

NEW up to 48 bar!

ACR Copper Press

Copper Press fittings for HVACR applications

Streamline[®]

SANHA[®]
a perfect fit

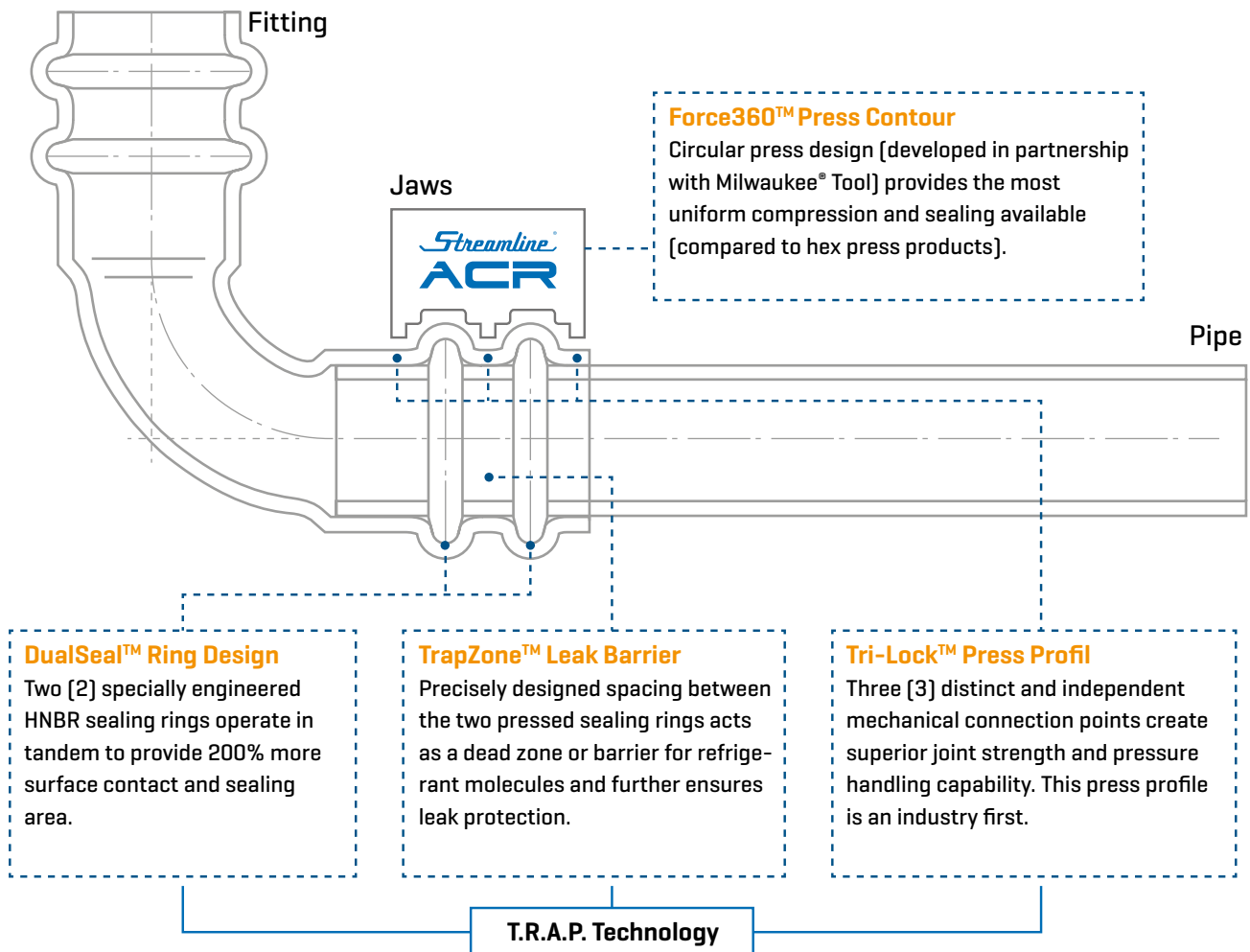
Press fittings for HVACR applications

ACR Copper Press fittings for modern refrigeration and cooling (HVACR) applications combine a wide range of unique design features and offer a **high degree of safety** while at the same time being easy and quick to install. Now, Mueller Streamline and SANHA® are joining forces to bring this innovative product to the European market. Not just one, but two seals on each side provide double safety for the connection. Their engineered design results in 200 % more surface contact. The precisely engineered distance between the sealing rings creates a trap zone that acts as a further barrier for refrigerant molecules and ensures extra leak protection. Last but not least, the clear and unmistakable design avoids confusion with other fittings.

