



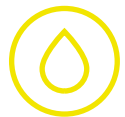
MANHOLES



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 four categories:



**PIPING
SOLUTIONS**



**BATHROOM
SOLUTIONS**



**AGRO CULTURE
SOLUTIONS**



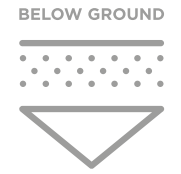
**HOUSEHOLD
SOLUTIONS**



Edition 7



MANHOLES



MANHOLES WITH SLUDGE TRAP

Peštan produces manholes with sludge trap as an integral part of the collector in gravity sewer systems, waste water systems, storm water or combined. These manholes are made of polypropylene.

Manholes are made of monolithic structures composed of a flat bottom, manhole body (PP corrugated pipe) and connections as specified by projects. The elements of each manhole are welded to each other by extrusion welded.

Manholes are made by order or project specification.

Dimensions

DN 800 mm

Material

Polypropylene

Standards

SRPS EN 13589

Fields of application

Gravity sewer systems
Waste water systems, storm water and combined
Various industrial application.



DESCRIPTION

Peštan produces manholes with sludge trap as an integral part of the collector in gravity sewer systems, waste water systems, storm water or combined.

They are used as revision manholes, cascading manholes, manholes with sludge trap or manholes for sewer flushing.

Manholes are made of monolithic structures composed of a flat bottom, manhole body (PP corrugated pipe) and connections as specified by projects.

The elements of each manhole are welded to each other by extrusion welded.

Advantages

- Long durability
- Water tightness
- Resistance to aggressive chemicals
- Easy handling
- Quick installation
- Easy height adjustment

DRAIN MANHOLES

Peřtan company has included DRAIN MANHOLES in its product range.

- Drain manholes $\varnothing 400$ ID
- Drain (revision) manholes $\varnothing 500$ ID
- Drain (revision) manholes $\varnothing 600$ ID

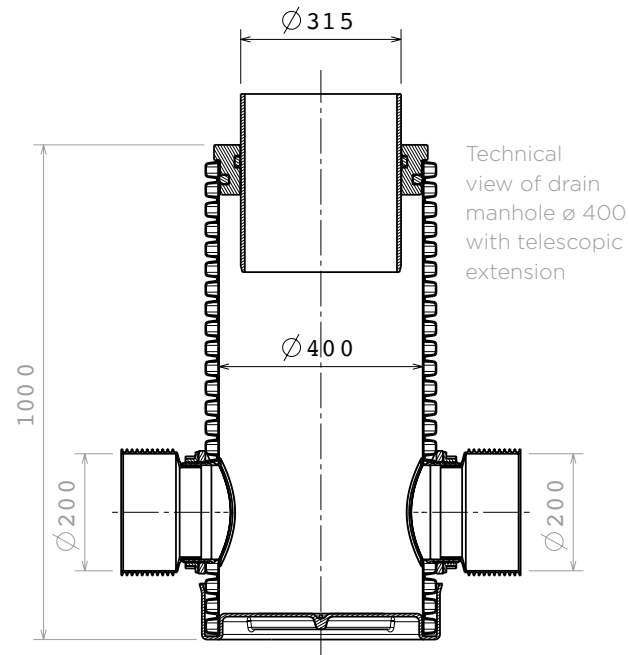
*ID - Inner diameter

PURPOSE

These products are mainly designed to collect rainwater in the rainwater sewage systems for individual home installations and also in systems of civil engineering (collecting rain water from and near the roads, etc.) In addition it is possible to use drain manholes $\varnothing 600$ (sometimes $\varnothing 500$

too) as revision as well which is particularly important during installation of home sewer and connection of multiple objects before joining the main line etc. With this, relevant joining standards are met, with additional reductions in joining costs

and installation time, while corrections of the mistakes on terrain (such as axel and angle issues as well as height of connecting lines) are facilitated by its flexibility.



CONSTRUCTION

Construction of drain manholes is usually performed with the Sedimentation, and in this system the height of sedimentation can be modified and adapted to specific customer requirements. Manhole height can be easily adjusted on the ground and by reducing the vertical which is always PP double layer corrugated pipe SN 8 it can be fully adapted to the situation before setting of cover grids.

Construction consists of:

- Drain bottom
- PP corrugated pipe SN 8 vertical
- Appropriate number of SAG's used to form one output and one or more inputs.

