INTERNATIONAL STANDARD

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Aerospace series — O-ring grooves — Dimensions

Série aérospatiale — Gorges pour joints toriques — Dimensions

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Foreword

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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).

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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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

ISO 23748 was prepared by ACE/12/1 as EN 3748:2001 and was adopted (without modification other than those stipulated below) by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 10, *Aerospace fluid systems and components*.

The following are the modifications made in this International Standard:

— reference to ISO 3601-1 size codes in tables;

— correction in Table 13 of value 90,27 to 91,27;

— addition of "static applications" in the title and scope;

— "according to European Standards" was removed in the scope;

— any reference to European Standards were removed.

Aerospace series — O-ring grooves — Dimensions

1 Scope

This International Standard specifies the dimensions of grooves for use with O-rings for aerospace in static sealing applications:

— radial sealing: rod or bore mounted O-rings;

— axial sealing: internal or external pressure source.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

There are no normative references in this document.

3 Symbols

b	O-ring groove width
d_1	O-ring inside diameter
d_2	O-ring section diameter
d_3	O-ring groove diameter, rod mounted
d_4	bore diameter, rod mounted
d_5	rod outside diameter bore mounted
d_6	O-ring groove diameter bore mounted
d_7	O-ring groove outside diameter, internal pressure
d_8	O-ring groove inside diameter, external pressure
d_9	rod outside diameter, rod mounted
d_{10}	bore diameter, bore mounted
h	groove height
R	edge radius on groove
r_1	corner radius on groove
t	housing depth
Z	lead-in chamfer length