



**BRANDS**

NEW ZEALAND'S LEADING SUPPLIER OF  
QUALITY PIPING & PLUMBING PRODUCTS



NZS 3501  
COPPER PRESS-FIT  
CONNECTION  
SYSTEM FOR  
WATER & GAS



**KEMBLA**

**KemPress® NZ**

NZS 3501 Press Fittings



# CONTENTS

- 03. Introduction
- 04. Why use KemPress NZ?
- 05. KemPress NZ KemGuard Technology
- 13. KemPress NZ Product Range
- 17. Copper Installation Guide:  
– DN15-25
- 20. KemPress NZ Pressure Protocols
- 25. KemPress NZ Measurements
- 30. KemPress NZ Warranty
- 32. KemPress NZ Technical Specifications
- 37. KemPress NZ Transition Fittings
- 39. KemPress NZ Press-Fit Tools
- 43. KemPress NZ FAQ's





# KEMPRESS® NZ IS A HIGH QUALITY COPPER PRESS-FIT CONNECTION SYSTEM DESIGNED SPECIFICALLY FOR NEW ZEALAND.

MM Kembla has been providing our customers with the highest quality and most reliable products and services for over 100 years.

The KemPress® NZ Copper Press-fit connection system has been designed for New Zealand water and gas installations. They should only be used in conjunction with NZS 3501 copper tube.

KemPress® NZ incorporates KemGuard Technology; a unique set of features to improve installation quality, minimise risk and manage and monitor installation performance. With a warranty of 25 years, and a design life of over 50 years, KemPress® NZ offers you peace of mind and the simplicity that you want.

When you need the highest quality press-fit connection system available in New Zealand, use Kembla NZS 3501 Copper Tube, KemPress® NZS 3501 Fittings and the KemPress® tool.





## WHY USE KEMPRESS NZ?

The advantages of installing KemPress NZ copper fittings include:

### Faster and easier to use

- Considerably faster than conventional brazing
- No need to drain water out of the system.

### Flame free connection

- No hot works permit required.

### KemGuard Technology

- New un-pressed fitting ID (Leak Path)
- Bluetooth Kempress tools
- Unique Push & Stay
- Universal Profile
- KemCore Technology
- Visual Identification
- 25 Year Warranty.

### Universal Copper Press-fit system

- All KemPress® NZ fittings are compatible with recognised press-fit tools such as, KemPress®, Novopress, REMS, Rothenberger, Zupper with NZ sized compatible jaws, making it a truly universal system.
- The KemPress® NZ system is compatible with Half Hard (HH), Hard Drawn (H), & Annealed (ANN) NZS 3501 copper tube.

### High quality, lightweight KemPress® tools

- Slim lightweight and ergonomic design
- One hand operation. Once the jaws are inserted the weight is balanced
- Smart Electronic Controls and Bluetooth technology for use with the Novocheck App
- Longest interval between servicing
- Loan tool provided while servicing
- Small tool (KPS2) handles tube up to DN25
- Brushless Motor Technology for more presses per battery charge
- Press area illumination
- 180° Rotatable head on KPS2 small tool.

### KemPress Warranty

- With a warranty of 25 years, and a design life of over 50 years, KemPress® NZ offers you peace of mind.
- Backed by MM Brand's reputation for high quality products, service and customer care.





# KEMGUARD™ TECHNOLOGY



**PROTECTING  
YOUR PRESS-FIT  
INSTALLATION**

**NOW WITH  
UNPRESSED  
FITTING ID  
(LEAK PATH)**





# WHAT IS KEMGUARD™ TECHNOLOGY?

A unique set of features incorporated into the KemPress Copper Press-Fit Connection system:

- Improve installation quality
- Minimise risks during and after installation
- Provide identifiable cues for incorrect installation
- The ability to manage and monitor on-site performance



## UNIVERSAL PROFILE

Suitable for use with all press tools



## UNIQUE PUSH & STAY

Prepare first fix before securing



## UNPRESSED FITTING ID

Designed to identify unpressed fittings



## BLUETOOTH KEMPRESS TOOLS

Manage on-site performance



## KEMCORE COPPER TUBE

Uniform wall thickness  
Optimised for press



## VISUAL IDENTIFICATION

Press identification through indentation



## 25 YEAR WARRANTY

All KemPress NZ fittings are backed by a 25 Year Warranty



## 50 YEAR DESIGN LIFE

The Kempress NZ connection system is designed not to leak for a minimum of 50 years

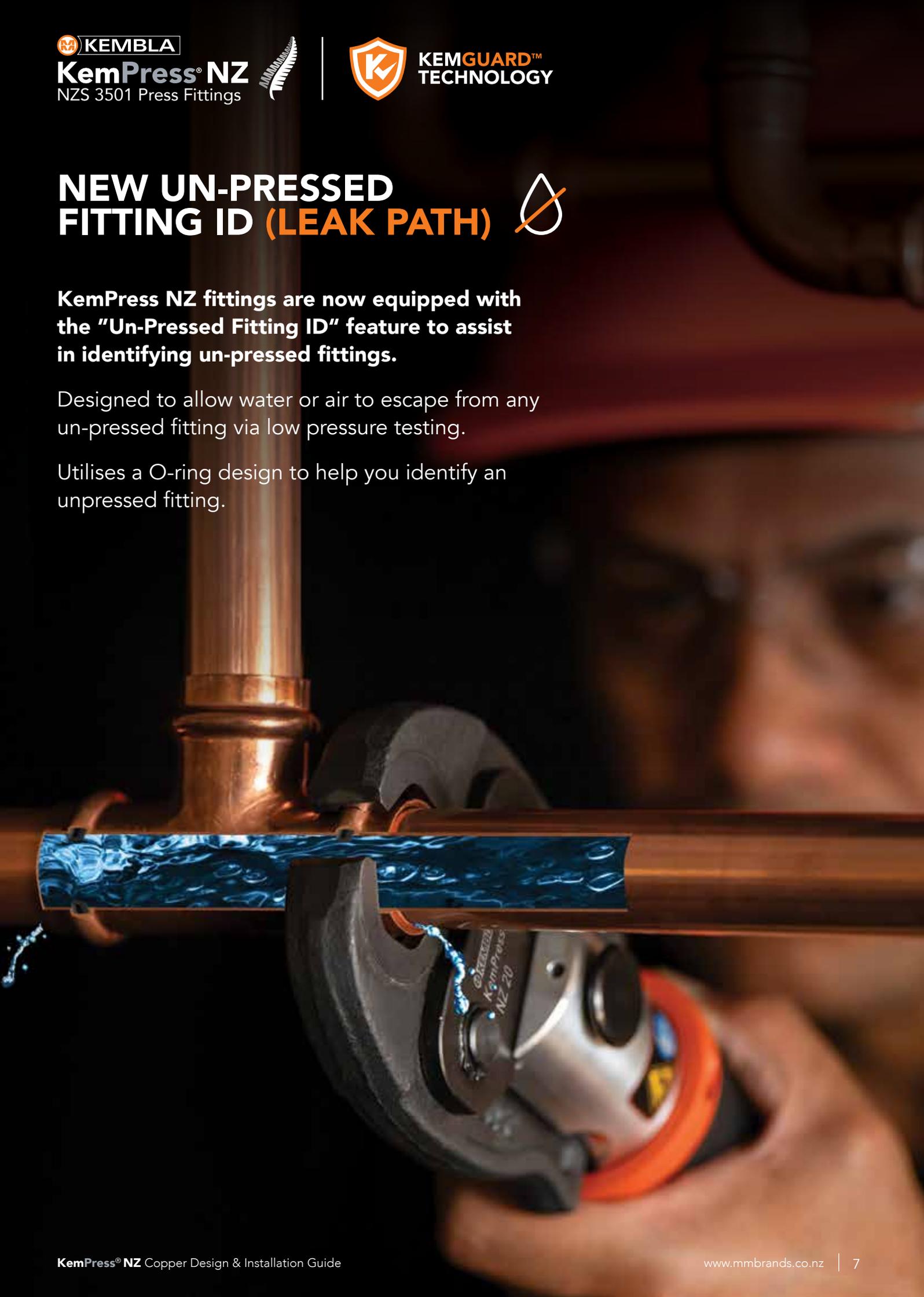


## NEW UN-PRESSED FITTING ID (LEAK PATH)

**KemPress NZ fittings are now equipped with the "Un-Pressed Fitting ID" feature to assist in identifying un-pressed fittings.**

Designed to allow water or air to escape from any un-pressed fitting via low pressure testing.

Utilises a O-ring design to help you identify an unpressed fitting.





# HOW TO ACTIVATE A LEAK PATH USING A LOW PRESSURE TEST



**WATER TEST**

**1**

**LEAK PATH TEST AT 100kPa**

Pressurise the line to 100kPa for a period of 10 minutes.

**2**

**INSPECT ALL JOINTS**

Whilst under pressure. Inspect all joints. If fitting is un-pressed, a bead of water will be visible from the un-pressed joint.

**3**

**PRESSURE TESTING**

Pressure test as per the requirements of AS/NZS 3500.

**PERFORMING A LOW PRESSURE (LEAK PATH) TEST**

A leak and a pressure drop will be noticeable during the low pressure test.

The low pressure test can be achieved by using a water test or an air test. Note when utilising the water method, be sure to flush the system completely after testing to ensure no stagnant water is present.

**AIR TEST**

**1**

**LEAK PATH TEST AT 15kPa**

Pressurise the line at 15kPa for a period of 120 minutes.

**2**

**IDENTIFY IF PRESSURE DROPS**

No pressure drop should be evident. If a pressure drop occurs, inspect all joints for any un-pressed fitting.

**3**

**PRESSURE TESTING**

As per the requirements of AS/NZS 3500 or AS/NZS5601 for Gas Installations.



**WATER TEST**



100 kPa



10 Minutes

**AIR TEST**



15 kPa



120 Minutes



## BLUETOOTH KEMPRESS TOOLS



Manage on-site tool performance and calibration.

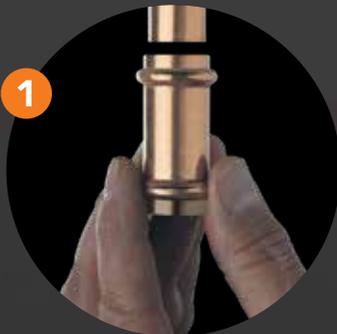
- KPS2 tools are Bluetooth
- Access live diagnostic data of all presses via the Novocheck App
- Generate site reports showing press completion and data logs of press performance
- Compare press completion with number of presses required on a section of work.



