EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000088N

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 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 and compensators

with type designation(s)
Hypress 4SP

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) 2022/1157,**
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 **2027-12-05**.

Issued at **Høvik** on **2022-12-06**

DNV local unit:
Italy/Malta CMC

Approval Engineer:
Vegard Skauge Hjelmeland

Notified Body
No.: **0575**

for **DNV AS**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Product description

Two types of flexible hose assemblies:

Inner tube : Synthetic rubber.
External cover : Anti-abrasive synthetic rubber, resistant to oils, fuels and atmospheric conditions.
Reinforcement : 4 steel wire spirals.
Couplings : Carbon steel (Ferrule Code 4SP:0009 and related carbon steel inserts as per IMM Catalogue) or INOX fittings of stainless steel (Ferrule Code 4SP:X0009 and related stainless steel inserts as per IMM Catalogue)
Materials : EN 10277-3 1.0737 (11SMnPb37)
EN 10263-2 1.0214 (C10C)
EN 10210-1/2 S355J2H
EN 10088-3 1.4404 (AISI 316L)

Hoses & Couplings manufactured by:
I.M.M. Hydraulics S.p.A.

Application/Limitation

Hose assemblies covered by this certificate are tested according to:
1) NS-EN ISO 15540: Fire resistance of hose assemblies - Test methods
2) NS-EN ISO 15541: Fire resistance of hose assemblies - Requirements for the test bench

Size		Hypress 4SP	
inch	DN	MAXWP [bar]	MAXWP [psi]
1/4”	6	450	6525
3/8”	10	445	6453
1/2”	12	415	6018
5/8”	16	350	5075
3/4”	19	350	5075
1”	25	280	5583
1 1/4”	31	210	5275
1 1/2”	38	185	4350
2”	51	165	3625

Hose assemblies covered by this certificate are suitable for:
- Oil or fuel oil within a temperature range of -40°C to +100°C.

Type Examination documentation

Tests carried out

Fire tests according to ISO 15540 and ISO 15541.

Marking of product

As a minimum, the final product to be marked with at least the following particulars:
- Hose manufacturer’s name or trademark.
- Date of manufacture (month/year).
- Designation type reference.
- Nominal diameter.
- Pressure & temperature rating.
- Mark of conformity according to Article 10 of the Council Directive 2014/90/EU.

Mark of Conformity may only be affixed to the product when the corresponding certification related to production-control phase module (D, E, or F) is valid.