

# International Standard



# 7311

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

## Road vehicles — Compression ignition engines — Heads for fuel filters with vertical flange — Mounting and connecting dimensions

*Véhicules routiers — Moteurs à combustion interne à allumage par compression — Têtes pour filtres à combustible à bride verticale — Dimensions de montage et de raccordement*

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## Foreword

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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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7311 was prepared by Technical Committee ISO/TC 22, *Road vehicles*.

# Road vehicles — Compression ignition engines — Heads for fuel filters with vertical flange — Mounting and connecting dimensions

## 0 Introduction

This International Standard is one of a series of International Standards dealing with heads for fuel filters for compression ignition engines. The others in the series are the following :

ISO 7310, *Road vehicles — Compression ignition engines — Heads for spin-on fuel filters with horizontal flange — Mounting and connecting dimensions.*

ISO 7577, *Road vehicles — Heads for fuel filters with vertical flange and three bolt fixing for compression ignition engines — Mounting and connecting dimensions.*

## 1 Scope and field of application

This International Standard specifies mounting and connecting dimensions for heads for fuel filters with vertical flange for compression ignition (diesel) engines.

Unless otherwise specified, the filter heads are applicable to both bolt-on and spin-on filters.

2 Dimensions and tolerances

NOTE — Features such as threads or bolts for use with the filters are omitted from the figures. The current size for fitment of filters is M16 × 1,5.

2.1 Bolt holes for flanges of single and double filters

See figure 1.

NOTE — Engine manufacturers are encouraged to use a centre-to-centre distance for fixing holes or fixing bolts of  $50 \pm 0,5$  mm.

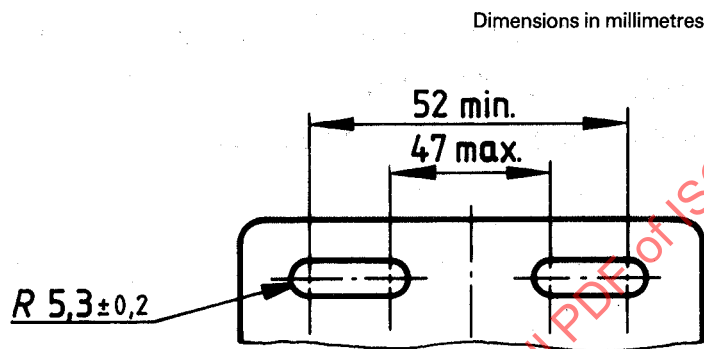


Figure 1

2.2 Filter inlet and outlet ports

2.2.1 For outside sealing

See figure 2.

NOTE — The choice of vent threads and overflow values are left to the manufacturer.

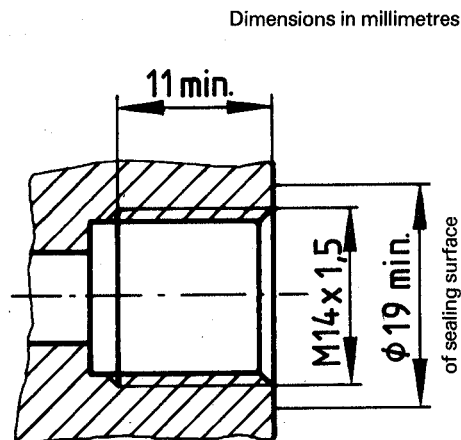


Figure 2

## 2.2.2 For internal sealing

See figure 3.

NOTE — The choice of vent threads and overflow values are left to the manufacturer.

