

# DET NORSKE VERITAS

# TYPE APPROVAL CERTIFICATE

#### **CERTIFICATE NO. P-13212**

This Certificate consists of 3 pages

This is to certify that the

Pipe Couplings, Bite and Compression Type

with type designation(s)

Cutting ring couplings acc. to ISO 8434-1 (DIN 2353)

Manufactured by

# CONEXA Präzisionsarmaturen GmbH

Hann. Münden, Germany

is found to comply with Det Norske Veritas' Rules for Classification of Ships Det Norske Veritas' Standards for Certification 2.9 No. 5-792.20

Application

May be used in the following systems: lubrication, water based hydraulics, fresh water, compressed air, sanitary, steam and condensate

Temperature range:	-40°C to 120°C (see certificate)
Max. working press.:	630 bar (see certificate)
Sizes:	Tube OD 6 to 42 mm

Place and date

Høvik, 2009-08/18 for DET NORSKE WERETAS

> Helge Drange Head of Section

Local Office **DNV** Essen

This Certificate is valid until 2013-12-31

Carl Ulrik Simons

TEL: (+47) 67 57 99 00

Notice: 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.

If any person sulfers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, employees, agents and any other acting on behalf of Det Norske Veritas.

DET NORSKE VERITAS AS Form No.: 20.90a Issue: January 98



Cert. No.: P-13212 File No.: 792.21

Job No.: 262.1-003983-1

## **Product description**

Cutting ring type pipe couplings, light series (L) and heavy series (S), acc. to DIN 2353/ISO 8434.

Materials: Carbon steel St 37.4 acc. to DIN 2391, stainless steel 1.4571 acc. to DIN 17458 and EN10088

### Application/Limitation

Sizes and pressure ratings:

Series	Tube OD (mm)	Nominal pressure (bar)
L	6-18	315
	22-42	160
S	6-14	630
	16-30	400
	38	315

The max. working pressures are to be reduced according to manufacturers instructions in systems with high-pressure pulsation and/or vibrations.

Temperature range for sealing material:

Material	Temperature range
NBR	-35°C to 100°C
FKM	-25°C to 200°C
EPDM	-40°C to 150°C

The approval is only valid when the couplings are assembled with tubing of correct temper and tolerances as recommended by the manufacturer. These couplings are not to be used on tubes in cold fabricated (hard temper) conditions.

Couplings made of carbon steel are not to be used at temperatures below -10°C, unless the material is normalised.

The wall thickness and material of the tubes are to be in accordance with the current Rules of Det Norske Veritas.

No product certificate will be required.

וצעט

DET NORSKE VERITAS AS VERITASVEIEN 1, 1322 HØVIK, NORWAY TEL: (+47) 67 57 99 00 FAX: (+47) 67 57 99 11 Form No.: 20.90a Issue: January 98 Page 2 of 3



Cert. No.: P-13212 File No.: 792.21

Job No.: 262.1-003983-1

### Type Approval documentation

IMA Dresden Test Reports S022.1/08 and S022.2/08

Manufacturer's catalogue

Drawings for T-form with description: S-XT 06.. – S-XT 42.. dated 16.06.09 Drawings for G-form with description: S-XG 06.. – S-XG 42.. dated 16.10.07 Drawings for K-form with description: C-XK 06.. – C-XK 42.. dated 10.10.07 Drawings for W-form with description: S-XW 06.. – S-XW 42.. dated 11.06.09

#### Tests carried out

Leakage test, repeated assembly test, burst pressure test, pull-out test, impulse and vibration test, vacuum test.

#### Marking of product

For traceability to this type approval, each coupling is at least to be marked with:

- Manufacturer's name
- Type designation
- All technical data necessary for the application

#### Certificate retention survey

For retention of the Type Approval, a DNV Surveyor shall perform a survey - before the expiry date of this certificate - to verify that the conditions for the type approval are complied with. The Surveyor shall perform the following tasks on samples selected at random from stock or from the running production:

- · Verify that the dimensions of the couplings comply with Type Approved documentation.
- · Verify that the material composition complies with Type Approved documentation.
- · Witness burst testing.

**END OF CERTIFICATE** 

CUSI

DET NORSKE VERITAS AS · VERITASVEIEN 1, 1322 HØVIK, NORWAY · TEL: (+47) 67 57 99 00 · FAX: (+47) 67 57 99 11

Form No.: 20.90a | Issue: January 98 Page 3 of 3