

The Fusamatic system was primarily developed to meet the requirements of British Gas and the British water industry. Subsequently the Fusamatic system has become the preferred system in many countries worldwide. Comprehensive up-to-date details of approvals are available on request. To confirm the long term durability of the Fusamatic system, thorough testing is carried out within our laboratory.

The following information provides details of typical tests and indicates the test results against specification requirements.

Fusion Provida is an ISO 9001:2008 quality assessed, registered and certificated company by the British Standards Institution. Certificate No. FM 28179.

TYPICAL TEST	TEST CRITERIA	WATER SPECIFICATION	GAS SPECIFICATION
20°C Hydrostatic test (5000 hrs)	PE80 - 9.5 Mpa PE100 - 11 Mpa	N/A	GIS/PL2-4 GIS/PL2-6
80°C Hydrostatic test (1000 hrs)	PE80 - 4 Mpa PE100 - 5 Mpa	BS EN12201-3	BS EN1555-3 GIS/PL2-4 GIS/PL2-6
20°C Hydrostatic test (100 hrs)	PE80 - 10 Mpa PE100 - 12.4 Mpa	BS EN12201-3	BS EN1555-3 BS ISO 8085
80°C Hydrostatic test (170 hrs)	PE80 - 4.6 Mpa PE100 - 5.5 Mpa	BS EN12201-3	GIS/PL2-4 GIS/PL2-6 BS EN1555-3 BS ISO 8085
Joint strength/adhesion (socket OD>90mm)	All samples to have 75% ductility	WIS 4-32-08 BS EN12201-3	GIS/PL2-4 GIS/PL2-6 BS EN1555-3 BS ISO 8085
Joint strength/crush (socket OD≤90mm and saddles)	No brittle failure at joint interface	BS EN12201-3	GIS/PL2-4 GIS/PL2-6 BS EN1555-3 BS ISO 8085
Dimensional stability (9000 hrs)	Within specified tolerances after conditioning @ 30°C	n/a	GIS/PL2-4 GIS/PL2-6
Material tests (taken from joint interface after fusion cycle)	MFR, OIT and density within specified limits	BS EN12201-3	GIS/PL2-4 GIS/PL2-6 BS EN1555-3 BS ISO 8085
A.R.E.L. (tensile loading for sockets<75mm)	Specified load for 500 hrs @ 80°C	n/a	GIS/PL2-4 GIS/PL2-6
Tapping tee impact (100 J impact energy)	No cracking or leaking after impact	BS EN12201-3	GIS/PL2-4 GIS/PL2-6 BS EN1555-3 ISO 8085
Tapping tee cutter torque	<45Nm for 32mm O/L<110NM for 63mm O/L	n/a	GIS/PL2-4
Pressure loss across tapping tee	State K value	n/a	GIS/PL2-4
Branch saddle pull off	Outlet pipe to fail before fitting	Internal	Internal