

TECHNICAL DATA SHEET



ULTRASTRESS PROTECT

Water pressure pipes from PE100-RC/PP

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



PRODUCT DESCRIPTION

Pressure piping system ULTRASTRESS PROTECT consists of PE100-RC solid-wall pipes with protective PP layer (identified by longitudinal green lines) and wide range of fittings. 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 layer provide additional durability against scratching in cases of especially complex installation, e.g. installation in old pipe.

Material: High density crack resistant polyethylene PE100-RC with polypropylene (PP) layer. Core pipe is black in colour with blue stripe and outer layer is blue with green stripes. Pipes are manufactured according to: EN 12201-2, PAS 1075 specifications.

APPLICATION AREA

ULTRASTRESS PROTECT pipes are designed for water 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.

PE100-RC / PP

According to PAS 1075:

Type 3

Open product

TECHNICAL DATA SHEET



ULTRASTRESS PROTECT

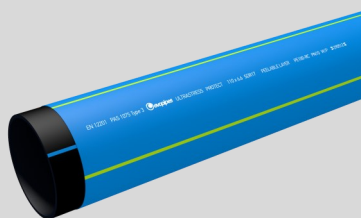
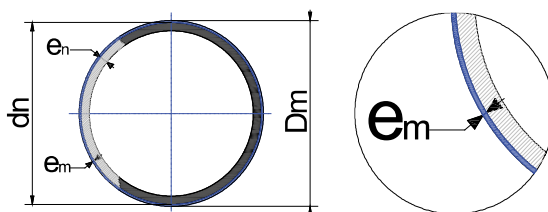
Water pressure pipes from PE100-RC/PP

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



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 bar for SDR 11 pipes.



PE100-RC / PP

According to PAS 1075:

Type 3

Open product

Pipe dimensions		PP layer	Main dimensions		Length
dn x e _{nv} mm		e _{nv} mm	D _m mm	L, m	
SDR 17	SDR 11				
32 x 2,0	32 x 3,0	~ 0,9	~ 33,8	6/30/50/60/70/100/150/200/300/400/500/1000/2000	
40 x 2,4	40 x 3,7	~ 1,0	~ 42	6/50/100/150/200/300/400/500/1000/2000	
50 x 3,0	50 x 4,6	~ 1,0	~ 52	6/50/100/150/200/300/400/500/1000	
63 x 3,8	63 x 5,8	~ 1,0	~ 65	6/50/100/150/200/300/400/500	
75 x 4,5	75 x 6,8	~ 1,0	~ 77	6/50/100/150/200/300/400/500	
90 x 5,4	90 x 8,2	~ 1,5	~ 93	6/12/13,4/50/100/150/200	
110 x 6,6	110 x 10,0	~ 1,8	~ 113,6	6/12/13,4/50/100/150/200	
125 x 7,4	125 x 11,4	~ 2,0	~ 129	6/12/13,4/50/100	
160 x 9,5	160 x 14,6	~ 2,0	~ 164	6/12/13,4/18/20/50/100	
180 x 10,7	180 x 16,4	~ 2,0	~ 184	6/12/13,4/18/20/50	
200 x 11,9	200 x 18,2	~ 2,0	~ 204	6/12/13,4/18/20/50	
225 x 13,4	225 x 20,5	~ 3,0	~ 231	6/12/13,4/18/20	
250 x 14,8	250 x 22,7	~ 3,0	~ 256	6/12/13,4/18/20	
280 x 16,6	280 x 25,4	~ 3,0	~ 286	6/12/13,4/18/20	
315 x 18,7	315 x 28,6	~ 3,0	~ 321	6/12/13,4/18/20	
355 x 21,1	355 x 32,2	~ 3,0	~ 363	6/12/13,4/18/20	
400 x 23,7	400 x 36,3	~ 3,0	~ 406	6/12/13,4/18/20	
450 x 26,7	450 x 40,9	~ 3,5	~ 457	6/12/13,4/18/20	
500 x 29,7	500 x 45,4	~ 3,5	~ 507	6/12/13,4/18/20	
560 x 33,2	560 x 50,8	~ 3,7	~ 567,4	6/12/13,4/18/20	
630 x 37,4	630 x 57,2	~ 4,0	~ 638	6/12/13,4/18/20	
710 x 42,1	710 x 64,5	~ 5,0	~ 720	6/12/13,4/18/20	
800 x 47,2	800 x 72,6	~ 5,0	~ 810	6/12/13,4/18/20	
900 x 53,3	900 x 81,7	~ 5,5	~ 911	6/12/13,4/18/20	
1000 x 59,3	1000 x 90,8	~ 6,0	~ 1012	6/12/13,4/18/20	
1200 x 71,1	-	~ 6,5	~ 1213	6/12/13,4/18/20	

TECHNICAL DATA SHEET



ULTRASTRESS PROTECT

Water pressure pipes from PE100-RC/PP

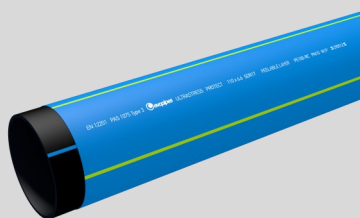
According to PAS 1075 Type 3
Conforms to: EN 12201-2



Nordic Poly Mark

PRODUCT PARAMETERS

Parameter	Value	Test method
Material	Core pipe: PE100-RC Outer layer: PP	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 / PP

According to PAS 1075:

Type 3

PRODUCT MARKING

Protective layer marking

Aspect	Marking
Standard number	EN 12201
Material requirements and type	PAS 1075 Type 3
Manufacturers information	EVOPIPES
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 (W-potable water)	W
Date of production	date
QA organization signature	Nordic Poly Mark

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 (W-potable water)	W
Date of production (dd/mm/yy)	date
QA organization signature	Nordic Poly Mark, DK VAND

Open product