DNV·GL

Certificate No:
TAP00001CG

TYPE APPROVAL CERTIFICATE

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 GL rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV GL class programme DNVGL-CP-0185 – Type approval – Mechanical joints

Application :

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

Temperature range:	**200 °C, see page 2**
Max. working press.:	**16 bar**
Sizes:	**DN10 up to DN100**

Issued at **Hamburg** on **2018-06-05**

This Certificate is valid until **2023-06-04**.
DNV GL local station: **Essen**

Approval Engineer: **Christian Kaemmer**

for **DNV GL**
Digitally Signed By: Drews, Olaf
Location: DNV GL Hamburg, Germany
Signing Date: 07.06.2018

Olaf Drews
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.

Product description

Shaped fittings sealed with a synthetic rubber O-ring to be assembled by 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

TECHNICAL DATA

Material of the fittings: Press copper, red brass or silicone bronze.

Pipes: CW024A (Cu-DHP) compliant with EN 1057

Sealing: EPDM, HNBR, FKM

Pressing tool: ECO 3 / ECO 301 / ACO 202 XL, tools acc. to manufacturers specifications.

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

Application/ Limitations

The SANHA-Press system is type approved for non-main class applications:

- Domestic warm water heating systems
- Cold water systems
- Compressed Service Air, non essential
- Potable water
- Sanitary drains
- Non essential systems

Further non-main-class applications may be accepted and have to be authorized by the manufacturer.
Main-class-applications are listed under DNVGL-Rules Part 4 – Chapter 6 Section 1 Table 2.

Type Approval documentation

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 certificate periodical assessments shall be carried out at production places by DNVGL surveyor. The objective of the periodical assessment is to verify that the design and production conditions for the type approval have not been altered.

Main scope of the assessment:
- verification of the production and quality control system
- review of quality control documentation of recent deliveries
- review of drawings in production to verify any design changes which may have an impact on data specified in the type approval certificate, performance and range of application
- verification of the product marking
- witness of burst testing on selected sizes from production.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.