

Certificate No: **TAP0000222**

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Replacement Filter Elements for Single, Double and Automatic Filters

with type designation(s)

Screw-In Filter Elements, Plug-In Filter Elements, Plastic Filter Elements

Issued to

Walter Stauffenberg GmbH & Co. KG Werdohl, Germany

is found to comply with

Works Standard WS-1-0001 Filterkerzen – Walter Stauffenberg GmbH & Co. KG (see details inside certificate)

Application:

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

Max. working temp.: up to 150°C

Working media: Refer to certificate

Design pressure: up to 16bar

Issued at Hamburg on 2020-03-16

for **DNV GL**

This Certificate is valid until 2025-03-15.

DNV GL local unit: Essen

Approval Engineer: Hagen Markus

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.



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Job Id: **262.1-024527-3** Certificate No: **TAP0000222**

Product description

Replacement filter elements for Single, Double and Automatic filters.

Materials

| Element Type | Marking | Filter mesh | End Cap A | End Cap B | End Cap C | Support tube | Sealing |
|--------------|----------------------|------------------|--------------|--------------|--------------|-----------------|------------------|
| Screw-In | SFK- 220/440/750G | 1 1101 | 1.4301 | 1.4301 | 1.4301 | 1.4316 | NBR or FKM |
| | SFK-439 | 1.4401 1.4404 | | | | | |
| Plug-In | SFK- 220/440/750G | 1.4404 | | | | | |
| Non-metallic | SFK-445 | PP/PES | PAGF15 | PAGF15 | - | 1.4316 | |
| | SFK-320 | | PP | PP | - | PA66GF30 | |

Dimensions

| Element Type | Filter micron rating µm | Length mm | |
|--------------|----------------------------|----------------|--|
| Screw-In | 25, 31, 48, 60, 80, 100 | 220, 440, 750 | |
| Screw-In | 6, 10 | 439 | |
| Plug-In | 25, 31, 48, 60, 80, 100 | Not applicable | |
| Non motallic | 31, 48 | 445 | |
| Non-metallic | 30 | 320 | |

Application/Limitation

The filter elements of type SFK may be used for replacement of filter elements for Single, Double and Automatic filters under consideration of the mechanical properties and long-term material resistance capability required for the intended application.

Filter elements made of stainless steel 1.4301 and 1.4216 are considered not corrosion resistance to sea water.

In addition, it shall be noted that the selection of the materials shall always consider the applicable service condition with respect to type of media, flow velocity, media temperature. In particular, the resistance to corrosion, erosion, oxidation and other deterioration during projected service life are to be considered.

The selection of the filter elements for the corresponding application and the right installation are to be in accordance with the instructions www.filterinterchange.com of Walter Stauffenberg.

Tests carried out

According to Walter Stauffenberg Test Report-No.: 15/2013, 2013-10-02 Test specification Walter Stauffenberg Werksstandard WS-1-001 Filterkerzen, Rev. A – 2017-04-18 Published on http://www.stauff.com.

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Service conditions and media

| Maximum allowable working pressure | Up to 16bar | | |
|---|---|--|--|
| Maximum allowable working temperature | Up to 150 [°C], 80 [°C] (Filter elements made of non-metallic material) | | |
| Medias | | | |
| Oils Crude oil, Mineral oil, Synthetic oil, Hydraulic oil, Lubricating oil, Turbine oil | | | |
| Fuel oil | Marine diesel, Petrol, Heavy fuel oil | | |
| Fresh water | Cooling water, Wash water, Wastewater, Industrial water | | |
| Chemicals | Cleaning agent, Alkaline | | |
| Coolants | Emulsion, Cutting oil, Honing oil, Grinding oil | | |

Type Approval documentation **Test report**

- Technical report A224, 2006-09

Drawings

| Туре | Marking | Drawing-No.: | Filter micron | Length |
|----------------------|----------------------|---------------------------------|----------------------------|-----------|
| | | | rating | mm |
| | | | μm | |
| Screw-In | SFK-220/ | 1050002216, Rev. 00, 18.07.2011 | 25, 31, 48, 60, | |
| Elements | 440/750G | 1030002210, Rev. 00, 18.07.2011 | 80, 100 | 220, 440, |
| Plug-In Elements | SFK-220/ 440/750G | 1050002210, Rev. 00, 11.08.2009 | 25, 31, 48, 60, 80, 100 | 750 |
| Plastic Elements | SFK-320 | 1050002203, Rev. 02, 24.01.2013 | 30 | 320 |
| Plastic Elements | SFK-445 | 1050002303, Rev. 00, 20.08.2013 | 31, 48 | 445 |
| Screw-In Elements | SFK-439 | 1050002304, Rev. 03, 04.03.2014 | 6, 10 | 439 |

Miscellaneous document

- DNVGL Assessment report at Walter Stauffenberg GmbH Werdohl, 2019-10-11
- STAUFF Werksstandard "WS-1-0001 Filterkerzen", 2017-04-21 STAUFF Product specification for marking 1024000027, 2013-01-14
- STAUFF product specification "Replacement Filter Elements-English 9910000178", 02/2019
- ISO 9001:2008, ISO 14001:2004, DNVGL-Rev-No.: 13-070312

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 Type Approval are complied with. Refer to the Class Programme DNVGL-CP-0338, Sec.4.

END OF CERTIFICATE

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