SRI LANKA STANDARD 1320: PART 2 : 2007
ISO 4249-2 :1990

SIZE DESIGNATION AND DIMENSIONS FOR MOTORCYCLE TYRES AND RIMS (CODE DESIGNATED SERIES)

PART 2: TYRE LOAD RATINGS

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PART 2: TYRE LOAD RATINGS

SLS 1320 : Part 2 : 2007
ISO 4249-2 :1990
(Superseding SLS 901 : Part 1: 1990 Section 2)

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SRI LANKA

Sri Lanka Standards are subject to periodical revision in order to accommodate the progress made by industry. Suggestions for improvement will be recorded and brought to the notice of the Committees to which the revisions are entrusted.

This standard does not purport to include all the necessary provisions of a contract.

SRI LANKA STANDARD
SIZE DESIGNATION AND DIMENSIONS FOR MOTORCYCLE TYRES AND RIMS (CODE DESIGNATED SERIES)
PART 2: TYRE LOAD RATINGS

NATIONAL FOREWORD

This Sri Lanka Standard was approved by the Sectoral Committee on Chemical and Polymer Technology and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on 2007-11-28.

This Sri Lanka Standard is identical with ISO 4249-2 : 1990 Motorcycle tyres and rims (code - designated series) Part 2- Tyre load ratings , published by the International Organization for Standardization (ISO).

The text of the International Standard has been accepted as suitable for publication without deviation, as a Sri Lanka Standard. However, certain terminology and conventions are not identical with those used in Sri Lanka Standards.

Attention is therefore drawn to the following :

TERMINOLOGY AND CONVENTIONS :

The text of the International Standard has been accepted as a suitable for publication, without deviation, as a Sri Lanka Standard. However, certain terminology and conventions are not identical with those used in Sri Lanka Standards, attention is therefore drawn to the following:

a) Wherever the words ‘International Standard/Publication’ appear referring to this standard they should be interpreted as “Sri Lanka Standard” .

b) The comma has been used throughout as a decimal marker. In Sri Lanka Standards it is the current practice to use the full point at the base line as the decimal marker.

c) Wherever page numbers are quoted, they are ISO/IEC page numbers.

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INTERNATIONAL STANDARD

ISO 4249-2

Second edition
1990-02-15

Motorcycle tyres and rims (Code-designated series) —

Part 2:
Tyre load ratings

Pneumatiques et jantes pour motocycles (Séries dont les dimensions sont désignées par des codes) —

Partie 2: Capacités de charge des pneumatiques

Reference number
ISO 4249-2 : 1990 (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 approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 4249-2 was prepared by Technical Committee ISO/TC 31, *Tyres, rims and valves.*

This second edition cancels and replaces the first edition (ISO 4249-2 : 1983) and its Amendment 1 (ISO 4249-2 : 1983/Amendment 1 : 1984), tables 2 and 4, and the footnote to table 3 of which have been technically revised (in Draft Amendment 2 and Amendment 1 of 1984 respectively).

ISO 4249 consists of the following parts, under the general title *Motorcycle tyres and rims (Code-designated series)*:

— *Part 1: Tyres*

— *Part 2: Tyre load ratings*

— *Part 3: Rims*

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INTERNATIONAL STANDARD ISO 4249-2 : 1990 (E)

Motorcycle tyres and rims (Code-designated series) — Part 2: Tyre load ratings

1 Scope

This part of ISO 4249 specifies the load ratings for an inch code-designated series of tyres for motorcycles.

NOTE — The tyres covered in ISO 4249-1 are designated by nominal section width and nominal rim diameter in the inch code. This designation indicates the origin of these tyres and does not indicate a preference for a unit not contained in the SI system of units; it is merely a convenient designation for a series of motorcycle tyres which have been in existence for a long period of time.

2 Tyre load-carrying capacity

Load indices are shown in table 1.

