

BSI Standards Publication

Tyres (ply rating marked series) and rims for agricultural tractors and machines

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



BS ISO 4251-1:2017 BRITISH STANDARD

National foreword

This British Standard is the UK implementation of ISO 4251-1:2017. It supersedes BS ISO 4251-1:2005+A1:2012, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee AUE/4, Tyres and wheels for motor vehicles.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Tyres (ply rating marked series) and rims for agricultural tractors and machines —

Part 1:

Tyre designation and dimensions, and approved rim contours

Pneumatiques (série à marquage "PR") et jantes pour tracteurs et machines agricoles —

Partie 1: Désignation et cotes des pneumatiques et profils de jantes approuvés



BS ISO 4251-1:2017 **ISO 4251-1:2017(E)**



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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).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

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

This seventh edition cancels and replaces the sixth edition (ISO 4251-1:2005) which has been technically revised. It also replaces ISO 4251-1:2005/Amd1:2012.

The seventh edition contains the following main changes:

- pictogram for maximum tyre bead seating pressure;
- tyre dimension parameters for vehicle speed reference;
- tables updated incorporating Amendment 1;
- Annex A updated adding tyres for small tractors;
- new Annex B with the comparison values for rolling circumference (RC), rolling circumference index (RCI), speed radius index (SRI).

Tyres (ply rating marked series) and rims for agricultural tractors 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 the ply rating marked series of tyres for agricultural tractors and machines.

Tyre load ratings are given in ISO 4251-2.

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, Definitions of some terms used in the tyre industry — Part 1: Pneumatic tyres

ISO 18805¹⁾, 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 apply.

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

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

4 Marking

The marking of the ply rating marked series of tyres consists of the designation of tyre size and load rating, and any additional information. See <u>4.1</u> to <u>4.4</u>.

4.1 Tyre size designation

The present size marking for the identification of tyres consists of the nominal tyre width code and the nominal rim diameter code.

EXAMPLE 1

Tyre 13.6 - 28

Tyre 6.50 - 16

¹⁾ To be published.

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For tyres of radial construction, the letter R replaces the dash.

EXAMPLE 2

Tyre 8.3 R 44

For low section height tyres, the letter L is added to the nominal tyre width code.

EXAMPLE 3

Tyre 9.5L - 15

For low section height tractor steering wheel tyres of diagonal construction, an optional marking may be used in the following manner:

Nominal tyre width code/nominal aspect ratio – nominal rim diameter

EXAMPLE 4

Tyre 9.5/85 - 15

4.2 Load rating

The present marking of load rating comprises the ply rating.

EXAMPLE

Tyre 13.6 - 28 8PR

4.3 Categories of use

4.3.1 Agricultural drive wheels — Tractor tyres

The classification code R, as specified in ISO 18805, may be optionally marked at the tyre sidewall.

4.3.2 Agricultural steering wheels — Tractor tyres

The classification code F, as specified in ISO 18805, may be optionally marked on the tyre sidewall. In addition, the letters "FRONT" or "SL" may be marked after the nominal rim diameter code on the tyre.

4.3.3 Agricultural implement tyres

The classification code I, as specified in ISO 18805, shall be marked on the tyre sidewall, along with an optional marking "IMPLEMENT" or "IMP" or "SL" suffix.

EXAMPLE

4.00-12	IMP	
4.00-12		IMPLEMENT
4.00-12	SL	IMPLEMENT

4.4 Additional information

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

Additionally, classification code markings including tyre classifications may be used as described in ISO 18805, but they are not part of the type size designation of the tyre.

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

4.5 Pictogram for maximum tyre bead seating pressure (optional)

The inscription "XXX kPa MAX" inside the pictogram (Figure 1) indicates the maximum cold 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.

Figure 1 shows an example of the pictogram to be marked on both sidewalls of the tyre.

