
International Standard



7030

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Road vehicles — Screw-mounted injection nozzle holder, types 12, 13, 14, 15, 16, 17, 18 and 19

Véhicules routiers — Porte-injecteurs vissés, types 12, 13, 14, 15, 16, 17, 18 et 19

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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 7030 was developed by Technical Committee ISO/TC 22, *Road vehicles*, and was circulated to the member bodies in June 1980.

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

Australia	Iran	Spain
Austria	Italy	Sweden
Belgium	Korea, Dem. P. Rep. of	Switzerland
Chile	Korea, Rep. of	United Kingdom
Egypt, Arab Rep. of	Netherlands	USA
France	Romania	USSR
India	South Africa, Rep. of	

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

Germany, F. R.

Road vehicles — Screw-mounted injection nozzle holder, types 12, 13, 14, 15, 16, 17, 18 and 19

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1 Scope and field of application

injection nozzle holders, types 12, 13, 14, 15, 16, 17, 18 and 19.

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

The nozzle holder types 12 and 13 are used with the nozzles specified in ISO 2697; nozzle holder types 14 and 15 may also be used with these nozzles.

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

2 Reference

This International Standard is applicable to screw-mounted

ISO 2697, *Road vehicles — Fuel injection nozzles — Size "S"*.

3 Dimensions and tolerances

3.1 General dimensions (the preferred shank lengths are given in 3.2)

3.1.1 Nozzle holder types 12 and 13

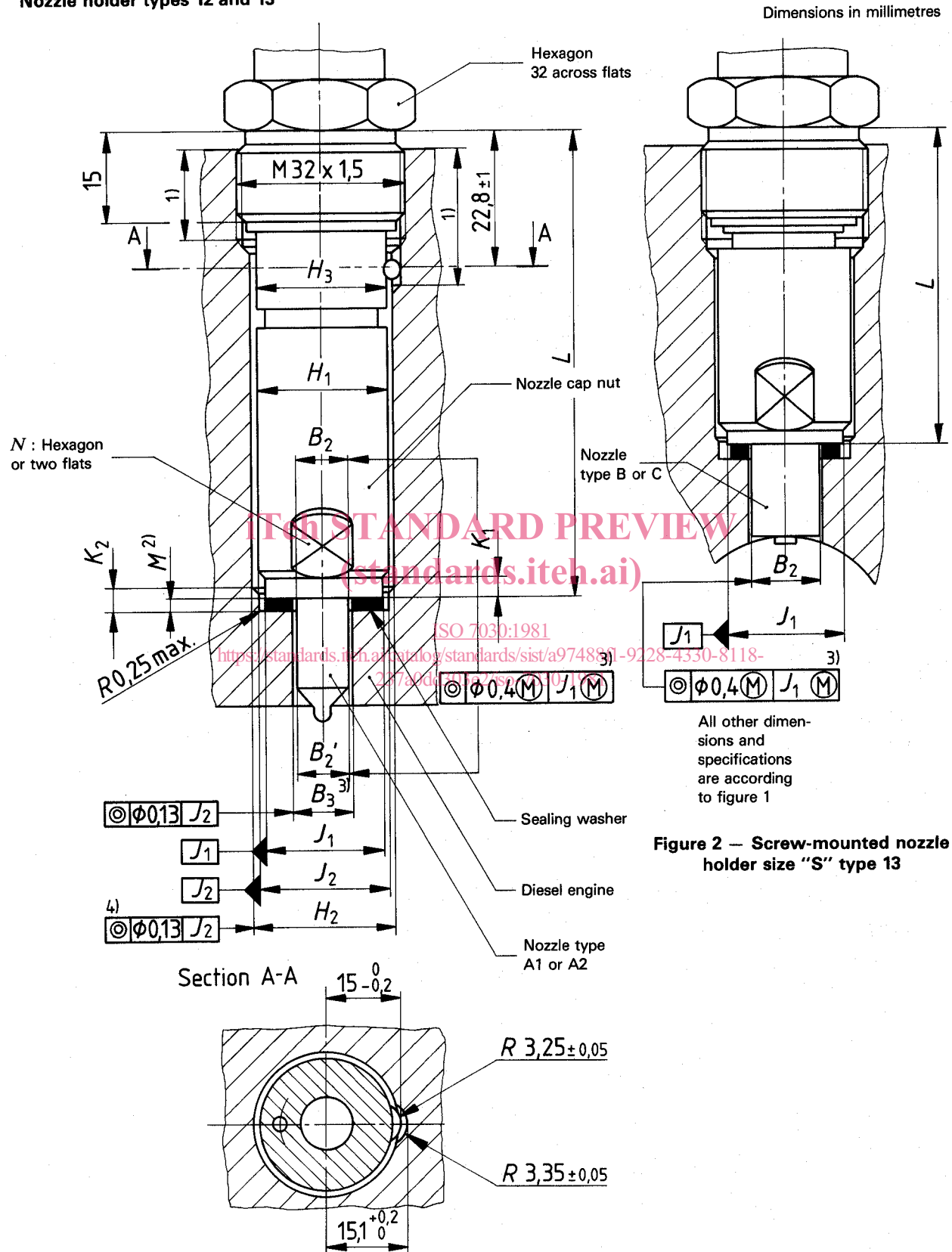


Figure 1 — Screw-mounted nozzle holder size "S" type 12

1) 2) 3) 4) See corresponding notes on page 3.

Nozzle holder Type	Nozzle Type	H_1 max.	H_2 min.	H_3 max.	B_2	B_2' + 0,3 0	B_3	J_1 h11	J_2 C11	K_1 min.	K_2 + 1 0	$M^{2)}$ nom.	N across flats h11
12	A1 – A2	25	25,2	25	9,2 max. ($B_2 > B_2'$)	8,9	3)	21,5	21,5	3,0	3,5	2	22
