

Thai Industrial Standard for Motorcycle Tyres

1. Scope

- 1.1 This standard specifies the class and type, maximum load, size and general requirements, marking and labelling, sampling and criteria for conformity and testing.

2. Definition

For the purpose of this standard, the following definitions apply:

- 2.1 A motorcycle tyre, hereinafter referred to as 'tyre', means a tyre that is designed to be assembled with a motorcycle rim, to carry a load when inflated, to reduce vibration and to cause the motorcycle to move upon applying traction.
- 2.2 A bias ply tyre means a tyre with a structure in which the carcass cords are arranged diagonally at approximately 30-70° to the centre line of the tread (see Figure 1), either "with breaker" or "without breaker".
- 2.3 A radial ply tyre means a tyre with a structure in which the carcass cords are arranged at 90° or the angle near to the tread line and bound tight by a belt (see Figure 1).

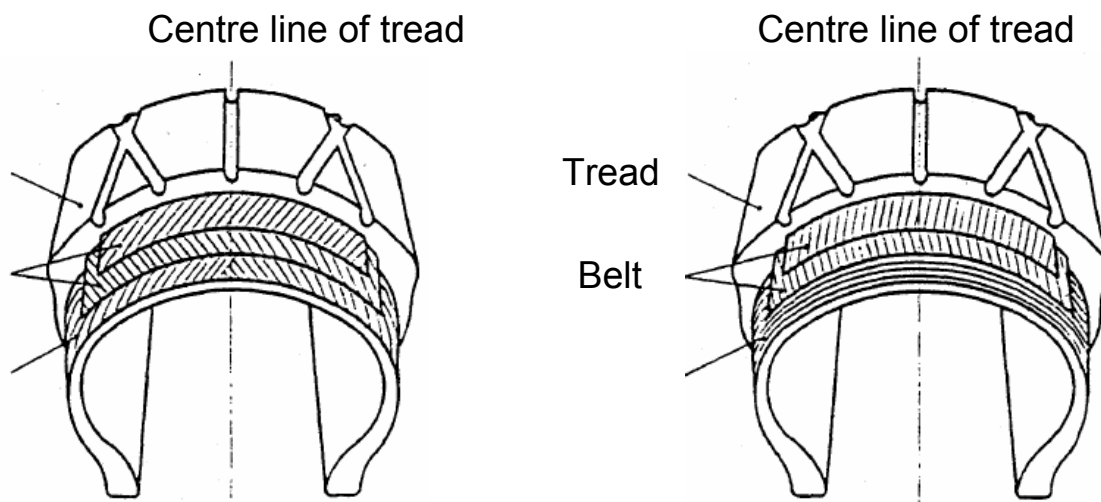


Figure 1 Bias ply tyre and radial ply tyre
(Clause 2.2 and Clause 2.3)

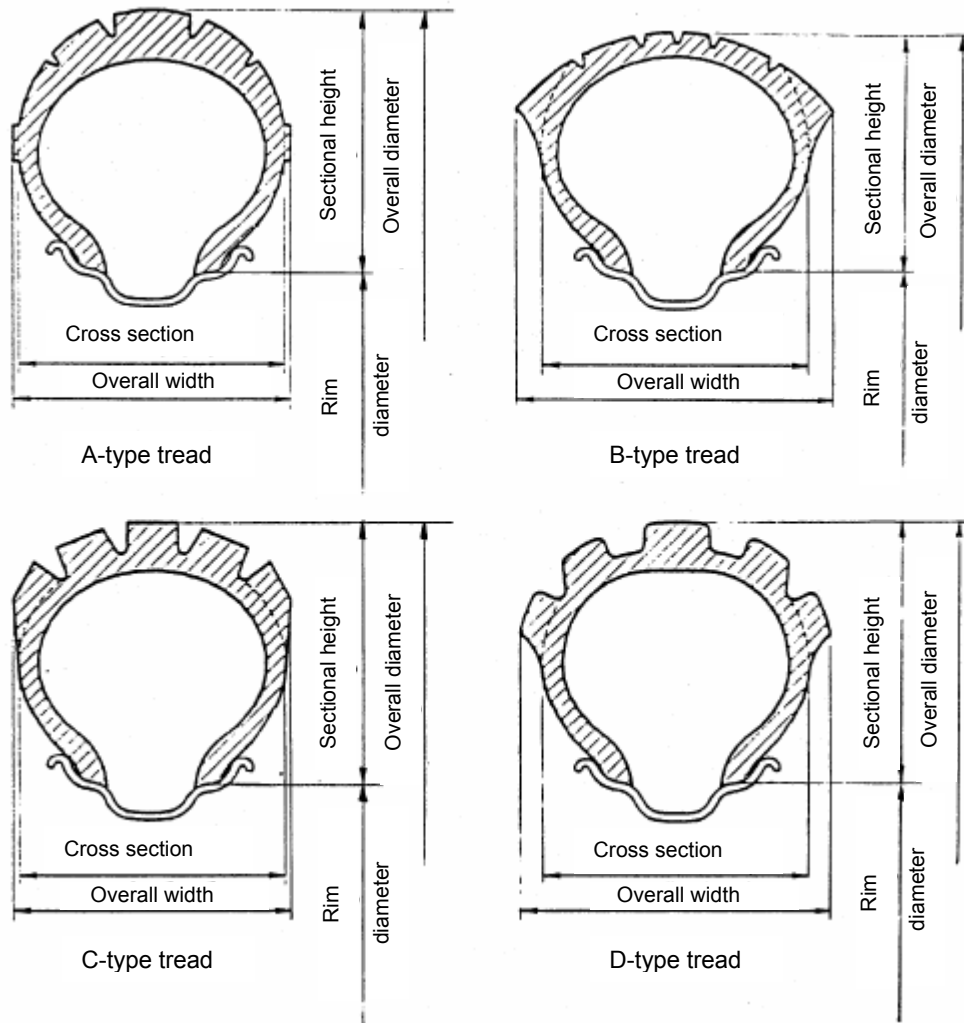


Figure 2 Overall width, cross section width, overall diameter, and cross section height
(Clauses 2.13, 2.14, 2.15 and 2.17)

- 2.4 Tread means the part of the tyre which normally comes into contact with the ground and is characterised as having a tread rib, tread element or tread block.
- 2.5 Side wall means the part of the tyre between the tread and the bead.
- 2.6 Carcass means the tyre construction consisting of plies, excluding the tread or side wall.
- 2.7 Bead means the part of the tyre which is shaped to fit the rim, reinforced by inextensible strands.
- 2.8 Cord means the textile or non-textile strand thread used in various components of the tyre carcass, plies, belts, and breakers.

