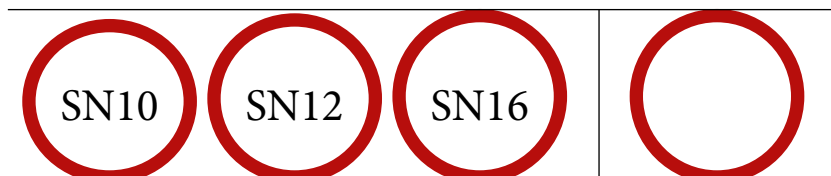
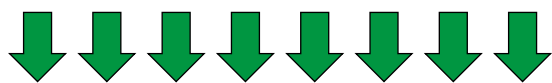
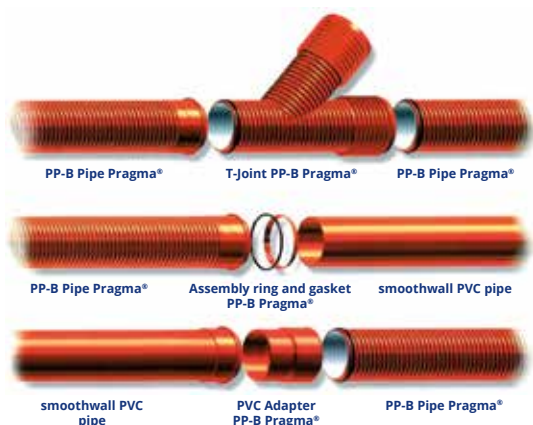


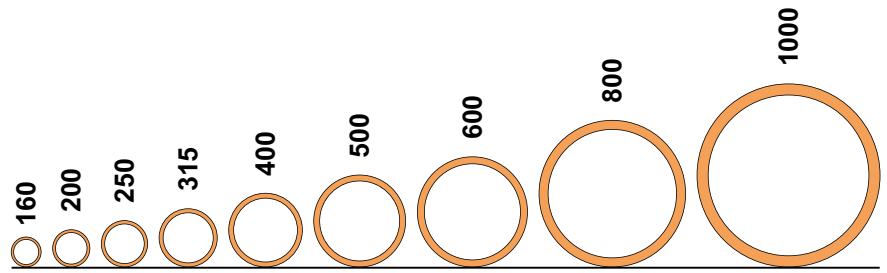
PRAGMA® SN10, SN12 AND SN16 POLYPROPYLENE INFRASTRUCTURE SEWAGE SYSTEM EN 13476-3:2018



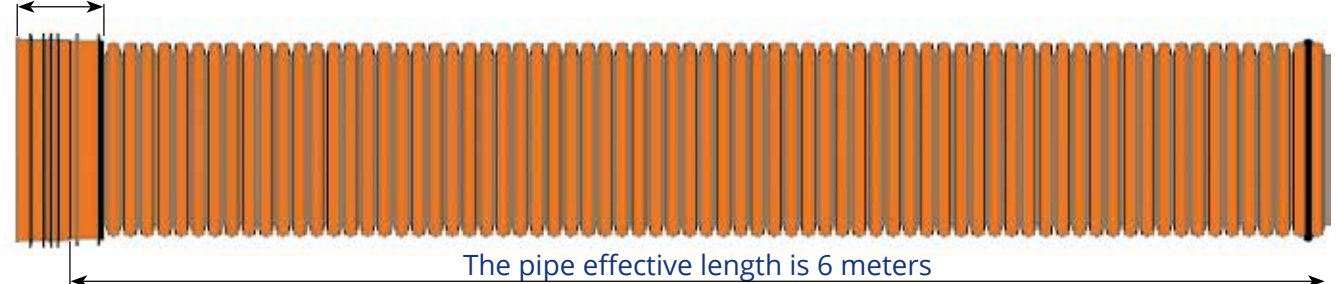
- Another enlargement of the product list of pipes for infrastructure sewage systems with the Pragma brand manufactured by Pipelife Bulgaria Ltd.
- Ring stiffness $SN \geq 10 \text{ kN/m}^2$, $SN \geq 12 \text{ kN/m}^2$ and $SN \geq 16 \text{ kN/m}^2$
- Pragma SN10, SN12 and SN16 provide more reliable security in case of bad conditions of installation, critical pipe cover layer in heavy traffic area or greater depth of laying!
- SN8 is the optimal stiffness; nevertheless pipes of higher class of stiffness such as SN10, SN12 and SN16 provide additional security as compared to other piping systems in same conditions of installation!
- The pipes SN10, SN12 and SN16 have the same geometry as the pipes SN8.
- All pipes with identical DN have the same inner diameter; they differ only in the class of stiffness SN10, SN12 and SN16. This ensures absence of any correlation between the pipe hydraulic conductivity and its structural strength; therefore the hydraulic dimensional calculations can be commonly applied for all SN classes of Pragma pipes SN10, SN12 and SN16!
- All pipes with identical DN have the same inner diameter; they differ only in the class of stiffness SN10, SN12 and SN16. This ensures absence of any correlation between the pipe overall dimensions for assemblage and its structural strength; therefore the pipes assemblage and coupling with standard size fittings can be commonly applied for all SN classes of Pragma pipes SN10, SN12 and SN16!
- The easy transition from and to PVC smoothwall pipes is preserved.
- Pragma pipes SN10, SN12 and SN16 are all part of a whole sewage system including manholes PRO, rainwater collectors PRO-RG, modular pumping stations PROFOS and modular wastewater treatment plants ECO.
- The application of Pragma pipes SN10, SN12 and SN16 is drainage of household and industrial wastewater and rainwater!



