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# LEAP

## WATERTITE



HOT AND COLD WATER PEX PLUMBING SYSTEM

# LEAP WATERTITE

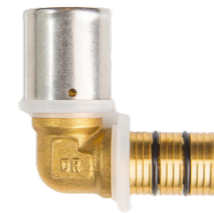
## HIGH INTEGRITY, HIGH PERFORMANCE PEX WATER PIPING SYSTEM

WATERTITE from LEAP is a high integrity and high performance piping system designed to offer installers the benefits of a high temperature and a flexible non-metallic pipe. WATERTITE pipe is manufactured using cross-linking technology first developed in Europe and performs in ways that provide superior reliability, durability and safety. All pipe and fittings are manufactured using the latest extrusion, moulding and machining techniques to ensure a perfect connection every time, providing you with a system that is superior than most conventional pipe systems with a design life in excess of 50 years.

### WATERTITE FEATURES

Corrosion free	Wide range of compact DR brass fittings
50 Year design life	Burst pressure up to 70 bar
Light, strong and robust	Quality appraised
Pipe fittings and tools compatible with GASTITE	Manual and power tools for easy and quick installation

### PIPE CONNECTION SYSTEMS



PRESS SLEEVE FITTINGS FOR CONNECTING BOTH MULTILAYER PEX AND MONOLAYER PEX PIPE



PUSH FIT FITTINGS FOR CONNECTING BOTH MULTILAYER PEX AND MONOLAYER PEX PIPE

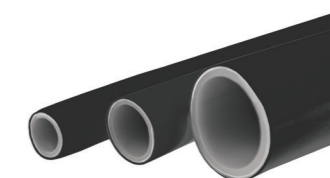


COMPRESSION SLEEVE FITTINGS FOR CONNECTING MONOLAYER PEX PIPE ONLY

### PIPE SYSTEMS



MULTILAYER PEX PIPE (PEX-AL-PEX)



MONOLAYER PEX PIPE

# PRESS SLEEVE

## WATERTITE PRESS SLEEVE (WTPS) FITTING SELECTOR



### Straight Connector

16mm x 16mm  
20mm x 20mm  
25mm x 25mm  
32mm x 32mm

WTPS SC1616  
WTPS SC2020  
WTPS SC2525  
WTPS SC3232



### Male Adaptor

16mm x 1/2"  
20mm x 1/2"  
20mm x 3/4"

### Coming Soon

25mm x 1/2"  
25mm x 3/4"  
25mm x 1"  
32mm x 3/4"  
32mm x 1"

WTPS MA16.15  
WTPS MA20.15  
WTPS MA20.20

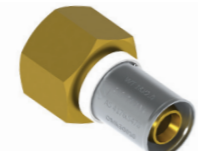
WTPS MA25.15  
WTPS MA25.20  
WTPS MA25.25  
WTPS MA32.20  
WTPS MA32.25



### Straight Reducer

20mm x 16mm  
25mm x 16mm  
25mm x 20mm  
32mm x 16mm  
32mm x 20mm  
32mm x 25mm

WTPS SR2016  
WTPS SR2516  
WTPS SR2520  
WTPS SR3216  
WTPS SR3220  
WTPS SR3225



### Female Adaptor

16mm x 1/2"  
20mm x 1/2"  
20mm x 3/4"  
25mm x 1/2"  
25mm x 3/4"  
32mm x 1/2"  
32mm x 3/4"  
32mm x 1"

WTPS FA16.15  
WTPS FA20.15  
WTPS FA20.20  
WTPS FA25.15  
WTPS FA25.20  
WTPS FA32.15  
WTPS FA32.20  
WTPS FA32.25



### Female Swivel Adaptor

16mm x 1/2"  
20mm x 1/2"  
20mm x 3/4"  
25mm x 3/4"  
25mm x 1"  
32mm x 1"

