DNV·GL

Certificate No:
TAP000028Y

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Flexible Hoses of Non-Metallic Material with Permanently Fitted Couplings

with type designation(s)
PARKER 811, PARKER 881

Issued to
Parker Hannifin India Pvt. Ltd.
Nagpur, maharashtra, India

is found to comply with
DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems
DNVGL-OS-D101 – Marine and machinery systems and equipment, Edition January 2018
DNV GL class programme DNVGL-CP-0183 – Type approval – Flexible hoses

Application :

Product(s) approved by this certificate is/are accepted for installation on vessels classed by DNV GL.

Type:	Temperature range:	Max. working press.:	Sizes:
PARKER 811	**-40°C to 100°C**	**7 bar to 21 bar (see page 2)**	**3/4", 1", 1-1/4", 1-1/2" and 2"**
PARKER 881	**-40°C to 125°C**	**7 bar to 21 bar (see page 2)**	**3/4", 1", 1-1/4", 1-1/2" and 2"**

Issued at **Høvik** on **2020-12-14**
This Certificate is valid until **2025-12-13**.
DNV GL local station: **Mumbai NB & CMC**

for **DNV GL**

Approval Engineer: **Maheshraja Venkatesan**

Zeinab Sharifi
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

Two types of flexible rubber hoses with permanently attached couplings:

1. PARKER 811 constructed according to SAE J517 type 100R4: -
   - Tube : synthetic rubber;
   - Reinforcement : multiple layers of fiber spiral and one helical wire;
   - Cover : synthetic rubber;
   - End fittings : Series 43;
   - Fire sleeve : Parker FS-F

2. PARKER 881 constructed according to SAE J517 type 100R4: -
   - Tube : synthetic rubber;
   - Reinforcement : multiple layers of fiber spiral and one helical wire;
   - Cover : synthetic rubber;
   - End fittings : Series 43
   - Fire sleeve : Parker FS-F

Material of construction for couplings: Carbon steel material grade 11SMnPb30 or 11SMnPb37 (SAE1215/ EN-1A/ EN-1AL)

Manufacturing locations:
- Hoses : Parker Hannifin India Pvt. Ltd., Nagpur, India
- End fittings : Parker Hannifin India Pvt. Limited, Hyderabad, India

Assembling location: -
Parker Hannifin India Pvt. Ltd.,
Bazargaon, Nagpur – 440 023, Maharashtra, India

Application/Limitation

This certificate is valid for the specific assembly of hose and coupling type as specified, assembled and delivered by the holder (named as manufacturer) of this certificate.

Hose assemblies covered by this certificate are approved to be used for systems conveying petroleum based hydraulic fluids and lubricating oil where no pressure impulse and/or high level of vibrations are expected.

Hose assemblies shall not be allowed to be used in systems related to DNV GL classed drilling units (applications covered by DNVGL-OS-E101).

Pressure ratings:

Size (Inside diameter)			PARKER 811			PARKER 881		
DN	dash	inch	Hose Part no.	Maximum working pressure (bar)	Minimum bending radius (mm)	Hose Part no.	Maximum working pressure (bar)	Minimum bending radius (mm)
19	-12	¾	811-12	21	64	881-12	21	127
25	-16	1	811-16	17	76	881-16	17	152
31	-20	1¼	811-20	14	102	881-20	14	203
38	-24	1½	811-24	10	127	881-24	10	254
51	-32	2	811-32	7	162	881-32	7	305

Flexible hoses are only to be used in short lengths where it is necessary due to vibrations or flexible mounting of the machinery. The hoses shall not replace/be used where permanent piping is possible/ required.

The hose assemblies must only be fitted in places where they are always accessible. Flexible hoses of these types are not to be used on boiler fronts.

The outer end of the pipe coupling (performing the connection to the fixed piping) is not covered by this certificate and shall follow the below requirements:

- Flanged ends shall be according to a recognized standard
- Slip-on threaded joints having pipe threads where pressure-tight joints are made on the threads with parallel or tapered threads, shall comply with requirements of a recognized standard. Limitations stated in DNVGL-RU-SHIP Pt.4 Ch.6 Sec.9 [5.2.6] to be followed.
- If these outer ends are going to be part of a mechanical joint as covered by Table 10 DNVGL-RU-SHIP Pt.4 Ch.6 Sec.9, then they shall be separately type approved.

Production testing

All hose assemblies delivered under the DNV GL type approval scheme shall be hydrostatically tested to a pressure of 1.5 times the maximum working pressure and shall be delivered with the pressure test report with reference to this type approval certificate.

Type Approval documentation

Tests carried out

Dimensional check, leakage, burst pressure, proof pressure, oil resistance, ozone resistance, cold flexibility, adhesion and fire testing

Marking of product

For traceability to this Type Approval, the products are at least to be marked with:

- hose manufacturer’s name or trademark;
- date of manufacture (month/year);
- designation type reference;
- nominal diameter;
- pressure rating;
- temperature rating.

Periodical assessment

For retention of the Type Approval, a DNV GL Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNVGL-CP-0338.