Dimensions in millimetres

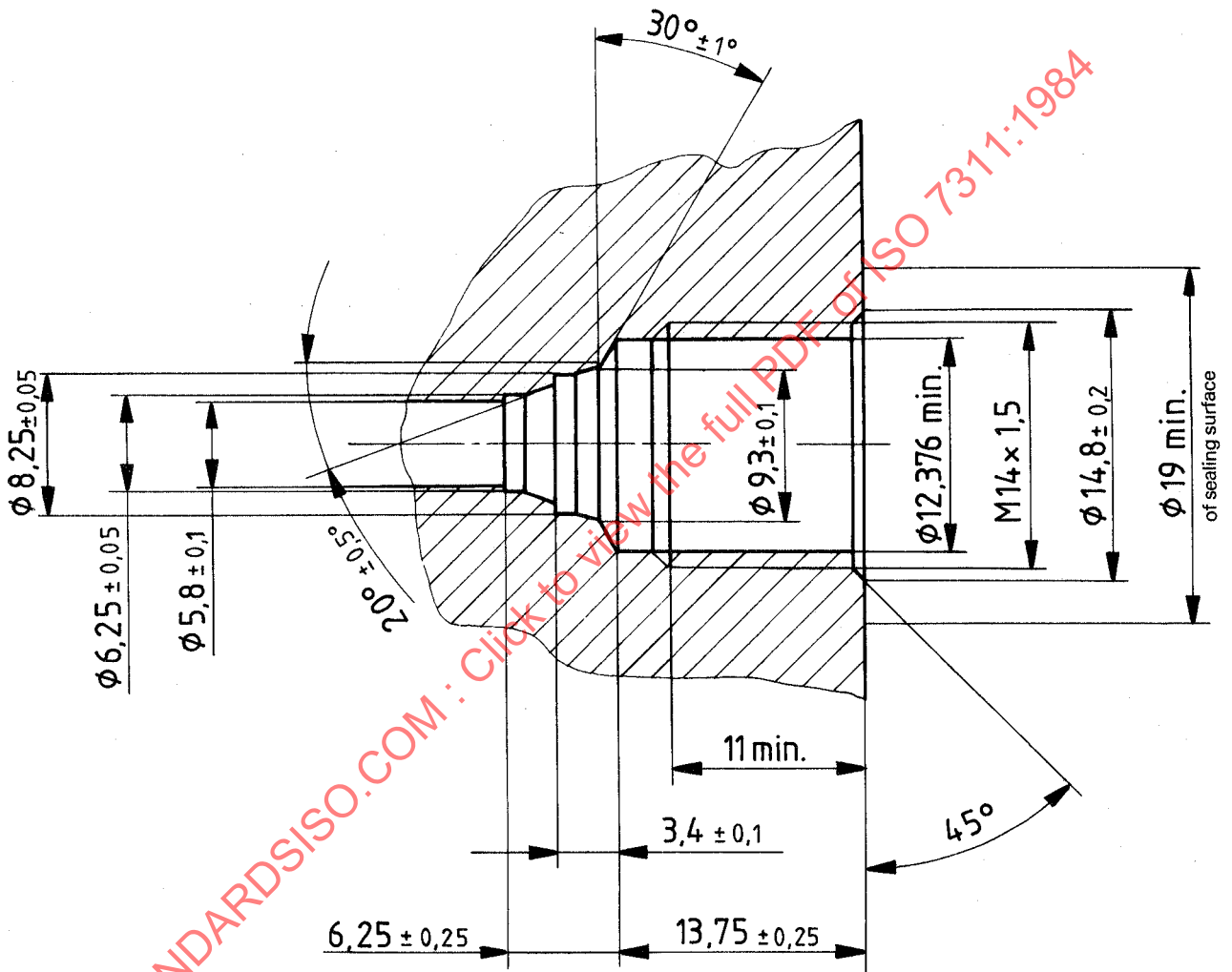


Figure 3

2.3 Positioning of inlet and outlet ports relative to the fixing face of the flange

2.3.1 Single spin-on filters with vertical outlet and three horizontal ports

See figure 4.