- 2.9 Ply means the layer of rubber interwoven with nylon, polyester, rayon or other parallel cords from one side of the bead to the other.
- 2.10 Breaker for bias ply tyre means the intermediate ply between the carcass and the tread.
- 2.11 Belt for radial ply tyre means the layer of material underneath the tread, laid principally in the direction of the tread centre line surrounding the carcass in a circumferential direction.
- 2.12 Ply rating means the index of tyre strength in comparison with the standard number of plies that does not necessarily represent the actual number of plies in the tyre.
- 2.13 Overall width means the maximum linear distance between the outside of the two side walls of an inflated tyre including elevations due to marking, decoration or protective ribs (see Figure 2).
- 2.14 Section width means the linear distance between the outsides of the two side walls of an inflated tyre excluding elevations due to marking, decorations or protective ribs (see Figure 2).
- 2.15 Overall diameter means the diameter of the inflated tyre (see Figure 2).
- 2.16 Nominal diameter code (of rim) means the number indicating the rim diameter in inches.
- 2.17 Section height means half of the difference between the overall diameter and the nominal diameter of the rim (see Figure 2).
- 2.18 Tyre designation means the tyre symbol consisting of the descriptions of size and structure as well as usage, with specific details of the tyre as prescribed in Clause 5.1 expressed in the imperial and metric systems.
- 2.19 Aspect ratio means the ratio of the section height to the section width of the tyre expressed as a percentage; for example, 90 series means an aspect ratio of 90%.
- 2.20 Load index means the symbol of the number corresponding to the maximum load that the tyre can transport at the speed shown by the speed symbol in accordance with the use conditions and pneumatic pressure specified by the manufacturer as indicated in Table 1.

Table 1 Load Index
(Clauses 2.20, 4.1, 9.3.3 and 9.4.3)

Load Index	Load kg	Load Index	Load Kg	Load Index	Load Kg	Load Index	Load kg
0	45	24	90	48	180	72	355
1	46.2	25	92.5	49	185	73	365
2	47.5	26	95	50	190	74	375
3	48.7	27	97.5	51	195	75	387
4	50	28	100	52	200	76	400
5	51.5	29	103	53	206	77	412
6	53	30	106	54	212	78	425
7	54.5	31	109	55	218	79	437
8	56	32	112	56	224	80	450
9	58	33	115	57	230	81	462
10	60	34	118	58	236	82	475
11	61.5	35	121	59	243	83	487
12	63	36	125	60	250	84	500
13	65	37	128	61	257	85	515
14	67	38	132	62	265	86	530
15	69	39	136	63	272	87	545
16	71	40	140	64	280	88	560
17	73	41	145	65	290	89	580
18	75	42	150	66	300		
19	77.5	43	155	67	307		
20	80	44	160	68	315		
21	82.5	45	165	69	325		
22	85	46	170	70	335		
23	87.5	47	175	71	345		

2.21 Speed symbol means the symbol indicating the tyre speed corresponding to the load index in the use conditions specified by the manufacturer, as shown in Table 2.

Table 2 Speed symbol
(Clause 2.21)

Speed symbol	Speed km/h
J	100
K	110
L	120
M	130
N	140
P	150
Q	160
R	170
S	180
T	190
U	200
H	210
V	240

3. Class and type

3.1 Tyres are classified into 2 classes as follows:

3.1.1 Nominal rim diameter codes 4 to 12

3.1.2 Nominal rim diameter codes 13 to 21

3.2 Tyres are divided into 2 types as follows:

3.2.1 Bias ply tyre

3.2.2 Radial ply tyre

4. Maximum load

- 4.1 The load as specified under load index in Table 1 is the maximum load when fully inflated with the following pneumatic pressures.
- 4.1.1 Nominal rim diameter codes 4 to 12
 - 4.1.1.1 A tyre carrying a light load shall be inflated with 175 kPa pneumatic pressure.
 - 4.1.1.2 A tyre carrying a normal load shall be inflated with 250 kPa pneumatic pressure.
 - 4.1.1.3 A tyre carrying a heavy load shall be inflated with 300 kPa pneumatic pressure.
 - 4.1.2 Nominal rim diameter codes 13 to 21
 - 4.1.2.1 Tyres carrying a normal load
 - A tyre with speed symbol P shall be inflated with 225 kPa pneumatic pressure.
 - A tyre with speed symbol S shall be inflated with 250 kPa pneumatic pressure.
 - A tyre with speed symbols T, U and H shall be inflated with 280 kPa pneumatic pressure.
 - A tyre with speed symbol V shall be inflated with 290 kPa pneumatic pressure.
 - 4.1.2.2 Tyres carrying a heavy load
 - A tyre with speed symbol P shall be inflated with 280 kPa pneumatic pressure.
- 4.2 In case of use at a speed varying from that corresponding to the speed symbol, the load-bearing capacity will vary in accordance with Table 3.

**Table 3 Load capacity
when used at a speed varying from that corresponding to the
speed symbol
(Clause 4.2)**

Corresponding speed km/hour	Load variation %								
	Nominal rim diameter codes 4 to 12			Nominal rim diameter codes 13 to 21					
	Speed symbol								
	J	K	L	J	K	L	M	N	P +
50	+ 30	+ 30	+ 30	+ 30	+ 30	+ 30			+ 30
60	+ 23	+ 23	+ 23	+ 23	+ 23	+ 23			+ 23
70	+ 16	+ 16	+ 16	+ 16	+ 16	+ 16			+ 16
80	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10			+ 14
90	+ 5	+ 5	+ 7.5	+ 5	+ 5	+ 7.5			+ 12
100	0*	0	+ 5	0*	0	+ 5			+ 10
110	- 7	0*	+ 2.5	**	0*	+ 2.5			+ 8
120	- 15	- 6	0*	**	- 15	0*	0	0	+ 6
130	- 25	- 12	- 5	**	- 25	**	0*	0	+ 4
140	**	**	**	**	**	**	**	0*	0

*Note: * at the nominal speed of each speed symbol*

*** not applicable*

5. Size designation

5.1 Nominal designation of tyre

5.1.1 Tyre designation is made up of two aspects as follows:

5.1.1.1 Dimension and construction

5.1.1.2 Use

5.1.2 Tyres are designated by two methods as follows:

5.1.2.1 Old system

(1) Dimension and construction describe the nominal sectional width (inches), marking of “-”, and nominal rim diameter code.

(2) Use describes the ply rating or load index and speed symbol.

Example 1: 2.75-18 4 PR

2.75 means the nominal sectional width of the tyre (inches).

- means biased ply.

18 means a nominal rim diameter code corresponding to 457 mm.

4 PR means a ply rating equivalent to 4.

Example 2: 2.75-18 42 P

2.75 means the nominal sectional width of the tyre (inches).

