

TECHNICAL DATA SHEET

ULTRASTRESS PROTECT

Wastewater pressure pipes from PE100-RC/PP

According to PAS 1075 Type 3
Conforms to: EN 12201-2



PRODUCT DESCRIPTION

Wastewater pressure piping system ULTRASTRESS PROTECT consists of PE100-RC solid-wall pipes with polypropylene (PP) protective layer (identified by longitudinal green lines) for additional durability. PE100-RC/PP material pipes are resistant to long term expansion of cracks, scratching and point type loads which 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). PE100-RC pipes with PP protective layer provide additional durability against scratching in cases of especially complex installation, e.g. while burst lining.

Material: High density crack resistant polyethylene PE100-RC with polypropylene (PP) protective layer. Core pipe is black in colour with 4 stripes in brown colour and protective layer is in brown colour with 4 stripes in green colour.

Pipes are manufactured according to EN 12201-2, PAS 1075 specifications.

APPLICATION AREA

ULTRASTRESS PROTECT pipes are designed for wastewater pressure systems, with recommended installation methods of pulling in the site of the old pipe with or without the destruction of the old pipe according to EN 12889, EN 14457.

PRODUCT DIMENSIONS

Core pipe dimensions conform to EN 12201-2 specifications. Core pipe nominal pressure according to EN 12201-2 (with C=1,25 at temperature 20 °C) PN10 bar for SDR 17 pipe.

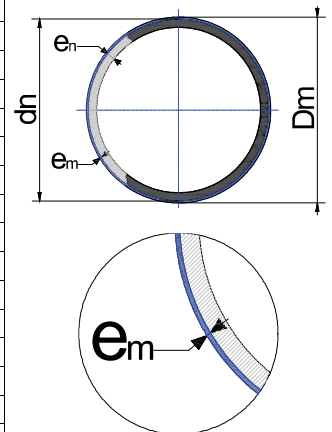
PE100-RC / PP

According to PAS 1075:

Type 3

Open product

Core pipe dimensions		PP layer	Main dimensions	Length
d _n x e _n , mm		e _m , mm (±10%)	D _m , mm	L, m
SDR 17	SDR 11			
32 x 2,0	32 x 3,0	~ 0,9	33,8	100-2000
40 x 2,4	40 x 3,7	~ 1,0	42	100-1000
63 x 3,8	63 x 5,8	~ 1,0	65	100-600
90 x 5,4	90 x 8,2	~ 1,5	93	100-200
110 x 6,6	110 x 10,0	~ 1,8	113,6	12 / 13,4 / 20 / 50
125 x 7,4	125 x 11,4	~ 2,0	129	12 / 13,4 / 20
160 x 9,5	160 x 14,6	~ 2,0	164	12 / 13,4 / 20
200 x 11,9	200 x 18,2	~ 2,0	204	12 / 13,4 / 20
225 x 13,4	225 x 20,5	~ 3,0	231	12 / 13,4 / 20
250 x 14,8	250 x 22,7	~ 3,0	256	12 / 13,4 / 20
280 x 16,6	280 x 25,4	~ 3,0	286	12 / 13,4 / 20
315 x 18,7	315 x 28,6	~ 3,0	321	12 / 13,4 / 20
355 x 21,1	355 x 32,2	~ 4,0	363	12 / 13,4 / 20
400 x 23,7	400 x 36,3	~ 4,0	408	12 / 13,4 / 20
450 x 26,7	450 x 40,9	~ 4,0	458	12 / 13,4 / 20
500 x 29,7	500 x 45,4	~ 4,0	508	12 / 13,4 / 20
560 x 33,2	560 x 50,8	~ 5,0	570	12 / 13,4 / 20
630 x 37,4	630 x 57,2	~ 5,0	640	12 / 13,4 / 20



TECHNICAL DATA SHEET

ULTRASTRESS PROTECT

Wastewater pressure pipes from PE100-RC/PP

According to PAS 1075 Type 3
Conforms to: EN 12201-2



PRODUCT PARAMETERS

Parameter	Value	Test method
Material	Core pipe: PE100-RC Outer layer: PP	PAS 1075
Hydrostatic pressure resistance (80 °C, 5,4 MPa)	>165 h	EN ISO 1167-1 EN ISO 1167-2
Tensile elongation	≥350%	EN ISO 6259-1 EN ISO 6259-3
Resistance to crack growth (80 °C, 4 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)	0.2-0,4g	EN ISO 1133
Oxidation induction time (200 °C)	≥20 min	EN ISO 11357-6
Longitudinal reversion ($e_r \leq 16$ mm, 110 °C)	≤3%	EN ISO 2505
Chemical resistance	pH 2 ≥ pH ≥ pH 12	ISO/TR 10358

PRODUCT MARKING

PE100-RC / PP

According to PAS 1075:

Type 3

Open product

Protective layer marking

Aspect	Marking
Standard number	EN 12201
Material requirements and type	PAS 1075 Type 3
Manufacturers information	EVOPIPES
Product identification	ULTRASTRESS PROTECT
Core pipe dimensions (diameter x wall thickness)	e.g. 110 x 6,6
SDR series	e.g. SDR 17
Extrusion type	PEELABLE PP LAYER
Material	PE100-RC/PP
Core pipe pressure rating (bar)	e.g. PN10
Intended application (P-wastewater)	P
Date of production	date
QA organization signature	Nordic Poly Mark, DIN CERTO

Core pipe 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 (P-wastewater)	P
Date of production (dd/mm/yy)	date
QA organization signature	Nordic Poly Mark, DIN CERTO