WTPS FSA16.15  
WTPS FSA20.15  
WTPS FSA20.20  
WTPS FSA25.20  
WTPS FSA25.25  
WTPS FSA32.25



### Equal Bend

16mm x 16mm  
20mm x 20mm  
25mm x 25mm  
32mm x 32mm

WTPS EB1616  
WTPS EB2020  
WTPS EB2525  
WTPS EB3232



### Female Elbow Swivel Adaptor

16mm x 1/2"  
20mm x 1/2"  
20mm x 3/4"  
25mm x 3/4"  
25mm x 1"

WTPS FESA16.15  
WTPS FESA20.15  
WTPS FESA20.20  
WTPS FESA25.20  
WTPS FESA25.25



### Female Bend Adaptor

15mm x 1/2"  
20mm x 3/4"  
25mm x 1"  
32mm x 1"

WTPS FB16.15  
WTPS FB20.20  
WTPS FB25.25  
WTPS FB32.25



### Male Female Adaptor

1" MI x 1/2" FI

WTPS MFA25.15

# PRESS SLEEVE

## WATERTITE PRESS SLEEVE (WTPS) FITTING SELECTOR



### Male Bend Adaptor

16mm x 1/2"  
20mm x 1/2"  
20mm x 3/4"  
25mm x 3/4"  
32mm x 1"

WTPS MB16.15  
WTPS MB20.15  
WTPS MB20.20  
WTPS MB25.20  
WTPS MB32.25



### Male Threaded Tee

16mm x 16mm x 1/2"  
20mm x 20mm x 1/2"  
25mm x 25mm x 3/4"  
32mm x 32mm x 1/2"  
32mm x 32mm x 3/4"

WTPS MTT16.15  
WTPS MTT20.15  
WTPS MTT25.20  
WTPS MTT32.15  
WTPS MTT32.20



### Female Wingback Elbow

16mm x 1/2"  
20mm x 1/2"  
20mm x 3/4"  
25mm x 1/2"  
25mm x 3/4"  
32mm x 1/2"

WTPS FWE16.15  
WTPS FWE20.15  
WTPS FWE20.20  
WTPS FWE25.15  
WTPS FWE25.20  
WTPS FWE32.15



### Equal Tee

16mm x 16mm x 16mm  
20mm x 20mm x 20mm  
25mm x 25mm x 25mm  
32mm x 32mm x 32mm

WTPS ET161616  
WTPS ET202020  
WTPS ET252525  
WTPS ET323232



### Male Wingback Elbow

16mm x 1/2" (100mm long) WTPS MWE16.15 (100)  
16mm x 1/2" (65mm long) WTPS MWE16.15 (65)  
20mm x 1/2" (65mm long) WTPS MWE20.15 (65)  
20mm x 3/4" (100mm long) WTPS MWE20.20 (100)  
20mm x 3/4" (65mm long) WTPS MWE20.20 (65)  
25mm x 3/4" (65mm long) WTPS MWE25.20 (65)  
25mm x 3/4" (20mm Tapered) WTPS MWE25.20TT



### WTPS - Branch Tee

16mm x 16mm x **20mm** WTPS RT161620



### WTPS - Branch Reducing Tee

20mm x 20mm x **16mm** WTPS RT202016  
25mm x 25mm x **16mm** WTPS RT252516  
25mm x 25mm x **20mm** WTPS RT252520  
32mm x 32mm x **16mm** WTPS RT323216  
32mm x 32mm x **20mm** WTPS RT323220  
32mm x 32mm x **25mm** WTPS RT323225



### Female Threaded Tee

32mm x 32mm x 1" WTPS FTT32.25

Note: **bold** = branch size

# PRESS SLEEVE

## WATERTITE PRESS SLEEVE (WTPS) FITTING SELECTOR



### End Reducing Tee

20mm x 16mm x **20mm** WTPS RT201620  
 25mm x 20mm x **25mm** WTPS RT252025  
 32mm x 16mm x **32mm** WTPS RT321632  
 32mm x 25mm x **32mm** WTPS RT322532



### Female Swivel Ball Valve (Blue)

20mm x 3/4" WTPS SBV20.20BL



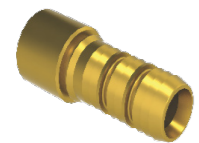
### Branch/End Reducing Tee

20mm x 16mm x **16mm** WTPS RT201616  
 25mm x 20mm x **20mm** WTPS RT252020  
 32mm x 25mm x **25mm** WTPS RT322525



