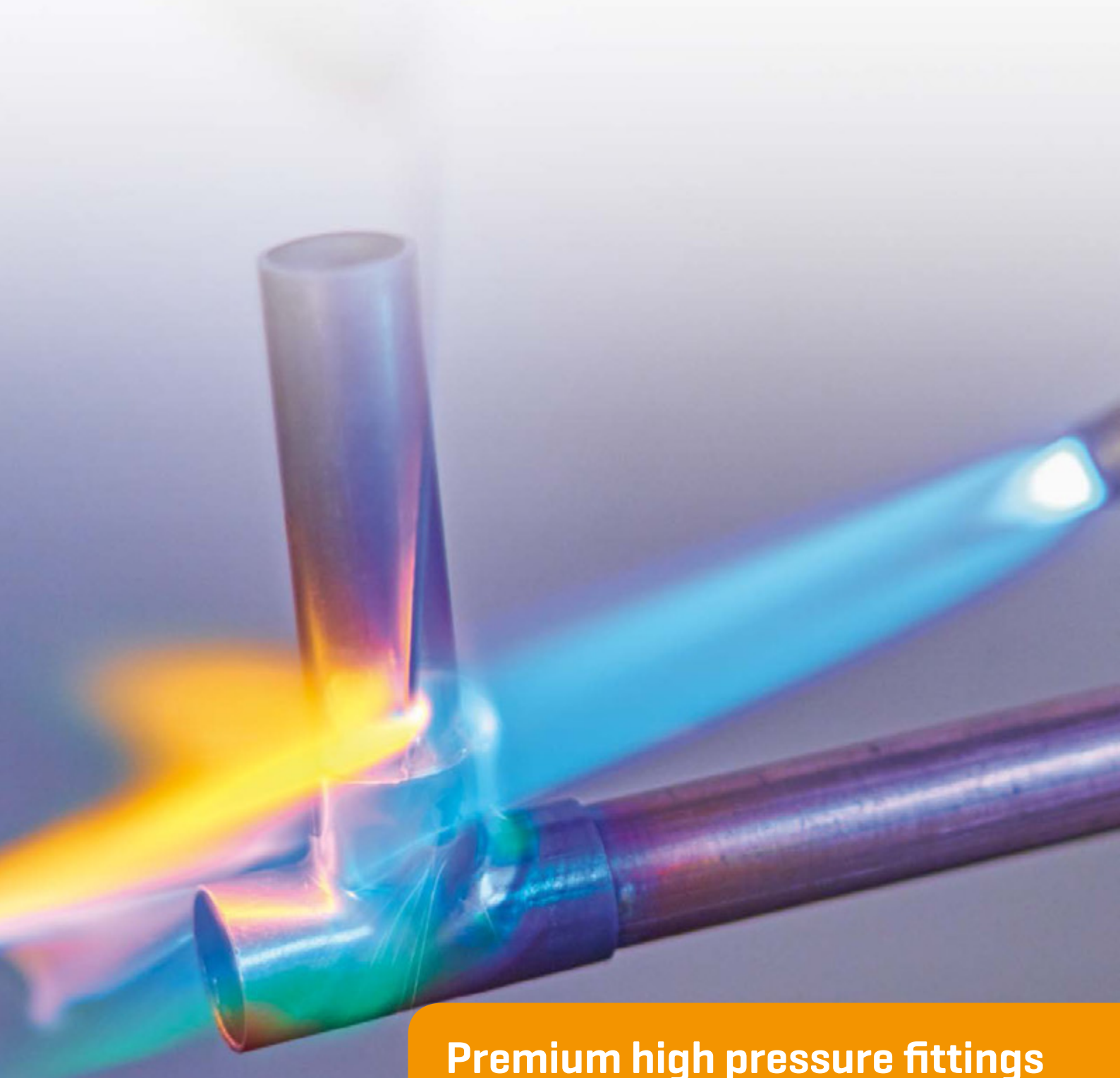


SANHA RefHP – Premium Piping System

SANHA
a perfect fit



**Premium high pressure fittings
for the refrigerant industry**

Withstand the highest pressure - High precision - Safe installation

Quality pays for itself - with the premium SANHA RefHP piping system

Many modern-day applications, from air conditioning to commercial and industrial refrigeration, employ more and more non-fluorinated refrigerants such as R744. However, the use of this medium, while highly efficient and environmentally friendly, leads to higher operating pressures of up to 130 bar at 150 °C.

For high-pressure applications like these, SANHA has diligently developed its series 29000 SANHA RefHP system. Easy to install in compliance with TÜV Material Data Sheet 567 and info sheet AD-2000 Merkblatt 6/2 and economically viable, the SANHA RefHP system provides the optimal solution for your needs when it comes to cooling applications

What is more: High operating pressures require the highest possible safety standards for humans and the environment alike. Our high pressure fittings ensure premium quality based on more than 50 years of experience in the field of solder fittings. In addition, production in our own factories sets standards and guarantees high precision when it comes to tolerances.



