conex | Bänninger | >B < MaxiPro

Join the Press Revolution

Air Conditioning and Refrigeration



An innovative press system, which is quick and simple to install, providing a secure and permanent joint. Designed for air conditioning and refrigeration applications in inch and metric dimensions.

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Join the Press Revolution

Benefiting from over 110 years' experience in fittings manufacture and over two decades experience in press system design, >B< MaxiPro is revolutionising pipe jointing in air conditioning and refrigeration applications.

>B< MaxiPro is a robust press system, which is quick and simple to use providing a secure and permanent joint. Compared with traditional techniques it significantly improves productivity through greatly reduced installation time and enhanced working flexibility.

>B< MaxiPro can be used with hard, half hard or annealed copper tube conforming to EN 12735-1*, EN 12735-2* or ASTM-B280*, in both air conditioning and refrigeration applications.



>B< MaxiPro is compatible with the following refrigerants:

R-1234vf**, R-1234ze**, R-125, R-134a, R-290**, 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-515B, R-600A**, R-718 and HYCOOL 20.

* For full details on copper tube compatibility please refer to www.conexbanninger.com

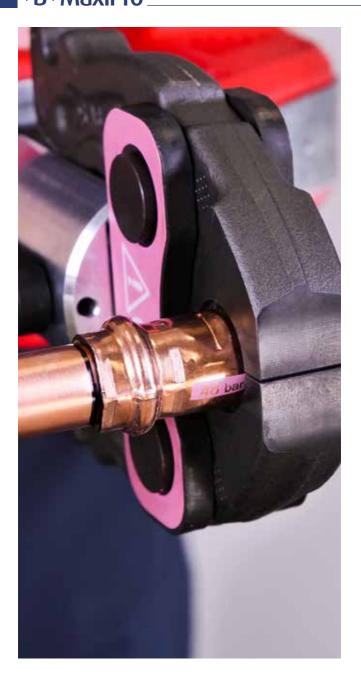
** When using refrigerants classified A2L (lower flammability), A2 (flammable) and A3 (higher flammability) additional/specific standards, local rules and regulations, codes of practice and by-laws may be applicable.

Note: >B< MaxiPro fittings are NOT suitable for R-717, R-723, R-764, R-744, R-22 refrigerants.

Features and Benefits:

| Flame-free: | Flame-free installation avoids the need for a hot works permit and the risk of fire on site. | | |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--|--|
| No nitrogen purge: | >B< MaxiPro is a mechanical joint, thus eliminating the need for nitrogen purge during the jointing process. | | |
| Lower installed cost: | A professional fitting which is quick and simple to install, saving time and money. | | |
| Higher productivity, improved flexibility: | Work may be completed during working hours / public access, by a single employee. | | |
| Site access: | Easy access to work sites, no gas bottles required. | | |
| Quality designed in: | Reliable, repeatable, permanent, tamper-proof connections every time. | | |
| 3-point press: | Three press points, one each side of the bead, and one press compressing the O-ring. This provides a permanent and secure joint. | | |
| High quality O-ring: | A high quality HNBR O-ring forms a secure leak-free joint when pressed. | | |
| Protected O-ring: | Lead-in edge design aids tube insertion and helps protect the O-ring from damage or displacement. | | |
| Range: | Available in inch sizes 1/4" to 1 3/8" and metric sizes 6 mm to 28 mm. | | |

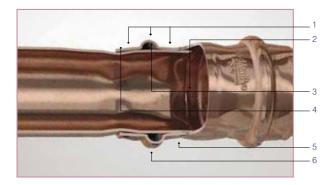
| Fitting identification: | Fittings are marked >B< MaxiPro and identified with a pink mark indicating their suitability for high pressure air conditioning and refrigeration applications. | |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Electrical continuity: | Maintains earth continuity without the need for additional earth continuity straps. | |
| Certification: | >B< MaxiPro is UL listed, refrigerant fitting SA44668. >B< MaxiPro is UL listed, approved use for field and factory installations. | |
| Field proven: | Press-fit technology, field proven over 20 years and millions of installed fittings worldwide. | |
| Guarantee: | When professionally installed by a trained and certified >B< MaxiPro installer, >B< MaxiPro fittings are covered by a ten (10) year extended guarantee. For full terms and conditions go to www.conexbanninger.com | |
| Support: | Backed by Conex Bänninger's experienced technical support and customer services teams. | |
| Compact tooling: | Light compact tooling provides easy access to tightly spaced tube runs. | |
| Tooling: | Conex Bänninger recommends the use of ROTHENBERGER press tools. | |



>B< MaxiPro Technology:

3-point press:

>B< MaxiPro benefits from a 3-point press; one each side of the bead, and one press point compressing the O-ring. This provides a permanent and secure joint.



