

IT'S THE SAFEST BET.
DOUBLE OR NOTHING.



WITH T.R.A.P
TECHNOLOGY

A HIGH QUALITY
REFRIGERANT
COPPER PRESS-FIT
CONNECTION
SYSTEM

 **KEMBLA**

Streamline®

ACR COPPER PRESS FITTINGS

**KEMBLA***Streamline*[®]**ACR COPPER
PRESS FITTINGS**

Renowned copper manufactures MM Kembla & Mueller Industries have combined nearly 200 years of manufacturing experience to bring the Streamline ACR Press Fitting system to the Australian market.

Streamline ACR Press Fittings

Are the highest quality, flame-free connection system solution utilising T.R.A.P. Technology designed specifically for refrigerant piping systems.

- Available in diameters ranging from 1/4" to 1-1/8" OD
- Industry's only press fitting with T.R.A.P. Technology, featuring DualSeal™ Ring Design
- Similar patterns and lay lengths as traditional braze copper fittings
- Compatible with R410A and other commonly used refrigerant gases and oils
- Jaws compatible with leading full-size press tools on the market.

15 Year Warranty

Streamline ACR Press Fittings are backed by a 15 Year Manufacturing Warranty.

STREAMLINE APPLICATIONS

Commercial and Residential HVAC

Heat Pumps

VRV/VRF & Split System Air Conditioning

Light Commercial Refrigeration

Ethylene Glycol



TUBE COMPATIBILITY

AS1571
REFRIGERATION
TUBE

CONTINUOUS OPERATING PRESSURE

4,800 kPa
700 PSI

CONTINUOUS OPERATING TEMPERATURE

-40 to 121°C

BURST PRESSURE

14,400 kPa
2,100 PSI

VACUUM PRESSURE

200 Microns

HELIUM LEAK TIGHTNESS

≤ 7.5 X 10⁻⁷
Pa.m³/s at 20°C

SUITABLE REFRIGERANTS

R410A, R134A,
R404A, 4407A
+ MORE R32,
R45B & A2L'S

NOT SUITABLE
For R22 or CO2

APPROVALS & CERTIFICATIONS

UL 207
(License SA 44401)

UL 1963

**International
Mechanical Code (IMC)**

**Uniform Mechanical
Code (UMC)**

ASHRAE 15

ASME B31.5

CSA C22.2



DUALSEAL™ RING DESIGN

Two specially engineered HNBR Elastomer sealing O-Rings operate in tandem to provide 200% more surface contact and sealing area.



TRILOCK™ PRESS BARRIER

Three distinct mechanical connection points create superior joint strength and pressure handling capabilities.



TRAPZONE™ LEAK BARRIER

Precise spacing between the two pressed sealing rings acts as a barrier for refrigerant molecules to ensure leak protection.



WITH T.R.A.P. TECHNOLOGY

What is Streamline T.R.A.P. Technology?

T.R.A.P (Two Ring Advanced Press) technology provides superior sealing, leak protection, and joint strength by using innovative firsts in the world of flame-free joining for air conditioning and refrigeration piping systems.



FORCE360™ PRESS CONTOUR

Circular press design for the most uniform compression and sealing with minimal tube deformation.

DUALSEAL™ O-RING DESIGN



Two specially engineered HNBR Elastomer sealing O-Rings operate in tandem to provide 200% more surface contact and sealing area.

- HNBR Elastomer
- Proprietary engineered seal profile
- Improved ability to seal tube imperfections
- Only press fitting with primary and secondary seals
- Inspired by Mueller Refrigeration double O-ring valve stem design
- Increases surface contact by more than 200%.



TRAPZONE™ LEAK BARRIER



Precise spacing between the two pressed sealing rings acts as a barrier for refrigerant molecules to ensure leak protection.

