

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Flexible Hoses of Non-Metallic Material with Permanently Fitted Couplings**

with type designation(s)

Parflex 573HVN, 573LZN, Parflex 575LHN, Parflex 575HVN

Issued to

**Parker Hannifin - Fluid Connectors Group
Ravenna OH, United States**

is found to comply with

DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems**DNV GL class programme DNVGL-CP-0183 – Type approval – Flexible hoses****Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**

Type:	Temperature range:	Max. working press.:	Sizes:
Parflex 573HVN, 573LZN	-40 °C to +55°C	3000 psi (207 bar)	0,355 in
Parflex 575LHN	-40 °C to +55°C	5000 psi (345 bar)	0,388 in
Parflex 575HVN	-40°C to + 55°C	5000 psi (345 bar)	0,355 in

This Certificate is valid until **2021-10-05**.Issued at **Høvik** on **2016-10-06**for **DNV GL**DNV GL local station: **New York**Approval Engineer: **Mehdi Rowshan**

Marianne Spæren Marveng
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

Thermoplastic hose

Tube : Thermoplastic
Reinforcement : Multiple layers of spiralled yarn (polyester and aramid)
Outer cover : Polyurethane (black, blue, green)
Couplings : Parflex stainless steel couplings SAE 300 grade
Series LV for type 573LZ-3, 573HV-3, 573LZN-3, 573HVN-3, 575HV-3 and 575HVN-3
Series LH for type 575LH-3, 575LHN
Hose and couplings are made by Parker Hannifin Ravenna OH, United States (where we have test report on Thermoplastics)

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.

The hoses may be used for pneumatic power and control systems working with air and water based hydraulic fluids.

All hose assemblies delivered under this type approval certificate shall be in compliance with an assembly procedure issued by the certificate holder.

Each hose assembly is before delivery to be hydraulic pressure tested to 1.5 times the maximum working pressure and be delivered with pressure test report with reference to the type approval certificate.

Flexible hoses of these types are not to be used on boiler fronts.

Hoses assemblies covered by this certificate shall not be installed in systems subject to pressure below atmospheric

Type Approval documentation

- Hose specs HS-573LZ, HS-573LZN, HS-573HV, HS-573HVN, HS-575HV, HS-575HVN, HZ-575LH and HS-575LHN
- Manufacturers Engineering Report ER709H, revised 2013-08-20
- Hose spec. HS-573-LH rev. 2003-01-23, HS-575LH rev. 2002-05-02
- Drawings: 573LH-3-Hose, 575LH-3-Hose, 106LH-4-3C_DNV rev. 2003-02-05, 106LV-4-3C_DNV rev. 2003-02-05
- DNV witnessed test report: LTR. NO .6909 dated 2003-03-05
- DNV witnessed test report: LTR. NO. 8024 dated 2007-06-11
- ECO-0025317, Rev. A dated 2012-08-17
- DNV GL witnessed test report: LTR. NO. 11260 dated 2016.04.24.

Tests carried out

Dimensional check, change in length, oil resistance test, cover adhesion, impulse, proof and burst test

Marking of product

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

- Manufacturer's name or trade mark
- Type designation
- Maximum working pressure
- Size



Job Id: **262.1-003743-5**
Certificate No: **TAP00000A2**

Periodical assessment

For retention of the Type Approval, DNV GL Surveyor shall perform a periodical assessment every second year, to verify that the conditions for the type approval are complied with and to witness the following tests on a selection of sizes:

Dimensional check/ Change in length/ Production test/ Burst test

The tests are to be performed with the type of couplings fitted that are Type Approved with the hoses.