics

- PP-R material is subject to open flame burning, but not classified as a self-igniting material.
- During pipe extrusion, there is no change in properties material.
- The material retains its physicochemical, thermal and mechanical properties during the processing process.
- Pipes can be joined by welding.
- The impact resistance of pipes made of these materials decreases at temperatures below 5 °C.
- Hydrostatic stress of pipes made of PP-R material at 20 °C for a lifetime of 50 years (MRS) is 10MPa, Hydrostatic stress at 70 °C for a period of 50 years for PP-R it is 3.2 Mpa.
- The passage of light through a tube made of this material must be less than 0.2% to prevent algae growth on the inner surface of pipes and fittings, which is very important when transporting drinking water.
- Low weight (9 times lighter than steel)
- Large thermal and sound insulator.
- Reduce the risk of condensation to a minimum.
- They do not contain toxic ingredients.

pD	Application							
	Class 1	Class 2	Class 4	Class 5				
bar	S _{calc, max} - values ^a							
4	6,9	5,3	6,9	4,7				
6	5,0	3,5	5,5	3,2				
8	3,8	2,6	4,1	2,4				
10	3,0	2,1	3,3	1,9				
The values are rounded to the first place of decimals.								

- Small pressure losses due to the smooth surface, which at the same time does not allows deposition on pipe walls, turbulence and friction.
- Dilation of PP-R pipe is reduced 4 times.
- Water resistance testing (DIN 1988) can be performed water or an air/water mixture.
- Short-term temperature resistance of 90 °C.
- Long-term temperature resistance up to 60 °C.
- Connecting PP-R pipes with connecting elements and pipes from other materials is done through metal inserts made of the highest quality brass.

Chemical resistance

PP-R and PP-RCT pipes is chemically durable materials. Resistant to fresh and salt water, to industrial chemicals and highly abrasive liquids.

*Plastic pipes and fittings - Combined chemical-resistance classification table ISO/TR 10358.

Transport and storage

Storage at temperatures from 5 °C to 50 °C. They should be shielded from direct UV radiation. At low temperatures, the pipes are fragile and need to be cautious when working.

Products

Pipes are produced in green, white and gray color. Made in classes: SDR 6, SDR7.4, SDR9, SDR11.

Standard dimensions from 12 to 160 mm (other dimensions to order).



Other products: knees, reduced knees, couplings, T - pieces, Cross T - pieces, reductions, valve bodies, end caps, test plugs, retrofit saddles, etc.. In addition to the standard program of PEŠTAN PP-RCT pipes, we also offer a composite PP RCT pipe with fiber glass. The expansion and contraction of the tube is controlled in a linear direction.

This is achieved by adding a fiberglass layer that is co-extruded into the middle wall of the tube.



Name	Fuidtherm PPR pipe			Name	Fuidtherm PPR pipe				
Picture	SDR	OD [mm]	S [mm]	DINN [mm]	Picture	SDR	OD [mm]	S [mm]	DINN [mm]
		16	2.7	10.6			20	2,3	15,4
		20	3.4	13.2			25	2,8	19,4
		25	4.2	16.6			32	3,6	24,8
		32	5.4	21.2			40	4,4	31,2
		40	6.7	26.6		SDR 9	50	5,6	38,8
	SDR 6	50	8.3	33.4		[PN16]	63	7,1	48,8
	[PN20]	63	10.5	42			75	8,4	58,2
		75	12.5	50			90	10,1	69,8
		90	15	60			110	12,3	85,4
		110	18.3	73.4			125	14	97
		125	20.8	83.4			160	17,9	124,2
		160	26,6	106,8			OD		DINN
	SDR	OD [mm]	S [mm]	DINN [mm]	0	SDR	[mm]	S [mm]	[mm]
		16	2.2	11.6			16	1.8	12.4
		20	2.8	14.4			20	1.9	16.2
		25	3.5	18			25	2.3	20.4
		32	4.4	23.2			32	2.9	26.2
		40	5.5	29			40	3.7	32.6
	SDR 7.4	50	6.9	36.2		SDR 11	50	4.6	40.8
	[PN16]	63	8.6	45.8		[PN10]	63	5.8	51.4
		75	10.3	54.4			75	6.8	61.4
		90	12.3	65.4			90	8.2	73.6
		110	15.1	79.8			110	10	90
		125	17.1	90.8			125	11.4	102.2
		160	21,9	106,8			160	14,6	126,8

Technical Assistance

Our technical and engineering team is supported and advised by European institutes. For more information about products please contact PEŠTAN technical support or regional salesman.