Your advantages at a glance

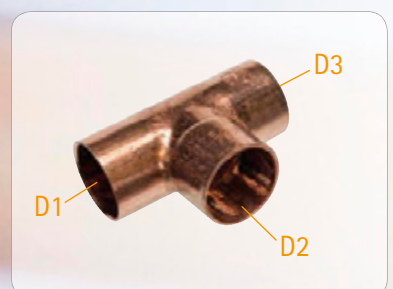
- Particularly well suited for **high-pressure** applications such as refrigeration, air conditioning, especially cooling devices on CO₂ with operating pressures up to 130 bar
- **Less weight** reduces installation cost, saves on material and results in easy handling
- **Fast and easy** to install due to proven, installer-friendly brazing technology
- **Easy to recognize** before and after installation: Pipes and fittings are marked so that all components can easily be identified. In addition, the material is slightly magnetic and distinguishable from copper with a neodyme magnet – a practical advantage!
- High-strength copper/iron alloy (material CuFe2P) for **easy and economical installation** with excellent processing properties without any toxic chemical elements
- **Corrosion resistant**
- Makes for an **energy-efficient** and environmentally suitable cooling system
- **UL 207 certification** in process
- Compliant for installations under the **Pressure Equipment Directive**
- Adaptor fittings **inch to metric** available


Facts & figures

The SANHA RefHP system is made from CuFe2P. This high-strength material is harder than traditional copper and as such can resist higher operating pressure even after hard soldering. At the same time, the material is insensitive to stress corrosion cracking and exhibits a high resistance to natural atmosphere.


Contrary to stainless steel, SANHA RefHP fittings and pipes are connected by capillary brazing and not welded. This makes them easy to install even without expensive specialist welders, needs no yearly training sessions and subsequently reduces installation time and cost noticeably.

The SANHA RefHP system is therefore particularly well suited for use in air conditioning, commercial or industrial refrigeration systems or any refrigeration system using CO₂ / R744 or similar media with operating pressures of up to 130 bar (for higher pressures or more information please contact our Technical Support at technik@sanha.com or +49 2054 925170).







29001a Bend 90° 1M	
Article Nr.	Dimension
129001A38	3/8
129001A12	1/2
129001A58	5/8
129001A34	3/4
129001A78	7/8
129001A118	1 1/8
129001A138	1 3/8
129001A158	1 5/8
129001A218	2 1/8




29002a Bend 90° 2M	
Article Nr.	Dimension
129002A38	3/8
129002A12	1/2
129002A58	5/8
129002A34	3/4
129002A78	7/8
129002A118	1 1/8
129002A138	1 3/8
129002A158	1 5/8
129002A218	2 1/8



29130 Tee	
Article Nr.	Dimension
12913038	3/8
12913012	1/2
12913058	5/8
12913034	3/4
12913078	7/8
129130118	1 1/8
129130138	1 3/8
129130158	1 5/8
129130218	2 1/8
129130123838	1/2 x 3/8 x 3/8
129130121238	1/2 x 1/2 x 3/8
129130123812	1/2 x 3/8 x 1/2
129130581212	5/8 x 1/2 x 1/2
129130581258	5/8 x 1/2 x 5/8
129130583858	5/8 x 3/8 x 5/8
129130585838	5/8 x 5/8 x 3/8
129130585812	5/8 x 5/8 x 1/2
129130341234	3/4 x 1/2 x 3/4
129130345834	3/4 x 5/8 x 3/4
129130343412	3/4 x 3/4 x 1/2
129130343458	3/4 x 3/4 x 5/8
129130781278	7/8 x 1/2 x 7/8
129130783478	7/8 x 3/4 x 7/8
129130785878	7/8 x 5/8 x 7/8
129130787812	7/8 x 7/8 x 1/2
129130787858	7/8 x 7/8 x 5/8
129130787834	7/8 x 7/8 x 3/4
12913011834118	1 1/8 x 3/4 x 1 1/8
1291301187812	1 1/8 x 7/8 x 1/2
12913011878118	1 1/8 x 7/8 x 1 1/8
12913011811834	1 1/8 x 1 1/8 x 3/4
12913011811878	1 1/8 x 1 1/8 x 7/8
12913013834138	1 3/8 x 3/4 x 1 3/8
12913013878138	1 3/8 x 7/8 x 1 3/8
129130138118138	1 3/8 x 1 1/8 x 1 3/8
12913013813834	1 3/8 x 1 3/8 x 3/4
12913013813878	1 3/8 x 1 3/8 x 7/8
129130138138118	1 3/8 x 1 3/8 x 1 1/8
129130158118158	1 5/8 x 1 1/8 x 1 5/8
129130158138158	1 5/8 x 1 3/8 x 1 5/8
12913015815834	1 5/8 x 1 5/8 x 3/4
12913015815878	1 5/8 x 1 5/8 x 7/8
129130158158118	1 5/8 x 1 5/8 x 1 1/8
129130158158138	1 5/8 x 1 5/8 x 1 3/8
129130218158218	2 1/8 x 1 5/8 x 2 1/8



