

TYPE APPROVAL CERTIFICATE

DNV·GL

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No. **15 652 - 00 HH**

Company **Eaton Germany GmbH**
Dr.-Reckeweg-Straße 1
76532 Baden-Baden, GERMANY

Product Description **FRESH WATER COOLING AND COMPRESSED AIR HOSES**
FLAME RESISTANT HYDRAULIC HOSES IN ACC. WITH ISO 15540

Type **FC300 acc. to SAE 100R5**

Environmental Category **• None**

Technical Data /
Range of Application **TECHNICAL DATA**
Inner tube **AQP elastomere**
Reinforcement **Polyester inner braid, single wire braid**
Cover **Blue polyester braid**
Fittings **Crimp and reusable fittings**
Size **DN 38, DN 51, DN 64**
M.A.W.P. **34 [bar] up to 24 [bar]**
Temperature range **-49 [°C] up to 150 [°C],
pneumatic* systems 121 [°C] max.**

*** Rubber covered hose styles for use with gases above 17,5 bar must be perforated.**

RANGE OF APPLICATION

The a.m. hoses may be used according to their suitability in:

- Fuel oil, lubricating oil and hydraulic oil systems
- Bilge and seawater systems
- Fresh and seawater cooling systems
- Compressed air systems
- Connections between fresh water cooling pipes at or to the engine.

Test Standard **• Regulations for the Performance of Type Tests, Part 6 - Test Requirements for Mechanical Components and Equipment.**

Documents **• Engineering Test Report: 224773; dated 2007-05-30**
• Listing FC 300
• Globalen Eaton Standard ES4009 „Processing and Quality Assurance of Eaton Hose & Hose Assemblies“; ES 4009, Rev. M
• ISO/TS 16949:2009, dated: 2012-10-31
• DNV GL Ref.-Nr.: 15-029202

Remarks **• PRODUCTION PLACES and REMARKS / LIMITATIONS see page 2.**

Valid until **2020-04-17**

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Hamburg, 2015-04-16

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Olaf Drews


Peter Gierhan

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PRODUCTION PLACES

HOSES:

Eaton Corporation
New Bern hose plant
860 Blankenship Street
Newbern, TN38059

FITTINGS:

Eaton Fluid Power GmbH
P.O. Box 2060
76532 Baden-Baden
Germany

REMARKS / LIMITATIONS

- The current Rules of Germanischer Lloyd Chapter 2-Machinery installation, Section 11 are to be observed.
- The use of the hoses outside the range of application is subject to special consideration by DNV GL in each individual case.
- The combination of high temperatures and high pressure reduce the hose life.
- The use of hose assemblies is not permitted in permanently pressurized starting air lines of diesel engines.
- Type approved hoses may be assembled with fittings by recognized manufacturers* of hose assemblies only.

* See VI - Additional Rules and Guidelines, Part 3 - Machinery Installations, Chapter 9 - Guidelines for the Recognition of Manufacturers of Hose Assemblies and Compensators.

The selection of the hoses for the corresponding application and the proper assembly are to be in accordance with the instructions of the manufacturer.

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