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CATALOGUE 2026

XPAND-PEX®

COLD EXPANSION SLEEVE SYSTEM

FOR PE-Xa PIPES

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Xpand-Pex, is a cold expansion sleeve system. It is a method of connecting pipes and fittings widely used in plumbing and heating systems. It offers an alternative to traditional welding or press fitting methods.

Xpand-Pex is a system that takes advantage of the great elasticity of PE-Xa pipe, and the shape memory of plastic materials. It is a very widely used system due to its ease of installation, and reliability, and suitable for a wide range of applications, including potable water supply, heating, and cooling systems.

Advantage of Xpand-Pex system

- Simple to assemble and quick to install.
- Compatible with PE-Xa pipes.
- Greater flow, lower pressure loss.
- Secure sealing system, no O-ring needed.
- You do not need to calibrate or bevel the end of the pipe.
- Safe and reliable system.
- PPSU fittings provide very good thermal insulation.
- Absence of incrustations and greater corrosion resistance.
- The fittings safely and reliably absorb dimensional variations in plastic pipes.
- 10 years warranty on the entire system (pipes + fittings)*
- Suitable for plumbing, heating, air conditioning, and underfloor heating/cooling systems.
- Made with materials approved for the transportation of potable water, this product guarantees the absence of odours, flavours, and toxicity.

Certified system

AENOR

001/007682

*See warranty conditions in the installation guide

SYSTEM COMPONENTS OF XPAND-PEX

The system has been designed to operate within the technical specifications of pressure and temperature, guaranteeing a minimum durability of 50 years.

Class and Application	Design Temperature TD	Time TD (years)	Tmax	Time Tmax (years)	Tmal	Time Tmal (hours)
Class 1 - Supply hot water (60 °C)	60 °C	49	80	1	95	100
Class 2 - Supply hot water (70 °C)	70 °C	49	80	1	95	100
Class 4 - Radiant floo heating and low-temperature radiators	20 °C followed by 40 °C followed by 60 °C	2.5 followed by 20 followed by 25	70	2.5	100	100
Class 5 - High-temperature radiators	20 ªC followed by 60 °C followed by 80 °C	14 followed by 25 followed by 10	90	1	100	100

TD: Design Temperature / Tmax: Maximum Temperature / Tmal: Malfunction Temperature

(*) If these conditions are exceeded, the warranty will be voided.

Each country can choose between class 1 or 2 according to its national regulations.

When more than one design temperature appears for any class, times should be added (e.g., the temperature profile for 50 years for class 5 is: 14 years at 20 ◦C followed by 25 years at 60 ◦C, 10 years at 80 ◦C, 1 year at 90 ◦C, and 100 h at 100 ◦C)

These standards do not apply to TD, Tmax and Tmal values higher than those indicated in the table.

According to EN ISO 15875, all heating installations must use only water or suitably treated water as the circulating fluid, ensuring compatibility with the piping system.

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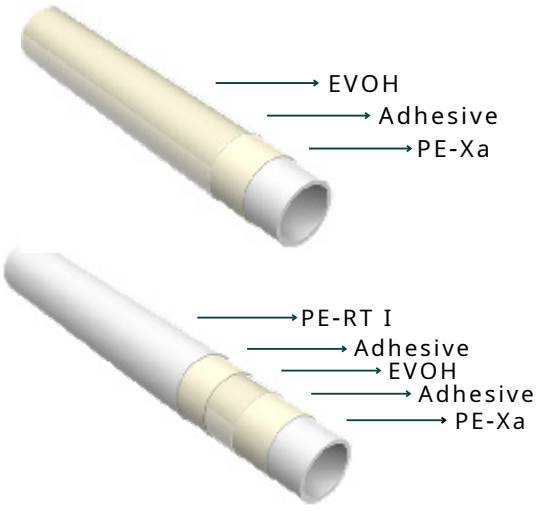
PE-Xa / PE-Xa EVOH pipe

Auray Managing uses the best polyethylene and the latest cross-linking technology to offer PE-Xa pipes with the best performance. PE-Xa and PE-Xa EVOH piping are available in rolls and bars, to select the one that best fits the project. Standardized certifications according to UNE-EN ISO 15875.