18 means a nominal rim diameter code corresponding to 457 mm.

42 means a load index corresponding to maximum load at 150 kg.

P means a speed symbol corresponding to 150 km/hour.

5.1.1.2 Metric system

(1) Dimension and construction describes the nominal sectional width (mm), a marking of “/”, aspect ratio, construction code (“-” means biased ply and “R” means radial ply), and nominal rim diameter code.

(2) Use consists of the load index and speed symbol.

Example: 90/90-17 49 P

90 means the nominal sectional width of the tyre (mm).

90 means the aspect ratio of tyre 90.

- means biased ply.

17 means the nominal rim diameter code corresponding to 432 mm.

49 means the load index corresponding to maximum load at 185 kg.

P means the speed symbol corresponding to 150 km/hour.

5.1.3 Tyres used with nominal rim diameter codes 13 to 19 may be marked with M/C after the nominal rim diameter of the tyre designation.

5.1.4 Nominal rim diameter code

The nominal rim diameter code and nominal rim diameter shall be in accordance with Table 4.

Table 4 Nominal rim diameter code and nominal rim diameter
(Clause 5.1.4)

Nominal rim diameter code	Nominal rim diameter mm
8	203
10	254
12	305
13	330
14	356
15	381
16	406
17	432
18	457
19	483
20	508
21	533

5.2 The overall diameter and overall width of the tyre shall be in accordance with the provisions specified in Appendix A. Measurement shall be conducted in accordance with Clause 9.1.

6. Requirements

6.1 General appearance

The appearance of the tyre shall be free from splitting, cracking, tearing, or defects that affect its usability.

Test shall be conducted by visual inspection.

6.2 Capacity

6.2.1 Resistance to breaking energy

The tyre shall be resistant to a destructive force not less than the value specified in Tables 5 or 6 as the case may be.

The test shall be conducted in accordance with Clause 9.2.

Table 5 Resistance to breaking energy
(Clause 6.2.1)

Unit in Joules

Pneumatic pressure kPa	Resistance to breaking energy	
	Design sectional width	
	Up to and including 62 mm	In excess of 62 mm
Not over 175	15	17
225 or over	29	34

Table 6 Resistance to breaking energy computed on ply rating
(Clause 6.2.1)

Unit in Joules

Ply rating (PR)	Resistance to breaking energy computed on ply rating	
	Design sectional width	
	Up to and including 62 mm	Over 62 mm
2	15	17
4	29	34
6	39	45
8	-	56

6.2.2 Endurance test

After the tyre has been subjected to the test specified in accordance with Clause 9.3, there shall be no evidence of bead split out of the rim, broken cord, tread, ply or bead separation.

6.2.3 High-speed endurance test

After the tyre has been subjected to the test specified in accordance with Clause 9.4, there shall be no evidence of bead split out of the rim, broken cord, tread, ply or bead separation.

7. Marking and labelling

- 7.1 There must be at least a number, letter, or mark legibly, clearly and permanently indicating the following details on the tyre side wall.
- (1) The tyre size designation in the imperial system and/or the metric system.
 - (2) Lot
 - (3) A mark acting as a tread wear limit indicator (or tread depth of 0.8 mm) in “△” or “TWI” in at least 4 equidistant positions for tyres used with nominal rim diameter codes 4 to 12, and at least 6 positions for tyres used with nominal rim diameter codes 13 to 21.
 - (4) A mark indicating the tyre rotating direction
 - (5) A symbol indicating use with the front or rear wheel if it is specifically designed so.
 - (6) In the case of tubeless tyres, the word “TUBELESS” must be shown.
 - (7) Name of manufacturer or registered trademark
 - (8) Country of manufacture
- In the case of use of a foreign language, the meaning must correspond with that in Thai specified above.

8. Sampling and Criteria for Conformity

- 8.1 Lot means tyres with the same designation, made of the same materials under the same procedures, which are made, sold or delivered in the same period.
- 8.2 Sampling and acceptance shall conform to the following sampling plan or an equivalent plan.
- 8.2.1 Sampling and acceptance for tests on size and general requirements
- 8.2.1.1 Two samples shall be drawn at random from the same lot.
- 8.2.1.2 If the samples comply with the provisions prescribed in Clauses 5 and 6.1, they shall be deemed to meet the requirements.
- 8.2.2 Sampling and acceptance for the capacity test
- 8.2.2.1 Four samples shall be drawn at random from the same lot, with 2 tyres provided for resistance to breaking energy and 1 sample each for endurance and high-speed endurance tests respectively.
- 8.2.2.2 If the samples comply with the provisions prescribed in Clauses 6.2.1, 6.2.2 and 6.2.3, they shall be deemed to meet the requirements.
- 8.3 Criteria for conformity

If the tyre samples meet all the requirements prescribed in Clauses 8.2.1.2 and 8.2.2.2, they shall be deemed to comply with this standard.

9. Testing

9.1 Size

9.1.1 Preparation of sample

Mount the tyre on a measuring rim with the width code as specified in Table 7 (the rim used in the test shall comply with TIS 306) and inflate it to the pneumatic pressure specified in Table 7 as appropriate. Maintain the assembly at room temperature for at least 24 hours. If the tyre pressure varies, readjust it to the specified value.

Table 7 Measuring rim width with various width codes
(Clause 9.1.1)

Width code	Measuring rim width mm
1.50	38
1.65	40.5
1.85	47
2.15	55
2.50	63.5
2.75	70
3.00	76
3.50	89
3.75	95
4.00	101.5
4.50	114.5
5.00	127
5.50	139.5
6.00	152.5
6.50	165
7.00	178

Table 8 Measuring pneumatic pressure of tyre
(Clause 9.1.1)

Speed symbol	Pneumatic pressure KPa
Tyre carrying normal load P and lower S Over S	225 250 280
Tyre carrying heavy load M and P	280

9.1.2 Measuring method

9.1.2.1 Overall diameter

Use an instrument that has a scale of 0.5 mm to measure the overall diameter at 2 perpendicular positions and report the result as an averaged value.

9.1.2.2 Overall width

Use an instrument that has a scale of 0.5 mm to measure the overall width at each of 6 points approximately equally spaced around the circumference and report the result as an averaged value.

