Product Specification

IMPERIAL RANGE

DURAPIPE PVC-U PIPES

In accordance with the dimensional and testing requirements of BS EN 1452, Third Party Approved with British Standard Kitemark Licence.

DURAPIPE PVC-U FITTINGS

In accordance with the dimensional and testing requirements of BS 4346 Part 1, Third Party Approved with British Standard Kitemark Licence.

MATCHED SYSTEM

The PVC-U products are designed to ensure complete integrity, quality and compatibility between pipes, fittings and valves. Manufacturers warranties may be compromised if a system is installed with materials from various manufacturers. Where this is not possible then any alternative products should be confirmed as being at least equivalent to that which is normally supplied.

QUALITY SYSTEM

Pipes, fittings and valves shall be manufactured in an environment, which operates a Quality Assurance System assessed to ISO 9001.

ENVIRONMENTAL SYSTEM

The manufacturer of pipes, fittings and valves shall be able to demonstrate compliance with applicable environmental legislation and products shall be manufactured in an environment where documented performance reviews are undertaken and an Environmental Management System is successfully assessed to ISO 14001.

DRINKING WATER/ APPROVAL FOR USE IN CONTACT

Within private property boundaries all PVC-U pipes, fittings and solvent cement shall be listed in the Water Fittings and Materials Directory to show compliance with the requirements of the United Kingdom Water Regulations Advisory Service.

In any situation which could result in the PVC-U pipes, fittings and solvent cement coming into contact with water which is intended for human consumption these shall be in accordance with the requirements of BS 6920 Part 1.

Copies of certification of compliance with these approvals are available for inspection.

Approved for use within public water supplies and by the Secretary of State. Durapipe UK PVC-U is listed in the 'List of Approved Products' published by the DWI.

THIRD PARTY APPROVALS

The manufacturer shall have the following Third Party Approvals:

BRITISH STANDARD KITEMARK LICENCE

KM06218 for solvent cement to BS 4346 Part 3

WRAS WATER REGULATIONS ADVISORY SCHEME 0112065 for Imperial fittings

0610503 for Durapipe solvent cement (5560)

DWI PRODUCT APPROVAL DWI 56.4.937 Durapipe grey PVC-U pipe NGS

DESIGN LIFE

Durapipe pipes, fittings and valves are designed to operate continuously for 50 years at their maximum rated pressure at a working temperature of 20°C.

CHEMICAL SUITABILITY

The manufacturer shall publish detailed chemical resistance data to enable the suitability of the PVC-U material, seals, and gaskets to be determined by designers and specifiers.

The manufacturer shall also employ a qualified and experienced Chemist and provide a free-of-charge advisory service for assessing the suitability of its PVC-U material, seals, and gaskets.

INSTALLATION SPECIFICATION

The installation must be carried out by competent persons. The contractor shall be required to provide technical documentation relating to the manufacturers recommended Installation procedures. The manufacturer shall publish Installation recommendations, and shall also provide a free-of-charge training service for designers and installers, with appropriate written confirmation of attendance.

Temperature range +5°C to +60°C (see page 8 for more details).

DURAPIPE PVC-U BALL VALVES

True union design, end load resistant with full pressure and shock resistant anti blow out device which conforms to design and endurance testing requirements of DIN 3441 Part 1, and DIN 3230 Part 3 Leak Rate One (Water and Air).

Drop Tight and Bubble Tight testing have been satisfactorily completed. In addition, the following testing has been successfully conducted: Hydrostatic Shell Test 1.5 x Maximum Working Pressure. Seat Test 1.1 x Maximum Working Pressure.

PRESSURE RATING

PN16 at 20°C

SEATS AND SEALS

Seats: PTFE material fitted with O-Ring compensators. Seals: Standard size O-Ring type for ease of replacement, in EPDM or FPM material.

END CONNECTIONS

Plain socket ends, or BSP threaded.

ACTUATION

Options: Electric or pneumatic.

