



TYPE APPROVAL CERTIFICATE
No. **MAC285620CS**

This is to certify that the product identified below is in compliance with the regulations herewith specified.

| | |
|-----------------------------|---|
| <i>Description</i> | Non metallic expansion joints |
| <i>Type</i> | J1 LUX - J2 LUX - J1 AS+ |
| <i>Applicant</i> | ISOPREN S.r.l. VIA A. MERLI 6 20095 Cusano Milanino (MI) ITALY |
| <i>Manufacturer</i> | ISOPREN S.r.l. |
| <i>Place of manufacture</i> | VIA A. MERLI 6 20095 Cusano Milanino (MI) ITALY |
| <i>Reference standards</i> | Parte C, Cap. 1, Sez. 10 dei Regolamenti RINA |

Issued in **GENOVA** on **February 26, 2021**. This Certificate is valid until **February 25, 2026**

RINA Services S.p.A.

This certificate consists of this page and 1 enclosure

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J1 LUX - J2 LUX - J1 AS+

Reference documentation:

- *Constructional drawings and specification:*

Letter No. PPVT/2021/210/CAA

| | |
|------------|--|
| PPVT-35753 | Fascicolo Compensatori T200120 - T200121 - T201009 |
| PPVT-35754 | Cuffia anti fiamma - FR LUX |
| PPVT-35755 | Analisi dei rischi |

- *Test Report:*

Fire tests ISO 15540:2016 and ISO 15541:2016, dated 07/01/2021
reports no. 2020CS012534/001-002-003-004-005-006-007-008
RINA Laboratory - Calata Gadda Genova

Burst tests dated 01/10/2020
ISOPREN (RINA 2020/MI/01/510) J1 LUX - J2 LUX
Cusano Milanino (MI)

Burst tests dated 25/01/2021
ISOPREN (RINA 2021/MI/01/42) J1 AS+
Cusano Milanino (MI)

Technical characteristic

Diameters:

J1 LUX: DN40 - DN50 - DN65 - DN80 - DN100 - DN125 - DN150 - DN175 - DN200 - DN250;

J2 LUX: DN40 - DN50 - DN65 - DN80 - DN100 - DN125 - DN150 - DN200 - DN250;

J1 AS+: DN40 - DN50 - DN65 - DN80 - DN100 - DN125 - DN150 - DN175 - DN200 - DN250;

Working pressure: 16 bar;

Working temperature: min -10°C, +90°C with peaks to +100°C;

Expansion joints material:

- Internal POLSPP, POGNTH, POLGNT, EPD174 and FK 70;
- External POLGNT, POGNTH, GS1123.

Flange: Galvanized Steel - Stainless Steel AISI 316.

Application

- Fresh water and sanitary systems;
 - Compressed air systems;
 - the installation of expansion joints with flame protection cap (FR LUX) in fuel oil and lubricating oil systems can be accepted, provided that:
1. for ships flying EC flag, they are also certified in compliance with Marine Equipment Directive (MED) 2014/90/EU as amended;
 2. for ships not flying EC flag, they are also approved by the flag Administration.

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J1 LUX - J2 LUX - J1 AS+

- Water fire systems, for expansion joints with flame protection cap (FR LUX).
- Sea water systems, provided that they are arranged in compliance with Para. 2.6.3 of Pt C, Ch 1, Sec 10 of RINA Rules.

Remarks

The installation on board is to be carried out in accordance with Manufacturer's instructions and with requirements of Para 2.6.3 and 5.9.3 of Pt C, Ch 1, Sec 10 of RINA Rules.

Each product to be installed on board ships and other units classed by RINA is subject to the satisfactory outcome of testing according to RINA Rules (para. 20.4.6 of Pt C, Ch 1, Sec 10).

The products are to be permanently marked, for traceability, in compliance with para. 7.2 of RINA "Rules for the type approval of flexible hoses and expansion joints".

GENOVA 26/02/2021