



Marine & Offshore

Certificate number: 08549/E0 BV

File number: ACM 135/616/1

Product code: 2265H

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

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

FKB GmbH (Feinwerktechnik, Kunststoffverarbeitung, Beleuchtungstechnik)
Oberndorf am Neckar - GERMANY

for the type of product

PIPE CLAMPS

Series: A, B and C

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: 24 Jun 2025

For Bureau Veritas Marine & Offshore,

At BV HAMBURG, on 24 Jun 2020,

Adama Diene



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.

The electronic version is available at: <http://www.veristarnb.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=x4ozv7swyh>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Tube clamps, series: A, B and C according to DIN 3015

1.1 Rating

Tube clamps Series A	Light construction series according to DIN 3015, part 1
Clamp size	0, 1,2 ,3 ,4 ,5 ,6 ,7 and 8
Outside diameter for tube (mm)	6 to 101,8

Tube clamps Series B	Twin-tube clamps series according to DIN 3015, part 3
Clamp size	1, 2, 3, 4 and 5
Outside diameter for tube (mm)	6 to 42

Tube clamps Series C	Heavy series according to DIN 3015, part 2
Clamp size	1,2 ,3 ,4 ,5 ,6 ,7 and 8
Outside diameter for tube (mm)	6 to 220

U-bolt clamps	U-bolt clamps according to DIN 3570
2 nuts:	
Nominal size	15 to 500
Outside diameter for tube (mm)	17.2 to 521
4 nuts:	
Nominal size	15 to 750
Outside diameter for tube (mm)	17.2 to 762

Pipe saddle (short or long)

Nominal size	15 to 750
Outside diameter for tube (mm)	17.2 to 762

Flat steel tube clamps	Flat steel tube clamps according to DIN 3567
Series A:	
Nominal size	20 to 521
Light construction:	
Nominal size	18 to 288

Hydraulic steel clamps

Nominal size	25 to 42
--------------	----------

Temperature ranges:

- Polypropylene (PP)	-30 °C to +90 °C	- Rubber	-50 °C to +120 °C
- Polyamide 6 (PA 6)	-40 °C to +120 °C	- Aluminium	up to +300 °C

1.2 Materials and/or components:

Tube clamps

- Series A and C	Polypropylene, polyamide 6, rubber, aluminium
Components	Steel
- Series B	Polypropylene, polyamide 6, rubber
Components	Steel

U-bolt clamps

- 2 nuts/4 nuts	Steel, galvanized steel, stainless steel
- Pipe saddle (short/long)	Polypropylene, polyamide 6

Flat steel tube clamps

- Series A	Steel, galvanized steel
- Light construction	Steel, galvanized steel, stainless steel

Hydraulic steel clamps

Galvanized steel

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

2. DOCUMENTS AND DRAWINGS:

According to following documents:

Designation	Rev.
Catalogue: RSB TUBE CLAMBS	12-2019

3. TEST REPORTS:

Not applicable.

4. APPLICATION / LIMITATION:

- 4.1 The tube clamps made of aluminum are not to be used in dangerous areas.
- 4.2 For essential services in machinery spaces, only the series with a steel cover and at least two screws may be used.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The tube clamps are to be supplied by **FKB GmbH** 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 BUREAU VERITAS product certificate.
- 5.3 **FKB GmbH** 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, **FKB GmbH** has declared to BUREAU VERITAS the following production site:
FKB GmbH, Oberndorf / GERMANY

6. MARKING OF PRODUCT:

The tube clamps shall be marked with at least:

- Manufacturer's name or logo
- Type designation

7. OTHERS:

- 7.1 It is **FKB GmbH**'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.
- 7.2 This certificate supersedes the Type Approval Certificate N° 08549/D0 BV issued on 08 Sep 2014 by the Society.

*** END OF CERTIFICATE ***