International Standard 4249/3

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

Motorcycle tyres and rims (Code designated series) — Part 3 : Rims

Pneumatiques et jantes pour motocycles (Séries dont les dimensions sont désignées par des pouces codes) — Partie 3 : Jantes

First edition — 1981-12-15

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UDC 629.11.012.61 : 629.118.6 **Ref. No. ISO 4249/3-1981 (E)**

Descriptors : road vehicles, motorcycles, tyres, rims, dimensions, dimensional tolerances, designation.

Price based on 3 pages

Foreword

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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.

International Standard ISO 4249/3 was developed by Technical Committee ISO/TC 31, *Tyres, rims and valves*, and was circulated to the member bodies in May 1980.

It has been approved by the member bodies of the following countries :

Australia	Israel	South Africa, Rep. of
Austria	Italy	Spain
Brazil	Japan	Sweden
China	Korea, Rep. of	United Kingdom
Czechoslovakia	Netherlands	USA
France	Poland	USSR
India	Romania	

No member body expressed disapproval of the document.

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Printed in Switzerland

Motorcycle tyres and rims (Code designated series) — Part 3 : Rims

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1 Scope and field of application

This International Standard lays down rim dimensions for a selection of rims for an existing series of motorcycle tyres, and only applies to those rim contour dimensions necessary for tyre mounting and fitment of the tyre to rim.

Tyre designation and dimensions are given in ISO 4249/1. Tyre load ratings will be the subject of ISO 4249/2.

2 References

ISO 3911, *Wheels/rims — Nomenclature, designation, marking, and units of measurement.*

ISO 4249/1, *Motorcycle tyres and rims (Existing series) — Part 1 : Tyres.*

3 General

3.1 Rim contour

The rim on the side of the tyre should have a smooth contour free of sharp edges.

3.2 Rim valve hole

The rim valve hole should be centered on the bottom of the rim well. On the tyre side, the edges should be rounded or chamfered, whilst on the hub side, the edges should be free of burrs, which could damage the valve.

4 Designation and marking

The rim should be designated by its diameter code and nominal rim width. (For example, 18 × 1,85.)

5 Cylindrical bead seat

5.1 Rim contours

Dimensions and tolerances of the cylindrical bead seat rims are given in table 1.

5.2 Rim diameters

Nominal rim diameter code, specified diameters and circumference are given in table 2.

5.3 Rim circumference measurement

See the annex for information on circumference measurement.

6 Tapered bead seat

(Currently under study)

7 Permitted rim widths

The permitted rim width for the existing series of motorcycle tyres is given in table 3.

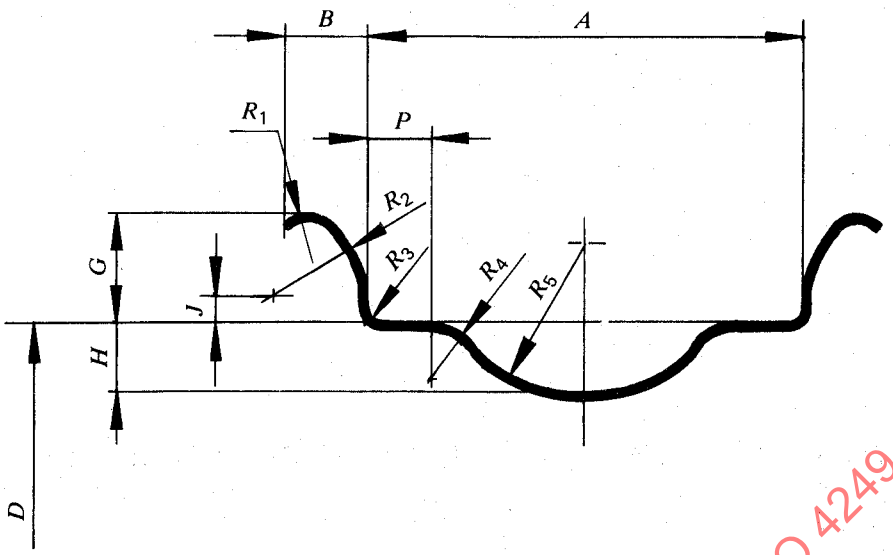

Table 1 — Dimensions of cylindrical bead seat rims

Dimensions in millimetres

Nominal rim width in	A	B	G	H	P	J	R_2	R_1	R_3	R_4	R_5
	$^{+1}_{-0,5}$	min.	± 0,5	$^{+1}_{-0,5}$	$^{+2}_{0}$			min.	max.	min.	
1.10	28,0	5,0	7,0	7,0	3,0	2,0	5,5	1,5	1,5	5,0	7,0
1.20	30,5	5,5	9,0			3,5	6,0				
1.35	34,0	6,5	10,0	7,5	3,5	4,0	6,5	2,0			10,0
1.40	36,0			8,0			7,0		2,0	5,5	11,5
1.50	38,0	7,5	10,5		4,0						13,0
1.60	40,5		12,0		4,5	4,5	8,0			6,0	15,0
1.85	47,0	8,5	14,0	9,0	5,0	3,5	12,5			7,0	18,5
2.15	55,0				7,5						19,0
2.50	63,5	9,5		12,0	11,0			3,0	3,0		
2.75	70,0	10,5									

Table 2 — Specified rim diameters and circumferences

Nominal rim diameter code	Specified rim diameter D mm	Specified rim circumference πD mm $^{+2}_{-0,5}$
14	357,1	1121,9
15	382,5	1201,7
16	405,6	1274,2
17	433,3	1361,2
18	458,7	1441,0
19	484,1	1520,8
20	509,5	1600,6
21	534,9	1680,4
22	558,8	1755,5
23	584,2	1835,3

Table 3 — Permitted rim widths

Tyre section	Permitted rim width
2.00	1.10 - 1.20 - 1.35
2.25	1.20 - 1.35 - 1.40 - 1.50 - 1.60
2.50	1.35 - 1.40 - 1.50 - 1.60
2.75	1.40 - 1.50 - 1.60 - 1.85
3.00	1.60 - 1.85 - 2.15
3.25	1.85 - 2.15 - 2.50
3.50	1.85 - 2.15 - 2.50
3.75	1.85 - 2.15 - 2.50
4.00	2.15 - 2.50 - 2.75 - 3.00
4.25	2.15 - 2.50 - 2.75 - 3.00
4.50	2.15 - 2.50 - 2.75 - 3.00
5.00	2.50 - 2.75 - 3.00 - 3.50

NOTE — To obtain the measuring rim width for a desired tyre section, see table 3 of ISO 4249/1.

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Annex

Rim circumference measurement (See 5.3)

The bead seat rim circumference measurements shall be performed using a tape gauge whose length is related to a mandrel diameter which is that of the specified rim diameter.

The tolerance on the mandrel is $^{0}_{-0,15}$ mm and to obtain accuracy, each bead seat shall be measured separately.

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