

Technical Submittal

NiroSan® [9000]



SANHA[®]
a perfect fit

Product Group Description

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

All NiroSan® press fittings are made from the premium stainless steel type 1.4404 / AISI 316L (for pressing components) and 1.4408 (for precision cast threaded stainless steel components). The material 1.4404 contains at least 2.3 % molybdenum, yet less carbon than the conventional type 1.4401. For this reason material no 1.4404/316L is a superior material with higher corrosion resistance than standard stainless steels.

Please note that we also have the NiroSan (with EPDM) available in a silicon free version under the article group number: 6SF9...

Marking

Marking on the fitting: Manufacturer & dimension, approval marking (DVGW),

Marking on the pipe: Black marking information about standard and certification. Manufacturer, batch number, dimension and system name (NiroSan®)

Marking on the packaging: Logo manufacturer (SANHA®), Approval markings (DVGW,...) , quantity, system name (NiroSan®), 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

NiroSan® 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

- | Drinking water
- | Heating
- | Rainwater
- | Solar
- | Compressed air
- | Fire Extinguishing systems (DIN14462, wet)
- | Sprinklers (vdS CEA 4001, wet)
- | Cooling water
- | Ship building
- | Technical gases
- | Glycol

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 tested in accordance with DVGW Worksheet W 534 with DVGW test mark. Approved for d15 – 168.0 mm. Press fittings suitable for stainless steel pipes in accordance with EN 10312 and DVGW Worksheet GW 392. Further certifications and approvals can be found at the website

Operating conditions

The press fitting system NiroSan® 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

NiroSan® fittings are made of stainless steel (material number 316L/1.4404) with a minimum molybdenum content of 2.3 % according to the standard EN 10352.

Permitted pipes

For the installation of NiroSan® fittings the use of stainless steel pipes NiroSan®, NiroSan® ECO and NiroSan® F stainless steel pipes are recommended. The 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	Country	Certifier
Austria	ÖVGW	Italy	RINA
Austria	Land Wien	Italy	TIFQ
Czech Republic	SZU	The Netherlands	KIWA-ATA
Denmark	ETA	Norway	SINTEF
Denmark	GDV	Poland	ITB
France	CSTB	Poland	PZH
France	ACS	Poland	CE Declaration
France	QB CSTB	Slovakia	TSU
Germany	DNV GL	Switzerland	SVGW
Germany	DVGW	The UK	Kitemark
Germany	TUV	The UK	WRAS
Germany	VdS	Global	ABS
Hungary	EMI-NME	Global	FM Global