

# INTERNATIONAL STANDARD

**ISO**  
**12667**

First edition  
1993-12-15

---

---

## **Commercial vehicles and buses — Cross-tooth propeller shaft flanges, type T**

*Véhicules utilitaires et autobus — Brides d'arbre de transmission à dents  
croisées, type T*



Reference number  
ISO 12667:1993(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 12667 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 15, *Interchangeability of components of commercial vehicles and buses*.

© ISO 1993

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization  
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

# Commercial vehicles and buses — Cross-tooth propeller shaft flanges, type T

## 1 Scope

This International Standard specifies the nominal dimensions and tolerances which affect interchangeability between cross-tooth propeller shaft flanges, type T, used on commercial vehicles and buses.

Dimensions and tolerances of the mating parts, i.e. type T cross-tooth gearbox flanges, are specified in ISO 8667.

## 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 indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 8667:1992, *Commercial vehicles and buses — Cross-tooth gearbox flanges, type T*.

ISO 13715:—<sup>1)</sup> *Technical drawings — Corners — Vocabulary and indication on drawings*.

## 3 Dimensions and tolerances

Nominal dimensions and tolerances which affect the interchangeability of type T propeller shaft flanges shall be as shown in figures 1 and 2, and table 1.

## 4 Designation

Propeller shaft flanges meeting the requirements of this International Standard shall be identified by a certain number of elements, to be given in the following order:

- a) reference to this International Standard;
- b) type code: T;
- c) size:  $d_1$

