

IS 12973 : 1990  
ISO 7804 : 1985

*Indian Standard*

**COMMERCIAL ROAD VEHICLES — SIDE  
OPENINGS FOR TRUCK POWER  
TAKE-OFFS ( PTO )**

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**BUREAU OF INDIAN STANDARDS**  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

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**Price Group 3**

*Indian Standard*

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OPENINGS FOR TRUCK POWER  
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**NATIONAL FOREWORD**

This Indian Standard which is identical with ISO 7804 : 1985 'Commercial road vehicles — Side openings for truck 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.

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## 1 Scope and field of application

This International Standard lays down the dimensions of side openings for truck power take-offs. These specifications are applicable for all general installations of power take-offs on the transmission gear box of trucks and tractors where the size of the transmission permits.

## 2 Definition

**gear depth** : Distance from transmission face to pitch line of power take-off drive gear.

## 3 Specifications

### 3.1 Types

This International Standard defines two types of side opening :

- Type R : regular duty type, 6 bolts M10
- Type H : heavy duty type, 8 bolts M12

Both types are specified with two alternative gear depths and subdivided accordingly.

### 3.2 Type R

Type R shall have one of the following gear depths :

- Type R1 :  $20 \pm 10$  mm
- Type R2 :  $70 \pm 10$  mm

Type R1 shall comply with the requirements of figure 1.

Type R2 shall comply with the additional requirements of figure 2.

### 3.3 Type H

Type H shall have one of the following gear depths :

- Type H1 :  $14 \pm 10$  mm
- Type H2 :  $64 \pm 10$  mm

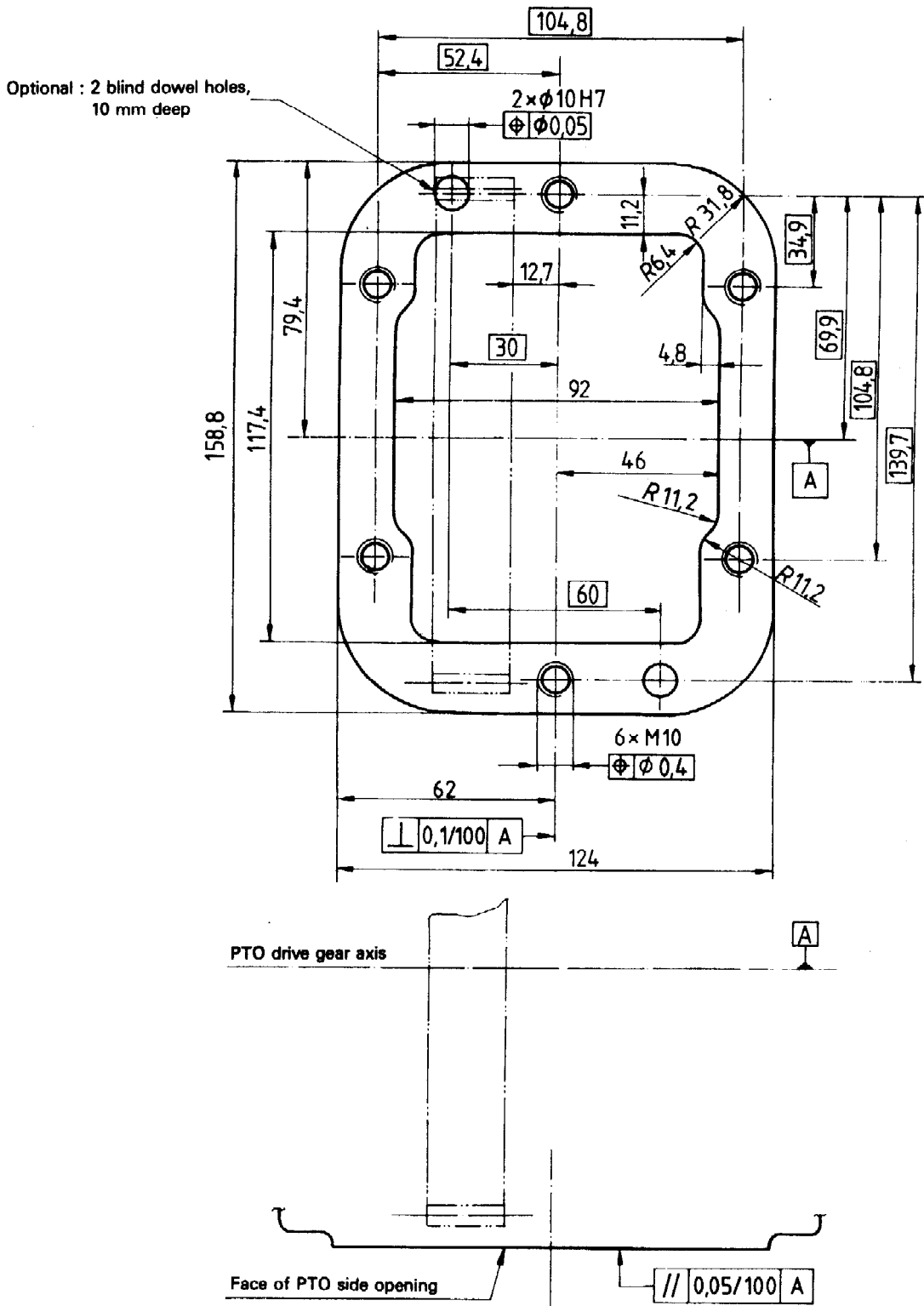
Types H1 and H2 shall comply with the requirements of figure 3.

