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**Code designated diagonal tyres (ply rating marked series) for agricultural tractors, trailers and machines —**

**Part 1:  
Tyre designation and dimensions, and approved rim contours**

*Pneumatiques diagonaux à désignation dimensionnelle par code (séries à marquage équivalent nappes "ply rating") pour tracteurs, remorques et machines agricoles —*

*Partie 1: Désignations et cotes des pneumatiques, et profils de jantes approuvés*

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## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 31, *Tyres, rim and valves*, Subcommittee SC 5, *Agricultural tyres and rims*.

This eighth edition cancels and replaces the seventh edition (ISO 4251-1:2017), which has been technically revised. The main changes compared to the previous edition are as follows:

- information already contained in other International Standards was removed and replaced with normative references to those standards;
- radial tyres marked with ply rating and with a reference speed of 10 km/h were deleted since obsolete and this document was restricted to code designated diagonal tyres (marked with PR) for agricultural tractors, trailers and machines;
- the title of this document was revised accordingly;
- the document was aligned with other International Standards developed by SC 5 and with existing regulations;
- additional definitions useful for the comprehension of this document were added;
- specific markings for tractor steering wheel and implement tyres and the pictogram to identify the maximum pressure for tyre bead seating, as specified by UN/ECE Regulation 106, were introduced;
- dimensional data and the list of approved rim contours were revised.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Code designated diagonal tyres (ply rating marked series) for agricultural tractors, trailers and machines —

## Part 1: Tyre designation and dimensions, and approved rim contours

### 1 Scope

This document establishes the designation in use and the dimensions of code designated tyres in diagonal construction (ply rating marked series) for agricultural tractors, trailers and machines.

Tyre load ratings are given in ISO 4251-2.

NOTE Code designated diagonal tyres (ply rating marked series) for construction applications (industrial tractors), identified by the classification code R-4, as specified in ISO 18805, or by suffix "IND" are covered by ISO 13442.

Code designated tyres in radial construction for drive wheels of agricultural tractors are covered by ISO 8664.

Code designated diagonal tyres (ply rating marked series) for forestry machines, identified by the classification code LS, as specified in ISO 18805, are covered by ISO 18807.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4223-1:2017, *Definitions of some terms used in the tyre industry — Part 1: Pneumatic tyres*

ISO 18804, *Rims for agricultural, forestry and construction machines*

ISO 18805, *Tyre classification — Agricultural, forestry and construction machines*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4223-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

#### 3.1

##### **tractor drive wheel tyre**

tyre designed to be fitted to driven axles of agricultural tractors (vehicles in categories T) suitable for sustained high torque service

Note 1 to entry: The tread pattern of the tyre consists of lugs or cleats.

### 3.2 tractor steering wheel tyre

tyre designed to be fitted to non-driven axles of agricultural tractors (motor vehicles in category T)

Note 1 to entry: The tread pattern of the tyre generally consists of circumferential grooves and ribs.

### 3.3 implement tyre

tyre designed primarily for agricultural machines, interchangeable towed equipment (vehicles in category S) or agricultural trailers (vehicles in category R)

Note 1 to entry: Such tyre may also equip either front steering wheels and drive wheels of agricultural tractors (vehicles in category T), but it is not suitable for sustained high torque service.

### 3.4 design section height

$H$

half the difference between the overall diameter and the rim diameter, as defined by

$$H = (D_o - d)/2$$

where

$H$  is the design section height of the tyre;

$D_o$  is the overall diameter of the tyre;

$d$  is the nominal rim diameter expressed in mm (see ISO 4223-1:2017, Table A.3).

## 4 Marking

### 4.1 General

The marking of code designated tyres in diagonal construction consists of the tyre size designation, the load rating, and any additional information. See 4.2 to 4.5 for details.

### 4.2 Tyre size designation

The size marking for the identification of tyres consists of:

**4.2.1** For normal section height tyres: the nominal tyre width code, the construction code ("-") and the nominal rim diameter code.

EXAMPLES

13.6 - 28

6.50 - 16

**4.2.2** For low section height tyres: either the letter L is added to the nominal tyre width code

EXAMPLE 1 9.5L - 15

or the nominal tyre width code is used, followed by "/" and the nominal aspect ratio, the construction code ("-") and the nominal rim diameter code

EXAMPLE 2 9.5/85 - 15

### 4.3 Categories of use

#### 4.3.1 Agricultural tractor drive wheel tyres

The classification code R-2, as specified in ISO 18805, shall be marked on the tyre sidewall to identify tyres with deep tread.

