

Technical Submittal

NiroTherm® [91000]



SANHA[®]
a perfect fit

Product Group Description

The piping system consists of NiroTherm® stainless steel press fittings according to EN 10352 mounted with an EPDM (ethylene propylene diene rubber) sealing ring and NiroTherm® and NiroTherm® F stainless steel system pipes according to EN 10312.

All NiroTherm® press fittings and pipes are made from stainless steel type 1.4301 / AISI 304 (for pressing components) and 1.4408 (for precision cast threaded stainless steel components). The Press fittings can be combined with NiroTherm® pipes made from stainless steel type 1.4301 / AISI 304 as well with NiroTherm® F pipes made of stainless steel type 1.4520 (AISI 304 / 430Ti).

Marking

Marking on the fitting: Manufacturer & dimension, Red dot which means not allowed for drinking water.

Marking on the NiroTherm® pipe: Red marking applicable standards and certifications, manufacturer, batch number, dimension and system name (NiroTherm®)

Marking on the NiroTherm® F pipe: Brown marking applicable standards and certifications, manufacturer, batch number, dimension and system name (NiroTherm® F)

Marking on the packaging: Logo manufacturer (SANHA®), Approval markings, quantity, system name (NiroTherm®), Product type (e.g. elbow)

Press fitting with Leak path feature.

During a leakage test, accidentally left-unpressed connections are quickly discovered. SANHA® warrants the following pressure ranges for the identification of unpressed connections:

Min. water pressure: 0.1 MPa / 100 kPa / 1 bar / 14.5 PSI

Max. water pressure: 0.65 MPa / 650kPa / 6,5 bar / 94,3 PSI

Min. air pressure: 150 hPa / 15 kPa / 150 mbar / 2,18 PSI

Max. air pressure: 0.3 MPa / 300 kPa / 3 bar / 43,5PSI

Sealing Elements

EPDM Black (ethylene propylene diene monomer)

Notice: Depending on the operation period and media temperature, the press fitting system's sealing materials may undergo thermal aging. The sealing material undergoes thermal aging more quickly at higher media temperatures. Nevertheless, the sealing ring have a design life of at least 50 years. This can also be substantiated with tests that confirm this.

When dealing with unique operating circumstances, such as industrial heat recovery systems, it is important to compare the press fitting system's specifications with those of the appliance manufacturer. Please get in touch with SANHA® if you have any questions about the proper material selection or would like to use the press fitting system outside of the specified application regions.

Dimensions

All dimensions from 15 to 168 mm including 64 mm available

Tools

NiroTherm® can be pressed up to 54 mm with SA, M and V original profile. Furthermore, dimensions larger than 54 mm can be pressed with SA & M original profile. For reason of guarantee, the installer always has to respect the instructions of the manufacturer regarding the use of press tools and press machines; Especially the instructions for the use and combination of tools and machines of different manufacturers. Finally, a common use of the press tools and press machines of different manufacturers is strictly forbidden without the authorization of the respective manufacturers.

The tool compatibility does not apply to special applications, such as fire extinguishing systems and industrial applications.

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Areas of applications

- | Closed heating circuits
- | Closed cooling circuits
- | Compressed air (residual oil content max. 25 mg/m³)
- | Rainwater
- | Glycol
- | Treated water
- | Technical gases

Any use of the system for media or application areas not listed above requires approval from SANHA®! The product information, available online or in print, contains comprehensive details regarding uses, limitations, and national regulations and guidelines.

Standard and approvals

Press fittings and pipes tested and in accordance with EN 10088 (material) and EN 10312. For use in heating systems VDI guideline 2035 and EN 12828. Approved for 15 mm – 168 mm.

Further certifications and approvals can be found at the website

Operating conditions

The press fitting system NiroTherm® can be used with the following operating conditions:

- | Water and aqueous solutions and technical gases (non-toxic, non-flammable up to 168 mm)
- | Operating pressure: 16 bar
- | Technical gases: 16 bar
- | Operating temperature with EPDM: -30°C - +120°C
- | Type of thread: Pipe thread: R/Rp thread according to EN 10226,
- | Fastening thread: G thread according to ISO 228

Press fitting material

NiroTherm® fittings are made of stainless steel (material number 1.4301 / AISI 304) according to the standard EN 10352.

Permitted pipes

For the installation of NiroTherm® fittings, the use of NiroTherm® and NiroTherm® F stainless steel pipes are recommended. Both NiroTherm® and NiroTherm F pipes are TIG-welded and are produced according to the standard EN 10312. (Table 1, series 1 and Table 2, series 2)

National standards and guidelines relevant to the application must be observed. If other dimensions are needed, please do not hesitate to contact us at technik@sanha.com

Certificates

These certificates can be found at www.sanha.com:

Country	Certifier
France	QB CSTB
Italy	RIA
Italy	TIFQ
Poland	ITB
Poland	PZH
Poland	CE Declaration
Slovakia	TSU
Global	ABS