



Marine & Offshore

Certificate number: 26441/B0 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: 04 Mar 2024

For Bureau Veritas Marine & Offshore,

At BV RIJEKA, on 04 Mar 2019,

Slaven Celic



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 3 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 Issue 2019

3. TEST REPORTS

3.1 Tests carried out at laboratory Brodarski Institute and witnessed by the Society: Pull-out test, Tightness test, Burst test, Pressure Pulsation test, Vibration test (fatigue test) and repeated assembly test.

3.2 Test reports N° YQ 01-02-262 dated 25/06/2011 and annex of 02/01/2014. Tested specimens coupling type: equal elbow, equal tees, straight reducing and straight.

3.3 Test report N° YQ 01-02-301 dated 04/10/2013. Tested specimens coupling type: elbow-W and EW, tee-T and plug VKA.

3.4 Vacuum test and fire test endurance not carried out.

4. APPLICATION / LIMITATION

4.1 May be used for piping systems on board ships.

4.2 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.

4.3 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.

4.4 Taper threaded end connections are not to be used for liquid fuel or oil circuits in engine rooms nor any place containing an ignition source unless otherwise suitably screened at the Society's Surveyor satisfaction.

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 suitably 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 Rules.

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

5. PRODUCTION SURVEY REQUIREMENTS

5.1 - The products are to be supplied by **BIJUK HPC d.o.o.** 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 NR320 and as such does not require a BV product certificate.

5.3 - **BIJUK HPC d.o.o.** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

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

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

6. MARKING OF PRODUCT

Each coupling is to be clearly marked with at least:

- Manufacturer's name or logo
- Type designation
- Pipe size
- Max. working pressure

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 No. 26441/A0 BV issued by the Society.

*** END OF CERTIFICATE ***