



Westfälische Rohrwerke

enclosing liquids with innovation



## Cooling technique

### Multilayer Composite Pipe

PE-RT/AL/PE-RT,  $\varnothing$  12 - 32 mm

- Air Condition



### Special features:

- high dimensional stability
- 100% oxygen tight
- minimal thermal expansion
- low weight
- tested according to ASTM 1282, ICC I listed
- outstanding laying properties
- developed for cooling liquid
- cooling liquid R22 | R134 a | R404 a | R407 c | R410 a | R507
- corrosion-resistant

## Data (depending on nominal size)

| $d_n \times e_n$   | $d_e$ | $d_i$ | $e$  | weight | Coil length    | quantity liquid | weight filled with water |
|--------------------|-------|-------|------|--------|----------------|-----------------|--------------------------|
| [in.] [mm]         | min   | min   | min  | [g/m]  | [m]            | [l/m]           | [g/m]                    |
|                    | [mm]  | [mm]  | [mm] | [g/ft] | [ft]           | [l/ft]          | [g/ft]                   |
| 1/4" (12 x 2,5)    | 12    | 7     | 2,5  | 88,59  | 15,24 - 310,89 | 0,039           | 88,626                   |
|                    |       |       |      | 27,00  | 50 - 1020      | 0,012           | 27,012                   |
| 3/8" (14 x 2,5)    | 14    | 9     | 2,5  | 104,99 | 15,24 - 310,89 | 0,062           | 105,054                  |
|                    |       |       |      | 32,00  | 50 - 1020      | 0,019           | 32,019                   |
| 1/2" (16 x 2,5)    | 16    | 11    | 2,5  | 127,96 | 15,24 - 310,89 | 0,010           | 127,969                  |
|                    |       |       |      | 39,00  | 50 - 1020      | 0,029           | 39,029                   |
| 5/8" (18 x 2,75)   | 18    | 12,5  | 2,75 | 150,93 | 15,24 - 310,89 | 0,121           | 151,047                  |
|                    |       |       |      | 46,00  | 50 - 1020      | 0,037           | 46,037                   |
| 3/4" (20 x 2,75)   | 20    | 14,5  | 2,75 | 223,11 | 15,24 - 310,89 | 0,164           | 223,272                  |
|                    |       |       |      | 68,00  | 50 - 1020      | 0,05            | 68,050                   |
| 7/8" (25 x 3,25)   | 25,5  | 18,5  | 3,25 | 337,94 | 15,24 - 188,98 | 0,269           | 338,212                  |
|                    |       |       |      | 103,00 | 50 - 620       | 0,082           | 103,082                  |
| 1 1/8" (32 x 3,75) | 32    | 24,5  | 3,75 | 413,41 | 15,24 - 188,98 | 0,469           | 413,875                  |
|                    |       |       |      | 126,00 | 50 - 200       | 0,143           | 126,143                  |

Other dimensions and lengths possible upon request.

## Technical data

| Type of pipe  | 1/4" (12 x 2,5) 3/8" (14 x 2,5) 1/2" (16 x 2,5)<br>1/2" (16 x 2,5) 5/8" (18 x 2,75) 3/4" (20 x 2,75)<br>7/8" (25 x 3,25) | 1 1/8" (32 x 3,75) |
|---|--|--------------------|
| Thermal conductivity in W/m*K(1)                          | 0,42   | 0,42               |
| Thermal coefficient of expansion mm/m*K                   | 0,025  | 0,025              |
| Oxygen diffusion in mg/l*d                                | 0,000  | 0,000              |
| Max. operating temperature in °C / °F                     | 95°C / 203°F   | 95°C / 203°F       |
| Max. operating pressure in bar*/psi                       | 45bar / 650psi   | 40bar / 580psi     |
| Max. malfunction temperature in °C / °F                   | 110°C / 230°F  | 110°C / 230°F      |
| Bending radius in mm (manually bended)                    | 3  | 3                  |
| Bending radius in mm (bended with bending tool)           | 2  | 2                  |
| Fire rating class, normal flammable according to DIN 4102 | B2   | B2                 |

(1) Mean value (2)  $5 \times d_e$  (mm) (3)  $4 \times d_e$  (mm); all values are to be considered as guidelines. This is subject to technical modifications.

\*extrapolated lifetime 25 years

## Contact

Westfälische Rohrwerke GmbH  
Kruppstraße 29  
59227 Ahlen  
Germany

Fon: + 49 (0) 23 82 / 7 60 08 - 0  
Fax: + 49 (0) 23 82 / 7 60 08 - 29

E-Mail: [info@wrw-ahlen.de](mailto:info@wrw-ahlen.de)  
Internet: [www.wrw-ahlen.de](http://www.wrw-ahlen.de)