### Blanking Plug

16mm WTPS BP16  
 20mm WTPS BP20  
 25mm WTPS BP25  
 32mm WTPS BP32



### Bare Brazing Tail - Components Supplied

16mm x 10mm Cu NZ WTPS BBT16.10  
 16mm x 3/8" NZ WTPS BBT16.12  
 20mm x 1/2" NZ WTPS BBT20.15  
 25mm x 3/4" NZ WTPS BBT25.20  
 32mm x 1" NZ WTPS BBT32.25  
 32mm x 1 1/4" NZ WTPS BBT32.32



### Hoseplate

16mm x 1/2" WTPS HP16.15

### Coming Soon

25mm x 1/2" WTPS HP25.15

### Coming Soon

25mm x 3/4" WTPS HP25.20

### Coming Soon

32mm x 1/2" WTPS HP32.15

Note: **bold** = branch size

# PUSH FIT

## WATERTITE PUSHFIT (WTPF) FITTING SELECTOR



### Straight Connector

16mm x 16mm WTPF SC1616  
 20mm x 20mm WTPF SC2020  
 25mm x 25mm WTPF SC2525



### Female Swivel Adaptor

16mm x 1/2" FI WTPF FSA16.15  
 20mm x 3/4" FI WTPF FSA20.20



### Straight Reducer

20mm x 16mm WTPF SR2016  
 25mm x 20mm WTPF SR2520



### Female Elbow Swivel Adaptor

16mm x 1/2" FI WTPF FESA16.15  
 20mm x 3/4" FI WTPF FESA20.20



### Equal Bend

16mm x 16mm WTPF EB1616  
 20mm x 20mm WTPF EB2020  
 25mm x 25mm WTPF EB2525



### Male Bend Adaptor

16mm x 1/2" BSP MI WTPF MB16.15  
 20mm x 3/4" BSP MI WTPF MB20.20  
 25mm x 3/4" BSP MI WTPF MB25.20



### Equal Tee

16mm x 16mm x 16mm WTPF ET161616  
 20mm x 20mm x 20mm WTPF ET202020  
 25mm x 25mm x 25mm WTPF ET252525



### Female Bend Adaptor

16mm x 1/2" BSP FI WTPF FB16.15  
 20mm x 3/4" BSP FI WTPF FB20.20  
 25mm x 3/4" BSP FI WTPF FB25.25



### Male Adaptor

16mm x 1/2" BSP MI WTPF MA16.15  
 20mm x 3/4" BSP MI WTPF MA20.20  
 25mm x 1" BSP MI WTPF MA25.25



### Branch Reducing Tee

20mm x 20mm x **16mm** WTPF RT202016  
 25mm x 25mm x **20mm** WTPF RT252520



### Female Adaptor

16mm x 1/2" BSP FI WTPF FA16.15  
 20mm x 3/4" BSP FI WTPF FA20.20  
 25mm x 1" BSP FI WTPF FA25.25



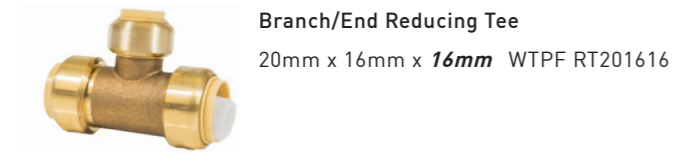
### End Reducing Tee

20mm x 16mm x **20mm** WTPF RT201620

Note: **bold** = branch size

# PUSH FIT

## WATERTITE PUSHFIT (WTPF) FITTING SELECTOR



**Branch/End Reducing Tee**  
20mm x 16mm x **16mm** WTPF RT201616



**Female Wingback Elbow**  
16mm x 1/2" BSP FI WTPF FWE16.15  
20mm x 3/4" BSP FI WTPF FWE20.20



**PEX - PB Adaptor**  
16mm x AS18mm PB WTPF PXPB16.18  
20mm x AS22mm PB WTPF PXPB20.22



**Blanking Plug**  
16mm WTPF BP16  
20mm WTPF BP20  
25mm WTPF BP25



**PEX - CU Adaptor**  
16mm x 1/2" NZ CU WTPF PXCU16.15 NZ  
20mm x 3/4" NZ CU WTPF PXCU20.20 NZ



**Demounting Tool**  
16mm WTPF DT16  
20mm WTPF DT20  
25mm WTPF DT25  
1/2" NZCU WTPF DT15.NZCU  
3/4" NZCU WTPF DT20.NZCU



