### Conex | Bänninger

# Conex | Bänninger >B< MaxiPro

### Join the Press Revolution

#### Air Conditioning and Refrigeration

#### **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 10 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.

#### **Conex Universal Limited:**

Global House, 95 Vantage Point, The Pensnett Estate, Kingswinford, West Midlands, DY6 7FT, UNITED KINGDOM. Tel: +44 (0) 121 557 2831, Fax: +44 (0) 121 557 0185 Email: salesuk@ibpgroup.com, Website: www.conexbanninger.com

Conex Bänninger products are approved by numerous Standards Authorities and Certification Bodies. This is a representation of the full range from Conex Universal Ltd. IBP trademarks are registered in numerous countries.

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

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

## conex | Bänninger >B< MaxiPro

#### 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\* or ASTM-B280\*, in both air-conditioning and refrigeration applications. >B< MaxiPro is compatible with the following refrigerants:

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-600A\*\* and R-718.

> \* For full details please refer to >B< MaxiPro Technical Manual - Tube Compatibility Table.

\*\* When using refrigerants classified A2L (lower flammability), A2 (flammable) and A3 (higher flammability) ensure that all appropriate standards, local rules and regulations, codes of practice and by-laws are adhered to.

#### conex | Bänninger >B< MaxiPro

#### Features and benefits:

**Flame-free:** Flame-free installation avoids the need for a hot work 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.

**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 is covered by a five year extended guarantee. For full terms and conditions go to www.conexbanninger.com/bmaxipro

**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 concept:** We recommend using tried and tested ROTHENBERGER tools and jaws.

\*Please refer to UL's online certification database for full details of listings.



#### Conex | Bänninger >B< MaxiPro

### >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.







#### Range:



Straight Coupler 1/4" to 1.1/8"



Long Coupler 1/4" to 1.1/8"



Long Repair Coupler 1/4" to 1.1/8"



Fitting Reducer 3/8" x 1/4" to 1.1/8" x 7/8"



Equal Tee 1/4" to 1.1/8"



Reducing Coupler 3/8" x 1/4" to 1.1/8" x 1"



Long Reducing Coupler 3/8" x 1/4" to 1" x 5/8"



45° Obtuse Elbow 1/4" to 1.1/8"



90° Bend 1/4" to 1.1/8"

SAE45 Stainless Flare -

1/4" x 1/4" to 3/4" x 3/4"

Suction Line P-Trap

5/8" to 1 1/8"

Brass Nut - Copper Washer



Stop End 1/4" to 1.1/8"



SAE45 Copper Flare -

Brass Nut 1/4" x 1/4" to 3/4" x 3/4"



**Copper Flare Washer** 1/4" to 3/4"



Stainless Nut - Copper Washer

SAE45 Stainless Flare -

1/4" x 1/4" to 3/4" x 3/4"

Depth Gauge & Pen



Press Fitting Lubricant (100ml)





Technical data	
Parameters	Capability
Applications	Air-conditioning and refrigeration
Connections	Copper to copper
Approved tube*: Copper tube conforming to	EN 12735-1 or ASTM-B280
Fitting / tube range (inches)	1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8"
Fitting material	Refrigerant grade copper (C12200 min 99.9% pure)
O-ring	HNBR
Approved oils	POE, PAO, PVE, AB and MO
Maximum operating and abnormal pressure	48 bar / 4800 kPa / 700 psi
O-ring temperature range	-40 °C to 140 °C / -40 °F to 284 °F
Burst pressure >3 x maximum operating and abnormal pressure EN 378-2	>144 bar / >14400 kPa / >2100 psi
Leak tightness	Helium $\leq$ 7.5 $\times$ 10- <sup>7</sup> Pa.m <sup>3</sup> /s at +20 °C, 10 bar
Vacuum	200 microns
UL listing continuous operating temperature	-40 °C to 121 °C / -40 °F to 250 °F
Compatible refrigerants	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-600A** and R-718.

\* Please refer to >B< MaxiPro Technical Brochure - Tube Compatibility Table.

\*\* When using refrigerants classified A2L (lower flammability), A2 (flammable) and A3 (higher flammability) ensure that all appropriate standards, local rules and regulations, codes of practice and by-laws are adhered to.

#### conex | Bänninger >B< MaxiPro

# 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, compliant.
- EN 14276-2 Type burst proof test, compliant.
- ISO 14903 Tightness test, compliant.
- ISO 14903 Temperature, pressure cycling and vibration test, compliant.
- ISO 14903 Freeze / thaw test, compliant.
- ASTM G85 Salt Spray (Fog) Test, compliant.

\*Please refer to UL's online certification database for full details of listings.



#### Press tools and jaws:

Conex Bänninger recommends the use of ROTHENBERGER press tools and jaws.

#### Specifications ROMAX Compact TT:



Battery voltage – 18 VBattery capacity – 2.0 Ah / 4.0 AhRated power consumption – 281 WattsMax piston force – 19 kN metal fittings Pressing time – 3 secs (nominal) Dimensions (L x W x H) – 336 x 143 x 76 mmWeight (less battery) - ca. 2.1 kg

Working range: 1/4" to 1 1/8"

 $\ensuremath{\textbf{Note:}}$  When using the tool, wear ear and eye protection.



>B< MaxiPro jaws are readily identified by their pink coloured label, logo and jaw size.

Regular care and cleaning of the jaws can be completed by the user. Prior to use check the press jaws are free of damage or deformation and the inner pressing contour is free of dirt or debris.