9.2 Resistance to breaking energy

9.2.1 Testing method

Mount the tyre on a measuring rim and inflate it to the pneumatic pressure for the maximum load specified in Clause 4.1. Maintain the assembly at room temperature for at least 3 hours. If the tyre pressure varies, readjust it to the specified value. The assembly shall be pressed using a cylindrical steel plunger with a hemispherical end measuring 8.0 ± 0.1 mm in diameter. Position the plunger as near to the centreline as possible, and force the plunger into the tread at a rate of 50 ± 2.5 mm/min. Start recording the distance of penetration while force is applied to the tread. Measure the force for penetration (F) and the distance of penetration (P) while the tyre is breaking. The test shall be carried out at each of the 3 points equally spaced around the circumference for tyres with the nominal rim diameter codes 4 to 12, and 5 points

for tyres with the nominal rim diameter codes 13 to 21. If the tyre fails to break before the plunger is stopped on reaching the rim, the value at that point shall be used as the force for penetration and distance of penetration. For tubeless tyres, the inner tube shall be mounted so that the pneumatic pressure will be maintained if the tyre blows out during the test.

9.2.2 Computing method

Compute the breaking energy for each test point by means of the following formula.

$$W = \frac{F \times P}{2}$$

where W: breaking energy in Joule
F: force for penetration in N
P: distance of penetration in metres

9.2.3 Test result

The result shall be reported as an average of the values obtained.

9.3 Endurance

9.3.1 Apparatus

The test drum is a steel drum, measuring 1,707 mm \pm 3 mm in diameter, with a smooth surface and a width greater than the overall width of the tyre.

9.3.2 Preparation of sample

Mount the tyre on a measuring rim and inflate it to the pressure for the maximum load specified in Clause 4.1. Maintain the assembly at 38 \pm 3 degrees Celsius for at least 3 hours. If the tyre pressure varies, readjust it to the specified value.

9.3.3 Testing method

Mount the tyre on a measuring rim in accordance with Clause 9.3.2, and on the axle. Press it against a test drum with the force applied perpendicular to the contact surface and passing through the centre of the test drum as illustrated in Figure 3. The force applied comes from the maximum load specified in Table 1. The test shall be carried out in 3 steps continuously under the conditions given in Table 10. In each step, the pressure shall not be readjusted and the ambient temperature be maintained at 38 \pm 3 degrees Celsius throughout the test. Upon completing the test, the tyre shall be left to cool down and be removed from the measuring rim. A visual inspection shall be performed.

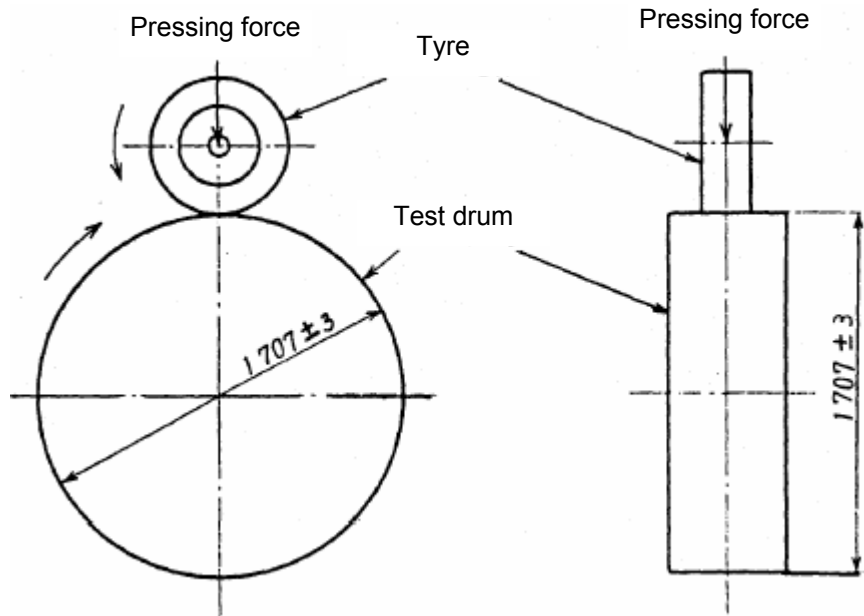


Figure 3 Endurance test
(Clauses 9.3.3 and 9.4.3)

Table 9 Endurance test conditions
(Clause 9.3.3)

Pneumatic pressure kPa		Pneumatic pressure for maximum load
Pressing force	kg	Maximum load %
Speed	km/h	81
Test step	Max. load %	Duration h ¹⁾
1	100	4 (7)
2	108	6 (16)
3	117	24 (24)

Note: ¹⁾ For tyres used with nominal rim diameter codes 4 to 12, a high-speed test may not be required if it is subjected to an endurance test for the period specified in parentheses.

9.4 High-speed endurance

9.4.1 Apparatus

The apparatus shall be in accordance with Clause 9.3.1.

9.4.2 Preparation of sample

The sample shall be prepared in accordance with Clause 9.3.2.

9.4.3 Testing method

Mount the tyre on a measuring rim under Clause 9.4.2 and the axle. Press it against a test drum with the force applied perpendicular to the contact surface and passing through the centre of the test drum as illustrated in Figure 3. The force applied shall be 88% of the maximum load specified in Table 1. The test shall be carried out in four steps according to the conditions given in Table 10. The ambient temperature shall be maintained at 38 ± 3 degrees Celsius. The pressure shall be readjusted to maintain the specified value and the test shall be carried out for Steps 2, 3 and 4 continually without pressure readjustment. Upon completing the test, the tyre shall be left to cool down and be removed from the measuring rim. A visual inspection shall be performed.

Table 10 High speed test condition
(Clause 9.4.3)

(Clause 9.4.3) Tyre Class	Nominal rim diameter codes 4 to 12	Nominal rim diameter codes 13 to 21		
		Design sectional width up to and including 62 mm	Design sectional width over 62 mm	
Pneumatic pressure kPa	Pneumatic pressure for maximum load			
Pressing force kg	Maximum load x 0.88			
Test step	1	81 km/h x 120 minutes	81 km/h x 120 minutes	81 km/h x 120 minutes
	2	89 km/h x 30 minutes	89 km/h x 30 minutes	121 km/h x 30 minutes
	3	97 km/h x 30 minutes	97 km/h x 30 minutes	129 km/h x 30 minutes

	4	105 km/h x 120 minutes	105 km/h x 120 minutes	137 km/h x 30 minutes
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Appendix A

(Clause 5.2)

A.1 The size designation and properties of tyres shall be in accordance with Table A.1 to A.12.