Why two seals? Refrigerant molecules are notoriously hard to contain because of their small size. Thus, the team developed the industry-first DualSeal™ design. The second sealing ring as well as the space between them act as a secondary sealing mechanism. The result is an HVACR press system providing a level of leak resistance unlike any other.

Streamline® is a brand and registered trademark of Mueller Streamline Co. / Mueller Industries. All rights reserved.





All advantages at a glance


- Only fitting with primary and secondary seals, or DualSeal™ technology
- Extensive range of fittings for modern refrigeration and cooling applications
- Available in sizes 1/4" – 1 3/8"
- Compatible with R410A, R32 and many other gases in use
- Comparable installation lengths to conventional solder fittings
- Only fitting with three press points for a more durable joint and structural integrity
- Special jaws and slings available
- Press machines with 32 kN can be used. Please contact our Technical Department for information on other machines.
- Clear marking, no confusion with other fittings
- Extra round pressing pattern
- High security against refrigerant leakage
- Various Revit formats and CADmep available
- Packaged in clean, clear resealable bags and convenient pack quantities




Contact us today: technik@sanha.com
+49 2054 925160

ACR Copper Press Fittings


32001A Elbow 90° 1M Press end | insertion end

	Article no.	Inch	Piece*
	132001A14	1/4	5
	132001A38	3/8	5
	132001A12	1/2	5
	132001A58	5/8	3
	132001A34	3/4	3
	132001A78	7/8	3
	132001A118	1 1/8	2
	132001A138	1 3/8	1


32002A Elbow 90° 2M Press end

	Article no.	Inch	Piece*
	132002A14	1/4	5
	132002A38	3/8	5
	132002A12	1/2	5
	132002A58	5/8	3
	132002A34	3/4	3
	132002A78	7/8	3
	132002A118	1 1/8	2
	132002A138	1 3/8	1


32041 Elbow 45° 2M Press end

	Article no.	Inch	Piece*
	13204114	1/4	5
	13204138	3/8	5
	13204112	1/2	5
	13204158	5/8	3
	13204134	3/4	3
	13204178	7/8	3
	132041118	1 1/8	2
	132041138	1 3/8	1


32130 Tee 3M Press end

	Article no.	Inch	Piece*
	13213038	3/8	5
	13213012	1/2	5
	13213058	5/8	2
	13213034	3/4	2
	13213078	7/8	2
	132130118	1 1/8	1
	132130138	1 3/8	1


32240 Coupling reducing Press end

	Article no.	Inch	Piece*
	1322403814	3/8 x 1/4	5
	1322401214	1/2 x 1/4	5
	1322401238	1/2 x 3/8	5
	1322405814	5/8 x 1/4	5
	1322405838	5/8 x 3/8	5
	1322405812	5/8 x 1/2	2
	1322403412	3/4 x 1/2	2
	1322403458	3/4 x 5/8	2
	1322407812	7/8 x 1/2	2
	1322407858	7/8 x 5/8	2
	1322407834	7/8 x 3/4	2
	13224011812	1 1/8 x 1/2	1
	13224011858	1 1/8 x 5/8	1
	13224011834	1 1/8 x 3/4	1
	13224011878	1 1/8 x 7/8	1
	132240138118	1 3/8 x 1 1/8	1


32270 Coupling Press end

	Article no.	Inch	Piece*
	13227014	1/4	5
	13227038	3/8	5
	13227012	1/2	5
	13227058	5/8	5
	13227034	3/4	2
	13227078	7/8	2
	132270118	1 1/8	2
	132270138	1 3/8	1


32301 Cap Press end

	Article no.	Inch	Piece*
	13230114	1/4	5
	13230138	3/8	5
	13230112	1/2	5
	13230158	5/8	2
	13230134	3/4	2
	13230178	7/8	2
	132301118	1 1/8	1
	132301138	1 3/8	1