#### 4.3.2 Agricultural tractor steering wheel tyres

The classification code F, as specified in ISO 18805, shall be marked on the tyre sidewall. It may, optionally, be replaced by the inscription "FRONT". The suffix "SL" may be marked after the nominal rim diameter code on the tyre.

#### 4.3.3 Agricultural implement tyres

The inscription "IMPLEMENT" or the suffix "IMP" shall be marked on the tyre sidewall. The suffix "SL" may be marked after the nominal rim diameter code on the tyre.

#### EXAMPLES

4.00-12 IMP

4.00-12 IMPLEMENT

4.00-12SL IMPLEMENT

The classification code I-3, as specified in ISO 18805, shall be marked on the tyre sidewall in case of "Traction pattern" tyres.

### 4.4 Load rating

The marking of the load rating comprises the ply rating (PR) and the service description. For details on load rating markings on the tyre sidewalls, see ISO 4251-2.

### 4.5 Additional information

**4.5.1** Tubeless tyres shall be marked with the word "TUBELESS".

**4.5.2** Except when specifically required in point 4.3 above, the classification code marking, as described in ISO 18805, may additionally be marked, but it is not part of the size designation of the tyre.

**4.5.3** In the case of a preferred direction of rotation of the tyre, an arrow shall be used to indicate that direction.

**4.5.4** Maximum pressure for tyre bead seating shall be marked with the following inscription: "XXX kPa MAX" or "XXX bar MAX" inside the pictogram (Figure 1) indicating the maximum inflation pressure that shall not be exceeded for bead seating during tyre mounting. The value of the tyre bead seating pressure is determined by the tyre manufacturer.

The marking of the pictogram on the tyre sidewall is optional, but can be required for conformity to some regional regulations.

An example of the pictogram to be marked on both sidewalls of the tyre is given in [Figure 1](#).

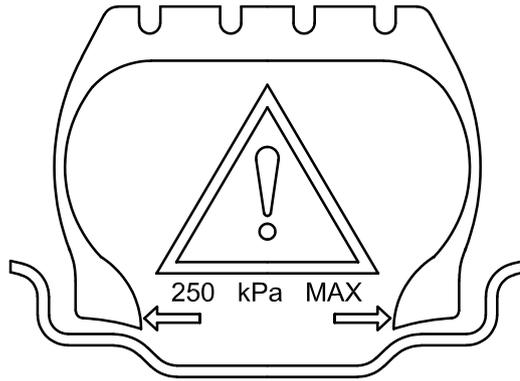


Figure 1 — Pictogram for the maximum bead seating inflation pressure

## 5 Tyre dimensions

### 5.1 Design new tyre dimensions

Design new tyre dimensions are used for tyre design purposes only.

### 5.2 Maximum tyre dimensions in service

Maximum dimensions in service are for use by vehicle manufacturers in designing for tyre clearance.

### 5.3 Minimum new tyre overall diameter

The minimum new tyre overall diameter ( $D_{o,min}$ ) shall be calculated on the basis of a tolerance of  $-3\%$  on design section height.

$$D_{o,min} = d + 2 \cdot 0,97 \cdot H$$

where

$D_{o,min}$  is to be rounded to the nearest integer;

$H$  is the design section height of the tyre;

$d$  is the nominal rim diameter expressed in mm (see ISO 4223-1:2017, Table A.3).

$0,97 H$  shall be first rounded to the nearest integer before calculating the minimum new tyre overall diameter.

Tyre size designations, measurement rims, design dimensions of new tyres, and maximum tyre dimensions in service shall be as given in [Annex A](#).

The technical data and the approved rim contour of formerly standardized tyres with nominal rim diameter codes 15.3 or 16.1 and tyres for small tractors shall be as given in [Annex C](#).

## 6 Tyre dimension parameters for vehicle speed reference

Rolling circumference (RC), rolling circumference index (RCI) and speed radius index (SRI) are parameters which are used exclusively for the calculation of forward ground speed during homologation procedures (see for further information ISO 3965 and ISO 11795).

Values for tractor drive wheel tyres are given in [Annex D](#).

