

TYPE APPROVAL CERTIFICATE No. MAC356316CS

This is to certify that the product identified below is in compliance with the regulations herewith specified.

Description Plastic pipes and fittings

Type PRINETO

PRINETO-FLEX PRINETO-STABIL

Applicant IVT GMBH & CO. KG. SITZ ROHR

GEWERBERING NORD 5 91189 ROHR

GERMANY

Manufacturer IVT GMBH & CO. KG. SITZ ROHR

Place of manufacture GEWERBERING NORD 5 91189 ROHR

GERMANY

Reference standards Part C, Chapter 1, Appendix 3 of RINA Rules

Issued in Genoa on November 29, 2016. This Certificate is valid until November 28, 2021

RINA/Services S.p.A.
Francesco Sciacca

This Certificate annuls and replace the previous No. MAC305510CS dated 11/02/2011. This certificate consists of this page and 1 enclosure

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TYPE APPROVAL CERTIFICATE No. MAC356316CS Enclosure - Page 1 of 1 PRINETO

REFERENCE DOCUMENTS

IVT PRINETO catalogue

- RINA REPORT 97DG367TO dated 20.10.1997, relevant to low flame spead tests in compliance with ASTM D 635-77 Standard.
- OFI Test Report No. 303.978-5 dated 30.01.2006.

TECHNICAL CHARATTERISTICS

Pipe made of: Polythylene PEHD (PRINETO-FLEX),

Polyethilene PEHD with additiona of an aluminum sheet (PRINETO-STABIL)

Couplings made of: Alloy CZ 132 BS 2872/74 or equivalent

Nominal pressure: 10 bar at 20°C

For working temperatures higher than 20°C the maximum working pressure must be reduced as per the manufaturer's instructions.

Nominal diameters: 12 mm, 15 mm, 20 mm, 25 mm.

FIELDS OF APPLICATION

Fresch water, non essential system (sanitary systems and heating-cooling systems) under the conditions of Part C, Chapter 1, Appendix 3 of RINA Rules, where pipes are subjected to an external pressure head or internal vacuum, they are to be separately approved for each installation. In each case, the nominal external pressure of the pipe is to be determined in accordance with RINA Rules and verified experimentally or by a combination of testing and calculation methods. The pipe collapse pressure is to be less than 3 bar.

ACCEPTANCE CONDITIONS

The arrangement and installation on board is to be carried out in accordance with Manufacturer's guidelines. RINA Rules for Classification of Ships Pt.C, Ch. 1, Appendix 3 are to be applied with regard to:

- arrangement and installation on board (see para 3);
- cartification, inspection and testing (see para 4.2 and 4.3).

REMARKS

- The installation on board shipsbuilt in compliance with RINA "Rules for the construction and classification of high speed craft" is subject to the satusfactory outcome of the tests foreseen by the IMO Resolution A.753(18).
- The pipes and fittings marking shall at leastinclude the following information:
- 1. Product and Manufacturer name,
- 2. The materials of which the pipe or fitting are made,
- 3. The design standards that the pipe or fittings are manufactured in accordance with,
- 4. Pressure rating.

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Genoa November 29, 2016

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