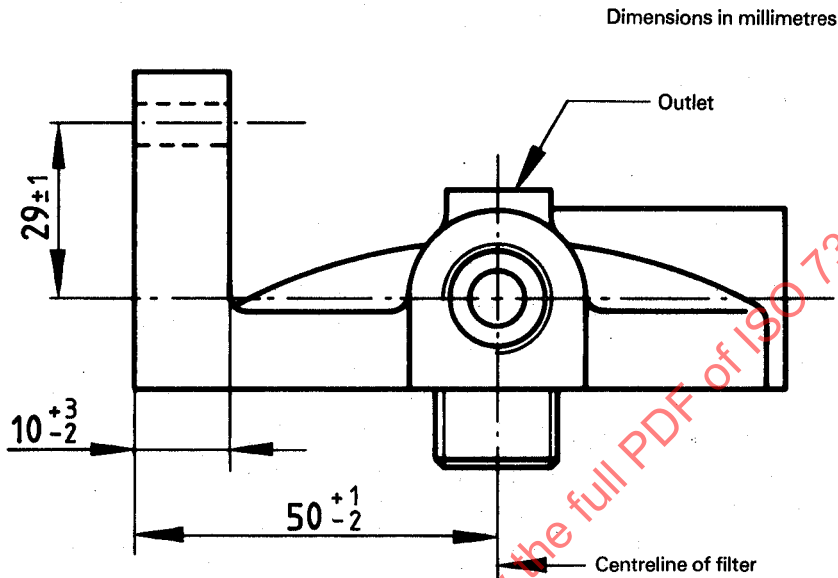


Figure 4

2.3.2 Single and double filters without vertical outlet with two horizontal ports

See figure 5.

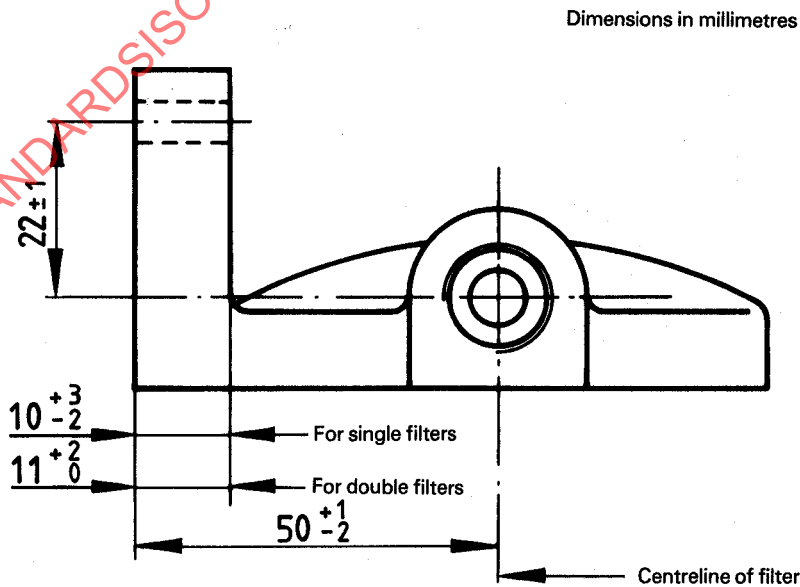


Figure 5

2.3.3 Single filters with four horizontal ports and a flange of  $10 \pm 1$  mm thickness

See figure 6.