## 7 Tyre and rim coordination

Approved rim contours shall be as given in [Annex B](#). Dimensional details of rim contours shall be as specified in ISO 18804.

In case the tyre is mounted on a rim whose width code differs from the measuring rim width code, the actual tyre section widths shall be modified as follows:

$$W_a = W_{mr} + 10 \times (R_a - R_{mr})$$

where

$W_a$  is the actual tyre width;

$W_{mr}$  is the tyre width on the measuring rim;

$R_a$  is the actual rim width code;

$R_{mr}$  is the measuring rim width code.

## 8 Tubes

Whenever a tube is required, it should be identified by the same designation as the tyre size in which it is to be mounted.

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## Annex A (normative)

### Tyre size designations, measurement rims and dimensions

**Table A.1 — Agricultural tractor drive wheels tyres with normal section height**

Dimensions in millimetres

Tyre size designation	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
		Section width	Overall diameter <sup>a</sup>	Maximum overall width	Maximum overall diameter <sup>a</sup>
8.3 - 16	7.00	211	790	228	813
8.3 - 24			995		1 019
8.3 - 36			1 300		1 323
8.3 - 38			1 351		1 374
8.3 - 42			1 452		1 475
8.3 - 44			1 503		1 526
9.5 - 16	8.00	241	845	260	871
9.5 - 22			997		1 024
9.5 - 24			1 050		1 076
9.5 - 32			1 250		1 276
9.5 - 36			1 355		1 381
9.5 - 38			1 404		1 430
9.5 - 42			1 505		1 532
9.5 - 44			1 556		1 582
9.5 - 48			1 658		1 684
11.2 - 20	10.00	284	1 002	307	1 032
11.2 - 24			1 105		1 135
11.2 - 28			1 205		1 235
11.2 - 36			1 410		1 438
11.2 - 38			1 460		1 488
11.2 - 42			1 561		1 591
12.4 - 16	11.00	315	955	340	988
12.4 - 24			1 160		1 192
12.4 - 28			1 260		1 292
12.4 - 32			1 360		1 392
12.4 - 36			1 465		1 497
12.4 - 38	11.00	315	1 515	340	1 547
12.4 - 42			1 616		1 649
12.4 - 46			1 718		1 751

<sup>a</sup> Figures are based on tyres with classification code R-1. Tyres with deep tread (classification code R-2) and related increased overall diameter may be used.

Table A.1 (continued)

Tyre size designation	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
		Section width	Overall diameter <sup>a</sup>	Maximum overall width	Maximum overall diameter <sup>a</sup>
13.6 - 16	12.00	345	1 005	373	1 042
13.6 - 24			1 210		1 246
13.6 - 26			1 285		1 311
13.6 - 28			1 310		1 346
13.6 - 36			1 515		1 551
13.6 - 38			1 565		1 601
13.6 - 46			1 770		1 804
13.6 - 48			1 819		1 855
14.9 - 24	13.00	378	1 265	408	1 305
14.9 - 26			1 315		1 355
14.9 - 28			1 365		1 405
14.9 - 30			1 415		1 455
14.9 - 38			1 615		1 655
15.5 - 38	14.00	394	1 570	426	1 606
16.9 - 24	15.00	429	1 335	463	1 379
16.9 - 26			1 385		1 429
16.9 - 28			1 435		1 479
16.9 - 30			1 485		1 529
16.9 - 34			1 585		1 629
16.9 - 38			1 690		1 734
18.4 - 24	16.00	467	1 400	504	1 447
18.4 - 26			1 450		1 498
18.4 - 28			1 500		1 548
18.4 - 30			1 550		1 598
18.4 - 34			1 650		1 698
18.4 - 38			1 750		1 798
18.4 - 42			1 850		1 898
18.4 - 46			1 958		2 006
20.8 - 34	18.00	528	1 732	570	1 785
20.8 - 38			1 834		1 886
20.8 - 42			1 935		1 988
23.1 - 26	20.00	587	1 605	634	1 661
23.1 - 30			1 705		1 761
23.1 - 34			1 805		1 861
24.5 - 32	21.00	622	1 805	672	1 865

<sup>a</sup> Figures are based on tyres with classification code R-1. Tyres with deep tread (classification code R-2) and related increased overall diameter may be used.

