

# Type Approval Certificate



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

Certificate No. 36 661 - 85 HH

Company Willibrord Lösing Filtertechnik e.K.

Essener Str. 108  
45529 Hattingen, GERMANY

Product Description SEPAR FILTER

Type KWA-20-M, KWA-50-M, KWA-90-M, KWA-100-M  
SWK-2000 / 5M(UM), 5-50M(UM), 10M(UM), 18M(UM), 40M(UM), 130M(UM)

Environmental Category None

Technical Data /  
Range of Application TECHNICAL DATA

#### MATERIALS

Housing: GK-ALSi12Cu  
Bowl: GK-ALSi12Cu  
Sealings: NBR / HNBR

Pipe connection: GL type approved pipe unions or flanges  
Design pressure: 4 bar  
Service temperature: T<sub>max</sub>: 90 °C  
Flowrate type KWA: 20-100 l/min  
Flowrate type SWK: 5-130 l/min

Test Standard VI-7-8 Guidelines for the Performance of Type Approvals: 2008

Documents MPA Test certificate No.: 120371993; 130001638  
Drawings: KWA-20-M, KWA-50-M, KWA-90-M, KWA-100-M, 062988, 062433,  
062989, 062990, 062994, 062435, 062408, 062434, 062412, 062416,  
062418, 062436, Material lists, Data sheets, Mounting and service instr

Remarks For ships with class notation AUT the Rules I-1-4, Automation are to be observed.

Valid until 2018-12-14

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File No. II.G.03

Hamburg, 2014-01-06

Type Approval Symbol



**Germanischer Lloyd**

Olaf Drews

Christian Kaemmer

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## RANGE OF APPLICATION

The filter series of type SEPAR is type approved for the use in fuel systems installed directly on diesel engines.  
Medium: Marine distillate fuels acc. to ISO 8217:2005 or equivalent.

Valid until **2018-12-14**  
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