## UNIQUE PUSH & STAY



Fittings up to DN25 are manufactured and designed tight enough on insertion to complete a first fix prior to pressing the fittings.





# UNIVERSAL PROFILE



**KemPress NZ fittings from DN15 to DN25 have been designed with a unique universal profile, to ensure no matter what press tool you are using, your fitting warranty remains intact.**

The press profile of KemPress NZ fittings means you can use the below press tool with jaw profile VI. Meaning you don't need to purchase a new press tool to begin using KemPress NZ fittings or worry about using the wrong press tool across job sites.

### TOOLS COMPATIBLE WITH KEMPRESS NZ FITTINGS

KemPress® KPS & KPS2
Novopress ACO102
REMS Mini-Press
Rothenberger Romax Compact TT
Zupper PZ 1930

# VISUAL IDENTIFICATION



### Press identification through indentation.

- Once pressed, fittings will display a visual indentation mark around the fitting.
- After pressing look for a straight indentation mark on the fitting to confirm all fittings have been pressed.
- It is also recommended to mark the fitting with a marker or paint once visual identification of press has occurred – encourages good workmanship.

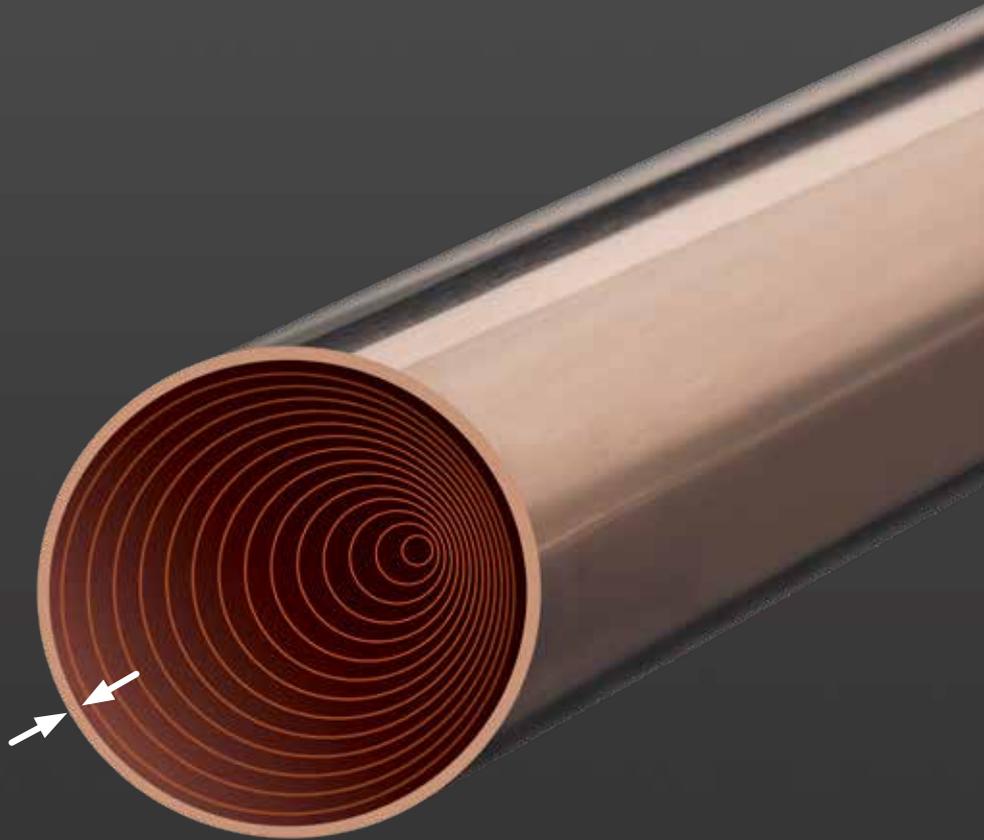




# KEMCORE™ COPPER TUBE



- A press-fit system is only as good as the tools, fittings and tube you press with.
- Kembla Copper Tube with KemCore utilises inline technology up to size DN25 to measure and control tube concentricity across the entire length:
  - Providing superior wall thickness control and optimal press conditions
  - Reduces variance in wall thickness which results in unequal distribution of press force, reducing the tube structural integrity.
- Kembla copper tube is optimised for use with press fittings – requiring additional control and consistency of dimensions under pressing force.



**SUPERIOR TUBE  
WALL THICKNESS  
CONTROL FOR  
OPTIMUM PRESS  
PERFORMANCE**



## 25 YEAR WARRANTY



**The KemPress NZ press-fit system is backed by a 25 year warranty.**

- MM Kembla's manufacturing processes and quality systems are built upon over 100 years of experience in manufacturing copper tube in Port Kembla, Australia.
- An intensive ISO 9001 certified quality control system is applied to all MM Kembla KemPress NZ fittings.

## 50 YEAR DESIGN LIFE



**The KemPress NZ press-fit system has a 50 year design life.**

- Just like copper, KemPress NZ fittings are designed to last. When installed carefully according to our installation instructions, suitable plumbing system designs to required standards and adequate system maintenance, KemPress NZ fittings have a 50 year design life.
- An intensive ISO 9001 certified quality control system is applied to all MM Kembla KemPress NZ fittings.



# PRODUCT RANGE

**COPPER FITTINGS**  
(DN 15-25)

**COPPER ALLOY FITTINGS**  
(DN 15-25)





**PRODUCT RANGE**

<b>COPPER FITTINGS</b>	<b>Diameter (DN)</b>	<b>Water Code</b>	<b>Pack Qty</b>	<b>Carton Qty</b>	<b>Gas Code</b>	<b>Pack Qty</b>	<b>Carton Qty</b>
<b>Connector</b> 	15	913795	50	400	913830	50	400
	20	913796	20	200	913831	20	200
	25	913797	30	120	913832	30	120
<b>Connector Slip</b> 	15	913813	50	400	913848	50	400
	20	913814	20	200	913849	20	200
	25	913815	30	120	913850	30	120
<b>Elbow 45° F/F</b> 	15	913798	40	320	913833	40	320
	20	913799	20	160	913834	20	160
	25	913800	20	100	913835	20	100
<b>Bend 45° M/F</b> <b>(Available Early 2024)</b> 	15	913896	40	320	913907	40	320
	20	913897	20	160	913908	20	160
	25	913898	20	100	913909	20	100
<b>Elbow 90°</b> 	15	913804	30	270	913839	30	270
	20	913805	20	120	913840	20	120
	25	913806	15	75	913841	15	75
<b>Bends 90° M/F</b> <b>(Available Early 2024)</b> 	15	913893	30	270	913904	30	270
	20	913894	20	120	913905	20	120
	25	913895	10	75	913906	15	75
<b>Tee Equal</b> 	15	913807	20	200	913842	20	200
	20	913808	20	80	913843	20	80
	25	913809	10	50	913844	10	50
<b>Tee Reducing - Branch</b> 	20 x 20 x 15 (E-E-B)	913810	20	120	913845	20	120
	25 x 25 x 15 (E-E-B)	913811	15	75	913846	15	75
	25 x 25 x 20 (E-E-B)	913812	15	60	913847	15	60



**PRODUCT RANGE**

<b>COPPER &amp; COPPER ALLOY FITTINGS</b>	<b>Diameter (DN)</b>	<b>Water Code</b>	<b>Pack Qty</b>	<b>Carton Qty</b>	<b>Gas Code</b>	<b>Pack Qty</b>	<b>Carton Qty</b>
<b>Tee Reducing End+Branch</b> <i>(Available Early 2024)</i>	20 x 15 x 15 (E-E-B)	913899	20	120	913910	20	120
	20 x 15 x 20 (E-E-B)	913900	15	75	913911	15	75
							
<b>Reducer F/F</b>	20 x 15	913801	30	240	913836	30	240
	25 x 20	913802	40	160	913837	40	160
	25 x 15	913803	40	200	913838	40	200
							
<b>Reducer M/F</b> <i>(Available Early 2024)</i>	20 x 15	913901	30	240	913912	30	240
	25 x 15	913902	40	160	913913	40	160
	25 x 20	913903	40	200	913914	40	200
							
<b>End Cap</b>	15	913816	50	700	913851	50	700
	20	913817	50	400	913852	50	400
	25	913818	50	250	913853	50	250
							
<b>Adaptor In Line Female</b>	15 x 1/2" BSP	913827	40	320	913862	40	320
	20 x 3/4" BSP	913828	30	210	913863	30	210
	25 x 1" BSP	913829	20	120	913864	20	120
							
<b>Adaptor - Male</b>	15 x 1/2" BSP	913821	40	320	913856	40	320
	15 x 3/4" BSP	913822	30	240	913857	30	240
	20 x 1/2" BSP	913823	30	240	913858	30	240
	20 x 3/4" BSP	913824	30	210	913859	30	210
	25 x 3/4" BSP	913825	20	160	913860	20	160
	25 x 1" BSP	913826	20	120	913861	20	120
							
<b>Wingback - Female</b>	15 x 1/2" BSP	913819	30	150	913854	30	150
	20 x 3/4" BSP	913820	15	60	913855	15	60
							



**PRODUCT RANGE**

<b>COPPER ALLOY FITTINGS</b>	<b>Diameter (DN)</b>	<b>Water Code</b>	<b>Pack Qty</b>	<b>Carton Qty</b>	<b>Gas Code</b>	<b>Pack Qty</b>	<b>Carton Qty</b>
<b>Swivel Adaptor</b> <b>(Available Early 2024)</b> 	15 x 1/2" BSP	<b>913871</b>	45	360			
	20 x 1/2" BSP	<b>913872</b>	25	200			
	20 x 3/4" BSP	<b>913873</b>	25	200			
<b>KemPress NZ Copper to Kempress Slide Connector</b> <b>(Available Early 2024)</b> 	15/16mm	<b>913100</b>	10	150			
	20mm	<b>913101</b>	10	100			
	25mm	<b>913102</b>	10	100			
<b>KemPress NZ Copper to KemPex Crimp Connector</b> <b>(Available Early 2024)</b> 	15/16mm	<b>913103</b>	10	320	<b>913109</b>	10	320
	20mm	<b>913104</b>	10	200	<b>913110</b>	10	200
	25mm	<b>913105</b>	10	100	<b>913111</b>	10	100
<b>KemPress NZ Copper to Rifeng Crimp Connector</b> <b>(Available Early 2024)</b> 	15/16mm	<b>913106</b>	5	360	<b>913112</b>	5	320
	20mm	<b>913107</b>	5	225	<b>913113</b>	5	225
	25mm	<b>913108</b>	5	120	<b>913114</b>	5	120



# KEMPRESS NZ INSTALLATION GUIDE

**DN 15-25  
COPPER FITTINGS**

## DN15-25 INSTALLATION

The following is a step-by-step guide to installing the KemPress® NZ System for diameters DN15-25.

