



CERTIFICATO DI OMOLOGAZIONE DI TIPO
TYPE APPROVAL CERTIFICATE
N. DIP156920CS/002

Si certifica che il seguente prodotto soddisfa le prescrizioni delle norme RINA per l'omologazione di tipo.
This is to certify that the product identified below is in compliance with the applicable requirements of the RINA type approval system.

Descrizione <i>Description</i>	Rubber hoses for marine-engine wet-exhaust systems <i>Rubber hoses for marine-engine wet-exhaust systems</i>
Tipo <i>Type</i>	SCAMO/SP CAJ
Fabbricante <i>Manufacturer</i>	TUBI THOR SPA
Luogo di produzione <i>Place of manufacture</i>	VIA CADUTI PER LA PATRIA, 83 20050 LESMO (MB)
Norme di riferimento <i>Reference standards</i>	ITALY ISO 13363 ISO 13363

Rilasciato a Viareggio l' 1 Luglio 2020. Questo
Certificato è valido fino al 30 Giugno 2023
*Issued in Viareggio on July 1, 2020 . This Certificate is valid
until June 30, 2023*

Questo Certificato e' composto di 1 pagina e di 1 allegato
This certificate consists of this page and 1 enclosure

RINA Services S.p.A.

Andrea Venturelli



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SCAMO/SP CAJ

<p>Documentazione di riferimento e materiali:</p> <p><i>Reference documents and materials:</i></p>	<ul style="list-style-type: none">- Specifiche tecniche archiviate in DIP-102390, DIP-102391 e DIP-102392.- Diametri da 16 mm a 305 mm.- <i>Technical specification filed with DIP-102390, DIP-102391 and DIP-102392.</i>- <i>Diameters from 16 mm to 305 mm.</i>
<p>Campi di applicazione:</p> <p><i>Fields of application:</i></p>	<ul style="list-style-type: none">- Impianti gas di scarico di motori marini su unità da diporto.- I dettagli degli impianti gas di scarico di motori marini devono essere approvati in precedenza dal RINA sui disegni richiesti.- <i>Marine engine wet-exhaust systems of pleasure boats.</i>- <i>The details of marine engine wet-exhaust systems are to be previously approved by RINA on the drawings required.</i>
<p>Standard di riferimento:</p> <p><i>Reference standard:</i></p>	<ul style="list-style-type: none">- ISO 13363 – Sono stati effettuati anche i test in accordo alla norma "SAE J 2006".- <i>ISO 13363 - Tests according to "SAE J 2006" have also been carried out.</i>
<p>Condizioni di accettazione:</p> <p><i>Acceptance conditions:</i></p>	<ul style="list-style-type: none">- Il numero e la data del presente certificato dovranno essere marcati sui tubi.- I tubi dovranno essere marcati in accordo al paragrafo 10 della norma ISO 13363.- <i>The number and the date of this certificate shall have to be marked on the hoses.</i>- <i>Hoses shall have to be marked according to par. 10 of ISO 13363.</i>

Viareggio 1 Luglio 2020
Viareggio July 1, 2020

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Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	Tubi Thor SpA
Address	Via Caduti per la Patria 83, Lesmo MB, 20855, Italy
Place of Production	Thor Sud S.p.A. Via M. Bellisario, 54, San Salvo - CH -, 66050, Italy
Place of Production	Tubi Thor SpA Via Caduti per la Patria 83, Lesmo MB, 20855, Italy
Type	Marine Diesel Exhaust Hose And Components
Description	Marine diesel exhaust hose, comprising of synthetic NBR black rubber inner tube, embedded steel wire helix, high tensile synthetic cord reinforcement and black CR rubber cover.
Trade Name	SCAMO / SP CAJ
Application	Marine diesel exhaust hose for Special Service Craft.
Specified Standard	ISO 13363: 2016 SAE J2006: 2013



Mohamed Mohamed Rila
Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

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Type Approval Certificate

Ratings

Internal diameter (mm): 16 to 305
Max. working pressure (bar): 3
Temperature range (°C): -30 to +100

Other Conditions

1. Exhaust components are to be selected and installed in accordance with the manufacturer's instructions and recommendations and Lloyd's Register's Rules and Regulations for the Classification of Special Service Craft.
2. Hoses are to be secured by two stainless steel hose clips at each end and service length should be as short as practicable,
3. Erosion/corrosion resistant shut off flaps or other devices are to be fitted on the hull side shell or pipe end and acceptable arrangements made to prevent water flooding the space.3. Where it is intended to use flexible exhaust hoses in exhaust piping systems on craft or yachts Classed or intended to be classed by LR, the arrangements are to be submitted for approval.
4. The following details are to be permanently marked:
 - Manufacturer's name or trademark.
 - Designation type reference.
 - Nominal diameter.
 - Pressure rating.
 - Temperature range.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 96/00127 (E6)

The Design Appraisal Document LR21124871DA and its supplementary Type Approval Terms and Conditions form part of this Certificate.