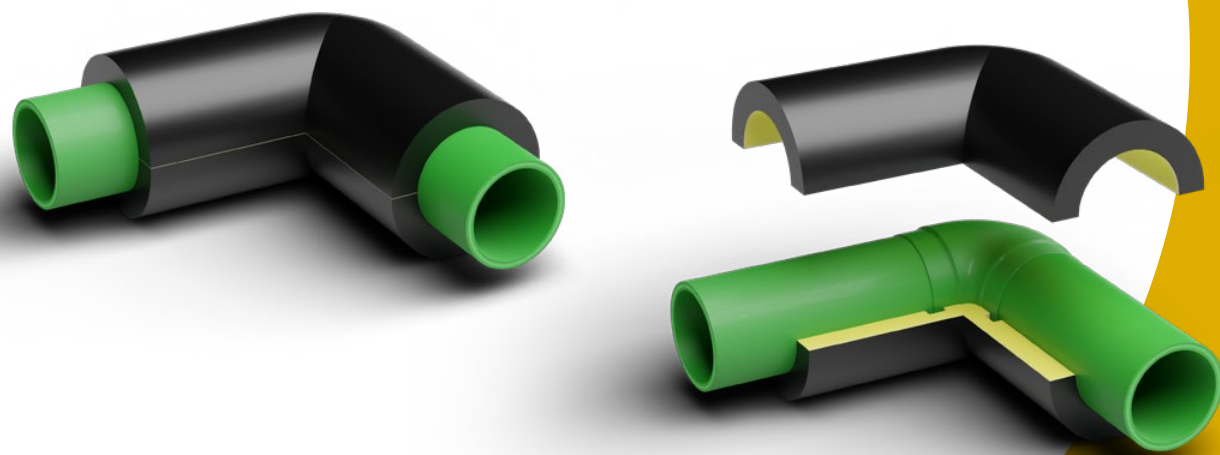


## aquatherm **energy** **half shells** —

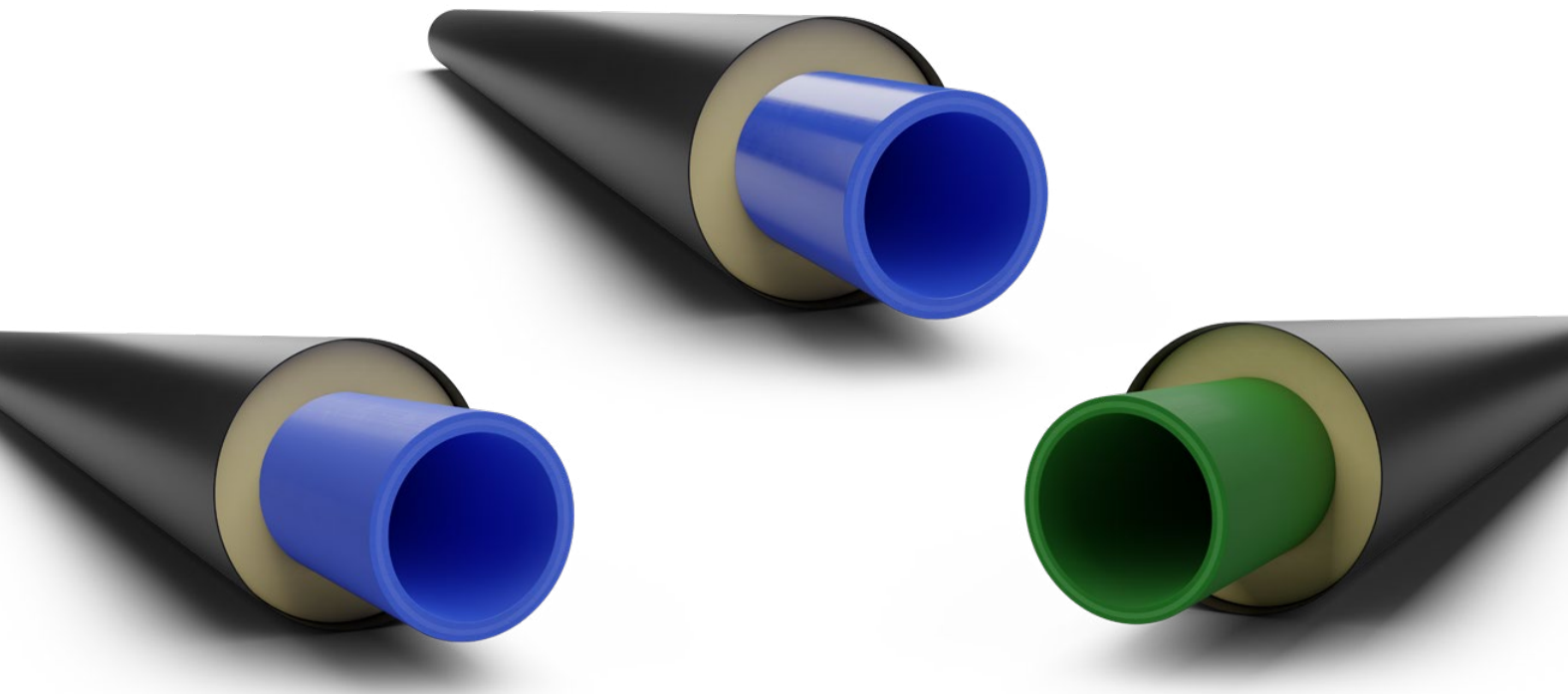


## Pre-insulated piping solutions \_\_

aquatherm offers a comprehensive range of pre-insulated piping systems for industrial applications and large building complexes like hotel resorts. This enables the transportation of hot and cold liquids with very small energy losses. In addition to building and industrial applications, aquatherm energy is particularly suitable for district heating/cooling & local heating/cooling. As underground variants, our piping systems help to transport heating and cooling water safely and efficiently over long distances. They can supply several buildings or even entire cities with hot water for heating or cold water for air conditioning.

The aquatherm energy piping system consists of pre-insulated polypropylene pipes, fittings and joints. All medium pipes and fittings used for aquatherm energy are made of the material fusiolen® PP-R/PP-RCT. These are insulated with PUR foam and enclosed in a HDPE casing pipe.