For projects requiring maintenance and repair visually inspect the copper tube to ensure it is in reasonable condition with no signs of external corrosion or scores. Installation shall be in accordance with New Zealand plumbing and gas standards and the KemPress® NZ Design & Installation Guide. Failure to adhere to either can result in the warranty being voided.



**1.** Cut copper tube to length using a pipe cutter.



**2.** Deburr carefully the end of the tube on the inside to minimise turbulence and pressure loss according to AS3500 and on the outside to avoid damaging the O-ring.



**3.** For existing copper tube, clean the end with emery paper or a soft scourer.



**4.** Mark the insertion depth by lining up the fitting side by side with the tube and mark the tube. When the fitting is inserted onto the tube the outer edge of the fitting must line up with the marking. For correct insertion depths see column **E** of the Fittings Space Requirements table, page 29.



**5.** Select pressing jaw according to the fitting dimension and insert into the pressing machine. Arrest the locking bolts of the machine. Check the jaws are free from debris and in good working order.

**DN15-25 INSTALLATION**



**6.** Ensure you have the correct fitting for the application (e.g. water or gas). Check the fitting is clean and the O-ring is free from debris and correctly sitting in place. Push fitting on tube all the way to the engagement marking.



**7.** Check the fitting outer edge still lines up with the marking. Open the pressing jaw and close it around the fitting so the raised bump in the fitting rests inside the groove of the pressing jaw. Ensure the jaw is engaged square with the fitting and not on an angle.



**8.** Initiate the pressing job by pressing the start button. The automatic pressing process guarantees a tight connection. The pressing process can be interrupted by pressing the emergency-stop button.



**9.** Visually inspect the fitting to ensure the press has been completed. The KemPress® tool will flash if the fitting did not press correctly. If this occurs a new fitting and tube section is required. At the end of the project visually inspect each fitting to ensure none have been missed. By simply marking each press on your KemPress NZ fitting with a marker or spray you can easily identify unpressed fittings and audit installations visually with the naked eye.

**CAUTION**

Brazing or soldering near to KemPress® NZ joints should be avoided as this may cause the seal to degrade due to heat transfer. The table below states the minimum distance away from the press joint which is acceptable to braze. If this distance cannot be maintained then adequate precautions must be taken such as fabricating the brazed section prior to assembly with the press fittings, wrapping the press joint in a wet rag and keeping cool during brazing or applying tube freezing spray.

**MIN. DISTANCE FOR BRAZING NEAR A KEMPRESS NZ FITTING**

Tube Size	DN15	DN20	DN25
Min. Clearance to existing connection (mm)	350	500	650
Min. Clearance to existing brazed fitting (mm)	20	20	20



# PRESSURE TESTING PROTOCOLS

## **WET TEST**

(For Water Systems)

## **DRY TEST**

(For Water Systems)

## **AIR TEST**

(For Gas Systems)





## PRESSURE TEST LOGS

**The KemPress NZ copper press-fit connection system incorporates a unique set of features referred to as “KemGuard Technology” designed to; improve installation quality, minimise risks during and after installation, provide identifiable cues for incorrect installation, create the ability to manage and monitor on-site performance.**

With the new “Un-pressed Fitting ID” feature, KemPress fittings are designed to allow a small amount of water or air to escape from a fitting that is un-pressed, providing a visual pressure drop and leak to identify unpressed fittings. This low-pressure test can be completed with air or water and leak paths on press fittings only activate when low pressure testing is completed. Below are the requirements to test to identify any un-pressed fittings. Once completed and no pressure drop has been found (or a visible leak), you can proceed to standard system pressure testing as per AS/NZS 3500 or relevant installation standard.

It is also a good practice to visually inspect all fittings for visual identification of indentation marks, ensuring they are present and straight. It is also strongly recommended to mark all fittings after visual inspection to encourage good installation practice.

When water fitting installations are complete, it is essential to flush with water before use to remove dust, debris and flux residues, in accordance with AS/NZS 3500. Drinking water installations should be tested and inspected in accordance with AS/NZS 3500 for leaks and remedial action taken if necessary. KemPress® NZ fittings maintain earth continuity without the need for additional continuity straps.

The KemPress system should comprise of two parts: Firstly, a low pressure leak test, which will allow any un-pressed fittings to be identified by the ‘Un-Pressed Fitting ID’ feature, and the second part of the test at a higher pressure to act as a ‘Tightness Test’. Both the ‘Leak Path’ and the ‘Tightness Test’ should be carried out and recorded on the ‘Pressure Test Log’.

### WATER TEST (WATER)

- Constant checks should be made while charging the system for early leakage signs / identifying an un-pressed fitting.
- Ideally, pressure testing should be done with water that is as close to ambient temperature as possible. Using water that is heated can cause a false pressure drop reading if allowed to cool over an extended ‘Tightness Test’ period. We recommend a 30min settling period to allow any temperature variances to equalise. The ambient temperature, and the water temperature, should be recorded in the ‘Pressure Test Log’. Once filled, care should also be taken to ensure that all water and air is removed from the system.

#### Preliminary Leak Test:

- Once the system has settled, the ‘Leak Path’ test should be carried out at 100 kPa, for a period of 10 minutes. During this time, we recommend a visual inspection of all joints and connections, and this inspection should be recorded on our ‘Pressure Test Log’. If a fitting has been left un-pressed, then the un-pressed fitting should be visible as a bead of water coming from the un-pressed joint.
- If an un-pressed fitting is detected, the pressure should be released from the system before the fitting is pressed. Please also ensure that the pipe is still inserted to the correct depth before pressing. Once the press has been completed, the test should be repeated.

#### Main Test:

- Once the ‘Leak Path’ test is complete, then the main pressure test can begin. AS/NZS 3500 specifies that the piping system is to be tested to 1500kPa for 30 minutes minimum (According to AS/NZS 3500.1 Cold Water and AS/NZS 3500.4 Heated Water).
- We suggest that the pressure to be built up in stages. For example, raised to 500 kPa for few minutes,

then raised to 1000 kPa and finally to 1500 kPa (This is not mandatory, but if a fitting has been pressed but is incorrectly installed, and it fails, it is better that it fails at a lower pressure).

### DRY TEST (COMPRESSED AIR/ INERT GAS)

- When testing with air/gas, at pressures higher than 1 bar, due care and attention must be taken when considering the potential health/safety hazards to workers in the vicinity. Air/gas, when compressed to high pressures, can store significant energy. In the event of a joint failure due to a fitting being incorrectly installed, this energy, which if released suddenly, can have an explosive like effect.
- Constant checks should be made while charging the system for early leakage signs / identifying an un-pressed fitting.

#### Preliminary Leak Test:

- The initial air test is a ‘Leak Path’ test and should be performed at 15 kPa at least for 120 minutes, for a system with a volume up to 100 litres. Additional 20 minutes of testing time should be added for every additional 100 litres of system volume.
- No pressure drop is allowed during this test period. Record the results of the test on the ‘Pressure Test Log. Once the ‘Leak Path’ test has been completed and passed, a mechanical strength test can commence. A maximum pressure of 300 kPa, for a period of 10 minutes is recommended. We also suggest the pressure is elevated in steps of 100 kPa per 10 min. Again, no pressure drop is allowed during this period.
- If during any testing a pressure drop is detected, then the testing process should be halted, and the location of the leak identified and remedied. A report should be made and kept of the initial failed test. Once the fault has been corrected, the whole pressure test process should be re-commenced from the beginning.



**PRESSURE TEST LOG - WET TEST (FOR WATER SYSTEMS)**

Project / Stage: \_\_\_\_\_

Customer / Representative: \_\_\_\_\_

Customer / Representative: \_\_\_\_\_

Start (Date/Time):	End (Date/Time):
Ambient Temp (°C):	Water Temp (°C):
Copper: <input type="checkbox"/> Stainless Steel: <input type="checkbox"/>	Total Pipe Length of Water System (m):
The system has been tested: As a complete system <input type="checkbox"/> Or in: _____ (Sections)	
<input type="checkbox"/> Visual inspection of plug, press and screw connections carried out <input type="checkbox"/> Plug, press and screw connectors were leak-proof during visual inspection	
<input type="checkbox"/> <b>PRELIMINARY LEAK TEST (APPROXIMATELY 10 MINUTES)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Permissible operating pressure: 1000 kPa</li> <li><input type="checkbox"/> Test pressure (maximum): 100 kPa</li> </ul>	
Test pressure 10 minutes after start of test (kPa): _____ Time: _____ During the test leakage observed: Yes: <input type="checkbox"/> No: <input type="checkbox"/> During the test time pressure loss observed: Yes: <input type="checkbox"/> No: <input type="checkbox"/>	
<b>MAIN TEST (DIRECTLY AFTER PRELIMINARY)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Test pressure: 1500 kPa</li> <li><input type="checkbox"/> Duration: No less than 30 minutes</li> </ul>	
Test pressure 30 min. after start of test (kPa): _____ Time: _____ During the test leakage observed: Yes: <input type="checkbox"/> No: <input type="checkbox"/> During the test time pressure loss observed: Yes: <input type="checkbox"/> No: <input type="checkbox"/>	
<b>Comments</b>	

