INTERNATIONAL STANDARD

ISO 6392-2

First edition
1996-11-15

Earth-moving machinery — Lubrication fittings —

Part 2: Grease-gun nozzles

Engins de terrassement — Raccords de graissage —

Partie 2: Buses de pistolets à graisse

Reference number
ISO 6392-2:1996(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 voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 6392-2 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 3, *Operation and maintenance*.

This first edition of ISO 6392-2 together with ISO 6392-1 cancels and replaces ISO 6392:1980, which has been technically revised.

ISO 6392 consists of the following parts, under the general title *Earth-moving machinery — Lubrication fittings*:

— *Part 1: Nipple type*

— *Part 2: Grease-gun nozzles*

Annexes A and B of this part of ISO 6392 are for information only.

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Earth-moving machinery — Lubrication fittings —

Part 2:
Grease-gun nozzles

1 Scope

This part of ISO 6392 specifies grease-gun nozzles to be used for the injection of grease into the lubrication points of earth-moving machinery by means of the grease fitting specified in part 1 of this International Standard.

The grease-gun nozzles covered by this part of ISO 6392 are used on the types of earth-moving machinery defined in ISO 6165.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 6392. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 6392 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6165:—[1], *Earth-moving machinery — Basic types — Vocabulary.*

3 Nozzle type and mounting position

3.1 Nozzle type

Nozzle types are divided into two types: the rubber nozzle-centre type (see figure 2) and the steel nozzle-centre type (see figure 3).

The rubber nozzle-centre type is recommended for the grease-gun nozzles to be used on earth-moving machinery.

For the grease injection into the grease fitting, the rubber nozzle-centre type is superior in sealability and grease leakage is less compared to the steel nozzle-centre type.

3.2 Mounting position

Figure 1 shows an example of the mounting position of the grease-gun nozzle. The specific type of grease gun is not prescribed.

1) To be published. (Revision of ISO 6165:1987)

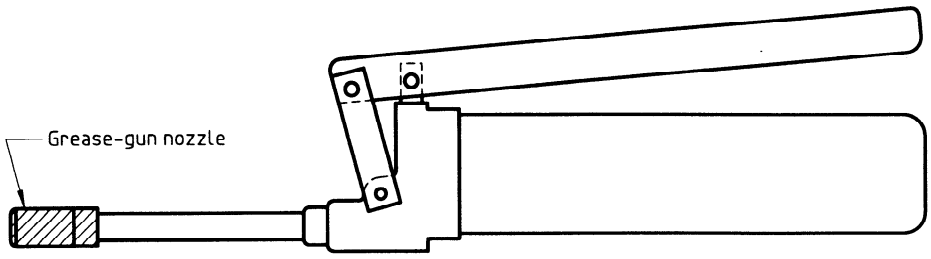

Figure 1

4 Structure

The structure of the grease-gun nozzle shall be able to withstand a working pressure of 20 MPa and a minimum destructive pressure of 80 MPa without leakage.

When the grease-gun is used in a track adjuster, the grease injection pressure can exceed 50 MPa; the life of the nozzle (number of leak free applications) may decrease if the grease-gun is removed under the residual pressure. It is therefore recommended to use the grease-gun nozzle with a relief valve.

5 Dimensions, materials and finish

5.1 Dimensions

The dimensions of grease-gun nozzles shall be as shown in figures 2 and 3 and table 1.

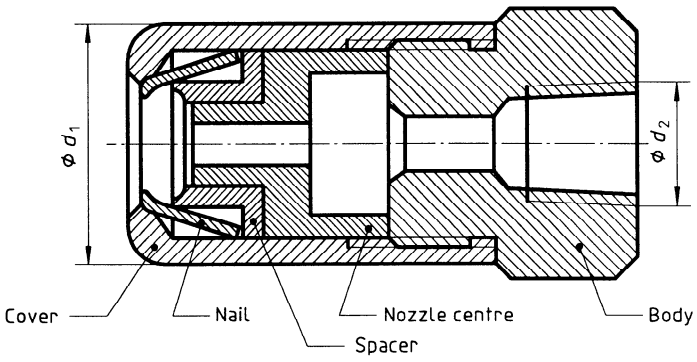

Figure 2 — Rubber nozzle-centre type

Table 1

Type of nozzle	d_1 mm	d_2
Rubber nozzle-centre type	14 to 15	ISO 7-Rc 1/8
Steel nozzle-centre type	16 to 18	ISO 7-Rp 1/8

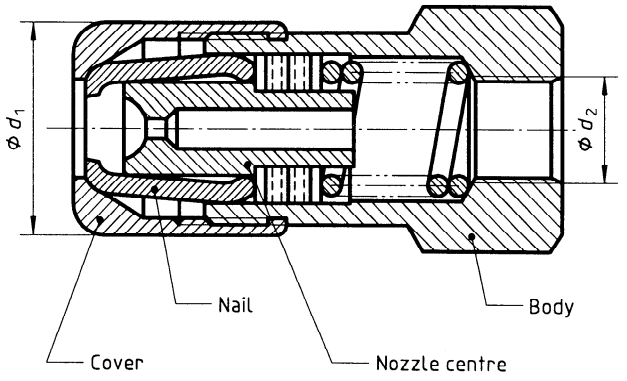

Figure 3 — Steel nozzle-centre type

5.2 Materials

5.2.1 Rubber nozzle-centre type

The nail and the spacer (see figure 2) shall be manufactured from steel with a Rockwell hardness of at least 45 HRC. The nozzle centre shall be manufactured from rubber with hardness 75 IRHD to 95 IRHD.

