

APPROVAL OF MANUFACTURER **CERTIFICATE**

Certificate no .: AMT0000099 Revision No:

This is to certify:

that the Manufacturer

Hydynamic Holland B.V.

Enschede, Netherlands

is approved for the

Assembling of type approved hoses and couplings

The approval is granted on condition that

DNV class programme DNV-CP-0183 - Type approval - Flexible non-metallic hoses

are complied with in all respect

Hose Size

DN5, 6, 8, 10, 12, 16, 19, 25, 31, 51 DN19, 25, 31, 38, 51 GH681

GH506

DN6, 8, 10, 12, 16, 19, 31, 51 EC881

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules.

Issued at Høvik on 2025-10-22

for **DNV**

This Certificate is valid until 2027-04-18. DNV local unit: Netherlands CMC

Approval Engineer: Jane Lozanov

Bosman van der Merwe **Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in production facilities and methods may render this Certificate invalid.

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LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.



Job ID: **263.11-011348-2** Certificate no.: **AMT0000099**

Revision No: 4

Approval basis

Hydynamic Holland B.V. is approved as a hose assembling company to deliver type approved hose assemblies (hose and coupling types as described in this certificate) to DNV vessels.

Products

The holder of this certificate is authorized to assemble hoses and end fittings as specified in below type approval certificates with subsequent identical revisions (as long as there is no change in the design of the products):

Type approval holder	Certificate No.*	Type designation	Sizes covered
Danfoss Power Solutions II GmbH	TAP0000116	GH681	DN 5, 6, 8, 10, 12, 16, 19, 25, 31, 51
	TAP00000DN	GH506	DN 19, 25, 31, 38, 51
	TAP000016W	EC881	DN 6, 8, 10, 12, 16, 19, 31, 51

^{*} To check the validity of the type approval certificate, please see https://approvalfinder.dnv.com.

Limitation

The approval is valid by considering all conditions in authorization letter and type approval certificates during the validity of current certificate and relevant type approval certificates.

Approval documentation

Quality plan: making of hose assemblies with DNV-GL approval

Machine catalogue EA116

Aeroquip MatchMate Plus EA063D

Eaton Aeroquip, Preferred Die Cage Decal Instruction Sheet

Voorschriften tov productcodering bij slangassemblage (Work instructions hose assembly)

AGN6000 documents:

GH435 rev. A, GA512 rev. C, FC555 rev. D, FC364 rev. B, FC363 rev. B, FC 325 rev. A, FC323 rev. C, 2807 rev. E,

2755B rev. -, 2755 rev. B,

Hochdruckhydraulikkupplung GA90090

Test bench Hydynamic Holland B.V.

ISO 9001 certificate no. 185820-2015-AQ-NLD-RvA

A/C Aluminium Löt Kit +

Hose and reusable fittings EA001J

Hose and fittings (product catalogue)

Advantage Hose Products (product catalogue)

Global Spiral (product catalogue)

Global products EA005J (product catalogue)

Fluid Conveyance Products EMEA

Walterscheid WALRing tube connection system

STC® Connectors EA104

Eaton Aeroquip Crimp fittings

MM2 Montagemaschine

Assembly instructions

ET1280, die wirtschaftliche und flexible Pressmaschine

Authorization letter from Eaton, dated 2018-08-10

Burst pressure tests witnessed by DNV GL 2018-03-28 and 2018-05-14

List of designated persons responsible for hose assembling dated 2018-08-17

Burst pressure test witnessed by DNV GL 2019-10-31

Burst pressure tests for renewal of the certification witnessed by DNV Surveyor.

Authorization letter from Danfoss, dated 19.02.2025

Production testing

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

Marking

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For identification and traceability purposes, each hose assembly permanently marked as required by the respective Type Approval Certificate listed above.

Certificate Retention Survey

The AoM certificate is valid for three (3) years and besides the renewal audit, the Society will keep the right to request intermediate audit as deemed necessary.

To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com.

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