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

\_\_\_\_\_  
 Signature of client/representative

\_\_\_\_\_  
 Signature of client/representative



**PRESSURE TEST LOG - DRY TEST (FOR WATER SYSTEMS)**

Project / Stage: \_\_\_\_\_

Customer / Representative: \_\_\_\_\_

Customer / Representative: \_\_\_\_\_

Start (Date/Time):	End (Date/Time):
Ambient Temp (°C):	Water Temp (°C):
Test Medium: Compressed Air: <input type="checkbox"/> N2: <input type="checkbox"/> CO2: <input type="checkbox"/>	Total Pipe Length of Water System (m):
The system has been tested: As a complete system <input type="checkbox"/> Or in: _____ (Sections)	
<input type="checkbox"/> All pipelines are closed with metal stoppers, caps or blanks or blind flanges <input type="checkbox"/> Devices, pressure tanks or drinking water heaters must be disconnected from the pipes <input type="checkbox"/> Visual inspection of all pipe connections for correct execution was carried out <input type="checkbox"/> Check manometre accuracy (10 kPa measuring accuracy is ideal)	
<input type="checkbox"/> <b>PRELIMINARY LEAK TEST (APPROXIMATELY 10 MINUTES)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Test pressure: 15 kPa</li> <li><input type="checkbox"/> Duration for up to 100 litres pipeline volume: at least 120 minutes</li> <li><input type="checkbox"/> The test time should be increased by 20 minutes for every additional 100 litres</li> <li><input type="checkbox"/> Wait for the temperature and steady-state condition before starting</li> </ul>	
Pipe volume: _____ litres    Test Time: _____ minutes	
Test pressure: _____ minutes after start of test (kPa): _____	
During the test time fall in pressure observed: Yes: <input type="checkbox"/> No: <input type="checkbox"/>	
<b>MAIN TEST (DIRECTLY AFTER PRELIMINARY)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Test pressure: for water pipeline ≤ DN50: 300 kPa</li> <li><input type="checkbox"/> Test pressure: for water pipeline &gt; DN50: 100 kPa</li> <li><input type="checkbox"/> Test Duration: at least 10 minutes</li> </ul>	
Test pressure _____ minutes after start of test (kPa): _____ Time: _____	
During the test time fall in pressure observed: Yes: <input type="checkbox"/> No: <input type="checkbox"/>	
Pipeline is leak proof: Yes: <input type="checkbox"/> No: <input type="checkbox"/>	
<b>Comments</b>	

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Signature of client/representative

Signature of client/representative



**PRESSURE TEST LOG - AIR TEST (FOR GAS SYSTEMS)**

Project / Stage: \_\_\_\_\_

Customer / Representative: \_\_\_\_\_

Customer / Representative: \_\_\_\_\_

Start (Date/Time):	End (Date/Time):
Ambient Temp (°C):	Water Temp (°C):
Test Medium: Compressed Air: <input type="checkbox"/> N2: <input type="checkbox"/> CO2: <input type="checkbox"/>	Total Pipe Length of Water System (m):
The system has been tested: As a complete system <input type="checkbox"/> Or in: _____ (Sections)	
<input type="checkbox"/> All pipelines are closed with metal stoppers, caps or blanks or blind flanges <input type="checkbox"/> Devices, pressure tanks or drinking water heaters must be disconnected from the pipes <input type="checkbox"/> Visual inspection of all pipe connections for correct execution was carried out <input type="checkbox"/> Check manometre accuracy (10 kPa measuring accuracy is ideal)	
<input type="checkbox"/> <b>PRELIMINARY LEAK TEST (APPROXIMATELY 10 MINUTES)</b> <ul style="list-style-type: none"> <li>■ Test pressure: 15 kPa</li> <li>■ Duration for up to 100 litres pipeline volume: at least 120 minutes</li> <li>■ The test time should be increased by 20 minutes for every additional 100 litres</li> <li>■ Wait for the temperature and steady-state condition before starting</li> </ul> Pipe volume: _____ litres    Test Time: _____ minutes Test pressure: _____ minutes after start of test (kPa): _____ During the test time pressure loss observed: Yes: <input type="checkbox"/> No: <input type="checkbox"/>	
<b>MAIN TEST (DIRECTLY AFTER PRELIMINARY)</b> <ul style="list-style-type: none"> <li>■ Test pressure: Operating pressure or 2.0 kPa, whichever is the greater.</li> <li>■ Test Duration: 5 minutes</li> </ul> Test pressure 5 minutes after start of test (kPa): _____ Time: _____ During the test time fall in pressure observed: Yes: <input type="checkbox"/> No: <input type="checkbox"/> Pipeline is leak proof: Yes: <input type="checkbox"/> No: <input type="checkbox"/>	
<b>Comments</b>	

Date: \_\_\_\_\_

Date: \_\_\_\_\_

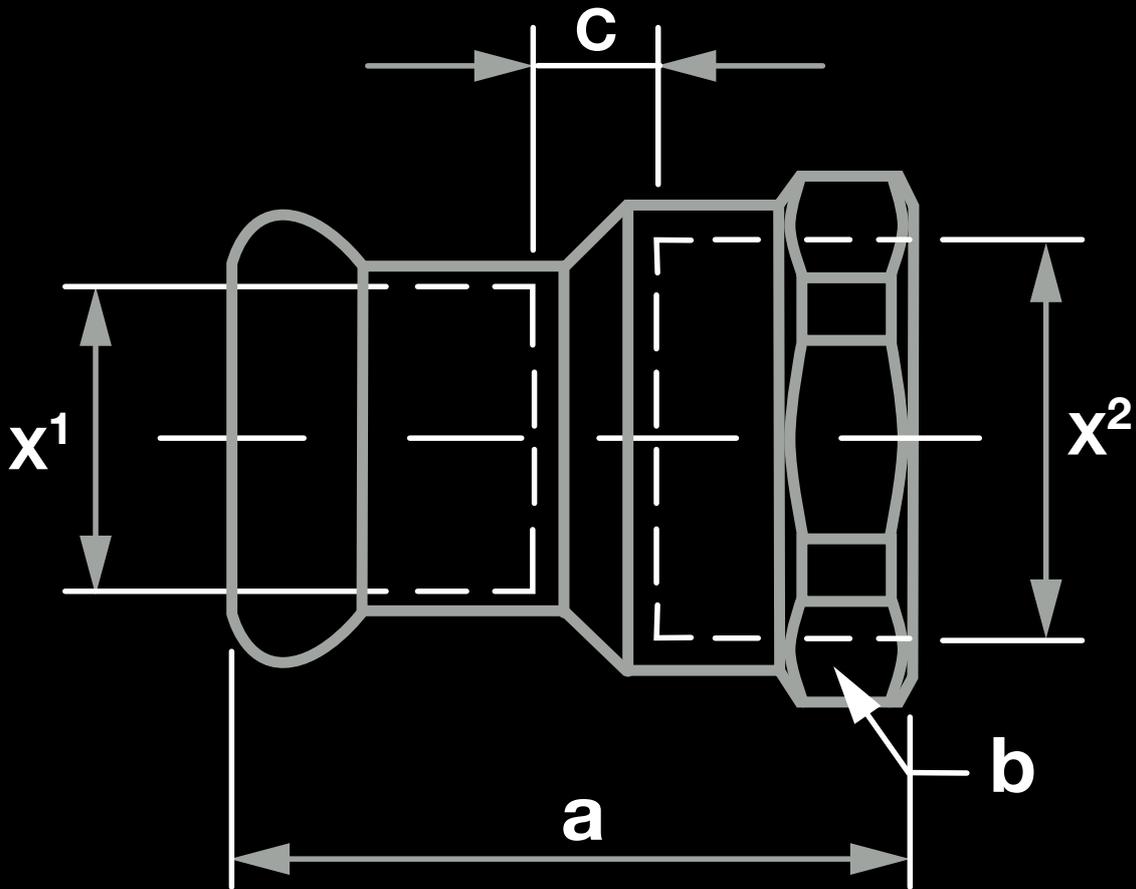
Name: \_\_\_\_\_

Name: \_\_\_\_\_

\_\_\_\_\_  
 Signature of client/representative

\_\_\_\_\_  
 Signature of client/representative

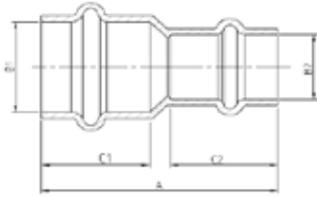
# FITTING MEASUREMENTS





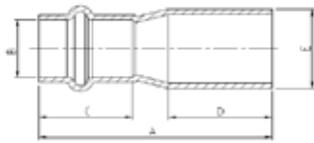
## DN 15-25 FITTINGS MEASUREMENTS

### Reducer F+F



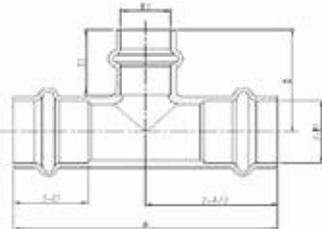
Product Code	A	B1	B2	C1	C2
913801	50	Ø20	Ø15	23	22.5
913802	52.2	Ø25	Ø20	25	23
913803	56	Ø25	Ø15	25	22.5

### Reducer M+F



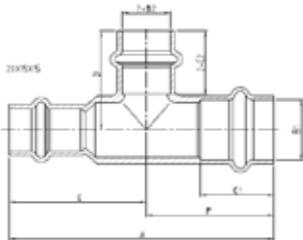
Product Code	A	B	C	D	E
913901	56	Ø15	22.5	23	Ø20
913902	67.5	Ø15	22.5	25	Ø25
913903	58.5	Ø20	23	27.5	Ø25

### Tee Reducing - Branch



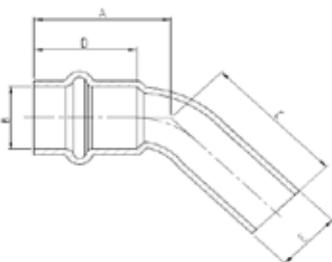
Product Code	A	B1	B2	C1	C2	D
913810	78	Ø20	Ø15	22.5	22.5	35
913811	79	Ø25	Ø15	23	23	41
913812	89	Ø25	Ø20	25	25	42

### Tee Reducing - End+Branch



Product Code	A	B1	B2	C1	C2	D	E	F
913899	83	Ø20	Ø15	23	22.5	35	43	40
913900	89	Ø20	Ø15	23	22.5	36	46	43

### Elbow M+F 45°

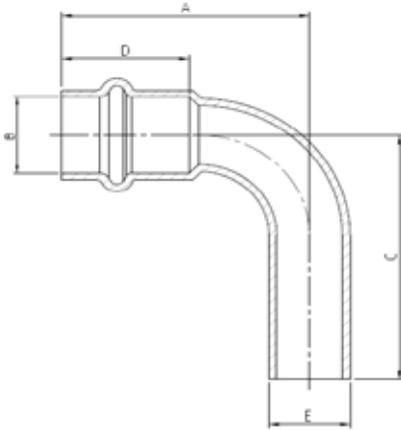


Product Code	A	B	C	D	E
913896	30	Ø15	32.5	22.5	Ø15
913897	34.5	Ø20	37	23	Ø20
913898	38	Ø25	41	25	Ø25



