

TECHNICAL DATA SHEET



ULTRASTRESS

Water pressure pipes from PE100-RC

According to PAS 1075 Type 1
Conforms to: EN 12201-2



Nordic Poly Mark

PRODUCT DESCRIPTION

ULTRASTRESS potable water pressure pipes are made from PE100-RC material. PE100-RC material pipes are resistant to long term expansion of cracks, scratching and point type loads. Point type loads are especially common during assembly of the pipelines using trenchless installation methods (for instance, as a result of friction against the stones that are present in the soil). In case of a point type load, tension and plastic deformations are produced in the material, which may cause cracks in the internal surface of the pipe.

Material: High density polyethylene (HDPE), type PE100-RC

Pipes are manufactured according to EN 12201, PAS 1075 specifications.

APPLICATION AREA

ULTRASTRESS pipes are designed potable water systems, with recommended installation in open trenches without bedding and filling or by alternative installation techniques: laying into the soil with a plough or a milling cutter or horizontal directional drilling.

PRODUCT DIMENSIONS

Pipe dimensions conform to EN 12201-2 specifications. Pipe nominal pressure according to EN12201-2 (with C=1,25 at temperature 20 °C) PN10 bar for SDR 17 pipes and PN16 for SDR 11 pipes.

PE100-RC

According to PAS 1075:

Type 1

Open product

Pipe dimensions		Length
$d_n \times e_n$, mm		L, m
SDR 17	SDR 11	
-	16 x 2,0	6-2000
-	20 x 2,0	6-2000
-	25 x 2,3	6-2000
32 x 2,0	32 x 3,0	6-2000
40 x 2,4	40 x 3,7	6-1000
50 x 3,0	50 x 4,6	6-600
63 x 3,8	63 x 5,8	6-600
75 x 4,5	75 x 6,8	6-200
90 x 5,4	90 x 8,2	6-200
110 x 6,6	110 x 10,0	6 / 12 / 13,4 / 20 / 50
125 x 7,4	125 x 11,4	6 / 12 / 13,4 / 20
140 x 8,3	140 x 12,7	6 / 12 / 13,4 / 20
160 x 9,5	160 x 14,6	6 / 12 / 13,4 / 20
200 x 11,9	200 x 18,2	6 / 12 / 13,4 / 20
225 x 13,4	225 x 20,5	6 / 12 / 13,4 / 20
250 x 14,8	250 x 22,7	6 / 12 / 13,4 / 20
280 x 16,6	280 x 25,4	6 / 12 / 13,4 / 20
315 x 18,7	315 x 28,6	6 / 12 / 13,4 / 20
355 x 21,1	355 x 32,2	6 / 12 / 13,4 / 20
400 x 23,7	400 x 36,3	6 / 12 / 13,4 / 20
450 x 26,7	450 x 40,9	6 / 12 / 13,4 / 20
500 x 29,7	500 x 45,4	6 / 12 / 13,4 / 20
560 x 33,2	560 x 50,8	6 / 12 / 13,4 / 20
630 x 37,4	630 x 57,2	6 / 12 / 13,4 / 20

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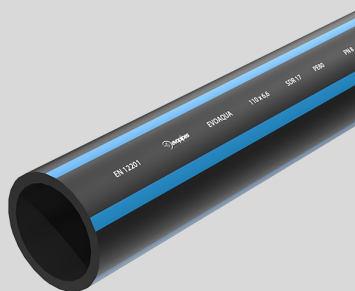
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PRODUCT PARAMETERS

Parameter	Value	Test method
Material	PE100-RC	PAS 1075
Hydrostatic pressure resistance (80 °C, 5 MPa)	>1000 h	EN ISO 1167-1 EN ISO 1167-2
Tensile elongation	>350%	EN ISO 6259-1
Resistance to crack growth (80 °C, 4 N/MPa, 2% Arkopal N-100)	>8760 h	ISO 16770
Resistance to slow crack growth (80 °C, 9.2 bar)	>8760 h	EN ISO 13479
Mass flow rate MFR (5 kg, 190 °C, 10 min)	0.25 ± 20%	EN ISO 1133
Oxidation induction time (200 °C)	≥20% min	ISO 11357-6
Longitudinal reversion (e _r ≤ 16 mm, 110 °C)	≤3%	EN ISO 2505
Chemical resistance	pH 2 ≥ pH ≥ pH 12	ISO/TR 10358



PE100-RC

According to PAS 1075:

Type 1

PRODUCT MARKING

Aspect	Marking
Standard number	EN 12201
Material requirements and type	PAS 1075 Type 1
Manufacturers information	EVOPIPES
Dimensions (diameter x wall thickness)	e.g. 110 x 6,6
SDR series	e.g. SDR 17
Material	PE100-RC
Pressure rating (bar)	e.g. PN10
Intended application (W-potable water)	W / P
Date of production (dd/mm/yy)	date
QA organization signature	Nordic Poly Mark, DK VAND

Open product