# **Plumbing Systems**

## **Quick Connect Plumbing System**

Whale Quick Connect fittings ensure a high integrity, reliable, plumbing system solution, specifically designed for use in mobile applications.

## Save Time and Money by Using Whale Quick Connect

Fittings and pipework design ensures easy installation and re-usability of components. The simple two step installation procedure does not require special tools to make a watertight connection.

- Unique 'Double Gripper' design provides secure lifelong pipework retention even at excessive pressures
- The innovative 'cage collet' eliminates leaks where fittings are installed close to tight bends
- Collet has internal support ring ensuring o ring seal is held in position and does not distort or leak under pressure
- High integrity single piece moulding improves the strength of the fittings
- · Outer sleeve incorporates collet cover, thus preventing accidental pipework release
- Collet clips are not necessary and therefore reduce installation time
- Pipework includes measured cut marks, designed to be a visual guide to ensure that fittings are pushed fully home

#### Whale Quick Connect Semi-Rigid Pipework

Whale Quick Connect colour coded semi-rigid pipework is available in 12 mm, 15 mm, and 22 mm sizes in standard or high performance (Whalex) PE materials. The pipework's flexibility enables tight bends to be formed, hence reducing both the number of fittings and time required at installation. Whale Quick Connect semi-rigid pipework offers the integrity of metal, but the usability of plastic, and is fully tested and recommended for use with the complete range of Whale fittings (see pages 82-83).

#### Minimum Bend Radii Recommendations

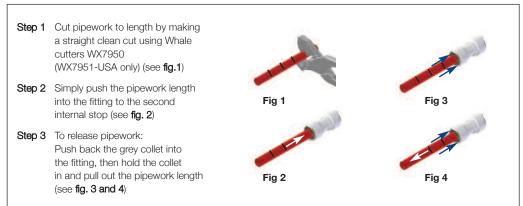
All grades of Whale Quick Connect semi-rigid pipework are flexible and can be bent into a tight radius to facilitate easy installations. This reduces the number of fittings required and the cost of the total water system.

Whale Tubing	Minimum Bend Radius

15mm

n 75mm

#### Installation Guide



This product is protected by the following granted patents: United States Patent No. US 6,349,978; German Patent No. 69810350.5 (EP(DE) 1 032 785); French Patent No. FR 1 032 785; United Kingdom Patent No. GB 2 331 564; and Dutch Patent No. NL 1 032 785.

The Whale Quick Connect products are protected by the following patents UK Patent Number: 2331564, European Patent Number: 1032785 USA Patent Number: 6349978

Materials		
Whale Quick Connect Fittings	Glass-filled P	olypropylene
Whale Quick Connect Pipework	Polyet	hylene
Maximum Operating Conditions	Maximum Pressure	Maximum Temperature
Maximum Operating		

	Minimum Bend Radius
Quick Connect 15 mm Pipework	75 mm

#### Minimum Storage Temperature

The minimum dry storage temperature is -40 °C (-40 °F)

Note: It is vital that the system is fully winterized to prevent frost damage.



**WARNING:** Temperature Settings – To prevent scalding, (regardless of the water heating method or the control devices used), the temperature for the hot water supplied to the faucets and showers should be controlled in the range of 50 °C to 60 °C (110 ° F to 140 ° F) with a fail safe set at 82 °C (180 °F).

**CAUTION:** Ideally, the temperature should be set at 46 °C (115 °F) for health and safety reasons, higher settings will increase the risk of scald injury. Those at greatest risk of scald injury include children, the elderly, disabled, and diabetics.

## **Fail Safe Controls**



**WARNING:** In a typical marine installation, it is vital to incorporate primary and fail safe controls for water temperature and pressure. Please see list below:

#### PRIMARY CONTROLS:

Thermostatic Mixer Valve: WX1599B Pressure Switch: WU7207(B) - In-Line Pressure Switch or included in the Universal Pressure Pump (see page 77) Pressure Regulator: WX1595B - Pressure Relief Valve - 6 bar <sup>1</sup>/<sub>2</sub>" Female Expansion Vessel: Accumulator Tank

#### FAIL SAFE CONTROLS:

WX1595B - Pressure / Temperature Relief Valve
For typical installation of these necessary controls see page 55
For a full list of our part numbers see pages 92-93
For advice on specific installation requirements contact Whale - see contact details

Note: The patented Whale Plumbing System is specifically designed to be use in "mobile" applications. Whale Quick Connect fittings and Whalex pipework (any) are covered for 10 years from date of purchase (except WX1599). For use with Whale plastic tubing and grooved stems only.

## **Quick Connect Pipework and Fittings**

## 15 mm



WX1502(B) 15 mm Equal Tee



WX1503(B) 15 mm Equal Elbow



WX1504(B) 15 mm Equal Straight



WX1508B End Plug (Brass)



WX1509B Stem Adaptor 12 mm - 15 mm



WX1511B Stem Adaptor 11 mm - 15 mm



(Brass) WX1521(B) Stem Tee

Adaptor 15 mm Female

15 mm Compression Fitting

WX1520B



WX1522(B) Stem Elbow



WX1546B End Stop

WX1573B



WX1571(B) 3 Way Valve (Brass)

Shut-off Valve (Brass)





WX1575B Stem Shut-off Valve (Brass)



WX1576B Stem Shut-off Valve





WX1577B



WX1578B Stem Ice Maker Fitting With 15 mm Equal Tee (Brass)