3 Service condition characteristics

The characteristics shall be indicated as follows:

Load index

Speed symbol

Table 1 — Correlation between Load Index (LI) and tyre load-carrying capacity (TLCC)

LI	TLCC kg	LI	TLCC kg	LI	TLCC kg
0	45	30	106	60	250
1	46,2	31	109	61	257
2	47,5	32	112	62	265
3	48,7	33	115	63	272
4	50	34	118	64	280
5	51,5	35	121	65	290
6	53	36	125	66	300
7	54,5	37	128	67	307
8	56	38	132	68	315
9	58	39	136	69	325
10	60	40	140	70	335
11	61,5	41	145	71	345
12	63	42	150	72	355
13	65	43	155	73	365
14	67	44	160	74	375
15	69	45	165	75	387
16	71	46	170	76	400
17	73	47	175	77	412
18	75	48	180	78	425
19	77,5	49	185	79	437
20	80	50	190	80	450
21	82,5	51	195	81	462
22	85	52	200	82	475
23	87,5	53	206	83	487
24	90	54	212	84	500
25	92,5	55	218	85	515
26	95	56	224	86	530
27	97,5	57	230	87	545
28	100	58	236	88	560
29	103	59	243	89	580

4 Speed symbols

The speed symbols are shown in table 2.

Table 2 — Correlation between speed symbol and speed category

Speed symbol	Speed category km/h
J	100
K	110
L	120
M	130
N	140
P	150

5 Maximum load capacities

Table 3 shows the maximum tyre load capacities for "standard" and "extra load" versions of tyres with speed category symbols L and P.

6 Inflation pressures

The inflation pressures shown in table 3 are given as a guide only.

The inflation pressures used in practice are subject to agreement between the tyre and motorcycle manufacturers and should take into account not only the load, but also the tyre construction, road holding, maximum speed, the operating conditions, the mechanical characteristics of the vehicle and the location of the tyre.

7 Load capacities at reduced speeds

Subject to acceptance by the tyre manufacturer and taking into account the conditions of use of the motorcycle, the load capacities corresponding to the load indices indicated in table 3 may be modified according to the percentage shown in table 4. This modification is possible when the motorcycle maximum speed is different from the one which is associated with the load index.

Table 3 — Maximum tyre load capacities for standard and "extra load" version of tyres (speed symbols L and P)

Type size designation	Service description	Maximum load capacity kg	Inflation pressure, kPa	
			Standard	Reinforced
2.00-14	21 L	82,5	225	—
2.00-17	27 L	97,5	225	—
2.00-19	31 L	109	225	—
2.25-14	27 L	97,5	225	—
2.25-14	32 L*	112	—	280
2.25-15	29 L	103	225	—
2.25-15	34 L*	118	—	280
2.25-16	31 L	109	225	—
2.25-16	36 L*	125	—	280
2.25-17	33 L	115	225	—
2.25-17	38 L*	132	—	280
2.25-18	35 L	121	225	—
2.25-18	40 L*	140	—	280
2.25-19	37 L	128	225	—
2.25-19	42 L*	150	—	280
2.50-14	32 L	112	225	—
2.50-14	37 L*	128	—	280
2.50-15	34 L	118	225	—
2.50-15	39 L*	136	—	280
2.50-16	36 L	125	225	—
2.50-16	41 L*	145	—	280
2.50-17	38 L	132	225	—
2.50-17	43 L*	155	—	280
2.50-18	40 L	140	225	—
2.50-18	45 L*	165	—	280
2.50-19	41 L	145	225	—
2.50-19	46 L*	170	—	280
2.50-21	43 L	155	225	—
2.50-21	48 L*	180	—	280
2.75-14	35 P	121	225	—
2.75-14	41 P*	145	—	280
2.75-15	37 P	128	225	—
2.75-15	42 P*	150	—	280
2.75-16	40 P	140	225	—
2.75-16	46 P*	170	—	280
2.75-17	41 P	145	225	—
2.75-17	47 P*	175	—	280
2.75-18	42 P	150	225	—
2.75-18	48 P*	180	—	280
2.75-19	43 P	155	225	—
2.75-19	49 P*	185	—	280
2.75-21	45 P	165	225	—
2.75-21	52 P*	200	—	280
3.00-14	40 P	140	225	—
3.00-14	45 P*	165	—	280
3.00-15	41 P	145	225	—
3.00-15	47 P*	175	—	280
3.00-16	43 P	155	225	—
3.00-16	48 P*	180	—	280
3.00-17	45 P	165	225	—
3.00-17	50 P*	190	—	280
3.00-18	47 P	175	225	—
3.00-18	52 P*	200	—	280
3.00-19	49 P	185	225	—
3.00-19	54 P*	212	—	280
3.00-21	51 P	195	225	—
3.00-21	57 P*	230	—	280
3.25-14	44 P	160	225	—
3.25-14	52 P*	200	—	280
3.25-15	46 P	170	225	—
3.25-15	53 P*	206	—	280
3.25-16	48 P	180	225	—
3.25-16	55 P*	218	—	280
3.25-17	50 P	190	225	—
3.25-17	57 P*	230	—	280
3.25-18	52 P	200	225	—
3.25-18	59 P*	243	—	280
3.25-19	54 P	212	225	—
3.25-19	60 P*	250	—	280
3.25-21	57 P	230	225	—
3.25-21	62 P*	265	—	280
3.50-14	48 P	180	225	—
3.50-14	54 P*	212	—	280
3.50-15	50 P	190	225	—
3.50-15	56 P*	224	—	280
3.50-16	52 P	200	225	—
3.50-16	58 P*	236	—	280
3.50-17	54 P	212	225	—
3.50-17	60 P*	250	—	280
3.50-18	56 P	224	225	—
3.50-18	62 P*	265	—	280
3.50-19	57 P	230	225	—
3.50-19	63 P*	272	—	280
3.50-21	60 P	250	225	—
3.50-21	65 P*	290	—	280
3.75-17	58 P	236	225	—
3.75-18	60 P	250	225	—
3.75-19	61 P	257	225	—
4.00-16	60 P	250	225	—
4.00-18	64 P	280	225	—
4.00-19	65 P	290	225	—
4.25-17	64 P	280	225	—
4.25-18	66 P	300	225	—
4.25-19	67 P	307	225	—
4.50-17	67 P	307	225	—
4.50-18	70 P	335	225	—
5.00-16	71 P	345	225	—

