

MAGNUM Tube

Underfloor heating tube

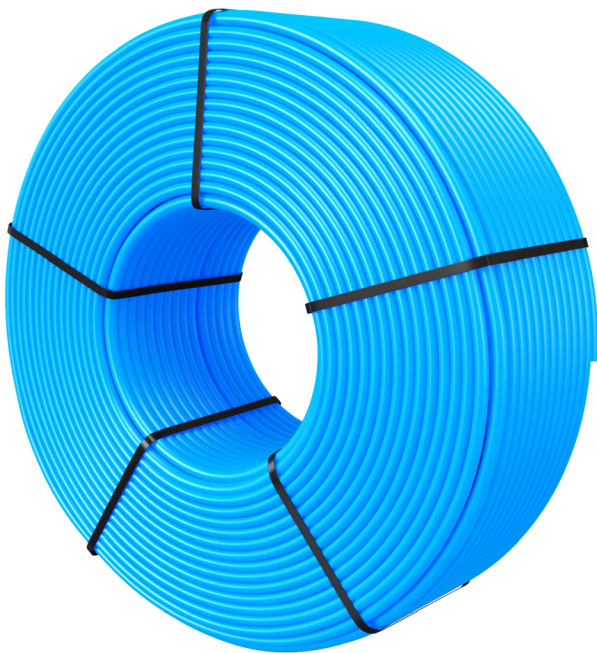
The MAGNUM Tube, floor heating tube, is made of a PE-RT type I and stands for Polyethylene Raised Temperature. This makes the tube also suitable for high temperatures.

PE-RT type I is strong and yet flexible. It is copolymer of ethylene with a unique molecular structure, based on controlled side chain distribution. As a result, it exhibits superior behaviour in terms of stress cracking and resistance to hydrostatic pressure, without the need for cross-linking. This makes MAGNUM Tube recyclable.

This PE-RT Type I is optimally stabilised against ageing, so that the MAGNUM Tube has a calculated life span of at least 50 years under normal conditions of use. The PE-RT type I MAGNUM Tube has been specially developed for use in hot and cold water systems, floor and wall heating/cooling and ceiling cooling.

The PE-RT type I feedstock, has been a leader for more than 20 years in tube applications where a wide temperature range is required.

The MAGNUM Tube can be used in a temperature range from 5°C to 80°C. Short-term peak loads of up to 95°C at a maximum internal hydrostatic overpressure of 6 bar can be withstood without any problems.

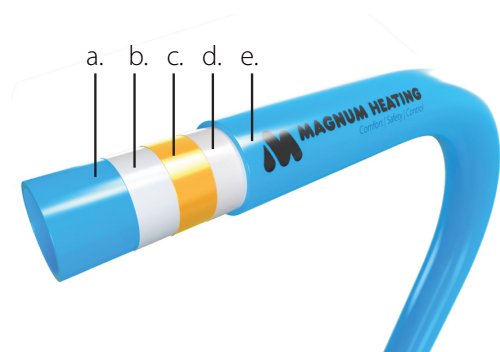


Specifications

Material	PE-RT Type I
Oxygen density	EVOH Low (DIN 4726)
Density	0,933 g/cm ³ (ASTM D-792)
Linear expansion coefficient	20°C - 70°C 0,19 mm/mK (DIN 53752 A)
Coefficient of thermal conductivity	at 60°C 0,4 W/mK (DIN 52612-1)
Deflection point (Vicat)	122°C (ASTM D-1525)
Maximum elongation to failure	> 800% (ISO 527-2)
Bending radius	5 x Diameter
Certification	KOMO, MPA and SKZ
Warranty	50 years of which the first 10 years with consequential damage



Cross section of the PE-RT 5 layered heating tube:



- a. PE-RT, Type 1
- b. Adhesive layer
- c. EVOH layer
- d. Adhesive layer
- e. PE-RT, Type 1

Technical details

- Density 0,933 g/cm³ (ASTM D-792)
- Linear expansion coefficient 20°C - 70°C
0,19 mm/mK (DIN 53752 A)
- Coefficient of thermal conductivity at 60°C
0,4 Watt/mK (DIN 52612-1)
- Deflection point (Vicat) 122°C (ASTM D-1525)
- Maximum elongation to failure > 800% (ISO 527-2)
- Bending radius 5 x Diameter
- Oxygen density EVOH Low (DIN 4726)
- With KOMO, MPA and SKZ certification

Warranty

50 years of which the first 10 years with consequential damage.

Art.nr.	Description	Length	Dimensions
	10 mm for MAGNUM SlimFit 10 system		
W10080	MAGNUM Tube, underfloor heating tube PE-RT	80 m	10 x 1,3 mm
W10240	MAGNUM Tube, underfloor heating tube PE-RT	240 m	10 x 1,3 mm
Art.nr.	Description	Length	Dimensions
	12 mm for MAGNUM Heatboard W system & MAGNUM SlimFit 12 system		
W12100	MAGNUM Tube, underfloor heating tube PE-RT	100 m	12 x 1,5 mm
W12300	MAGNUM Tube, underfloor heating tube PE-RT	300 m	12 x 1,5 mm
Art.nr.	Description	Length	Dimensions
	14 mm		
W14100	MAGNUM Tube, underfloor heating tube PE-RT	100 m	14 x 2 mm
W14120	MAGNUM Tube, underfloor heating tube PE-RT	120 m	14 x 2 mm
W14240	MAGNUM Tube, underfloor heating tube PE-RT	240 m	14 x 2 mm
W14600	MAGNUM Tube, underfloor heating tube PE-RT	600 m	14 x 2 mm
Art.nr.	Description	Length	Dimensions
	16 mm		
W16090	MAGNUM Tube, underfloor heating tube PE-RT	90 m	16 x 2 mm
W16100	MAGNUM Tube, underfloor heating tube PE-RT	100 m	16 x 2 mm
W16120	MAGNUM Tube, underfloor heating tube PE-RT	120 m	16 x 2 mm
W16240	MAGNUM Tube, underfloor heating tube PE-RT	240 m	16 x 2 mm
W16600	MAGNUM Tube, underfloor heating tube PE-RT	600 m	16 x 2 mm
Art.nr.	Description	Length	Dimensions
	18 mm		
W18130	MAGNUM Tube, underfloor heating tube PE-RT	130 m	18 x 2 mm
W18260	MAGNUM Tube, underfloor heating tube PE-RT	260 m	18 x 2 mm
W18520	MAGNUM Tube, underfloor heating tube PE-RT	520 m	18 x 2 mm
Art.nr.	Description	Length	Dimensions
	20 mm		
W20120	MAGNUM Tube, underfloor heating tube PE-RT	120 m	20 x 2 mm
W20240	MAGNUM Tube, underfloor heating tube PE-RT	240 m	20 x 2 mm
W20500	MAGNUM Tube, underfloor heating tube PE-RT	500 m	20 x 2 mm