**Table A.1 Designation and properties of tyres
with nominal rim diameter codes 4 to 12 (Old system)**

(Clause 4.1)

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure KPa	Maximum load kg
Dimension and construction	Load index					
3.00-5	10	2.15	86	291	175	60
3.00-5	22				250	85
3.00-7	18			342	175	75
3.00-7	30				250	106
3.50-4	16	2.50	99	291	175	71
3.50-4	28				250	100
3.50-5	20			316	175	80
3.50-5	32				250	112
3.50-6	24			341	175	90
3.50-6	36				250	125
3.50-7	28			367	175	100
3.50-7	40				250	140
4.00-5	32	2.50	113	346	175	112
4.00-5	41				250	145
4.00-7	38			397	175	132
4.00-7	48				250	180
4.50-6	42	3.00	130	398	175	150
4.50-6	52				250	200
6.00-6	57	4.00	166	464	175	230
6.00-6	68				250	315
2.50-8	16	1.50	70	352	175	71
2.50-8	28				250	100
2.50-9	20			378	175	80
2.50-9	30				250	106

**Table A.1 Designation and properties of tyres
with nominal rim diameter codes 4 to 12 (Old system)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
2.75-9	24	1.85	77	389	175	90
2.75-9	35			250	250	121
2.75-10	37			414	250	128
3.00-8	26	2.15	86	378	175	95
3.00-8	38			250	250	132
3.00-10	32			429	175	112
3.00-10	42				250	150
3.00-12	38			480	175	132
3.00-12	47				250	175
3.25-12	40	2.50	95	492	175	140
3.25-12	51			250	250	195
3.50-8	35	2.50	95	404	175	121
3.50-8	46			250	250	170
3.50-9	39			430	175	136
3.50-9	48				250	180
3.50-10	41			455	175	145
3.50-10	51				250	195
3.50-12	45			506	175	165
3.50-12	57				250	230
4.00-8	44	2.50	113	436	175	160
4.00-8	55			250	250	218
4.00-10	49			487	175	185
4.00-10	60				250	250
4.00-12	54			538	175	212
4.00-12	65				250	290
4.50-12	61	3.00	130	568	175	257
4.50-12	72			250	250	355
6.00-9	69	4.00	166	562	175	325
6.00-9	79			250	250	437

Note: In marking the tyre size designation on the side wall, the manufacturer must give a full explanation of operation.

**Table A.2 Designation and properties of tyres
with nominal rim diameter codes 4 to 12 (100 metric series)
(Clause 4.1)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
70/100-8	26	1.60	75	353	175	95
70/100-8	36				250	125
70/100-8	41				300	145
80/100-8	34	1.85	86	375	175	118
80/100-8	43				250	155
80/100-8	48				300	180
90/100-8	40	2.15	97	395	175	140
90/100-8	49				250	185
90/100-8	54				300	212
100/100-8	45	2.50	109	417	175	165
100/100-8	55				250	218
100/100-8	60				300	250
110/100-8	50	2.50	118	439	175	190
110/100-8	60				250	250
110/100-8	65				300	290
120/100-8	55	2.75	129	459	175	218
120/100-8	65				250	290
120/100-8	70				300	335
130/100-8	60	3.00	139	481	175	250
130/100-8	69				250	325
130/100-8	75				300	387
70/100-10	30	1.60	75	404	175	106
70/100-10	40				250	140
70/100-10	45				300	165
80/100-10	38	1.85	86	426	175	132
80/100-10	46				250	170
80/100-10	52				300	200

**Table A.2 Designation and properties of tyres
with nominal rim diameter codes 4 to 12 (100 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
90/100-10	43	2.15	97	446	175	155
90/100-10	53				250	206
90/100-10	58				300	236
100/100-10	49	2.50	109	468	175	185
100/100-10	59				250	243
100/100-10	64				300	280
110/100-10	54	2.50	118	490	175	212
110/100-10	64				250	280
110/100-10	69				300	325
120/100-10	59	2.75	129	510	175	243
120/100-10	68				250	315
120/100-10	74				300	375
130/100-10	63	3.00	139	532	175	272
130/100-10	73				250	365
130/100-10	78				300	425
70/100-12	34	1.60	75	455	175	118
70/100-12	43				250	155
70/100-12	48				300	180
80/100-12	41	1.85	86	477	175	145
80/100-12	50				250	190
80/100-12	55				300	218
90/100-12	46	2.15	97	497	175	170
90/100-12	56				250	224
90/100-12	62				300	265
100/100-12	52	2.50	109	519	175	200
100/100-12	62				250	265
100/100-12	67				300	307
110/100-12	57	2.50	118	541	175	230
110/100-12	67				250	307
110/100-12	72				300	355

**Table A.2 Designation and properties of tyres
with nominal rim diameter codes 4 to 12 (100 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
120/100-12	62	2.75	129	561	175	265
120/100-12	71				250	345
120/100-12	76				300	400
130/100-12	66	3.00	139	583	175	300
130/100-12	75				250	387
130/100-12	80				300	450

Note: In marking the tyre size designation on the side wall, the manufacturer must give a full explanation of operation.

**Table A.3 Designation and properties of tyres
with nominal rim diameter codes 4 to 12 (90 metric series)
(Clause 4.1)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
60/90-8	16	1.50	66	319	175	71
	25				250	92.5
	31				300	109
70/90-8	24	1.60	75	337	175	90
	34				250	118
	39				300	136
80/90-8	31	1.85	86	357	175	109
	41				250	145
	45				300	165
90/90-8	38	2.15	97	377	175	132
	46				250	170
	52				300	200
100/90-8	43	2.50	109	395	175	155
	52				250	200
	58				300	236
110/90-8	48	2.50	118	415	175	180
	58				250	236
	63				300	272
120/90-8	53	2.75	129	435	175	206
	62				250	265
	67				300	307
130/90-8	57	3.00	139	453	175	230
	66				250	300
	72				300	350
60/90-10	20	1.50	66	370	175	80
	30				250	106
	35				300	121

**Table A.3 Designation and properties of tyres
with nominal rim diameter codes 4 to 12 (90 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
70/90-10	28	1.60	75	388	175	100
	38				250	132
	43				300	155
80-90-10	35	1.85	86	408	175	121
	44				250	160
	49				300	185
90/90-10	41	2.15	97	428	175	145
	50				250	190
	56				300	224
100/90-10	46	2.50	109	446	175	170
	56				250	224
	61				300	257
110/90-10	51	2.50	118	466	175	195
	61				250	257
	66				300	300
120/90-10	56	2.75	129	486	175	224
	66				250	300
	71				300	345
130/90-10	61	3.00	139	504	175	257
	70				250	335
	75				300	387
60/90-12	24	1.50	66	421	175	90
	34				250	118
	39				300	136
70/90-12	32	1.60	75	439	175	112
	41				250	145
	46				300	170
80/90-12	39	1.85	86	459	175	136
	74				250	175
	53				300	206

**Table A.3 Designation and properties of tyres
with nominal rim diameter codes 4 to 12 (90 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
90/90-10	44	2.15	97	479	175	160
	54				250	212
	59				300	243
100/90-12	49	2.50	109	497	175	185
	59				250	243
	64				300	280
110/90-12	55	2.50	118	517	175	218
	64				250	280
	69				300	325
120/90-12	59	2.75	129	537	175	243
	69				250	325
	74				300	375
130/90-12	64	3.00	139	555	175	280
	73				250	365
	78				300	425

Note: In marking the tyre size designation on the side wall, the manufacturer must give a full explanation of operation.