29040 Bend 45° 1M	
Article Nr.	Dimension
12904038	3/8
12904012	1/2
12904058	5/8
12904034	3/4
12904078	7/8
129040118	1 1/8
129040138	1 3/8
129040158	1 5/8
129040218	2 1/8



29041 Bend 45° 2M	
Article Nr.	Dimension
12904138	3/8
12904112	1/2
12904158	5/8
12904134	3/4
12904178	7/8
129041118	1 1/8
129041138	1 3/8
129041158	1 5/8
129041218	2 1/8

Technical data

SANHA RefHP fittings for capillary brazing made of CuFe2P for piping made of copper materials are specially developed for energy-efficient cooling systems and have inch dimensions (diameter) according to ASTM B 280. Their dimensions and tolerances comply with product standards EN 1254-1 and EN 1254-5 and are appropriate for 'lap joints' according to EN 14276-1, Annex B in piping according to EN 378-2 and EN 14276-2. For connections with materials according to prEN 1412 (except numbers 000 and 400) we advise flux FH 10 (SANHA art.no. 84948) according to EN 1045.

Operating conditions for SANHA RefHP Fittings from CuFe2P

Outside pipe diameter	$d \leq 1\ 5/8''$
Operating pressure	130 bar
Operating temperature SANHA RefHP	-196 °C up to +150 °C

**29240
Reduction**



Article Nr.	Dimension
1292401238	1/2 x 3/8
1292405812	5/8 x 1/2
1292403458	3/4 x 5/8
1292407834	7/8 x 3/4
12924011812	1 1/8 x 1/2
12924011878	1 1/8 x 7/8
12924013812	1 3/8 x 1/2
12924013858	1 3/8 x 5/8
12924013834	1 3/8 x 3/4
12924013878	1 3/8 x 7/8
129240138118	1 3/8 x 1 1/8
12924015834	1 5/8 x 3/4
12924015878	1 5/8 x 7/8
129240158118	1 5/8 x 1 1/8
129240158138	1 5/8 x 1 3/8

**29243
Reduction**



Article Nr.	Dimension
1292431238	1/2a x 3/8
1292435838	5/8a x 3/8
1292435812	5/8a x 1/2
1292433438	3/4a x 3/8
1292433412	3/4a x 1/2
1292433458	3/4a x 5/8
1292437838	7/8a x 3/8
1292437812	7/8a x 1/2
1292437858	7/8a x 5/8
1292437834	7/8a x 3/4
12924311812	1 1/8a x 1/2
12924311858	1 1/8a x 5/8
12924311834	1 1/8a x 3/4
12924311878	1 1/8a x 7/8
129243138118	1 3/8a x 1 1/8
12924315878	1 5/8a x 7/8
129243158138	1 5/8a x 1 3/8
129243218118	2 1/8a x 1 1/8
129243218158	2 1/8a x 1 5/8

**29301
End cap**



Article Nr.	Dimension
12930138	3/8
12930112	1/2
12930158	5/8
12930134	3/4
12930178	7/8
129301118	1 1/8
129301138	1 3/8
129301158	1 5/8
129301218	2 1/8

**29270
Coupling**



Article Nr.	Dimension
12927038	3/8
12927012	1/2
12927058	5/8
12927034	3/4
12927078	7/8
129270118	1 1/8
129270138	1 3/8
129270158	1 5/8
129270218	2 1/8

**29243IM
Reduction**



Article Nr.	Dimension
129243IM1212	1/2 x 12
129243IM5815	5/8 x 15
129243IM3418	3/4 x 18
129243IM7822	7/8 x 22
129243IM11828	1 1/8 x 28
129243IM13835	1 3/8 x 35
129243IM15842	1 5/8 x 42



SANHA RefHP – Premium Piping System

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With safety on your side

SANHA offers genuine advantages

As a family enterprise for over 50 years we have been observing a simple principle: every pipe and every fitting must give the customer added value in terms of safety and practical use at a fair price. This is our mission and, at the same time, the best recommendation from our satisfied customers.

As a specialist for pipeline systems we offer a unique breadth and depth of products for all of the usual connection techniques and applications from a one stop shop. Tried and tested installation techniques are as much a part of our program as practice-oriented innovations.

And that's why: SANHA. Always a perfect fit.

Your advantages:

1 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 over fifty years of service, we are committed to close support of our customers, with a highly experience local and international technical service.

2 Large product range

SANHA offers a wide material, product and dimension range, multiple connection methods, with significant expertise and experience – all from a one stop shop. SANHA, the pipeline specialist.

3 Guaranteed safety

SANHA has all the important approvals, certifications and warranties, backed up by WRAS and BSI, ensuring you are always on the safe side.

4 Nationwide technical service

SANHA is pleased to offer a wide range of services from installation training, technical seminars, design advice, specifications and on site support as and when required.