

# 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.

### Features and Benefits

- 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 86 and 87).

### 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	75mm

### Installation Guide

**Step 1** Cut pipework to length by making a straight clean cut using Whale cutters WX7950 (WX7951-USA only) (see **fig.1**)

**Step 2** Simply push the pipework length into the fitting to the second internal stop (see **fig. 2**)

**Step 3** To release pipework:  
Push back the grey collet into the fitting, then hold the collet in and pull out the pipework length (see **fig. 3 and 4**)



Fig 1



Fig 3



Fig 2



Fig 4

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 Polypropylene
Whale Quick Connect Pipework	Polyethylene

Recommended Maximum Operating Conditions	Maximum Pressure	Maximum Temperature
	Hot Water	6 bar (90 psi)
Cold Water	12 bar (180 psi)	20°C (68 °F)

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

**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 43 °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

**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 76)

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

**Expansion Vessel:** PT0800 - Accumulator Tank

### FAIL SAFE CONTROLS:

WX1595B - Pressure / Temperature Relief Valve

(For typical installation of these necessary controls see page 49)

(For a full list of our part numbers see pages 86-87)

(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



**WX1520B**  
Adaptor 15 mm Female  
15 mm Compression Fitting  
(Brass)



**WX1521(B)**  
Stem Tee



**WX1522(B)**  
Stem Elbow



**WX1546B**  
End Stop



**WX1571(B)**  
3 Way Valve (Brass)



**WX1573B**  
Shut-off Valve (Brass)



**WX1574(B)**  
Shut-off Valve



**WX1575B**  
Stem Shut-off Valve (Brass)



**WX1576B**  
Stem Shut-off Valve



**WX1577B**  
Stem Ice Maker Fitting (Brass)



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



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

### Threaded 3/4"



**WX1516B**  
Adaptor 3/4" BSP Male



**WX1542(B)**  
Adaptor 3/4" BSP Female



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



**WX1568B**  
Adaptor 3/4" Male - 1/2" Male (Brass)

### Threaded 3/8"



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



**WX1539B**  
Stem Adaptor 3/8" Female (Brass)



**WX1563(B)**  
Stem Adaptor 3/8" NPT Male (Brass)



**WX1583B**  
Adaptor 3/8" BSP Male

### Threaded 1/2"



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



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



**WX1514B**  
Adaptor 1/2" BSP Male - 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")



**WX1524(B)**  
Stem Adaptor 1/2"  
NPT Male (Brass)



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



**WX1532(B)**  
Adaptor 1/2" BSP 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

#### 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).

## Quick Connect Pipework and Fittings

### Flexible Hose Fittings 1/2"



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



**WX1584(B)**  
Stem Adaptor 1/2"  
Flexible Hose Male



**WX1585B**  
Tee 1/2" barb X 1/2" barb X 1/2" barb



**WX1586B**  
Tee 1/2" barb X 15 mm WX X 1/2" barb



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

### Flexible Hose Fittings 3/4"



**WX1555B**  
Tee 3/4" barb X 3/4" barb X 3/4" barb



**WX1556B**  
Tee 3/4" barb X 15 mm WX  
X 3/4" BARB



**WX1557B**  
Tee 3/4" barb X 1/2" barb X 3/4" barb



**WX1558B**  
Tee 1/2" barb X 1/2" barb X 3/4" barb



**WX1592(B)**  
Stem Elbow 3/4" Flexible Hose



**WX1593(B)**  
Stem Adaptor 3/4" Flexible Hose



**WX2259B**  
Adaptor 22 Spigot X 3/4" barb

### Other Connections



**WX1517B**  
9/16" X 24 UNEF Male Faucet Tail  
Adaptor (Brass) suitable for Gröhe  
Faucets



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



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



**WX1566B**  
Tank Fitting Assembly



**WX2260B**  
End Stop 22mm Spigot



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

### Plumbing Safety Fittings



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



**WX1599B**  
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**  
3/8" Hose Connector (Brass)



**WX1597(B)**  
Stem Adaptor 5/8" Flexible Hose

### Colour Coded Tubing



**WX7152**  
Standard Semi-Rigid Pipework  
15 mm Blue 10 m (33 ft)



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



**WX7154**  
Standard Semi-Rigid Pipework  
15 mm Red 10 m (33 ft)



**WX7154B**  
Standard Semi-Rigid Pipework  
15 mm Red 50M (164 ft)



**WX7156**  
Standard Semi-Rigid Pipework  
15 mm Green 10 m (33 ft)



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



**WX7162B**  
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 50 m (164 ft)

### Tools



**WX7950 (WX7951 USA Only)**  
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.