PE-Xa EVOH is available in 3 or 5 layers



PE-Xa pipes provide:

- High flexibility, superior to PE-X pipes Cross-linked by other systems.
- Increased pressure resistance.
- Resistance to impact and tensile, as well as scratch and brittle breakage.
- Long service life, which under normal circumstances will exceed 50 years.
- Resistance to abrasion and the effect of chemicals.
- Safety against temperatures below zero. The adaptability of the pipe allows it to expand without breaking, even in extreme cold conditions.
- Lower pressure loss compared to metal pipes, thereby achieving a greater flow rate with the same pipe diameter.
- Four times lighter than the copper pipe of equivalent diameter.
- Ideal for potable water applications.
- Furthermore, thanks to their polyethylene composition and flexibility, these pipes do not transmit noise significantly. Even at higher water circulation speeds (up to 2.5 m/sec), they significantly reduce the propagation of acoustic waves compared to metal pipes.

Characteristics of PE-Xa

Physical Properties

Density	> 0.951 g/cm³
Cross-linking degree	> 70 %
PE-Xa EVOH - O_2 Permeability at 40 °	≤ 0.32 g/m²*d
Roughness	0.007 mm

Thermal Properties

Minimum working temperature	-10 °C
Maximum working temperature	90 °C
Malfunction maximum temperature	100 °C
Heat reversion (120 °C, 1 hour	≤ 3.0 %
Thermal conductivity	0.35-0.38 W / m*K
Specific heat (23 °C	2.3 KJ/kg*K
Lineal extension coefficient	0.026 mm/m*K

PE-Xa pipe dimensions

Outer diameter x Thickness (mm)	Inner diameter (mm)	Weight (kg/m)	Volume (l/m)
16 x 1.8	12.4	0.076	0.121
16 x 2.0	12.0	0.084	0.113
16 x 2.2	11.6	0.091	0.106
20 x 1.9	16.2	0.103	0.206
20 x 2.0	16	0.108	0.201
20 x 2.8	14.4	0.144	0.163
25 x 2.3	20.4	0.156	0.327
25 x 3.5	18	0.225	0.254
32 x 2.9	26.2	0.252	0.539
32 x 4.4	23.2	0.363	0.423

Other dimensions and colours are available under request

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Sleeve of PE-Xa with stopper

Manufactured with cross-linked polyethylene (PE-Xa) with a stop system to facilitate assembly work. Being manufactured in PE-Xa, they allow you to take advantage of all the technical advantages of this material, such as flexibility, durability, and thermal memory, which guarantee the best possible performance for the expansion system. The expansion sleeve are available in 3 formats (with identification in red, blue, and natural), to easily identify the system in pipe networks.

Compatible with PE-Xa pipes of the following dimensions

External diameter (mm)	Thickness (mm)				
	Serie 4	Serie 5	Serie 4.5	Serie 3.5	Serie 3.2
16	1.8			2.0	2.2
20		1.9	2.0		2.8
25		2.3			3.5
32		2.9			4.4

Fittings

The **Xpand-Pex** system uses polyphenylsulfone (PPSU) for the manufacturing of the plastic fitting bodies and the highest quality European brass (CW617N) for the threaded joints, which complies with the health legislation of the most demanding countries of the European Union.

Visible joints that offer peace of mind, ensuring a correct joint. The strength of the joint is greater than the resistance of the pipe.

The fittings are designed and manufactured according to the UNE-EN ISO 15875 standard, the reference standard for plastic piping systems for hot and cold water installations. Cross-linked polyethylene (PE-X).