DURAPIPE PVC-U TKD 3-WAY BALL VALVES

True union design. Options of 'L' or 'T' port configuration. The following testing will have been successfully completed: Drop Tight and Bubble Tight Test. Hydrostatic Shell Test 1.5 x maximum recommended pressure. Seat Test 1.1 x maximum working pressure.

PRESSURE RATING 1/2" to 2" - PN16 at 20°C.

SEATS AND SEALS

Seats: PTFE material fitted with O-Ring compensators. Seals: Standard size O-Ring type for ease of replacement, in EPDM or FPM material.

FND CONNECTIONS

Plain socket ends or BSP threaded.

DURAPIPE PVC-U DIAPHRAGM VALVES Will be equipped with a maintenance free hand wheel actuator with spindle extension to indicate the position of the valve open or closed. The body retaining bolts will be fixed from the underside, to provide a crevice free outer surface to prevent accumulation of debris or risk of corrosion of exposed steel bolts from chemical spillage. Valves will have been hydrostatically pressure tested to the requirements BS 4346 Part 1, BS 5156, ISO 7508 and DIN 3230 Part 3 Leak Rate One

PRESSURE RATING

1/2" to 4" - PN10 at 20°C

DIAPHRAGM TYPE

Choice of EPDM, FPM or PTFE will be available.

END CONNECTION

These may be plain spigot ends or flanged.

ACTUATION

Options – Pneumatic

DURAPIPE PVC-U BALL CHECK VALVES

These shall be double union with plain socket or BSP threaded end. PRESSURE RATING

¹/2" to 2" - PN16 at 20°C. SEALS

Seals: Will be EPDM or FPM material.

DURAPIPE BUTTERFLY VALVES

Reinforced Polypropylene body, fully lined, with PVC disc. Full flanged design, with oval holes/inserts to suit various standard

flange drillings.

Lever operated, with 10 x 10° position stops, and locking device. PRESSURE RATING

 $1^{1}\!/\!2"$ to 10"- PN10 at 20°C

12" - PN8 at 20°C

PRIMARY LINER Available in EPDM, FPM, or NBR

ACTUATION

Electric, Pneumatic, or Gearbox (standard on sizes over 8")

METRIC RANGE

DURAPIPE PVC-U PIPES

In accordance with the requirements of EN 1452-2, DIN 8061/2, and ISO DIS 15493. Pressure rating PN 16.

DURAPIPE PVC-U FITTINGS

In accordance with the requirements of EN 1452-3, DIN 8063, ISO 727 and ISO DIS 15493. Pressure rating PN 16 up to size 160mm, and PN 10 in larger sizes.

MATCHED SYSTEM

Durapipe PVC-U products are designed to ensure complete integrity, quality and compatibility between pipes, fittings and valves. Warranties are compromised if a system is installed with materials from various manufacturers. Where this is not possible then any alternative products should be confirmed as being at least equivalent to that which is normally supplied.

QUALITY SYSTEM

Pipes, fittings and valves shall be manufactured in an environment which operates a Quality Assurance System assessed to ISO 9001.

ENVIRONMENTAL SYSTEM

The manufacturer of pipes, fittings, and valves shall be able to demonstrate compliance with applicable environmental legislation and products shall be manufactured in an environment where documented performance reviews are undertaken and an Environmental Management System is successfully assessed to ISO 14001.

APPROVAL FOR USE IN CONTACT WITH DRINKING WATER

Within private property boundaries all PVC-U pipes, fittings and solvent cement shall be listed in the Water Fittings and Materials Directory to show compliance with the requirements of the United Kingdom Water Regulations Advisory Service.

In any situation which could result in the PVC-U pipes, fittings and solvent cement coming into contact with water which is intended for human consumption these shall be in accordance with the requirements of BS 6920 Part 1.

Copies of certification of compliance with these approvals are available for inspection.

Approved for use within public water supplies and by the Secretary of State. Durapipe UK PVC-U is listed in the 'List of Approved Products' published by the DWI.