**Table A.2 — Agricultural tractor drive wheels with low section height**

Dimensions in millimetres

Tyre size designation	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
		Section width	Overall diameter <sup>a</sup>	Maximum overall width	Maximum overall diameter <sup>a</sup>
17.5L – 24	15.00	445	1 265	480	1 304
19.5L – 24	17.00	495	1 340	535	1 382
21L – 24	18.00	533	1 400	576	1 450
21L-28	18.00	533	1 504	576	1 551
28L – 26 <sup>b</sup>	25.00	714	1 615	771	1 673
30.5L – 32 <sup>c</sup>	27.00	775	1 820	837	1 881
VA 30.5L – 32 <sup>c</sup>					
DH 35.5L – 32 <sup>c</sup>	31.00	902	1 980	974	2 051
VA 35.5L – 32 <sup>c</sup>					

<sup>a</sup> Figures are based on tyres with classification code R-1. Tyres with deep tread (classification code R-2) and related increased overall diameter may be used.

<sup>b</sup> Optional size designation 28.1 – 26.

<sup>c</sup> VA rims are not interchangeable with DH or DH-H, DH-B, DH-HB or DWM rims.

**Table A.3 — Agricultural tractor steering wheels with normal section height**

Dimensions in millimetres

Tyre size designation	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
		Section width	Overall diameter <sup>a</sup>	Maximum overall width	Maximum overall diameter <sup>a</sup>
4.00 – 12	3.00	112	535	122	553
4.00 – 15			610		628
4.00 – 16			630		641
4.00 – 19			712		723
4.50 – 16	3.00	122	655	133	667
4.50 – 19			736		748
5.00 – 15	4.00	140	655	153	677
5.00 – 16			680		694
5.50 – 16			710		734
6.00 – 14	4.50	165	688	180	715
6.00 – 16			735		761
6.00 – 19			814		830
6.00 – 20			840		857
6.50 – 16	4.50	175	760	191	788
6.50 – 20			865		894
7.50 – 16	5.50	205	805	223	837
7.50 – 18			860		892
7.50 – 20			915		948
8.00 – 16	5.50	211	813	230	845
9.00 – 16			855		891
9.00 – 16	6.00	234	855	255	891

<sup>a</sup> Figures are based on tyres with classification code F-2.

Table A.3 (continued)

Tyre size designation	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
		Section width	Overall diameter <sup>a</sup>	Maximum overall width	Maximum overall diameter <sup>a</sup>
9.50 – 20	7.00	254	978	277	1 015
10.00 – 16	8.00	274	895	299	934
11.00 – 16	10.00	315	965	343	1 010
11.00 – 20			1 069		1134
11.00 – 24			1 170		1 215

<sup>a</sup> Figures are based on tyres with classification code F-2.

Table A.4 — Agricultural tractor steering wheels with low section height

Dimensions in millimetres

Tyre size designation	Optional size marking	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
			Section width	Overall diameter <sup>a</sup>	Maximum overall width	Maximum overall diameter <sup>a</sup>
7.5L – 15	8.25/85 – 15	6.00	210	745	229	774
9.5L – 15	9.50/85 – 15	8.00	240	785	262	817
11L – 15	11.50/75 – 15		280	815	305	850
11L – 16	—		838	873		

<sup>a</sup> Figures are based on tyres with classification code F-2.

Table A.5 — Agricultural implement tyres with normal section height

Dimensions in millimetres

Tyre size designation	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
		Section width	Overall diameter	Maximum overall width	Maximum overall diameter
2.50 – 8	1.50	68	338	71	345
3.00 – 4	2.50	90	265	95	270
3.00 – 8		90	367	95	374
3.50 – 6		100	343	105	350
3.50 – 8	3.00	100	393	105	401
4.00 – 4		114	313	122	319
4.00 – 8		112	418	122	429
4.00 – 9		112	443	122	460
4.00 – 10		114	465	120	474
4.00 – 12		112	519	122	536
4.00 – 15		112	595	122	612
4.00 – 18		112	672	122	689
4.50 – 19		124	720	130	734

Table A.5 (continued)

