

Product Specification of PERT & PERT Pipe with Oxygen Barrier

Hot & Cold Water Piping System

Definition

MODUS PERT pipes are manufactured from raised temperature polyethylene with advanced polymeric structure which makes them the best solution for a wide range of liquid transportation. The advantages of MODUS PERT over other plastic and metal piping systems, such as high operation temperatures, non-corrosiveness, flexibility, higher impact strength at lower temperatures and speed of installation, are considered the main reasons for being preferred by engineers for residential and industrial projects.

Material : Raised temperature polyethylene (PE) with advanced polymeric structure

Pipe Sizes : 16mm, 17mm, 20mm

Density : 0.94 g/cm³ (DIN 53497)

Application and Usage Area : Radiator connections, outdoor snow melting, district heating / cooling, under-floor & wall heating, radiant heating and cooling systems, hot and cold water plumbing applications; residential and commercial

Pipe Dimension and General Properties

D, Pipe Diameter (mm)	S, Wall Thickness (mm)	Standard Dimension Ratio	Nominal Pressure	Class Info. for Hot water Application	Coil/Length (m)
16	2.0	SDR 9	PN 16	1/8; 2/8; 4/10; 5/8	100, 160, 200, 400, 500, 600
	2.2	SDR 7.4	PN 20	1/10; 2/10; 4/10; 5/8	
17	2.0	SDR 8.5	PN 16	1/8; 2/8; 4/10; 5/8	100, 160, 200, 400, 500, 600
20	2.0	SDR 11	PN 12.5	1/6; 2/6; 4/8; 5/6	100, 160, 200, 400, 500
	2.8	SDR 7.4	PN 20	1/10; 2/10; 4/10; 5/10	

Table 1. Polyethylene of Raised Temperature Resistance Pipes (PERT)

D, Pipe Diameter (mm)	S, Wall Thickness (mm)	Standard Dimension Ratio	Nominal Pressure	Class Info. for Hot water Application	Coil/Length (m)
16	2.0	SDR 9	PN 16	1/8; 2/8; 4/10; 5/8	100, 160, 200, 400, 500, 600
	2.2	SDR 7.4	PN 20	1/10; 2/10; 4/10; 5/8	

Table 2. Pipe - In- Pipe PERT

Standard : DIN 16833, ISO 22391

Rules to be Followed During Installation

- Pipes are installed using a special welding machine. The temperature of the place where the installation is done, should be under the 10°C.
- It is not allowed to distort and break the pipeline during assembly.
- Pipes that are transported and stored under 0 ° C, should be kept at a temperature not exceeding 10 ° C for 24 hours before being transferred to production.
- Pipe ends should be closed with plugs to prevent pipe contamination and dusting.
- When bending the pipe (maximum radius of 5D outside), it is recommended to preheat the pipe to 130 ° C with a dryer. The pipe must be bent using a spring conductor.
- When heating the pipe, the pipe should be fixed to rotating points and 10 cm gap should be left with clamps to prevent the bent part from flattening.
- Underfloor heating pipeline should be closed with concrete or other coating after hydraulic tests are done. Coating height should not be less than 3 cm.
- Fixed supporting connections on the pipeline should be properly installed.
- The pipe should be protected from direct sunlight.

Usage and Technical Maintenance Rules

PERT pipes should not be used in the following situations:

- at operating temperature of the liquid carried above - 130 ° C,
- at operating pressure of 10 bar,
- in thermal radiation source areas whose surface temperature exceeds 150 ° C;
- in safety (security), transmission and signaling piping system

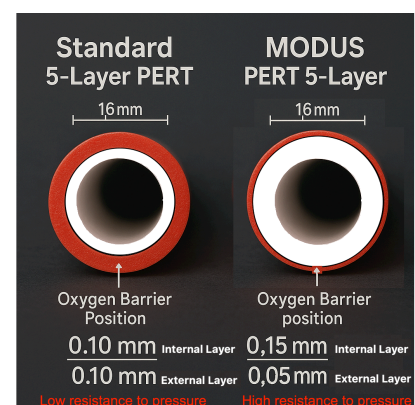


Table 3. Pipe - In- Pipe PERT