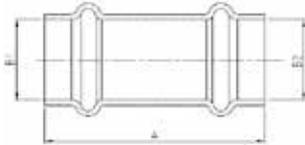
## DN 15-25 FITTINGS MEASUREMENTS

### Bend M+F 90°



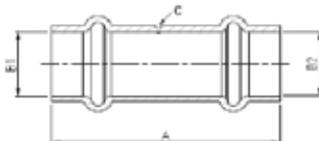
Product Code	A	B	C	D	E
913893	44.7	Ø15	49	23	Ø15
913894	53.6	Ø20	56.5	23	Ø20
913895	55	Ø25	63	25	Ø25

### Connector Slip



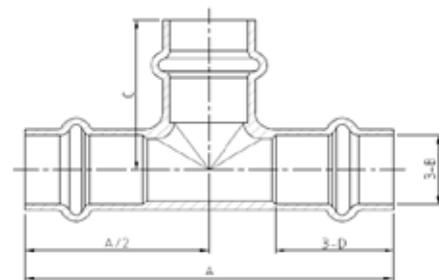
Product Code	A	B1	B2
913813	47	Ø15	Ø15
913814	53	Ø20	Ø20
913815	58	Ø25	Ø25

### Connector



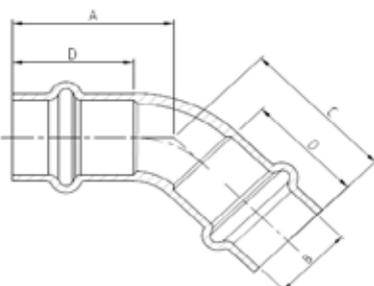
Product Code	A	B1	B2	C
913795	47	Ø15	Ø15	23.5
913814	53	Ø20	Ø20	26.5
913815	58	Ø25	Ø25	29

### Tee Equal



Product Code	A	A2	B	C	3D
913901	72	36	Ø15	33	23
913902	85	42.5	Ø20	40	23
913903	93	46.5	Ø25	44	25

### Elbow F+F 45°

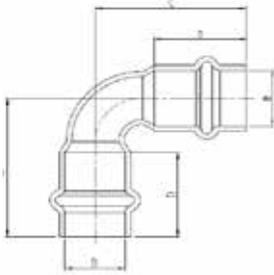


Product Code	A	B	C	D
913789	30	Ø15	30	22.5
913799	34.5	Ø20	34.5	23
913800	38	Ø25	38	25



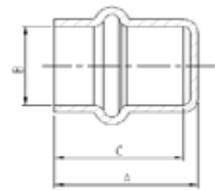
## DN 15-25 FITTINGS MEASUREMENTS

### Bend 90°



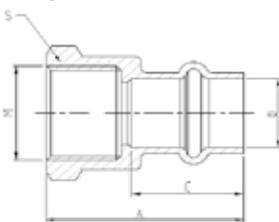
Product Code	A	B	C	D
913804	45	Ø15	45	23
913805	50	Ø20	50	23
913806	62	Ø25	62	24

### End Cap



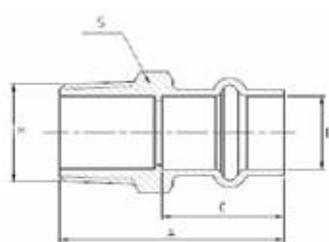
Product Code	A	B	C
913816	25	Ø15	22.5
913817	26	Ø20	23
913818	28	Ø25	25

### Adaptor - In Line Female



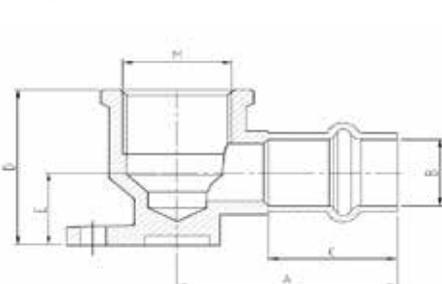
Product Code	A	B	C	S	M
913827	39.5	Ø15	22.5	S26	G1/2
913828	45.5	Ø20	23	S30.5	G3/4
913829	50.5	Ø25	25.7	S37.5	G1

### Adaptor - Male



Product Code	A	B	C	S	M
913821	41.3	Ø15	22.5	S22	R1/2
913822	48.5	Ø15	23	S28	R3/4
913823	46	Ø20	22.5	S28	R1/2
913824	46	Ø20	23	S27	R3/4
913825	50	Ø25	25.8	S32	R3/4
913826	51.5	Ø25	25.7	S34	R1

### Wingback Female



Product Code	A	B	C	D	E	M
913819	41	Ø15	24	35.5	16.5	G1/2
913820	52	Ø20	23	48	19.1	G3/4

## FITTINGS SPACE REQUIREMENTS

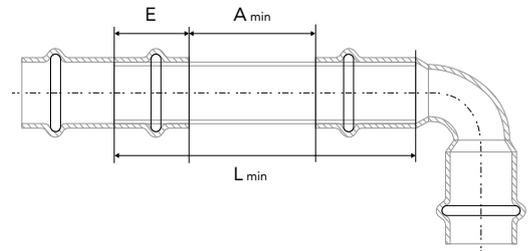
The distance required between tubes and walls, in corners and wall recesses is shown in the sketches and table below.

### DN15-25 FITTINGS

Nominal Size	Actual OD mm	A mm	L mm	B mm	C mm	E Insertion Depth
DN15	14.73	20	64	60	82	22-24
DN20*	21.08	20	66	60	83	23-25
DN25*	27.43	20	68	60	84	24-26

\* Insertion depth for DN20 & DN25 Connectors do not fall within column E above.

Minimum spacing between two press points.



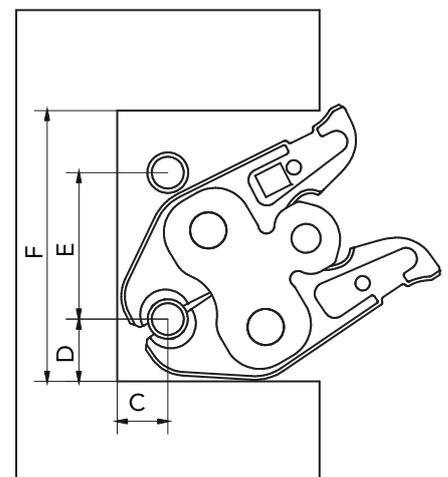
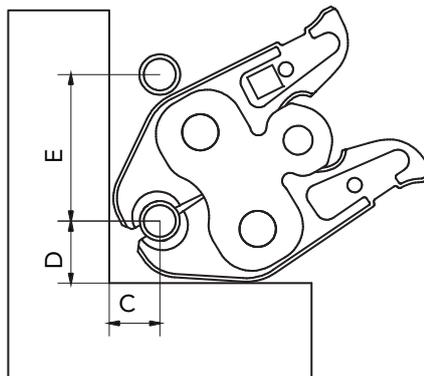
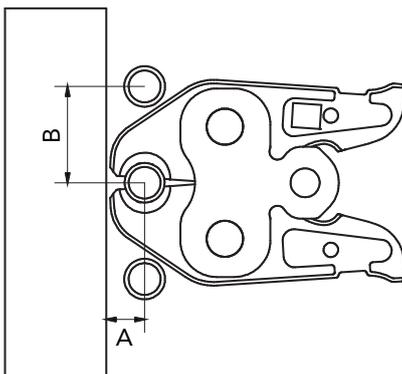
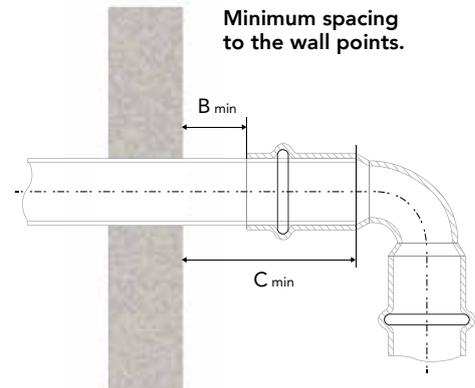
## TOOL SPACE REQUIREMENTS

The distance required to operate the KemPress® Tool as shown in the sketches and table below.

### DN15-25 FITTINGS

Nominal Size	A mm	B mm	C mm	D mm	E mm	F mm
DN15	19	48	25	31	73	135
DN20	23	58	30	37.5	80	155
DN25	25	64	30	38.5	83	160

Minimum spacing to the wall points.





# WARRANTIES





**WARRANTY**

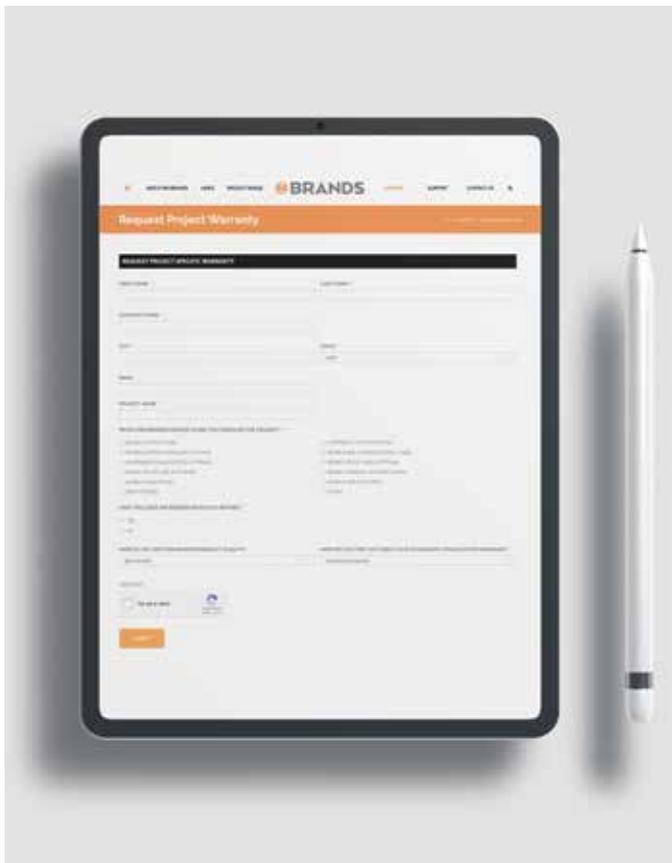
**Tool Warranty**

The KemPress® tool, jaws, adaptor jaws and collars are guaranteed to work for a minimum of 3 years from date of purchase. The warranty covers the repair of any damage or malfunction to the tool that is the cause of defective materials or parts. It will not cover damage caused by improper use, inadequate maintenance or mishandling of the tool (for example, major impact caused by dropping the tool or water damage).