Using SAG's enables the various versions of connecting smooth or corrugated pipe diameters in the 140 ID corr. 160 OD corr. 160 SW, and also

ID 200 corr. and 200 SW. It is possible to form the manhole on the spot, which is a huge advantage because the drilling and installation of SAG's can be performed at the site of installation with simultaneous correction of alignment errors and regular deviations from the projected documents. Due to the extremely high ring stiffness of used PP corr. pipes, recommended height of manhole can range up to 5 m.

The table below contains the basic data related to drain manholes:

	DRAIN MANHOLE 400 MM	DRAIN REVISION MANHOLE 500MM	DRAIN REVISION MANHOLE 600 MM
Minimal angle between the terminal	60	45	45
Maximal height of the manhole - h	5000	5000	5000
Minimal height to the port axis - h1	260	300	310
Maximal number of input ports	2	3	4

The seal between the vertical and manhole bottom is achieved by using common rubber ring which is used for PP corr. pipes which allows sealing up to 0.5 bar and 5 m height of the water column which defined maximum height of the manhole.

Drain manhole is supplied as a telescopic too. In this version base is upgraded with coupling ring and PVC Ø315 OD.

This is a very popular and sought option for designers and contractors because this structure results in greater depth of installation with a

flexible coupling ring connection and in case of heavy loads due to increased surface pressure or increased construction depth, transmission of loads based on the manhole is prevented. Building the concrete ring around the PVC pipe is required.

DELIVERY

At the request of the customer, manhole can be supplied in kit-form which is particularly popular with final customers because of lower prices and a relatively simple and rapid preparation of manholes users, which leaves them with possibility of corrections and changes.

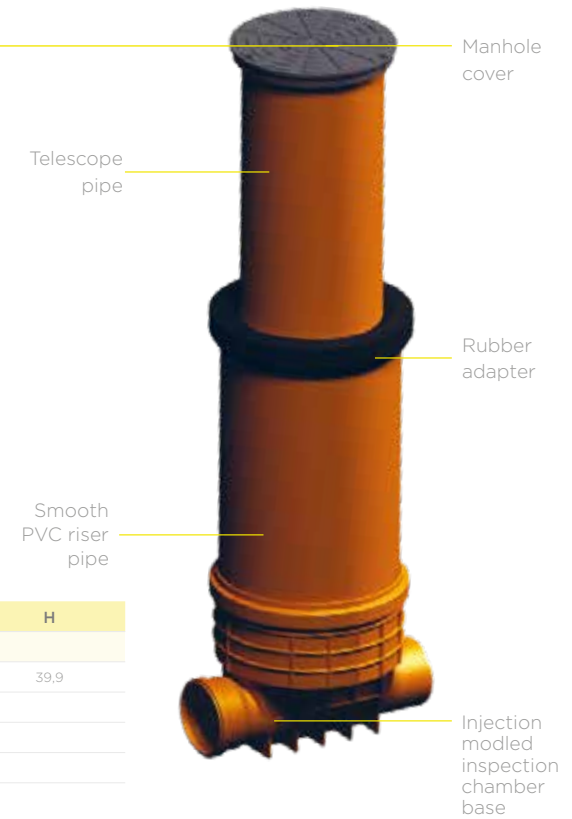
These products can be delivered and fully assembled on the basis of data obtained from our customers. This can significantly speed up the delivery of the alignment setting but reduces the possibility of correcting possible deviations on terrain.

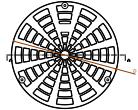

PVC MANHOLES


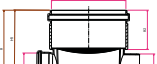
Manholes with a gutter at the bottom, are made of PVC (the bottom of the manhole). The body of manholes and telescopic extension are made of PVC pipe and are joined with rubber seal for complete waterproofing. Manhole cover is made of composite materials in the class A 150th.


