ABS

ABS (acrylonitrile butadiene styrene) is a thermoplastic polymeric material whose primary characteristics are lightness and rigidity, extremely important for manufacturing valves & fittings

ABS Pressure Pipe System can be used in temperatures as low as -40°C and has extremely good flow characteristics. This makes ABS pipe and fitting systems a safe and secure choice for chilled or potable water, food stuffs and beverage applications in an commercial environment.

Within any pressure piping system, it's vital that the thermal movement and the temperature and pressure relationship is controlled

Features & Benefits

- Lightweight
- Robust system with high impact strength
- Suitable at low temperatures down to -40°C
- Smooth bore pipe reduces pressure loss
- Operating temperature -40°C to +60 °C subject to pressure requirements
- Solvent weld pipe fitting system
- Suitable for mains water and chilled water applications

Colour
ABS products are recognised by their light grey colour

Temperature and Pressure

It is suitable for use over a wide temperature range from -40°C to +60°C at pressures up to 15 bar. Please consult the temperature/pressure relationship chart for specific ratings. It is important to remember that if the temperature is increased above 20°C then the pressure must be reduced.

ABS in sub-zero temperatures
ABS Pipe systems are suitable for temperatures as low as -40°C, however it is necessary as with any other pipeline to take preventative measures to ensure the pipeline fluid does not freeze, as freezing would cause subsequent damage to the system.

Thermal expansion
The thermal coefficient of linear expansion for ABS is 10.1 x 10-5m/m.°C. It is necessary in certain situations to make special provision for this expansion and contraction. Thermal expansion of ABS is compared with other materials, in the following chart.
General Information Temperature range
-40°C to +60°C
Size range
Imperial Solvent weld ½” – 8”

Threaded ½” – 4”