

IS 12971 : 1990
ISO 7706 : 1985

Indian Standard

**ROAD VEHICLES — COMMERCIAL VEHICLES —
CLEARANCE ENVELOPE FOR POWER
TAKE-OFFS (PTO)**

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BUREAU OF INDIAN STANDARDS
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Price Group 3

Indian Standard

ROAD VEHICLES — COMMERCIAL VEHICLES — CLEARANCE ENVELOPE FOR POWER TAKE-OFFS (PTO)

NATIONAL FOREWORD

This Indian Standard which is identical with ISO 7706 : 1985 'Road vehicles — Commercial vehicles — Clearance envelope for power take-offs (PTO)' was adopted by the Bureau of Indian Standards on 17 March 1990, after the draft finalized by the Automotive Transmission Systems Sectional Committee (TED 3) had been approved by the Transport Engineering Division Council.

The text of ISO standard has been approved as suitable for publication as Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear, referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use point (.) as the decimal marker.

CROSS REFERENCES

In this Indian Standard, the following International Standard is referred to. Read in its place the following:

<i>International Standard</i>	<i>Indian Standard</i>	<i>Degree of Correspondence</i>
ISO 7804 : 1985 Commercial road vehicles — Side openings for truck power take-offs (PTO)	IS 12973 : 1990 Commercial road vehicles — Side openings for truck power take-offs (PTO)	Identical

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0 Introduction

It should be appreciated that the requirements of this International Standard did not necessarily reflect current practice at the time of its preparation, but it is recommended that, in the interest of interchangeability for the future, its provisions should be adopted for new designs.

The clearance envelope which is specified should meet most requirements, but if, for any reason, they are not suitable, the vehicle manufacturer and the PTO manufacturer will have to find an alternative solution which is acceptable to both.

1 Scope and field of application

This International Standard lays down the dimensions of clearance envelopes for regular and heavy duty type truck transmission power take-offs. It is applicable to clearance envelopes required immediately adjacent to the PTO openings or drives on truck transmissions.

2 Reference

ISO 7804, *Road vehicles — Commercial vehicles — Side openings for truck power take-offs.*¹⁾

3 General

3.1 Two clearance envelopes are specified:

- Type S: clearance envelopes for side-mounted PTO
- Type Z: clearance envelopes for rear-mounted PTO

3.2 A clearance envelope is shown in figure 1 for a hydraulic pump mounted directly on the PTO. The installation envelope shown as a dotted outline includes the additional clearance required to mount the pump.