WX1582(B) Check Valve - Non Return Valve (Brass)

## Threaded 3/4"



WX1516B Adaptor ¾" BSP Male



WX1542(B) Adaptor 3/4" BSP Female



WX1552B Adaptor 3/4" Garden Hose Thread (Green) Female

## Threaded 3/8"



WX1538 / WX1538(B) Adaptor 3/8" BSP Female

WX1539B Stem Adaptor 3/8" Female (Brass)



Stem Adaptor 3/8" NPT Male (Brass)



WX1583B Adaptor 3/8" BSP Male

WX1563(B)

#### Part Numbers Explanation:

B Suffix: refers to items available only in bulk packed quantities for high volume production OEM use (B) Suffix: refers to items available in either retail packaging (e.g. WX1502) or in bulk packed quantities for high volume production OEM use (e.g. WX1502B).

Note: All brass connectors are lead-free as per USA federal regulations

## Threaded 1/2"



WX1080B Adaptor 1/2" BSP Male - 10 mm Compression Fitting (Brass)



WX1513B Adaptor 1/2" NPT Male (Brass) -15 mm







WX1515(B) Faucet Tail Assembly Adaptor 1/2" BSP Male - 15 mm



WX1519B Flexible Heater Connector 1/2" NPT Male 1/2" BSP Female Length - 350 mm (14")







WX1531(B) Elbow Adaptor 1/2" BSP Female - 15 mm



WX1532(B) Adaptor 1/2" Female - 15 mm



WX1533B Adaptor 1/2" BSP Female (Brass) -15 mm



WX1534(B) 15 mm Stem with None Return Valve Adaptor 1/2" NPT Male (Brass)



WX1536B Adaptor 1/2" BSP (Green) (Short Wings) Female



WX1567B 1/2" NPT Male - 1/2" BSP Male Shower Bulkhead Adaptor (Brass)



WX1587(B) Stem Adaptor 1/2" BSP Male - 15 mm

## **Quick Connect Pipework and Fittings**

## Flexible Hose Fittings 1/2"



WX1544(B) 1/2" Hose Connector (Brass)

WX1584(B)

WX1585B

Stem Adaptor 1/2"

Flexible Hose Male



WX1586B

Tee 1/2" barb X 1/2" barb X 1/2" barb



Tee 1/2" barb X 15 mm WX X 1/2" barb



WX1591(B) Stem Elbow 1/2" Flexible Hose

## Flexible Hose Fittings <sup>3</sup>/<sub>4</sub>"



WX1555B Tee ¾" barb X ¾" barb X ¾" barb

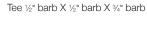


WX1556B Tee ¾" barb X 15 mm WX X ¾ BARB



WX1557B Tee ¾" barb X ½" barb X ¾" barb





WX1558B

WX1592(B)



Stem Elbow ¾" Flexible Hose





WX2259B Adaptor 22 Spigot X 3/4" barb

## Other Connections



WX1517B %16" X 24 UNEF Male Faucet Tail Adaptor (Brass) suitable for Gröhe Faucets

WX1535B Stem Adaptor 1/8" Hose (Brass) for Windsrceen Washer

WX1537B Stem Adaptor 1/4" NPT Female (Brass)



WX1566B Tank Fitting Assembly



WX2260B End Stop 22mm Spigot

WX1528(B) Adaptor 5/8" - 15mm



WX1595B Pressure Relief Valve - 6 bar 1/2" Female



## WX1599(B)

Thermostatic Mixer Valve 1/2" Male (Brass) 15 mm and Check Valve / Non-Return Valve Note: This product is covered by 1 year warranty

### Flexible Hose Fittings Other

WX1548B





WX1597(B) Stem Adaptor 5%" Flexible Hose

%" Hose Connector (Brass)

## Colour Coded Tubing

WX7152

WX7154



Standard Semi-Rigid Pipework 15 mm Blue 10 m (33 ft)

WX7152B Standard Semi-Rigid Pipework 15 mm Blue 50 m (164 ft)



Standard Semi-Rigid Pipework 15 mm Red 10 m (33 ft) WX7154B

Standard Semi-Rigid Pipework 15 mm Red 50M (164 ft)



Standard Semi-Rigid Pipework 15 mm Green 10 m (33 ft)

WX7156B Standard Semi-Rigid Pipework 15 mm Green 50 m (164 ft)



WHALEX Semi-Rigid Pipework 15 mm High Performance Blue 50 m (164 ft) WX7562B

WHALEX Semi-Rigid Pipework 15 mm High Performance Blue 152 m (500 ft)



WX7164B WHALEX Semi-Rigid Pipework 15 mm High Performance Red 50 m (164 ft)

WX7564B WHALEX Semi-Rigid Pipework 15 mm High Performance Red 152 m (500 ft)

WX7166B WHALEX Semi-Rigid Pipework 15 mm High Performance Green 50 m (164 ft)

#### WX7168B



WHALEX Semi-Rigid Pipework 15 mm High Performance White 15m (49.2 ft)

Tools

#### WX7950

Pipework Cutters - must be used to cut Whale Semi-Rigid Pipework



WX1569B Pipework Mounting Clip (White) WX1565(B) Pipework Mounting Clip (Black)

WHALEX Pipework is NSF61 listed and has the benefits of a more scratch-resistant surface and greater durability.

**Plumbing Safety Fittings**