DNV·GL

Certificate No:
TAP00000TD

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Pipe Couplings with Bolts Not Covered by a National Standard

with type designation(s)
Parflange F37 flange connection

Issued to
Parker Hannifin Manufacturing Germany GmbH & Co KG
BIELEFELD, 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 :

The pipe couplings are type approved for application in pipe class I, II and III-piping systems, under consideration of the DNV GL Ship Rules Pt. 4, Ch. 6, Sec. 1 and 9.
Products approved by this certificate are accepted for installation on all vessels classed by DNV GL

Temperature range:	**-40°C up to 120°C**
Max. working press.:	**Up to 420 bar (refer to certifcate)**
Sizes:	**1/2" up to 8" (refer to certifcate)**

Issued at **Hamburg** on **2017-01-27**
This Certificate is valid until **2017-09-30**.
DNV GL local station: **Magdeburg**

Approval Engineer: **Martin Zeller**

for **DNV GL**

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.

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Job Id: **262.1-022086-1**
Certificate No: **TAP00000TD**

Product description

Parflange® flanges
Design: 37° Flared Connection.
Flared part is a tube insert, bolted according to SAE or DIN

Materials:
Forged steel: C22.3 and C22.8/ASTM A 105/S355, C45 and equivalent or higher quality
Hot rolled steel plate: S355/C45 and equivalent or higher quality
Stainless steel: forged or hot rolled AISI 316, 316L or 316TI and equivalent or higher quality
Bolt strength: Steel Class 8.8 or 10.9, Stainless steel A2 or A4, Class of strength: 80

Manufactured by

This certificate is also valid for products manufactured at:

Parker Hannifin Sp.z.o.o.
Ul. E. Kwiatkowskiego 16
PL- 55011 Siechnice
Poland

Parker Hannifin Fluid connectors (Qingdao) Co. Ltd.
East of Huojo branch road,
South of Xinye road, Qingdao National high-tech.
Industrial development zone
Qingdao
China

Responsibility

Parker Hannifin Manufacturing Germany GmbH & Co., KG
Tube Fittings Division Europe
Bielefeld, GERMANY

Application/Limitation

The couplings are not to be used in systems having an oxygen content by volume of more than 25%.

SAE 1000 PSI SYSTEM 37deg Flaring

Type	Size	Max Working Pressure, bar *
F37-108	½"	70
F37-112	¾"	70
F37-116	1"	70
F37-120	1 ¼"	70
F37-124	1 ½"	70
F37-132	2"	70
F37-140	2 ½"	70
F37-148	3"	70
F37-156	3 ½"	70
F37-164	4"	70
F37-180	5"	50
F37-196	6"	50
F37-1128	8"	50

SAE 3000 PSI SYSTEM 37deg Flaring

Type	Size	Max Working Pressure, bar *

F37-308	½″	350
F37-312	¾″	350
F37-316	1″	350
F37-320	1 ¼″	280
F37-324	1 ½″	280
F37-332	2″	280
F37-340	2 ½″	210
F37-348	3″	210

SAE 6000 PSI SYSTEM 37deg Flaring

Type	Size	Max Working Pressure, bar *
F37-608	½″	420
F37612	¾″	420
F37-616	1″	420
F37-620	1 ¼″	420
F37-624	1 ½″	420
F37-632	2″	420

DIN ISO 6164 SYSTEM 37deg Flaring

Type	Size	Max Working Pressure, bar *
F37-432	2″	400
F37-440	2 ½″	400
F37-448	3″	400

*: Max working pressure depend on pipe material and thickness.
Pressure reductions depending on design temperature are to be observed according to performance data of catalogue 4162. Tube preparation and final installation must be conducted by personel which is trained and currently certified by Parker.
All assemblies must be made with machines that are approved by Parker

Temperature range:
- 40°C to + 120°C (Other temperature depending on seal and coupling material)

The flange necks must be of approximately the same diameters as the pipes for which they are used.

No product certificate is otherwise required.

Type Approval documentation

Tests carried out

Repeated Assembly Test, Leakage Test, Hydraulic Proof Pressure Test, Hydraulic Burst Pressure Test, Hydraulic Impulse Test, Hydraulic Impulse and Vibration Test, Pressure pulsation, Fire resistance tests, Vibration test.

Marking of product

For traceability to this type approval, each flange is to be marked with:
- Manufacturer's name or trade mark
- Size and Type designation

Periodical assessment

For retention of the type approval certificate periodical assessments shall be carried out at production places.

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

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.

END OF CERTIFICATE