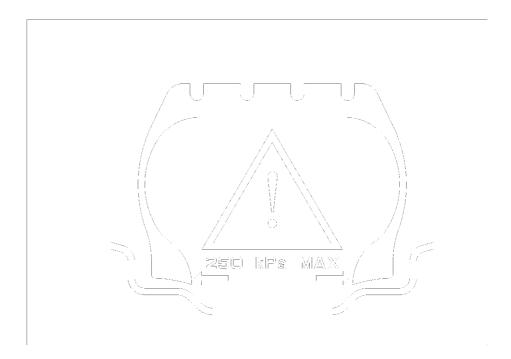


Figure 1 — Pictogram for the maximum bead seating inflation pressure

5 Dimensions and tolerances

5.1 Agricultural drive wheels — Tractor tyres

Tyre size designations, measurement rims, design dimensions of new tyres, and maximum tyre dimensions in service are given in

- a) Table 1 for tyres of diagonal construction with normal section height;
- b) Table 2 for tyres of diagonal construction with low section height;
- c) Table 3 for tyres of radial construction for special cultivation work.

5.2 Agricultural steering wheels — Tractor tyres

Tyre size designations, measurement rims, design dimensions of new tyres, and maximum tyre dimensions in service are given in

- a) Table 4 for tyres of diagonal construction with normal section height;
- b) <u>Table 5</u> for tyres of diagonal construction with low section height.

5.3 Agricultural implement tyres

Tyre size designations, measurement rims, design dimensions of new tyres and maximum tyre dimensions in service are given in

- a) Table 6 for tyres of diagonal construction with normal section height;
- b) <u>Table 7</u> for tyres of diagonal construction with low section height.

6 Tyre dimension parameters for vehicle speed reference

6.1 Speed radius index

Speed Radius Indices (SRI) given in Annex B are parameters which are used exclusively for the calculation of forward ground speed during homologation procedures (further information see ISO 3965).

6.2 Rolling circumference index

Values are given in <u>Annex B</u> for tyres of diagonal and radial constructions with normal section height and for agricultural tractor drive wheel tyres of diagonal construction with low section height.

7 Tyre and rim coordination

Approved rim contours are given in

- a) Table 8 for agricultural drive wheel tractor tyres;
- b) Table 9 for agricultural steering wheel tractor tyres;
- c) Table 10 for agricultural implement tyres with normal section height;
- d) Table 11 for agricultural implement tyres with low section height.

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.

Table 1 — Agricultural drive wheels — Tractor tyres (diagonal construction, normal section height) — Tyre size designations, measurement rims and dimensions

Tyre size	Measurement rim		mensions of v tyres	Dimensio	ns in service
designation	width code	Section width	Overall diameter ^a	Maximum overall width	Maximum overall diameter b
8.3 - 16			790		813
8.3 - 24	7.00		995		1 019
8.3 - 36		211	1 300	220	1 323
8.3 - 38	7.00	211	1 351	228	1 374
8.3 - 42			1 452		1 475
8.3 – 44			1 503		1 526
9.5 – 16			845		871
9.5 – 22			997		1 024
9.5 – 24	-		1 050		1 076
9.5 – 32			1 250		1 276
9.5 – 36	8.00	241	1 355	260	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			1 002	307	1 032
11.2 – 24			1 105		1 135
11.2 – 28	40.00	284	1 205		1 235
11.2 - 36	10.00		1 410		1 438
11.2 - 38	-		1 460		1 488
11.2 - 42	-		1 561		1 591
12.4 - 16			955		988
12.4 - 24			1 160	340	1 192
12.4 – 28	11.00	215	1 260		1 292
12.4 - 32			1 360		1 392
12.4 – 36			1 465		1 497
12.4 – 38			1 515		1 547
12.4 – 42	11-00	315	1 616	340	1 649
12.4 – 46			1 718		1 751
13.6 - 16			1 005		1 042
13.6 – 24			1 210		1 246
13.6 - 26	12.00		1 285		1 311
13.6 - 28		245	1 310	272	1 346
13.6 - 36		345	1 515	373	1 551
13.6 - 38			1 565		1 601
13.6 – 46	1		1 770	1	1 804
13.6 - 48			1 819		1 855

a Minimum new tyre overall shall be calculated on the basis of tolerance of −3 % on design section height.

b Figures are based on tyres with classification code R–1. The tractor manufacturer shall recognize that tyres with deep tread and related increased overall diameter may be used.

