

Technical

Electro Fusion & Spigot Fittings

Electro Fusion Technical Information



Description:

The range of Electro Fusion fittings are used for jointing polyethylene piping systems used in high pressure conveyance of water, irrigation, gaseous fuels, compressed air, certain chemical solutions and slurries. These fittings are to suit metric HDPE/MDPE pipe manufactured to NZS 4130. Electro Fusion fittings have an electrical coil, which when energised melts the two surfaces together to form a sound joint when cooled.

Range:

Metric O.D. series from 20mm O.D. up to 630mm O.D.

Conditions of Use:

Temperature

The normal fusing temperature range is from -5°C to +23°C. The fittings are designed to work between -10°C and +45°C (metric sizes) and -30°C and +50°C (imperial sizes) with automatic fusion temperature correction.

Operating Pressure:

The levels of pressure used for the hydraulic pressure resistance tests, allow the definition, according to the current regulation in each country, the maximum operating pressures:

Marking	Maximum pressures generally used:	Test Pressures and Test Duration
PE80 - SDR11	4 Bar Gas 12.5 Bar Water	80°C, 8 Bar, 1000 Hours 80°C 9 Bar, 165 Hours
PE80 - SDR9	10 Bar Gas 16 Bar Water	80°C, 10 Bar, 1000 Hours 80°C, 11.25 Bar, 165 Hours
PE100 - SDR11	10 Bar Gas 16 Bar Water	80°C, 10 Bar, 1000 Hours 80°C, 10.8 Bar, 165 Hours

In no case should the pressure be higher than the values authorised in your local regulations.

Maximum Operating Pressure:

The maximum operating pressure (PMS) of piping items is the maximum inner allowable operating pressure for this item for the kind of application considered.

The PMS is linked to the nominal pressure according to the use envisaged. It can be inferior or superior to the nominal pressure depending on whether the conditions of service are more or less than the reference conditions.