



Certificate number: 57548/B0 BV

File number: ACM 135/2796/01

Product code: 2130H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

RASTELLI RACCORDI COMMERCIALE SRL

Villanterio (PV) - ITALY

for the type of product

MECHANICAL JOINTS - COMPRESSION COUPLINGS - SCREW TYPE

Couplings Series L & S (made of Steel & Stainless Steel)

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships
Bureau Veritas Rules for the Classification of Offshore Units
Bureau Veritas Rules for the Classification of Naval Ships

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 15 Apr 2031

For Bureau Veritas Marine & Offshore,

At BV NAPOLI, on 15 Apr 2026,

Sandro BRUSEGAN

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 4 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

Couplings Series L & S (made of Steel and Stainless Steel)

1.1 - Design (compression coupling, bite type)

- Metallic pipe couplings L for medium pressures and S for high pressures according to DIN 2353/DIN EN ISO 8434-1
- Couplings to ISO 8434-1/DIN 2353 comprise a body, a cutting ring and a tightening nut
- Fittings : equal elbow, equal tees, straight reducing, straight, etc ...

1.2 - Technical data

Size (mm)	6 to 42
Max. Working Pressure (bar)	630
Temperature range (°C)	-40 / 120 (carbon steel) -55 / 400 (stainless steel)

Series	Pipe OD (mm)	Nominal Pressure (bar)
L	6, 8, 10, 12, 15, 18	315
	22, 28, 35, 42	160
S	6, 8, 10, 12, 14	630
	16, 20, 25, 30	400
	38	315

Pressure-Temperature rating will comply with the manufacturer's recommendation

Temperature (°C)	20	50	100	200	300	400
Factor	1	0.96	0.90	0.80	0.70	0.65

1.3 - Temperature range depending on sealing material

Material	Temperature Range (°C)
NBR	-35 to 100
FPM	-25 to 200

1.4 - Raw Material

Part	Material
Fittings	11SMnPb37 (1.0737) / 9SMn28 (1.0715) DIN 3859 Stainless Steel AISI 316L, AISI 316Ti or 1.4571
O-ring	NBR / FPM

When other choices of materials are used per manufacturer's recommendations, the BV agreement is to be obtained.

2. DOCUMENTS AND DRAWINGS

- Manufacturer's catalogue & Assembly Instructions N° 2B7 dated 03/2018
- Document N° 6086 A dated 07/05/2005
- Document N° 6086 A1 dated 30/11/1994
- Documents N° 6006 A2 dated 22/05/2018 & N° 3278-A dated 26/07/2005

3. TEST REPORTS

Test item	Test report reference	Date
Tightness test	N°315934-I	13/05/2014
Vibration (fatigue) test	N°120002588	07/04/2008
Pressure pulsation test	N°120002588	07/04/2008
Burst pressure test	N°OC2-1011-AI N°OC2-1011-BI	30/11/2017

Pull-out test	N°K137/19A	23/09/2019 to 24/09/2019
Fire endurance test (30 min wet)	N°2013CS03495/1 N°2013CS03495/2 N°2013CS03495/5 N°2013CS03495/6 N°2013CS03495/7 N°2013CS03495/8 N°2013CS03495/9 N°2013CS03495/10	12/02/2014 & 17/02/2014
Vacuum test	N°120002588	07/04/2008
Repeated assembly test	N°OC2-1011-I	22/11/2007

4. APPLICATION / LIMITATION

4.1 - May be used on board for services of class I, class II and class III:

Flammable fluids (flash point ≤ 60°C)	
Cargo oil lines (1), crude oil washing lines (1), vent lines (3)	-
Inert gas	
Water seal / scrubber effluent lines	+
Main lines (1) (2), distribution lines (1)	-
Flammable fluids (flash point > 60°C)	
Cargo oil lines (1)	-
Fuel oil (2)(3), lubricating oil (2)(3), hydraulic oil (2)(3), thermal oil lines (2)(3)	+
Sea water	
Bilge lines (4), non-permanent water fire extinguishing systems (3)	-
Permanent water filled fire extinguishing systems (3), ballast system (4), cooling water system	+
Tank cleaning services, non-essential systems	+
Fresh water	
Cooling water system (4), condensate return (4)	+
Non-essential systems	+
Sanitary/Drains/Scuppers	
Deck drains (internal) (5), sanitary drains	+
Scuppers and discharge (overboard)	+
Sounding and venting	
Water tanks/dry spaces, Oil tanks (flash point > 60°C) (2) (3)	+
Miscellaneous	
Starting/control air (4), CO ₂ system	-
Service air (non-essential), brine, steam	+

Note 1: +: Application is allowed; -: Application is not allowed.

- (1) Fire endurance test is to be applied when mechanical joints are installed in pump rooms and open decks.
 (2) Specific requirements for slip-on joint. Application allowed for compression coupling and pipe unions.
 (3) Approved fire-resistant types except in cases where such mechanical joints are installed on open decks and not used for fuel oil lines.
 (4) Fire endurance test is to be applied when mechanical joints are installed inside machinery spaces of category A.
 (5) Only above bulkhead deck of passenger ships and freeboard deck of cargo ships.

4.2 - The bulkhead fittings are not approved through watertight or fire bulkheads. For bulkhead unions, the requirements given in the Society Rules Pt C, Ch 1, Sec 10, [5.3] have to be complied with. When soft seals are used for bulkhead unions, it must be ensured that water, oil or fire cannot penetrate through the watertight bulkheads or decks.

4.3 - Tapered threaded end fittings are not to be used in engine rooms, nor in any place containing an ignition source unless

otherwise suitably screened at the Society's Surveyor satisfaction.

4.4 - The use of metallic materials is restricted according to Bureau Veritas Rules *NR 467, Pt C, Ch 1, Sec 10, Table 5* and corresponding requirements in *NR 483* and *NR 445*

4.5 - The sealing material is to be compatible with the fluid to be conveyed and the maximum working temperature.

4.6 - In all cases, the associated pipes are to be suitable supported and anchored. The joints are to be at any time accessible, excepting inside tanks where permitted by the Bureau Veritas Rules.

4.7 - The wall thickness and the material of the tubes are to be in accordance with the applicable Society's Rules.

4.8 - The mechanical joints are to be installed according to the manufacturer's instructions and Society's Rule requirements.

5. PRODUCTION SURVEY REQUIREMENTS

5.1 - The products are to be supplied by **RASTELLI RACCORDI COMMERCIALE SRL** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note *NR 320* and as such does not require a BV product certificate.

5.3 - **RASTELLI RACCORDI COMMERCIALE SRL** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of *NR 320* for HBV products.

5.4 - For information, **RASTELLI RACCORDI COMMERCIALE SRL** has declared to Bureau Veritas the following production site:

RASTELLI RACCORDI COMMERCIALE SRL

Via Circonvallazione, 26

27019 Villanterio (PV)

ITALY

6. MARKING OF PRODUCT

Each coupling is to be marked as far as practicable with:

- Manufacturer's name or logo
- Type designation
- Pipe size
- Design pressure

7. OTHERS

It is **RASTELLI RACCORDI COMMERCIALE SRL**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

This certificate supersedes the Type Approval Certificate N° 57548/A0 BV issued by the Society.

***** END OF CERTIFICATE *****