- 1. Three press points, one each side of the bead and one press point compressing the O-ring.
- 2. Tube stop.
- 3. HNBR O-ring.
- 4. Hook.
- 5. Fitting socket.
- 6. Bead.

In tests, press fittings are up to three times faster to install than brazing.







Inch Range:

MPA5001 90° Street Ber MPA5002 90° Bend

MPA5041 45° Obtuse Elbo MPA5240 Reducing Couple





O-marine

6

From: 3/8" To: 1 3/8"

From: 1/4" To: 1 3/8"

From: 1/4" To: 1 3/8" From: 3/8" x 1/4" To: 1 3/8" x 1 1/8"





MPA5270 Straight Coupler MPA5270I









From: 3/8" x 1/4" To: 1" x 5/8"

From: 3/8" x 1/4" To: 1 3/8" x 1 1/8"

From: 1/4" To: 1 3/8"

From: 1/4" To: 1 1/8"

MPA5275L Long Repair Coupler

SAE45 Copper Flare - Brass Nut

MPA5286G SAE45 Stainless Flare - Brass Nut

MPA5287 Copper Flare Washer









From: 1/4" To: 1 3/8"

From: 1/4" x 1/4" To: 3/4" x 3/4"

From: 1/4" x 1/4" To: 3/4" x 3/4"

From: 1/4" To: 3/4"

MPA5289G SAE45 Stainless Flan

MPA5301

MPA5T

MPA5698









From: 1/4" x 1/4" To: 3/4" x 3/4"

From: 1/4" To: 1 3/8"

From: 1/4" To: 1 3/8"

To: 1 1/8"

Note: Not UL approved.

From: 5/8'

MPA Depth Gauge
Depth Gauge + Pen



From: 1/4" To: 1 3/8"

MPABPSOIL
Press Fitting Lubricant



100 ml

Metric Range:

| MPM5001 | MPM5002 | MPM5041 | MPM5240 |
|----------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| 90° Street Bend | 90° Bend | 45° Obtuse Elbow | Reducing Coupler |
| | 0 | - | CC |
| From: 6 mm To: 28 mm | From: 6 mm To: 28 mm | From: 6 mm To: 28 mm | From: 8 x 6 mm To: 28 x 22 mm |
| MPM5243 | MPM5270 | MPM5301 | MPM5T |
| Fitting Reducer | Straight Coupler | Stop End | Equal Tee |
| 0 | | Sales of the sales | 0-0 |
| From: 8 x 6 mm To: 28 x 22 mm | From: 6 mm To: 28 mm | From: 6 mm To: 28 mm | From: 6 mm To: 28 mm |
| | | | |
| MPM Depth Gauge | MJ03CB19KN | MPM01INS | MPMTOOLCASE03 |
| Depth Gauge + Pen | Mother Jaw | Insert Metric | Tool Case, Mother Jaw and 9 Metric Inserts* |
| | | 9 | |
| From: 6 mm To: 35 mm | From: 6 mm To: 28 mm | From: 6 mm To: 28 mm | From: 6 mm To: 28 mm |
| | | | |

^{*}Contents MPMTOOLCASE03: Mother jaw, 9 inserts 6-28 mm, rotary tube cutter, deburrer, pencil deburrer, depth gauge, marker pen and cleaning pads.

Technical data

Parameters

Applications

Connections

Approved tube: Copper tube conforming to*

Fitting / tube range (inch)

Fitting / tube range (metric)

Fitting material

O-ring

Approved oils

Maximum operating and abnormal pressure

O-ring temperature range

Burst pressure >3 x maximum operating and abnormal pressure EN 378-2

Leak tightness

Vacuum

UL listing continuous operating temperature

Compatible refrigerants

Note: >B< MaxiPro fittings are NOT suitable for R-717, R-723, R-764, R-744, R-22 refrigerants.

