

# PEHD CABLE PROTECTION PIPES

## Technical datasheet

### APPLICATIONS

Peštan PEHD pipes are intended for cable protection during underground installation or installation inside the building. Pipeline can follow configuration of the ground because of its elasticity that reduces couplings needed. Very flexible and extremely resistant to vibration, seismic strikes and ground movements.

### PRODUCT DESCRIPTION

Peštan PEHD pipes are high quality pipes made of supreme quality polyethylene PE-80 and PE-100. The inner side of the pipe is very small toothed tines, which are obliged to reduce surface contact of cable and pipe and consequently the coefficient of friction, which results in very large lengths to which it is possible to insufflate optical cable. Peštan PEHD pipes for cable protection is produced under the norm EN 12201.

### PRODUCT AVAILABILITY

Peštan HDPE pipes for cable protection are produced in all diameters like HDPE pipe for water, however, since the need for such large diameters is extremely rare standard products are considered to be the following diameters: Ø20 mm, Ø25 mm, Ø32 mm, Ø40 mm, Ø50 mm, Ø63 mm, Ø75 mm, Ø90 mm and Ø110 mm with length of 6000 mm (product in bars) or 50 m, 100 m or 200 m, depending on the diameter (product in the coil).

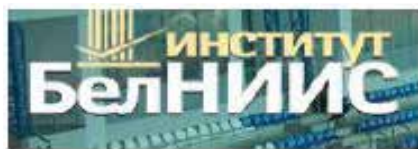
### CHARACTERISTICS AND TECHNICAL DATA

Peštan HDPE pipes for cable protection are made of polyethylene PE 80 or PE 100, depending on the customer's requirements. Ring stiffness of the pipe is very large and depending on the diameter and type of pipe can be over 50 KN/m<sup>2</sup> and can be used in places increased load floor in accordance with the static calculation. HDPE pipes for cable protection are UV stable. Pipes are an electrical insulator and do not contribute to the spread of fire. Safety coefficient of PEHD pipes is 1,25. Bending radius is 20d. PEHD pipes have high abrasion resistance. Coefficient of linear extension for polyethylene is 1,3×10<sup>-4</sup>C<sup>-1</sup> (0,13 mm/m °C)



### TECHNICAL ASSISTANCE

For more information about products please contact PEŠTAN technical support or regional salesman.



BELNIIS - Belarus



MPA - Germany



VUPS - Czech Republic



BELNIIS - Belarus



GOST R - Russia



IGH - Croatia

|                                     | Norm         | UOM               | PE 80             | PE100               |
|-------------------------------------|--------------|-------------------|-------------------|---------------------|
| Density on 23 °C                    | ISO 1183-1   | g/cm <sup>3</sup> | 0,93              | 0,95                |
| Mass flow                           | ISO 1133     | g/10min           | 0,45              | 0,45                |
| Tensile strenght                    | ISO 527      | MPa               | 23                | 25                  |
| Elasticity modul                    | ISO 178      | MPa               | 1000              | 1300                |
| The coefficient of linear expansion | DIN 53 752   | mm/m°K            | 0,18              | 0,18                |
| Vicat softening point               | ISO 306      | C°                | 72                | 77                  |
| Thermal conductivity on 20°         | DIN 53 612   | W/m°K             | 0,4               | 0,38                |
| Surface resistivity                 | DIN/IEC60167 | Ω                 | >10 <sup>14</sup> | VT>10 <sup>14</sup> |

| DN  | e <sub>min</sub> | e <sub>max</sub> |
|-----|------------------|------------------|
| 20  | 2                | 2.3              |
| 25  | 2                | 2.3              |
| 32  | 2                | 2.3              |
| 40  | 2.4              | 2.8              |
| 50  | 3                | 3.4              |
| 63  | 3.8              | 4.3              |
| 75  | 4.5              | 5.1              |
| 90  | 5.4              | 6.1              |
| 110 | 6.6              | 7.7              |

Table 1: Wall thickness

### ASSEMBLY OF POLYETHYLENE PIPES

There are more ways of connecting polyethylene water pipes:

- Head welding
- Electro-fusion
- Compression fitting (up to diameter 125)
- Connecting sleeves and langes

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

### CHEMICAL RESISTANCE

Peštan PEHD pipes for cable protection are resistant to the influence of water, components found in concrete and other building materials, corrosion and other external influences. The chemical resistance of polyethylene allows working in salty and chemically aggressive soil. Plastic pipes and fittings - Combined chemical-resistance classification table ISO/TR 10358.