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# International Standard



# 7654

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

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## Compression ignition engines — Spin-on fuel filters — Mounting and connecting dimensions

*Moteurs à combustion interne à allumage par compression — Filtres à combustible vissés — Dimensions de montage et de raccordement*

First edition — 1983-10-01

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[ISO 7654:1983](https://standards.iteh.ai/catalog/standards/sist/2aed2fba-1420-4014-a78d-e102a94084c0/iso-7654-1983)

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Ref. No. ISO 7654-1983 (E)

Descriptors : internal combustion engines, fuel filters, connecting dimensions, dimensional tolerances.

## 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.

International Standard ISO 7654 was developed by Technical Committee ISO/TC 22, *Road vehicles*, and was circulated to the member bodies in February 1982.

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

ISO-7654:1983

Austria	Iran	Romania
Belgium	Italy	South Africa, Rep. of
Brazil	Japan	Sweden
China	Korea, Dem. P. Rep. of	Spain
Czechoslovakia	Korea, Rep. of	Switzerland
Egypt, Arab Rep. of	Netherlands	USA
Germany, F.R.	New Zealand	USSR
Hungary	Poland	

The member body of the following country expressed disapproval of the document on technical grounds :

United Kingdom

# Compression ignition engines — Spin-on fuel filters — Mounting and connecting dimensions

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## 1 Scope and field of application

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This International Standard lays down the mounting and connection dimensions for spin-on fuel filters.

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It applies to spin-on fuel filters to be used with compression ignition (diesel) engines.

The corresponding filter heads are specified in ISO 7310, ISO 7311 and ISO 7577.

## 2 References

ISO 7310, *Road vehicles — Compression ignition engines — Heads for spin-on fuel filters with horizontal flange — Mounting and connecting dimensions.*<sup>1)</sup>

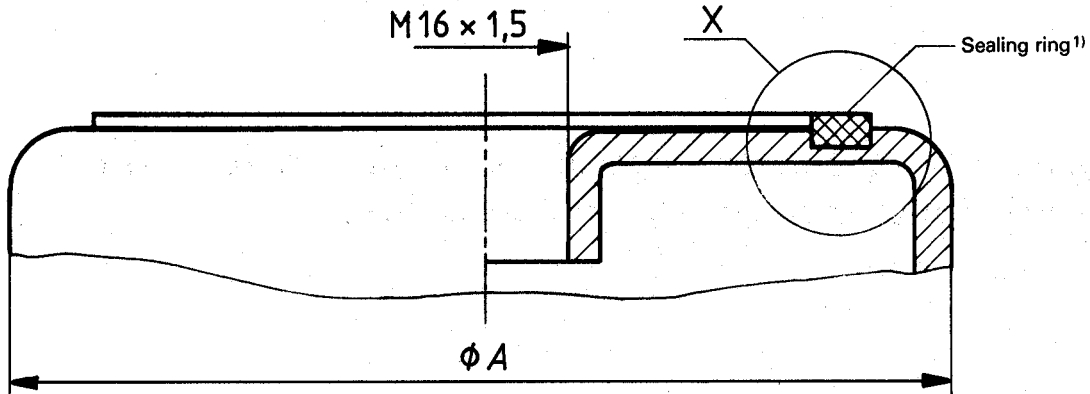
ISO 7311, *Road vehicles — Compression ignition engines — Heads for fuel filters with vertical flanges — Mounting and connecting dimensions.*<sup>1)</sup>

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

1) At present at the stage of draft.

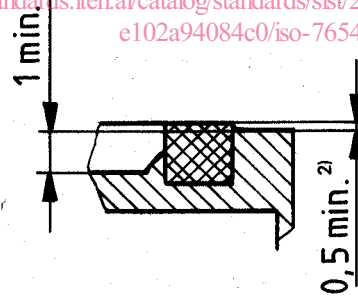
3 Dimensions and tolerances

Dimensions in millimetres



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Size	1	2	3	4	5
A max.	80	88	90	100	112

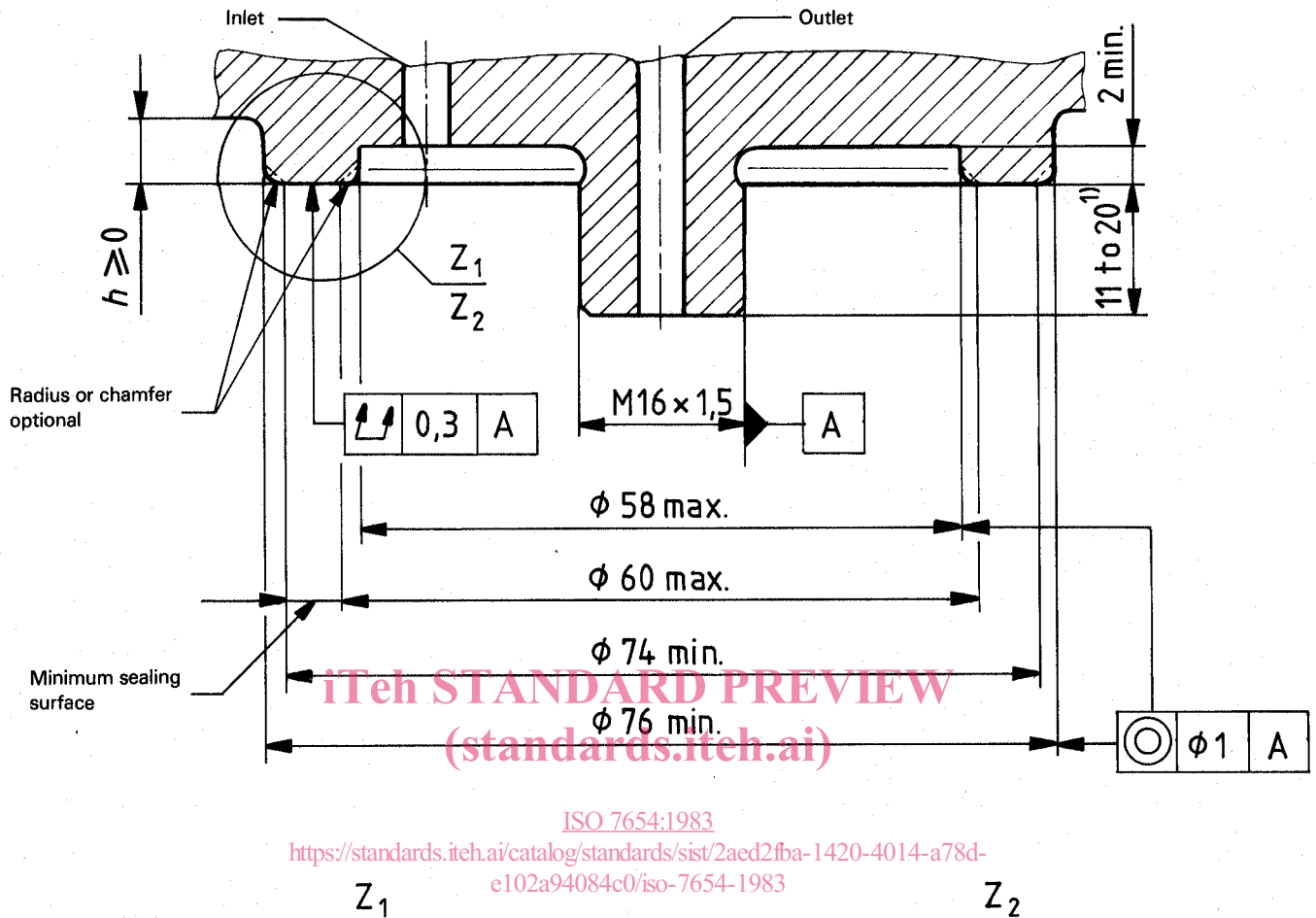
Figure 1 – Dimensions of the filter

1) The shape of the sealing ring shall be such that effective sealing is ensured. The dimensions of the compressed sealing ring shall be within the sealing surface.

2) This dimension shall be measured after tightening the filter in accordance with the filter manufacturer's recommendations.

In cases where moulded sealing rings are used, this dimension may be 0; i.e., metal contact between the sealing surface to which the filter is attached and the face of the spin-on filter is allowed. (This special design shall be identified on the filter with necessary fitting instructions.)

Dimensions in millimetres



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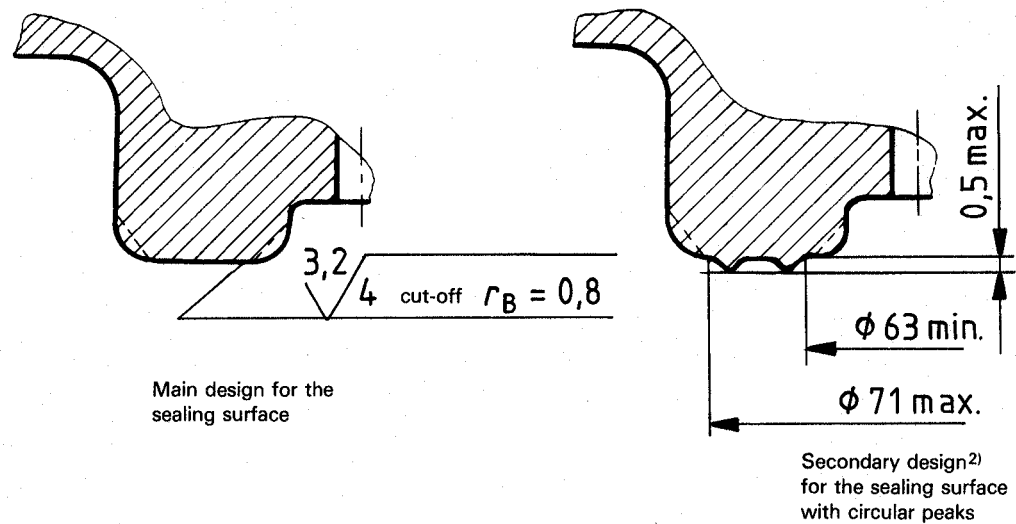


Figure 2 — Dimensions of sealing surface and connecting thread

NOTE — Details not specified in this International Standard are left to the manufacturer's choice.

- 1) The thread length shall be adequate to ensure a satisfactory seal between the filter and the sealing surface.
- 2) This design shall be avoided for future applications.

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