



Additional Information

Applications

Cuprofit can be used for drinking water, plus cold and hot sanitary and domestic heating installations. Cuprofit is for use with water only, and must not be used on any gas installations.

Earth Continuity

Cuprofit does not maintain earth continuity. Building Regulations currently recommend that the water supply tubes are not used to earth out new installations. In existing installations where the tube is used as an earth, the contact should be correctly re-established by installing a separate earth connection. If earth continuity is required the fitting should be bridged with a continuity strap.

Tube Compatibility

Cuprofit is suitable for use with Copper tube to EN1057: 1996, but is unsuitable for use with Imperial tubes to BS 659. Cuprofit cannot be used with stainless steel tube.

For details relating to the use of Cuprofit on chromium plated tube, please contact our Technical Department.

Both PE-x and PB pipe can be joined with Cuprofit, however, the appropriate liner **must** be used. Cuprofit must be used with the specially designed COAS liner (which has a chamfered leading edge that aids assembly past the 'O' ring seal). Table B, page 8, provides details relating to the liners.

Under no circumstances must other manufacturers' liners be used, as these are not compatible with Cuprofit.

EPDM (Ethylene Propylene Diene Monomer) 'O' ring Compatibility

EPDM is compatible with drinking water, plus other hot and cold heating and sanitary applications within the working pressure and temperature limitation of the material.

Lifespan

Accelerated life tests to BS5760 show that the 'O' ring and the other components within a Cuprofit fitting have a life expectancy greater than 50 years.

Soldering/Brazing

Cuprofit is a push-fit system that requires no flames or flux. External heat sources should not be applied when installing any Cuprofit product, including street and stem elbows or socket reducers.

Additional Information *continued*

Test Certification

Cuprofit has numerous approvals including:
WRAS, DVGW and KIWA.
(See page 10)

Angularity

Cuprofit's unique design offers 360° rotation, and $\pm 2^\circ$ angularity, thus further easing the installation process.

Ovality

PE-x and PB pipe can become oval when stored. Inserting the appropriate liner should re-round the pipe sufficiently to allow installation to be successful. If the pipe is extremely oval it is recommended that new pipe is used, or appropriate re-rounding tools are used before the pipe liner is inserted.

Glycol Compatibility

Cuprofit can be used with a 25% Glycol : 75% Water solution.

Chlorination

Chlorinating the line in accordance with BS6700:1997 will have no detrimental effect upon the fittings. If the concentration of the chlorination solution exceeds 50mg/l (50 p.p.m), damage to the pipeline could occur.

Temperature and Pressure Rating

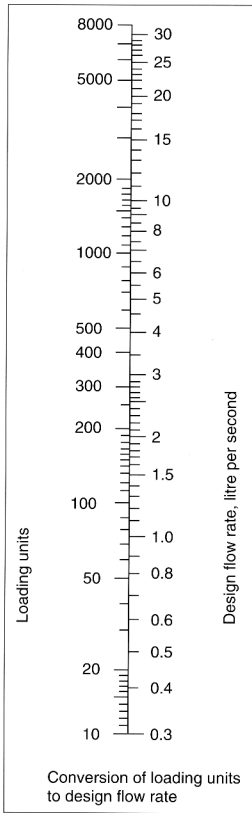
Refer to Table D:

Table D

Size (mm)	Working conditions	
	Max Temp °C	Max Pressure (bar)
10mm	30	16
28mm	95	6

Pipe System Data

Chart 1



The following charts can be used to determine:

- Water flow rate through the pipe.
- Pipe diameter (Tentative approximation).
- Water velocity through the pipe.
- Head-loss rate of the pipe.

Example using copper tube:

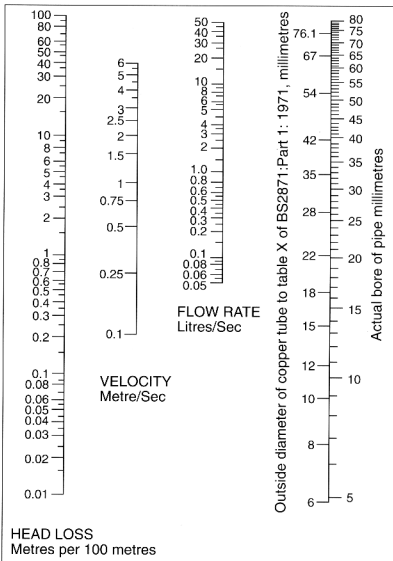
Assumed loading units = 100 (ref. BS.6700).
Use Chart 1 to directly convert the loading units into the design flow rate.
100 loading units = 1.25 litres/second.

From the pipe material charts, select a pipe diameter such that when a straight line is drawn from the pipe diameter through the known flow rate, it indicates a water velocity near to, but less than 3m/s.

A 28mm diameter pipe is closest to fulfilling the conditions stated above.
This gives a water velocity of 2.3m/s.

The head-loss rate of the pipe is seen to be 22m/100m.

Copper



Pipe System Data

Plastic