Tyre size designation	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
		Section width	Overall diameter	Maximum overall width	Maximum overall diameter
5.00 – 12	4.00	145	567	152	578
5.00 – 14		145	618	152	630
5.00 – 15		145	644	152	657
5.50 – 16		150	685	162	707
5.90 – 15		150	665	163	688
6.00 – 9	4.50	169	543	172	554
6.00 – 16	4.00	158	712	172	736
6.40 – 15	4.50	163	684	178	708
6.50 – 16		173	735	188	761
6.70 – 15		170	704	185	729
7.00 – 12	5.00	187	652	204	680
7.00 – 16	5.50	200	769	210	784
7.00 – 19		200	845	210	862
7.50 – 10	6.00	214	634	225	647
7.50 – 14	5.50	194	686	212	713
7.50 – 16		202	785	220	809
7.50 – 18		202	836	220	866
7.50 – 20		202	887	220	917
7.50 – 24		202	989	220	1 020
7.60 – 15		193	734	210	763
8.25 – 16	6.00	229	832	240	849
9.00 – 10		234	696	255	732
9.00 – 16		234	848	254	883
9.00 – 24	8.00	272	1 094	296	1 132
10.00 – 12	6.50	262	790	275	806
10.00 – 15	8.00	274	853	299	891
11.00 – 16	10.00	315	965	343	999
11.25 – 24		325	1 171	354	1 216
11.25 – 28		325	1 273	354	1 318

Table A.6 — Agricultural implement tyres with low section height

Dimensions in millimetres

Tyre size designation	Measurement rim width code	Design dimensions of new tyres			Dimensions in service		
		Section width	Overall diameter		Maximum overall width	Maximum overall diameter	
			Non-traction pattern	Traction pattern <sup>a</sup>		Non-traction pattern	Traction pattern <sup>a</sup>
5.5/85 – 9	4.00	145	475	493	152	495	506
13.5/85 – 28	11.00	345	1 293	1 315	362	1 322	1 344
16.5/85 – 24	13.00	417	1 322	1 344	438	1 358	1 380
16.5/85 – 28	13.00	417	1 423	1 445	438	1 454	1 481

<sup>a</sup> Identified by construction code I-3.

Table A.6 (continued)

Tyre size designation	Measurement rim width code	Design dimensions of new tyres			Dimensions in service		
		Section width	Overall diameter		Maximum overall width	Maximum overall diameter	
			Non-traction pattern	Traction pattern <sup>a</sup>		Non-traction pattern	Traction pattern <sup>a</sup>
6.5/80 - 12	5.00	163	569	588	171	577	597
6.5/80 - 15	5.50	163	645	663	171	658	677
10.0/80 - 12	9.50	264	710	730	277	730	751
10.5/80 - 18	9.50	274	885	907	288	906	930
12.5/80 - 18	9.50	308	965	987	323	990	1 014
15.5/80 - 24	13.00	394	1 240	1 262	414	1 271	1 293
19.5/80 - 20	16.00	499	1 300	1 322	524	1 340	1 362
21.0/80 - 20	16.00	525	1 362	1 384	551	1 405	1 427
12.0/75 - 18	9.00	299	915	937	314	938	961
13.0/75 - 16	11.00	336	900	922	353	925	948
14.5/75 - 20	12.00	372	1 060	1 082	390	1 087	1 111
9.0/70 - 16	7.00	226	725	745	237	741	762
11.5/70 - 16	9.00	290	815	837	305	835	858
11.5/70 - 18	9.00	290	865	887	305	885	908
15.0/70 - 18	13.00	391	990	1 012	411	1 017	1 040
16.0/70 - 20	14.00	418	1 075	1 097	439	1 105	1 126
20.0/70 - 20	16.00	508	1 220	1 242	533	1 255	1 279
10.5/65 - 16	9.00	274	755	777	288	774	797
11.0/65 - 12	9.00	281	670	692	295	688	711
13.0/65 - 18	11.00	336	890	912	353	912	935
14.0/65 - 16	11.00	353	870	892	371	893	916
15.0/55 - 17	13.00	391	850	872	411	871	894
19.0/45 - 17	16.00	491	866	—	516	888	—
7.5L - 15	6.00	210	745	765	220	763	783
8.5L - 14	6.00	216	721	—	235	750	—
9.5L - 14	7.00	241	741	—	263	772	—
9.5L - 15	7.00	241	767	782	263	786	802
11L - 14	8.00	279	752	—	305	783	—
11L - 15	8.00	279	777	796	305	797	816
11L - 16	8.00	279	803	821	305	822	842
12.5L - 15	10.00	318	823	—	346	859	—
12.5L - 16	10.00	318	848	—	346	884	—

<sup>a</sup> Identified by construction code I-3.