- Refrigerant molecules are small and notoriously hard to contain
- Primary seal design to contain all refrigerant molecules
- Secondary seal for greater confidence and reliability
- Creates a barrier zone for any escaped refrigerant molecules
- Only design on the market that caters for the smaller molecular structure between refrigeration systems and plumbing systems.



TRI-LOCK™ PRESS PROFILE



Three distinct mechanical connection points create superior joint strength and pressure handling capabilities.

- Industry first triple-crimp design
- 3 distinct mechanical connection points
- Superior joint strength, pull out strength and structural integrity
- Aided by an extra deep cup design.



FORCE360™ PRESS CONTOUR



Developed in partnership with hydraulic press tool leaders Novopress (manufacturers of the KemPress press tool).

- Circular press design for the most uniform compression and sealing
- Stronger, leak-free connection for smaller refrigeration molecules than traditional hexagonal refrigeration press designs.



PRODUCT RANGE
**STREAMLINE
ACR FITTINGS**
Coupling

**Diameter
(Inches)**
**Kembla
Code**
**Bag
Quantity**

1/4"

J62600

5

3/8"

J62601

5

1/2"

J62602

5

5/8"

J62603

5

3/4"

J62604

2

7/8"

J62605

2

1-1/8"

J62607

2

Elbow 90 Degree


1/4"

J62618

5

3/8"

J62619

5

1/2"

J62620

5

5/8"

J62621

3

3/4"

J62622

3

7/8"

J62623

3

1-1/8"

J62625

2

Reducer F+F


3/8 x 1/4"

J62643

5

1/2 x 3/8"

J62644

5

5/8 x 1/2"

J62646

2

3/4 x 5/8"

J62649

2

7/8 x 3/4"

J62652

2

1-1/8 x 7/8"

J62655

1

Equal Tee


3/8"

J62672

5

1/2"

J62673

5

5/8"

J62674

2

3/4"

J62675

2

7/8"

J62676

2

1-1/8"

J62678

1

End Cap


1/4"

J62680

5

3/8"

J62681

5

1/2"

J62682

5

5/8"

J62683

2

3/4"

J62684

2

7/8"

J62685

2

1-1/8"

J62687

1

Flare Adaptor (FLR SAE)


1/4"

J62690

5

3/8"

J62691

5

1/2"

J62692

5

5/8"

J62693

2

3/4"

J62694

2

TOOLING RANGE
**STREAMLINE
ACR TOOLING**
**KPL3 32KN STREAMLINE
ACR PRESS KIT 1/4" - 7/8"**


Items Included	Kembla Code
KemPress KPL3 32kN Tool	J62800
2 x 18V/2.0AH Li-ion Batteries	
1 X 240V 12/18V Multi Volt Battery Charger	
Carry Cases x 2	
1/4" Streamline ACR Press Jaw	
3/8" Streamline ACR Press Jaw	
1/2" Streamline ACR Press Jaw	
5/8" Streamline ACR Press Jaw	
3/4" Streamline ACR Press Jaw	
7/8" Streamline ACR Press Jaw	
1-1/8" Streamline ACR Press Collar KPL3	
Streamline ACR Adaptor Jaw KPL3	
Streamline ACR Press Gauge	

**KPL3 32KN STREAMLINE
ACR PRESS TOOL (NO JAWS)**


KemPress KPL3 32kN Tool	J09615
2 x 18V/2.0AH Li-ion Batteries	
1 X 240V 12/18V Multi Volt Battery Charger	
Carry Case x 1	

**STREAMLINE ACR KPL3
JAW KIT 1/4 - 7/8" (6 JAWS)**


1/4" Streamline ACR Press Jaw KPL3	J62810
3/8" Streamline ACR Press Jaw	
1/2" Streamline ACR Press Jaw	
5/8" Streamline ACR Press Jaw	
3/4" Streamline ACR Press Jaw	
7/8" Streamline ACR Press Jaw	
Carry Case x 1	

