DNV·GL

Certificate No:
MEDB00004ZV

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)
INTERPUMP HyGreen R13 (TFDR013)

Issued to
I.M.M. Hydraulics S.p.A.
Atessa CH, Italy

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 **2024-02-12**.

Issued at **Høvik** on **2019-02-13**

DNV GL local station:
Milan

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Job Id: **344.1-008997-1**
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Product description

One type of hose assembly (Code TFDR013) with synthetic rubber tube, reinforced with 4 or 6 high tensile steel wire spiral, and cover made of anti-abrasive synthetic rubber, resistant to oils, fuels and atmospheric conditions, MSHA
Hose manufacturer: IMM Hydraulics, Atessa (CH), Ascoli Satriano (FG), Italy

Coupling designations:

Hose Size			HyGreen R13	
DASH	**DN**	**inch**	**Two Pieces**	**One Piece**
-12	19	3/4"	004N / X004N	X Series
-16	25	1"	0013/X0013	X Series
-20	31	1 ¼"	0013/X0013	X Series
-24	38	1 ½"	0013/X0013	X Series
-32	51	2"	0013/X0013	X Series

Couplings Material: Two pieces (Ferrule 004N/X004N & 0013/X0013 with related interlock tail fittings): Carbon Steel (11SMnPb37/C4C) or Stainless Steel (AISI 316L);
One Piece (X Series): Carbon Steel (11SMnPb37/C4C)
Coupling Manufacturer: IMM Hydraulics, Atessa (CH), Ascoli Satriano (FG), Italy

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

Hose assemblies are suitable for use with petroleum base hydraulic fluids and water base hydraulic fluids, the maximum working pressure is 350 bar.

Type Examination documentation

Tests carried out

Fire tests carried out according to ISO 15540/15541

Marking of product

As a minimum, the final products (hoses with couplings) are to be marked with:

- Manufacturers name or trademark;
- Manufacturer's address;
- Specification or hose name;
- Hose size;
- Date code (quarterly and daily production code).