INTERNATIONAL STANDARD

ISO 6550

Second edition
1989-11-15

Road vehicles — M12 × 1,25 and M14 × 1,25 sheath-type glow-plugs with conical seating and their cylinder head housing

Véhicules routiers — Bougies de préchauffage M12 × 1,25 et M14 × 1,25 du type à fourreau et à siège conique et leur logement dans la culasse

Reference number
ISO 6550 : 1989 (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 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 6550 was prepared by Technical Committee ISO/TC 22, *Road vehicles.*

This second edition cancels and replaces the first edition (ISO 6550 : 1980) and its addendum 1 of 1982 which specified installation tightening torques: the main change is that the M14 type should not be used for new installations.

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Road vehicles — M12 × 1,25 and M14 × 1,25 sheath-type glow-plugs with conical seating and their cylinder head housing

1 Scope

This International Standard specifies the main characteristics of M12 × 1,25 and M14 × 1,25 sheath-type glow-plugs with conical seating and their cylinder head housing, for use with compression-ignition (diesel) engines.

Type M14 should not be used for new applications.

2 Normative references

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

ISO 1919 : 1982, *Road vehicles — Spark plugs M14 × 1,25 with flat seating and their cylinder head housing.*

ISO 2705 : 1982, *Road vehicles — Spark plugs M12 × 1,25 with flat seating and their cylinder head housing.*

ISO 8092-1 : 1989, *Road vehicles — Flat, quick-connect terminations — Part 1: Tabs for single pole connections.*

3 Dimensions and tolerances

3.1 Glow-plugs

Sheath-type glow-plug dimensions and tolerances shall be as given in figure 1.

3.2 Cylinder head housing

The dimensions and tolerances of the cylinder head housing for sheath-type glow-plugs shall be as given in figure 2.

3.3 Limiting dimensions

3.3.1 M12 × 1,25 threads

The threads of M12 × 1,25 glow-plugs and the corresponding tapped holes in the cylinder head shall conform to the threads specified for M12 × 1,25 spark-plugs in ISO 2705.

3.3.2 M14 × 1,25 threads

The threads of M14 × 1,25 glow-plugs and the corresponding tapped holes in the cylinder head shall conform to the threads specified for M14 × 1,25 spark-plugs in ISO 1919.

4 Installation tightening torque

The installation torque values given in table 1 apply to new sheath-type glow-plugs without lubricant on the threads. If threads are lubricated, the torque value shall be reduced by approximately one-third to avoid overstressing.