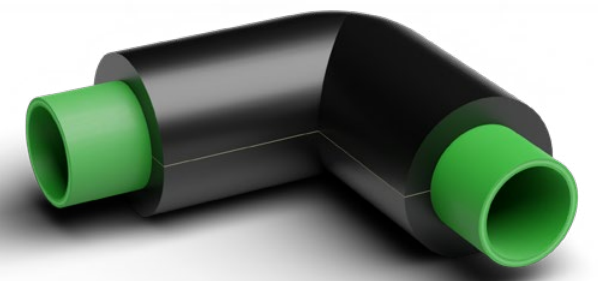
The pre-insulated aquatherm energy pipe is particularly suitable for energy efficient heat and cold transport. The system is the solution for many different applications for distributing heat and cold fluids in heating and cooling networks, water distribution, geothermal energy, swimming pool technology, outdoor cooling, in refrigeration systems, outdoor heating and air conditioning systems.



## New: aquatherm energy half shells \_\_

The aquatherm energy half shells were developed to avoid energy losses at the joints and to guarantee the complete insulation of the piping system. The half shells consist of PUR foam and polyurea and have similar insulation values to the pipe. They are also 100% watertight.

The new aquatherm energy half shells are suitable for all areas of application in which the aquatherm energy piping system is installed. They can be installed outdoors, in buildings, on the roof of the building or in the ground.

