PIPE

PEXROMA | PE-Xa / PE-Xa EVOH

PEXROMA crosslinked high-density polyethylene pipe is produced by IR/Peroxide method.

Crosslinking is a process which transforms the chemical structure in such a way that the polymer chains are linked within themselves into a three-dimensional network through chemical connections. The result is a flexible thermoset polymer with improved mechanical, thermal and chemical properties. The crosslinked polymeric structure makes dissolution impossible, unless its structure is previously destroyed.

The properties of **PE-Xa** pipe make it the most flexible PE-X pipe on the market and also offers a better resistance to stress than other PE-X pipes, produced by a different method, Silane or Electron beam, PE-Xb or PE-Xc, respectively.

PEXROMA is a PE-Xa pipe with thermal-elastic memory, a greater flexibility that avoids kinking, thus avoiding the risk of bottlenecks which reduce the flow, and allows the optimization of the installation process.

PEXROMA can be supplied in a monolayer without oxygen barrier – PE-Xa or a multilayer pipe with oxygen barrier PE-Xa w/EVOH.

HEATING SYSTEMS | SUPERIOR CRACK RESISTANCE | APPROVED FOR DRINKING WATER | DISINFECTION RESISTANCE | LEGIONELLA CONTROL | ECO-FRIENDLY

Pipe certification.

ADVANTAGES AND KEY FEATURES

- THERMAL AND ELASTIC MEMORY
- HIGH DEGREE OF CROSS-LINKING
- HIGH CHEMICAL RESISTANCE
- HIGH RESISTANCE TO STRESS CRACKING
- CORROSION AND INCRUSTATION RESISTANCE
- HIGH ABRASION RESISTANCE
- HIGHLY SMOOTH SURFACE
- KINKING RESISTANCE
- DRINKABLE WATER APPLICATIONS
- HIGH RESISTANCE TO TEMPERATURE AND PRESSURE
- OXYGEN DIFFUSION BARRIER
- EXCELLENT FLEXIBILITY
- LIGHTWEIGHT
- LOW NOISE
- SUPPLIED IN COILS
- NATIONAL AND INTERNATIONAL CERTIFICATIONS

PE-Xa PRODUCTS

PE-Xa PRODUCTS

PEXROMA | PE-XA
PEXROMA | PE-XA EVOH

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Huliot Group

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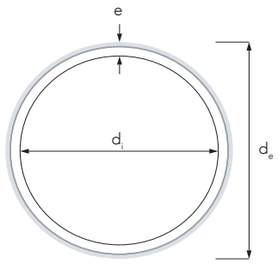
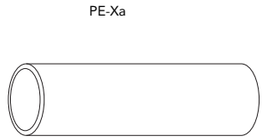
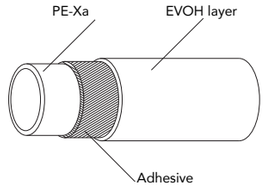
PIPE

PEXROMA | PE-Xa / PE-Xa EVOH

PRODUCT RANGE AND GEOMETRY







REFERENCE	DIMENSION (mm)	EXTERNAL DIAMETER d_e (mm)		THICKNESS e (mm)		INNER DIAMETER d_i (mm)	WEIGHT (kg/m)	SINGLE LAYER	EVOH	SERIES
		min	max	min	max					
P-002012-XA	12x2,0	12	12,3	2,0	2,2	7,6	0,063	✓	✓ (1)	2.5
P-011016-XA	16x1,8	16	16,3	1,8	2,1	11,8	0,081	✓	✓	4.0
P-001016-XA	16x2,0	16	16,3	2,0	2,3	11,4	0,087	✓	✓ (1)	3.5
P-002016-XA	16x2,2	16	16,3	2,2	2,6	10,8	0,095	✓	✓ (1)	3.2
P-001017-XA	17x2,0	17	17,3	2,0	2,3	13,0	0,094	✓ (1)	✓ (1)	3.8
P-001018-XA	18x2,0	18	18,3	2,0	2,3	14,0	0,100	✓ (1)	✓ (1)	4.0
P-011020-XA	20x1,9	20	20,3	1,9	2,2	16,2	0,112	✓	✓	5.0
P-001020-XA	20x2,0	20	20,3	2,0	2,3	16,0	0,116	✓	✓ (1)	4.5
P-002020-XA	20x2,8	20	20,3	2,8	3,2	14,4	0,152	✓	✓ (1)	3.2
P-001025-XA	25x2,3	25	25,3	2,3	2,7	20,4	0,161	✓	✓ (1)	5.0
P-002025-XA	25x3,5	25	25,3	3,5	4,0	18,0	0,235	✓	✓ (1)	3.2
P-011032-XA	32x2,9	32	32,3	2,9	3,3	25,4	0,266	✓	✓ (1)	5.0
P-002032-XA	32x4,4	32	32,3	4,4	5,0	27,6	0,364	✓ (1)	✓ (1)	3.2

