

INTERNATIONAL STANDARD

ISO 9102

Second edition
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Diesel engines — Screw-in injection nozzle holders, types 24, 25, 26 and 26.1

Moteurs diesels — Porte-injecteurs vissés, types 24, 25, 26 et 26.1

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Reference number
ISO 9102:1997(E)

Foreword

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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 9102 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 7, *Injection equipment and filters for use on road vehicles*.

This second edition cancels and replaces the first edition (ISO 9102:1990), which has been revised to include screw-in injection nozzle holders of type 26.1.

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Diesel engines — Screw-in injection nozzle holders, types 24, 25, 26 and 26.1

1 Scope

This International Standard specifies dimensional requirements for the mounting of nozzle holders in diesel engines.

The location of the fuel inlet and leak-off connections are not defined since they vary according to the particular application.

This International Standard applies to screw-in nozzle holders of types 24, 25, 26 and 26.1.

2 Dimensions and tolerances

2.1 Nozzle holder with integral heat shield, type 24

Nozzle holders of type 24 with integral head shield shall meet the requirements shown in figure 1 and table 1.

2.2 Nozzle holders without heat shield

2.2.1 Nozzle holder, type 25

Nozzle holders of type 25 without head shield shall meet the requirements shown in figure 2 and table 1.

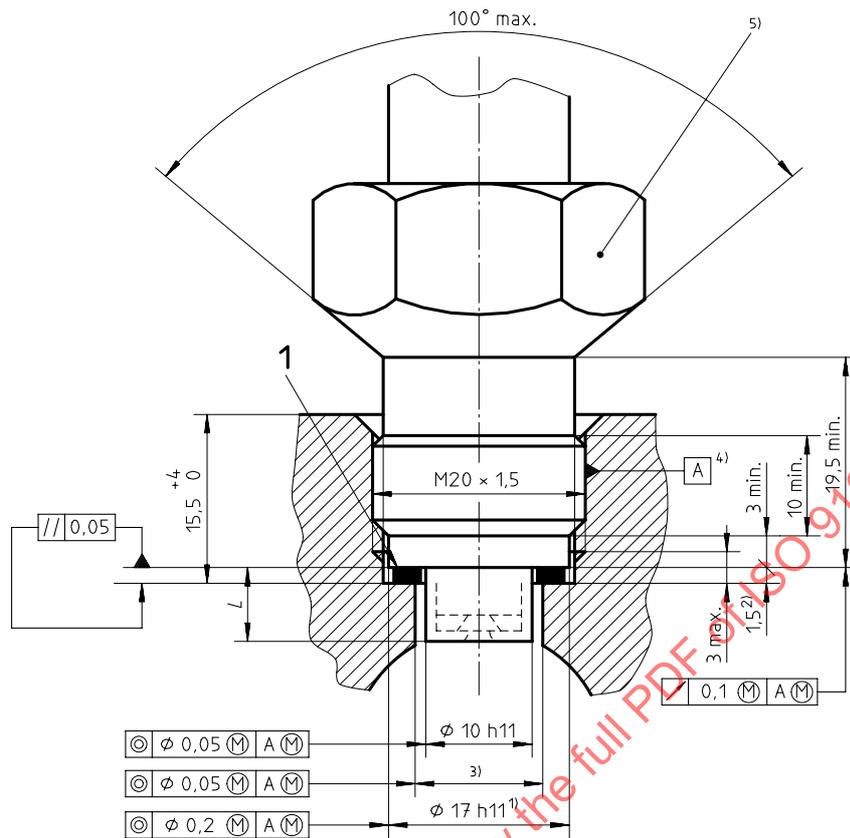
2.2.2 Nozzle holders, types 26 and 26.1

Nozzle holders of types 26 and 26.1 without heat shield shall meet the requirements shown in figure 3 and table 1.

3 Other specifications

Dimensions and requirements not given in this International Standard are left to the discretion of the manufacturer.

Dimensions in millimetres



Key

1 Sealing washer

- 1) In cases where narrow mounting conditions exist, this shaft diameter may be reduced to 15 h11, but this shall be agreed between the screw-in nozzle holder manufacturer and the engine manufacturer.
- 2) With commercial tolerances (before compression).
- 3) The determination of this diameter in the cylinder head is left to the manufacturer's choice. For this purpose, the maximum value for the heat shield diameter, which is given as a result of the maximum material principle (M) and the maximum tolerance value of the cylinder head hole, shall be taken into account. The clearance shall be kept to a minimum to avoid unnecessary heating of the nozzle.
- 4) Datum feature for the datum letter A is the pitch diameter; this refers to the nozzle holder thread as well as to the cylinder head thread.
- 5) Hexagon 22 or 27 h13 across flats.

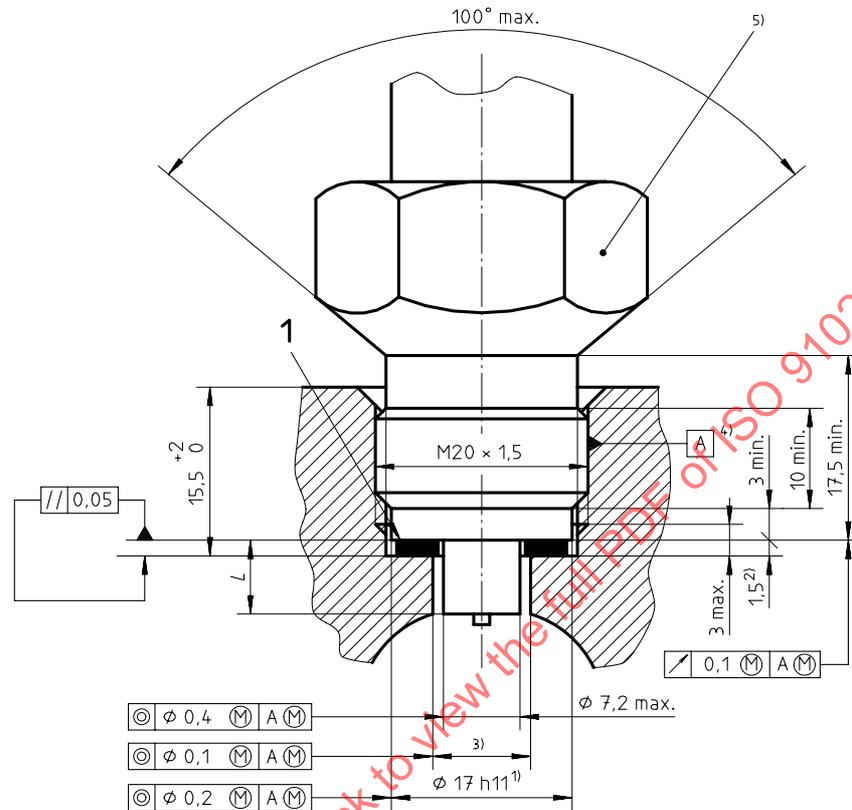
Figure 1 — Screw-in nozzle holder, type 24

