Certificate No: LR26390642TA
Issue Date: 26/05/2026
Expiry Date: 25/05/2031

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	**Bänninger Kunststoff-Produkte GmbH**
Address	Bänningerstrasse 1, Reiskirchen, 35447, Germany
Place of Production	Bänninger Rohrleitungssysteme GmbH Athenslebener Weg 21, Staßfurt, 39418, Germany
Type	Plastic Pipes
Description	PP-R, PP-RCT, PP-RCT/GF-PP-RCT/PP-RCT, PP-RCT/AL/PP-R piping systems and fittings
Trade Name	PP-R, PP-RCT, PP-RCT/GF PP-RCT/PF-RCT, PP-RCT/AL/PP-R piping systems and fittings
Application	Non-essential Class III piping systems, hot and cold domestic water on board ships and offshore installations, where fire endurance is not a requirement, according to the Rules, Part 5, Chapter 12, Table 12.5.3.
Specified Standard	DIN 8077: 2008-09, DIN 8078: 2008-09, ISO 15874-1, 2, 3, 5: 2010-04; LR Rules and Regulations for the Classification of Ships, 2026.

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Torsten Schroeder

Engineering - Piping/ Decarbonisation -
Senior Specialist to Lloyd's Register EMEA
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Ratings

Sizes: up to 355 mm diameter
Max. Working Temperature: PP-R up to 70°C, PP-RCT up to 95°C ,

Pressure Ratings: (mm)

PP-R	SDR 6	d 16 - 63
PP-RCT	SDR 7.4	d 20 - 125
PP-RCT	SDR 9 / SDR 11	d 20 - 355
PP-RCT / AL / PP-R	SDR 7.4 / SDR 9	d 20 -125
PP-RCT / GF / PP-RCT	SDR 7.4 / SDR9 / SDR11 / SDR17	d 20 - 250

Other Conditions

Pipes and fittings are to be selected and installed in accordance with the manufacturer's recommendations.
The use of plastic pipes may be restricted by statutory requirements of the National Authority of the country in which the ship is to be registered.

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: LR21250838TA, previous 11/20023(E2)

The Design Appraisal Document TSO/26-062872, previous ENS 26699-11, Issue No. 3 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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