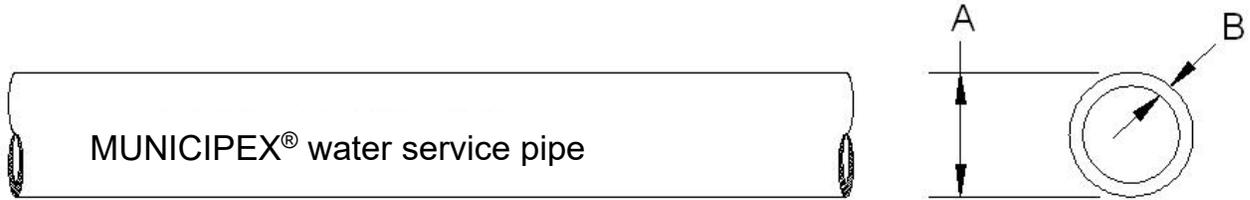


PRODUCT SUBMITTAL 110

MUNICIPEX® water service pipe



Product: MUNICIPEX® water service pipe
Date: 15 March 2024 (supersedes 31 March 2022)



| Article no. | Nominal diameter in | Average OD A In (mm) | Wall thickness B In (mm) | Weight lb/ft (kg/m) | Capacity gal/ft (l/m) |
|-------------|------------------------|----------------------------|--------------------------------|------------------------|--------------------------|
| 261056 | 3/4 | 0.875 (22.22) | 0.097 (2.47) | 0.10 (0.15) | 0.0189 (0.2356) |
| 261076 | 1 | 1.125 (28.582) | 0.125 (3.18) | 0.17 (0.26) | 0.0316 (0.3939) |
| 261096 | 1 1/4 | 1.375 (34.92) | 0.153 (3.88) | 0.25 (0.37) | 0.0467 (0.5827) |
| 261116 | 1 1/2 | 1.625 (41.28) | 0.181 (4.59) | 0.35 (0.52) | 0.0650 (0.8118) |
| 261136 | 2 | 2.125 (53.98) | 0.236 (6.00) | 0.60 (0.90) | 0.1114 (1.3906) |

TECHNICAL DESCRIPTION

| Specification | English | SI | Standard |
|-------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------|
| Minimum Density | 58 lb/ft ³ | 926 kg/m ³ | ASTM F876 |
| Minimum Degree of Crosslinking | 70% | 70% | ASTM F876 |
| Max. Thermal Conductivity | 2.84 Btu in/(ft ² °F hr) | 0.41 w/(m ² K) | DIN 16892 |
| Coefficient of Linear Expansion | 9.33 x 10 ⁻⁴ in/ft°F @ 68°F 1.33 x 10 ⁻³ in/ft°F @ 212°F | 0.14 mm/(m°C) @ 20°C 0.2 mm/(m°C) @ 100°C | Mean @ 20-70°C per DIN 16892 |
| Modulus of Elasticity | 87,000-130,500 psi @ 68°F 43,500-58,000 psi @ 176°F | 600-900 N/mm ² @ 20°C 300-400 N/mm ² @ 80°C | Minimum @ 20°C per DIN 16892 |
| Tensile Strength | 4,194-4,355 psi @ 68°F 2,610-2,900 psi @ 176°F per ASTM D638 | 26-30 N/mm ² @ 20°C 18-20 N/mm ² @ 80°C per ASTM D638 | -- |
| IZOD Impact Resistance | No Break | No Break | -- |
| Temperature Working Range | -40 to 200°F | -40 to 93°C | -- |
| Roughness (Coefficient of Friction) | e=0.00028 in | e=0.007 mm | -- |
| Hazen-Williams Roughness Coefficient (C-Factor) | 150 | 150 | AWWA C904 |
| Max. Short-term Exposure | 150 psig @ 210°F (48 hr) | 1035 kPa @ 99°C (48 hr) | ASTM F876 |
| UV resistance | See TB218 | | ASTM F2657 |

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PRODUCT SUBMITTAL 110

MUNICIPEX® water service pipe



FUNCTIONAL DESCRIPTION

MUNICIPEX water service pipe is manufactured using the high-pressure peroxide extrusion method for crosslinked polyethylene (PEXa). MUNICIPEX water service has a co-extruded blue PE shield that protects the pipe against ultraviolet light (sunlight) for an extended time. MUNICIPEX water service pipe meets or exceeds the requirements of ASTM F876, CSA B137.5 and PPI TR-3, and is certified to NSF Standards 14/61 and AWWA C904. MUNICIPEX water service meets the requirements of ASTM F2023 for chlorine resistance. MUNICIPEX water service is manufactured by REHAU using a quality management system which has been certified to the latest version of ISO 9001.

MUNICIPEX water service is produced in SDR9 copper tube sizes (CTS) so that it is compatible with AWWA C800 valves and fittings when used with manufacturer's recommended insert which is required to stiffen the pipe. MUNICIPEX water service can also be used with the EVERLOC+® compression-sleeve system certified to ASTM F877. See Technical Bulletin 261 for other compatible PEX fitting systems

LONG-TERM STRENGTH

The maximum temperature and pressure ratings of the MUNICIPEX water service are in accordance to ASTM F876, CSA B137.5 and PPI TR-3. The designer shall determine the actual conditions and apply the appropriate and additional design factors as required for any particular project. The temperature and pressure ratings apply to the application of MUNICIPEX water service for conveying hot and cold water at the 2.0 safety factor on allowable working pressure according to ASTM and CSA. REHAU confirms a 200 psi (1380 kPa) pressure rating at 73.4°F (23°C) when using a 1.5 safety factor, see REHAU *Technical Bulletin 239 MUNICIPEX Pressure and Temperature Ratings*. According to the REHAU *PEXa Limited Warranty*, the MUNICIPEX water service warranty period of 25 years is for operating conditions at or below 180°F (82.2°C) in permitted applications when the handling, use, installation and maintenance continually complies with all REHAU technical guidelines.

MUNICIPEX water service pipe SDR9

maximum pressures and temperatures

design factors

| | |
|------------------------------------|-----------------------------------------------------|
| 200 psi @ 73.4°F (1380 kPa @ 23°C) | 0.63 (per CSA B137.0 clause 6.6.3.2.2, REHAU TB239) |
| 160 psi @ 73.4°F (1055 kPa @ 23°C) | 0.50 (per ASTM F876, CSA B137.5) |
| 100 psi @ 180°F (690 kPa @ 82.2°C) | 0.50 (per ASTM F876, CSA B137.5) |

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