Benefits of PPSU fittings

The PPSU version uses a high-performance material designed specifically for use in potable water installations:

- **Minimum internal roughness:** this results in lower pressure losses compared to brass fittings.
- **Outstanding chemical resistance:** the material is immune to the effect of chlorine in water, avoiding galvanic corrosion and oxidation problems. In addition, its composition makes it compatible with a wide range of construction materials.
- **Lightweight:** PPSU fittings are considerably lighter than their brass equivalents.
- **Exceptional impact resistance:** These fittings are robust and durable, able to withstand strong impacts without fracturing.
- **High thermal tolerance:** the material can resist temperatures of up to 134ºC without compromising its integrity.
- **Low noise level:** The PPSU material reduces noise produced by water circulation due to its low roughness coefficient, dampening water hammer by 2 to 3 times compared to traditional copper or brass systems.

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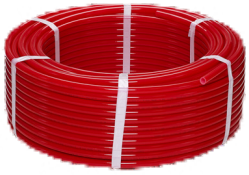
Product range

PE-Xa		
Reference	Diameter (mm)	Coils (m)
11011618000	16 x 1.8	50/100/200/500/600
11011620000	16 x 2.0	50/100/200/500/600
11011622000	16 x 2.2	50/100/200/500/600
11012019000	20 x 1.9	50/100
11012020000	20 x 2.0	50/100
11012028000	20 x 2.8	50/100
11012523000	25 x 2.3	50/100
11012535000	25 x 3.5	50/100
11013229000	32 x 2.9	50/100
11013244000	32 x 4.4	50/100



PE-Xa EVOH - 3 Layers		
Reference	Diameter (mm)	Coils (m)
11031618000	16 x 1.8	50/100/200/500/600
11031620000	16 x 2.0	50/100/200/500/600
11031622000	16 x 2.2	50/100/200/500/600
11032019000	20 x 1.9	50/100
11032020000	20 x 2.0	50/100
11032028000	20 x 2.8	50/100
11032523000	25 x 2.3	50/100
11032535000	25 x 3.5	50/100
11033229000	32 x 2.9	50/100
11033244000	32 x 4.4	50/100

PE-Xa EVOH - 5 Layers		
Reference	Diameter (mm)	Coils (m)
11051618000	16 x 1.8	50/100/200/500/600
11051620000	16 x 2.0	50/100/200/500/600
11051622000	16 x 2.2	50/100/200/500/600
11052019000	20 x 1.9	50/100
11052020000	20 x 2.0	50/100
11052028000	20 x 2.8	50/100
11052523000	25 x 2.3	50/100
11052535000	25 x 3.5	50/100
11053229000	32 x 2.9	50/100
11053244000	32 x 4.4	50/100

Other dimensions, colours and coils are available under reques

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Product range

PE-Xa Sleeve with Stopper			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C500RP160000	16 Red	50	4,000
C500RP200000	20 Red	40	2,000
C500RP250000	25 Red	25	1,000
C500RP320000	32 Red	20	500
C500BP160000	16 Blue	50	4,000
C500BP200000	20 Blue	40	2,000
C500BP250000	25 Blue	25	1,000
C500BP320000	32 Blue	20	500
C500NP160000	16 Natural	50	4,000
C500NP200000	20 Natural	40	2,000
C500NP250000	25 Natural	25	1,000
C500NP320000	32 Natural	20	500

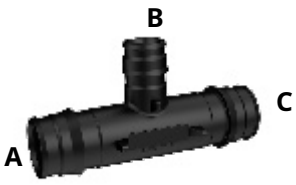
Equal Coupling - PPSU			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C0270P160016	16 - 16	25	550
C0270P200020	20 - 20	25	200
C0270P250025	25 - 25	15	120
C0270P320032	32 - 32	10	80

Reducing Coupling - PPSU			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C0243P200016	20-16	25	200
C0243P250020	25-20	15	120
C0243P320025	32-25	8	64

90° Elbow - PPSU			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C0090P160016	16 - 16	25	400
C0090P200020	20 - 20	20	160
C0090P250025	25 - 25	10	80
C0090P320032	32 - 32	6	48

Product range

Equal Tee - PPSU			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C0130P161616	16 - 16 - 16	20	280
C0130P202020	20 - 20 - 20	15	120
C0130P252525	25 - 25 - 25	8	64
C0130P323232	32 - 32 - 32	3	24



