

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

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

with type designation(s)

1101-14-xx, 1102-14-xx, 1105-10-xx and 1105-63-xx

Issued to

HYDROSCAND AS
OSLO, Norway

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

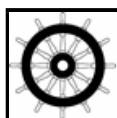
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-05-01**.

Issued at **Høvik** on **2019-05-02**

DNV GL local station:
Sandefjord

Approval Engineer:
Adel Samiei



Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
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 AS 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.



Product description

- 1) Hose assemblies with designation 1101-14 EGEFLEX CO 1SN according to EN 853 1SN
Hoses made of synthetic oil resistant rubber inner tube, reinforced with one layer of steel wire braid, and black weather and oil resistant synthetic rubber cover
Couplings: Series HYDROSCAND design 4200 (carbon steel) and 4200S (stainless steel)
 - 2) Hose assemblies with designation 1102-14-xx EGEFLEX 2 CO EN 2SN according to EN 853 2SN
Hoses made of synthetic oil resistant rubber inner tube, reinforced with two layers of steel wire braid, and black weather and oil resistant synthetic rubber cover.
Couplings: Series HYDROSCAND design 4200 (carbon steel) and 4200S (stainless steel).
 - 3) Hose assemblies with designation 1105-10 KAPPAFLEX 2K CO and 1105-63 KAPPAFLEX 2K CO ROCK according to EN 857 2SC
Hoses made of synthetic oil resistant rubber inner tube, reinforced with Two layers of steel wire braid, black weather and oil resistant synthetic rubber cover.
Couplings: Series HYDROSCAND design 4200 (carbon steel) and 4200S (stainless steel).
- Rubber hose manufacturer: Semperit Technische Produkte Gesellschaft m.b.H., Austria
Coupling Material: 11SMnPb37, 11SMnPb30 & AISI 316

Application/Limitation

Hose assemblies covered by this certificate are tested according to:

- 1) EN ISO 15540: Fire resistance of hose assemblies- Test methods
- 2) EN ISO 15541: Fire resistance of hose assemblies - Requirements for the test bench

Maximum working pressure (MWP) in bar for each type and size:

Size		1101-14 EGEFLEX CO 1SN		1102-14-xx EGEFLEX 2 CO EN 2SN		1105-10 KAPPAFLEX 2K CO and 1105-63 KAPPAFLEX 2K CO ROCK		
DN	inch	Designation	MWP	Designation	MWP	Designation	Designation	MWP
6	¼"	1104-14-04	225	-	-	1105-10-04	1105-63-04	400
8	5/16"	1104-14-05	215	-	-	1105-10-05	1105-63-05	350
10	3/8"	1104-14-06	180	1102-14-06	330	1105-10-06	1105-63-06	330
12	½"	1104-14-08	160	1102-14-08	275	1105-10-08	1105-63-08	275
16	5/8"	1104-14-10	130	1102-14-10	250	1105-10-10	1105-63-10	250
19	¾"	1104-14-12	105	1102-14-12	215	1105-10-12	1105-63-12	215
25	1"	1104-14-16	88	1102-14-16	165	1105-10-16	1105-63-16	165
31	1 ¼"	1104-14-20	63	1102-14-20	125	-	-	-
38	1 ½"	1104-14-24	50	1102-14-24	90	-	-	-
51	2"	1104-14-32	40	1102-14-32	80	-	-	-

Type Examination documentation

Tests carried out

Fire testing according to ISO 15540 and ISO 15541

Marking of product

For traceability to this certificate, each hose is marked with:

- Hose manufacturer's name or trademark;
- Date of manufacture (month/year);
- Designation type reference;
- Nominal diameter;
- Pressure rating;
- Temperature rating.