**Table A.4 Designation and properties of tyres
with nominal rim diameter codes 4 to 12 (80 metric series)
(Clause 4.1)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
60/80-8	13	1.50	66	305	175	65
	22				250	85
	27				300	97.5
70/80-8	20	1.60	75	323	175	80
	30				250	106
	36				300	125
80/80-8	28	1.85	86	339	175	100
	37				250	128
	42				300	150
90/80-8	34	2.15	97	357	175	118
	43				250	155
	48				300	180
100/80-8	40	2.50	109	375	175	140
	48				250	180
	54				300	212
110/80-8	44	2.50	118	391	175	160
	54				250	212
	59				300	243
120/80-8	49	2.75	129	409	175	185
	59				250	243
	64				300	280
130/80-8	53	3.00	139	425	175	206
	63				250	272
	68				300	315
60/80-10	17	1.50	66	356	175	73
	26				250	95
	32				300	112

**Table A.4 Designation and properties of tyres
with nominal rim diameter codes 4 to 12 (80 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
60/80-8	13	1.50	66	305	175	65
	22				250	85
	27				300	97.5
70/80-8	20	1.60	75	323	175	80
	30				250	106
	36				300	125
80/80-8	28	1.85	86	339	175	100
	37				250	128
	42				300	150
90/80-8	34	2.15	97	357	175	118
	43				250	155
	48				300	180
100/80-8	40	2.50	109	375	175	140
	48				250	180
	54				300	212
110/80-8	44	2.50	118	391	175	160
	54				250	212
	59				300	243
120/80-8	49	2.75	129	409	175	185
	59				250	243
	64				300	280
130/80-8	53	3.00	139	425	175	206
	63				250	272
	68				300	315
60/80-8	17	1.50	66	356	175	73
	26				250	95
	32				300	112

**Table A.4 Designation and properties of tyres
with nominal rim diameter codes 4 to 12 (80 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
80/80-12	35	1.85	86	441	175	121
	44				250	160
	49				300	185
90/80-12	41	2.15	97	459	175	145
	50				250	190
	56				300	224
100/80-12	46	2.50	109	477	175	170
	56				250	224
	61				300	257
110/80-12	51	2.50	118	493	175	195
	61				250	257
	66				300	300
120/80-12	56	2.75	129	511	175	224
	65				250	290
	70				300	335
130/80-12	60	3.00	139	527	175	250
	69				250	325
	75				300	387

Note: In marking the tyre size designation on the side wall, the manufacturer must give a full explanation of operation.

**Table A.5 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (Old system)
(Clause 4.1)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index and speed symbol					
2.00-14	21 L	1.20	57	478	225	82.5
2.00-17	27 L			554	225	97.5
2.00-19	31 L			605	225	109
2.25-14	27 L	1.60	67	492	225	97.5
2.25-14	32 L			492	280	112
2.25-15	29 L			517	225	103
2.25-15	34 L			517	280	118
2.25-16	31 L			542	250	109
2.25-16	36 L			542	280	125
2.25-17	33 L			568	225	115
2.25-17	38 L			568	280	132
2.25-18	35 L			593	225	121
2.25-18	40 L			593	280	140
2.25-19	37 L			619	225	128
2.25-19	42 L			619	280	150
2.50-14	32 L			1.60	72	506
2.50-14	37 L	506	280			128
2.50-15	34 L	531	225			118
2.50-15	39 L	531	280			136
2.50-16	36 L	556	225			125
2.50-16	41 L	556	280			145
2.50-17	38 L	582	225			132
2.50-17	43 L	582	280			155
2.50-18	40 L	607	225			140
2.50-18	45 L	607	280			165

**Table A.5 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (Old system)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index and speed symbol					
2.50-19	41 L	1.60	72	633	225	145
2.50-19	46 L			633	280	170
2.50-21	43 L			683	225	155
2.50-21	48 L			683	280	180
2.75-14	35 P	1.85	83	524	225	121
2.75-14	41 P			524	280	145
2.75-15	37 P			549	225	128
2.75-15	42 P			549	280	150
2.75-16	40 P			574	225	140
2.75-16	46 P			574	280	170
2.75-17	41 P			600	225	145
2.75-17	47 P			600	280	175
2.75-18	42 P			625	225	150
2.75-18	48 P			625	280	180
2.75-19	43 P			651	225	155
2.75-19	49 P			651	280	185
2.75-21	45 P			701	225	165
2.75-21	52 P			701	280	200
3.00-14	40 P	1.85	88	540	225	140
3.00-14	45 P			540	280	165
3.00-15	41 P			565	225	145
3.00-15	47 P			565	280	175
3.00-16	43 P			590	225	155
3.00-16	48 P			590	280	180
3.00-17	45 P			616	225	165
3.00-17	50 P			616	280	190

**Table A.5 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (Old system)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index and speed symbol					
3.00-18	47 P	1.85	88	641	225	175
3.00-18	52 P			641	280	200
3.00-19	49 P			667	225	185
3.00-19	54 P			667	280	212
3.00-21	51 P			717	225	195
3.00-21	57 P			717	280	230
3.25-14	44 P	2.15	98	552	225	160
3.25-14	52 P			552	280	200
3.25-15	46 P			577	225	170
3.25-15	53 P			577	280	206
3.25-16	48 P			602	225	180
3.25-16	55 P			602	280	218
3.25-17	50 P			628	225	190
3.25-17	57 P			628	280	230
3.25-18	52 P			653	225	200
3.25-18	59 P			653	280	243
3.25-19	54 P			679	225	212
3.25-19	60 P			679	280	250
3.25-21	57 P			729	225	230
3.25-21	62 P			729	280	265
3.50-14	48 P	2.15	102	564	225	180
3.50-14	54 P			564	280	212
3.50-15	50 P			589	225	190
3.50-15	56 P			589	280	221
3.50-16	52 P			614	225	200
3.50-16	58 P			614	280	236

**Table A.5 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (Old system)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index and speed symbol					
3.50-17	54 P	2.15	102	640	225	212
3.50-17	60 P			640	280	250
3.50-18	56 P			665	225	224
3.50-18	62 P			665	280	265
3.50-19	57 P			691	225	230
3.50-19	63 P			691	280	272
3.50-21	60 P			741	225	250
3.50-21	65 P			741	280	290
3.75-17	58 P	2.15	109	652	225	236
3.75-18	60 P			677	225	250
3.75-19	61 P			703	225	257
4.00-16	60 P	2.15	114	638	225	250
4.00-18	64 P			689	225	280
4.00-19	65 P			715	225	290
4.25-17	64 P	2.15	119	676	225	280
4.25-18	66 P			701	225	300
4.25-19	67 P			727	225	307
4.50-17	67 P	2.15	122	684	225	307
4.50-18	70 P			709	225	335
5.00-16	71 P	3.00	142	686	225	345

Note: In marking the tyre size designation on the side wall, the manufacturer must give a full explanation of operation.

