

Tubi multistrato metallo-plastici, raccordi in ottone e plastici in PPSU per impianti sanitari di riscaldamento e condizionamento nel settore navale (Prescrizioni LR).

*Metal-plastic multi-layer pipes, brass fittings and plastic fittings in PPSU for dhwh, heating and air-conditioning systems in the shipping application (LR Prescriptions).*

SETTORE NAVALE - NAVAL INDUSTRY



Lloyd's  
Register

## Type Approval Certificate Extension

*This is to certify* that Certificate No. 03/00044(E3) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

<b>PRODUCER</b>	Valsir SPA								
<b>PLACE OF PRODUCTION</b>	Localita Merlaro 2 25078 Vestone(BS) Italy								
<b>DESCRIPTION</b>	Plastic pipe and fittings <ul style="list-style-type: none"> <li>- Pexal multilayer pipes: from OD 14 to 75 mm (Red RAL3020, Blue RAL5015, White RAL9003)</li> <li>- Brass Compression fittings: from OD 16 to 32 mm</li> <li>- Brass Crimp fittings: from OD 14 to 75 mm</li> <li>- Pexal EASY ppsu fittings: from OD 14 to 63 mm</li> </ul>								
<b>TYPE</b>	PEXAL								
<b>APPLICATION</b>	Marine applications for heating and sanitary systems.								
<b>SPECIFIED STANDARDS</b>	Lloyd's Register's Rules and Regulations for the Classification of Ships and EN 744 (Test method for resistance to external blows by the round - the- clock method).								
<b>RATINGS</b>	<table> <tr> <td>Normal diameter (mm):</td><td>14 to 75</td></tr> <tr> <td>Temperature range (°C):</td><td>0 to 95</td></tr> <tr> <td>Nominal internal pressure (bar):</td><td>16 for OD14 to OD32 13 for OD40 to OD75</td></tr> <tr> <td>Nominal external pressure (bar):</td><td>10</td></tr> </table>	Normal diameter (mm):	14 to 75	Temperature range (°C):	0 to 95	Nominal internal pressure (bar):	16 for OD14 to OD32 13 for OD40 to OD75	Nominal external pressure (bar):	10
Normal diameter (mm):	14 to 75								
Temperature range (°C):	0 to 95								
Nominal internal pressure (bar):	16 for OD14 to OD32 13 for OD40 to OD75								
Nominal external pressure (bar):	10								
<b>OTHER CONDITIONS</b>	Pipes are to be selected and installed in accordance with the manufacturer's instructions and recommendations.								
<b>Certificate No.</b>	03/00044(E4)								
<b>Issue Date</b>	22 May 2018								
<b>Expiry Date</b>	21 April 2023								
<b>Sheet</b>	1 of 2								



Fabrizio Cadenaro  
Trieste Technical Support Office  
Lloyd's Register EMEA

Lloyd's Register EMEA  
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA  
Is a subsidiary of Lloyd's Register Group

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 the '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.

Tubi multistrato metallo-plastici, raccordi in ottone e plastici in PPSU per impianti sanitari di riscaldamento e condizionamento nel settore navale (Prescrizioni LR).

*Metal-plastic multi-layer pipes, brass fittings and plastic fittings in PPSU for dhwt, heating and air-conditioning systems in the shipping application (LR Prescriptions).*

SETTORE NAVALE - NAVAL INDUSTRY



Lloyd's  
Register

*"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 attached Design Appraisal Document No. 03/00044(E4) and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

All other details remain as the previous Certificate No. 03/00044(E3) to which this extension should be attached.

**Certificate No.** 03/00044(E4)

**Issue Date** 22 May 2018

**Expiry Date** 21 April 2023

**Sheet** 2 of 2

Lloyd's Register EMEA  
71 Fenchurch Street, London EC3M 4BS



Fabrizio Cadenaro  
Trieste Technical Support Office  
Lloyd's Register EMEA

Lloyd's Register EMEA  
Is a subsidiary of Lloyd's Register Group

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 the '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.

Tubi multistrato metallo-plastici, raccordi in ottone e plastici in PPSU per impianti sanitari di riscaldamento e condizionamento nel settore navale (Prescrizioni LR).

Metal-plastic multi-layer pipes, brass fittings and plastic fittings in PPSU for dhw, heating and air-conditioning systems in the shipping application (LR Prescriptions).

SETTORE NAVALE - NAVAL INDUSTRY

Part 1A Subject: Pipe and Pipe Couplings Product: Plastic Pipes (Part 1A)					
Producer / Licence No.	Description of Product				Cert. No.
	Type	Details of Approval	Application	Remarks	
VALSIR S.p.A, Località Merlaro, 2, 25078 Vestone (BS), Italy.	PEXAL	Plastic Pipe and Fittings: Nominal Diameter (mm): 16 to 75 0 to +95 Nominal Pressure, internal (bar): 16 for OD 14 to OD32, 13 for OD40 to OD75 Nominal Pressure, external (bar): 10  Pexal pipes colors: Red RAL 3020, Blue RAL5015, White RAL 9003	Marine applications for heating and sanitary systems.	Expires: 21 April 2023  Refer to certificates for conditions of approval.	03/00044(E4)

Fabrizio Caderno

1

Tubi multistrato metallo-plastici, raccordi in ottone e plastici in PPSU per impianti sanitari di riscaldamento e condizionamento nel settore navale (Prescrizioni LR).

*Metal-plastic multi-layer pipes, brass fittings and plastic fittings in PPSU for dhw, heating and air-conditioning systems in the shipping application (LR Prescriptions).*

SETTORE NAVALE - NAVAL INDUSTRY



Lloyd's  
Register

### Lloyd's Register EMEA (London Office)

Marine Technology & Engineering Services

71 Fenchurch Street, London, EC3M 4BS

Telephone 020 7709 9166 Fax 020 7488 4796

Email [tad@lr.org](mailto:tad@lr.org)

Page	1 of 1
Document number	03/00044(E4)
Issue number	1

### DESIGN APPRAISAL DOCUMENT

Date	Quote this reference on all future communications
22 May 2018	PRJ4499-8

### LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.

Issued to: VALSIR SPA

for: PEXEL PLASTIC PIPES AND FITTINGS

TYPE APPROVAL CERTIFICATE No. 03/00044(E4)

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

#### ADDITIONAL APPROVAL DOCUMENTATION

Request for Services TAC 2018/35

15 March 2018

Application Checklist

01 March 2018

PQA Report PRJ4499

19 March 2018

LR Stamped test reports 20180319153753039, 20180319153823488, 20180319153915255,

20180319153941650, 20180319161749603

19 March 2018

RINA Fire Test Report 2008CS015841/1

29 December 2008

RINA Fire Test Report 2008CS015841/2

29 December 2008

Previous documentation as listed in Design Appraisal Documents 03/00044 to 03/00044(E3) inclusive.

#### Supplementary Type Approval Terms and Conditions

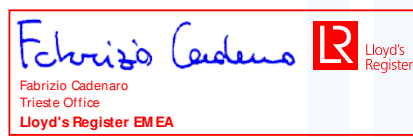
Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

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

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.

Fabrizio Cadenaro  
Engineering Systems, Trieste Technical Support Office  
Marine Technology & Engineering Services



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 the '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.