**Male Wall Elbow**  
16mm x 1/2" BSP WTPF MWE16.15

# COMPRESSION SLEEVE

## WATERTITE COMPRESSION SLEEVE (WTCS) FITTING SELECTOR

Please note: Fittings are supplied with compression sleeve(s)



**Straight Connector**  
16mm x 16mm WTCS SC1616  
20mm x 20mm WTCS SC2020



**Reducing Tee**  
20mm x 16mm x **16mm** WTCS RT201616  
20mm x 20mm x **16mm** WTCS RT202016  
20mm x 16mm x **20mm** WTCS RT201620



**Straight Reducer**  
20mm x 16mm WTCS SR2016



**Blanking Plug**  
16mm WTCS BP16  
20mm WTCS BP20



**Equal Bend**  
16mm x 16mm WTCS EB1616  
20mm x 20mm WTCS EB2020



**Female Swivel Adaptor**  
16mm x 1/2" WTCS FSA16.15  
20mm x 3/4" WTCS FSA20.20



**Equal Tee**  
16mm x 16mm x 16mm WTCS ET161616  
20mm x 20mm x 20mm WTCS ET202020



**Female Wingback Elbow**  
16mm x 1/2" BSP FI WTCS FWE16.15  
20mm x 3/4" BSP FI WTCS FWE20.20



**Male Adaptor**  
16mm x 1/2" BSP MI WTCS MA16.15  
20mm x 3/4" BSP MI WTCS MA20.20



**Female Bend Adaptor**  
16mm x 1/2" BSP FI WTCS FB16.15  
20mm x 3/4" BSP FI WTCS FB20.20



**Female Adaptor**  
16mm x 1/2" BSP FI WTCS FA16.15  
20mm x 3/4" BSP FI WTCS FA20.20



**Male Wingback Elbow**  
16mm x 1/2" BSP MI WTCS MWE16.15  
{65mm}



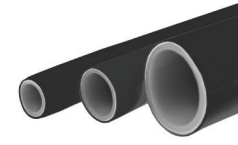
**Compression Sleeve (Spares)**  
16mm WTCS CS16  
20mm WTCS CS20

Note: **bold** = branch size

# WATERTITE PIPE

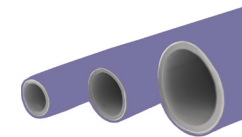
## PIPE SELECTOR

### PEX PIPES: (PN16)



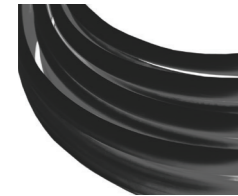
#### Pex Pipe, Straight Length (Black)

16mm - 5m Length x 10	PLWB16.05-B
20mm - 5m Length x 10	PLWB20.05-B
25mm - 5m Length x 10	PLWB25.05-B
32mm - 5m Length x 10	PLWB32.05-B



#### Pex Pipe, Length (Lilac)

16mm - 5m Length x 10	PLWB16.05-L
20mm - 5m Length x 10	PLWB20.05-L



#### Pex Coil (Black)

16mm - 25m Coil	PCWB16.25-B
16mm - 50m Coil	PCWB16.50-B
20mm - 25m Coil	PCWB20.25-B
20mm - 50m Coil	PCWB20.50-B
25mm - 25m Coil	PCWB25.25-B



