



Marine & Offshore

Certificate number: 26441/C0 BV

File number: ACM 135/2701/01

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

BIJUK HPC d.o.o.

Samobor - CROATIA

for the type of product

MECHANICAL JOINTS - COMPRESSION COUPLINGS - SCREW TYPE

Cutting Ring - Pipe Couplings made of Steel, Stainless Steel and Brass

Requirements:

- BUREAU VERITAS Rules for the Classification of Steel Ships
- BUREAU VERITAS Rules for the Classification of Offshore Units

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: 16 Aug 2029

For Bureau Veritas Marine & Offshore,

At BV RIJEKA, on 16 Aug 2024,

Slaven Celic

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

BIJUK Cutting ring pipe couplings made of Steel, Stainless Steel and Brass

1.1 Design (compression coupling, bite type)

- Metallic pipe couplings LL for low pressures, L for medium pressures and S for high pressures acc. 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 ...

1.2 Technical data

- Steel and Stainless Steel

Size (mm)	6 - 42
Max. Working Pressure (bar)	320
Temperature range (°C)	-40 / +120

Series	Pipe OD (mm)	Nominal Pressure (bar) acc. to DIN 2353
LL	4, 6, 8	100
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	0,95	0,89	0,80	0,71	0,66

- Brass

Size (mm)	4 - 25
Max. Working Pressure (bar)	68
Temperature range (°C)	-40 / 120

1.3 Temperature range depending on sealing material

Material	Temperature Range
NBR	-35°C to 100°C
FKM	-25°C to 200°C
EPDM	-40°C to 150°C

1.4 Raw Material

Fittings	Carbon Steel St.37.4 acc. to DIN 2391 Stainless Steel AISI 316L, AISI 316Ti or 1.4571 acc. to DIN 17458/EN 10088 Brass CuZn39Pb3
O-ring	NBR / FKM / EPDM

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 Rev. 02 Edition 2023.

3. TEST REPORTS

3.1 Type tests witnessed by a BV Surveyor including burst test at 4 times the design pressure, tightness test, vibration test, pull-out test, pulsation test and repeated assembly test.

- Test report N° YQ01-02-262 dated 25/06/2011. Tested specimens coupling type: equal elbow, equal tees, straight reducing and straight.

- Test report N° YQ01-02-301 dated 04/10/2013. Tested specimens coupling type: elbow-W and EW, tee-T and plug VKA.

3.2 Fire resistance test not performed.

3.3 Vacuum test not performed.

4. APPLICATION / LIMITATION

4.1 May be used on board for services of Class I (OD ≤ 60,3 mm), class II (OD ≤ 60, 3 mm), & class III:

- **Flammable fluids (flash point ≤ 60°C)** – cargo oil lines (1), crude oil washing lines (1), vent lines (2)

- **Inert gas** – main lines (1), distribution lines (1)

- **Flammable fluids (flash point > 60°C)** – cargo oil (1), fuel oil (2), lubricating oil (2), hydraulic oil (2), thermal oil lines (2)

- **Sea water** – bilge/ballast/cooling water (3), tank cleaning, non-essential systems, permanent water filled fire extinguishing systems (2), non-permanent water filled fire extinguishing systems (2)

- **Fresh water** - cooling water (3), condensate return (3), non-essential systems

- **Sanitary/Drains/Scuppers** - sanitary drains, scuppers and discharge (overboard)

- **Sounding and venting** - water tanks/dry spaces, oil tanks (flash point > 60°C) (2)

- **Miscellaneous** – starting/control air (3), service air (non-essential), brine, steam,

(1)- *Not to be used in pump rooms and open decks.*

(2)- *May be used only in cases where such mechanical joints are installed on open decks, as defined in Ch 4, Sec5, [1.4.3] item b) 2) (10) and not used for fuel oil lines.*

(3)- *Not to be used inside machinery spaces of category A.*

(4)- *Only above bulkhead deck of passenger ships and freeboard deck of cargo ships.*

4.2 Not to be used for:

- **Inert gas** – water seal effluent, scrubber effluent lines

- **Miscellaneous** – CO2 Systems

4.3 - 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.

4.4 - Assembly instructions given by the manufacturer are to be complied with.

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

4.6 - The use of stainless steel is to be restricted as per the requirements of the Bureau Veritas Rules.

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

4.8 - 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.

4.9 - Compression couplings, bite type with soft seal are not to be used for piping systems when a vacuum test and/or a fire resistance test are required.

5. PRODUCTION SURVEY REQUIREMENTS

5.1 The products are to be supplied by **BIJUK HPC d.o.o.** in compliance with the type and the requirements described in this certificate.

5.2 This type of product certificate is within the category HBV of Bureau Veritas Rule Note NR320.

5.3 BV product certificate is not required.

5.4 **BIJUK HPC d.o.o.** has to make the necessary arrangements to have its works recognized by Bureau Veritas in compliance with the requirements of NR 320 for HBV products.

5.5 For information, **BIJUK HPC d.o.o.** has declared to Bureau Veritas the following production site:

BIJUK HPC d.o.o.
Vrbovec Samoborski 1A
HR-10430 Samobor
CROATIA

6. MARKING OF PRODUCT

The product shall be marked clearly and indelibly with at least:

- Manufacturer's name or logo
- Type designation
- Maximum working pressure
- Size

7. OTHERS

It is **BIJUK HPC d.o.o.**'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° 26441/B0 BV issued by the Society.

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