The KemPress® 12V & 18V Li-ion batteries and battery chargers are covered by a limited 12 month warranty.

The following faults are not covered by the warranty (for examples of how MM Brands can detect these faults, please contact customer service):

1. Tool damaged by dropping
2. Water damage
3. Heavily affected by dirt
4. Unauthorised opening
5. Inappropriate handling
6. Continuous operation
7. Operation without jaws and fitting
8. Inserting the battery by force



**For further information:** Refer to a MM Brands representative or contact Customer Service: 0800 536 252.

**Fittings and Copper Tube Warranty**

For full details of the MM Brands warranty please see: <https://www.mmbrands.co.nz/wp-content/uploads/2021/07/MMB-Standard-Terms-of-Sale.pdf> and download the Standard Conditions of Sale for Goods.

There are three elements to a Press-fit system. The copper tube, the fittings and the press tool. MM Brands has tested Kembla copper tube, KemPress® fittings and the KemPress® tools in accordance with the relevant standards and guarantees. When installed by a licensed plumber in accordance with the Design and Installation Guide (located on our website) the tube and fittings will be fit for their intended purpose for a period of not less than 25 years.

This means that the system is designed not to leak for a minimum of 50 years and guaranteed not to leak for 25 years.

When using copper tube compliant to NZS 3501 other than Kembla copper tube, MM Brands will provide the same warranty as above for the same period as the warranty of the copper tube to a maximum of 25 years. If the copper tube warranty is 10 years, then the Kembla warranty for the KemPress® fittings is 10 years.

When using Kembla copper tube with other press-fit fittings, Kembla will provide a warranty for the copper tube only. The fittings manufacturer must provide the warranty for the fittings.

The below list of press tools and press jaws have been tested for use on our KemPress NZ fittings. This guarantee covers licensed plumbers using these tools on our fittings. The warranty does not cover faults arising from incorrect installations and faults arising from competitor fittings used on the same installation.

**TOOLS COMPATIBLE WITH KEMPRESS FITTINGS**

KemPress® KPS & KPS2
Novopress ACO102
REMS Mini-Press
Rothenberger Romax Compact TT
Zupper PZ 1930

**CAUTION:** Product data, design details, performance figures, advice and other information given herein (the "Information") is provided only as a guide to available information. MM Brands does not accept any liability whatsoever (including arising from negligence) for the accuracy of the information and for injuries, expense or loss, which may arise as a result of the use of the Information by the recipient.



# TECHNICAL SPECIFICATIONS





**TECHNICAL SPECIFICATIONS**

**Copper Tube**

MM Kembla recommends using our high quality Kembla copper tube, incorporating KemCore technology for superior wall thickness control and optimal press performance. KemPress® NZ is suitable for use with hard, half hard and annealed copper tube complying with NZS 3501.

KemPress® NZ fittings can also be used on existing copper tube complying with NZS 3501. The tube must be in reasonable condition with no signs of external corrosion or any surface damage.

For detailed information on copper tube specifications contact MM Brands: [www.mmbrands.co.nz](http://www.mmbrands.co.nz)

**Fittings**

Inside each fitting is a sealing element called an Elastomeric O-ring. They are not interchangeable for their different applications. See the O-ring Compatibility table for specific applications.

It is essential that the O-rings are not contaminated or damaged by foreign material such as copper swarf or sharp metal. Gas fittings have a yellow O-ring and are clearly marked on the fittings up to 25mm and also on the packaging with the word GAS.

**Push and Stay Feature**

The KemPress® fittings up to DN25 have been designed to provide a tight fit when pushed together to allow the first fix to be completed prior to pressing. This ensures you have the right design and tube placement and allows you to make adjustments, if required, prior to pressing. This is especially beneficial for vertical installations.

Note: Due to movement it is important to check that you have full engagement of your fittings on the tube prior to pressing. Use the mark made in step 4 of the DN15-25 installation process as your guide.

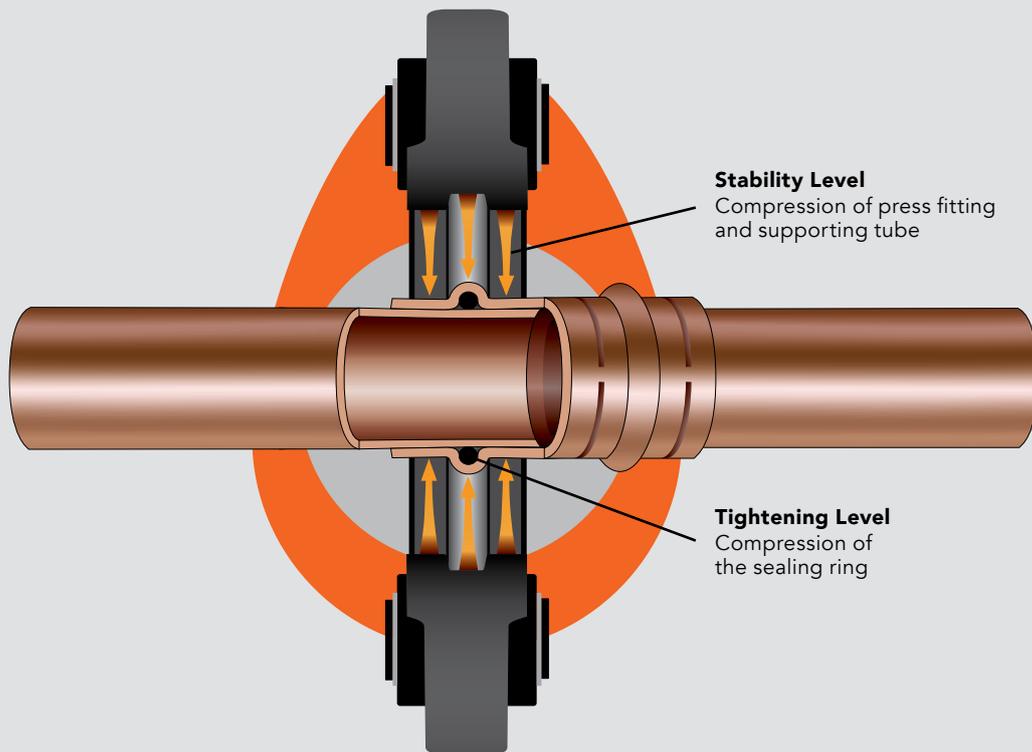
**Press Profile**

KemPress® NZ fittings are designed to deliver minimal deformation to the internal shape of the tube they are connecting to, reducing turbulence in the flow of the fluid. The connection provides a rigid coupling with excellent resistance to torsional forces. This is particularly beneficial when connecting mechanical threaded connections.

**Press Process**

The objective of the press process is to deliver a permanent connection. The KemPress® NZ process presses the lip of the fitting and then compresses the O-ring at the same time.

**DN15-25 FITTING**





## UNPRESSED FITTINGS

Once pressed the KemPress® NZ fittings will not leak. It is important to check every fitting has been pressed. The KemPress® NZ system has been designed to make it very obvious to detect an unpressed fitting prior to the commissioning of the system.

### Visual Inspection

Pressed and unpressed fittings are clearly distinguished on a visual inspection.

### Un-pressed Fitting ID (Leak Path)

All KemPress DN15-25 Water & Gas fittings are equipped with the Un-pressed Fitting ID feature which identifies un-pressed fittings via low pressure tests. Utilising a combination of O-ring and fitting design, KemPress NZ fittings will allow a small amount of water to escape and a subsequent pressure drop when a low pressure test is performed.

## TESTING & COMMISSIONING

When water fitting installations are complete, it is essential to flush with water before use to remove dust, debris and flux residues, in accordance with AS/NZS 3500.

Drinking water installations should be tested and inspected in accordance with AS/NZS 3500 for leaks and remedial action taken if necessary.

Gas installation should be tested in accordance with the requirements specified in AS/NZS 5601.

## TESTING

KemPress® NZ fittings maintain earth continuity without the need for additional continuity straps.

KemPress® NZ fittings have undergone a rigorous testing program including:

- Prototype testing
  - Burst pressure
  - Water tightness
  - Strength of fabrication
  - Strength of joint assembly
  - Pull-out strength
  - Thermal cycling
- Material in contact with drinking water
- Press testing every product in the range
- Press testing every tool and Jaw

The KemPress® Gas Fittings have the same metallic body but use a special o-ring sealing element that is compatible with most gases.

These KemPress® Gas Fittings have been subjected to low pressure pneumatic tests to simulate the use when conveying gases at the pressures stated in AS 5601 Gas Installation.



**Unpressed fitting** - smooth with no indents.



**Unpressed fitting** - small gap between fitting and tube.



**Pressed fitting** - indents on fitting.



**Pressed fitting** - no gap between fitting and tube.



**O-RINGS**

The KemPress® O-Ring is pre-lubricated and should be protected from contamination by foreign objects to avoid damaging the integrity of the product (for example copper filings when cutting copper tubes).

**Water**

Water applications use an EPDM (Ethylene Propylene Diene Monomer) O-ring sealing element. This O-ring is suitable for standard water applications designated below.

Please contact MM Brands for guidance.

**Gas**

Gas applications use a NBR (Nitrile Butadiene Rubber) O-ring sealing element. Gas fittings have a yellow O-ring and are clearly marked with a distinctive yellow colour and the word GAS.



**WATER FITTINGS**

Application	Pressure KPa	Temperature °C
Hot & cold potable water	1600	100
Chilled water	1600	-20
Rainwater installations*	1600	Ambient
Vacuum	- 80	Ambient
Compressed air installations (oil free)	1600	70

\* The composition of untreated supplies and bore water should be examined to ensure compatibility with copper prior to installation of piping. Untreated tank water may not be compatible with copper due to the lack of stability and potential microbiological variability.