 $^{^{\}ast}$ For full details on copper tube compatibility please refer to www.conexbanninger.com

^{**} When using refrigerants classified A2L (lower flammability), A2 (flammable) and A3 (higher flammability) additional/specific standards, local rules and regulations, codes of practice and by-laws may be applicable.

Capability

Air conditioning, refrigeration and heat pump (refrigeration side)

Copper to copper

EN 12735-1. EN 12735-2 or ASTM-B280

1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 3/8"

6 mm, 8 mm, 10 mm, 12 mm, 15 mm, 16 mm, 18 mm, 22 mm, 28 mm

Refrigerant grade copper (C12200 min 99.9% pure)

HNBR

POE, PAO, PVE, AB and MO

48 bar / 4800 kPa / 700 psi

-40 °C to 140 °C / -40 °F to 284 °F

>144 bar / >14400 kPa / >2100 psi

Helium $\leq 7.5 \times 10^{-7} \text{ Pa.m}^3/\text{s} \text{ at } +20 \,^{\circ}\text{C}, 10 \text{ bar}$

200 microns

-40 °C to 121 °C / -40 °F to 250 °F

R-1234yf**, R-1234ze**, R-125, R-134a, R-290**, 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-515B, R-600A**, R-718 and HYCOOL 20.

Installations must be completed in line with all standards, local regulations, by-laws and codes of practice governing the installation. All applicable health and safety practices must be adhered to.

Approvals, Standards and Test Compliance:

- >B< MaxiPro is UL listed, refrigerant fitting SA44668.
- >B< MaxiPro is UL listed, approved use for field and factory installations.
- UL 109 7 Pull test, compliant.
- UL 109 8 Vibration test, compliant.
- UL 1963 79 Tests of Gaskets and Seals used in Refrigerant Systems, compliant.
- ISO 5149-2, EN 378-2,
 - Refrigerating systems and heat pumps
 - Safety and environmental requirements
 - Part 2: Design, construction, testing, marking and documentation, compliant.
- EN 14276-2 8.9.4.1.2 Type burst proof test, compliant.
- ISO 14903 7.4 Tightness test, compliant.
- ISO 14903 7.6 Pressure temperature vibration tests (PTV), compliant.
- ISO 14903 7.8 Freezing test, compliant.
- ASTM G85 Salt Spray (Fog) Test, compliant.



Press Tools and Jaws:

Conex Bänninger recommends the use of ROTHENBERGER press tools.







Standard jaw



Mother jaw with interchangeable insert

- For inch fittings compact or standard jaws can be used. 19 kN press tools can press fittings up to 1 1/8" in size, for fittings larger than this a 32 kN press tool and jaw must be used.
- For metric fittings 19 kN press tools have been approved for use in combination with a mother jaw and Conex Bänninger >B< MaxiPro interchangeable inserts. 19 kN press tools can press metric fittings up to 28 mm. >B< MaxiPro inserts are manufactured in Germany.

All tools and jaws used must be maintained and serviced in line with manufacturers recommendations. Regular care and cleaning of the jaws/inserts can be completed by the user. Prior to use check the press jaws/inserts are free of damage or deformation and the inner pressing contour is free of dirt or debris. When using a press tool always wear ear and eye protection.

Please visit www.conexbanninger.com for latest information on approved; press tools, jaws, mother jaws and inserts. Use of non approved; press tools, jaws, mother jaws and inserts may void your guarantee.

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Conex Bänninger

The >B< MaxiPro range is brought to you by Conex Bänninger, a specialist in providing high quality fittings, valves and accessories across the globe. Since 1909, Conex Bänninger has produced over 22 billion fittings and valves, and our innovative approach has led to some landmark achievements in product design.

Conex Bänninger carries a heritage of product knowledge, expertise and excellence that is trusted across residential, commercial, industrial, air conditioning and refrigeration markets worldwide. Conex Bänninger is an ISO 9001 quality assured company, that ensures you receive the very best in quality.

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Note: For the latest updates and information about >B< MaxiPro visit www.conexbanninger.com