



## Confirmation of Product Type Approval

**Company Name:** PARKER HANNIFIN CORP.

**Address:** 1501 HAYES DRIVE MANHATTAN KS 66502 United States

**Product:** Non-metallic Flexible Hydraulic Hose

**Model(s):** 777ST -6, 777ST -8, 777ST-10, 777ST-12, 777ST-16, 777TC -6, 777TC -8, 777TC-10, 777TC-12, 777TC-16, 777CP-8, 777CP-12, 777CP-16,

**Endorsements:**

<b>Certificate Type</b>	<b>Certificate Number</b>	<b>Issue Date</b>	<b>Expiry Date</b>
Product Design Assessment (PDA)	21-2367222-2-PDA-DUP	23-OCT-2023	18-FEB-2026
Manufacturing Assessment (MA)	24-6262608	29-FEB-2024	27-FEB-2029
Product Quality Assurance (PQA)	NA	NA	NA

### **Tier**

3 - Type Approved, unit certification not required

### **Intended Service**

Marine and Offshore Applications - Petroleum based Hydraulic Fluids and Lubrication Oils.

### **Description**

Synthetic Rubber Inner Tube. Four Spiral Steel Wire Reinforcement - ISO 18752 for hose type CC. Synthetic Rubber High Abrasion Resistant Cover (777ST) and Abrasion Resistant Rubber Covered (777TC).

### **Ratings**

Model 777ST - Size -6, 8, 10,12 and 16; MAWP: 4000 PSI, End Fittings: Parkrimp 43 Series; MSHA IC-40/41.

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

Petroleum-base hydraulic fluids and lubricating oils, -40°F to +257°F (-40°C to +125°C);

Water, water/oil emulsion, and water/glycol hydraulic fluids, up to +185°F (+85°C);

Polyol ester fluids, up to +150°F (+65°C);

Air, up to +158°F (+70°C).

Model 777TC - Size -6, 8, 10,12 and 16; MAWP: 4000 PSI, End Fittings: Parkrimp 43 Series; MSHA IC-40/41.

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

Petroleum-base hydraulic fluids and lubricating oils, -40°F to +257°F (-40°C to +125°C);

Water, water/oil emulsion, and water/glycol hydraulic fluids, up to +185°F (+85°C);

Polyol ester fluids, up to +150°F (+65°C);

Air, up to +158°F (+70°C).

Model 777CP Size -8, -12, -16: MAWP: 4000 PSI

Standard Cover, -40°F to +212°F (-40°C to +100°C);

Tough Cover, SuperTough Cover & Critical Protection -40°F to +212°F (-40°C to +100°C)

See "pdf" attachment Manufacturer's Specification Hydraulic Hose: 777ST / TC/CP.

### **Service Restrictions**

Unit Certification is not required for this product. If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

- i) Flexible Hose assemblies are not applicable in high pressure fuel oil injection systems.
- ii) The type of end connection utilized (e.g. threaded, flanged, etc.) is to comply with the applicable requirements and limitations of the Marine Vessel Rules 4-6-2/5.7.3 b).
- iii) Flexible hoses are not applicable to hoses intended to be used in fixed fire extinguishing systems.
- iv) 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 Vessel Rules 4-6-2/5.7.5 b).
- v) Fittings made of Aluminum are not to be used on the Hose Assembly.

### **Comments**

- i) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- ii) The Flexible Hoses are to be complete 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 Vessel Rules 4-6-2/5.7.3 b).
- iii) 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 Vessel Rules 4-6-2/5.7.4.
- iv) 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 Vessel Rules 4-6-2/5.7.6.
- v) Manufacturing location Manhattan, KS manufactures both models 777TC and 777ST in sizes -12 and -16, Model 777CP in sizes -8, -12 & -16

### **Notes, Drawings and Documentation**

Drawing No. CP Hose 2, CP Hose Bulletin 2, Revision: , Pages:

Drawing No. Catalog 4000 2, Catalog 4000 2, Revision: -, Pages: -

Drawing No. T-969 CP, T969 CP Hose Cover Report, Revision: -, Pages: -

**Term of Validity**

This Product Design Assessment (PDA) Certificate remains valid until 18/Feb/2026 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**

2021 Rules for Conditions of Classification, 1-1-4/7.7, 1-1-A3,1-1-A4, which covers the following:

2021 Rules for Building and Classing Marine Vessels: 4-6-2/5.7.

2021 Rules for Conditions of Classification, Offshore Units and Structures, 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2021 Rules for Building and Classing Mobile Offshore Units: 4-2-1/11.29;

2021 Rules for Facilities on Offshore Installations 3-4/5.11.5, A2/Table 1-Marine Support only;

2021 Guide for the Classification of Drilling Systems 4-2/7-Support Systems.

**International Standards**

ISO 18752:2014 Rubber hoses and hose assemblies - Wire- or textile-reinforced single-pressure types for hydraulic applications - Specification

ISO 15540:2016 Ships and marine technology - Fire resistance of hose assemblies - Test methods

ISO 6945:1991 Rubber hoses - Determination of abrasion resistance of the outer cover

ISO 1402:2009 Rubber and plastics hoses and hose assemblies - Hydrostatic testing;

ISO 6803:2017 Rubber or plastics hoses and hose assemblies - Hydraulic-pressure impulse test without flexing.

**EU-MED Standards**

NA

**National Standards**

SAE J1754/1:2017 Hose Assemblies, Rubber, Hydraulic, Steel Wire Reinforced;

SAE J1942:2019 Hose and Hose Assemblies for Marine Applications.

**Government Standards**

NA

**Other Standards**

NA





Corporate ABS Programs  
American Bureau of Shipping  
Print Date and Time: 12-Jun-2024 3:13

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.