SEWAGE PIPES PRAGMA® SN10, SN12 И SN16. MANUFACTURED IN BOTEVGRAD!



L-socket



	DN	Dext.	Dint.	Rib Height H	Pipe Length without socket L*	Product Code	Ring Stiffness
	[mm]	[mm]	[mm]	[mm]	[m]		
DN/OD	160	160	137.9	11.05	6	PRAGMA160/6	SN ≥ 10 kN/m ² SN ≥ 12 kN/m ² SN ≥ 16 kN/m ²
DN/OD	200	200	174.8	12.6	6	PRAGMA200/6	
DN/OD	250	250	219.8	15.1	6	PRAGMA250/6	
DN/OD	315	315	275.5	19.75	6	PRAGMA315/6	
DN/OD	400	400	348.6	25.7	6	PRAGMA400/6	
DN/ID	500	560	490	35	6	PRAGMA500+ID/6	
DN/ID	600	660	588	36	6	PRAGMA600+ID/6	
DN/ID	800	930	785	72.5	6	PRAGMA800+ID/6	
DN/ID	1000	1140	985	77.5	6	PRAGMA1000+ID/6	

* The effective length (without socket) of Pragma ID pipes can vary by up to +/-7.5cm

** Dimensions refer to pipes DN / ID600 and SN≥10 kN/m² and SN≥12 kN/m²

*** Dimensions refer to pipes DN / ID600 and SN≥16 kN/m²

The use of primary raw materials with higher elasticity module and the increase of wall thickness in the inner layer of ribs while preserving the pipe span and external diameter account for keeping the hydraulic and assemblage specifications of Pragma pipes SN10, SN12 and SN16.

The adverse conditions that could affect the security of sewage pipes SN8 are insufficient control of backfilling coupled with insufficient compaction or using existing unearthed mass for backfilling, which from statistical point of view will provide not so good performance conditions for the pipes, or also shallow laying of pipes in traffic sections of large areal sewer piping systems or installation of a separate shallower rainwater drainage system in case of a divided urban sewer system or laying the pipes too deep or combination of earth pressure and high underground waters pressure or additionally increased requirements about the cross deflection of pipes.

Pragma pipes SN10 are worth paying special attention! Compared to SN8 they provide additional security and quality at minimum higher price. Pragma SN10 costs almost as much as SN8 pipes but it is 25% stronger and more secure than SN8!

Pipelife Bulgaria Ltd is capable of providing technical consultations and statistical calculations for underground laid piping using professional software EASYPIPE. This way we can further serve our customers when choosing the stiffness class of Pragma pipes to correspond to the specific terrain conditions and requirements.