

# TYPE APPROVAL CERTIFICATE

Certificate no .: **TAP00001DZ** Revision No:

This is to certify:

that the Pipeline Clamps

with type designation(s)

Series A (Light Series), Series B (Twin Tube Clamp), Series C (Heavy Series)

# Parker Hannifin Manufacturing Germany GmbH & Co. KG **BIELEFELD, 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:**

Products approved by this certificate are accepted for installation in piping systems on all vessels and offshore installations classed by DNV

Issued at Hamburg on 2024-03-05

This Certificate is valid until 2029-03-04.

for **DNV** 

DNV local unit: Essen

Approval Engineer: Hagen Markus

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



Form code: TA 281 Revision: 2023-09 www.dnv.com Page 1 of 3

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.



Job ID: **262.1-022090-2** Certificate no.: **TAP00001DZ** 

Revision No: 1

## **Product description**

Туре	Design	Outer diameter of pipes		
		Metric series	Inch series	Imperial series
Series A	Light construction series / DIN 3015, Part 1	4 up to 101,8mm	1/8" up to 3 ½"	1⁄4" up to 4"
	Normal mechanical loads	nine standard sizes		
Series B	Twin tube clamps / DIN 3015, Part 3	6 up to 42mm	1/8" up to 1 1/4"	1/4" up to 1 1/2"
	Normal mechanical loads	five standard sizes		
Series C	Heavy series / DIN 3015, Part 2	6 up to 406,4	1/8" up to 16"	5/16" up to 12 3/4"
	High mechanical loads	ten standard sizes		

### **Assembly Variants**

Assembly on to metal welding	Cover plates, clamp body, screws	
Assembly on support rails	Support rail, support rail nuts, clamp body, cover plate, screws	
Construction assembly	Same as assembly on support rail. Clamps allow the assembly of multiple clamps of the same construction	

## Materials<sup>1</sup>

Clamp body	Material designation	
Series A	Polypropylene PP, PP-F <sup>2</sup> Polyamide 6 PA, PA-F <sup>2</sup>	
Series B		
Series C	Thermoplastic, Elastomer, TPE, TPE-F <sup>2</sup> Aluminum Al	
Cover plates, Screws	Carbon steel, Stainless steel	
Rails, Rail nuts, Welding plates		

#### Notes

### Application/Limitation

The pipe clamps are approved for application in piping systems installed on board ships and offshore installations classed by DNV.

For selection and installation of the pipe clamps the data/instructions specified in the Parker Hannifin catalogue 4100/UK is to be observed.

Pipe clamps intended to be installed inside of machinery spaces are to be provided with upper cover plates made of carbon or stainless steel.

This Type Approval Certificate Non-Class is based on the standards specified on page 1.

# Temperature range

Clamp body material	Temperature range	Color
Polypropylene (PP), PP-F	-30°C up to +90°C	dark green
Polyamide 6 (PA), PA-F	-40°C up to +120°C	black
Thermoplastic Elastomer (TP), TP-F	-40°C up to +120°C	black
Aluminum	-40°C up to +300 °C	n.a.

Form code: TA 281 Revision: 2023-09 www.dnv.com Page 2 of 3

<sup>&</sup>lt;sup>1</sup> Mechanical property refer to Parker Hannifin catalogue 4100/UK.

<sup>&</sup>lt;sup>2</sup> flame retardant



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## Type Approval documentation

### **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 Manufacturers mark

- Diameter
- Size

#### Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment to verify that the conditions for the Type Approval are complied with. Refer to the Class Programme DNV-CP-0338, Sec.4.

To check the validity of this certificate, please look it up in <a href="https://approvalfinder.dnv.com">https://approvalfinder.dnv.com</a>

### **End of certificate**

Form code: TA 281 Revision: 2023-09 www.dnv.com Page 3 of 3