# INTERNATIONAL STANDARD

ISO 8278

Second edition 2016-03-01

# Aerospace series — Hydraulic, pressure compensated, variable delivery pumps — General requirements

Série aérospatiale — Pompes hydrauliques à débit variable régulé en fonction de la pression — Exigences générales





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## **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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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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 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*, Subcommittee SC 10, *Aerospace fluid systems and components*.

This second edition cancels and replaces the first edition (ISO 8278:1986) and ISO 12334:2000, which have been technically revised.

# Aerospace series — Hydraulic, pressure compensated, variable delivery pumps — General requirements

## 1 Scope

This International Standard establishes the general requirements for pressure compensated, variable delivery hydraulic pumps, suitable for use in aircraft hydraulic systems at pressures up to 35 000 kPa (5 000 psi).

This International Standard is to be used in conjunction with detail specifications that is particular to each application.

### 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 2093, Electroplated coatings of tin — Specification and test methods

ISO 2669, Environmental tests for aircraft equipment — Steady-state acceleration

ISO 2671, Environmental tests for aircraft equipment — Part 3.4: Acoustic vibration

ISO 2685, Aircraft — Environmental test procedure for airborne equipment — Resistance to fire in designated fire zones

ISO 3323, Aircraft — Hydraulic components — Marking to indicate fluid for which component is approved

ISO 3601-1:2012, Fluid power systems — O-rings — Part 1: Inside diameters, cross-sections, tolerances and designation codes

ISO 7137, Aircraft — Environmental conditions and test procedures for airborne equipment

ISO 7320, Aerospace — Couplings, threaded and sealed, for fluid systems — Dimensions

ISO 8078, Aerospace process — Anodic treatment of aluminium alloys — Sulfuric acid process, undyed coating

ISO 8079, Aerospace process — Anodic treatment of aluminium alloys — Sulfuric acid process, dyed coating

ISO 8081, Aerospace process — Chemical conversion coating for aluminium alloys — General purpose

ISO 8399-1, Aerospace — Accessory drives and mounting flanges (Metric series) — Part 1: Design criteria

ISO 8399-2, Aerospace — Accessory drives and mounting flanges (Metric series) — Part 2: Dimensions

ISO 8625-1, Aerospace — Fluid systems — Vocabulary — Part 1: General terms and definitions related to pressure

ISO 8625-2, Aerospace — Fluid systems — Vocabulary — Part 2: General terms and definitions relating to flow

ISO 8625-3, Aerospace — Fluid systems — Vocabulary — Part 3: General terms and definitions relating to temperature