
**Aerospace — Omega clamps (saddle
clamps) for fluid systems — Dimensions**

*Aéronautique et espace — Colliers en oméga pour systèmes de
fluides — Dimensions*



This document is a preview generated by EBS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Field of application	1
4 Field of use	1
5 Description	1
6 Dimensions	2

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword — Supplementary information](#).

The committee responsible for this document is ISO/TC 20, *Aircraft and space vehicles*, SC 10, *Aerospace fluid systems and components*.

This third edition cancels and replaces the second edition (ISO 8177:1987), which constitutes a minor revision.

Aerospace — Omega clamps (saddle clamps) for fluid systems — Dimensions

1 Scope

This International Standard specifies maximum and minimum dimensions for omega clamps (saddle clamps) installed by means of two bolts with nominal diameters of 5 mm.

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

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

3 Field of application

These clamps are intended for the installation, support and guiding of rigid tubing or hose assemblies used in aerospace equipment.

NOTE Omega clamps (saddle clamps) may also be used for other equipment, e.g. electrical cables or looms.

4 Field of use

Omega clamps (saddle clamps) are classified into six types according to the temperature range in which they are intended to be used (see [Table 1](#)).

Table 1 — Types of omega (saddle) clamps

Clamp type	Temperature range ^a	
	min.	max.
1	–55	+70
2	–55	+135
3	–55	+200
4	–55	+320
5	–55	+400
6	–55	+650

^a See ISO 6771.

5 Description

The omega clamp (saddle clamp) is a “multi-component”-type clamp. It consists of a top band and a base contoured to the tubing. Mounting holes in the top band align with holes in the base on installation. This