Dimensions in millimetres

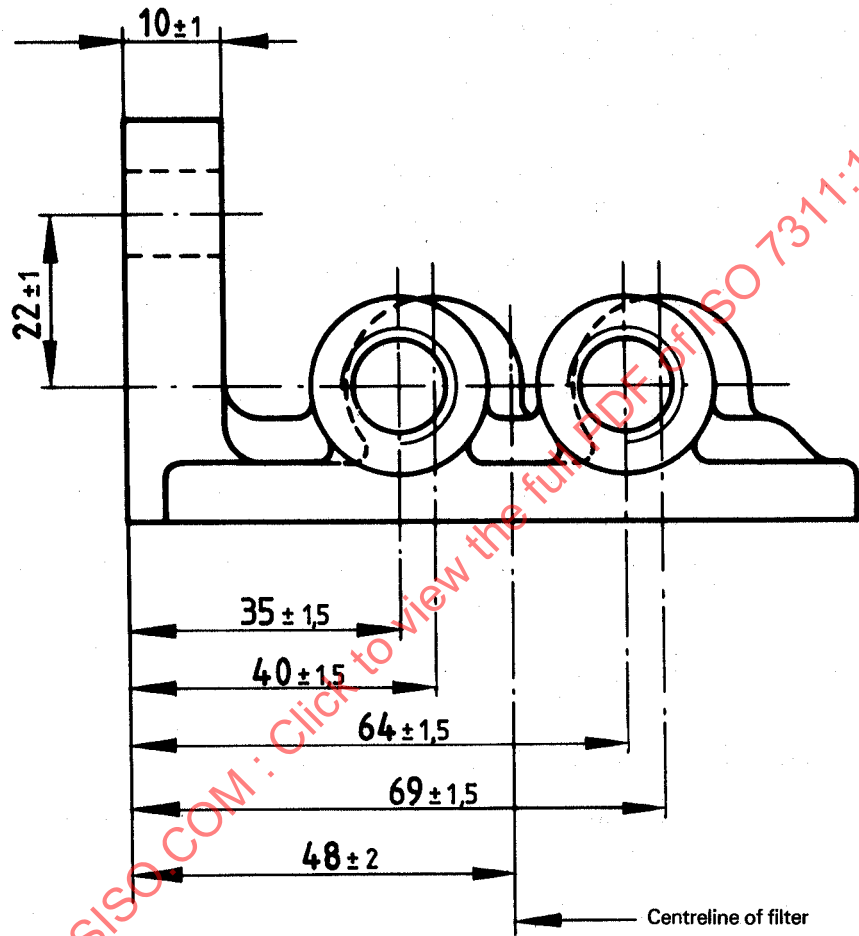


Figure 6

2.3.4 Single filters with four horizontal ports and a flange of  $14 \pm 1$  mm thickness

See figure 7.

Dimensions in millimetres

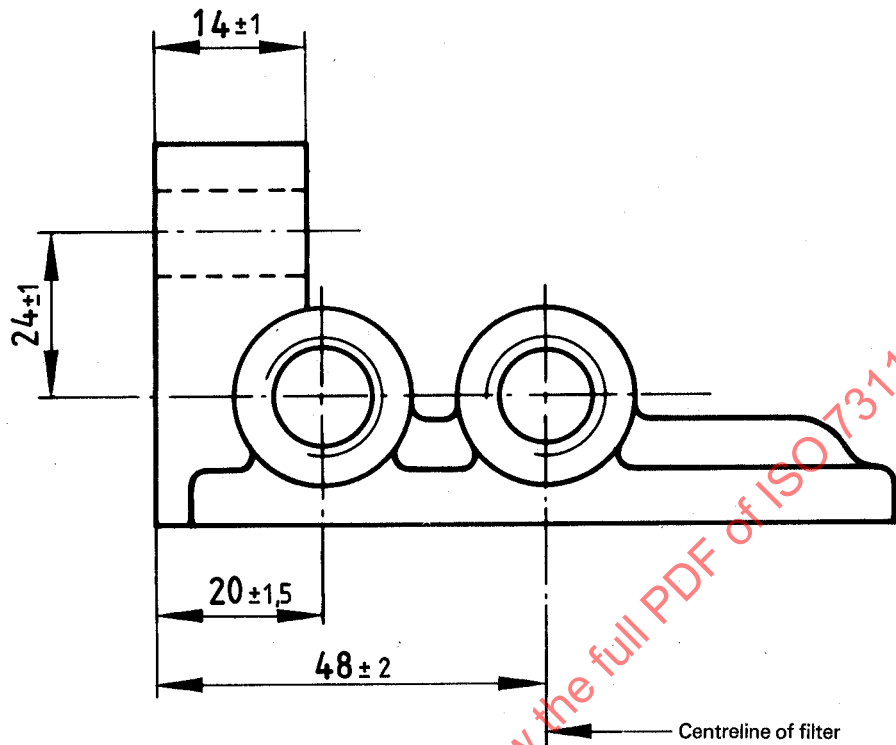


Figure 7

2.3.5 Double filters with four horizontal ports

See figure 8.

