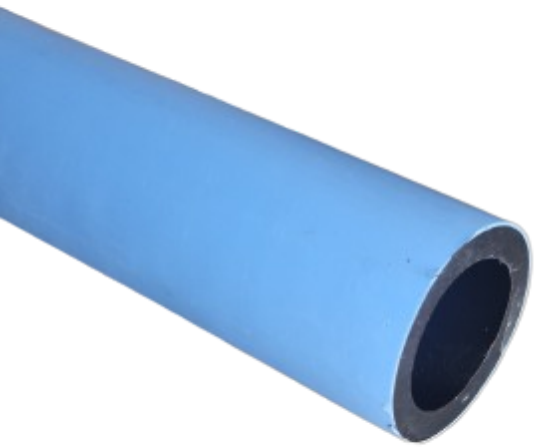
POLYETHYLENE PIPING

Also called:

PE100, POLY, GENIII, PE

Similar to:

BLUELINE POLY, POLYPROPYLENE (PP)



SUITABLE FOR:

- Compressed Air
- Water

PRESSURE RATING:

- 1600kPa/800kPa

JOINTING METHODS:

- Metric Compression (Mechanical) - 800kPa
- Socket-Fusion (Welded) - 1600kPa
- Electro-Fusion (Welded) - 1600kPa

Sizes - measure Outside Diameter (OD):

20mm (not stocked)
25mm
32mm
40mm
50mm
63mm
75mm (not stocked - rare)
90mm
110mm
160mm

Lengths:

- 6m lengths
- 50m rolls (some sizes)
- 100m rolls (some sizes)

ADVANTAGES:

- Cost-effective
- Can be DIY
- High pressure rating
- Blue to AS1345 for pressure pipe identification
- Impact-resistant
- Compliant to AS1430 for pressure pipe
- 2:1 safety factor
- Readily available
- Smooth bore
- Will not corrode
- Can be installed underground
- UV-stable

DISADVANTAGES:

- Needs additional support
- Longer install times
- Not as rigid

Short Description:
GenIII PolyEthylene Pipework has largely been the mainstay of compressed air pipework for many years, but is rapidly being overtaken by other products such as aluminium Unipipe systems.
PE pipework remains one of the most cost-effective systems for compressed air and with multiple jointing methods* available, can be used pretty much anywhere.

*Jointing methods:

- Metric Compression (Mechanical) fittings: are largely regarded as the DIY option for this pipework system, they are similar to irrigation fittings such as Philmac and Plasson. The fittings we use are Plasson and we've found these to be the most reliable for compressed air. **Compression fittings have a pressure rating of 8 bar, and are unsuitable for connecting directly to compressor plant due to heat and vibration**
- Socket-Fusion fittings are a welded system which has a simple working method involving a hot iron that softens the outside of the pipe, and the inside of the fitting, simultaneously. After softening, the pipe and fitting are removed from the iron and pushed together to cool and harden and create a strong, long-lasting joint. Due to the manual process involved the system gets prohibitively labour-intensive above 40mm without specialised equipment.
- Electro-Fusion fittings are another welded system that comes into economic viability above 32mm. This process uses an expensive welder that heats an integral coil inside the fitting which melts the plastic pipe and fitting together, then cools and hardens forming a strong, long lasting joint. The welder identifies the fitting and in some cases, automatically sets the heating time. Cooling time is per the direction on the fitting. This process is largely used in underground plumbing systems.