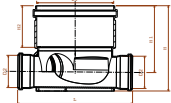
Available in the following dimensions:

- Drain manholes Ø315/160
- Drain manholes Ø400/160
- Drain manholes Ø400/200



DESCRIPTION	PICTURE	CODE	DN	DN1	DN2	H
DRAIN MANHOLES LINEAR TRAY						
		10204560	315	346,7	292,4	39,9

DESCRIPTION	PICTURE	CODE	(D/D1)	H	H1	H2	L
DRAIN MANHOLES							
		10799224	315/160	384	281	190	479
		10799220	400/160	420	315	207	554
		10799221	400/200	470	340	207	586

DRAIN MANHOLES							
		10799225	315/160	395	309	185	490
		10799222	400/160	420	319	207	559
		10799223	400/200	470	344	207	584

ASSEMBLING OF THE MANHOLE IN STAGES

1. Preparation of necessary tools



Drill



Saw



Scalpel



Protective devices for work



The manhole body made of Pešťan's corrugated pipe ID with appropriate diameter.



Drain bottom of the manhole of the appropriate diameter which is mounted on the pipe and within the pipe provides watertight connection.



Telescopic extension for drain manhole Ø400. This extension allows easy adjustment of drain manhole's height.
*is made only for drain manhole Ø400



Saddle connection that corresponds to the vertical (Ø400, Ø500, Ø600)
With the appropriate connector (Ø160 and Ø200) for a smooth or corrugated pipe.

3. Installation of the bottom of corresponding diameter drain manhole



At the bottom of the drain manhole impress the pipes with rubber gasket. Rubber gasket must be placed behind the first rib of the pipe and not after second one which is the case with connecting pipes with standard socket.

4. Installation of the connector



In accordance with instructions for installation of SAG, set the connections to the height required in order to adapt to the terrain, considering the requested depth of sedimentation. It is possible to set up connection anywhere along the perimeter of pipes. With this method it is possible to make cascading connections.

5. Installation of the manhole in a trench



In case of drain (revision) manhole $\varnothing 500$ or $\varnothing 600$, after setting the connectors, the manhole is placed into the trench, the height is being set by cutting of the excess of the pipe (if necessary) and finally, standard cover is being set whether from concrete or casting one with note that the load on the cover must not be transferred to the vertical of the manhole, but to the surrounding soil.