THIRD PARTY APPROVALS

The manufacturer shall have the following Third Party Approvals: WRAS WATER REGULATIONS ADVISORY SCHEME

0402050 for Metric size pipe and fittings 0610503 for Durapipe solvent cement (5560)

DWI PRODUCT APPROVAL DWI 56.4.937 Durapipe grey

PVC-U pipe NGS

DESIGN LIFE

Durapipe pipes, fittings and valves are designed to operate continuously for 50 years at their maximum rated pressure at a working temperature of 20° C.

CHEMICAL SUITABILITY

The manufacturer shall publish detailed chemical resistance data to enable the suitability of the PVC-U material, seals, and gaskets to be determined by designers and specifiers.

The manufacturer shall also employ a qualified and experienced Chemist and provide a free-of-charge advisory service for assessing the suitability of its PVC-U material, seals, and gaskets.

INSTALLATION SPECIFICATION

The installation must be carried out by competent persons. The contractor shall be required to provide technical documentation relating to the manufacturers recommended Installation procedures. The manufacturer shall publish Installation recommendations, and shall also provide a free-of-charge training service for designers and installers, with appropriate written confirmation of attendance. Temperature range $+5^{\circ}$ C to $+60^{\circ}$ C (see page 8 for more details).

DURAPIPE PVC-U BALL VALVES

True union design, end load resistant with full pressure and shock resistant anti blow out device which conforms to design and endurance testing requirements of DIN 3441 Part 1, and DIN 3230 Part 3 Leak Rate One (Water and Air).

Drop Tight and Bubble Tight testing have been satisfactorily completed. In addition, the following testing has been successfully conducted: Hydrostatic Shell Test 1.5 x Maximum Working Pressure. Seat Test 1.1 x Maximum Working Pressure.

PRESSURE RATING

PN16 at 20°C

SEATS AND SEALS

Seats: PTFE material fitted with O-Ring compensators. Seals: Standard size O-Ring type for ease of replacement, in EPDM or FPM material.

END CONNECTIONS

Plain socket ends, BSP threaded or flanged.

ACTUATION

Options: Electric or Pneumatic.

DURAPIPE PVC-U TKD 3-WAY BALL VALVES

True union design. Options of 'L' or 'T' port configuration. The following testing will have been successfully completed: Drop Tight and Bubble Tight Test. Hydrostatic Shell Test 1.5 x maximum recommended pressure. Seat Test 1.1 x maximum working pressure.

PRESSURE RATING

16mm to 63mm – PN16 at 20°C.

SEATS AND SEALS

Seats: PTFE material fitted with O-Ring compensators.

Seals: Standard size O-Ring type in EPDM or FPM material.

END CONNECTIONS

Plain socket ends or BSP threaded.

DURAPIPE PVC-U DIAPHRAGM VALVES

These are equipped with a maintenance free hand wheel actuator with spindle extension to indicate the position of the valve open or closed. The body retaining bolts are fixed from the underside to provide a crevice free outer surface to prevent accumulation of debris or risk of corrosion of exposed steel bolts from chemical spillage. Valves have been hydrostatically pressure tested to the requirements of DIN 8063, ISO 5208, ISO 7508 and DIN 3230 Part 3 Leak Rate One.

PRESSURE RATING

20mm to 110mm – PN10 at 20°C

DIAPHRAGM TYPE Choice of EPDM, FPM or PTFE will be available.

END CONNECTION These may be plain spigot ends or flanged. ACTUATION Options: Pneumatic

DURAPIPE PVC-U BALL CHECK VALVES

These shall be double union with plain socket or BSP threaded end.

PRESSURE RATING 20mm to 63mm – PN16 at 20°C.

SEALS

Seals: Will be EPDM or FPM material.

DURAPIPE BUTTERFLY VALVES

Reinforced Polypropylene body, fully lined, with PVC disc. Full flanged design, with oval holes/inserts to suit various standard flange drillings. Lever operated, with 10 x 10° position stops, and locking device **PRESSURE RATING**

50 mm to 250mm – PN 10 at 20°C

315 mm – PN 8 at 20 °C

PRIMARY LINER

Available in EPDM, FPM, or NBR

ACTUATION

Electric, Pneumatic, or Gearbox (standard on sizes over 225 mm).