Table 1

Dimensions in millimetres

Nozzle holder type	L ± 0,2
24	3,5 or 8 or 13
25	8 or 13
26	7
26.1	7

Dimensions in millimetres

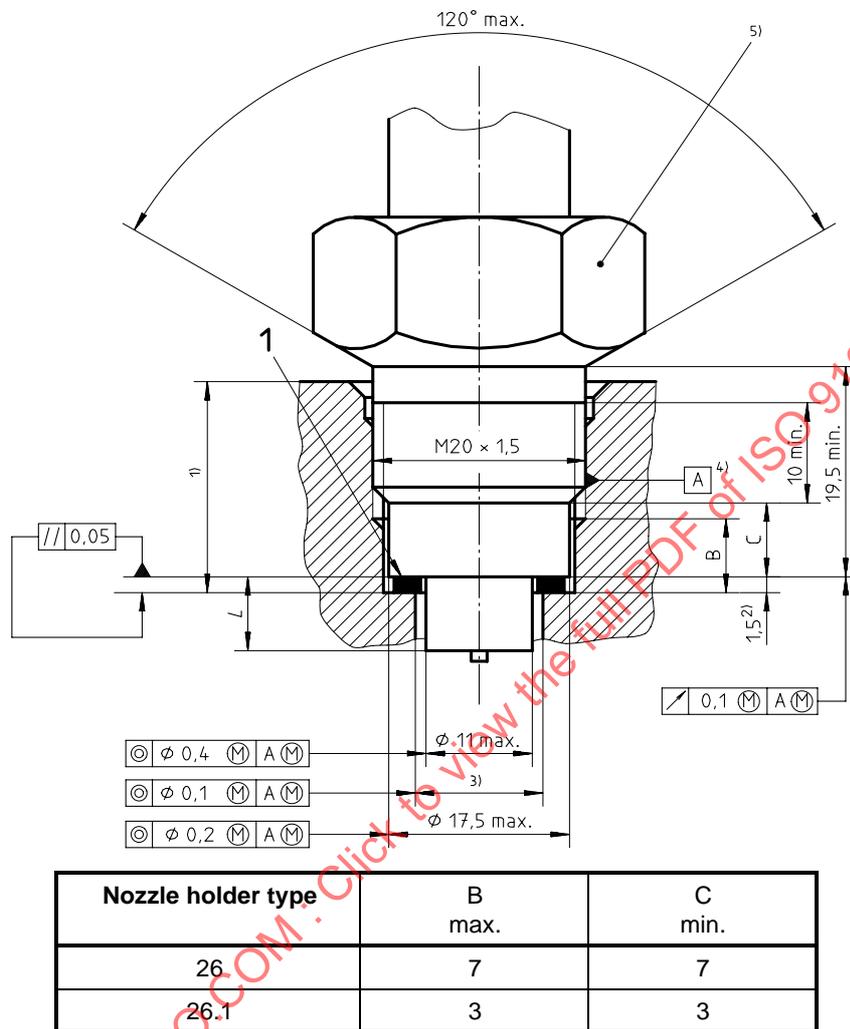
**Key**

1 Sealing washer

- 1) In cases where narrow mounting conditions exist, this shaft diameter may be reduced to 15 h11, but this shall be agreed between the screw-in nozzle holder manufacturer and the engine manufacturer.
- 2) With commercial tolerances (before compression).
- 3) The determination of this diameter in the cylinder head is left to the manufacturer's choice. For this purpose, the maximum value for the nozzle stem diameter, which is given as a result of the maximum material principle (M) and the maximum tolerance value of the cylinder head hole, shall be taken into account. The clearance shall be kept to a minimum to avoid unnecessary heating of the nozzle.
- 4) Datum feature for the datum letter A is the pitch diameter; this refers to the nozzle holder thread as well as to the cylinder head thread.
- 5) Hexagon 22 or 27 h13 across flats.

Figure 2 — Screw-in nozzle holder, type 25

Dimensions in millimetres



Key

1 Sealing washer

- 1) The maximum depth of the cylinder head hole shall be chosen to ensure that there is no interference with the thread runout on the injector. The minimum thread engagement shall be suitable for the recommended tightening torque.
- 2) With commercial tolerances (before compression).
- 3) The determination of this diameter in the cylinder head is left to the manufacturer's choice. For this purpose, the maximum value for the nozzle stem diameter, which is given as a result of the maximum material principle (M) and the maximum tolerance value of the cylinder head hole, shall be taken into account. The clearance shall be kept to a minimum to avoid unnecessary heating of the nozzle.
- 4) Datum feature for the datum letter A is the pitch diameter; this refers to the nozzle holder thread as well as to the cylinder head thread.
- 5) Hexagon 22 h13 across flats. Provisionally, a hexagon size of 21 mm may be used.

Figure 3 — Screw-in nozzle holder, types 26 and 26.1