



Climate and chilled water technology



Water supply



Industrial waste heat pipeline



District heating pipeline



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**aquatherm® ISO**

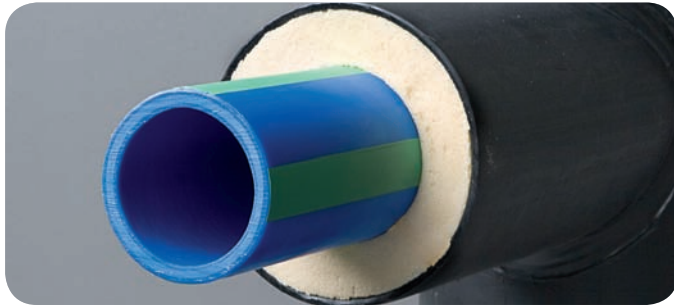
PRE-INSOLATED AQUATHERM  
FASER COMPOSITE PIPES  
for district heating and cooling



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**aquatherm**



## System technology

one of the most energy-efficient methods for transporting heating or cooling over long distances is by the use of buried piping. To achieve the necessary insulating characteristics needed for this application, aquatherm offers factory pre-insulated **fusiotherm® ISO** and the oxygene tight **climatherm OT ISO** for drinking water and heating/cooling networks, with operating pressures up to 20 bar (290 psi) and operating temperatures up to 90° C (190° F).

The aquatherm pipe systems are factory-made pre-insulated. They are available in the dimensions according to table as:

- **fusiotherm® ISO**-fasercomposite pipe system SDR 7,4
- **climatherm OT ISO**-fasercomposite pipe system SDR 11

These systems are insulated with closed cell PUR rigid foam and coated with a casing pipe made of HDPE.

## Fields of application

- ▶ construction of heating systems
- ▶ climate and chilled water technology
- ▶ potable water supply
- ▶ process water plants
- ▶ industrial water supply

## Components

The following components are available for all insulated fasercomposite pipe systems:

- ▶ pipes (6 m and 12 m straight lengths)
- ▶ elbows 45 °
- ▶ elbows 90 ° (short and long design)
- ▶ branches
- ▶ reducing branches
- ▶ cross over branches
- ▶ accessories for field-insulating of joints
- ▶ special fittings on request

## Connection

aquatherm faser composite pipes are joined by socket-welding in the dimensions 32 – 125 mm, and butt-welding in the dimensions 160 – 315 mm.

The heat fusion welding process for joining the pipes and fittings creates a homogeneous, permanent, and leak-free joint. The aquatherm fusion equipment makes the joining process quick and easy, with joints ready for full pressure testing in a matter of minutes.

More detailed information and instructions on the welding process and equipment are available in our technical catalog E10101.

Accessories and materials are available for professional insulation of the joints at the job site.

## Dimensions

Pipe size inner pipe	<b>fusiotherm® ISO</b> faser composite pipe SDR 7,4	<b>climatherm OT ISO</b> faser composite pipe SDR 11	Outer diameter casing pipe
d (mm)	DN		d <sub>a</sub> (mm)
32	25	25	90
40	32	32	110
50	40	40	110
63	50	50	125
75	50	65	140
90	65	80	160
110	80	80	200
125	-	100	225
160	125	125	250
200	150	150	315
250	175	200	400
315	-	250	450

## Advantages

- ▶ low weight
- ▶ higher flow section
- ▶ high stability
- ▶ absolutely corrosion resistant
- ▶ resistant against chemicals
- ▶ high impact rate
- ▶ less pipe roughness
- ▶ heat and sound insulating characteristics
- ▶ very good welding properties
- ▶ high heat-stabilized
- ▶ ease of handling and installation