32359 Flare Press end

	Article no.	Inch	Piece*
	13235914	1/4	5
	13235938	3/8	5
	13235912	1/2	5
	13235958	5/8	2
	13235934	3/4	2


32270S Extend No Stop Coupling Pressenden

	Article no.	Inch	Piece*
	132270S14	1/4	
	132270S38	3/8	
	132270S12	1/2	
	132270S58	5/8	
	132270S34	3/4	
	132270S78	7/8	
	132270S118	1 1/8	
132270S138	1 3/8		

4994 Insertion depth tool

	Art.-Nr.
	84994

8WN04949 PB2 Press jaw

	Article no.	Zoll
	8WN049491-50	1/4
	8WN049492-50	3/8
	8WN049493-50	1/2
	8WN049494-50	5/8
	8WN049495-50	3/4
	8WN049496-50	7/8

8WN04951 PSL Press sling

	Article no.	Zoll
	8WN049516-50	1 1/8
	8WN049517-50	1 3/8

8WN04361 ZB203 Intermediate jaw for PSL

	Article no.
	8WN043610-05

SET AC0203 BT Press machine, 5 Ah/230 V

	Article no.
	8WN04715480-05

* / Bag

System parameters

Product Description:

- For use in HVACR and VRF applications
- Available sizes ranging from 1/4" to 1 3/8" in outside diameter
- Hard-drawn copper pipe from 1/4" to 1 3/8" Soft (annealed) copper pipe up to 7/8"
- ACR press jaws and slings available. Press machine must have at least 32 kN.*
- UL certification

Material:

- Comprised of a mechanical press copper fitting (CU-DHP / CW0024A with min. 99.9% pure copper for the body)
- Engineered HNBR sealing rings

Operating Parameters:

- **Continuous Operating Pressure:** max. 48 bar
- **Operating temperature:** -40 – 120 °C

Approvals & Certifications:

- **ISO 5149-2** 5.3.2.2.3 Strength Pressure Test
- **ISO 14903** Maximum Helium Leak Rate of 28 g per Year – 7.4 Tightness Test – 7.6 Pressure Temperature Vibration Tests (PTV) – 7.8 Freezing Test

Approved Applications:

- **Air Conditioning**
- **Heat Pump**
- **VRF and VRV**
- **Non-Potable Water**
- **Ethylene Glycol**
- **other applications on demand**

Please contact us for other applications or details.

Leak Tightness:

- Helium $\leq 7.5 \times 10^{-7}$ Pa · m³/s at 20°C and 10 bar

Approved Refrigerants**:

R-32, R-125, R-134a, R-290, 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-600A, R-1234yf, R-1234ze

Approved Oils:

Mineral Oil, POE, PVE, PAO, PAG, and AB

* Please contact our Technical Support for more information on press machines at +49 2054 925 170 | info@sanha.com

** Please consult the latest version of Regulation (EU) No 517/2014 of the European Parliament and of the Council on fluorinated greenhouse gases as well as your respective national legislation regarding allowed refrigerants.

Pipe Compatibility Table

Fitting Size (Inch)	Pipe size (mm)	Insertion Depth (inch)	Normal Wall Thickness (mm) – EN12735-1, AS/NZS 1571, ASTM B280, ASTM B88											
			0.64	0.71	0.76	0.80 0.81	0.89 0.90 0.91	1.00 1.02	1.07	1.14	1.22	1.24 1.25 1.27	1.40	1.63 1.65
1/4	6.35	1	■	●■	●■	●■	●■							
3/8	9.35	1 1/16			●■	●■	●■	●■						
1/2	12.70	1 3/16				●■	●■	●■			■	●■		
5/8	15.88	1 5/16				●■	●■	●■		●	■	●■		
3/4	19.05	1 3/8				●■	●■	●■	●■	●■	●■	●■		
7/8	22.23	1 7/16				■	■	●■		●■	■	■	■	●■
1 1/8	28.58	1 1/2									■	■		■
1 3/8	34.93	1 5/8									■	■	■	■

● Annealed coil ■ Straight pipe Half hard / Hard

Installation

ACR Copper press fittings must be installed by trained professionals who use and are familiar with only the manufacturer's approved tools, jaws and slings.