**Table A.6 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (100 metric series)
(Clause 4.1)**

Tyre size designation		Measuring rim width code	Overall width mm		Overall diameter mm		Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index		A, B and C-type tread	D-type tread	A and B-type tread	C and D-type tread		
80/100-14	43	1.85	88	100	528	536		155
90/100-14	49	2.15	99	113	548	558		185
70/100-14	38	1.60	76	86	531	537		132
80/100-15	44	1.85	88	100	553	561		160
90/100-15	50	2.15	99	113	573	583		190
70/100-16	39	1.60	76	86	556	562		136
80/100-16	39	1.85	88	100	578	586		136
90/100-16	51	2.15	99	113	598	608		195
100/100-16	57	2.50	111	126	620	630		230
130/100-16	70	3.00	142	161	684	698		335
	76						280	400
140/100-16	74	3.50	156	178	706	720		375
	80						280	450
70/100-17	40	1.60	76	86	582	588		140
	46						280	170
80/100-17	46	1.85	88	100	604	612		170
	53						280	206
90/100-17	53	2.15	99	113	624	634		206
	59						280	243
100/100-17	58	2.50	111	126	646	656		236
	64						280	280
110/100-17	63	2.50	120	136	668	678		272
	69						280	325
120/100-17	67	2.75	131	149	588	700		307
	73						280	365
130/100-17	71	3.00	142	161	710	724		345
	77						280	412
70/100-18	41	1.60	76	86	607	613		145
	47						280	175

**Table A.6 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (100 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm		Overall diameter mm		Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index		A, B and C-type tread	D-type tread	A and B-type tread	C and D-type tread		
80/100-18	47	1.85	88	100	629	637		175
	54						280	212
90/100-18	54	2.15	99	113	649	659		212
	60						280	250
100/100-18	59	2.50	111	126	671	681		243
	65						280	290
110/100-18	64	2.50	120	136	693	703		280
	70						280	335
120/100-18	68	2.75	131	149	713	725		315
	74						280	375
130/100-18	72	3.00	142	161	735	749		355
	78						280	425
70/100-19	42	1.60	76	86	633	639		150
	48						280	180
80/100-19	49	1.85	88	100	655	663		185
	55						280	218
90/100-19	55	2.15	99	113	675	685		218
	61						280	257
100/100-19	60	2.50	111	126	697	707		250
	66						280	300
110/100-19	65	2.50	120	136	719	729		290
	71						280	345
120/100-19	69	2.75	131	149	739	751		325
	75						280	387
130/100-19	73	3.00	142	161	761	775		365
	79						280	437

**Table A.7 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (90 metric series)
(Clause 4.1)**

Tyre size designation		Measuring rim width code	Overall width mm		Overall diameter mm		Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index		A, B and C-type tread	D-type tread	A and B-type tread	C and D-type tread		
80/90-14	40	2.15	99	113	530	538		140
90/90-15	47	2.15	99	113	555	563		175
100/90-15	53	2.50	111	126	573	583		206
110/90-15	58	2.50	120	136	593	603		236
120/90-15	62	2.75	131	149	613	623		265
130/90-15	66	3.00	142	161	631	643		300
140/90-15	70	3.50	156	178	651	663		335
	76						280	400
150/90-15	74	3.50	165	188	669	683		375
	80						280	450
70/90-16	36	1.60	76	88	540	548	225	125
80/90-16	43	1.85	88	100	560	568		155
90/90-16	48	2.15	99	113	580	588		180
100/90-16	54	2.50	111	126	598	608		212
110/90-16	59	2.50	120	136	618	628		243
120/90-16	63	2.75	131	149	638	648		272
130/90-16	67	3.00	142	161	656	668		307
	73						280	365
140/90-16	71	3.50	156	178	676	688		345
	77						280	412
150/90-16	75	3.50	165	188	694	708		387
	81						280	462
70/90-17	38	1.60	76	85	566	574		132
	43						280	155
80/90-17	44	1.85	88	100	586	594		160
	50						280	190
90/90-17	49	2.15	99	113	606	614		185
	56						280	224
100/90-17	55	2.50	111	126	624	634		218
	61						280	257

**Table A.7 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (90 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm		Overall diameter mm		Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index		A, B and C-type tread	D-type tread	A and B-type tread	C and D-type tread		
110/90-17	60	2.50	120	136	644	654		250
	66						280	300
120/90-17	64	2.75	131	149	664	674		280
	70						280	335
130/90-17	68	3.00	142	161	682	694		315
	74						280	375
70/90-18	39	1.60	76	86	591	599		136
	44						280	160
80/90-18	45	1.85	88	100	611	619		165
	51						280	195
90/90-18	51	2.15	99	113	631	639		195
	57						280	230
100/90-18	56	2.50	111	126	649	659		224
	62						280	265
110/90-18	61	2.50	120	136	669	679		257
	67						280	307
120/90-18	65	2.75	131	149	689	699		290
	71						280	345
130/90-18	69	3.00	142	161	707	719		325
	75						280	387
70/90-18	40	1.60	76	86	617	625		140
	45						280	165
80/90-19	46	1.85	88	100	637	645		170
	52						280	200
90/90-19	52	2.15	99	113	657	665		200
	58						280	236
100/90-19	57	2.50	111	126	675	685		230
	63						280	272
110/90-19	62	2.50	120	136	695	705		265
	68						280	315

**Table A.7 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (90 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm		Overall diameter mm		Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index		A, B and C-type tread	D-type tread	A and B-type tread	C and D-type tread		
120/90-19	66	2.75	131	149	715	725		300
	72						280	355
130/90-19	70	3.00	142	161	733	745		355
	76						280	400
90/90-21	54	2.15	99	113	707	715		212
100/90-21	59	2.50	111	126	725	735		243