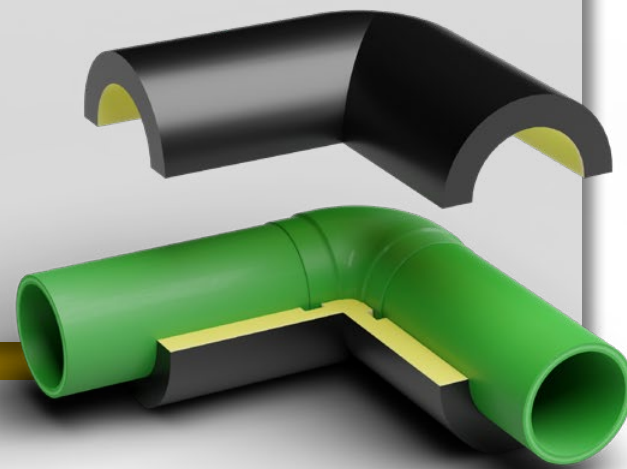


## Advantages at one view \_\_

The new aquatherm energy half shells make laying the aquatherm energy pipe system even easier and faster. The half shells are already foamed and sheathed at the factory and only need to be glued on the outer surfaces onsite. This means significant time savings, as the required time for shrinking on the construction site is reduced to a minimum.

### Advantages:

- Quick and easy installation
- Already foamed and encased in the factory
- Significant time savings
- Quick delivery due to good stock availability
- Tighter pipe system design possible



## Mounting instruction \_\_

1.  
aquatherm  
energy  
reducing branch  
half shell



2.  
Insert  
aquatherm  
energy  
reducing branch



3.  
Applying the  
adhesive



4.  
Assembling the  
half shells



5.  
Seal the  
transitions with  
sealing tape



### Tools and materials for mounting:

- Half shells in corresponding dimensions
- Glue „klebt & dichtet“
- Sealing gun
- Fine toothed saw or insulation knife
- Applicator
- Sealing tape (black)

▶ View video

Apply the adhesive generously to the half shell using a sealing gun

After assembling the half shells, we recommend to use a flexible black adhesive tape to hold the pair of half shells firmly together. It is not necessary to remove the adhesive tape. After the gluing process, remove any excess glue.

Apply the sealing tape in the middle of the transition of the two elements to be joined with an overlap of approx. 30%. On the opposite side of the overlap, a distance of 2 cm must be maintained between the pipe and the shrink tape. The tension of the shrink tape is distributed evenly when heated.

Heat the sealing tape evenly all around using a hot air gun or a gas burner to seal the joint.

# Product types and technical details

In addition to straight connectors, the aquatherm energy half shells are also available in 45° and 90° angles. T-pieces are also available in all dimensions of the aquatherm energy pipe system (diameter 90 to 500 mm). Special applications are available on request.

## Pipe diameter

### aquatherm energy green & blue

| Diameter in mm |         | 16 | 17 | 20 | 25 | 32 | 40 | 50 | 63 | 75 | 90 | 110 | 125 | 160 | 200 | 250 | 315 | 355 | 400 | 450 | 500 | 630 |
|----------------|---------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SDR 9          | MF RP   | •  | •  | •  | •  | ●  | ●  | ●  | ●  | ●  | ●  | ●   | ●   | ●   | ●   | ●   | ●   | •   | •   | •   | •   | •   |
| SDR 9          | MFR POT | •  | •  | •  | •  | ●  | •  | •  | •  | •  | •  | •   | •   | •   | •   | •   | •   | •   | •   | •   | •   | •   |
| SDR 11         | MF RP   | •  | •  | •  | •  | •  | ●  | ●  | ●  | ●  | ●  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | •   | •   | •   | •   |
| SDR 11         | MFR POT | •  | •  | •  | •  | •  | ●  | ●  | ●  | ●  | ●  | ●   | ●   | ●   | ●   | ●   | •   | •   | •   | •   | •   | •   |
| SDR 17,6       | MF RP   | •  | •  | •  | •  | •  | •  | •  | •  | •  | •  | ●   | ●   | ●   | ●   | ●   | ●   | •   | •   | •   | •   | •   |