Press process

The pressing is done with special pressing jaws or a sling (from 1 1/8"). The tools have a „double contour“ with which the fitting and pipe are pressed securely at three points (Tri-Lock™). The design creates a particularly round pressing pattern and thus a more uniform, secure pressing. In addition, ACR Copper press fittings are just as hard as solder fittings - not soft and not susceptible to damage from dropping or the like. Please note that according to the International Mechanical Code (IMC) and Uniform Mechanical Code (UMC), mechanical fittings may not be used on annealed copper tubing with an outside diameter greater than 7/8".

Before you start making your connection, you will need the following accessories: Streamline® ACR Copper Press Fitting or fittings, copper pipe, pipe cutter, deburrer, medium grit sandpaper, Streamline® ACR depth gauge or tape measure, matching press tool and ACR press jaw & loop, permanent marker.

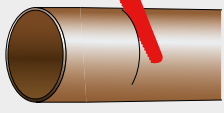
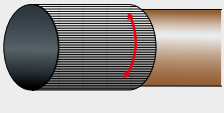
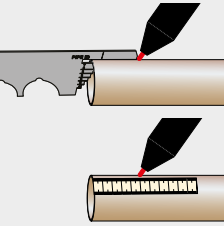
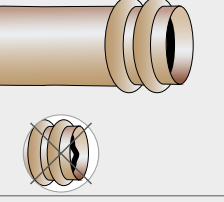
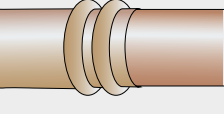
Tools, pressing jaws and slings

In general, pressing machines with a pressing force of 32 kN and a stroke of 40 mm can be used. It is important to follow the manufacturer's guidelines for the best use and required and regular maintenance of both the tool and the jaws and slings used in copper piping systems. Failure to do so may void the tool and jaw manufacturer's warranty and result in improper pressing of fittings.

Further installation and safety instructions

- | If you see scratches or damage (of any kind) on the pipe, cut the pipe behind the damage and start the installation steps.
- | Store the fittings in sealed zip lock bags to protect them from contamination.
- | Keep a minimum distance between two pressed fittings. You will find an overview of suitable pipes in our brochure.
- | Do not force the pipe ends together before making the connection. Connections should only be made on an unloaded pipe.
- | Complete the entire pressing cycle of the tool.
- | Do not press any ACR Copper press fitting more than once.
- | The pipe must be aligned before the fitting is pressed, not after.
- | Do not rotate the fittings after pressing.
- | Always wear eye and hand protection.

Preparation of the pressing process

1		Cut the pipe squarely with a pipe cutter or fine-tooth saw.
2		Deburr the inside and outside diameter of the pipe with a deburring tool. Make sure that the pipe ends are free of burrs or sharp edges.
3		Clean and smooth the pipe surface with sandpaper and a cleaning fleece. The pipe surface must be free of depressions, scratches, deformations and dirt. Mark the correct insertion depth of the fitting on the pipe with a Streamline® ACR insertion depth gauge. You can also use a tape measure and refer to the insertion depth chart on the back of the bag.
4		Remove the fitting from the sealed package and check that it is completely clean. Check both fittings to ensure that the sealing rings in each bead are present, clean and undamaged. Even small particles of dirt can jeopardise the tightness of the connection!
5		Turn the fitting slightly when pushing it onto the pipe. Push it on completely up to the marking or as far as it will go.

Examples of pressing jaws from 1/4" - 1 3/8"

Compatible with e.g:

- | Milwaukee® M18™ FORCE LOGIC™ 29220
- | Milwaukee® M18™ Long Throw 2773-20L
- | Ridgid® RP300 Serie 320-E, RP 330-B, RP 330-C oder RP 340, RP 350
- | Dewalt® DCE200M2
- | Hilti NPR 32-A
- | REMS 579011, 579010, 571014, 576011, 576010, 577010, 57211
- | Klauke® UAP Series
- | Novopress ECO 203, ACO 203, EFP 203, ACO 203XL
- | Rothenberger ROMAX 3000, 4000 & AC ECO



