



Confirmation of Product Type Approval

Company Name: PARKER HANNIFIN CORP.

Address: 101 PARKER LANE ALLIANCE NE 69301 United States

Product: Hose, Non-metallic Flexible Hydraulic

Model(s): 787TC-4, 787TC-6, 787TC-8, 787TC-10, 787TC-12, 787TC-16, 787TC-20, 787TC-24 & 787TC-32; 797TC-4, 797TC-6, 797TC-8, 797TC-10, 797TC-12, 797TC-16, 797TC-20, 797TC-24 & 797TC-32; 787ST-4, 787ST-6, 787ST-8, 787ST-10, 787ST-12, 787ST-16, 787ST-20, 787ST-24 & 787ST-32; 797ST-4, 797ST-6, 797ST-8, 797ST-10, 797ST-12, 797ST-16, 797ST-20, 797ST-24 & 797ST-32.

Endorsements:

| Certificate Type | Certificate Number | Issue Date | Expiry Date |
|---------------------------------|--------------------|-------------|-------------|
| Product Design Assessment (PDA) | 20-2023534-PDA-DUP | 27-AUG-2020 | 26-AUG-2025 |
| Manufacturing Assessment (MA) | 23-5592042 | 19-APR-2023 | 18-APR-2028 |
| Product Quality Assurance (PQA) | NA | NA | NA |

Tier

3 - Type Approved, unit certification not required

Intended Service

Marine and Offshore Applications - Petroleum Base Hydraulic Fluids and Lubricating Oils

Description

Compact Spiral Hose - Proprietary Synthetic Rubber Inner Tube. Four or Six Spiral Steel Wire. Synthetic Rubber Cover.

Ratings

For Models 787TC/ST:

Working Pressure Rating: 5000 Psi

Temperature Range:-40 °F to +257 °F (-40 °C to +125 °C);

End Fittings: Parkrimp Series 43 & 48 (-4 & -6 size) and Parkrimp Series 77 (-8 through -32 size)

For Models 797TC/ST:

Working Pressure Rating: 6000 Psi

Temperature Range:-40 °F to +257 °F (-40 °C to +125 °C);

End Fittings: Parkrimp Series 43 & 48 (-4 size), Parkrimp Series 43 (-6 size) and Parkrimp Series 77 (-8 through -32 size)

For more details, please contact the manufacturer such as available Hose I.D., O.D., Working Pressure, Bend Radius, etc.

Service Restrictions

- 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) Flexible Hose assemblies are not applicable in high pressure fuel oil injection systems.
- 3) The type of end connections utilized (e.g. threaded, flanged, etc.) are to comply with the applicable requirements and limitations of the Marine Vessels Rules 4-6-2/5.7.3 (b)
- 4) Flexible hose are not applicable to hoses intended to be used in fixed fire extinguishing systems.
- 5) All Flexible Hose assemblies are to be burst tested to demonstrate they are able to withstand a pressure not less than four times its design pressure in accordance with Marine Vessels Rules 4-6-2/5.7.5 (b)
- 6) Fittings made of Aluminum are Not to be used on the Hose Assembly.

Comments

- 1) Duplicate PDA resides with Parker Hannifin Corp. - ALLIANCE and Parker Hannifin Corp. - MANHATTAN, Parker Hannifin Corp - RED OAK.
- 2) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- 3) The Flexible Hoses are to be completed with factory assembled end fittings or factory supplied ends made of steel only and installed in accordance with manufacturer's procedures in accordance with Marine Vessels Rules 4-6-2/5.7.3 (b)
- 4) Hose assemblies are to be installed only when flexibility is required and are not to be subject to torsional deflection under normal conditions. In addition, the length of the hose is to be limited to that required for flexibility only as indicated in Marine Vessels Rules 4-6-2/5.7.4.
- 5) Flexible Hoses are to be permanently marked by the manufacturer with the following details: Hose manufacturer's name or trademark, date of manufacturer (month/year), designation type reference, nominal diameter, pressure and temperature rating in accordance with Marine Vessels Rules 4-6-2/5.7.6.

Notes, Drawings and Documentation

Supporting Documentation:

Catalog 4400 US, Specifications of 787, 797_Parker HPD 2017, Pages: 2.

Type Test Report No. 2166.01S0110/16 by LAPI, ISO 15540 Cert_787TC-4 w-43 series, Date: 12/19/2016, Pages: 7.

Type Test Report No. 2167.01S0110/16 by LAPI, ISO 15540 Cert_787TC-4 w-48 series, Date: 12/19/2016, Pages: 7.

Type Test Report No. 2168.01S0110/16 by LAPI, ISO 15540 Cert_797TC-4 w-43 series, Date: 12/19/2016, Pages: 7.

Type Test Report No. 2169.01S0110/16 by LAPI, ISO 15540 Cert_797TC-4 w-48 series, Date: 12/19/2016, Pages: 7.

Type Test Report Annex No. 1 by LAPI to Report No. 521.01S0110/10 of Type 787TC-8, Pages: 1.

Type Test Report Annex No. 1 by LAPI to Report No. 522.01S0110/10 of Type 787TC-16, Pages: 1.

Type Test Report Annex No. 1 by LAPI to Report No. 523.01S0110/10 of Type 787TC-20, Pages: 1.

Type Test Report Annex No. 1 by LAPI to Report No. 1051.01S0110/13 of Type 787TC-24, Pages: 1.

Type Test Report Annex No. 1 by LAPI to Report No. 1052.01S0110/13 of Type 787TC-32, Pages: 1.