## Annex B (normative)

### Approved rim contours

#### B.1 General

For actual tyre section widths on approved rim contours, see [Clause 7](#).

**Table B.1 — Agricultural tractor drive wheels**

Tyre section code	Rim diameter code	Approved rim contours <sup>a</sup>
8.3	16, 22, 24, 36, 38, 42, 44	W6, W7
9.5	22, 24, 32, 36, 38, 44, 48	W7, W8
11.2	24, 28, 36, 38, 42	W9, W10, W10H
11.6	24, 28, 36, 38	W11, W12, W12A
11.6	48	W11, W12, W12A
12.4	16	W10L, 10LB
12.4	24, 28, 32, 36, 38, 46	W9, W10, W10A, W10H, W11, W11A
12.4	42	W10, W10H, W11
13.6	16	W10L, W12L
13.6	24, 26, 28, 36, 38, 46, 48	W11, W12, W12A
14.9	24, 26, 28, 30, 38	W11, W12, W12A, W13, W13A
15.5	38	W14A, W14L
16.9	24, 26, 28, 30, 34, 38	W14A, W14L, W15A, W15L
18.4	24, 26, 28, 30, 34, 36, 38, 42, 46, 48	W15A, W15L, W16A, W16L, DW15A, DW16A, DD16
20.8	34, 38, 42	W16A, W16L, W17L, W18L, W18A, DD16, DD18
23.1	26, 30, 34	DW18, DW18A, DW20B, MW20B
24.5	32	DW20B, DW21B, DH21, DH21H
17.5L	24	W15L
19.5L	24	W15L <sup>b</sup> , W16L, DW16A
21L	24, 28	W18L <sup>b</sup> , DW18A, DW18L
28L	26	DW23B, DW25B
30.5L	32	DW27B, DH27
VA30.5L	32	27VA
DH35.5L	32	DH31, DH31H, DH31B, DH31HB, 31DWM
VA35.5L	32	31VA

<sup>a</sup> DW and DW-A rims with equivalent flanges are also permitted where W and W-A rims are shown, respectively. Wherever DW rim contours are specified, the optional TW contours are allowed. Consult the tyre manufacturer for the preferred rim contours.

<sup>b</sup> For tyres up to 10 PR only.

Table B.2 — Agricultural tractor steering wheels

Tyre size designation	Approved rim contours
4.00 – 12	2.50C, 3.00D
4.00 – 15	3.00D, 4J
4.00 – 16	3.00D
4.00 – 19	3.00D
4.50 – 16	3.00D
4.50 – 19	3.00D
5.00 – 15	3.00D, 4.00E, 4J
5.00 – 16	3.00D, 4.00E, 4J, 4½J
5.50 – 16	4.00E, 4.25KA, 4.50E
6.00 – 14	5KB
6.00 – 16	4.00E, 4.25KA, 4.50E, 5.00F, 5K
6.00 – 19	4.00E, 4.50E, 5.00F
6.00 – 20	4.50E, 5.00F
6.50 – 16	4.00E, 4.25KA, 4.50E, 5.00F, 5K, 5.50F
6.50 – 20	5.00F, 5.50F
7.50 – 16	5.00F, 5K, 5.50F, 6.00F, 6LB
7.50 – 18	5.00F, 5.50F
7.50 – 20	5.00F, 5.50F
8.00 – 16	5.50F
9.00 – 16	6.00F, 6LB, W7, W8, W8L, 8LB
9.50 – 20	W7L
10.00 – 16	W8, W8 L, 8LB
11.00 – 16	W8, W8L, 8LB, W10L, 10LB
11.00 – 20	W10H
11.00 – 24	W10, W10H
7.5L – 15 (8.25/85 – 15)	5K, 5KB, 5½J, 5½K, 6L, 6LB
9.5L – 15 (9.50/85 – 15)	6LB, 8LB
11L – 15 (11.50/75 – 15)	W8L, 8LB, 10LB
11L – 16	W8L, 8LB, 10LB, W10L

Table B.3 — Agricultural implement tyres with normal section height

Tyre size designation	Approved rim contours
2.50 – 8	1.50
3.00 – 4	2.10
3.00 – 8	2.10
3.50 – 6	2.50A, 2.50C
3.50 – 8	2.15, 2.50A, 2.50C
4.00 – 4	2.50C, 3.00D
4.00 – 8	2.50A, 3.00D
4.00 – 9	3.00D
4.00 – 10	2.50A, 2.50C, 3.00B, 3.00D
<sup>a</sup> For 6 PR tyres only.	
<sup>b</sup> For 8 PR tyres only.	

