

TYPE APPROVAL CERTIFICATE

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No. **13 792 - 99 HH**

Company **Parker Hannifin GmbH & Co. KG
Fluid Connectors Group Europe, Hose Products Division Europe
Freiherr-vom-Stein-Straße 1
35325 Mücke, GERMANY**

Product Description **FLAME RESISTANT HYDRAULIC HOSES**

Type **PARKER 221FR - No-SKIVE HOSES
MARINE FUEL & ENGINE HOSES**

Environmental Category **• None**

Technical Data /
Range of Application

TECHNICAL DATA	
Inner tube	synthetic rubber
Reinforcement	one braid of steel wire
Cover	synthetic rubber
Crimped fittings	26 series
Size range [O.D.]	-5, -6, -8, -10, -12, -16
Pressure range [bar]	-----35-----
Temperature range	-20 [°C] to 100 [°C] [depending on media used]
Exception air	max. 70 [°C]
and water-glycol and	max. 85 [°C]
water-oil emulsion	

RANGE OF APPLICATION (continued on page 2)

The a.m. hose type may be used according to their suitability in:

- Fuel oil, lubricating oil and hydraulic oil systems
- Bilge and ballast systems
- Fresh and seawater cooling systems

Test Standard **• Regulations for the Performance of Type Tests, Part 6 - Test Requirements for Mechanical Components and Equipment, Edition 1998.**

Documents **• Test reports
• Data sheets
• Catalogue
• DNVGL-Ref.-Nr.: 14-040756**

Remarks **• RANGE OF APPLICATIONS, PRODUCTION PLACES.and
REMARKS / LIMITATIONS see page 2**

Valid until **2019-03-08**

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File No. **II.D.02**

Hamburg, 2014-08-20

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RANGE OF APPLICATIONS

- Compressed air systems*
- Secondary piping systems

* Pin prick cover is required for air or gas applications above 17 [bar].

PRODUCTION PLACES

USA: Parker Hannifin Corporation
1501 Hayes Drive
Manhattan, Kansas

Fittings: Parker Hannifin Manufacturing Germany GmbH & Co. KG
FLUID CONNECTORS GROUP
HOSE PRODUCTS DIVISION
Freiherr-vom-Stein-Strasse
35325 Mücke
Germany

REMARKS / LIMITATIONS

- The current Rules of DNVGL Chapter 2-Machinery installation, Section 11 are to be observed.
- The use of the hoses outside the range of application is subject to special consideration by DNVGL in each individual case.
- The combination of high temperatures and high pressure reduce the hose life.
- The use of hose assemblies is not permitted in permanently pressurized starting air lines of diesel engines.
- Type approved hoses may be assembled with fittings by recognized manufacturers* of hose assemblies only.

* See VI - Additional Rules and Guidelines, Part 3 - Machinery Installations, Chapter 9 - Guidelines for the Recognition of Manufacturers of Hose Assemblies and Compensators.

The selection of the hoses for the corresponding application and the proper assembly are to be in accordance with the instructions of the manufacturer

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DNV GL


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