DNV·GL

Certificate No:
MEDB00004VZ

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Materials other than steel for pipes conveying oil or fuel oil: flexible pipe assemblies

with type designation(s)
HANSA-FLEX HD 400, HD500 acc. to DIN EN 856 - 4SP, 4SH

Issued to
HANSA-FLEX AG
Bremen, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
item No. MED/3.15c. SOLAS 74 as amended, Regulation II-2/4 & X/3 and 2000 HSC Code 7 & 10 and IMO MSC/Circ.1120

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-02-06**.

Issued at **Hamburg** on **2019-02-07**

DNV GL local station:
Bremerhaven

Approval Engineer:
Hagen Markus

Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudszus
Head of Notified Body

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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Product description

Hose design

According to EN 856 - 4 SP (HD400) and – 4SH (HD500).

Inner tube	Oil-resistant synthetic rubber
Reinforcement	Four high tensile steel spiral wire inserts
Cover	Synthetic rubber with high temperature, ozone and weather resistance
Colour	Black
Size range	4SP: DN10 to DN25 4SH: DN19 to DN31
Temperature range	- 40°C to + 100°C

Hose end fittings

Approved combination of hose and hose end fittings according to overview "Vom DNV GL Notified Body 0098 zugelassene MED Schlauch -und Armaturenkombinationen", issue date 2019-01-28

Maximum Allowable Working Pressure (M.A.W.P.)

Hose type HD400 (4SP)

Hose size DN	Identification	M.A.W.P. (bar)
10	HD 410	445
12	HD 413	415
16	HD 416	350
19	HD 420	350
25	HD 425	280

Hose type 500 (4SH)

Hose size DN	Identification	M.A.W.P. (bar)
19	HD 520	420
25	HD 525	380
31	HD 532	350

Application/Limitation

Piping systems conveying oil or fuel.

Type Examination documentation

Tests carried out

Fire resistance tests according to ISO 15540/15541.

Marking of product

For traceability to this certificate each hose assembly is to be marked on the hose and or on the hose end fitting at least with:

Job Id: **344.1-008884-1**
Certificate No: **MEDB00004VZ**

Scope	**Examples**	
Manufacturer's name or trademark	HANSA-FLEX	HANSA-FLEX
Type designation	HD416	HD532
M.A.W.P.	350bar	350bar
Hose size	DN16	DN31
Mark of Conformity according to Article 10 of the Council Directive (MED)	HF1007, 350bar,01/19  0098 /19	HF1007, 350bar,01/19  0098 /19