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Third edition
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Hydraulic fluid power — Cylinders — Dimensions and tolerances of housings for single-acting piston and rod seals in reciprocating applications

*Transmissions hydrauliques — Vérins — Dimensions et tolérances
des logements de joints d'étanchéité pour pistons et tiges de piston à
simple effet dans les applications à mouvement alternatif*



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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 www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 7, *Sealing devices*.

This third edition cancels and replaces the second edition (ISO 5597:2010) which has been technically revised to ensure consistency with ISO 3320.

The main changes compared to the previous edition are:

- Seal housing sizes for a 60 mm diameter cylinder bore added to [Table 3](#);
- 400 mm and 450 mm diameter rods added to [Table 5](#).
- [Table 1](#) has been modified to indicate that, for some seal housings, the axial lengths (seal groove lengths) are too short for the surface roughness to be measured with five sampling lengths.

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Introduction

In hydraulic fluid power systems, power is transmitted and controlled through a liquid under pressure within an enclosed circuit. Sealing devices are used to contain the pressurized fluid with components having elements with linear motion, i.e. hydraulic cylinders. These sealing devices are used with both cylinder rod and piston seal housings.

This document is one of a series of standards covering dimensions and tolerances of housings.