## 4 Designation

Example for the designation of a 6 bolt M10 side opening (type R) with gear depth  $20 \pm 10$  mm (code 1) :

**PTO opening ISO 7804-R1**

Dimensions in millimetres

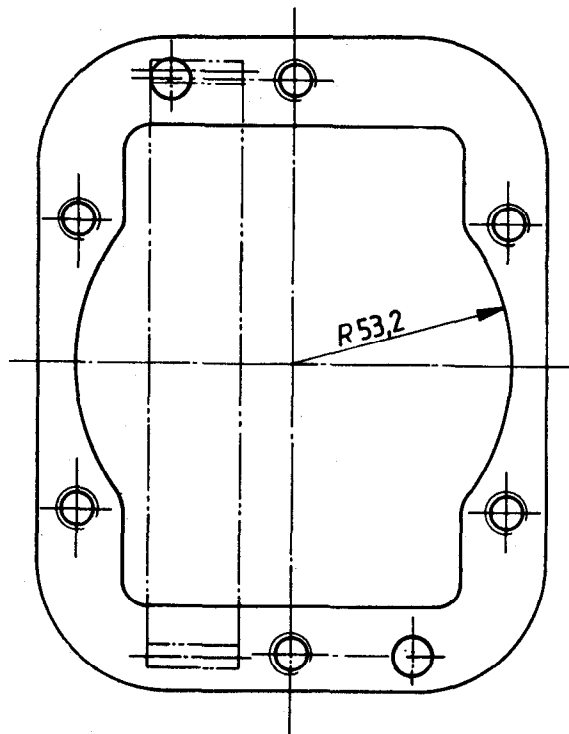


NOTES

- 1 Gear data and backlash are specified by gearbox manufacturer.
- 2 PTO drive gear may be located either side of the vertical centre-line

