# PP ID CORRUGATED DRAINAGE PIPES
Tehnički list

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## Applications

Bearing in mind the need for drainage of excess water from the soil, Peštan included corrugated drainage and polypropylene (PP) pipes in its prodcution 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.

## Mechanical and physical characteristics

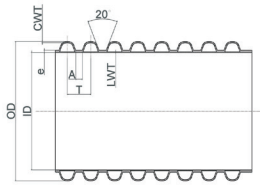
- Material: PP-B copolymer
- Fast and inexpensive mounting
- Standard: DIN 4262/1
- Density:> 0,900 Kg/$m^3$
- Pour Index: MFR 230 °C/2.16 0,30 gr/10‘
- Modulus of elasticity: MPa 1500/2000
- Tensile strength: 32 Mpa
- Impact strength according to Charpy: at 23 °C≈70kJ/$m^2$; at -23 ˚C ≈7kJ/$m^2$
- Connection is via a socket
- Ring hardness SN = 4KN/$m^2$ I = SN 8kN/$m^2$
- Perforation surface: >50 $cm^2$/m

## Product description

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.

## BOQ description

Two-layer corrugated pipes for drainage, which is made of polypropylene, with black outside layer and white inside layer, defined by inner diameter DN/ID, with extrusion welded socket and ring stiffness SN 4 KN/$m^2$ manufactured according to EN13476-3. Pipes shall be perforated in accordance with DIN4262 with angle of perforation of 120° (240°; 360°), and all in accordance with projected diameter and detailed specification.
Pipes need to be type „Peštan“ Aranđelovac or other pipes of the equivalent characteristics.
The pipes shall be carefully laid on a sand bedding, with necessary geotextile filter layer mounted, and adjusted to the projected slope, without the horizontal and vertical change of grade.
Control of the grade is necessary to perform with geodetic instrument in presence of Supervisor Engineer’s .
The work shall strictly comply in accordance with the technical regulation for the intended type of the pipe according to EN1610 and according to instruction of Supervisor Engineer’s.




* The values in the table are mean values measured during continuous product quality control over a long period of time

| CODE | DN | | OD (mm) | ID (mm) | CWT | LWT | T | A | e |
|---|---|---|---|---|---|---|---|---|---|
| 10702000 | Ø140 | SN4 | 160.5 | 140 | 0.7 | 0.7 | 17.4 | 3.5 | 1.1 |
| 10702020 | | SN8 | 160 | 139 | 0.7 | 0.8 | 17.4 | 3.5 | 1.1 |
| 10702001 | Ø200 | SN4 | 228 | 199 | 0.9 | 0.7 | 22 | 4.2 | 1.9 |
| 10702021 | | SN8 | 228.5 | 200 | 1 | 1.1 | 22 | 4.2 | 2 |
| 10702002 | Ø250 | SN4 | 284 | 249 | 1 | 0.6 | 26 | 4.5 | 2.2 |
| 10702022 | | SN8 | 283 | 248 | 1.2 | 1.4 | 26 | 4.5 | 2.3 |
| 10702003 | Ø300 | SN4 | 341 | 300 | 1.7 | 1.3 | 34.6 | 6.8 | 2.5 |
| 10702023 | | SN8 | 342 | 303 | 1.9 | 1.5 | 34.6 | 6.8 | 2.8 |
| 10702004 | Ø400 | SN4 | 455 | 400 | 1.8 | 1.2 | 50.8 | 11.9 | 3 |
| 10702024 | | SN8 | 454.5 | 401 | 2.1 | 2 | 50.8 | 11.9 | 3.2 |
| 10702005 | Ø500 | SN4 | 571 | 503 | 2 | 1.5 | 59 | 11 | 3.6 |
| 10702025 | | SN8 | 570 | 501 | 2.2 | 1.7 | 59 | 11 | 4.1 |
| 10702006 | Ø600 | SN4 | 686 | 607 | 2.4 | 2.5 | 70 | 14 | 3.7 |
| 10702026 | | SN8 | 685 | 607 | 2.7 | 2.7 | 70 | 14 | 4.5 |
| 10702007 | Ø800 | SN4 | 907 | 802 | 3.3 | 3 | 88.7 | 34.5 | 5.6 |
| 10702027 | | SN8 | 906 | 800 | 3.6 | 3.5 | 88.7 | 34.5 | 6.8 |

## 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.

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

• KD – RIGID DRAINAGE PIPES (FULLY PERFORATED)

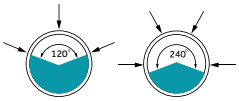
• KDK - RIGID DRAINAGE-SEWERAGE PIPES (PARTLY PERFORATED)

### 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 DRAINAGE-SEWERAGE PIPES (PARTLY 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.




## 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.

**BELNIIS - Belarus**

**KIWA - Netherland**

**VUPS - Czech Republic**

**BELNIIS - Belarus**

**GOST R - Russia**

**IGH - Croatia**

**MPA - Germany**