



PE100-RC/ RC TECH/S-TRIO

In sizes DN 32 - 500 mm

Water and sewage systems

Long durability | Environmental aspects | High quality

ELMO-PLAST, a.s.
Alojzov 171,
798 04 Alojzov
Czech republic
Tel: +420 582 331 950
Fax: +420 582 331 951
E-mail: elmoplast@elmoplast.cz
Website: www.elmoplast.cz

Designed for main distribution pressure water and sewage lines, delivery of chemicals or pressure air, suction pipelines, in cooling systems, for older lines renovations, trenchless applications, collectors for thermal pumps etc.

Manufactured in compliance with ČSN EN 12 201-2



Characteristics

Pipes PE100-RC (type 1 as per PAS 1075)

Pipelines with single-layer homogenous walls, made from material PE100-RC in black. They are intended for laying in soils with diggability and workability of category R5, R6, F, S or G as per ČSN 73 6133. Should they be laid also in stony soils, then it is necessary to backfill them with soil R5, R6, F, S or G. This pipeline is able to carry out its function also in case of damage or puncture of its wall thickness up to 10%. Used material PE100-RC provides good weldability with PE80 and PE100 through butt welding or with electro-couplers.

Pipes RC-TECH made from material PE100-RC (type 2 as per PAS 1075)

The pipeline RC-TECH is designed for laying in opened trenches without sand backfilling, furthermore for renovation technologies and special applications. Two inseparable wall layers provide high resistance to mechanical wear. The outer layer creates 10% of overall wall thickness and it can be made in different colour tones (blue, orange, brown). This colour difference is intended especially for easy detection of surface defects and scratches deeper than 10% wall thickness. The inner layer in black creates 90% of overall wall thickness and it is made from classical material PE100-RC.

Pipes S-TRIO made from material PE100-RC (type 2 as per PAS 1075)

The PE pipeline is designed for laying in opened trenches without sand backfilling, furthermore for renovation technologies and special applications. Three inseparable wall layers provide the pipeline with excellent mechanical characteristics.

All three types of pipes made from PE100-RC can be characterised by high intensity of testing of their material properties that are decisive for long durability life as specified in applicable norms for a period up to 100 years. Primary properties of PE100-RC in comparison with standard PE-100 show improved material resistance to slow crack growth at keeping long-term pressure resistance of PE100 and thereby long-term durability and stability also under heavy conditions.

To backfill all the Elmo-plast pipes made from PE100-RC you can use any compactable excavated material independently on soil texture except for the material with content of heavy parts that may damage (by weight) the pipe or its diameter resulting in reduced flow.

Thanks to excellent PE100-RC characteristics the Elmo-plast pipes can be also used for demanding laying technologies incl. trenchless applications: sand-free laying in trenches, burstlining, ploughing, controlled boring, cutting, relining.

Advantages

Pipes made from PE100-RC

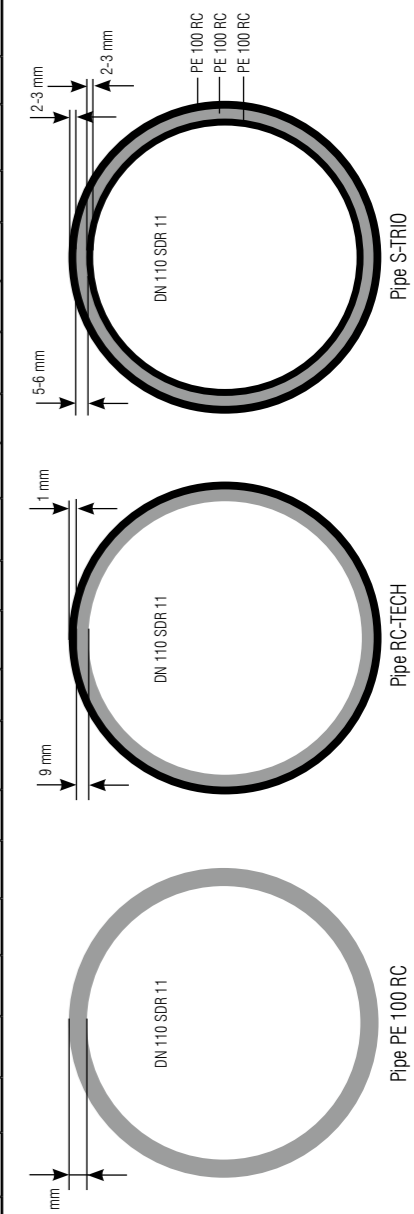
- impaired risk of pipe failure due to damage
- resistance to point load
- increased resistance to point corrosion due to tension
- significant protection against damage
- prolonged durability life
- improved weldability
- sand-free laying in trenches
- trenchless applications
- easy differentiation of pipes – coloured stripes according to medium
- black colour improving UV stability at storage