**Table A.8 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (80 metric series)
(Clause 4.1)**

Tyre size designation		Measuring rim width code	Overall width mm		Overall diameter mm		Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index		A, B and C-type tread	D-type tread	A and B-type tread	C and D-type tread		
100/80-14	48	2.50	111	126	528	536	300	180
	53							206
120/80-14	58	2.75	131	149	562	572		236
130/80-14	62	3.00	142	151	578	588		265
140/80-14	72	4.00	178	203	630	642		355
150/80-15	76	3.50	165	188	637	649	300	400
160/80-15	74	3.00	178	203	655	667		375
170/80-15	83	4.00	187	213	673	685	300	487
100/80-16	50	2.50	111	126	578	586		190
110/80-16	55	2.50	120	136	594	604	225	218
120/80-16	60	2.75	131	149	612	622		250
130/80-16	64	3.00	142	161	628	638		280
140/80-16	68	3.50	156	178	646	656		315
150/80-16	71	3.50	165	188	662	674	300	345
	77							412
160/80-16	80	4.00	178	203	680	692	300	450
80/80-17	41	1.85	88	100	568	576		145
90/80-17	46	2.15	99	113	586	594		170
100/80-17	52	2.50	111	126	604	612		200
110/80-17	57	2.50	120	136	620	630		230
120/80-17	61	2.75	131	149	638	648		257
130/80-17	65	3.00	142	161	654	664		290
140/80-17	69	3.50	156	178	672	682		325
70/80-18	36	1.60	76	86	577	583	300	125
	41							145
80/80-18	42	1.85	88	100	593	601	300	150
	48							180
90/80-18	47	2.15	99	113	611	619	300	175
	54							212

**Table A.8 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (80 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm		Overall diameter mm		Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index		A, B and C-type tread	D-type tread	A and B-type tread	C and D-type tread		
100/80-18	53	2.50	111	126	629	637	300	206
	59							243
110/80-18	58	2.50	120	136	645	655	300	236
	64							280
120/80-18	62	2.75	131	149	663	673	300	265
	68							315
130/80-18	66	3.00	142	161	679	689	300	300
	72							355
140/80-18	70	3.50	156	178	697	707	300	335
	76							400
150/80-18	73	3.50	165	188	713	725	300	365
	79							437
160/80-18	83	4.00	178	203	731	743	300	487
80/80-19	43	1.85	88	100	619	627		155
90/80-19	49	2.15	99	113	637	645		185
100/80-19	54	2.50	111	126	655	663		212
110/80-19	59	2.50	120	136	671	681		243
120/80-19	63	2.75	131	149	689	699		272
80/80-21	45	1.85	88	100	669	677		165
90/80-21	51	2.15	99	113	687	695		195
100/80-21	56	2.50	111	126	705	713		224

**Table A.9 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (70 metric series)
(Clause 4.1)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
100/70-16	47	2.75	110	556		175
100/70-17	49			582		185
100/70-18	50			607		190
100/70-19	51			633		195
110/70-16	52	3.00	121	570		200
110/70-17	54			596		212
110/70-18	55			621		218
110/70-19	56			647		224
120/70-16	57	3.50	134	586		230
120/70-17	58			612		236
120/70-18	59			637		243
120/70-19	60			663		250
130/70-16	61	3.50	142	600		257
130/70-17	62			626		265
130/70-18	63			651		272
130/70-19	64			677		280
140/70-16	65	4.00	155	616		290
140/70-17	66			642		300
140/70-18	67			667		307
140/70-19	68			693		315
150/70-16	68	4.00	164	630		315
150/70-17	69			656		325
150/70-18	70			681		335
150/70-19	71			707		345

**Table A.9 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (70 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
160/70-16	71	4.50	177	646		345
160/70-17	73			672		365
160/70-18	74			697		375
160/70-19	75			723		387

Note: Tyres with nominal rim diameter codes 13 to 21 (70 metric series) in this table have A and B-type treads.

**Table A.10 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (60 metric series)
(Clause 4.1)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
110/60-16	49	3.00	121	548		185
110/60-17	50			574		190
110/60-18	51			599		195
110/60-19	53			625		206
120/60-16	53	3.50	134	560		206
120/60-17	55			586		218
120/60-18	56			611		224
120/60-19	57			637		230
130/60-16	58	3.50	142	572		236
130/60-17	59			598		243
130/60-18	60			623		250
130/60-19	61			649		257
140/60-16	61	4.00	155	586		257
140/60-17	63			612		272
140/60-18	64			637		280
140/60-19	65			663		290
150/60-16	65	4.00	164	598		290
150/60-17	66			624		300
150/60-18	67			649		307
150/60-19	68			657		315
160/60-16	68	4.50	177	612		315
160/60-17	69			638		325
160/60-18	70			663		335
160/60-19	71			689		345

**Table A.10 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (60 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
170/60-16	71	4.50	185	624		345
170/60-17	72			650		355
170/60-18	73			675		365
170/60-19	74			701		375

Note: Tyres with nominal rim diameter codes 13 to 21 (60 metric series) in this table have A and B-type treads.

**Table A.11 Designation and properties of tires
with nominal rim diameter codes 13 to 21 (55 metric series)
(Clause 4.1)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
130/55-16	55	4.00	142	560		218
130/55-17	57			586		230
130/55-18	58			611		236
130/55-19	59			637		243
140/55-16	59	4.50	155	570		243
140/55-17	60			596		250
140/55-18	61			621		257
140/55-19	62			647		265
150/55-16	63	4.50	163	584		272
150/55-17	64			610		280
150/55-18	65			635		290
150/55-19	66			661		300
160/55-16	65	5.00	176	594		290
160/55-17	67			620		307
160/55-18	68			645		315
160/55-19	69			671		325
170/55-16	69	5.50	188	608		325
170/55-17	70			634		335
170/55-18	71			659		345
170/55-19	72			685		355
180/55-16	71	5.50	196	618		345
180/55-17	73			644		365
180/55-18	74			669		375
180/55-19	75			695		387

**Table A.11 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (55 metric series)
(Continued)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
190/55-16	74	6.00	209	630		375
190/55-17	75			656		387
190/55-18	76			681		400
190/55-19	77			707		412

Note: Tyres with nominal rim diameter codes 13 to 21 (55 metric series) in this table have B-type tread.

**Table A.12 Designation and properties of tyres
with nominal rim diameter codes 13 to 21 (50 metric series)
(Clause 4.1)**

Tyre size designation		Measuring rim width code	Overall width mm	Overall diameter mm	Pneumatic pressure kPa	Maximum load kg
Dimension and construction	Load index					
160/50-16	63	5.00	176	578		272
160/50-17	64			604		280
160/50-18	65			629		290
160/50-19	66			655		300
170/50-16	66	5.50	188	588		300
170/50-17	67			614		307
170/50-18	68			639		315
170/50-19	69			665		325
180/50-16	69	5.50	196	598		325
180/50-17	70			624		335
180/50-18	71			649		345
180/50-19	72			675		355
190/50-16	72	6.00	209	610		355
190/50-17	73			636		365
190/50-18	74			661		375
190/50-19	75			687		387

Note: Tyres with nominal rim diameter codes 13 to 21 (50 metric series) in this table have B-type treads.