



CERTIFICATE NUMBER	19-GE1917710-PDA
EFFECTIVE DATE	15-Oct-2019
EXPIRY DATE	14-Oct-2024
ABS TECHNICAL OFFICE	Genoa Engineering Department

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

PARKER HANNIFIN MANUFACTURING SRL

located at

**HOSE PRODUCTS DIVISION EUROPE, VIA G.B. PIRELLI, 6,
VENIANO (CO), Italy, 22070**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Hose, Rubber Flexible Hose

Model 811 + Fire Sleeve, 811S + Fire Sleeve

This Product Design Assessment (PDA) Certificate remains valid until 14/Oct/2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Cristina Generale, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

PARKER HANNIFIN MANUFACTURING SRL

HOSE PRODUCTS DIVISION EUROPE

VIA G.B. PIRELLI, 6

VENIANO (CO)

Italy 22070

Telephone: +39 031936111

Fax: +39031936664

Email: info@parker.com

Web: www.parker.com

Tier: 3 - Type Approved, unit certification not required

Product: Hose, Rubber Flexible Hose

Model: 811 + Fire Sleeve, 811S + Fire Sleeve

Intended Service:

Petroleum and water-glycol based fluids, lubricating oils, air and water - hydraulic systems (suction and return line).

Description:

Oil resistant synthetic rubber hoses reinforced two textile braids and with a steel wire helix, covered with a synthetic rubber.

For details see Manufacturer's data sheets.

Rating:

From DN19 at 300 psi to DN76 at 62 psi

Temperature Range: -40°C up to +100°C with the following exceptions:

Air: Tmax +70°C, Water: Tmax +85°C

For additional details, refer to the attached document.

Service Restriction:

- 1) Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
- 2) Hoses are to be completed with factory assembled end fittings or factory supplied end fittings installed in accordance with manufacturer's specifications.
- 3) End connections are to comply with applicable requirements and limitations of the Rules for the intended service (e.g. Marine Vessels Rules 4-6-7/3.5.1)
- 4) Hose assemblies are to be installed only where flexibility is required and are not to be subject to torsional deflection under normal conditions; hose length is to be limited to that required by flexibility only.
- 5) Not to be installed in applications where pressure pulse and/or high level of vibration are expected.
- 6) Not to be installed in applications where flexing in service is expected.
- 7) Not to be used in high pressure fuel oil injection systems, steam systems or oil supply lines to boilers.
- 8) Flexible hoses are to be permanently marked by the manufacturer with the following details: Hose manufacturer's name or trademark, Date of manufacture (month/year), Designation type reference, Nominal diameter, Pressure rating, Temperature rating.

Comments:

- The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- Manufacturer recommended fittings as per attachment.

Notes/Drawing/Documentation:

Flame test ISO 15540 size 12 at LAPI dated 05 Sep 2012

Fire test ISO 15540 size 20 at LAPI dated 05 Sep 2012

Fire test ISO 15540 size 48 at LAPI dated 05 Sep 2012

Mod B Size 12-48

Burst test 811+FSF sleeve DNV survey at PARKER dated 26 Jul 2012

Omologation reports 811 at PARKER dated 26 Jul 2012

811 catalogue

FSF Fire sleeve catalogue

Crimp table 811 + 48 IF series

Burst pressure 811-16 at PARKER dated 22 Apr 2013

Burst pressure 811-24 at PARKER dated 22 Apr 2013

PARKER HANNIFIN MANUFACTURING SRL

HOSE PRODUCTS DIVISION EUROPE

VIA G.B. PIRELLI, 6

VENIANO (CO)

Italy 22070

Telephone: +39 031936111

Fax: +39031936664

Email: info@parker.com

Web: www.parker.com

Tier: 3 - Type Approved, unit certification not required

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 14/Oct/2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

Rules for Conditions of Classification, Part I - 2019, 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2019 Steel Vessels Rules 4-6-2/5.7, 4-6-7/3.5.1

2019 Marine Vessels Rules 4-6-2/5.7, 4-6-7/3.5.1

2019 Steel Vessels Under 90 Meters (295 Feet) in Length Rules, 4-1-1/9.19

2019 Offshore Support Vessels Rules, 4-6-2/5.7

Rules for Conditions of Classification, Part I - 2019 Rules for Building and Classing Mobile Offshore Units 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2019 Mobile Offshore Units Rules 4-2-1/11.29

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA

PARKER HANNIFIN MANUFACTURING S.r.l.
HOSE PRODUCTS DIVISION EUROPE
Via G. B. Pirelli, 6
22070 Veniano (CO)

Attachement to PDA No. 19-GE1917710-PDA
issued on 15 Oct 2019, expiring 14 Oct 2024

Sleeve	Model	Size DN	Max working pressure		Min Burst Pressure		Fittings
			psi	Mpa	psi	[Mpa]	
FS-F	811-12	19	300	2,1	1200	8,4	48
FS-F	811-16	25	250	1,7	1000	6,8	48
FS-F	811-20	32	200	1,4	800	5,6	48
FS-F	811-24	38	150	1,0	600	4	48
FS-F	811-32	51	100	0,7	400	2,8	48
FS-F	811-40	63	62	0,4	248	1,6	IF 80
FS-F	811-48	76	62	0,4	248	1,6	IF 80
FS-F	811S-64	90	145	1,0	580	4	IF 80
FS-F	811S-80	100	145	1,0	580	4	IF 80