Pipes made from RC-TECH/S-TRIO

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- black colour improving UV stability at storage
- easy detection of surface defects and scratches deeper than 10% wall thickness

Table of products PE 100-RC: water, sewage

Ø	PIPE PE100-RC			PIPE RC-TECH			PIPE S-TRIO												
	PN6 SDR 26	PN 10 SDR 17	PN 16 SDR 11	PN 20 SDR 9	PN 25 SDR 7,4	Ø	PN6 SDR 26	PN 10 SDR 17	PN 16 SDR 11	PN 20 SDR 9	PN 25 SDR 7,4	Ø							
	kg/m	mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m	mm							
32		2.0	0.19	3.0	0.28	3.6	0.33	4.4	0.39	3.6	0.33	4.4	0.39						
40		2.4	0.29	3.7	0.43	4.5	0.51	5.5	0.60	4.5	0.51	5.5	0.60						
50	2.0	3.0	0.45	4.6	0.67	5.6	0.79	6.9	0.94	5.6	0.79	6.9	0.94						
63	2.5	3.8	0.72	5.8	1.05	7.1	1.26	8.6	1.46	7.1	1.26	8.6	1.46						
75	2.9	4.5	1.02	6.8	1.47	8.4	1.77	10.3	2.11	8.4	1.77	10.3	2.11						
90	3.5	5.67	1.46	8.2	2.13	10.1	2.56	12.3	3.02	10.1	2.56	12.3	3.02						
110	4.2	1.43	6.6	2.17	10.0	3.16	12.3	3.80	4.52	11.0	3.16	12.3	3.80						
125	4.8	1.84	7.4	2.77	11.4	4.10	14.0	4.90	5.82	12.5	4.8	1.84	7.4	2.77	11.4	4.10	14.0	4.90	5.82
140	5.4	2.33	8.3	3.48	12.7	5.11	15.7	6.16	7.31	14.0	5.4	2.33	8.3	3.48	12.7	5.11	15.7	6.16	7.31
160	6.2	3.05	9.5	4.54	14.6	6.71	17.9	8.02	9.15	160	6.2	3.05	9.5	4.54	14.6	6.71	17.9	8.02	9.15
180	6.9	3.80	10.7	5.74	16.4	8.48	20.1	10.14	12.02	180	6.9	3.80	10.7	5.74	16.4	8.48	20.1	10.14	12.02
200	7.7	4.71	11.9	7.09	18.2	10.46	22.4	14.88	200	7.7	4.71	11.9	7.09	18.2	10.46	22.4	14.88	200	
225	8.6	5.92	13.4	8.99	20.5	13.24	25.2	15.87	18.80	225	8.6	5.92	13.4	8.99	20.5	13.24	25.2	15.87	18.80
250	9.6	7.33	14.8	11.02	22.7	16.28	27.9	19.51	23.21	250	9.6	7.33	14.8	11.02	22.7	16.28	27.9	19.51	23.21
280	10.7	9.15	16.6	13.84	25.4	20.41	31.3	24.52	28.0	280	10.7	9.15	16.6	13.84	25.4	20.41	31.3	24.52	28.0
315	12.1	11.65	18.7	17.53	28.6	25.84	35.2	31.03	31.5	315	12.1	11.65	18.7	17.53	28.6	25.84	35.2	31.03	31.5
355	13.6	14.73	21.1	22.31	32.2	32.80	39.7	39.40	48.5	355	13.6	14.73	21.1	22.31	32.2	32.80	39.7	39.40	48.5
400	15.3	18.65	23.7	28.19	36.3	41.64	44.7	49.99	54.7	400	15.3	18.65	23.7	28.19	36.3	41.64	44.7	49.99	54.7
450	17.2	23.61	26.7	35.72	40.9	52.73	50.3	63.29	61.5	450	17.2	23.61	26.7	35.72	40.9	52.73	50.3	63.29	61.5
500	19.1	29.13	29.7	44.13	45.4	65.06	55.8	77.99	68.3	500	19.1	29.13	29.7	44.13	45.4	65.06	55.8	77.99	68.3
560	21.4	36.51	33.2	55.29	50.8	81.50				560	21.4	36.51	33.2	55.29	50.8	81.50			
630	24.1	46.27	37.4	70.02	57.2	103.27				630	24.1	46.27	37.4	70.02	57.2	103.27			
710	27.2	58.81	42.1	88.85	64.5	131.18				710	27.2	58.81	42.1	88.85	64.5	131.18			
800	30.6	74.49	47.4	112.66	72.9	174.10				800	30.6	74.49	47.4	112.66	72.9	174.10			
900	34.4	94.21	53.3	142.52						900	34.4	94.21	53.3	142.52					
1000	38.2	116.25	59.3	176.14						1000	38.2	116.25	59.3	176.14					
1100	42.1	140.90	65.2	213.02						1100	42.1	140.90	65.2	213.02					
1200	45.9	167.43								1200	45.9	167.43							



Example: