

#### **PIPING SOLUTIONS**

Drainage



### PP ID DRAINAGE PIPES

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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 6500 products, divided into four categories:











DRAIN SOLUTIONS

AGRICULTURE SOLUTIONS



HOUSEHOLD SOLUTIONS

Edition 5



**BELOW GROUND** 



## PP ID DRAINAGE PIPES

Polypropilene corrugated drainage pipes ID

Excess of water in the soil can cause serious problems on land and objects until their complete destruction in landslides in a very short period of time. Therefore, the proper drainage of the terrain is extremely important to consider when designing and preparing the ground for construction.

Bearing in mind the need for drainage of excess water from the soil, Peštan included corrugated drainage and polypropylene (PP) pipes in its production portfolio. Peštan provides a large range of diameters in accordance with DIN 4262/1. These pipes ,thanks to their large hydraulic capacity and a wide range of diameters, are fully able to respond to any request and provide a reliable and long-term drainage of ground. In addition, thanks to the chemical resistance of polypropylene, these pipes are used even in the presence of chemically aggressive liquids.

Peštan polypropylene corrugated drainage pipes are made from standard PP corrugated pipes. The pipes are passing through perforation process in accordance with DIN 4262/1.

PP pipes are lighter than PVC pipes for the same purpose, which provides easier handling and installation. They have excellent chemical resistance to aggressive environment and the surrounding land. The smooth inner surface has a low coefficient of friction so that the pipes have very good hydraulic characteristics. They have excellent resistance to abrasion, mechanical and physical properties.

Pipes are resistant to UV rays- they can stand outdoors for one year. They should be protected. It is necessary to take into account that during transport and installation pipes shouldn't be dragged over sharp edges, sharp edges can damage the pipe while they are impact-resistant to blunt instrument.

#### FEATURES AND TECHNICAL DATA

- Material: PP-B copolymer
- Fast and inexpensive mounting
- Standard: DIN 4262/1
- Density:> 0,900Kg / m3
- Pour Index: MFR 230C / 2.16 0,30gr / 10 '
- Modulus of elasticity: MPa 1500/2000
- Tensile strength: 32 MPa

- Impact strength according to Charpy: at 23 ° C ≈70kJ / m2; at -23 °C ≈7kJ / m2
- Connection is via a socket
- Ring hardness SN = 4KN / m2 I = SN 8 kN / m2
- Colour: orange Standard (by request of the customer can have other colors)
- Standard length 6 and 12m

#### TYPES OF PP ID DRAINAGE PIPES

Double-layer corrugated PP pipe have been classified by the internal diameter of DN / ID (nominal diameter is the inner diameter/ inside-diameter).

They are manufactured with integrated socket. They can be produced in a range from Ø140 to Ø800, of ring stiffness SN 4 and SN 8.



DN		OD (MM)	ID (MM)	E (MM)	CWT (MM)	LWT (MM)	T (MM)	A (MM)	KG/M
Ø140	SN4	Ø160	139.8	1.2	0.5~0.9	0.9	17.44	3.5	0.8-1.1
	SN8	Ø160	139	1.6	0.9~1.2	1.1	17.44	3.5	1.1-1.4
Ø200	SN4	Ø227	199	1.7	0.9~1.2	1.2	22.43	4.5	1.8-2.0
	SN8	Ø227	198	2.2	1.2~1.6	1.4	22.43	4.5	2.1-2.5
Ø250	SN4	Ø283	249	2.2	1.2~1.4	1.5	26.17	5.1	2.8-3.1
	SN8	Ø283	248	2.7	1.6~2.0	1.6	26.17	5.1	3.6-3.85
Ø300	SN4	Ø340	298.2	2.6	1.3~1.5	1.7	31.4	5.5	3.8-4.2
	SN8	Ø340	297	3.2	1.7~2.2	1.8	31.4	5.5	4.5-5.2
Ø400	SN4	Ø453	397.8	3.2	1.4~1.7	2.2	39.25	7.9	5.8-6.6
	SN8	Ø453	396	4.1	2.2~2.6	2.5	39.25	7.9	8.1-8.9
Ø500	SN4	Ø567	497.6	4.2	1.8~2.2	3.0	52.78	9.4	9.8-10.7
	SN8	Ø567	495	5.5	2.4~3.1	3.3	52.78	9.4	12.6-13.5
Ø600	SN4	Ø680	597	5.2	2.6~3.0	3.5	65.97	13.2	15.0-16.5
	SN8	Ø680	594	6.7	3.4~3.8	3.8	65.97	13.2	18.7-19.3
Ø800	SN4	Ø906	796	6.5	2.8~3.2	4.5	89.97	19.3	24.0-25.8
	SN8	Ø906	792	8.5	4.3~5.1	4.7	89.87	19.3	31.6-33.4

There are two types of drainage pipes made of polypropylene, defined through the inner diameter – ID pipes:

- **KD** RIGID DRAINAGE PIPES (FULLY PERFORATED)
- KDK RIGID DRAINAGE-SEWERAGE PIPES (PARTLY PERFORATED)

#### KD - RIGID DRAINAGE PIPES (FULLY PERFORATED)

KD pipes function is to assure the optimum drainage sub-degree and anti-freeze layer.

This applies both during the construction and completion of the work site by entering the existing water and transporting it to the main dumping.

The joints are impermeable to sand.

Installation of rubber rings to such pipes is not necessary. 6 slots are standard per wholevolume and they are distributed to 60°.



#### KDK - RIGID SOLID DRAINAGE PIPES (PARTIALLY PERFORATED)

Partially perforated KDK solid drainage-sewerage pipes represent the ideal combination of perforated and collecting pipes. If requested, they must be able to collect and transport any surface water at short and long distances. Because of water transport, sockets are impermeable to water and sand. Rubber ring is inserted into the third channel of the corrugated pipe and socket, which is first lubricated, is wrapped around lubricated rubber. The pipes must be professionally installed respecting the guidelines for laying the pipeline given in EN1610 and DIN4033.



The slots on both types of pipes are located between the ribs of pipe, symmetrically over whole volume of the pipe which allows a smooth access of water to the slot. During the construction of drainage systems it is recommended to place a pipe, in addition to the stone filter layer, in an additional protective layer of geotextile filter to prevent leaching of the soil and the possible blocking of the hole on the pipe impurities and therefore reduction of efficiency of the pipeline.



## BRAND MANIFESTO

We do not only sell pipes, 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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