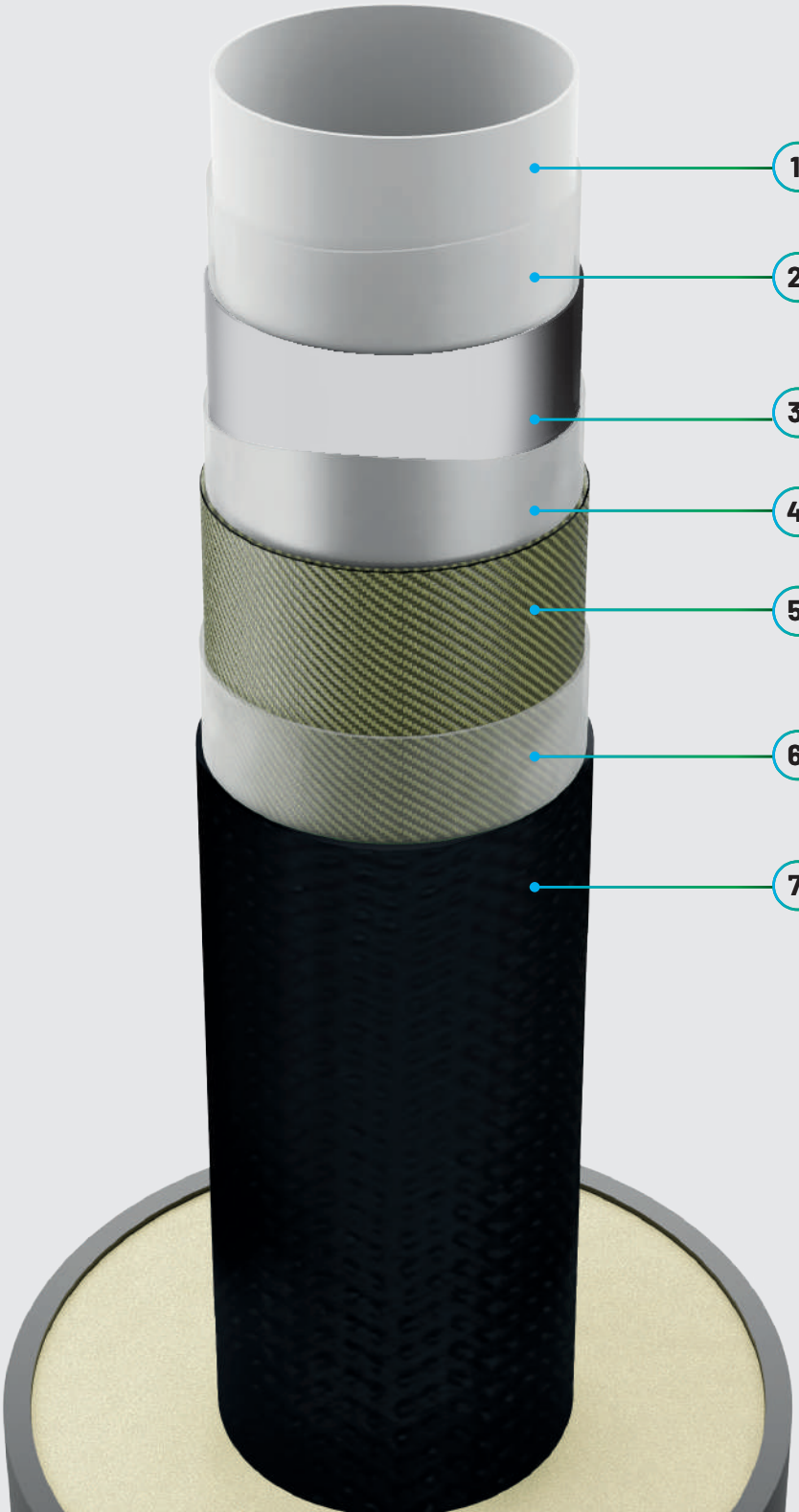
ECOPEX FORTE 16



1. Inner layer in PE-Xa
2. High-temperature adhesive layer
3. Aluminum foil as a high-temperature oxygen diffusion barrier
4. High-temperature adhesive layer
5. Para-aramid fiber
6. High-temperature adhesive layer
7. Polypropylene