#### Pex Coil (Lilac)

16mm - 50m Coil	PCWB16.50-L
20mm - 50m Coil	PCWB20.50-L

### PEX-AL-PEX PIPES



#### Pex-Al-Pex Pipe, Length (White)

16mm - 5m Length x 10	PLWA16.05
20mm - 5m Length x 10	PLWA20.05
25mm - 5m Length x 10	PLWA25.05
32mm - 5m length x 10	PLWA32.05



#### Pex-Al-Pex Pipe Coil (White)

16mm - 50m Coil	PCWA16.50
20mm - 25m Coil	PCWA20.25
20mm - 50m Coil	PCWA20.50
25mm - 25m Coil	PCWA25.25
32mm - 50m Coil	PCWA32.50



#### Pex-Al-Pex Pipe Coil - Insulated (Red)

16mm - 50m Coil	PCWA16.50 INS-R
20mm - 50m Coil	PCWA20.50 INS-R
25mm - 25m Coil	PCWA25.25 INS-R

# TOOLS

## TOOL SELECTOR



#### Metal Pipe Reaming Tool

16mm, 20mm, 25mm MPRT16.20.25



#### Manual Press Tool

16mm only	MPT16
16mm - 32mm	MPT16.20.25.32
20mm only	MPT20
25mm only	MPT25
32mm only	MPT32



#### Pipe Bending Tool

16 - 32mm PBT16.32



#### Pipe Cutter

16mm - 32mm	PCT16.32
16mm - 42mm	PCT16.42
16mm - 63mm	PCT16.63

## PIPE CLIP SELECTOR



#### Pipe Clips (White)

32mm PX65.32-W



#### Pipe Clips (Stainless Steel)

32mm PX65.60-SS



#### Pipe Clips (Black)

16mm	PX65.16-B
20mm	PX65.20-B
25mm	PX65.25-B

# PIPE CONNECTIONS

## PIPE CONNECTION USING PUSH-FIT FITTINGS



1. Measure and cut the pipe at one of the insertion marks. Mark the pipe manually if there are no insertion marks printed on the pipe. Ensure pipe end is square and free from burrs. An uneven or jagged cut may result in an improper connection. Use only purpose designed cutters.



2. The cut pipe must be reamed and beveled using an appropriate LEAP reamer to ensure a round and smooth pouring angle on the pipe end **both** on the inside and outside.  
**Please take extra care while reaming.**



3. Select the required fitting and push the fitting fully into the pipe with a slight twisting action. A secure connection will be made when pipe reaches the end-stop or when end of fitting has reached the next insertion mark on the pipe.



4. Tug back on the pipe to ensure the grab-ring has engaged correctly.

## PUSH FIT PIPE DISCONNECTION



1. Place the appropriate sized release tool around the pipe with the face positioned against the release collar on the fitting.



2. Push the clip against the release collar and simultaneously pull the pipe away from the fitting using a slight twisting action.



3. Ensure the pipe end is free of damage or scratch marks. If the pipe is damaged, the damaged end should be cut and a new pipe section be used to make a new connection.



4. After disconnection ensure the pipe end is free of damage or scratch marks. If the pipe is damaged, the damaged end should be cut and a new pipe section be used to make a new connection; following steps 2-4 above for pipe connection.

## PIPE CONNECTION USING COMPRESSION SLEEVE FITTINGS



1. Cut pipe at right angle.



2. Slide on brass sleeve with chamfered end facing outwards. Expand pipe sufficiently using an expanding tool. Open expander and rotate pipe to make full expansion of pipe end.



3. Insert fitting into the expanded end of pipe.



4. Place the sleeve and fitting between the jaws of the compression tool. Slide the compression sleeve towards the fitting. Ensure the position of sleeve and fitting is square.



5. Close the jaws of the compression tool until the sleeve reaches the shoulder of the fitting.



6. Inspect the connection to ensure the sleeve is fully drawn up the shoulder of the fitting.

# PIPE CONNECTIONS

## PIPE CONNECTION USING PRESS SLEEVE FITTINGS



1. Use only purpose designed pipe cutters. Measure and cut the pipe. Ensure pipe end is square and free from burrs. An uneven or jagged cut may result in an improper connection.



2. Cut pipe must be reamed and bevelled using an appropriate reamer to ensure a round and smooth pouring angle on pipe end.