Note: standard colour: natural. Other colours on demand. Subject to MOQ;
(1) Available on demand. Subject to MOQ.

EVOH PROPERTIES

The **Oxygen Barrier** is provided by an ethylene vinyl alcohol – EVOH layer prevents oxygen permeability in the system which reduces corrosion within the system, thus reducing premature failing of system components.
The EVOH layer provides excellent functional barrier against organic solvents and gases. With its exceptional elasticity it protects the product integrity. The **Oxygen Barrier** seals the oxygen access, therefore increasing the installation life expectancy. In a multilayer pipe, all layers are connected permanently via adhesive.

PARAMETER	VALUE	STANDARD
OTR - 20°C, 0% RH	0.2 cm^3.20µm/m^2.day.atm	ASTM D3985
OTR - 20°C, 65% RH	0.4 cm^3.20µm/m^2.day.atm	
OTR - 20°C, 85% RH	1.5 cm^3.20µm/m^2.day.atm	
OTR - 20°C, 100% RH	1.9 cm^3.20µm/m^2.day.atm	

OTR – Oxygen Transmission Rate

PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER	VALUE	STANDARD
DENSITY	953 kg/m^3	ISO 1183
MFI - 190°C/5.00 kg	0,7 g/10min	ISO 1133
TENSILE MODULUS	1100 MPa	ISO 527
TENSILE STRESS AT YIELD	28 MPa	ISO 527
TENSILE STRESS AT BREAK	37 MPa	ISO 527
BALL INDENTATION HARDNESS	49 MPa	ISO 2039
VICAT SOFTENING TEMPERATURE A50	130°C	ISO 306
VICAT SOFTENING TEMPERATURE B50	79°C	ISO 306
ROUGHNESS	0,007 mm	ISO 5436
THERMAL CONDUCTIVITY	0,35 W/m K	DIN 52612
THERMAL EXPANSION COEFFICIENT	1,4x10^{-4} m/m °C	VDE 0304
LINEAR COEFFICIENT	0,026 mm/m K	-
FIRE CLASSIFICATION	B2	DIN 4102
SMALLEST BEND RADIUS	5 x d_e mm	DIN 4721
POLYETHYLENE CROSSLINKING METHOD	IR/Peroxide	-
DEGREE OF CROSSLINKING	≥70%	-

LEAKAGE TEST

All **HELIROMA** products must be submitted to a leakage test as per procedures stated in **HR** Technical Catalogue.
The product warranty is only valid if the leakage test has been performed, on the date the system has been installed.

APPLICATIONS:

- Drinking supply water systems;
- Underfloor heating and cooling;
- Wall heating and cooling;
- Ceiling heating and cooling;
- Heating and cooling systems in general.

APPLICATION CLASSES AND ADMISSIBLE PRESSURES

Application Class 1 – Hot water supply 60°C
Application Class 2 – Hot water supply 70°C
Application Class 4 – Underfloor heating and low temperature radiators
Application Class 5 – High temperature radiators

APPLICATION CLASS	P_D (bar) SERIES					
	2.5	3.2	3.5	4.0	4.5	5.0
1	10	10	10	8	8	6
2	10	10	10	8	6	6
4	10	10	10	10	8	8
5	10	10	8	8	6	6

NEW
Single layer coloured

STANDARDS

EN ISO 15875
Plastics piping systems for hot and cold-water installations - Crosslinked polyethylene (PE-X).

DIN 16892
Crosslinked polyethylene (PE-X) pipes: general quality requirements, testing.

DIN 16893
Crosslinked high-density polyethylene (PE-X) pipes – Dimensions.

DIN 4726
Warm water surface heating systems and radiator connecting systems - Plastics piping systems and multilayer piping systems.

RP01.03
Rules for crosslinked polyethylene (PEX) piping systems for hot and cold water installations.