# PRAGMA SADDLES



The mechanical fitting known as a SADDLE provides joining of the housing sewer connections to the street collector pipes of an existing or newly constructed sewer system. The installation of the saddle is meant to be done in the upper 1/3 of the section of the laid street collector pipe. It is made up of two parts which having been tightened to each other and with the help of the rubber sleeve between them, they achieve a strong and waterproof connection and preserves the mechanical strength of the section where it is mounted.

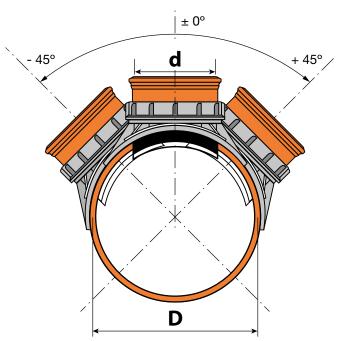
The use of the SADDLE has a significant advantage over factory made branches in terms of:

Excavation work

- only the section where the saddle will be installed is revealed, unlike the fitting, for which the pipe must be fully exposed.

• • In terms of number of manipulations

- the joining of the housing connection is a single manipulation as opposed to a branch coupler where it is necessary to shorten the pipe, install the branch coupler and repair socket after it. Any additional connection activity leads to an unnecessary risk of loss of water tightness, as well as a waste of time and resources.



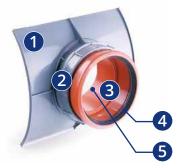
The saddle is more convenient for installation on a pipe in operation in which water flows than installation of a branch coupler.

**d** – diameter of the housing sewer connection (HSC). It covers DN/OD160 and DN/OD200 diameters of smooth-walled PVC or PP pipes. For the joining of corrugated pipes, an additional PP adaptor to smooth wall pipes with DN/OD160 and DN/OD200 must be used, with corresponding product codes - PRP160 and PRP200 (For more details, please refer to the catalogue and price list of the Pragma system!).

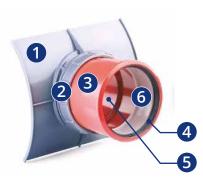
**D** - is the diameter of the sewer collector pipe into which the joining takes place. It covers diameters DN/OD250, DN/OD315, DN/OD400, DN/ID300, DN/ID400, DN/ID500, DN/ID600, DN/ID700, DN/ID800 and DN/ID1000.

For the application of different types of saddles for different combinations of d and D, please see further explanations in the document!

## MAIN CHARACTERISTICS OF PRAGMA SADDLES TYPE NL



Saddles type NL



Saddles type NL (with a long socket)

- 1. Saddle. Material injection molded PP.
- 2. Nut. Material injection molded PP.
- 3. Socket. Material injection molded PVC.

4. Rubber sealing ring in the socket. Extruded together with the socket. An integral part of the socket. **Do not take it out or cut it, because then it cannot be put back!** Material - styrene butadiene (SBR).

5. Rubber sealing ring in the saddle. Material - styrene butadiene (SBR).

6. Supporting ring for the sealing ring. Material - polyethylene (PE).

EN 1401, EN 13746, EN 13598 SN8 HSC – Housing sewer connetion Diameter of the sewer collector pipe to which HSC is connected: DN/OD250, DN/OD315, DN/OD400, DN/ID500

## MAIN CHARACTERISTICS OF PRAGMA SADDLES TYPE R



Saddles type R for connection of HSC DN160



Saddles type R for connection of HSC DN200

- 1. Saddle. Material injection molded PVC.
- 2. Nut. Material injection molded PVC.
- 3. Socket. Material injection molded PVC.

7. Rubber sealing ring in the socket. Material - ethylene propylene diene monomer (EPDM).

8. Rubber sealing ring in the saddle. Material - ethylene propylene diene monomer (EPDM).

EN 1401, EN 13746, EN 13598 SN8 HSC – Housing sewer connetion Diameter of the sewer collector pipe to which HSC is connected: For saddles type R and HSC DN160 DN/ID600, DN/ID800 and DN/ID1000 For saddles type R and HSC DN200 DN/OD315, DN/OD400, DN/ID500, DN/ID600, DN/ID800 and DN/ID1000

#### INSTALLATION INSTRUCTIONS FOR SADDLES WITH OR WITHOUT WIDE SADDLE PART ON PRAGMA CORRUGATED PIPES:

 Make a hole with the corresponding cutter for the respective connection diameter. Make sure that the cutter is placed perpendicular to the surface of the pipe, avoiding an oval opening that can lead to loss of water tightness.
Clean the already made hole from swarf, with a scraper, without changing the diameter of the hole.