## Article list

### aquatherm energy glue

| Art. no.   | Quantity             | PU |
|------------|----------------------|----|
| 9700000004 | 1 Cartridge (290 ml) | 1  |

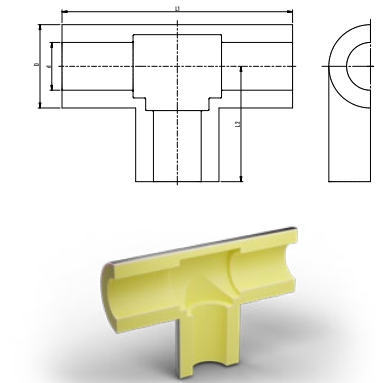
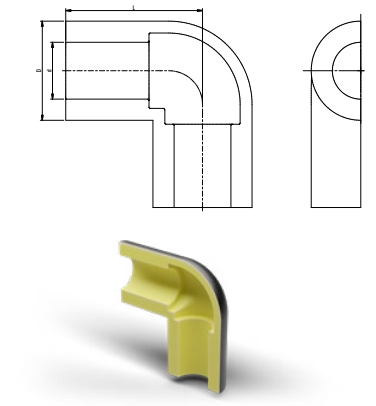
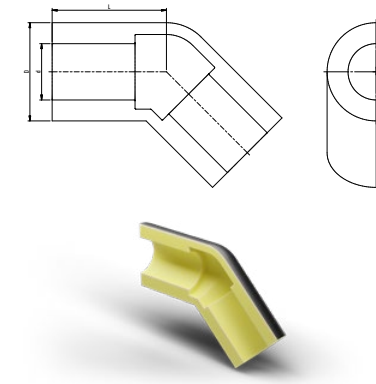
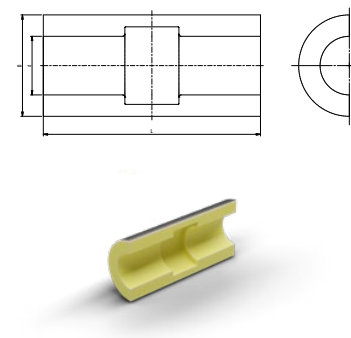
### aquatherm energy shrink tape

| Art. no.   | Width  | Length | PU |
|------------|--------|--------|----|
| 9700000005 | 100 mm | 10 m   | 1  |

### aquatherm energy half shells

straight

| Art. no.   | Ø outside medium pipe d | Ø outside casing pipe D | Ø inside half shell d | Ø outside half shell D | l     | PU |
|------------|-------------------------|-------------------------|-----------------------|------------------------|-------|----|
| 2370032001 | 32                      | 90                      | 35                    | 90                     | 474   | 1  |
| 2370040001 | 40                      | 110                     | 43                    | 110                    | 476,5 | 1  |
| 2370050001 | 50                      | 110                     | 53                    | 110                    | 476,5 | 1  |
| 2370063001 | 63                      | 125                     | 66                    | 125                    | 476,5 | 1  |
| 2370075001 | 75                      | 140                     | 79                    | 140                    | 476,5 | 1  |
| 2370090001 | 90                      | 160                     | 94                    | 160                    | 476,5 | 1  |
| 2370110001 | 110                     | 200                     | 115                   | 200                    | 478   | 1  |
| 2370125001 | 125                     | 225                     | 130                   | 225                    | 482   | 1  |
| 2370160001 | 160                     | 250                     | 165                   | 250                    | 455   | 1  |
| 2370200001 | 200                     | 315                     | 205                   | 315                    | 455   | 1  |
| 2370250001 | 250                     | 400                     | 256                   | 400                    | 455   | 1  |
| 2370315001 | 315                     | 450                     | 320                   | 450                    | 455   | 1  |