Table B.3 (continued)

Tyre size designation	Approved rim contours
4.00 – 12	2.50C, 3.00B, 3.00D
4.00 – 15	3.00D, 4J
4.00 – 18	3.00D
4.50 – 19	3.00D, 3.50D
5.00 – 12	3.00D, 3.50D, 4.00E, 4J
5.00 – 14	3.00D, 3.50D, 4.00E, 4J
5.00 – 15	3.00D, 4.00E, 4J, 4½J
5.50 – 16	3.50D, 4.00E, 4.25KA, 4.50E
5.90 – 15	4½K, 4½KB, 5K, 5KB
6.00 – 9	4.00E
6.00 – 16	4.00E, 4.25KA, 4.50E, 5.00F, 5K
6.40 – 15	4.00E, 4½K, 4½KB, 5K, 5KB, 5.50F
6.50 – 16	4.00E, 4.25KA, 4.50E, 5.00F, 5K, 5.50F
6.70 – 15	4½KB, 5KB
7.00 – 12	5.00F, 5JA, 5.50F
7.00 – 19	4.50E, 5.00F, 5.50F
7.50 – 10	5.00F, 5.50F, 6.00F
7.50 – 14	5KB, 6KB
7.50 – 16	5.00F, 5K, 5.50F, 6.00F, 6LB
7.50 – 18	5.00F, 5.50F
7.50 – 20	5.00F, 5.50F
7.50 – 24	W7
7.60 – 15	6LB
8.25 – 16	5.00F, 5.50F, 6.00F
9.00 – 10	5.50F, 6.00F
9.00 – 16	5.50F, 6.00F, 6LB, 8LB, W8L
9.00 – 24	W7 <sup>a</sup> , W8 <sup>a</sup> , W8H, W8H <sup>b</sup>
10.00 – 12	7.00
10.00 – 15	8 LB
11.00 – 16	W8, W8L, W10L, 10LB
11.25 – 24	W8, W8H, W10, W10H
11.25 – 28	W10, W10H
<sup>a</sup> For 6 PR tyres only.	
<sup>b</sup> For 8 PR tyres only.	

Table B.4 — Agricultural implement tyres with low section height

Tyre size designation	Approved rim contours
5.5/85 – 9	4.00E
13.5/85 – 28	W11, W12
16.5/85 – 24	W13, W14L, W15L
16.5/85 – 28	W13, W14L, W15L
6.5/80 – 12	5J, 5JA
<sup>a</sup> For tyres up to 10 PR only.	
<sup>b</sup> For tyres up to 8 PR only.	

Table B.4 (continued)

Tyre size designation	Approved rim contours
6.5/80 - 15	4½K, 5.0, 5J, 5K
10.0/80 - 12	7.00, 9.00
10.5/80 - 18	9, 9.00, W9
12.5/80 - 18	9 <sup>a</sup> , W9, 11
15.5/80 - 24	W12, W13, W14L
19.5/80 - 20	W16L
21.0/80 - 20	16SDC
12.0/75 - 18	9 <sup>b</sup> , W9, 11
13.0/75 - 16	9, W9, 11, W11
14.5/75 - 20	11, 11SDC, 12SDC, 13, 13SDC
10.5/65 - 16	W8L, W9
11.0/65 - 12	9.00
13.0/65 - 18	9 <sup>a</sup> , 11
14.0/65 - 16	11
9.0/70 - 16	W7
11.5/70 - 16	W8, W8L, W9
11.5/70 - 18	9, W9
15.0/70 - 18	13.00, W13
16.0/70 - 20	12SDC, 13, 13SDC, 14
20.0/70 - 20	16
15.0/55 - 17	13.00, 13
19.0/45 - 17	16.00
7.5L - 15	5KB, 6LB
8.5L - 14	6KB, 8KB
9.5L - 14	8KB
9.5L - 15	8LB
11L - 14	8KB
11L - 15	8LB, 10LB
11L - 16	8LB, W8L, 10LB, W10L
12.5L - 15	10LB
12.5L - 16	W10L, 10LB
<sup>a</sup> For tyres up to 10 PR only.	
<sup>b</sup> For tyres up to 8 PR only.	

