

# INTERNATIONAL STANDARD

**ISO**  
**5751-1**

Fourth edition  
1994-12-15

**AMENDMENT 1**  
1999-04-15

---

---

## **Motorcycle tyres and rims (metric series) — Part 1: Design guides AMENDMENT 1**

*Pneumatiques et jantes pour motocycles (séries millimétriques) —  
Partie 1: Guide de conception  
AMENDEMENT 1*

[ISO 5751-1:1994/Amd 1:1999](https://standards.iteh.ai/catalog/standards/sist/21906c92-2489-45f5-ac38-d73c9f736284/iso-5751-1-1994-amd-1-1999)

<https://standards.iteh.ai/catalog/standards/sist/21906c92-2489-45f5-ac38-d73c9f736284/iso-5751-1-1994-amd-1-1999>



Reference number  
ISO 5751-1:1994/Amd.1:1999(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.

Amendment 1 to International Standard ISO 5751-1:1994 was prepared by Technical Committee ISO/TC 31, *Tyres, rims and valves*, Subcommittee SC 10, *Cycle, moped, motorcycle tyres and rims*.

# iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO 5751-1:1994/Amd 1:1999](https://standards.iteh.ai/catalog/standards/sist/21906c92-2489-45f5-ac38-d73c9f736284/iso-5751-1-1994-amd-1-1999)

<https://standards.iteh.ai/catalog/standards/sist/21906c92-2489-45f5-ac38-d73c9f736284/iso-5751-1-1994-amd-1-1999>

© ISO 1999

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  
Internet iso@iso.ch

Printed in Switzerland

# Motorcycle tyres and rims (metric series) —

## Part 1: Design guides

### AMENDMENT 1

*Page 2, subclause 4.1.3*

Add the following list item:

- “B” for bias belted type constructions;

Add the following note, and renumber the subsequent notes as 4, 5 and 6:

NOTE 3 “Bias belted construction” describes a pneumatic tyre structure of diagonal (bias ply) type in which the carcass is restricted by a substantially inextensible circumferential belt.

With reference to the definition of “radial ply tyre” given in ISO 4223-1, for the purposes of this part of ISO 5751, “substantially at 90°” means angles between 70° and 90° as measured from the centreline of the tread.

*Page 2, subclause 4.3.3*

Add the following paragraphs at the end of the subclause:

Tyres suitable for speeds above 240 km/h shall be marked with the appropriate speed category marking “V”, “VB”, “VR”, “ZB” or “ZR”.

EXAMPLE 1 120/60 VR 17

For speed category “V”, “VB” or “VR” tyres suitable for speeds over 240 km/h, a service description with the speed symbol “V” may be marked in parentheses.

EXAMPLE 2 120/60 VR 17 (55V)

For speed category “ZB” or “ZR” tyres suitable for speeds up to 270 km/h, a service description with the speed symbol “W” may be marked.

EXAMPLE 3 120/60 ZR 17 55W

If they are suitable for speeds over 270 km/h, the service description should be marked in parentheses.

EXAMPLE 4 120/60 ZR 17 (55W)

*Page 2*

Add the following new subclauses:

**4.3.5** The maximum speed approved by the tyre manufacturer may be marked on the tyre.

EXAMPLE “V250” to identify a maximum speed of 250 km/h.

4.3.6 The symbol MST may be used to identify special service tyres.

4.3.7 The symbol DP may be used to identify tread type C tyres.

Page 3, subclause 4.4.1

Replace item b) with the following:

- b) service description of:
  - load-carrying capacity 290 kg, corresponding to load index “65”,
  - maximum speed 180 km/h, corresponding to speed symbol “S”;

shall be marked

120/80 - 18 M/C	65 S
-----------------	------

Page 3, subclause 4.4.2

Replace the first line with the following:

4.4.2 A motorcycle tyre having

Replace item b) with the following:

- b) service description of:
  - reference speed in excess of 240 km/h (code letter “ZR”),
  - reference load carrying capacity 300 kg, corresponding to load index “66”,
  - maximum speed 270 km/h, corresponding to speed symbol “W”;

shall be marked

140/70 ZR 17 M/C	66 W
------------------	------

In case of VR, VB tyres approved for speeds in excess of 240 km/h or of ZR, ZB tyres approved for speeds in excess of 270 km/h, the “service description” shall be marked in parentheses.

EXAMPLE 140/70 ZR 17M/C (66W)

The actual maximum speed certified by the tyre manufacturer may be marked in clear on the tyre.

EXAMPLE V280 to identify a maximum speed of 280 km/h.

Page 5, Table 2

Replace footnote 2) with the following:

- 2) 1,08 for tyres on rim diameter code 12 and below and 1,07 for radial tyres.

Delete footnotes 1), 4) and 6), and renumber the remaining footnotes as footnotes 1), 2) and 3).

Add the following note:

NOTE Coefficients for diagonal tyres apply as well to tyres in bias belted construction.

Page 6, Table 4

Add a new speed symbol "W", corresponding to a speed category of 270 km/h.

Page 6

Add the following new clause 10:

## 10 Centrifugal radius

Maximum centrifugal radius  $R_{\text{dyn}}$  (caused by centrifugal force) is related to the maximum speed of the vehicle.

It equates the sum of one half of the nominal rim diameter  $D_r$  plus the product of the design tyre section height  $H$  and the appropriate coefficient  $c$  (see table 5).

$$R_{\text{dyn}} = 0,5D_r + H \times c$$

NOTE 7 For vehicles having maximum speeds in excess of 240 km/h, consult the tyre manufacturer.

**Table 5 — Coefficients for the calculation of the maximum centrifugal radius at various maximum driving speeds**

Tread configuration	Coefficient, $c$			
	Up to 150km/h	Up to 180 km/h	Up to 210 km/h	Up to 240 km/h
Types A and B	1,07 <sup>1)</sup>	1,10	1,13	1,16
Types C and D	1,12 <sup>2)</sup>	1,15	1,18	—

1) Subject to the condition that  $D_{o,\text{max}} - D_o$  is at least 6 mm.  
 2) Subject to the condition that  $D_{o,\text{max}} - D_o$  is at least 8 mm.