3.3 Adequate clearance for a driveshaft for remote-mounted ancillary equipment shall be provided.

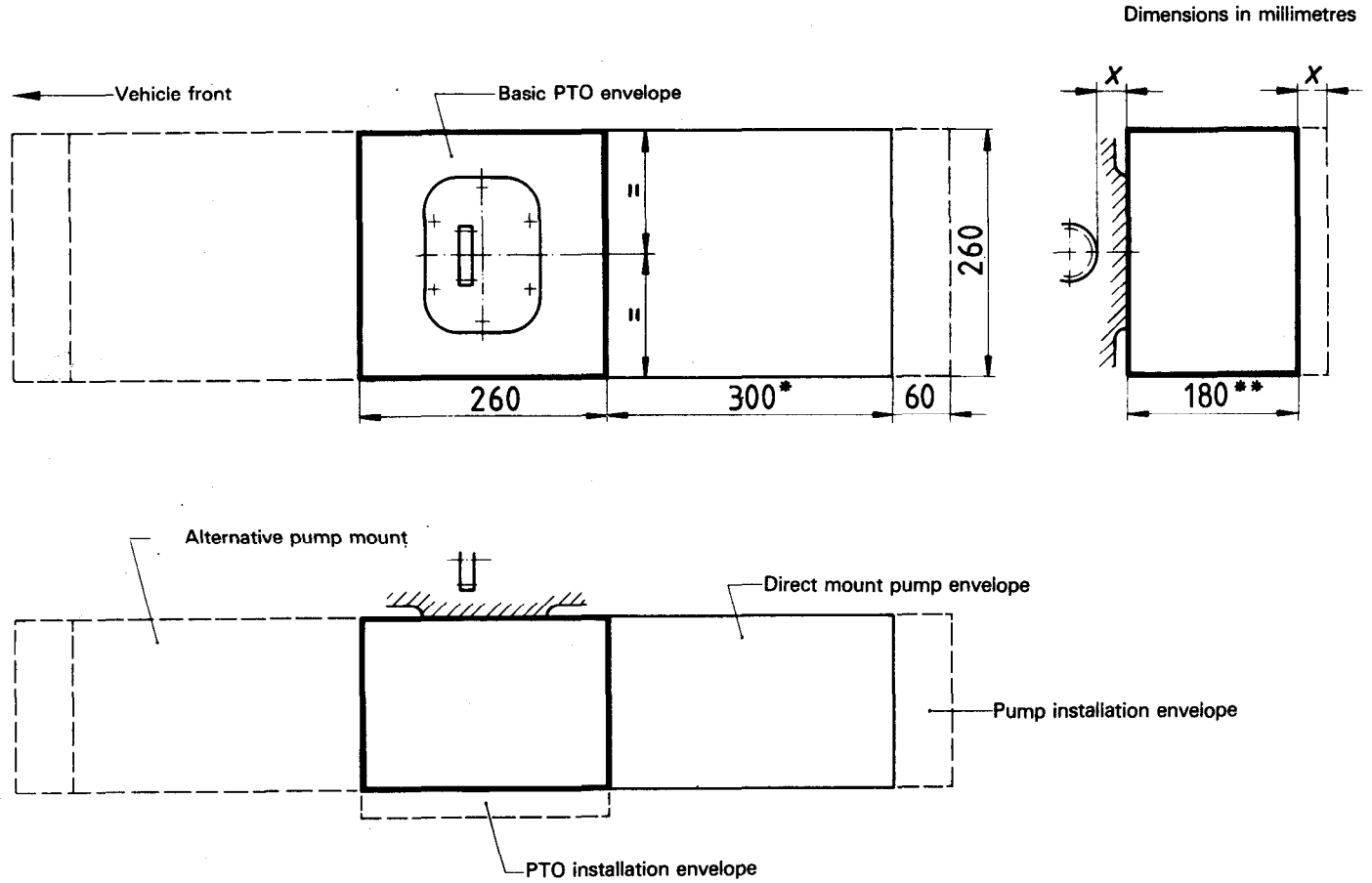
3.4 Additional space may be required for suction and pressure line connections at the pump.

1) At present at the stage of draft.

4 Side-mounted PTO

The clearance envelopes for side-mounted PTO are shown in figure 1.

Lateral clearance required for slipping the PTO over the mounting studs and the extended gear during the installation shall be provided in accordance with the depth x of the PTO drive gear as specified in ISO 7804.



* This value may be 400 mm for pumps with end-mounted suction and pressure lines.

** For heavy duty application (Type H, 8 bolt fixing) more space may be required (for example 225 mm).

Figure 1 — Clearance envelope for side-mounted PTO (Type S)

5 Rear-mounted PTO

The clearance envelopes for rear-mounted PTO are shown in figure 2.

Dimensions in millimetres

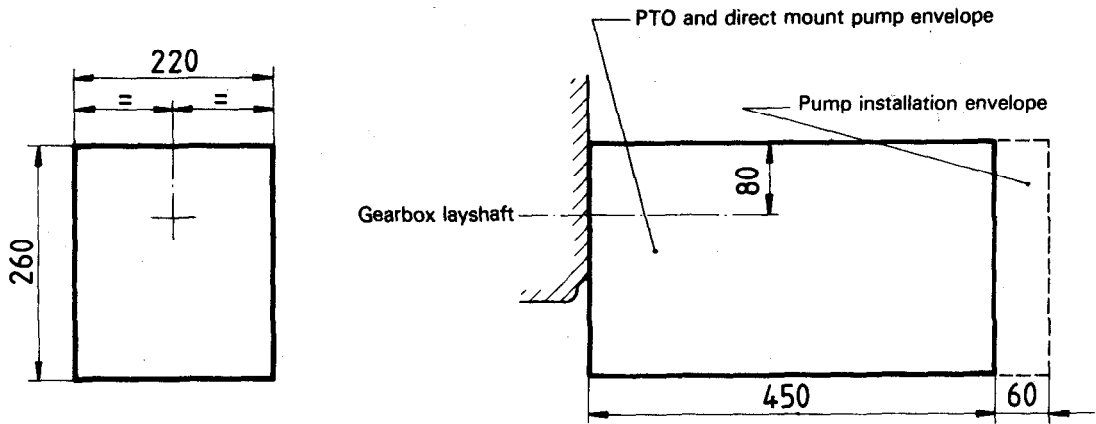


Figure 2 — Clearance envelope for rear-mounted PTO (Type Z)

6 Designation

Example for the designation of a clearance envelope for side-mounted PTO (Type S):

PTO envelope ISO 7706 - S

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