6. Installation of telescopic coupling on drain manhole $\varnothing 400$

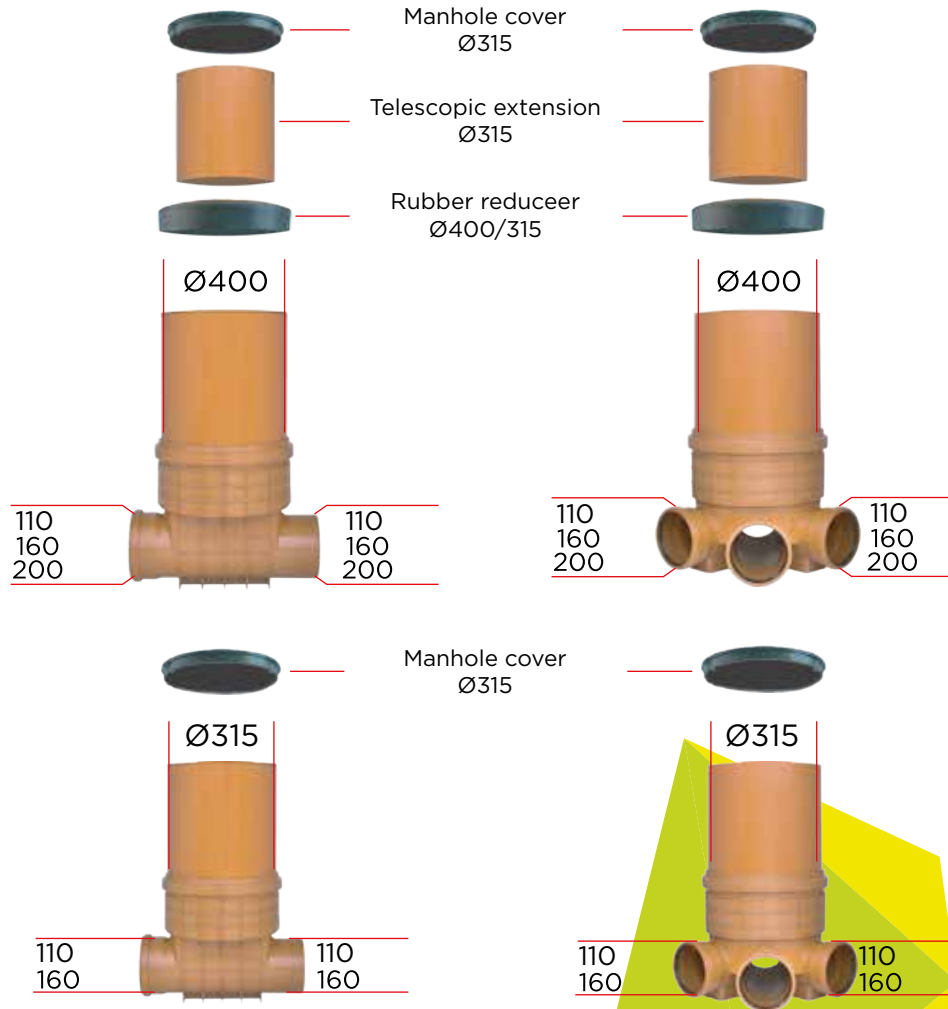


When installing a drain manhole $\varnothing 400$, telescopic extension can be used in order to facilitate height adjustment. This extension is set in the body of the manhole $\varnothing 400$ with gasket which provides come seal. Pipe $\varnothing 315$ is telescopic extension which provides easy adjustment of manhole height considering present relief. Manhole cover is set so that the load is transferred to the surrounding soil and not on vertical of manhole body.

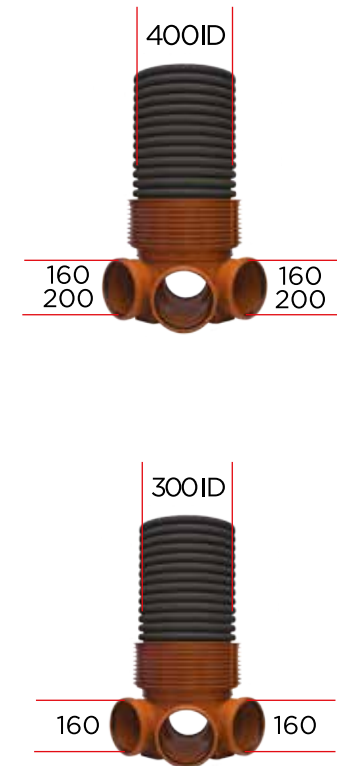


Manholes with a gutter at the bottom, are made of PP. The body of manholes and telescopic extensions are made of PVC pipe and PP corrugated pipe. These segments are joined with rubber seal for complete waterproofing. Manhole cover is made of composite materials in the class A 150.

PVC



PP corugated



NEW DRAIN MANHOLE Ø630

- Reinforced ribs are designed for greater strength and for the visual effect too.
- Hooks for hanging/lowering the manhole into the excavated holes/channels are designed to be reliable because they have reinforcement on the upper side where the cable or twine would be climbed, so they can withstand the weight of the manhole during lowering without problems.
- The top of the drain manhole has been adjusted to the corrugated pipe Ø630 OD and connected with rubber seal.
- Some models are designed with GRIP for better support to the maintenance master when he needs to go down in the manhole and prevents shoes from slipping.
- At the bottom of each of these manholes there is possibility of plug installation, exclusively at the customer's request.
- Ribs on the underside of the drainage manhole serve as structural reinforcement of the manhole under load, to stop the ground from all sides, and to protect the persons who will later during usage service, maintenance the drain and need to go down into the manhole itself.



Collective drain manhole
Ø630/Ø315



Collective drain manhole
Ø630/Ø200



Straight through drain manhole
Ø630/Ø315



Straight through drain manhole
Ø630/Ø200



Connecting directly to the smooth pipe



Connecting with a reducer



Connecting with corrugated pipe

Extension
Ø600 ID



EXTRUSION
CONNECTION

Extension
Ø630 OD



CONNECTION
WITH RUBBER

Manhole is available in diameters Ø630/315 and Ø630/200. If it needs to be connected to other diameters of the pipeline, reduction pieces can be used Pešťan's standard production assortment.

REDUCED PIECES FOR SMOOTH PIPES			
Ø315/Ø250	Ø200/Ø160	Ø200/Ø125	Ø200/Ø110

If necessary it is possible connecting the drain manhole with the pipeline that is designed of corrugated pipes. For this need it is possible to use some of the transient pieces from the Pešťan production assortment.

TRANSITIONAL PIECES FROM SMOOTH TO CORRUGATED PIPE			
Ø300/Ø315	Ø250/Ø250	Ø200/Ø200	Ø140/Ø160

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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