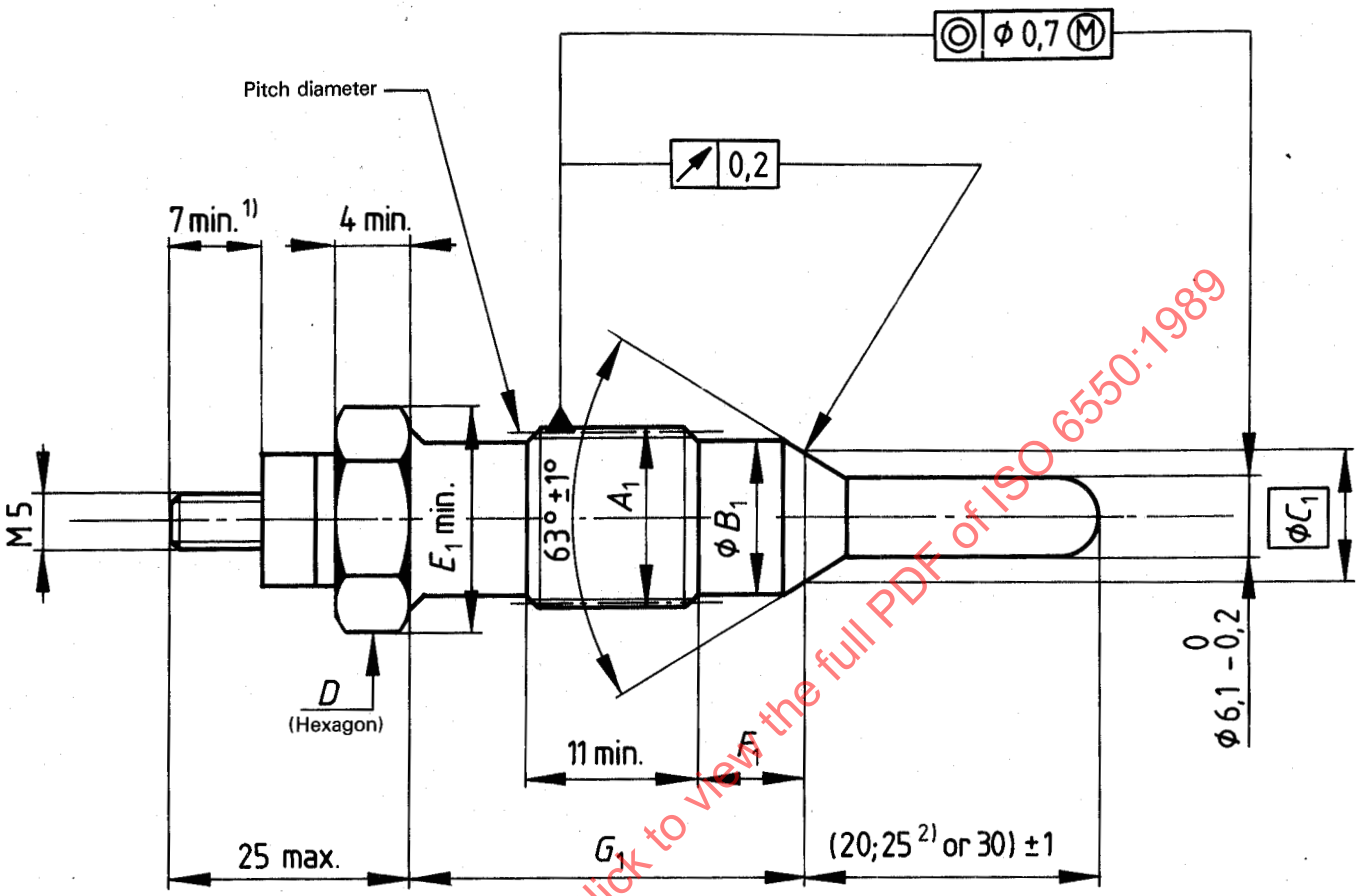
Table 1 — Installation tightening torque[1)]

Glow-plug type	Tightening torque for cast iron and aluminium cylinder heads N·m	Maximum torque for the M5 terminal thread[2)] N·m
M12 A M12 B	15 to 25	4
M14	20 to 35	4

1) Engine manufacturers may specify a different torque for the first glow-plug installation.

2) Differing specifications apply to the admissible tightening torque according to the nut used.