13	B – C				14 c11								

1) The reach of the groove and of the thread in the cylinder head shall be chosen in such a manner that an appropriate mounting of the nozzle holder is possible.

2) With commercial tolerances (before compression).

3) The determination of the diameter B_3 in the cylinder head is left to the manufacturer's choice. For that purpose the maximum value for the nozzle stem which is given as a result of the maximum material principle (M) and the maximum tolerance value of the cylinder head hole must be taken into account. The clearance shall be kept to a minimum to facilitate nozzle cooling.

4) For the nozzle holder types 12 and 13, this tolerance applies only in the case where a small clearance exists between H_1 and H_2 ($H_1 > H_2$).

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Nozzle holder Type	H_1 max.	$H_2^{6)}$ + 0,1 0	H_3 max.	B_2	B_2' + 0,3 0	B_3	J_1 min.	$M^{2)}$ nom.	N across flats h11	P
14	21	21,1	21	9,2 max. ($B_2 > B_2'$)	8,9	3)	18,5	2	19	20 ⁵⁾ + 0,7 0
15				14 c11						—

1) 2) 3) See 3.1.1.

5) This dimension determines the distance between the reference plane and the point of intersection of the injection holes axes with the nozzle axis.

6) For type 14 and 15 nozzle holders without shanks, dimension H_2 should be reduced by 0,1 mm. In this case, the maximum material principle (M) in figures 3 and 4 applies on diameter H_1 instead of diameter H_3 .

7) In cases where it is necessary for the dimension P to be closely controlled for purposes of fitment of a heat shield, this dimension shall be $13 \pm 0,2$ mm.

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Nozzle holder Type	K_1 min.	K_2 + 1 0	H_1 max.	H_2 + 0,1 0	H_3 max.	B_2 max. ($B_2 \geq B_2'$)	B_2' + 0,3 0	B_3	J_1 h11	J_2 C11	$P^{5)}$ + 0,7 0	$M^{2)}$ nom.	N across flats h11
16	15,5	15	20,9	21,1	21	9,2	8,9	3)	17	17	20	1,5	15
17						7,2	6,9						

2) 3) See 3.1.1.

5) See 3.1.2.

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