Type Test Report Annex No. 1 by LAPI to Report No. 524.01S0110/10 of Type 797TC-8, Pages: 1.

Type Test Report Annex No. 1 by LAPI to Report No. 525.01S0110/10 of Type 797TC-16, Pages: 1.

Type Test Report Annex No. 1 by LAPI to Report No. 526.01S0110/10 of Type 797TC-20, Pages: 1.

Type Test Report Annex No. 1 by LAPI to Report No. 1053.01S0110/13 of Type 797TC-24, Pages: 1.

Type Test Report Annex No. 1 by LAPI to Report No. 1054.01S0110/13 of Type 797TC-32, Pages: 1.

SAE J517 100R2 Test Report & Data Summary by Parker, Type 787TC-4 (w/ fitting 43), Pages: 1.

SAE J517 100R2 Test Report & Data Summary by Parker, Type 787TC-4 (w/ fitting 48), Pages: 1.

SAE J517 100R2 Test Report & Data Summary by Parker, Type 787TC-6 (w/ fitting 43), Pages: 1.

SAE J517 100R2 Test Report & Data Summary by Parker, Type 787TC-6 (w/ fitting 48), Pages: 1.

SAE J517 100R2 Test Report & Data Summary by Parker, Type 797TC-4 (w/ fitting 43), Pages: 1.

SAE J517 100R2 Test Report & Data Summary by Parker, Type 797TC-4 (w/ fitting 48), Pages: 1.

SAE J517 100R2 Test Report & Data Summary by Parker, Type 797TC-6 (w/ fitting 43), Pages: 1.

Test Report No. T-487, Type 787TC-8 by Parker, Date: 7/29/2015, Pages: 1.

Test Report No. T-488, Type 787TC-10 by Parker, Date: 7/29/2015, Pages: 1.

Test Report No. T-489, Type 787TC-12 by Parker, Date: 7/29/2015, Pages: 1.

Test Report No. T-490, Type 787TC-16 by Parker, Date: 7/29/2015, Pages: 1.

Test Report No. T-491, Type 787TC-20 by Parker, Date: 7/29/2015, Pages: 1.

Test Report No. T-492, Type 787TC-24 by Parker, Date: 7/29/2015, Pages: 1.

Test Report No. T-493, Type 787TC-32 by Parker, Date: 7/29/2015, Pages: 1.

Test Report No. T-494, Type 797TC-8 by Parker, Date: 7/29/2015, Pages: 1

Test Report No. T-495, Type 797TC-10 by Parker, Date: 7/29/2015, Pages: 1.

Test Report No. T-496, Type 797TC-12 by Parker, Date: 7/29/2015, Pages: 1.

Test Report No. T-497, Type 797TC-16 by Parker, Date: 7/29/2015, Pages: 1.

Test Report No. T-498, Type 797TC-20 by Parker, Date: 7/29/2015, Pages: 1.

Test Report No. T-499, Type 797TC-24 by Parker, Date: 7/29/2015, Pages: 1.

Test Report No. T-500, Type 797TC-32 by Parker, Date: 7/29/2015, Pages: 1.

Surveyor Witnessed Burst Test Report STR# W24332 at Parker, Test Part No. 787TC-4, 787ST-4, 797TC-4, 797ST-4, 787TC-6, 797TC-6, Date: 06/07/2017, Pages: 4.

Surveyor Witnessed Burst Test Report STR# W21328 at Parker, Test Part No. 787TC-8, Date: 09/11/2013, Pages: 1.

Surveyor Witnessed Burst Test Report STR# W21329 at Parker, Test Part No. 787TC-20, Date: 09/11/2013, Pages: 1.

Surveyor Witnessed Burst Test Report STR# W20443 at Parker, Test Part No. 787TC-24, Date: 09/11/2013, Pages: 1.

Surveyor Witnessed Burst Test Report STR# W20444 at Parker, Test Part No. 787TC-32, Date: 09/11/2013, Pages: 1.

Surveyor Witnessed Burst Test Report STR# W21330 at Parker, Test Part No. 797TC-8, Date: 09/11/2013, Pages: 1.

Surveyor Witnessed Burst Test Report STR# W21331 at Parker, Test Part No. 797TC-20, Date: 09/11/2013, Pages: 1.

Surveyor Witnessed Burst Test Report STR# W20445 at Parker, Test Part No. 797TC-24, Date: 09/11/2013, Pages: 1.

Surveyor Witnessed Burst Test Report STR# W20446 at Parker, Test Part No. 797TC-32, Date: 09/11/2013, Pages: 1.

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 26/Aug/2025 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.

ABS Rules

The Rules for Conditions of Classification, 2020 Marine Vessels Rules:1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the followings;

2020 Rules for Building and Classing Marine Vessels: 4-6-2/5.7;

The Rules for Conditions of Classification - Offshore Units and Structures, 2020 Mobile Offshore Units Rules: 1-1-4/9.7, 1-1-A2, 1-1-A3 which covers the following:

2020 Rules for Building and Classing Mobile Offshore Units: 4-2-1/11.29;

International Standards

ISO 18752:2014 Rubber Hoses and Hose Assemblies - Wire or Textile Reinforced Single Pressure Types for Hydraulics Applications;

ISO 15540:2016 Ships and Marine Technology Fire Resistance of Hose Assemblies - Test Methods.

EU-MED Standards

NA

National Standards

NA

Government Standards

NA

Other Standards

NA



A handwritten signature in blue ink, appearing to read "James J. White".

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 04-Oct-2023 7:49

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

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 prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.