

HDPE pipes for pressure sewage

Technical datasheet

Applications

Peštan PEHD pipes are high quality pipes made of supreme quality polyethylene PE-100. The advantages of this type of pipe compared to other materials is that due to its high flexibility and resistance to seismic shocks and shifting of the soil can be used for installation in areas where they can count on this situation.

Product description

Bending radius of polyethylene pipes is 20 d. High resistance polyethylene on capturing deposits makes these pipes more suited for use in pressure sewage than other pipe materials. Polyethylene pipes for pressure sewage are stable to UV rays and temperatures from -30° C to + 60° C. Produced by the norm EN12201.

Product Availability

Production range covers diameters of Ø1200. These pipes are being made in versions SDR 17 – PN 10

Peštan is able to offer complete program of welded accessories made in all diameters and in all working pressures. Also other working pressures are available by the request Characteristics and technical data

Safety coefficient of PEHD pipes is 1,25. Bending radius is 20d. PEHD pipes have high abrasion resistance. Very low pressure losses since coefficient friction are 10 times less than with steel pipes. Easy for transport and handling. Easy connection by welding or with couplings. Life time above 50 years. No impact on water taste and smell. Tartar free that helps reduction water flow during the time. Coefficient of linear extension for polyethylene is $1,3 \times 10^{-4} \text{C}^{-1}$ (0,13 mm/m°C)

Installation, jointing and testing of polyethylene pipeline is done according to applicable European standards and guidelines:

EN 805
EN 1610
DVS 2207-1
DVGW W 400-2(A)



Resistance to superficial temperatures

Under the higher exploitation temperatures (industrial appliance) it is necessary to adjust the value of PN by using reducing coefficient from the table::

Pressure reduction coefficient for PE100 piping systems	
Temperature	Coefficient
20°	1,00
30°	0,87
40°	0,74

Physical properties of materials

	Norm	UOM	PE100
Density on 23°C	ISO 1183-1	g/cm ³	0,95
Mass flow	ISO 1133	g/10min	0,45
Tensile strenght	ISO 527	MPA	25
Elasticity modul	ISO 178	MPa	1300
The coefficient of linear expansion	DIN 53 752	mm/m°K	0,18
Vicat softening point	ISO 306	C°	77
Thermal conductivity on 20°	DIN 53 612	W/m°K	0,38
Surface resistivity	DIN/IEC60167	Ω	VT>10 ¹⁴

Assembly of polyethylene pipes

There are more ways of connecting polyethylene water pipes:

- Head welding
- Electro-fusion

Connecting sleeves and langes

Head welding and electro-fusion are being executed according to DVS 2207-1

Chemical resistance

Resistant to fresh and salt water, to vegetable and animal oils, alcohol, chlorine compounds, alkaloid acids, bases and detergents. Do not contain heavy metals (eg Pb, Cd, Sn ...).

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

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.



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