

# Pipe, Fittings and Pipe Joints for Underground Fire Service Mains

Underground fire service mains are made from many different materials. Cast iron, ductile iron, stainless steel pipe, Polyvinyl Chloride (PVC), Polyethylene (PE), and Fiber Reinforced Composite (FRP of Fiberglass) pipe and fittings are acceptable when they are FM Approved.

Installation of these products should conform to FM Global Property Loss Prevention Data Sheets.

## Polyethylene Pipe and Fittings

Polyethylene pipe should be installed and anchored according to the pipe manufacturer's instructions and FM Global Property Loss Prevention Data Sheets. For underground use only.

Nominal pipe size is the approximate outside diameter of the pipe. Refer to manufacturer's catalog for pipe inside diameter.

## Polyethylene Pipe and Fittings

| Product Designation         | O.D., Pipe Size, mm   | Pressure<br>Rating,<br>bar (psi) | Remarks |
|-----------------------------|---|----------------------------------|---------|
| Spigot Fittings for Electro | fusion, PE100, SDR 11   |                                  |         |
| WAVIN 45° Elbow             | 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315  | 12                               | a, b, c |
| WAVIN 90° Elbow             | 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315  | 12                               | a, b, c |
| WAVIN Equal Tee             | 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315  | 12                               | a, b, c |
| WAVIN Reducer               | 110/90, 125.90, 125/110, 160/90, 160/110, 160/125, 180/125, 180/160, 200/160, 200/180, 225/160, 225/180, 225/200, 250/160, 250/200, 250/225, 280/250, 315/200, 315/225, 315/250 | 12                               | a, b, c |
| WAVIN End Cap               | 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315  | 12                               | a, b, c |
| WAVIN Flange Adaptor        | 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315  | 12                               | a, b, c |

#### Remarks:

- a. Spigot fittings only to be used with electrofusion fittings.
- b. The manufacturer's electro-fusion welding instructions must be strictly adhered to for a proper joint.
- c. The fittings are manufactured of injection molded PE100.

| Product Designation                   | O.D., Pipe Size, mm                                  | Pressure<br>Rating,<br>bar (psi) | Remarks |  |  |
|---------------------------------------|--|----------------------------------|---------|--|--|
| Electrofusion Fittings, PE100, SDR 11 |  |                                  |         |  |  |
| WAVIN Coupler                         | 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315 | 12                               | a, b, c |  |  |
| WAVIN Branch Saddle                   | 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315 | 12                               | a, b, c |  |  |

### Remarks:

- a. Dimensions refer to the pipe outside the diameter. The pipe fits into a socket in the fitting, and when electrical current is applied to the terminal, which is integral with the fitting, the joint is complete.
- b. The manufacturer's electro-fusion welding instructions must be strictly adhered to for a proper joint.
- c. The fittings are manufactured of injection molded PE100.

| Company Name:       | Georg Fischer Wavin Ltd                          |
|---------------------|--|
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| Listing Country:    | Switzerland                                      |
| Certification Type: | FM Approved                                      |

# Approval Guide

