

# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAP00000M4**  
Revision No:  
**1**

## This is to certify:

That the Pipeline Clamps

with type designation(s)

**Tube Clamp Series A: Light Series, Tube Clamp Series B: Twin-tube Clamps, Tube Clamp Series C: Heavy Series**

Issued to

**FKB GmbH Feinwerktechnik Kunststoffverarbeitung  
Beleuchtungstechnik  
Oberndorf am Neckar, Baden-Württemberg, Germany**

is found to comply with

- DIN 3015-1 Fastening clamps – Block clamps – Part 1: Light duty (L)**
- DIN 3015-2 Fastening clamps – Block clamps – Part 2: Heavy duty (S)**
- DIN 3015-3 Fastening clamps – Block clamps – Part 3: Double clamps (Z)**
- DIN 3015-10 Fastening clamps – Block clamps – Part 10: Technical delivery conditions**

## Application :

The above mentioned pipe clamps are approved for the use in piping systems on board ships and piping systems on ON-Shore / Off-Shore constructions.

Issued at **Hamburg** on **2021-10-25**

This Certificate is valid until **2026-10-24** .

DNV local unit: **Augsburg**

for **DNV**

Approval Engineer: **Christian Kaemmer**

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**Olaf Drews**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



## Product description

Materials:

Clamps: Polypropylene PP, Polyamide 6 PA, Thermoplastic Elastomer TPE, Aluminium Al.  
Accessories: Steel, Stainless Steel

Outside Pipe: 4 – 101 mm Series A  
Diameter: 6 – 42 mm Series B  
6 – 406 mm Series C

Temperature Range:

Polypropylene: -30°C to +90°C Polyamide 6: -40°C to +120°C  
Aluminium: -40°C to +300 °C Thermoplastic Elastomer: -40°C to +120°C

## Limitation

The use of aluminium-clamps is not allowed for pipes containing flammable gases, liquids. Pipe clamps used inside machinery spaces are to be provided with upper and lower steel cover plates.  
The selection of the pipe clamps for the corresponding service and right installation are to be in accordance with the instructions of the manufacturer.

## Type Approval documentation

### Test reports / Assessment reports:

#### Tests carried out

- |                     |                                    |
|---------------------|------------------------------------|
| • DIN EN ISO 4589-2 | Determination of burning behaviour |
| • EN ISO 5659-2     | Smoke generation                   |
| • DIN 54837         | Testing of Materials               |
| • EN 45545-2        | Fire protection                    |
| • DIN 5510-2        | Preventive Fire Protection         |
| • NF X 70-100-1/-2  | Fire tests                         |

## Marking of product

For traceability to this type examination certificate, each tube clamp is to be marked with:

- "rsb"-logo as registered trademark
- Type designation
- Size

## Periodical assessment

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnvgl.com>