SLOVENSKI STANDARD
SIST ISO 6301-1:1998

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Fluidna tehnika - Pnevmatika - Naoljevalniki zraka - 1. del: Glavne znaļilnosti, ki morajo biti navedene v dokumentaciji dobaviteljev, in naļin oznaļevanja

Pneumatic fluid power -- Compressed-air lubricators -- Part 1: Main characteristics to be included in supplier's literature and product-marking requirements

Transmissions pneumatiques -- Lubrificateurs pour air comprimé -- Partie 1: Principales caractéristiques à inclure dans la documentation des fournisseurs et exigences de marquage du produit

Ta slovenski standard je istoveten z: **ISO 6301-1:1997**

ICS:

23.100.99	Drugi sestavni deli hidravliļnih sistemov	Other fluid power system components

SIST ISO 6301-1:1998 **en**

INTERNATIONAL STANDARD

ISO 6301-1

Second edition
1997-12-15

Pneumatic fluid power — Compressed air lubricators —

Part 1:
Main characteristics to be included in supplier's literature and product-marking requirements

Transmissions pneumatiques — Lubrificateurs pour air comprimé — Partie 1: Principales caractéristiques à inclure dans la documentation des fournisseurs et exigences de marquage du produit

Reference number
ISO 6301-1:1997(E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 6301-1 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 5, *Control products and components*.

This second edition cancels and replaces the first edition (ISO 6301-1:1989) of which it constitues a technical revision.

ISO 6301 consists of the following parts, under the general title *Pneumatic fluid power — Compressed air lubricators*:

— *Part 1: Main characteristics to be included in supplier's literature and product-marking requirements*

— *Part 2: Test methods to determine the main characteristics to be included in supplier's literature*

Annex A of this part of ISO 6301 is for information only.

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Introduction

In pneumatic fluid power systems, power is transmitted and controlled through air under pressure within a circuit. Where lubrication of the air media is desired, compressed air lubricators are components designed to introduce the required quantity of lubricant into the air stream.

Pneumatic fluid power — Compressed air lubricators —

Part 1:
Main characteristics to be included in supplier's literature and product-marking requirements

1 Scope

This part of ISO 6301 specifies which characteristics of compressed air lubricators are to be included in the supplier's literature.

It also specifies product-marking requirements which the lubricators must meet.

This part of ISO 6301 applies to compressed air lubricators, constructed from light alloys (aluminium, etc), zinc diecast alloys, brass, steel and plastic, with a rated pressure of 1 600 kPa (16 bar) and a maximum temperature of 80 °C.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 6301. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 6301 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2944:1974, *Fluid power systems and components — Nominal pressures*.

ISO 5598:1985, *Fluid power systems and components — Vocabulary*.

ISO 6301-2:1997, *Pneumatic fluid power — Compressed air lubricators — Part 2: Test methods to determine the main characteristics to be included in supplier's literature*.

3 Definitions

For the purposes of this part of ISO 6301, the definitions given in ISO 5598 apply together with the following.

3.1 compressed air lubricator: Component designed to introduce controlled quantities of lubricant into the compressed air stream. There are two kinds of compressed air lubricators based upon two principles of operation as defined in 3.1.1 and 3.1.2.

3.1.1 non-recirculating lubricator: Lubricator which injects into the air flow all the oil passing through the oil feed mechanism.

3.1.2 recirculating lubricator: Lubricator which injects into the air flow only a portion of the oil observed passing through the oil feed mechanism.

3.2 rated pressure: Pressure, confirmed through testing, at which a component or piping is designed to operate for a number of repetitions sufficient to assure adequate service life.

3.3 minimum operating flow for a lubricator: Minimum flow rate which, with the minimum oil level in the reservoir, provides an oil feed and atomization of the lubricant with a theoretical concentration when the oil feed mechanism is set at the maximum.

4 Technical requirements

Descriptive literature covering compressed air lubricators shall include the following characteristics.

4.1 General characteristics

4.1.1 General dimensions

The dimensions shown in figure 1 shall be given, in millimetres. For ports, see 4.1.2.

4.1.2 Port forms

Port forms should be selected from ISO 228-1 for ports with pipe parallel threads, or ISO 7-1 for ports with pipe tapered threads.

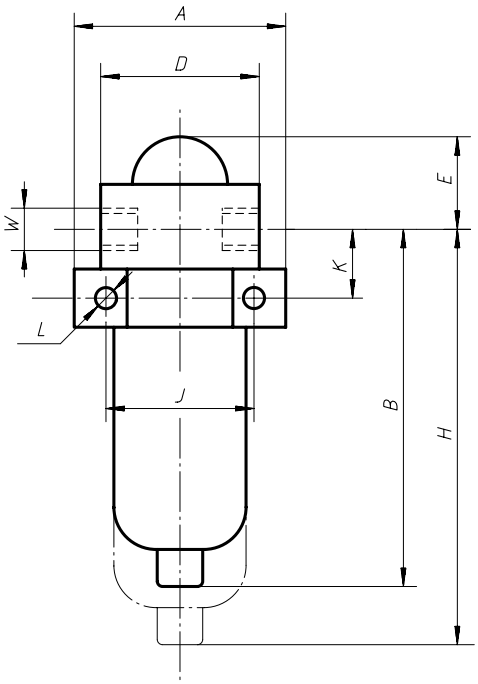
The connecting interface for flange-mounted designs may be plain ported and counterbored to accept O-rings.

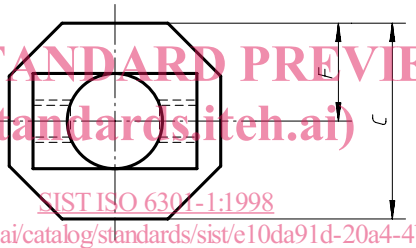
For certain applications and connections, other port forms may be employed.

4.1.3 Rated pressure

Compressed air lubricators shall be classified according to a pressure, selected from the preferred pressures listed in ISO 2944.

The rated pressure shall be verified using the test procedure specified as provided in ISO 6301-2:1997, clause 6.





Key

A = Maximum overall width
B = Maximum installation height below the port centreline
C = Maximum overall depth, excluding pressure gauge
D = Distance between the faces of the compressed air connection (inlet/outlet)
E = Maximum height above the port centreline
F 1) = Maximum installation depth from the port centreline
H = Minimum clearance from the port centreline to permit dismantling
J 2) = Distance between mounting holes
K 2) = Distance between the port centreline and mounting holes
L 2) = Minimum diameter and length of mounting holes or recommended mounting bolts
W = Port description

1) Applies also for mounting brackets.
2) Dimensions *J*, *K* and *L* shall be indicated only if the device has provisions for mounting.

Figure 1 — Dimensions of lubricators