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Product Datasheet MHT 2822

Geothermal Pipes



General

PE 80 pressure pipe complying with DS/EN 12201 - Approved for geothermal application up to 8 bar.

Supplied in coils or on wooden drums.

Raw Materials

Material

Only INSTA-CERT approved PE80 raw materials are used

INSTA-CERT approved raw materials comply with DS/EN 12201.

Dimensions

Size	SDR	Mean Outside Diam				Wall Thickness			Mass
		Min	NOM	Max	I.D nom	Min	NOM	Max	nom g/m
32-90 mm	17		Comply to DS/EN 12201 (See appendix MHT 2702)						

'SDR' is the standard dimension ratio (OD / wall).

Lower SDR's indicate heavy duty sizes.

The pipes shall have dimensions (mm) as defined above, in addition other non-standard dimensions can be chosen,

The weight (mass) of the pipe shall be nominally calculated for 1m pipe

$$(\mathbf{0D} - \mathbf{wt}) \times \mathbf{wt} \times \mathbf{\pi} \times \mathbf{desity}$$

Where:

OD (outside diameter) and wt (wall thickness) is in mm, and density for PE100 is 0.96 g/cm³.

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Pipe Performance

Pipe ovality: Comply to EN 12201

Physical Properties:

Test	Standard	Result
Hydrostatic test 165 h	EN ISO 1167	OK
Elongation at Break	EN ISO 6259	>350%
Yield Stress	EN ISO 6259	>22MPa
Longitudinal reversion	EN ISO 2505	<3%
MFR (190°C/5kg)		
Deviation raw mat. To pipe: ≤ 20%	EN ISO 1133	OK
OIT ≥ 20 min*	ISO 11357	OK
Recommended minimum Bending Radius**		25xOuter diameter

^{*}Demand taken from EN 12201 which ensures oxidative stability of at least 50 years. This is under ambient temperature and pressure conditions with no chemical stress.

Installation tension recommendation:

SDR 17			
Ø [mm]	Max install tension [kN]	Max install tension [kg]	
32	2,1	211	
40	3,1	318	
50	4,9	496	
63	7,8	792	
75	11,0	1116	
90	15,8	1608	

^{*}Note that "," separates for decimals and "." separates for thousands

Exposure: The pipe shall be UV stabilised to withstand daylight exposure period of at least 12 months. Black pipes comply with EN 12201. However, for optimum performance, the pipe is best stored for no longer than 6 months if outdoors.

Marking: Standard number, intended use P, dimensions, material, SDR series, pressure rating in bar, Date and time, manufactures name, rawmaterial code, metermark, Jordvarmeslange.

Environmental considerations: Can be disposed to recycling.

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^{**}Bending radius lower than recommended will negatively impact the mechanical strength of the pipe, such as tensile strength.