

POLYMELT UV

UV RESISTANT PIPE SYSTEM FOR OUTDOOR APPLICATION



POLYMELT UV

PP-R WATER PIPING SYSTEM



**The safest most reliable choice
for exposed potable water applications**

POLYMELT UV is the worldwide first audited UV-resistant PP-R system consisting of pipe and fitting, which can be fused together the same way as standard PP-R.

Furthermore, the especially developed material of the POLYMELT UV system, ensures vast UV-resistance.

High quality - Made in Germany.

**UV-RESISTANT
MADE IN GERMANY**

 **POLYMELT**

 Made in Germany

SOLUTION FOR OUTDOOR APPLICATIONS

The POLYMELT UV system consists of the well established POLYMELT UV ML5 fiber pipe and a new range of fittings, made of high grade PP-R. It was especially developed for situations, where the pipe distribution is exposed to UV-radiation. Therefore the POLYMELT UV system is especially suitable for the installation in outdoor environments such as drinking water systems and irrigation systems.



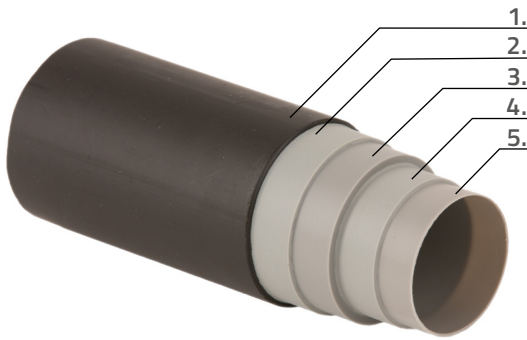
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Product Range

POLYMELT UV System

Material POLYMELT UV ML5 Pipe



1. PP-R UV black
2. PP-R GF
3. PP-R
4. PP-R GF
5. PP-R

Linear expansion coefficient: $\alpha = 0,038 \text{ mm/m K}$ third party certified: OFI Institute Vienna

Working pressure

Long Term Stress Behaviour with safety factor 1.25

| Temperature °C | Years of operation | | | | |
|----------------|---------------------------------|------|------|------|------|
| | 1 | 5 | 10 | 25 | 50 |
| | Maximum working pressure in bar | | | | |
| 20 °C | 28.5 | 26.8 | 26.1 | 25.2 | 24.5 |
| 30 °C | 24.2 | 22.7 | 22.1 | 21.3 | 20.7 |
| 40 °C | 20.6 | 19.2 | 18.7 | 18.0 | 17.4 |
| 50 °C | 17.4 | 16.2 | 15.7 | 15.1 | 14.7 |
| 60 °C | 14.7 | 13.6 | 13.2 | 12.7 | 12.3 |
| 70 °C | 12.3 | 11.7 | 11.1 | 9.6 | 8.1 |
| 80 °C | 10.3 | 9.1 | 7.7 | 6.2 | |
| 95 °C | 7.3 | 4.9 | 150 | 150 | |

Pipe

POLYMELT UV ML5

Fibre-pipe with UV protection layer, SDR 7.4/ S 3.2 for hot and cold water acc. to DIN EN ISO 15874, EN ISO 21003, class 1/8 bar, class 2/6 bar, Color black



| A. no. | Outer diameter | Wall thickness | Inner diameter | Water Content | Weight | Packing unit parcel/bar |
|--------|----------------|----------------|----------------|---------------|--------|-------------------------|
| 40322 | 20 | 2.8 | 14.4 | 0.163 | 0.149 | 100 m / 4 m |
| 40323 | 25 | 3.5 | 18.0 | 0.254 | 0.236 | 60 m / 4 m |
| 40324 | 32 | 4.4 | 23.2 | 0.423 | 0.385 | 40 m / 4 m |
| 40325 | 40 | 5.5 | 29.0 | 0.661 | 0.584 | 20 m / 4 m |
| 40326 | 50 | 6.9 | 36.2 | 1.029 | 0.916 | 20 m / 4 m |
| 40327 | 63 | 8.6 | 45.8 | 1.647 | 1.474 | 12 m / 4 m |

Fittings

POLYMELT UV
Welding socket



| A. no. | Outer Diameter | Packing unit parcel/bar |
|--------|----------------|-------------------------|
| 44002 | 20 | 600 / 10 |
| 44003 | 25 | 400 / 10 |
| 44004 | 32 | 300 / 10 |
| 44005 | 40 | 200 / 5 |
| 44006 | 50 | 100 / 5 |
| 44007 | 63 | 50 / 1 |