Reducing Tee - PPSU			
Reference	Diameter (mm) (A - B - C)	Uts./Small box	Uts./Big box
C130RP201616	20-16-16	15	120
C130RP201620	20-16-20	15	120
C130RP202016	20-20-16	15	120
C130RP251625	25-16-25	10	80
C130RP252020	25-20-20	10	80
C130RP252025	25-20-25	8	64
C130RP252520	25-25-20	8	64
C130RP322532	32-25-32	3	24

Male Connector - Brass			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C243GB1600R2	16 - 1/2"	25	200
C243GB2000R2	20 - 1/2"	24	192
C243GB2000R3	20 - 3/4"	20	160
C243GB2500R3	25 - 3/4"	18	144
C243GB2500R4	25 - 1"	12	96
C243GB3200R4	32 - 1"	10	80

Female Connector - Brass			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C270GB1600R2	16 - 1/2"	25	200
C270GB2000R2	20 - 1/2"	20	160
C270GB2000R3	20 - 3/4"	15	120
C270GB2500R3	25 - 3/4"	15	120
C270GB2500R4	25 - 1"	12	96
C270GB3200R4	32 - 1"	6	48

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Product range

Female Adapter with Swivel Nut - Brass			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C359GB1600R2	16 - 1/2"	24	192
C359GB2000R2	20 - 1/2"	18	144
C359GB2500R3	25 - 3/4"	15	120
C359GB3200R4	32 - 1"	8	64

Adapter for Copper - Brass			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C873PB160015	16 PE-X - 15 Copper	25	200
C873PB200018	20 PE-X - 18 Copper	15	120

Male Elbow - Brass			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C092GB1600R2	16 - 1/2"	20	160
C092GB2000R2	20 - 1/2"	18	144
C092GB2500R3	25 - 3/4"	8	64
C092GB2500R4	25 - 1"	6	48

Female Elbow - Brass			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C090GB1600R2	16 - 1/2"	18	144
C090GB2000R2	20 - 1/2"	15	120
C090GB2500R3	25 - 3/4"	10	80
C090GB3200R4	32 - 1"	5	40

Female Elbow with Fixing Base - Brass			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C473GB1600R2	16 - 1/2"	12	96
C473GB2000R2	20 - 1/2"	10	80
C473GB2500R3	25 - 3/4"	6	48

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Product range

High Elbow with Fixing Base - Brass			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C471GB1600R2	16 - 1/2"	10	80
C471GB2000R2	20 - 1/2"	10	80

Female Elbow - Brass			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C096GB1600R2	16 - 1/2"	18	144
C096GB2000R2	20 - 1/2"	12	96
C096GB2000R3	20 - 3/4"	12	96
C096GB2500R3	25 - 3/4"	8	64

Female Tee - Brass			
Reference	Diameter (mm)	Uts./Small box	Uts./Big box
C130GB16R216	16 - 1/2" - 16	12	96
C130GB20R220	20 - 1/2" - 20	10	80
C130GB25R325	25 - 3/4" - 25	5	40
C130GB32R432	32 - 1" - 32	3	24

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Tools

Set Battery Expanding Tool - Heads - 2 Batteries - Charger - Suitcase			
Reference	Diameter (mm)	Units/Bag	Units/Box
T23031000000	16-20-25-32	1	-

Battery			
Reference	Description	Units/Bag	Units/Box
T31055000000	18V Li-ion 2.0 Ah	1	-

Battery Charger			
Reference	Description	Units/Bag	Units/Box
T31056000000	AC 100V-240V 50-60 Hz	1	-

Rotating Expansion Head for Battery-Powered Expander Tool			
Reference	Diameter (mm)	Units/Bag	Units/Box
T23033160000	16x1.8 - 2.2	1	-
T23033200000	20x1.9 - 2.8	1	-
T23033250000	25x2.3 - 3.5	1	-
T23033320000	32x2.9 - 4.4	1	-

Suitcase with a Manual Expander and Rotating Heads		
Reference	Diameter (mm)	Unit/Box
T22030000000	16 - 20 - 25 - 32	1

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