

CATALOG SHEET - MODULAR PIPES PP

About the product and materials

TERMA modular pipes are made of PP-H polypropylene. This material is characterized by high strength and stiffness. It has a very high chemical resistance, also to solvents. Materials made of PP-H polypropylene are suitable for the transport of raw and drinking water, demineralized water as well as diluted acids and bases.

TERMA pipes are resistant to municipal sewage, surface and ground rainwater. The material is resistant to the formation of stress cracks.

The TERMA modular pipe system is manufactured in diameters from 110 to 500 [mm] with dimensional series SDR 17 or SDR 11 for pipes with a diameter smaller than 180 [mm] with nominal ring stiffnesses SN 8, 10, 12, 16, 20, 32.

The tightness of TERMA modules is ensured by a specially tailored and selected gasket, made of the highest-class NBR material of the Polish manufacturer of rubber and silicone products, which checks and tests its products at the Polish Center for Testing and Certification. This material is characterized by good oil resistance. They are also praised for their durability in the presence of alcohols, aqueous salt solutions and dilute acids and bases at medium temperatures.

The recommended temperature range for gaskets is -30°C to $+80^{\circ}\text{C}$.

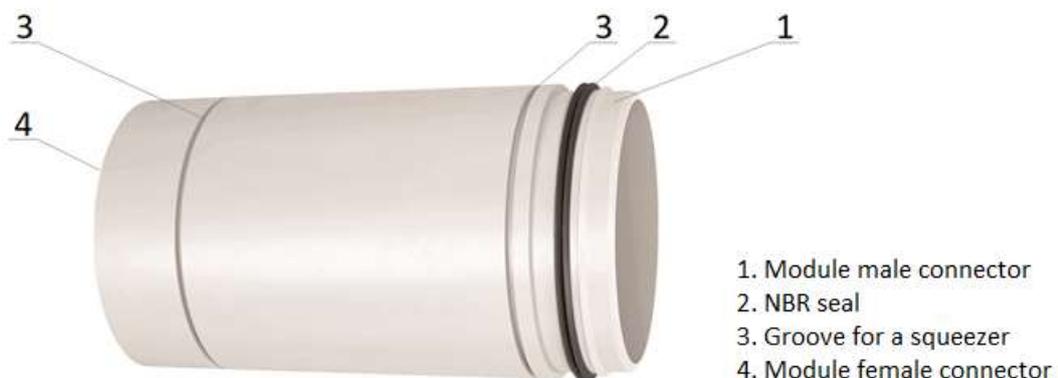
Approvals and standards

TERMA modular pipes made of PP-H polypropylene meet the standards and have the ITB-KOT-2020/1242 edition 3 approval, which is a positive assessment of the pipe performance.

Application

TERMA modular pipes are used to build a non-pressure sewage network using the traditional or trenchless method - by means of horizontal gravity drilling. Another application is also the renovation of existing sewage pipes.

Construction



List of declared performance and standards that are met by TERMA PP-H modular pipes, in accordance with ITB-KOT-2020/1242 edition 3.

Pos.	Essential characteristics	Performance properties	Assessment methods
1	2	3	4
1	Dimensional tolerances	according to the attachment A	PN-EN ISO 3126:2006
2	Resistance to external impacts, %	TIR \leq 10	PN-EN ISO 3127:2017 test parameters acc. to PN-EN 1852-1:2018
3	Circumferential stiffness, kN/m ²	SN 8 \geq 8 kN/m ² SN 10 \geq 10 kN/m ² SN 12 \geq 12 kN/m ² SN 16 \geq 16 kN/m ² SN 20 \geq 20 kN/m ² SN 32 \geq 32 kN/m ²	PN-EN ISO 9969:2016
4	Longitudinal contraction, %	\leq 2 no damage in the form of blisters, delamination and cracks	PN-EN ISO 2505:2006 test parameters acc. to PN-EN 1852-1:2018
5	Mass melt flow rate MFR (230° / 2,16 kg), g/10 min	maximum MFR change as a result of raw material processing \pm 20 %	PN-EN ISO 1133-1:2011
6	Tightness of connections with an elastomeric sealing ring	no leaks, air pressure \leq -0,27 bar	PN-EN ISO 13259:2018 test parameters acc. to PN-EN 1852-1:2018
7	Oxidation induction time OIT (200°C), min	\geq 8	PN-EN ISO 11357-6:2018