DNV·GL

Certificate No:
TAP00001GD

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Fuel-, Lubricating- and Hydraulic Oil Filters

with type designation(s)
140, 150, 152 series, 240 series, 290 series

Issued to
ALFA LAVAL MOATTI SAS
Elancourt, Yvelines, France

is found to comply with
DNV GL rules for classification – Ships Pt.4 Ch.7 Pressure equipment
DNVGL-OS-D101 – Marine and machinery systems and equipment, Edition January 2018

Application :

Product(s) approved by this certificate is/are accepted for installation on vessels classed by DNV GL.

Type:	Max. working temp.:	Max. working press.:	Sizes:
140, 150, 152 series	160°C	15 bar	See Page 2
240 series	160°C	15 bar	See page 2
290 series	160°C	15 bar	See page 2

Issued at **Høvik** on **2018-12-14**
This Certificate is valid until **2023-02-06**.
DNV GL local station: **Le Havre**

Approval Engineer: **Adel Samiei**

for **DNV GL**

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.

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Product description

Three categories of filters:

1) 140, 150, 152 filter series
   - FM152DE, sizes: 8/4, 12/6, 16/8, 24/12, 30/12, 60/24
   - FM150D, sizes: 12/6, 16/8, 24/12, 30/12
   - FF152DE, sizes: 8/4, 12/6, 16/8, 24/12, 30/12, 60/24
   - FF150D, sizes: 12/6, 16/8, 24/12, 30/12
   - MM140, sizes: 34, 59, 118
   - F152DE, sizes: 12/6, 16/8, 24/12, 30/12, 60/24
   - F150D, sizes: 12/6, 16/8, 24/12, 30/12
   - M140, sizes: 34, 59, 118

2) 240 filter series
   - F240D & F240DE, sizes: 15/8, 20/10, 25/12
   - M240, sizes: 69, 90, 112
   - FM240D, sizes: 15/8, 20/10, 25/12
   - FF240D, sizes: 15/8, 20/10, 25/12
   - FM240DE, sizes: 15/8, 20/10, 25/12
   - FF240DE, sizes: 15/8,20/10, 25/12
   - MM240, sizes: 69, 90, 112

3) 290 filter series
   - 290D, sizes: 20, 30, 40
   - 290MM, sizes: 200, 300, 400
   - 290DM, sizes: 20, 30, 40

All filters are categorized as DNV GL pressure class II.
Intended medium: fuel oil
Corrosion allowance: 1 mm
Material: EN-GJS-400-15 according to EN1563

Application/Limitation

The certificate does not cover internals.

Type Approval documentation

Analysis of COV DN125 according to

Production Testing
Each filter shall be tested upon completion to at least 1.5 times the design pressure in the presence of a DNV GL Surveyor.

Certification
Materials for pressure retaining parts are to be delivered with material certificates according to DNVGL-RU-SHIP Pt. 4 Ch. 7 Sec. 1 Tables 5, 6 or 7, and shall meet the requirements of relevant parts of DNVGL-RU-SHIP Pt. 2 Ch. 2

Each filter shall be certified by a DNV GL surveyor and to be delievered with a DNV GL product certificate when it is required by DNV GL Rules or by purchaser.

Marking of product
Each filter shall be permanently and legibly marked on the pressure part or on a nameplate permanently attached to a principal pressure part to show its identity and origin.The marking shall show at least the following particulars:
- manufacturer's name and address
- type designation and serial number
- year of manufacture
- maximum allowable working pressure
- hydrostatic test pressure.

Periodical assessment
For retention of the Type Approval, a DNV GL Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNVGL-CP-0338.