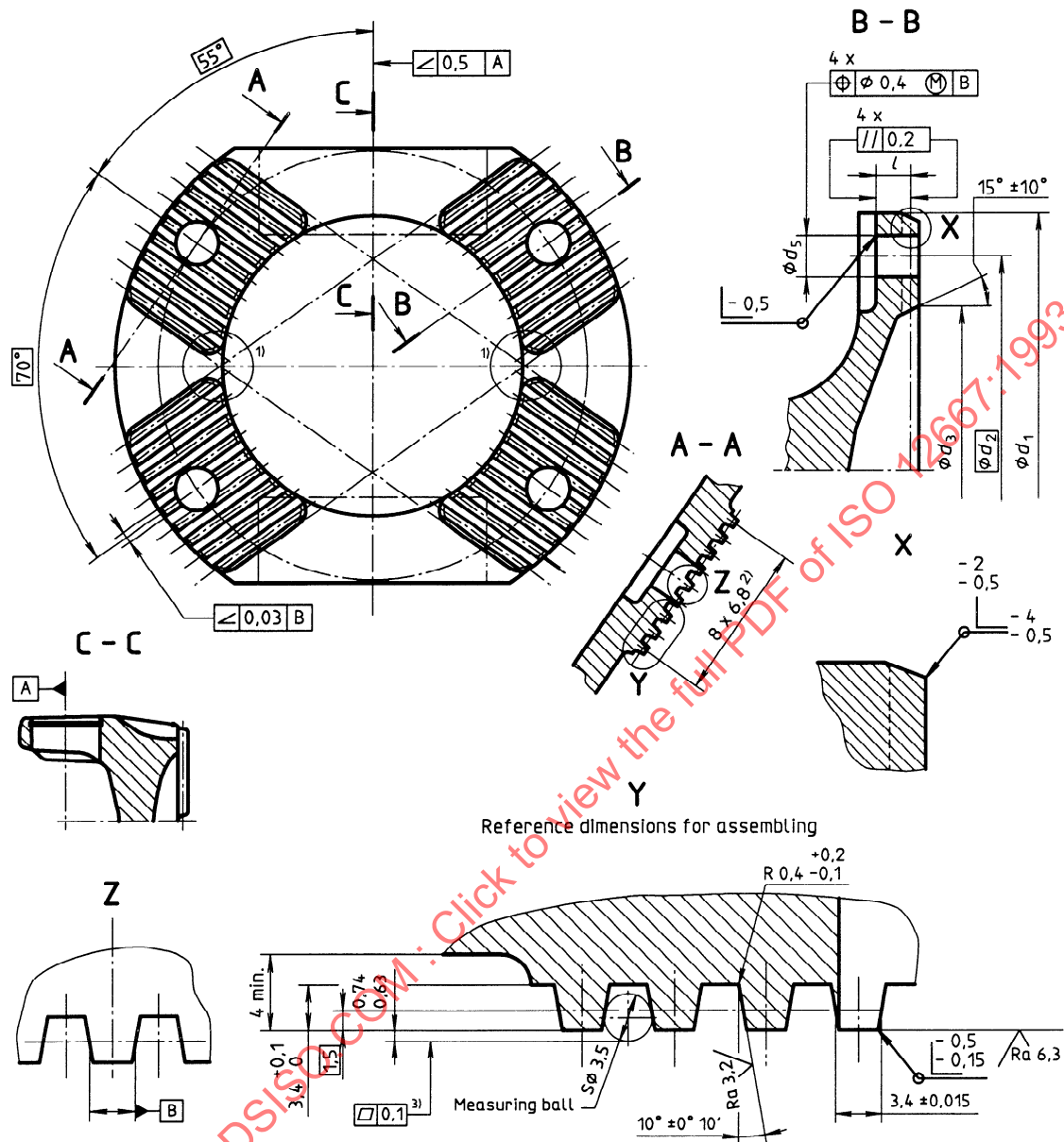
### EXAMPLE

Designation of a type T propeller shaft flange with  $d_1 = 150$  mm:

**Flange ISO 12667 - T 150**

1) To be published.

Dimensions in millimetres,  
surface roughness values in micrometres



Adjacent pitch error 0,02  
Cumulative pitch error 0,04  
Difference between adjacent pitches 0,02

- 1) To avoid over-cutting of teeth of two neighboured segments due to different cutting tools, the forging-contour may be optimized here.
- 2) If size  $d_1 = 120 \text{ mm}$ ,  $6 \times 6.8$  is valid. In this case the total width of the teeth-segment is  $44.2 \text{ mm}$  instead of  $57.8 \text{ mm}$ .
- 3) For comparative measurements, flatness shall be measured at a minimum distance of  $5 \text{ mm}$  from the diameter  $d_5$  hole and at the outside edges for diameters  $d_1$  and  $d_3$ .

ISO 13715

### Figure 1

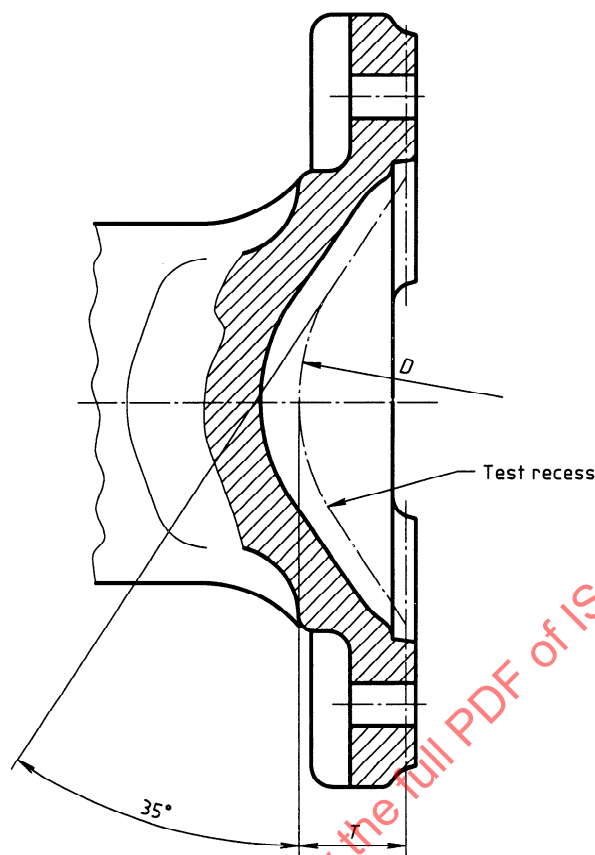


Figure 2

Table 1

Dimensions in millimetres

| Size<br>$d_1$<br>0<br>-2 | $d_2$ | $d_3$<br>max. | $d_5$<br>+0,2<br>0 | $l$ <sup>1)</sup><br>$\pm 0,5$ | $D \times T$ <sup>2)</sup> |
|--------------------------|-------|---------------|--------------------|--------------------------------|----------------------------|
| 120 <sup>3)</sup>        | 100   | 82            | 11                 | 14                             | 70 × 22                    |
| 150 <sup>3)</sup>        | 130   | 102           | 13                 | 16                             | 96 × 24 <sup>4)</sup>      |
| 165                      | 140   | 112           | 13                 | 16                             | 96 × 26                    |
| 180                      | 150   | 112           | 15                 | 18                             | 96 × 26                    |
| 200                      | 165   | 132           | 15                 | 22                             | 116 × 28                   |

1) For special applications, other dimensions may be required subject to agreement between manufacturer and customer.

2) The test recess is the minimum required clearance for the adjustment elements of the neighboured transmission flange.

3) For certain applications diameters  $d_1 = 122$  mm and 155 mm may be required subject to agreement between manufacturer and customer.

4) The 92 × 22 dimension is currently a common shape of recess. New designs of transmission flange should not exceed this dimension.

This page intentionally left blank