INTERNATIONAL STANDARD

ISO 9159

First edition
1988-04-01

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

Road vehicles — Nozzle spouts for leaded gasoline and diesel fuel

Véhicules routiers — Pistolets de remplissage pour essence au plomb et carburant diesel

Reference number
ISO 9159 : 1988 (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.

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 9159 was prepared by Technical Committee ISO/TC 22, *Road vehicles.*

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Printed in Switzerland

Road vehicles — Nozzle spouts for leaded gasoline and diesel fuel

1 Scope and field of application

This International Standard specifies the dimensions of nozzle spouts on pumps for refuelling road vehicles, and their filling rates.

It applies to nozzle spouts for leaded gasoline and diesel fuel for road vehicles.

2 Reference

ISO 4130, *Road vehicles — Three-dimensional reference systems and fiducial marks — Definitions.*

3 Requirements

The nozzle spout shall conform to the dimensions given in the figure. The shape is at the manufacturer's discretion.

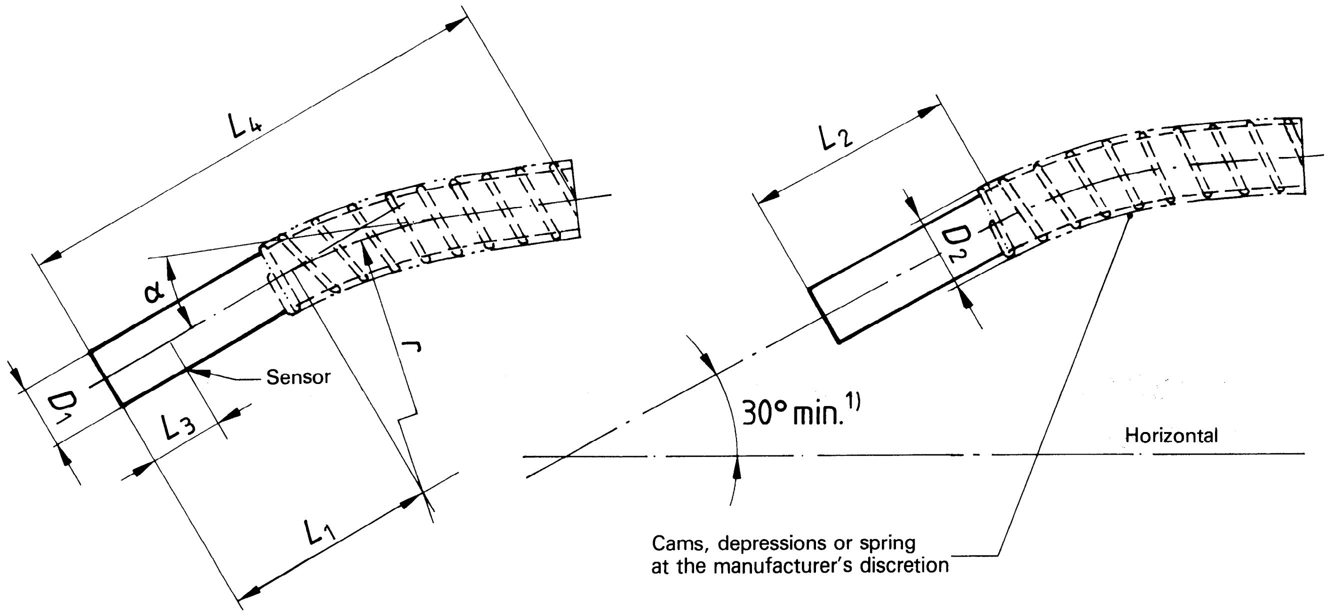
The flow rate, q_V, shall be

$q_V \leqslant 50$ l/min for leaded gasoline;

$q_V \leqslant 50$ l/min or 50 l/min $< q_V \leqslant 100$ l/min for diesel fuel, depending on spout dimensions (see the figure).

The figure shows a nozzle spout with a spring for safe hooking in the tank filler opening. The dimensions apply also to nozzle spouts with cams or depressions for safe hooking.

Dimensions in millimetres



Symbol	Description	Dimension $q_V \leqslant 50$ l/min (leaded gasoline or diesel fuel)	Dimension 50 l/min $< q_V \leqslant 100$ l/min (diesel fuel)
D_1	Nozzle outside diameter	23,6 min. 25,5 max.	32 max.
D_2	Anchor spring outside diameter	30 max.	38 max.
L_1	Length of straight part of nozzle pipe	80 to 95	65 to 90
L_2	Distance between nozzle end and anchor spring cam	$L_1 \leqslant L_2 \leqslant 95$	90 to 110
L_3	Distance between nozzle end and sensor	22 max.	22 max.
L_4	Clearance from fuel dispensing end to any part of nozzle body	165 min.	170 to 200
r	Nozzle pipe bending radius	100 to 250	120 to 160
α	Bending angle of nozzle pipe	21° ± 1,5°	21° ± 1,5°

Figure

1) Nozzle spout shown in its hooked filling position, and angle towards Z plane according to ISO 4130.

UDC 621.643.06 : 62-225 : 656.062 : [665.733.5 + 665.753.4] : 629.113

Descriptors : refuelling, gasoline, diesel fuels, fuel handling equipment, nozzles, dimensions.

Price based on 2 pages