## Annex C (normative)

### Tyres with nominal rim diameter codes 15.3 or 16.1 and tyres for small tractors

**Table C.1 — Agricultural tractor steering wheel tyres with rim diameter code 16.1 — Tyre size designations, measurement rims and dimensions**

Dimensions in millimetres

Tyre size designation	Optional size marking	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
			Section width	Overall diameter <sup>a</sup>	Maximum overall width	Maximum overall diameter <sup>a</sup>
14L - 16.1	14.0/80-16.1	11.00	360	985	392	1 031
16.5L - 16.1		14.00	419	1 072	457	1 133
14.5/75 - 16.1		11.00	373	940	407	982

<sup>a</sup> Figures are based on tyres with classification code F-2.

**Table C.2 — Agricultural implement tyres with nominal rim diameter 16.1 or 15.3 — Tyre size designations, measurement rims and dimensions**

Dimensions in millimetres

Tyre size designation	Measurement rim width code	Design dimensions of new tyres			Dimensions in service		
		Section width	Overall diameter		Maximum overall width	Maximum overall diameter	
			Non-traction pattern	Traction pattern		Non-traction pattern	Traction pattern
10.0/75 - 15.3	9.00	264	760	780	277	779	800
11.5/80 - 15.3	9.00	290	845	867	305	868	891
12.5/80 - 15.3	9.00	307	889	911	322	915	937
10.5/85 - 15.3	9.00	274	792	814	288	812	834
13.50 - 16.1	11.00	353	1 021	—	385	1 070	—
14L - 16.1	11.00	356	940	—	388	956	—
19L - 16.1	16.00	483	1 087	—	526	1 141	—
16.5L - 16.1	14.00	419	1 024	—	457	1 075	—
21.5L - 16.1	18.00	546	1 130	—	595	1 188	—

**Table C.3 — Traction drive wheel tyres for small tractors— Tyre size designations, measurement rims and dimensions**

Dimensions in millimetres

Tyre size designation	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
		Section width	Overall diameter	Maximum overall width	Maximum overall diameter
5 - 12	4.00	127	528	137	542

Table C.3 (continued)

Tyre size designation	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
		Section width	Overall diameter	Maximum overall width	Maximum overall diameter
6 – 12	5.00	155	577	167	593
6 – 14			627		647
6 – 16			678		701
7 – 12	6.00	183	640	198	660
7 – 14			691		714
7 – 16			742		768
8 – 16	6.00	211	790	228	819
8 – 18			841		873

Table C.4 — Agricultural implement tyres with rim diameter code 16.1 or 15.3 — Approved rim contours

Tyre size designation	Approved rim contours <sup>a</sup>
10.5/85 – 15.3	9.00
11.5/80 – 15.3	9.00
12.5/80 – 15.3	9.00
10.0/75 – 15.3	9.00
14L – 16.1	W11C
16.5L – 16.1	W14C, W14CH
19L – 16.1	W16C, W16CH
21.5L – 16.1	W16C, W18C, W16CH, W18CH
13.50 – 16.1	W11C

<sup>a</sup> WC-Rim should only be applicable up to 16PR.

Table C.5 — Agricultural tractor steering wheel tyres with nominal rim diameter 16.1 — Approved rim contours

Tyre size designation	Approved rim contours <sup>a</sup>
14L – 16.1	W11C
16.5L – 16.1	W14C, W14CH
14.5/75 – 16.1	W11C

<sup>a</sup> WC-Rim should only be applicable up to 16PR.

Table C.6 — Small tractor tyres — Approved rim contours

Tyre size designation	Approved rim contours
5 - 12	4JA
6 - 12	5JA
6 - 14	5KB, 5JA
6 - 16	4.50E, 5.50E
7 - 12	5JA
7 - 14	5JA, 5KB
7 - 16	6LB, 6L, 6.00F
8 - 16	6LB, 6L, 6.00F
8 - 18	5.50F

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