Certificate No: LR26320614TA
Issue Date: 25/01/2026
Expiry Date: 24/01/2031

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	**GIRPI**
Address	Rue Robert Ancel BP36, Harfleur, F76700, France
Place of Production	FIP FORMATURA INIEZIONE POLIMERI S.P.A. Località Pian di Parata, GENOVA, Casella, 16015, Italy
Place of Production	GIRPI Rue Robert Ancel BP36, Harfleur, F76700, France
Place of Production	NICOLL RACCORDS ET PLASTIQUES 37 Rue Pierre et Marie Curie, Cholet Cedex, FRANCE, France
Type	Pipes and Fittings
Description	C-PVC Chlorinated Polyvinylchloride thermoplastic polymer pipes, fittings and valves
Trade Name	HTA / HTA-F / HTA-E
Application	Class III non-essential water services where fire endurance is not required.
Specified Standard	LR Rules for Ships Pt 5 Ch 12 Sec 5, EN ISO 15877, EN ISO 16135, EN ISO16137. Resolution MSC.399(95), amendments to the guidelines for the application of

Downloaded Copy

Fabrizio Cadenaro

Engineering Piping/Decarbon - Lead Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Certificate No: LR26320614TA
Issue Date: 25/01/2026
Expiry Date: 24/01/2031

Type Approval Certificate

plastic pipes on ships as per resolutionA.753(18), as amended by resolution MSC.313(88)

Ratings

Nominal pipe size (mm) 16 up to 160 for HTA and HTA-F, 40 up to 200 for HTA-E
Nominal pressure (bar) at 20°C: 16 barg & 25 barg according to relevant data sheets for HTA and HTA-F only. Drain only for HTA-E.
Maximum working temperature (°C) 80 for HTA and HTA-F, 100 for HTA-E

Other Conditions

Installation design, joining procedures, choice of materials are to comply with the manufacturer's instructions and recommendations.
For temperatures above 20°C reduction in pressure has to be considered.

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.

The Design Appraisal Document LR26320614DA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Downloaded Copy

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.