POLYMELT UV
Welding elbow 90°



| A. no. | Outer Diameter | Packing unit parcel/bar |
|--------|----------------|-------------------------|
| 44042 | 20 | 500 / 10 |
| 44043 | 25 | 350 / 10 |
| 44044 | 32 | 200 / 10 |
| 44045 | 40 | 100 / 5 |
| 44046 | 50 | 50 / 5 |
| 44047 | 63 | 25 / 01 |

POLYMELT UV
Welding elbow 45°



| A. no. | Outer Diameter | Packing unit parcel/bar |
|--------|----------------|-------------------------|
| 44102 | 20 | 200 / 10 |
| 44103 | 25 | 150 / 10 |
| 44104 | 32 | 100 / 10 |
| 44105 | 40 | 50 / 5 |
| 44106 | 50 | 25 / 5 |
| 44107 | 63 | 12 / 1 |

POLYMELT UV
Welding tee



| A. no. | Outer Diameter | Packing unit parcel/bar |
|--------|----------------|-------------------------|
| 44202 | 20 | 400 / 10 |
| 44203 | 25 | 250 / 10 |
| 44204 | 32 | 100 / 10 |
| 44205 | 40 | 40 / 5 |
| 44206 | 50 | 20 / 5 |
| 44207 | 63 | 10 / 1 |

Fittings

POLYMELT UV
Welding tee reduced



| A. no. | Outer Diameter | Packing unit parcel/bar |
|--------|----------------|-------------------------|
| 44254 | 25 × 20 × 25 | 250 / 10 |
| 44273 | 32 × 20 × 32 | 120 / 5 |
| 44275 | 32 × 25 × 32 | 120 / 5 |
| 44305 | 40 × 20 × 40 | 80 / 5 |
| 44307 | 40 × 25 × 40 | 80 / 5 |
| 44309 | 40 × 32 × 40 | 80 / 5 |
| 44334 | 50 × 25 × 50 | 50 / 5 |
| 44336 | 50 × 32 × 50 | 50 / 5 |
| 44338 | 50 × 40 × 50 | 40 / 5 |
| 44352 | 63 × 25 × 63 | 25 / 1 |
| 44354 | 63 × 32 × 63 | 25 / 1 |
| 44356 | 63 × 40 × 63 | 25 / 1 |
| 44358 | 63 × 50 × 63 | 25 / 1 |

POLYMELT UV
Welding reducer



| A. no. | Outer diameter | Packing unit parcel/bar |
|--------|----------------|-------------------------|
| 44603 | 25 × 20 | 300 / 10 |
| 44605 | 32 × 20 | 250 / 10 |
| 44606 | 32 × 25 | 200 / 10 |
| 44609 | 40 × 25 | 400 / 5 |
| 44610 | 40 × 32 | 300 / 5 |
| 44614 | 50 × 32 | 250 / 5 |
| 44615 | 50 × 40 | 150 / 5 |
| 44620 | 63 × 40 | 100 / 1 |
| 44621 | 63 × 50 | 75 / 1 |

POLYMELT UV
Welding adapter male



| A. no. | Outer diameter | Packing unit parcel/bar |
|--------|----------------|-------------------------|
| 44156 | 25 × 1/2" | 100 / 10 |
| 44157 | 25 × 3/4" | 100 / 10 |
| 44159 | 32 × 1" | 50 / 5 |
| 44161 | 40 × 1 1/4" | 30 / 5 |
| 44163 | 50 × 1 1/2" | 20 / 5 |
| 44165 | 63 × 2" | 20 / 1 |

Audited UV-resistance

The resistance of POLYMELT UV system against UV-radiation was tested by an accredited test laboratory. In planned intervals during the complete process, samples were taken in order to check possible mechanical changes based on a tensile test.

The used irradiation rate is equivalent to more than 10 years in the city of Assuan, Egypt (one of the highest yearly UV-radiations worldwide).

Areas of application

POLYMELT UV system is approved for the contact with potable water and is the best choice for boiler connection on the top to the tapping points - outdoor and indoor.

It can be used as an ideal distribution system for Hot & Cold Water in residential and commercial buildings as well as for irrigation systems.

POLYMELT UV

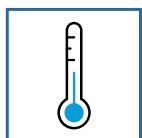
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Advantages

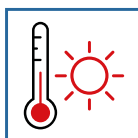
- 10 years UV-resistant guarantee
- fast and easy installation
- corrosion free
- low linear expansion
- increased flow rate
- high stability



The POLYMELT UV piping system is suitable for:



Cold water



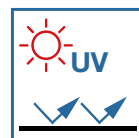
Hot water



Compressed air



Cooling



Sun exposure



Potable water

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●●● Made in Germany