ECOPEX FORTE 16

COMPOSITION	
PIPE	Pre-insulated flexible pipes with a multilayer service pipe, flexible polyurethane insulation, and an LD-PE outer sheath.
MULTILAYER PIPE (PEX + ALUMINUM OXYGEN BARRIER AND PARA-ARAMID FIBER).	
CROSS-LINKED STRUCTURE	PE-Xa/adhesive/aluminum/adhesive/para-aramid fiber/adhesive/PP.
MAXIMUM CONTINUOUS OPERATING TEMPERATURE	100°C
MAXIMUM SHORT-TERM OPERATING TEMPERATURE	115°C
MAXIMUM OPERATING PRESSURE:	See table on page 9 (Ecotech catalog)
Based on the operating parameters of each system, specific calculations can be performed to determine service life with respect to maximum temperature and pressure.	
POLYURETHANE INSULATING FOAM	
MATERIAL	Polyurethane foam obtained by mixing polyol and isocyanate with a cyclopentane-based blowing agent.
REFERENCE STANDARD	Minimum characteristics according to EN 15632-2.
THERMAL CONDUCTIVITY	(50°C) ≤ 0,02 W/mK
DENSITY	≥ 50 kg/m^3
COMPRESSIVE STRENGTH	≥ 0,2 MPa
LONG-TERM TEMPERATURE RESISTANCE	100°C
AXIAL SHEAR STRENGTH (EN 253)	≥ 0,12 MPa
EXTERNAL SHEATH IN LD-PE	
MATERIAL	Low-density polyethylene (LD-PE) PE 80, compliant with ISO 12162. MFI variation ≤ 0.5 g/10 min.
REFERENCE STANDARD	Minimum characteristics according to EN 15632-2.
SPECIAL TREATMENT	Corona treatment.
DENSITY	0,92 g/cm^3
ELASTIC MODULUS	325 N/mm^2
FIRE REACTION CLASSIFICATION (DIN 4102)	B2 (normal flammability).
GENERAL	

The pipes are provided in coils cut to the lengths specified by the customer.

ECOPEX FORTE 16

ECOPEX FORTE 16 is our pre-insulated flexible piping system designed for small to medium-sized district heating networks.

ECOPEX FORTE 16 UNO - SERIES 1

Type [mm]	ECOPEX FORTE 16		PE casing		Min. bending radius [m]	Fluid content [l/m]	Maximum roll length * [m]
	External diam. [mm]	Internal diam. [mm]	External diam. [mm]	Internal diam. [mm]			
40/90	40.0	32.6	90	3,0	0,80	0,83	400
50/110	49.8	40.8	110	3,0	0,85	1,31	300
63/125	61.8	51.4	125	3,0	0,90	2,07	300
75/140	72.8	61.4	140	3,0	1,00	2,96	250
90/160	86.5	73.6	160	3,0	1,10	4,25	150
110/160	104.9	90.0	160	3,0	1,10	6,36	150
125/180	117.0	102.2	180	3,0	1,40	8,20	90
140/200	130.4	114.6	200	3,2	1,40	10,31	70

* The maximum length is based on a coil with a diameter of 2.80 m and a width of 1.20 m.

ECOPEX FORTE 16 DUO - SERIES 1

Type [mm]	ECOPEX FORTE 16		PE casing		Min. bending radius [m]	Fluid content [l/m]	Maximum roll length * [m]
	External diam. [mm]	Internal diam. [mm]	External diam. [mm]	Internal diam. [mm]			
40+40/125	40.0	32,6	125	3,0	0,90	1,67	300
50+50/160	49.8	40,8	160	3,0	1,00	2,61	150
63+63/180	61.8	51,4	180	3,0	1,20	4,15	90
75+75/200	72.8	61,4	200	3,0	1,30	5,92	70

* The maximum length is based on a coil with a diameter of 2.80 m and a width of 1.20 m.