

TYPE APPROVAL CERTIFICATE

Certificate No:
TAP00001CG
Revision No:
1

This is to certify:

That the Press fittings

with type designation(s)
Sanha Press 6000, 8000, 10000, 11000, 12000, 13000

Issued to
SANHA GmbH & Co. KG
Essen, Germany

is found to comply with
DNV rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV class programme DNV-CP-0185 – Type approval – Mechanical joints

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Temperature range: 200 °C
Max. working press.: 16 bar
Sizes: DN10 up to DN100

Issued at **Hamburg** on **2023-06-14**

for **DNV**

This Certificate is valid until **2028-06-13**.

DNV local unit: **Essen**

Approval Engineer: **Christian Kaemmer**

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Sven Klinger
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Shaped fittings sealed with a synthetic rubber O-ring to be assembled by pressing tool. Consisting of a press fitting (basic component) and a sealing element (O-ring). The constant compression produces a positive, nondetachable mechanical joint. The fittings are to be assembled by a pressing tool.

	Dimension / Diameter	Nominal Pressure	Metallic Material	Gasket - Material
SANHA-Press 6000	12 mm – 108 mm	12 mm – 54 mm: PN16 64 mm – 108 mm: PN10	CW024A / Cu-DHP	EPDM
PURAPRESS 8000	12 mm – 108 mm	12 mm – 54 mm: PN16 64 mm – 108 mm: PN10	CW724R / CuZn21Si3P	EPDM
SANHA-Press Gas 10000	12 mm – 108 mm	12 mm – 54 mm: PN16 64 mm – 108 mm: PN10	CW024A / Cu-DHP	HNBR
SANHA-Press Gas 11000	12 mm – 108 mm	12 mm – 54 mm: PN16 64 mm – 108 mm: PN10	CW724R / CuZn21Si3P; CC499K/ CuSn5ZnPb2-C	HNBR
SANHA-Press Solar 12000	12 mm – 108 mm	12 mm – 54 mm: PN16 64 mm – 108 mm: PN10	CW024A / Cu-DHP	FKM
SANHA-Press Solar 13000	12 mm – 108 mm	12 mm – 54 mm: PN16 64 mm – 108 mm: PN10	CW724R / CuZn21Si3P; CC499K/ CuSn5ZnPb2-C	FKM

Material

Press fitting: Press copper, red brass or silicone bronze.

Pipes: CW024A (Cu-DHP) compliant with EN 1057 / Copper and Copper alloys

Sealing: EPDM, HNBR, FKM

Pressing tool: ECO 3 / ECO 301 / ACO 202 XL- and other tools:
 The pressing tools up to and including 28 mm must have a minimum pressing force of 18 kN (kilo-Newtons) The pressing tools from 35 mm up to and including 108 mm must have a minimum pressing force of 30 kN. SANHA pressing jaws/slings with original V, M, SA profile, with linear pressing.
 For metallic fittings above 54 mm, slings used for the press connections must use the original press profile SA or M.

Temperature range Sealing materials	EPDM	HNBR	FKM
	-30°C / +120°C	-20°C / +70°C	-20°C / +200°C

Application/ Limitation

The SANHA-Press system is type approved for pipe-class III-piping systems for non-essential systems:

- Domestic warm water heating systems
- Cold water systems
- Compressed Service Air, (technical & industrial gases for SANHA-Press Gas 10000 & 11000)
- Potable water
- Sanitary drains

Type of mechanical joint: Compression coupling – press type - acc. to DNV-Rules “Ships” Pt. 4, Ch.6, Sec. 9 – Table 8, 9 & 10.

At elevated temperatures the maximum working pressure is to be reduced with pressure reduction factors acc. to DNV-Class programme CP 0185, “Mechanical Joints” Section 2 Table 1.

Type Approval documentation

TAP00001CG rev 1:

Type Approval Assessment Report Essen dated 2023-06-13
Burst Pressure Test report Belgium
Type Approval Assessment Reports Belgium & Essen
IMA Test Report K089/17 dated 2018-04-18
Type Approval Assessment Report dated 2017-10-04
Data-Sheet SANHA-Press / PURAPRESS
Techn. Product and Installation Information Catalogue

Tests carried out

Burst-test, Vibration-test & Pressure Pulsation-test, Vacuum-test, Pull-out-test,

Production places

- SANHA Fittings BVBA, Industrielaan 7, 1740 Ternat, Belgium
- SANHA Polska Sp.z o.o., Poznanska 49, 59-220 Legnica, Poland

Marking of product

- Manufacturer`s Mark
- Type
- Nominal Diameter

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment to verify that the conditions for the Type Approval are complied with. Refer to the Class Programme DNV-CP-0338, Sec.4.

To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>