International Standard



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION MEX CHAPODHAR OPPAHUSALUN TO CTAHDAPTUSALUNOORGANISATION INTERNATIONALE DE NORMALISATION

# Aerospace – "P" clamps (loop clamps) for fluid tubing installations – Dimensions

Aéronautique et espace - Colliers de fixation en P pour tuyauteries de fluides - Dimensions

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### Foreword

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International Standard ISO 7315 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*.

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#### INTERNATIONAL STANDARD

## Aerospace — "P" clamps (loop clamps) for fluid tubing installations — Dimensions

#### 1 Scope

This International Standard specifies maximum and minimum dimensions for "P" clamps (loop clamps) installed by means of a bolt with a nominal diameter of 5 mm.

The specified dimensions define a dimensional envelope. This International Standard shall not be considered as an interchangeability standard. The tolerances for each type of clamp are to be defined in the parts standards drawings.

#### 2 Field of application

These clamps are intended for the installation, support and guiding of rigid tubing or hose assemblies used in aerospace equipment. They may also similarly be used for other equipment, e.g. electrical cables or looms, where suitable.

#### 3 Reference

ISO 6771, Aerospace construction — Fluid systems and components — Pressure and temperature classifications.

#### 4 Field of use

"P" clamps (loop clamps) are classified into six types, according to the temperature range in which they are intended to be used (see table 1).

Table 1

| Temperatures | in | dearees | Celsius |
|--------------|----|---------|---------|
|--------------|----|---------|---------|

| Clamp type | Temperature range <sup>1)</sup> |       |  |
|------------|---------------------------------|-------|--|
|            | min.                            | max.  |  |
| 1          | - 55                            | + 70  |  |
| 2          | - 55                            | + 135 |  |
| 3          | - 55                            | + 200 |  |
| 4          | - 55                            | + 320 |  |
| 5          | - 55                            | + 400 |  |
| 6          | - 55                            | + 650 |  |

1) See ISO 6771.

#### 5 Description

The "P" clamp (loop clamp) is a "single block" or a "multicomponent"-type clamp. The "multi-component"-type clamp is provided as a metallic support with a plastomer or elastomer cushion or sheathing.

#### 6 Dimensions

The "P" clamp (loop clamp) shall be in accordance with the figure and table 2.

The shape of clamp illustrated in the figure does not purport to be the exact shape of the manufactured clamp. Table 2 only specifies those dimensions required to define the maximum envelope and the proper location of the tube relative to the mounting plane and fastening point.