



TYPE APPROVAL CERTIFICATE
No. **MAC084922XG/001**

This is to certify that the product identified below is in compliance with the regulations herewith specified.

<i>Description</i>	Non metallic flexible hoses
<i>Type</i>	S50 DN65 S50 DN 50 S32 DN 32
<i>Applicant</i>	HKS GMBH SCHONENFAHRERSTR 1 18057 Rostock GERMANY
<i>Manufacturer</i>	HKS GMBH
<i>Place of manufacture</i>	SCHONENFAHRERSTR 1 18057 Rostock GERMANY
<i>Reference standards</i>	Part C, Chapter 1, Section 10 of RINA Rules for the Classification of Naval Ships

Issued in **HAMBURG** on **July 10, 2022**. This Certificate is valid until **July 10, 2027**



RINA Services S.p.A.
Giuseppe Russo

This certificate consists of this page and 1 enclosure

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S50 DN65

S50 DN 50

S32 DN 32

Reference documents

- Technical Drawings approved with HMMC-8637 and dispatched with Letter HMMC/2017/00191/CRLVA
- EC Certificate Type Examination (module B) N° 61831-14HH
- Catalogue
- Prototype test reports
 - HKS pressure tests : 2017/4552, 2017/4553 , 2017/4554 ,2017/4555
 - Fire Test acc. to ISO 15541 , Test Report WTD71 N° 60/08, 61/08.

Design Conditions

Design Pressure : 16 bar

Max Temperature : +180°C

Medium : Oil, Water, Air,Bio diesel

Materials/Components

As per approved drawings

Fields of application

May be used for the following services on board:

- Bilge and ballast
- Compressed air
- Fresh water and sea water
- Fuel oil
- Lub and hydraulic oil

Additional manufacturer site

HKS-CZ, s.r.o.

Mlekojedska 1994/97, 412 01 Litomerice, Czech Republic

Acceptance Conditions

- The installation on board is to be made in accordance with the Manufacturer's instructions and provisions stated in Part C Chapter 1 Section 10 par. 2.6 of RINA Rules for the classification of Naval Ships.
- The hoses are to be fitted with end couplings from the manufacturer.
- Each hose shall be tested as per Part C Chapter 1 Section 10 par. 20.4.6 of RINA Rules.
- Hoses are to be marked with the type designation, manufacturer's name and maximum foreseen working pressure.

HAMBURG July 10, 2022