* Extra load version previously identified by REINF or 6 PR or LRC.

Table 4 — Variation of maximum load capacities of tyres according to maximum speed of motorcycle

<table>
<tr><th rowspan="3">Maximum speed
km/h</th><th colspan="5">Load variation, %</th></tr>
<tr><th colspan="5">Speed symbol</th></tr>
<tr><th>J</th><th>K</th><th>L</th><th>M and N</th><th>P and above</th></tr>
<tr><td>50</td><td>+30</td><td rowspan="4">See column J</td><td rowspan="2">See column J</td><td rowspan="6">See column L</td><td rowspan="2">See column J</td></tr>
<tr><td>60</td><td>+23</td></tr>
<tr><td>70</td><td>+16</td><td rowspan="3">See column J</td><td rowspan="3">+14</td></tr>
<tr><td>80</td><td>+10</td><td rowspan="2">+7,5</td></tr>
<tr><td>90</td><td>+ 5</td><td>+12</td></tr>
<tr><td>100</td><td>0</td><td>+5</td><td>+10</td></tr>
<tr><td>110</td><td>1)</td><td>0</td><td>+2,5</td><td>+ 8</td></tr>
<tr><td>120</td><td>1)</td><td>1)</td><td>0</td><td>+ 6</td></tr>
<tr><td>130</td><td>1)</td><td>1)</td><td>1)</td><td>0</td><td>+ 4</td></tr>
<tr><td colspan="6">1) Not applicable.</td></tr>
</table>

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Descriptors: road vehicles, motorcycles, vehicle wheels, tyres, pneumatic tyres, specifications, ratings, load capacity.

Price based on 4 pages

SRI LANKA STANDARDS INSTITUTION

The Sri Lanka Standards Institution (SLSI) is the National Standards Organization of Sri Lanka established under the Sri Lanka Standards Institution Act No. 6 of 1984 which repealed and replaced the Bureau of Ceylon Standards Act No. 38 of 1964. The Institution functions under the Ministry of Science & Technology.

The principal objects of the Institution as set out in the Act are to prepare standards and promote their adoption, to provide facilities for examination and testing of products, to operate a Certification Marks Scheme, to certify the quality of products meant for local consumption or exports and to promote standardization and quality control by educational, consultancy and research activity.

The Institution is financed by Government grants, and by the income from the sale of its publications and other services offered for Industry and Business Sector. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

The development and formulation of National Standards is carried out by Technical Experts and representatives of other interest groups, assisted by the permanent officers of the Institution. These Technical Committees are appointed under the purview of the Sectoral Committees which in turn are appointed by the Council. The Sectoral Committees give the final Technical approval for the Draft National Standards prior to the approval by the Council of the SLSI.

All members of the Technical and Sectoral Committees render their services in an honorary capacity. In this process the Institution endeavours to ensure adequate representation of all view points.

In the International field the Institution represents Sri Lanka in the International Organization for Standardization (ISO), and participates in such fields of standardization as are of special interest to Sri Lanka.

Printed at the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.

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Further particulars of the terms and conditions of the permit may be obtained from the Sri *Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.*

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