



Lloyd's  
Register

## 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.*

This certificate supersedes certificate number 01/20029 (E5) issued on 25.06.2012 which is hereby cancelled.

This certificate is issued to:

<b>PRODUCER</b>	Georg Fischer Piping Systems Ltd. Ebnatstraße 111 8201 Schaffhausen Switzerland
<b>DESCRIPTION</b>	Plastic pipes and fittings
<b>TYPE</b>	PE 100
<b>APPLICATION</b>	Piping systems on open decks, within tanks, cofferdams, void spaces, pipe tunnels and ducts on board ships and offshore installations in Class III piping systems, where fire endurance is not a requirement, according to the Rules, Part 5, Chapter 12, Table 12.5.3 and domestic and other non-essential piping systems
<b>STANDARD</b>	LR Rules and Regulations for the Classification of Ships, 2016. IMO Resolution A.753 (18), <u>except</u> fire endurance, smoke generation and toxicity tests. Flame spread tests according to ASTM D 635-91.

<b>Certificate No.</b>	01/20029 (E6)
<b>Issue Date</b>	07 June 2016
<b>Expiry Date</b>	14 February 2021
<b>Sheet</b>	1 of 3



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**RATINGS**

Size Range	20 mm to 630 mm outside diameter	
Standard Dimension Ratio	SDR 11	SDR 17.6
Nominal Internal Pressure <sup>1)</sup>	8.3 bar	5.0 bar
Nominal External Pressure	1.66 bar (max. difference pressure)	
Temperature Range	-50 °C to 60 °C	

<sup>1)</sup> for domestic and similar services where there are no Rule requirements other nominal internal pressure could be applied based on the manufacturer's recommendations (SDR11 - 16 bar and SDR17/17.6 - 10 bar) and the acceptance of the National Authority.

**OTHER CONDITIONS**

At elevated temperatures higher than 20 °C pressure reductions have to be considered. For selection, installation and pressure reductions the producer's instructions and recommendations are to be adhered to.

Pipe selection, installation, welding and bonding procedures are to be in accordance with the producer's instructions and recommendations.

Use in accommodation, service and control spaces may be subject to National Authority requirements

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LR031.1.2015.12

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**PLACE OF  
PRODUCTION**

Georg Fischer Piping Systems Ltd.  
Ebnatstraße 111  
8201 Schaffhausen  
Switzerland

Georg Fischer Piping Systems Ltd., Shanghai  
No. 218 Kang Quiao Road, Pudong  
Shanghai 201319  
PR China

Georg Fischer DEKA GmbH  
Kreuzstr. 22  
35232 Dautphetal-Mornshausen  
Germany

Georg Fischer HAKAN PLASTIK BORU VE PROFIL SAN.TIC. A.S.  
Cerkez KoyOrganize Sanayi Bolgesi (COSB), 3. Cadde, No. 11-13  
59500, Cerkez Koy / Tekirdag  
Turkey

*The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.*

*If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.*

*The Design Appraisal Document No. ENS 20449-07, issue no. 3 dated 07.06.2016 and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

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