5.2.2 Steel nozzle-centre type

The nail and the nozzle centre (see figure 3) shall be manufactured from steel with a Rockwell hardness of at least 45 HRC.

5.3 Finish

Nozzle bodies and covers (see figures 2 and 3) shall be electroplated with zinc and chromate treatment in accordance with ISO 2081.

6 Grease injection angle

There shall be no leakage of grease when the nozzle is coupled to the grease-nipple and inclined up to the injection angle of 10° max. (see figure 4).

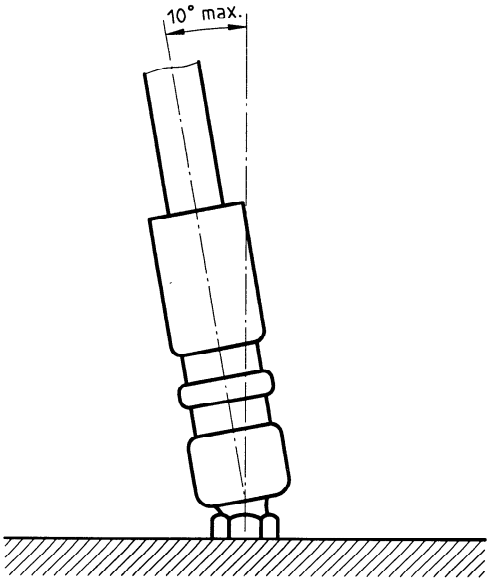

Figure 4 — Injection angle

7 Nozzle uncoupling angle

It shall be possible to uncouple the grease-gun nozzle up to the uncoupling angle of 25° max. (see figure 5).

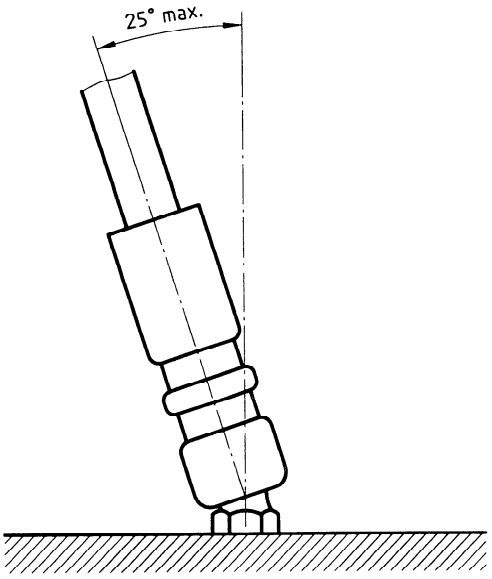

Figure 5 — Uncoupling angle

Annex A
(informative)

Referred dimensions of grease-gun nozzles

For information, dimensions that comply with ISO 6392-1 are given in this annex.

Dimensions in millimetres

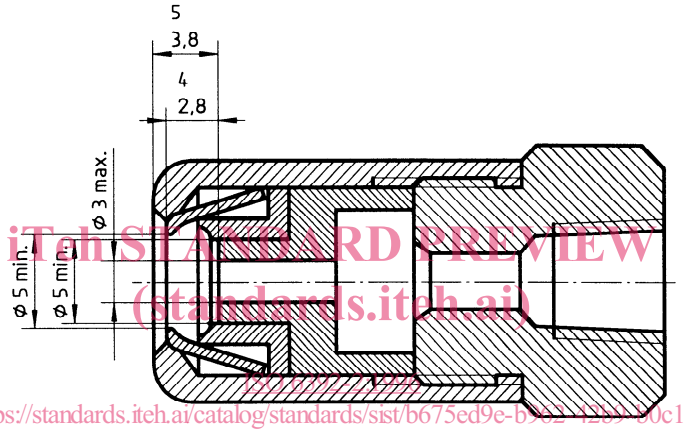

Figure A.1 — Rubber nozzle-centre type

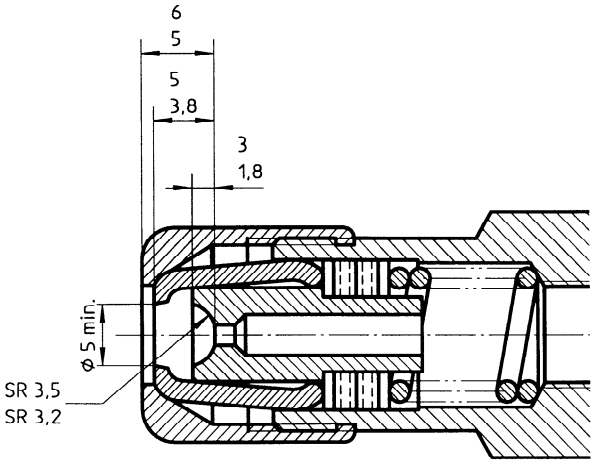

Figure A.2 — Steel nozzle-centre type

Annex B
(informative)

Bibliography

[1] ISO 7-1:1994, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation.*

[2] ISO 48:1994, *Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD).*

[3] ISO 261:1973, *ISO general purpose metric screw threads — General plan.*

[4] ISO 674:1988, *Metallic materials — Hardness test — Calibration of standardized blocks to be used for Rockwell hardness testing machines (scales A - B - C - D - E - F - G - H - K).*

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