Dimensions and tolerance ranges in millimetres



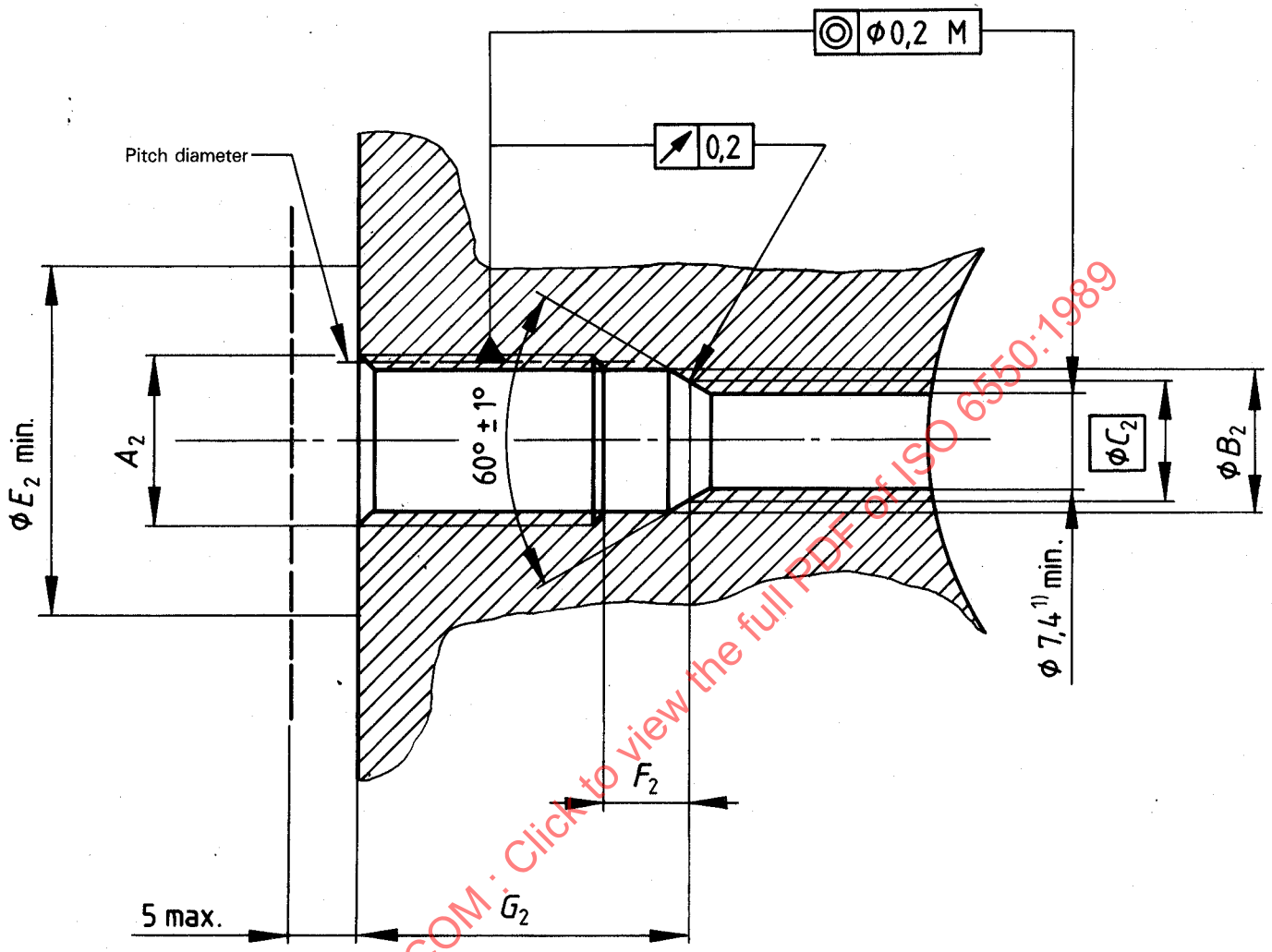
Glow-plug type	A_1 6e	B_1 $^{0}_{-0,2}$	C_1	D h13	E_1 min.	F_1 $^{+1}_{0}$	G_1 ±1
M12 A	M12 × 1,25	10	9	12	13,3	6	26
M12 B						3	20
M14	M14 × 1,25	12	11	14	15,5	6	26

Figure 1 — M12 × 1,25 and M14 × 1,25 sheath-type glow-plug with conical seating

1) For flat tab terminations of sizes 6,3 and 9,5, the 7 min. and 25 max. dimensions shall change to 12 min. and 30 max. respectively. Tab dimensions of these 6,3 and 9,5 sizes are given in ISO 8092-1.

2) The length of 25 is preferred.

Dimensions and tolerance ranges in millimetres



Glow-plug type	A_2 6H	B_2 min.	C_2	E_2 min.	F_2	G_2 max.
M12 A	M12 × 1,25	10,7	9	23	$5^{\ 0}_{-1}$	23
M12 B					$2^{\ 0}_{-0,3}$	17
M14	M14 × 1,25	12,7	11	26	$5^{\ 0}_{-1}$	23

Figure 2 — Cylinder head housing for glow-plug

1) The determination of the exact dimension above the minimum is left to the manufacturer. The clearance between the probe and the cylinder head shall be kept to a minimum.