Pressing $d = 1/4 - 7/8''$ with pressing jaw

1		<p>Select the pressing jaw according to the fitting dimensions and ensure the contour surfaces are clean and smooth. Then insert the pressing jaw into the appropriate pressing machine by opening and fully closing the retaining bolt.</p>
2		<p>Position the pressing tool on the connection to be pressed by opening the pressing jaw and placing it perpendicularly to the pipe axis, ensuring that the bead of the fitting engages into the groove of the pressing jaw. Does the outer edge of the fitting align with the insertion depth marking? Hold the start button for approximately 3 seconds to initiate the pressing process. The pressing process will then run automatically.</p> <p>IN CASE OF DANGER, the pressing process can be interrupted by pressing the emergency stop button. After resetting the emergency stop situation, re-pressing or, if necessary, re-compression must be performed.</p>
3		<p>Check the connection using the insertion depth gauge.</p>

Testing and leak detection

After the installation of ACR Copper Press fittings, the system must be tested for leaks. This can be done by pressurising the system with dry nitrogen to at least 50 % of the maximum operating pressure of the system (up to 48 bar). If the pressure is maintained over a longer period (up to 24 hours), temperature influences may also have to be taken into account. Leaks in the system can be tested with a test gas and an electronic leak detector. All detected leaks must be removed and replaced. When replacing a fitting, installers should carefully inspect the surface of the pipe before to ensure that a longitudinal scratch or other surface defect does not lead to another leak. It is not permitted to solder the end of a leaking fitting. Always carry out a pressure test after a repair. The national, state and local regulations for installation and installation and testing must always be observed.

Pressing $d = 1 1/8 - 1 3/8''$ with press sling

1		<p>Check that the press sling has clean, smooth contour surfaces.</p>
2		<p>Place the press sling around the press fitting in such a way that the bead of the fitting engages into the groove of the press sling. The press sling must fit snugly against the fitting. The alignment marks on the sliding segments and the press sling shells must form a straight line. If this is not the case, the sliding segments must be adjusted.</p>
3		<p>Select the intermediate jaw according to the appropriate size. Then insert the pressing jaw into the suitable pressing machine by opening and fully closing the retaining bolt.</p>
4		<p>Rotate the press sling to the correct position for attaching the pressing tool. Open the pressing tool by pressing down on the jaw levers of the intermediate jaw, and position it on the press sling so that the claws of the intermediate jaw grip the bolts of the press sling. Then check if the outer edge of the fitting aligns with the insertion depth marking.</p>
5		<p>Hold the start button for approximately 3 seconds to initiate the pressing process. The pressing process will then run automatically.</p> <p>IN CASE OF DANGER, the pressing process can be interrupted by pressing the emergency stop button. After resetting the emergency stop situation, re-pressing or, if necessary, re-compression must be performed.</p>
6		<p>Check the connection using the insertion depth gauge.</p>



SANHA[®]
a perfect fit

responsible
sustainable
fair.

A partner you can trust

SANHA[®] offers convincing advantages

As a family-owned company since 1964, we have been following a simple principle for many decades: every pipe and every fitting must offer the customer added value in terms of safety and practical benefits at fair prices – sustainably, of course. This is our aim, our claim and at the same time the best recommendation from our satisfied customers.

As a specialist for piping systems, we offer a unique range of products for all common connection technologies and applications as a one-shop solution. Proven techniques are just as much part of our programme as well as practical new developments.

Your advantages:

Always a perfect fit Our customers are central to all our activities. As a family enterprise, SANHA[®] highly values an active close and long-term relationship with all our partners, from designers, installers, contractors and trading companies. With decades of experience in the market, we are committed to close support of our customers, with a highly experience local and international technical service.

Large product range SANHA[®] offers a wide range of materials, products and dimensions, multiple connection methods as well as significant expertise and experience – all from a one stop shop.

Nationwide technical service SANHA[®] is pleased to offer a wide range of services from installation training, online seminars, design advice, planning service, specifications and on-site support as and when required.

For what is yet to come With an active CSR and sustainability strategy, we help to protect our climate and environment, promote sports and culture and are always respectful with our employees and partners.

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Since 1964.