**GAS FITTINGS**

Application	Pressure KPa	Temperature °C
Natural gas installations	1600	70
Liquid gas installations (LPG)	1600	70
Compressed air installations (with oil content)	1600	70
Engine Oils & Lubricants	1000	70
Heating Oil, Diesel	500	40

**Not Suitable for:** Refrigeration & Air Condition Applications, Acetylene, Urea Solution, Methanol, Glycerin Triacetate, Coolant Inhibitor, Sodium Hydroxide, Ammoniac-gaseous.

**Note:** For information regarding suitability of KemPress® NZ fittings for additional applications contact MM Brands customer service: 0800 536 252.



### O-RING SPECIFICATION TABLE

Application	Comment	P [kPa]	T [°C]	Water	Gas (NBR)
<b>WATER SUPPLY</b>					
Hot and cold potable water		1600	100	✓	
Chilled water	Must contact MM Brands customer service for open systems (inhibitors)	1600	≥ -20	✓	
Steam	Low pressure steam equipment	≤100	100	✓	
Spring water	Must contact MM Brands customer service	1600	100	✓	
Pump circulated HW systems	Compliant with EN 12828	1600	100	✓	
<b>ANTI-FREEZE / CORROSION PROTECTION / INHIBITORS</b>					
Anti-freeze cooling concentration 50%	Product	Manufacturer	1600	-20 to 100	
	Antifrogen N	Clariant			
	Antifrogen L	Clariant			
	Ethylene Glycol	Various			
	Propylene Glycol	Various			
	Tyfor	Tyforop-Chemie			
	Tyfor L	Tyforop-Chemie			
<b>OTHER MEDIA</b>					
Ethanol		1600	25	✓	
Condensate	Steam equipment	1600	100	✓	
Leakage indicator liquid for oil tanks	Brenntag R 36522	100	-20 to 30	✓	
Acetone	Liquid	500	-20 to 40	✓	
<b>NATURAL GAS</b>					
Natural gas	The scope of AS5601 for all gas system is restricted to 200kPa	200	100		✓
Liquid gas					
<b>OILS, COOLING MATERIALS AND LUBRICANTS</b>					
Engine oils	Product	Manufacturer	1000	70	
	Mahler HA	Q8			
	Pegasus 710	Mobil			
	Pegasus SHC	Mobil			
Lubricants	GTX	Castrol	500	40	
	Blasocut BC25	Swisslube AG			
	Garia Oil	Shell			
	GL 4	German Oil			
Heating oil, Diesel in acc with EN590	Formula SLX	Castrol			✓
<b>OTHER GAS</b>					
Oxygen		1600	Ambient	✓	✓
Argon	For welding	1600	Ambient	✓	✓
Carbogen		1600	70	✓	✓
Compressed Air	Oil Content Maximum 25 mg/m <sup>3</sup> of Air	1600	70	✓	
	With Oil Content greater than 25mg/m <sup>3</sup> of Air	1600	70		✓
Nitrogen – N <sub>2</sub>	After the evaporator	1600	70	✓	✓
Hydrogen – H <sub>2</sub>	Will leak at <0.001cm <sup>3</sup> /minute	500	70	✓	✓
Carbon dioxide – CO <sub>2</sub>	Dry	1600	70	✓	✓
Carbon monoxide – CO	Stainless steel components not permitted	1600	70	✓	✓
Low vacuum	P <sub>abs</sub> = 200mbar			✓	✓
Forming gas	80% Argon / 20% CO <sub>2</sub>	1600	70	✓	✓
Helium – He <sub>2</sub>		1600	70	✓	✓
Krypton		1600	70	✓	✓
Neon		1600	70	✓	✓
Xenon		1600	70	✓	✓

**P [kPa]** Maximum safe working pressure (continuous operating pressure), greater short duration peaks possible

**T (°C)** Maximum continuous operating temperature, greater short duration peaks possible

**EPDM** Ethylene Propylene Diene Monomer

**NBR** Nitrile Butadiene Rubber

**NOT SUITABLE**

Refrigeration and Air Condition Applications, Acetylene, Urea Solution, Methanol, Glycerin Triacetate, Coolant Inhibitor, Sodium Hydroxide, Ammoniac gaseous, Medical Gas Applications.



# KEMPRESS NZ TRANSITION FITTINGS

**DN 15-25**  
**COPPER ALLOY FITTINGS**



## TRANSITION FITTINGS

Our new KemPress® NZ transition range of KemPex and Rifeng fittings (Crimp or Slide) will simplify your plumbing and gas projects as they are more straightforward and efficient to use. These fittings, which are made of high-quality brass with stainless steel and copper sleeves, are designed to be safe, quick, and secure during installation.

### Transition Range

When connecting NZS 3501 Kembla copper tubing to PE-Xa or PE-Xb pipe our new KemPress® NZ transition fittings are the best option. It is easy to choose from sizes ranging from DN15 - DN25, so that you can find the best match for your hot or cold water and gas system requirements. Because these transition fittings are manufactured of high-quality materials, you can rely on them to survive for a long time. Furthermore, our transition range of KemPress NZ to KemPex and KemPress NZ to Rifeng fittings are simple to use; all you have to do is attach them with our KemPress tool and you're ready to go.

### Warranty

We understand that when it comes to completing our plumbing project, you need a system that is both reliable and enduring. With a warranty of 25 years, and a design life of over 50 years, KemPress® NZ offers you peace of mind and the simplicity that you want. That is why our Transition range of fittings is ideal for anyone searching for a cost-effective yet durable solution.

### Technical Support & Training

Reduce your behind-the-wall risk with our One System Warranty and renowned on-site training and technical support, online or just a phone call away.

Our knowledgeable customer care team is always available to assist you with any queries or problems. Call: 0800 536 252.



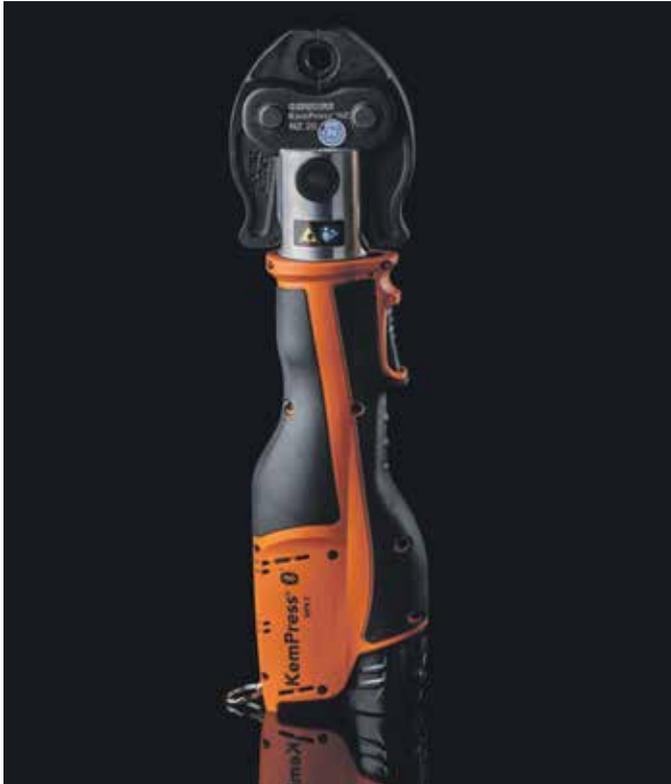


# KEMPRESS NZ TOOLS





## PRESS TOOL



The KemPress® tools are the smartest, lightweight copper pressing tool on the market and its slim line design makes it easy to handle. It has been specifically designed and tested to work with KemPress® NZ fittings.

There is a small tool and a large tool which deliver different pressing forces.

The jaws have been designed specifically for each tool and are not interchangeable.

- Lightest tools on the market
- One hand operation (Patent)
- Perfectly balanced with Jaws
- Longest Maintenance interval:  
KPS2 - Unlimited, service every 2 years
- Smart electronic controls:  
Flashes if not pressed correctly  
Battery status indicator
- New KPS2 tool is lighter, shorter, contains Brushless Motor Technology for more presses per battery charge & press area illumination
- Second battery included, rapid recharge (30 mins)
- Tool Service Program:  
Operated by MM Brands Service Agents  
Loan tool provided during service/repair
- Small tool (KPS2) designed for DN15, 20, 25mm.

### Key Features

- Equipped with Bluetooth technology so you can manage your tool and work via the Novocheck App on your smart phone or smart device
- Safe handling with slip-proof rubberised housing
- Signals if press not completed correctly - Immediately after the pressing cycle a green lights shows if the required pressing force was achieved, a red light if not
- Press cycle must be completed once it starts
- Electronic log book has bluetooth connectivity with the Novocheck App which allows for quick and precise analysis of errors for servicing and repair
- Electronic monitoring of the jaw locking bolt and visual error indicator
- When you reach the maximum number of presses before a service is required a warning light flashes. The machine will not close down enabling you to complete the job in hand
- Redundant switch-off
- Press area illumination
- 180° Rotatable head (KPS2)
- Latest generation tools have service interval of 2 years.

### Tool Operation

Holding the tool securely, press and hold the start button for 2 seconds to begin the automatic press cycle (the green LED will go out). Release the start button and continue to hold the tool securely. The green LED will light when the press cycle is complete. To cancel the automatic press cycle press and hold the release button on the side of the tool until the tool turns off.

If the red LED lights up, press the start button. If the tool does not run, call MM Brands for advice. If the red and green LEDs flash alternately, the tool is ready for a service, contact MM Brands Customer Service: 0800 536 252

The tool will turn off automatically after 30 minutes of no use. Turn the tool ON by quickly pressing and releasing the start button and open the jaws around the fitting.

### Bluetooth Connectivity and Novocheck App

Next Generation KemPress Small 2.0 are equipped with Bluetooth technology so you can connect to your press tool from the your smart device via the NovoCheck App. This new feature as part of the risk minimising suite of KemGuard Technology features, allows you to perform the following via your smart device:

- Pre-start tool checks before you star your work to ensure you tool is ready for the job
- Analysis of tool performance and press performance that helps you to identify incomplete presses
- Usage diagnostics and next service reminders
- Changes to your tool settings
- Generation of logs and site reports showing complete and incomplete presses. Great for submission during handover of your work
- Ability to monitor on-site activity and performance.

**Download the Novocheck APP and connect with your KemPress® tool today!**



**PRESS TOOL**



**Tool Maintenance**

KemPress® tool, jaws, adaptor jaws and collars are low maintenance, however, to ensure optimal performance and safety there are minimum precautions and maintenance procedures that need to be followed.