Figure 1 – Type R regular duty type 6 bolts M10 – Type R1

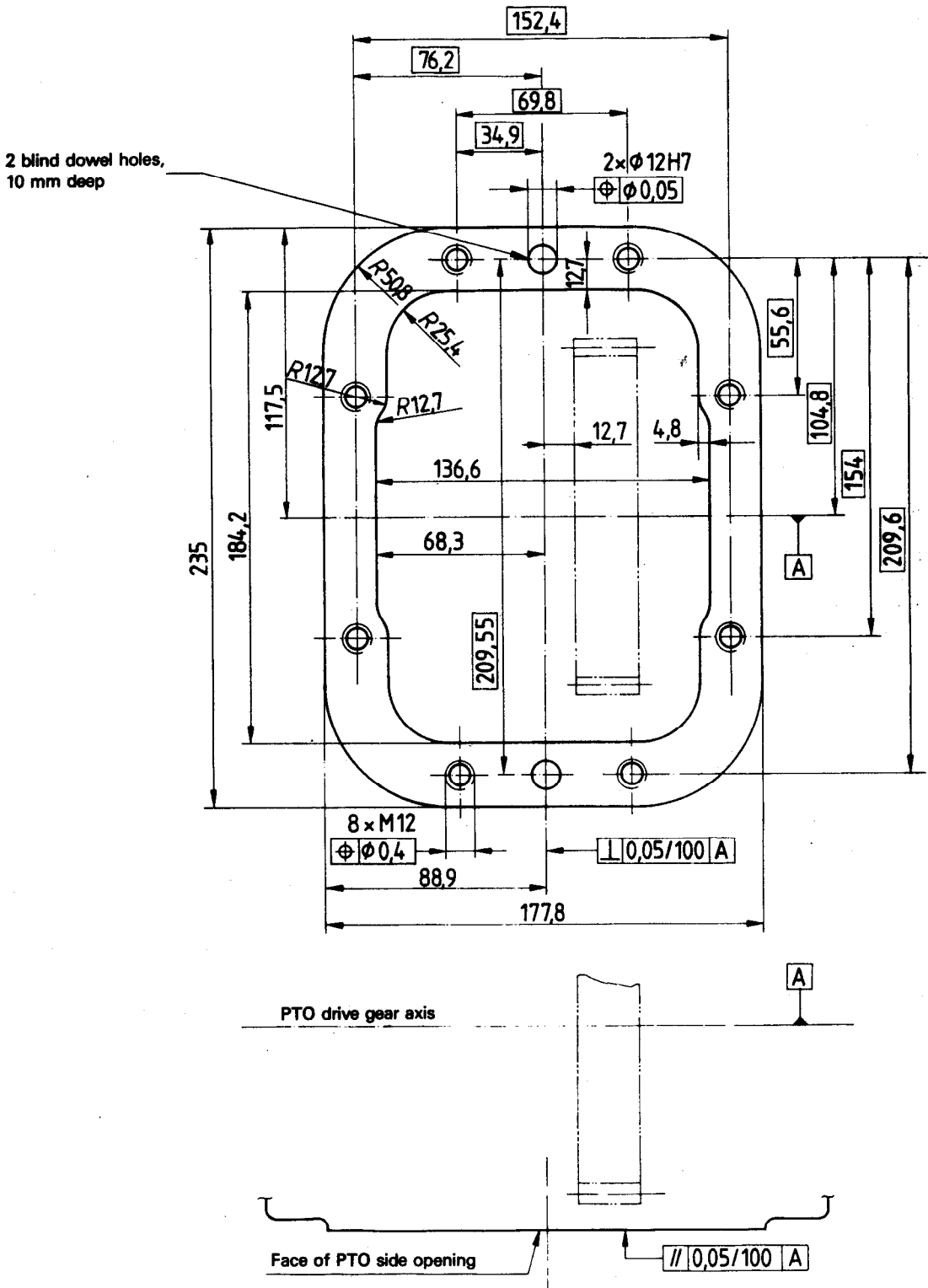
Dimension in millimetres



NOTE — For all other dimensions, see figure 1.

Figure 2 — Type R regular duty type 6 bolts M10 — Type R2 (wide centre opening)

Dimensions in millimetres



NOTES

- 1 Gear data and backlash are specified by gearbox manufacturer.
- 2 PTO drive gear may be located either side of the vertical centre-line.

Figure 3 — Type H (H1 and H2) heavy duty type 8 bolts M12

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