
INTERNATIONAL STANDARD



3939

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Fluid power systems and components — Multiple lip packing sets — Methods for measuring stack heights

Transmissions hydrauliques et pneumatiques — Garnitures à lèvres multiples — Méthodes de mesure des hauteurs d'empilage

First edition — 1977-03-15

Sample Document

get full document from standards.iteh.ai

UDC 621.8.032

Ref. No. ISO 3939-1977 (E)

Descriptors : pneumatic equipment, hydraulic equipment, fluid power, dimensional measurement, seals (stoppers).

Price based on 4 pages

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3939 was developed by Technical Committee ISO/TC 131, *Fluid power systems and components*, and was circulated to the member bodies in October 1975.

It has been approved by the member bodies of the following countries :

Australia	India	Spain
Austria	Japan	Sweden
Belgium	Korea, Dem. P. Rep. of	Turkey
Brazil	Mexico	United Kingdom
Czechoslovakia	Netherlands	U.S.A.
Finland	Poland	Yugoslavia
France	Romania	
Germany	South Africa, Rep. of	

No member body expressed disapproval of the document.

Fluid power systems and components — Multiple lip packing sets — Methods for measuring stack heights

0 INTRODUCTION

In fluid power systems, power is transmitted and controlled through a fluid (liquid or gas) under pressure within an enclosed circuit. Packing sets are used to contain the pressurized fluid within components with movable elements.

Various methods are currently being used by different suppliers and users to measure the stack height of packing sets. This frequently results in different values being obtained, owing to the nature of the materials used for seals and to the fact that a number of individual sealing rings are being measured together. Traditional measuring tools (for example sliding calipers) cannot be accurately applied in such circumstances. In addition, results are greatly influenced by the ability of the individual inspector.

Cylinder, valve and pump designers, quality control personnel, and inspection personnel need accurate stack height dimensions of multiple lip packing sets to do their work effectively. By having these dimensions, users and suppliers can work from a standard base when communicating seal requirements. Inspection upon receipt is facilitated for the user, as is final inspection for the supplier; and both have the opportunity of ensuring understanding concerning what has been received and what has been supplied. Having these dimensions also provides designers with an understanding and a means for determining final installation conditions.

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies methods for measuring sealing devices having more than one seal in the set. The sets are composed of homogeneous and/or fabric-reinforced fluid power lip sealing rings of various configurations such as V, Y, U and W, with or without adapters.

This International Standard also specifies methods for measuring stack height of multiple lip packing sets in order that both supplier and user can determine that the sets are to an acceptable dimensional standard.

It is not the intention of this International Standard to specify the dimensions for packing sets or their components, since such dimensions depend on the material being used, on the section and on the type of design.

2 REFERENCE

ISO 5598, *Fluid power systems and components — Vocabulary*.

3 DEFINITIONS

For definitions of terms used, see ISO 5598.

4 GENERAL

4.1 This International Standard describes three acceptable methods for determining the stack height of a multiple lip packing set. Each method has distinct advantages and disadvantages. However, there is a reasonable degree of correlation among these three methods, and users are advised to consult their suppliers to determine which of the three methods the supplier is currently using.

4.2 It is recommended that the user consult the seal supplier to ascertain the method of measuring used and the applicable data, thus enabling the user to duplicate the supplier's method or correlate results if supplier and user methods are different.