### aquatherm energy half shells

elbow 45°

with PUR foam and PE casing pipe

| Art. no.   | Ø outside medium pipe d | Ø outside casing pipe D | Ø inside half shell d | Ø outside half shell D | l     | PU |
|------------|-------------------------|-------------------------|-----------------------|------------------------|-------|----|
| 2380032002 | 32                      | 90                      | 35                    | 90                     | 242,5 | 1  |
| 2380040002 | 40                      | 110                     | 43                    | 110                    | 244,5 | 1  |
| 2380050002 | 50                      | 110                     | 53                    | 110                    | 246,5 | 1  |
| 2380063002 | 63                      | 125                     | 66                    | 125                    | 249   | 1  |
| 2380075002 | 75                      | 140                     | 79                    | 140                    | 251,5 | 1  |
| 2380090002 | 90                      | 160                     | 94                    | 160                    | 254,5 | 1  |
| 2380110002 | 110                     | 200                     | 114                   | 200                    | 258,5 | 1  |
| 2380125002 | 125                     | 225                     | 129                   | 225                    | 262   | 1  |
| 2380160002 | 160                     | 250                     | 165                   | 250                    | 330   | 1  |
| 2380200002 | 200                     | 315                     | 205                   | 315                    | 381   | 1  |
| 2380250002 | 250                     | 400                     | 256                   | 400                    | 417   | 1  |

### aquatherm energy half shells

elbow 90°

with PUR foam and PE casing pipe

| Art. no.   | Ø outside medium pipe d | Ø outside casing pipe D | Ø inside half shell d | Ø outside half shell D | l     | PU |
|------------|-------------------------|-------------------------|-----------------------|------------------------|-------|----|
| 2380032001 | 32                      | 90                      | 35                    | 90                     | 252   | 1  |
| 2380040001 | 40                      | 110                     | 43                    | 110                    | 256   | 1  |
| 2380050001 | 50                      | 110                     | 53                    | 110                    | 261   | 1  |
| 2380063001 | 63                      | 125                     | 66                    | 125                    | 267,5 | 1  |
| 2380075001 | 75                      | 140                     | 79                    | 140                    | 273,5 | 1  |
| 2380090001 | 90                      | 160                     | 94                    | 160                    | 281   | 1  |
| 2380110001 | 110                     | 200                     | 114                   | 200                    | 291   | 1  |
| 2380125001 | 125                     | 225                     | 129                   | 225                    | 310,5 | 1  |
| 2380160001 | 160                     | 250                     | 165                   | 250                    | 380   | 1  |
| 2380200001 | 200                     | 315                     | 205                   | 315                    | 444   | 1  |
| 2380250001 | 250                     | 400                     | 256                   | 400                    | 475   | 1  |

### aquatherm energy half shells

T-piece

with PUR foam and PE casing pipe

| Art. no.   | Ø outside medium pipe d | Ø outside casing pipe D | Ø inside half shell d | Ø outside half shell D | L1  | L2    | PU |
|------------|-------------------------|-------------------------|-----------------------|------------------------|-----|-------|----|
| 2360032010 | 32                      | 90                      | 35                    | 90                     | 504 | 252   | 1  |
| 2360040010 | 40                      | 110                     | 43                    | 110                    | 511 | 255,5 | 1  |
| 2360050010 | 50                      | 110                     | 53                    | 110                    | 522 | 261   | 1  |
| 2360063010 | 63                      | 125                     | 66                    | 125                    | 535 | 267,5 | 1  |
| 2360075010 | 75                      | 140                     | 79                    | 140                    | 547 | 273,5 | 1  |
| 2360090010 | 90                      | 160                     | 94                    | 160                    | 562 | 281   | 1  |
| 2360110010 | 110                     | 200                     | 114                   | 200                    | 582 | 291   | 1  |
| 2360125010 | 125                     | 225                     | 129                   | 225                    | 623 | 311,5 | 1  |
| 2360160010 | 160                     | 250                     | 165                   | 250                    | 760 | 380   | 1  |
| 2360200010 | 200                     | 315                     | 205                   | 315                    | 880 | 440   | 1  |
| 2360250010 | 250                     | 400                     | 256                   | 400                    | 956 | 478   | 1  |

