



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. P-13527

This is to certify that the
Pipe Couplings, Flared or Welded Nipple Type

with type designation(s)
37° flare couplings acc. to ISO8434-2 and SAE J514. JIC fittings. With or without O-ring.


Manufactured by
Volz Gruppe GmbH
DEILINGEN, Germany

is found to comply with
Det Norske Veritas' Rules for Classification of Ships
Det Norske Veritas' Standards for Certification 2.9 No. 5-791.70

Application
Sanitary, Fresh water, Sea water, Hydraulic systems, Compressed air, Steam and condensate, Fuel and lubrication oil, High pressure mist extinguishing systems, sprinkler and deluge fire extinguishing systems, shield gas, Nitrogen and CO2.

Temperature range:	See cert.
Max. working press.:	250 to 600 bar (See cert.)
Sizes:	6 to 38 mm


Høvik, 2010-07-01
for Det Norske Veritas AS


Marianne Spøren
Head of Section



DNV local office:
Essen

This Certificate is valid until
2014-06-30


Øyvind Skåra
Surveyor

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 suffers 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, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Certificate No.: P-13527
File No.: 792.22
Job Id.: 262.1-007489-3

Product description

37° flared tube (JIC) couplings made of stainless steel according to manufacturer's catalogue 01/2006

Type: ISO 8434-2, SAE J514

Material:

Fitting bodies – Stainless steel: ANSI 316 TI, 1.4571

Elastomeric seals - FPM, PTFE

Application/Limitation

Maximum working pressures:

Tube OD [mm]	Without O-ring [bar]	With O-ring [bar]
6	600	600
8	600	600
10	600	600
12	490	490
16	350	490
20	350	490
25	250	430
30	250	430
38	250	430

Temperature range:

Metallic sealing: -60°C to 400°C

FPM: -25°C to 200°C

PTFE: -60°C to 250°C

For other purposes than listed, an approval has to be obtained in each case.

The working pressure is equal to the max. nominal static pressure for working temperatures below 100°C. For higher temperature approval has to be considered in each case.

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

The approval is only valid when the couplings are assembled with tubing of correct temper and tolerances in accordance with ASTM A269 or EN 10305-1

These couplings should not be used on tubes in cold fabricated (hard temper) conditions.

Type Approval documentation

Manufacturer's catalogue

Burst and tightness test reports dated 2009-12-30

Pressure impulse and vibration test reports dated 2009-07-22, 2009-10-24 and 2010-01-04

Pull-out test report dated 2010-01-05

Repeated assembly test reports dated 2009-12-30

Vacuum test reports dated 2009-12-01

Fire endurance test reports dated 2010-01-(25-26)

Tests carried out

Pressure pulsation test, Vibration test, Leakage test, Burst test, Fire test.



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Marking of product

For traceability to this type approval the products are to be marked with:

- Manufacturer's name of trademark
- Type designation

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

