



Germanischer Lloyd

# Type Approval Certificate

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

Certificate No. **10 901 - 97 HH**

Company **TPR Fiberdur GmbH & Co. KG  
Industriepark Emil Mayrisch  
52457 Aldenhoven, GERMANY**

Product Description **REINFORCED PLASTIC PIPES AND FITTINGS ( FRP/GRP )**

Type **FIBERDUR VE**

Environmental Category **None**

Technical Data /

Range of Application

**TECHNICAL DATA**

Nominal Diameter: **DN 25 to DN 300** **DN 350 to DN 800**

M.A.W.P. [up to 60°C]: **16 [bar]** **10 [bar]**

M.A.W.T.: **95 [°C]** **95 [°C]**

#### RANGE OF APPLICATION

In pipe class III piping systems arranged on open decks, cofferdams, void spaces, pipe tunnels, ducts and further locations where fire endurance test according to Appendix 2, Level 3 and flame spread test acc. to Appendix 3 of the IMO Resolution A.753 (18) is required.

#### INSTALLATION

Ref. to page 2

Test Standard **IMO Resolution A.753 (18) : 1993 except smoke generation and toxicity test**

Documents  
- Test Reports of product tests according to IMO Res. A. 753(18)  
- Data Sheets  
- Instructions for handling and installation

Remarks **For the use on passenger vessels national regulations may have to be observed.**

Valid until **2012-05-08**

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Type Approval Symbol



File No. **II.C.03**

Hamburg, **2007-05-04**

**Germanischer Lloyd**

*Günter Hölzer*  
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*Hagen Markus*  
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## INSTALLATION

For installation of plastic piping systems the following Rules and Regulations are to be observed:

- Germanischer Lloyd Rules for Seagoing Ships, Chapter 2, Machinery Installations, Section 11 B ( Plastic piping systems) and Sec. 11 D ( Pipe couplings).
- IMO Resolution A.753(18)

Furthermore the installation requirements of the piping system manufacturer are to be observed.

## Joining Methods

Flange joint and laminated joint.

Type approved pipe couplings may be used only for compensation of thermal expansion and at location where a fire endurance test according to IMO Res. 753(18) is not required. The use of pipe couplings as main means of connection is not approved. The maximum allowable nominal pressure for pipe couplings is PN 10.

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This certificate is issued on the basis of "Guidelines for the Performance of Type Approvals Part 1, Procedure".