Carry out basic inspection of the pressing device and jaws prior to each use to ensure they are clean and free from debris and dirt. The pressing jaws should be visually inspected to ensure there are no cracks. If there are any cracks in the pressing jaws, do not use them, as there is risk of the jaws shattering and potential injury from flying fragments. It is recommended to always wear appropriate eye protection whenever using the pressing device.

When inspecting the pressing jaws, also ensure that there are no foreign material deposits and that the contours of the jaw surfaces are in order.

Failure to do this may result in damage to the jaws and/or the pressing device. Always remove the battery before performing regular cleaning and maintenance work.

Regular application of light machine oil to the moving parts of jaws, adaptor jaws and collars and general application of anti-corrosive spray is recommended to maintain serviceable condition and function.

The KemPress Small Tool 2.0 (KPS2) pressing device, jaws and batteries must be serviced at least every 2 years.

It is recommended to have the press tool, jaws, adaptor jaws and collars inspected by MM Brands Service Agents at least once per year. There are costs associated with the service work. Failure to have the required services carried out may affect the warranty.

**Tool Service Program**

The MM Brands tool service and repair program is easy, ensures minimal down time and provides known maximum costs for repairs. The key components of the program include:

- MM Brands - Customer Service: 0800 536 252
- Replacement tools available while your tool is being serviced/repared
- Convenient and easy process for lodging your tool for service/repair via MM Brands Service Agents, the place of purchase or via our express courier exchange program
- Maximum repair price guarantee: the cost won't exceed our maximum repair price and if the cost of repair is less, you only get charged that amount
- No fix, no charge
- Up to 12 months warranty on repairs
- MM Brands recommends an annual service of your tools jaws, adaptor jaws and collars.

Any service or repair of the KemPress® pressing tool or jaws, requiring opening the device, or mechanical repairs, shall only be carried out by MM Brands or their authorised service agent. Failure to do so may void the warranty.

**KEMPRESS COPPER TOOLING SPECIFICATIONS**

TECHNICAL DATA	Small Tool (KPS2)
Dimensions	DN15 - DN25
Weight incl. battery	1.7 kg
Length	319 mm
Width	70 mm
Height	96 mm
Power Consumption	240 W
Piston Force (minimum press force)	21 kN
Piston Stroke	30 mm
Battery	12V/2.0 Ah Li-Ion
Charging Time	30 minutes
Number of Presses Before Service	UNLIMITED. SERVICE EVERY 2 YEARS
Noise Pressure at User's Ear	75.5 db(A)
Type of Protection	IP20



**KEMPRESS NZ COPPER TOOLS**

ITEM	ITEM CODE	DESCRIPTION	INCLUDES
	69525	<b>KEMPRESS NZ KPS2 TOOL KIT</b> DN15-25 Copper (NZ)	KPS2 Battery Powered Hydraulic Press Tool DN15 KNZ Jaw for KPS DN20 KNZ Jaw for KPS DN25 KNZ Jaw for KPS 2 x 12V 2.0Ah Lithium-ion Batteries 1 x 12V Battery Charger Carry Case

ITEM	ITEM CODE	DESCRIPTION	INCLUDES
	69505	KemPress NZ KPS DN15 Jaw	DN15 KNZ Jaw for KPS2
	69508	KemPress NZ KPS DN20 Jaw	DN20 KNZ Jaw for KPS2
	69518	KemPress NZ KPS DN25 Jaw	DN25 KNZ Jaw for KPS2

ITEM	ITEM CODE	DESCRIPTION	INCLUDES
	913782	<b>KEMPRESS KPS2 TOOL KIT - NO JAWS</b>	KPS2 Battery Powered Hydraulic Press Tool 2 x 12V 2.0Ah Lithium-ion Batteries 1 x 12V Battery Charger Carry Case

ITEM	ITEM CODE	DESCRIPTION	INCLUDES
	913784	KemPress KPS 12V Li-ion 2.0Ah Battery	KPS 12V Li-ion 2.0Ah Battery
	913785	KemPress KPS 12V Li-ion 3.0Ah Battery	KPS 12V Li-ion 3.0Ah Battery

ITEM	ITEM CODE	DESCRIPTION	INCLUDES
	913788	KemPress KPS 12V Battery Charger 230V 50-60HZ	12V Battery Charger

ITEM	ITEM CODE	DESCRIPTION	INCLUDES
	913790	KPS2 Tool Kit Carry Case	KPS2 Carry Case



## FREQUENTLY ASKED QUESTIONS

### Q1: What standard of copper tube are KemPress NZ fittings compatible with?

A: KemPress NZ fittings are suitable for use with NZS 3501 copper plumbing tube in the annealed, half hard (bendable) and hard drawn tempers.

### Q2: Can KemPress be used on Chrome Plated Copper Tube?

A: Yes, however it is recommended to test a piece first as some splitting of the chrome plating may occur.

### Q3: Why can't the Water (EPDM) O-ring be used for Gas and the Gas O-ring (NBR) for water?

A: The O-rings are made from different materials for specific applications and are not suitable for the same applications. Using them for the wrong application can reduce the life of the installation or contaminate the pipeline supply.

### Q4: Can the water O-ring be used for solar hot water heaters and wet backs?

A: The water O-ring maximum temperature is 100 Deg. Usually the tube from the panel to the collector is 150-200 Deg. If the system exceeds 100 Deg then KemPress NZ must not be used. Not recommended for use on wetback heating systems.

### Q5: What is the testing process for your "Un-Pressed Fitting ID" feature (or leak path)?

A: Unpressed fittings are able to be identified by pressurising the system at target pressures of 100kPa for water and 15kPa for air/gas. A leak or pressure drop should be evident. Final pressure testing of the system should be conducted in accordance with AS/NZS 3500 and/or AS/NZS 5601 once the low pressure leak testing has been completed.

It's also recommended that you employ a "visual inspection" check. It is obvious if the fitting has been pressed or not. Good practice has been to mark the fitting after pressing or inspection with a marker or paint to indicate all fittings have been pressed and inspected.

### Q6: Can the fitting be pressed more than once?

A: No. Repeated pressing can incorrectly deform the fitting, affect the seal and create a leak.

### Q7: What is the Maximum operating temperature of each O-ring:

**EPDM** (Water) -20°C to +100°C

**NBR** (Gas) -20°C to +70°C

### Q8: Can KemPress NZ be used for Refrigeration gases?

A: No the fittings cannot handle the higher pressure. Maximum pressure is 1600kpa.

### Q9: Can KemPress NZ be used for Medical gases?

A: No, press fittings are not approved for use in the Australian Medical Gas Installation Standard AS2896. Only Silver brazing alloy (15% silver content) is to be used to connect copper tube and fittings for Medical Gas applications.

### Q10: Do you have to use Kembla Copper tube with KemPress NZ fittings?

A: KemPress NZ fittings are suitable for use with any NZS 3501 copper plumbing tube in the annealed, half hard (bendable) and hard drawn tempers. If you use Kembla Copper Tube you get one warranty from one supplier and KemPress NZ fittings have been developed and optimised for use with high quality Kembla Copper Tube.

### Q11: Can KemPress be installed underground?

A: Yes exactly the same as brazed copper fittings. If the environment is aggressive then it needs to be lagged or wrapped in tape. Refer to the requirements of AS/NZS 3500 regarding location of fitting installations under concrete slabs.

### Q12: Is de-burring the copper tube essential?

A: It is essential. Failing to De-bur can result in leaking pipes and void the warranty.

### Q13: Can you press fittings directly against each other?

A: No. Minimum distance is 20mm for 15-25mm.

### Q14: Can you use the fittings on Oxygen, Hydrogen or Helium?

A: Yes but not for medical gas installation purposes.

### Q15: If there is movement in the fittings what should I do? Will it leak?

A: As long as you have full engagement of the fitting on the tube and relevant low pressure tests and full pressure testing have been completed and passed. That means the fitting must be inserted up to the witness mark. If you do not have a witness mark then re-do the fitting to be safe.

### Q16: Once pressed, the tube shape looks to have changed. Is that normal?

A: Yes, the compression of the fitting onto the tube enables the connection to be permanent. There is no change in performance for water flow and friction loss.

### Q17: What do the LED lights mean on my tool:

LED DISPLAY	STATUS/CAUSE	MEASURE
All LEDs off	The device is switched off	Briefly press the start button (1)
Green LED (2) lights up	On standby	
Green LED (2) off (press operation in progress).	Automatic press cycle is on, device ends the press operation automatically	
Green LED (2) flashes.	Insufficient battery charge.	Charge or replace battery.
Green LED (4).	Battery charge display.	
Red LED (3) lights up.	Device fault.	Press the start button (1) If this is unsuccessful, the press device is defective. Send the device to a specialist workshop. <b>Note:</b> The pressing operation may not have been completed; please check and repeat if required.
Red and Green LED (2) flash alternately.	Service interval reached.	Take the press device to be serviced.



# BRANDS

NEW ZEALAND'S LEADING SUPPLIER OF  
QUALITY PIPING & PLUMBING PRODUCTS

## REDUCE YOUR INSTALLATION RISK WITH MM BRANDS.

CHOOSE AN MM BRANDS INTEGRATED  
PIPING SYSTEM AND GET REGULAR ON-SITE  
TRAINING FOR ALL YOUR PLUMBING  
INSTALLATION TEAM.



KEM  
KemPress NZ  
NZS 3501 Press Fittings



## ONE BRAND, ONE SYSTEM, ONE PROJECT WARRANTY.

Choose One Brand, One System, One Warranty customised to suit your project specific installation from a New Zealand company with a reputation for quality, reliability and service for over 67 years.

Reduce your installation risk with an MM Brands Integrated Piping System and get regular on-site training. We have a complete range of high quality products for Plumbing, HVAC, Refrigeration Services & Medical Gas.

[www.mmbrands.co.nz](http://www.mmbrands.co.nz)

# MM BRANDS

**MM Brands**  
263 Ti Rakau Drive  
East Tamaki, Auckland 2013  
P.O. Box 51-525, Pakuranga  
Auckland 2140  
T: +64 9 274 0111 or 0800 536 252  
E: [sales@mmbrands.co.nz](mailto:sales@mmbrands.co.nz)  
[www.mmbrands.co.nz](http://www.mmbrands.co.nz)

D66/24