**STREAMLINE ACR KPL3
1-1/8" COLLAR & ADAPTOR
JAW KIT**


1-1/8" Streamline ACR Press Collar KPL3	J62811
Streamline ACR Adaptor Jaw KPL3	
Carry Case x 1	

JAWS


1/4" Streamline ACR Press Jaw KPL3	J62802
3/8" Streamline ACR Press Jaw	J62803
1/2" Streamline ACR Press Jaw	J62804
5/8" Streamline ACR Press Jaw	J62805
3/4" Streamline ACR Press Jaw	J62806
7/8" Streamline ACR Press Jaw	J62807
1-1/8" Streamline ACR Press Collar KPL3	J62808
Streamline ACR Adaptor Jaw KPL3	J62809

BATTERIES & ACCESSORIES

KPL3 18V Li-ion 2.0Ah Battery	J62816
KPL3 12V/18V Multi Volt Tool Charger	J62831



KEMBLA

Streamline®

ACR COPPER
PRESS FITTINGS

INSTALLATION GUIDE



INSTALLATION GUIDE

The following is a step by step guide to installing the Kembla Streamline ACR Copper Press Fittings available in diameters ranging from 1/4" to 1-1/8" OD. For projects requiring maintenance and repair visually inspect the AS 1571 copper tube to ensure it is in reasonable condition with no signs of external corrosion or scores. Installation shall be in accordance with Australian standards and the Kembla Streamline ACR Copper Press Fittings Installation Guide. Failure to adhere to either can result in the warranty being voided.



- 1.** Select your AS 1571 copper refrigeration tube. Using a tube cutter, cut the tube to the length required ensuring the tube is cut square.



- 2.** Deburr the end of the tube on the inside and outside to minimise turbulence and pressure loss, and to avoid damaging the fittings O-rings. A conical deburrer is recommended to deburr the outside diameter, and a conical deburrer or pin reamer may be used for the inside diameter.



- 3.** Ensure the tube ends are free of any burrs or sharp edges that might damage the internal components of the fitting.



- 4.** Clean and smooth the tube surface using an abrasive pad, emery paper or a soft medium grade scourer. Ensure the tube surface is free of indentation, scratches, deformation, oxidation and dirt or debris.



- 5.** Mark the fitting insertion depth on the tube with a Streamline ACR press gauge tool. Whilst this is the preferred method, you can also use a tape measure and reference the insertion depth chart on the back of the bag.



- 6.** Select the correct size fitting and check both ends of the fitting to ensure two seals are present either end and correctly seated in position. Also ensure the fitting is free from any dirt or debris before using. It is recommended the fittings are stored in their resealable bags prior to use, to prevent contamination.

INSTALLATION GUIDE



7. Insert the fitting, slightly rotating the fitting whilst sliding it onto the copper tube.



8. Slide the fitting all the way up to the insertion depth mark and until you make contact with the fittings stop. It is critical that full insertion depth has been achieved before pressing.



9. Select the correct size Streamline ACR Press Jaw and check the jaw is in good condition and its press surface is clean and free from debris.



10. Attach the jaws onto your KemPress KPL3 tool or other compatible full size 32 Kilo Newton press tool and lock it by engaging the locking pin. If using a KemPress KPS2 press tool, ensure you use Streamline ACR Press small jaws, as large and small tool jaws are not interchangeable.



11. Place the jaw over both beads of the fitting at a right angle to the copper tube. Ensure the two beads of the fitting fit into the two corresponding grooves of the press jaw. Check the fitting is still fully engaged to the insertion depth mark and once the jaw and fitting is correctly engaged, initiate the pressing process by holding the start button.



12. For fittings sizes inch and one eighth and greater, use the ZB203 Adaptor Jaw and corresponding size Streamline ACR Press Collar.

INSTALLATION GUIDE



13. Open the press collar and place it over both beads of the fitting at a right angle to the copper tube. Ensure the two beads of the fitting fit into the two corresponding grooves of the press collar.



