



PE-RT EL-EN PIPES

WE ARE

a private company Peštan, leader in the Balkans in the production and distribution of products and solutions from the polymers.

Company was founded in 1989 and has been producing water pipes made of polyethylene. Over time, we introduced new materials (polypropylene and PVC) and expanded product range. Today, in our offer you may find more than 8.500 products, divided into two categories:



**PIPING
SOLUTIONS**



**BATHROOM
SOLUTIONS**



APPLICATION

Peštan PE-RT pipes are designed for the protection and routing of cables in underground installations. They are specifically engineered to support various cable installation methods, including blowing, jetting, pulling, and pushing, making them ideal for protecting both electrical cables and optical fibers.

The flexibility of the pipeline allows it to easily adapt to the terrain configuration, significantly reducing the need for joints.

The pipe is highly flexible and resistant to vibrations, seismic activity, and ground movements.

They are primarily used as conduits for underground installation of high and extra-high voltage cables, **up to 525 kV**, thanks to their stable resistance to temperatures **up to 70 °C** and ability to withstand short-term increases **up to 95 °C**.

PRODUCT DESCRIPTION

Peštan PEHD pipes are high-quality pipes made of premium-grade polyethylene – PE-RT or PE-100.

The inner surface of the pipe is smooth, reducing the contact area between the cable and the pipe, thereby lowering the friction coefficient and enabling long-distance blowing of optical cables.

- Pipes are manufactured in accordance with DIN and EN standards
- Solid (compact) PE pipe construction
- Available as single-layer or multi-layer pipes with smooth ends

EN 12201; DIN16874; DIN 16876; DIN 8074 / 8075; DIN EN 61386-24
(VDE 0605-24); DIN 16842; DIN 16833

PRODUCT AVAILABILITY

Peštan PEHD pipes are manufactured in all diameters ranging from **Ø32 mm to Ø630 mm**, available in lengths of 6 m, 12 m, 13.5 m, and 16 m (straight bars), or in coils of **50 m, 100 m, and 200 m** (up to 300 m depending on the diameter).

They can be produced as:

Single-layer pipes (black, optionally with colored stripes)

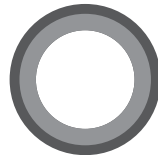
Double-layer pipes (with a colored outer layer)

TYPE 1 - Single-layer pipes

Pipes can be produced in a single layer, in black color, or optionally in black with co-extruded colored stripes.



TYPE 2 - Double-layer pipes Double-layer pipes with a dimensionally integrated colored outer layer.



PIPE MARKING

Marking of these pipes is carried out in accordance with the applicable standard.

Identification markings are printed every full meter on one side of the pipe (optional: multiple markings along the circumference).



PRODUCT SPECIFICATIONS

Peštan PEHD pipes for cable protection and installation are made of PE-RT or PE 100 polyethylene.

The ring stiffness of the pipes is very high and, depending on the diameter and pipe type, can exceed 50 kN/m², allowing installation in areas with increased soil load – in accordance with static calculations. (Expected service life: over 50 years at 70°C.)

These pipes are characterized by long-term thermal stability and durability.(Expected service life: over 50 years at 70°C.)

PEHD protective and installation pipes are UV-stabilized.

They are electrical insulators and do not contribute to flame propagation (normal flammability, class B2 according to DIN 4102-1).

The safety factor of PEHD pipes is 1.25, and the minimum bending radius is 20d. PEHD pipes have high abrasion resistance. The linear expansion coefficient for polyethylene is 1,8×10⁻⁴K⁻¹ (0,18 mm/m °K).

Property	Typical Value: PE-RT (incl. PE100 RC)	Unit	Test Method
Density	>940	kg/m ³	ISO 1183-1
Melt flow rate (190°C / 5 kg)	>0,2	g/10min	ISO 1133-1
Tensile modulus (1 mm/min)	>950	MPa	ISO 527-2
Elongation at break (50 mm/min)	>600	%	ISO 527-2
Oxidation induction time (210°C)	>30	min	ISO 11357-6
Resistance to rapid crack propagation	>10	bar	ISO 13477
Slow crack growth test (SHT)	≥65	MPa	ISO 18488
Accelerated Notched Pipe Test (ANPT) in 2% Arkopal N-100 solution (9.2 bar, 80°C)	≥300	h	ISO 13479
Accelerated Full Notch Creep Test (AFNCT) in 2% Dehyton solution (4 MPa, 90°C)	≥500	h	ISO 16770
Cracked Round Bar (CRB) Test, converted to 14.0 mm with initial notch length 1.40 mm (12.5 MPa, 23°C)	≥1,5	Milion ciklusa	ISO 18489
Weather resistance ≥ 7 GJ/m ² , test according to EN 12201-1	PROLAZ	Prolaz	EN ISO 16871

INSTALLATION OF POLYETHYLENE PIPES

Peštan PE-RT pipes can be connected in several ways, depending on the application and pipe diameter:

- Butt welding
- Electrofusion welding
- Compression fittings (up to diameter 125 mm)
- Connection sleeves and flanges

Butt welding and electrofusion welding are performed in accordance with **DVS 2207-1** standard.

PRODUCT AVAILABILITY

PE 100 RT	SDR 7,4	SDR 11	SDR 17	SDR 21	SDR26
	PN25	PN16	PN10	PN8	PN6
DN 32	•	•	•	•	•
DN 40	•	•	•	•	•
DN 50	•	•	•	•	•
DN 63	•	•	•	•	•
DN 75	•	•	•	•	•
DN 90	•	•	•	•	•
DN 110	•	•	•	•	•
DN 125	•	•	•	•	•
DN 140	•	•	•	•	•
DN 160	•	•	•	•	•
DN180	•	•	•	•	•
DN 200	•	•	•	•	•
DN 225	•	•	•	•	•
DN 250	•	•	•	•	•
DN 280	•	•	•	•	•
DN 315	•	•	•	•	•
DN 355	•	•	•	•	•
DN 400	•	•	•	•	•
DN 450	•	•	•	•	•
DN 500	•	•	•	•	•
DN 560	•	•	•	•	•
DN 630	•	•	•	•	•

ACCORDING TO EN 12201; DIN16874; DIN 16876; DIN 8074 / 8075; DIN EN 61386-24 (VDE 0605-24); DIN 16842; DIN 16833

BRAND MANIFESTO

We are not oriented just to production, we combine reliability with quality for the ultimate benefit of our clients.

We do not build short-term client relationships, but long-term and genuine partnerships.

Everything we do, we do with one thing in mind - to create ideas to perfectly match all our client needs and the best way for us to achieve this goal is to constantly educate our clients provide solutions that meet their specific needs and support them throughout the entire process.

Because our success is as big as your trust in us.



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