DNV·GL

Certificate No:
TAP000014S

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Filter

with type designation(s)
AF112, AF172

Issued to
Filtration Group GmbH
Oehringen, Germany

is found to comply with
DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV GL rules for classification – Ships Pt.4 Ch.7 Pressure equipment

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.

Type:	Max. working temp.:	Working media:	Design pressure:
AF112	100 °C	Lubricating oils, liquid fuels, cooling lubricants, water	16 bar
AF172	100 °C	Lubricating oils, liquid fuels, cooling lubricants, water	16 bar

Issued at **Hamburg** on **2017-11-06**
This Certificate is valid until **2022-11-05**.
DNV GL local station: **Augsburg**

Approval Engineer: **Christian Kaemmer**

for **DNV GL**

Olaf Drews
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

Flanged automatic backflushing filter without interrupting operation.

AF 172 G: External / internal pressure cleaning based on integrated cyclone effect.
AF 112 G: Internal pressure cleaning based on integrated cyclone effect.

Filter housing made from cast iron.

Part	**Material**
Cover	EN-GJS-400-15
Filter Housing	EN-GJS-400-15
Segmented Elements	1.4571
Sealing	FPM, PTFE
Media	Lubricating oil, liquid fuel, cooling lubricant, water
Pressure Equipment Class[1]	**Class I**, refer to DNVGL-Rules Part 4, Chapter 7, Section 1, Table 2
Connection Size	DN 40

Application/Limitation

The automatic backflushing filter of types AF 112 G and AF172 G are type approved for application in piping systems for the above media.

Threaded joints are not permitted on filters conveying flammable media.

For installation, operation and maintenance the instructions of the manufacturer are to be observed.

Production testing

Upon completion, a product certificate (PC) is to be issued for each filter by DNVGL; refer to DNVGL-rules Part 4, Chapter 7, Section 1, Table 5.

Type Approval documentation

Tests carried out

Marking of product

For traceability to this type approval, each filter is to be marked with:

Manufacturer's name or trade mark
Filter type designation
Operating pressure [bar]
Operating temperature range [°C]
Job No. / Serial No.
Date of manufacture coded

Periodical assessment

For retention of the type approval certificate periodical assessments shall be carried out at production places by local DNVGL Surveyor.
Prior to the expiry date of this certificate a renewal assessment is to be carried out to verify that the conditions for the type approval are complied with and to witness burst pressure testing on select sizes.
The objective of the periodical assessment is to verify that the design and production conditions for the type approval have not been altered.
Main scope of the assessment:
- verification of the production and quality control system
- review of quality control documentation of recent deliveries
- review of drawings in production to verify any design changes which may have an impact on data specified in the type approval certificate, performance and range of application
- verification of the product marking.

End of certificate