

Product Data Sheet

5/24/2025

Heating Distribution (Plastic Pipes)

Object Line PE-RT

Romania - Purmo



- High durability.
- Flexibility.
- Oxygen diffusion barrier.
- Versatile application.
- Standards compliant.

Description

The Objekt Line PE-RT is crafted from high-temperature-resistant polyethylene, ensuring excellent durability and flexibility. These pipes feature an internal oxygen diffusion barrier, safeguarding against oxidation and extending the system's lifespan. Suitable for a variety of heating and cooling applications, they are easy to install and conform to industry standards, offering a reliable solution for modern HVAC systems.

Area of Application

Objekt Line PE-RT pipes are suitable for radiant heating and cooling systems, as well as radiator installations. Designed for both low and high-temperature applications, they withstand a maximum pressure of 6 bar and a maximum temperature of 90°C. Certified according to DIN EN ISO 22391 standards, they provide excellent reliability and durability.

Selection Criteria

To select the proper Objekt Line PE-RT pipe, consider temperature, pressure, and application requirements. For detailed selection criteria, use our design service or refer to our brochure.

Basic User Instructions

Ensure that Objekt Line PE-RT pipes are installed according to the specified installation guidelines to maintain system efficiency. Always handle with care to avoid mechanical damage. Use appropriate fittings and adhere to the specified bending radius to prevent any structural weakening. Ensure the pipes are not exposed to UV light for extended periods. Regularly check for any leaks and secure all connections properly to enhance the system's longevity.

Prescription text specifiers

Objekt Line PE-RT pipes are designed for heating and cooling applications, offering durability and flexibility. With a pressure resistance of up to 6 bar and a temperature tolerance up to 90°C, these pipes are ideal for various radiant systems. They feature an internal oxygen diffusion barrier, conforming to DIN EN ISO 22391 standards, and are suitable for low and high-temperature applications. Available in multiple dimensions, these pipes ensure efficient installation and reliable long-term performance due to their advanced material composition and structural integrity.

Warranty

Purmo radiators are warranted for a period of 10 years* from date of purchase against all manufacturing defects when they are used in normal conditions and for a heating system with hot water. The warranty does not apply to defects caused by installation or handling errors, misuse or factors external to the radiators, such as water quality or oxygen-permeable pipes.

Underfloor heating products and piping systems elements are warranted for a period of 10 years**.

* 6 years for galvanized radiators and 2 years for all electronic and electric components and spare parts sold separately (side covers, top grilles, plastic clips, plugs, air vents, fixing parts)

** 30 years for PexPenta pipes

Specification

Feature	Unit	Value
Etim Class		EC010225 - Multi-layered pipe, smooth
Weight	Kilogram (kg)	0.093, 0.1202, 14.424, 22.32, 52.08, 55.8, 60.1
CO2/Kg equivalent per kg of material		0.2139, 0.27646, 119.784, 128.34
UV resistant		No
Halogen free		Yes
Flexible		Yes
Wall thickness	Millimetre (mm)	2
Glass-fibre reinforced		No
Water content	Litre per metre (l/m)	0.1327, 0.201
Number of layers		5
Outer pipe diameter	Millimetre (mm)	17, 20
Suitable for surface mounting		No
With heating cable		No
Max. medium temperature (momentarily)	Degrees celsius (°C)	80
Min. bending radius without tools	Millimetre (mm)	100, 85
Max. operating pressure at max. medium temperature	Bar (bar)	4
Thickness intermediate layer	Millimetre (mm)	0.2
Min. bending radius	Millimetre (mm)	100, 85
Expansion coefficient	Millimetre per metre Kelvin (mm/(m.K))	0.15
With mantle pipe		No
Pipe colour		Orange, Other
Quality class inner layer		PE-RT I, PE-RT II
Quality class intermediate layer		Ethylene vinyl alcohol (EVOH)
Quality class outer layer		PE-RT II
Wall roughness	Millimetre (mm)	0.007
Diffusion-proof		Yes
Max. operating pressure at 20 °C	Bar (bar)	4
Medium temperature (continuous)	Degrees celsius (°C)	5, 70, 90
Nominal diameter		DN 16, DN 20
With thermal insulation		No
Material inner layer		Plastic
Material intermediate layer		Plastic
Material outer layer		Plastic
System specific		No

Resources

Document Description	Document Type	Link
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Items

Global Item Code	Item Description
FBAPT3C1620600G0	Objektline PE-RT 16x2mm, 600m
FBAPT3C1720120G0	PURMO heating pipe object line PE-RT 17 x 2 mm, 120 m ring
FBAPT3C1720240G0	PURMO heating pipe object line PE-RT 17 x 2 mm, 240 m ring
FBAPT3C1720600G0	PURMO heating pipe object line PE-RT 17 x 2 mm, 600 m ring
FBAPT3C2020120G0	Objektline PE-RT 20x2mm, 120m
FBAPT3C2020240G0	Objektline PE-RT 20x2mm, 240m
FBAPT3C2020500G0	Objektline PE-RT 20x2mm, 500m