3. Insert the fitting fully into the pipe making sure the pipe can be seen through all witness holes in the press sleeve.



4. With a manual tool, close the handle bars fully until the pressing tongs are completely closed. Partial closing of the handle bars may result in an incomplete connection. Position the tool so the press sleeve is completely covered by the tool jaws. Keep the tool at a 90° angle to the fitting.

**Please take extra care while reaming.**

**NOTE – If an incorrect connection is made, the defective joint must be removed and replaced with a new fitting.**



5. With a battery operated tool, hold down the inching switch until the pressing tongs are completely closed indicated by an acoustic signal.

Reminder: This same Procedure should be followed when making a pipe connection using Watertite multilayer (Pex-AL-Pex) pipes.

### IMPORTANT:

- PEX- AL- PEX should be connected with either Watertite Push - Fit or Press Sleeve fittings only.
- Compression Sleeve fittings should NOT be used, to connect PEX - AL -PEX pipe.

# KEY INFORMATION

## WATERTITE KEY INFORMATION

- WATERTITE piping systems should only be installed by a qualified and licensed plumber.
- WATERTITE should always be installed in accordance with the New Zealand/Australian Building Code and AS/NZS 3500 National Plumbing Code and any local authority water requirements.
- WATERTITE should NOT be used when exposed to petroleum solvents.
- WATERTITE piping must be shielded or painted to protect from UV light.
- WATERTITE is manufactured to AS/NZS 3500 National Plumbing Code.
- WATERTITE pipes must be bent using appropriate bending tools.
- WATERTITE pipe must be reamed and bevelled using appropriate reaming tools.
- WATERTITE pipe and fittings should be installed using a WATERTITE tool. Other manufacturers' tools may be used to install WATERTITE. **Please check with LEAP for tool compatibility.**

### PIPE BENDING

WATERTITE pipe can be bent easily – care should be taken not to kink or damage the pipe. Pipe must always be bent prior to crimping the fitting. It is recommended that the minimum hand-bending radius be 5 times the outside diameter of the pipe for 16mm and 20mm pipe, and 8 times the outside diameter for 25mm pipe. The recommendation for minimum spring bending radius is 3 times the outside diameter of the pipe for 16mm and 20mm pipe and 4 times the outside diameter of the pipe for 25mm and 32mm pipe.

#### MINIMUM HAND BENDING RADIUS

PIPE	RADIUS
16	80mm Minimum
20	100mm Minimum
25	200mm Minimum

#### MINIMUM SPRING BENDING RADIUS

PIPE	RADIUS
16	48mm Minimum
20	60mm Minimum
25	100mm Minimum
32	128mm Minimum

### PIPE DIMENSIONS

#### MONOLAYER PEX

PIPE	WALL THICKNESS	ID
16	2.0mm	12.0mm
20	2.3mm	15.4mm
25	2.8mm	19.4mm
32	3.6mm	24.8mm

#### MULTILAYER PEX

PIPE	WALL THICKNESS	ID
16	2.0mm	12.0mm
20	2.0mm	16.0mm
25	2.5mm	20.0mm
32	3.0mm	26.0mm

**IMPORTANT NOTE:** If pipe radius required is less than the above limits, use an elbow fitting. If for any reason the pipe is kinked or damaged, the faulty section should be replaced. Never apply bending forces to a crimped fitting.

### CLIPPING PIPE

All WATERTITE pipe should be retained in position by clips at intervals complying with AS/NZS 3500.

### TESTING

All installations should be tested as per the requirements of AS/NZS 3500. All joints and fittings should be inspected for leaks.

# WATERTITE WARRANTY



WATERTITE pipes and fittings, installed by a licensed plumber in accordance with the current published installation guidelines, are warranted against material or manufacturing defects for a period of 25 years.

WATERTITE is manufactured under Watermark Licence Nos WM74687, WM74713 and WM74712 is approved for use in all Australian States and Territories, and New Zealand subject to the installation requirements outlined in the National Plumbing and Drainage Code, AS/NZS 3500 parts 1 & 4, and any local water authority requirements.