14. Attach the ZB203 Adaptor Jaw onto your KemPress KPL3 press tool and lock it by engaging the locking pin. Open the adaptor jaw and attach it to the pins on the Streamline ACR Press Collar.



15. Check the fitting is still fully engaged to the insertion depth mark and once the jaw and fitting is correctly engaged, initiate the pressing process by holding down the start button.



16. Verify the connection is secure and complete by using the Streamline ACR press gauge between the pressed O-ring beads. Rotate the gauge to avoid interference with flashing. If the gauge for the corresponding fitting size fits, the press has been completed.

CAUTION

Brazing or soldering near to Kembla Streamline® ACR Copper Press Fitting 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.

MINIMUM BRAZING DISTANCE

For brazing near Kembla Streamline® ACR Copper Press Fittings.

TUBE SIZE OD	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1-1/8"
Minimum Clearance to existing connection (mm)	7	7	7	7	7	7	7
Minimum Clearance to existing brazed fitting (mm)	25.4	25.4	25.4	25.4	25.4	25.4	25.4



MINIMUM INSERTION DEPTH CHART

Tube Size OD	Insertion Depth mm
1/4"	25.40
3/8"	26.98
1/2"	30.16
5/8"	33.33
3/4"	34.92
7/8"	36.51
1-1/8"	38.10

TOOL COMPATIBILITY (WHEN USED WITH STREAMLINE ACR PRESS JAWS)

KEMPRESS	KPL3 32kN Tool
NOVOPRESS	AC0201, ACO202 & ACO203
VIEGA	PressGun 4B, 5 & 6
RIDGID	RP300 series 320-E, RP 330-B, RP 330-C, or RP 340, RP 350
REMS	Full Sized 579011, 579010, 571014, 576011, 576010, 577010, 57211
ROTHENBERGER	ROMAX 4000, 3000, & AC ECO Series
MILWAUKEE	M18 FORCE LOGIC™ 2922-20, M18 Long Throw 2773-20L
DEWALT	Full Sized DCE200M2
HILTI	Full Sized NPR 32-A Pipe Press Tool
KLAUKE	UAP Series

CERTIFICATION, TESTING & VALIDATION

PRESSURE RATING	UL 207 – Standard for Refrigerant-Containing Components & Accessories
HELIUM LEAK RATE	ISO 14903 – Maximum Helium Leak Rate of 0.1 oz. per year 7.4 Tightness Test 7.6 Pressure Temperature Vibration Tests (PTV) 7.8 Freezing Tests
VACUUM CAPABILITY	200 Microns
PULL-OUT RESISTANCE	UL 109 (7. Pull Test) – Tube Fittings for Flammable and Combustible Fluids, Refrigeration Service, and Marine Use
VIBRATION RESISTANCE	UL 109 (8. Vibration Test) – Tube Fittings for Flammable and Combustible Fluids, Refrigeration Service, and Marine Use
REFRIGERATION COMPATIBILITY	UL 1963 – Standard for Refrigerant Recovery/Recycling Equipment
REFRIGERATION COMPATIBILITY	R410 Heat Pump
APPROVAL & CERTIFICATIONS	UL 207 – License SA 44401 UL 1963 International Mechanical Code (IMC) Uniform Mechanical Code (UMC) ASHRAE 15 ASME B31.5 CSA C22.2  

APPROVED REFRIGERANTS

REFRIGERANT TYPE	R-125, R-134a, R-32, R-404A, R-407A, R-407C, R-407F, R-407H, R-410A, R-417A, R-421A, R-422B, R-422D, R-427A, R-438A, R-444A, R-447A, R-447B, R-448A, R-449A, R-450A, R-452A, R-452B, R-452C, R-454A, R-454B, R-454C, R-457A, R-459A, R-507A, R-513A, R-513B, R-718, R-32, R-1234ze, R-1234yf, R-290 & R-600A.
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APPROVED OILS

OIL TYPE	MINERAL OIL, POE, PVE, PAO, PAG, & AB
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