Dimensions in millimetres

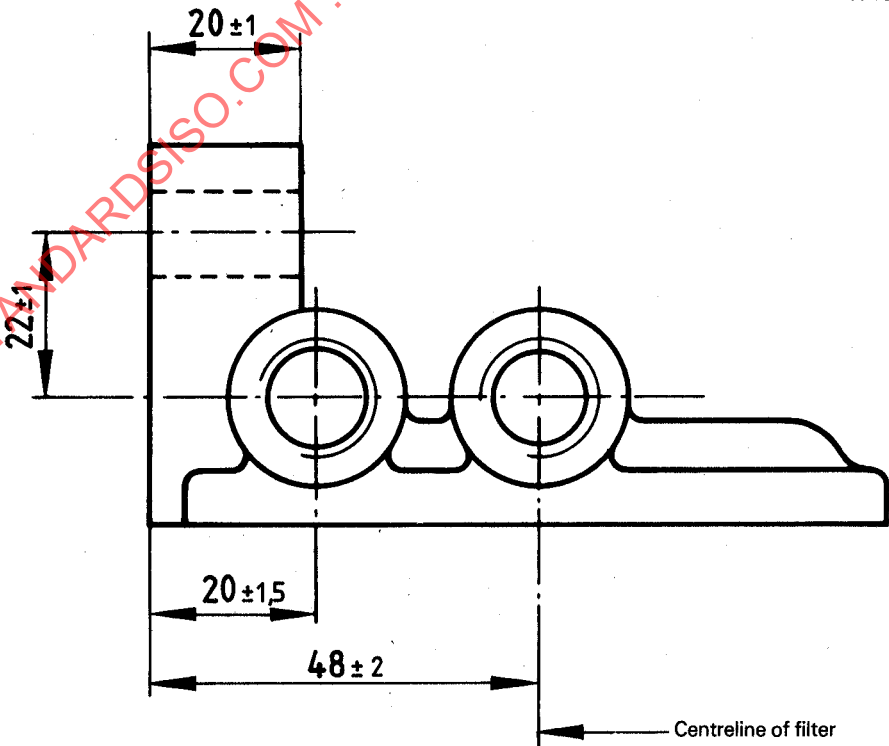


Figure 8

## 2.4 Overall dimensions between sealing surfaces of the horizontal ports

### 2.4.1 Single spin-on filters with vertical outlet and three horizontal ports

See figure 9.

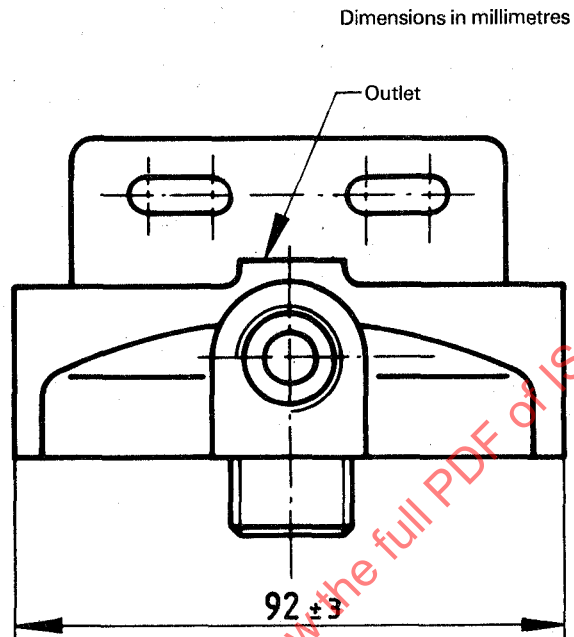


Figure 9

### 2.4.2 Single filters without vertical outlet with two horizontal ports

See figure 10.

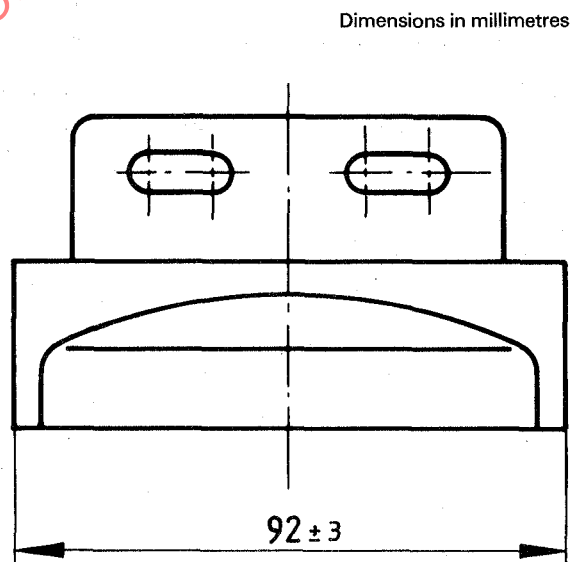


Figure 10