- 3. Unscrew the nut fully.
- 4. Lubricate the rubber sleeve to easily
- fit the saddle into the hole.
- 5. Insert the saddle into the hole.
- 6. Screwing the nut with the wrench:

6.a) for saddles type NL, continue tightening until the first upper thread appears.

6.b) for saddles type R screw the nut with the wrench completely until it stops, ensuring that the internal expanding seal (the rubber sleeve) is tightened.



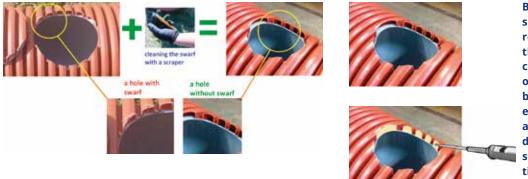












Before inserting the saddle into the hole, it is recommended that you fill the internal cavities of the cut ribs (opened as a result of the hole being drilled) by injecting a fast curing expanding foam to prevent any loss of watertightness due to stress in the pipe during the structure tightening of the saddle nut and afterwards!

# **PRODUCT RANGE**

Product Code	Description		DN street sewer collector	Images	
PRLATIN160/OD250NL	PRAGMA saddle with a nut DN/OD160 x DN/OD250 type NL		DN/OD250		
PRLATIN160/OD250NLexp	PRAGMA saddle with a nut DN/OD160 x DN/OD250, with a long socket type NL PRAGMA saddle with a nut DN/OD160 x DN/OD315 type NL		DN/OD250	The state	
PRLATIN160/OD315NL			DN/OD315		
PRLATIN160/OD315NLexp	PRAGMA saddle with a nut DN/OD160 x DN/OD315, with a long socket type NL		DN/OD315	with short with long socket	
PRLATIN160/OD400NL	PRAGMA saddle with a nut DN/OD160 x DN/OD400 type NL	DN/	DN/0D400		
PRLATIN160/OD400NLexp	PRAGMA saddle with a nut DN/OD160 x DN/OD400, with a long socket type NL		DN/OD400	socket socket <sup>1</sup>	
PRLATIN160/ID500NL	PRAGMA saddle with a nut DN/OD160 x DN/ID500 type NL		DN/ID500		
PRLATIN160/ID500NLexp	PRAGMA saddle with a nut DN/OD160 x DN/ID500 type NL		DN/ID500		
PRLATIN160/ID600R	PRAGMA saddle with a nut DN/OD160 x DN/ID600 type R		DN/ID600		
PRLATIN160/ID800R	PRAGMA saddle with a nut DN/OD160 x DN/ID800 type R		DN/ID800		
PRLATIN160/ID1000R	PRAGMA saddle with a nut DN/OD160 x DN/ID1000 type R		DN/ID1000		
PRLATIN200/OD315R	PRAGMA saddle with a nut DN/OD200 x DN/OD315 type R		DN/OD315		
PRLATIN200/OD400R	PRAGMA saddle with a nut DN/OD200 x DN/OD400 type R		DN/OD400	10000	
PRLATIN200/ID500R	PRAGMA saddle with a nut DN/OD200 x DN/ID500 type R	DN/	DN/ID500	1 Para	
PRLATIN200/ID600R	PRAGMA saddle with a nut DN/OD200 x DN/ID600 type R	OD200	DN/ID600		
PRLATIN200/ID800R	TIN200/ID800R PRAGMA saddle with a nut DN/OD200 x DN/ID800 type R		DN/ID800	No. of Contraction of	
PRLATIN200/ID1000R	PRAGMA saddle with a nut DN/OD200 x DN/ID1000 type R		DN/ID1000	A STATE OF A	

\*HSC – housing sewer connection

1 - Saddles with long sockets are recommended for vertical joining of the housing sewer connection into the street sewer collector pipe

# TOOLS

Product Code	Description	Images	Applied to saddles:
PRLATKEY160	Wrench for Pragma saddles type NL		
There is not a product code, because the wrench is part of the kit of every saddle type R	Wrench for Pragma saddles type R	Q	

Product Code	Description	D [mm]	Images
PRFREZ160-SP	Cutter for Pragma saddles type NL, connection with PVC DN160 – D168 mm	168	
PRFREZ160/200-SR	Cutter for Pragma saddles type R, connection with PVC DN160/200 – D200 mm	200	

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