 Table 1 (continued)

Tyre size	Measurement rim			Dimensions in service	
designation	width code	Section width	Overall diameter ^a	Maximum overall width	Maximum overall diameter b
14.9 – 24			1 265		1 305
14.9 – 26			1 315		1 355
14.9 – 28	13.00	378	1 365	408	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			1 335		1 379
16.9 - 26			1 385		1 429
16.9 - 28	15.00	420	1 435	462	1 479
16.9 - 30	15.00	429	1 485	463	1 529
16.9 - 34			1 585		1 629
16.9 - 38			1 690		1 734
18.4 – 24			1 400		1 447
18.4 - 26			1 450	504	1 498
18.4 - 28			1 500		1 548
18.4 - 30	16.00	4.67	1 550		1 598
18.4 - 34	16.00	467	1 650		1 698
18.4 - 38			1 750		1 798
18.4 - 42			1 850		1 698
18.4 - 46			1 958		2 006
20.8 - 34			1 732		1 785
20.8 - 38	18.00	528	1 834	570	1 886
20.8 - 42			1 935		1 988
23.1 - 26			1 605		1 661
23.1 - 30	20.00	587	1 705	634	1 761
23.1 - 34			1 805		1 861
24.5 - 32	21.00	622	1 805	672	1 865

^a Minimum new tyre overall shall be calculated on the basis of tolerance of -3 % on design section height.

b Figures are based on tyres with classification code R-1. The tractor manufacturer shall recognize that tyres with deep tread and related increased overall diameter may be used.

Table 2 — Agricultural drive wheels — Tractor tyres (diagonal construction, low section height) — Tyre size designations, measurement rims and dimensions

Tyre size	Measurement rim	Design dimens	ions of new tyres	Dimensions in service		
designation	width code	Section width	Overall diameter ^a	Maximum overall width	Maximum over- all diameter ^b	
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	
28L – 26 ^c	25.00	714	1 615	771	1 673	
30.5L - 32d	27.00	775	1 820	837	1 001	
VA 30.5L – 32d	27.00	775	1 820	03/	1 881	
DH 35.5L - 32d	21.00	002	1 000	974	2.051	
VA 35.5L – 32d	31.00	902	1 980	9/4	2 051	

Minimum new tyre overall shall be calculated on the basis of tolerance of -3 % on design section height.

Table 3 — Agricultural drive wheels — Tractor tyres for special cultivation work (radial construction) — Tyre size designations, measurement rims and dimensions

Tyre size	Measurement rim	Design dimens	ions of new tyres	Dimensions in service	
designation	width code	Section width	Overall diameter	Maximum over- all width	Maximum over- all diameter
8.3 R 36			1 290		1 315
8.3 R 38	7.00	211	1 340	228	1 365
8.3 R 42		7.00	211	1 440	220
8.3 R 44			1 495		1 520
9.5 R 36		8.00 241	1 345		1 365
9.5 R 44	8.00		241	1 550	260
9.5 R 48			1 650		1 675
11.2 R 42	10.00	284	1 557	307	1 577
12.4 R 46	11.00	315	1 705	340	1 730
13.6 R 48	12.00	345	1 804	373	1 827

b Figures are based on tyres with classification code R-1. The tractor manufacturer shall recognize that tyres with deep tread and related increased overall diameter may be used.

c Optional size designation 28.1 - 26.

d VA rims are not interchangeable with DH or DH-H, DH-B, DH-HB or DWM rims.

Table 4 — Agricultural steering wheels — Tractor tyres (diagonal construction, normal section height) — Tyre size designations, measurement rims and dimensions

Tyre size	Measurement rim	Design dimens	ions of new tyres	Dimension	is in service
designation	width code	Section width	Overall diameter ^a	Maximum over- all width	Maximum over- all diameter ^b
4.00 – 12			535		553
4.00 – 15		112	610	122	628
4.00 – 16	3.00	112	630	122	641
4.00 – 19	3.00		712		723
4.50 – 16		122	655	133	667
4.50 – 19		122	736	133	748
5.00 – 15		140	655	152	677
5.00 – 16	4.00	140	680	153	694
5.50 – 16		150	710	164	734
6.00 – 14			688		715
6.00 – 16		165 735 814 840 175 760 865	735	180	761
6.00 – 19	4.50		814		830
6.00 – 20	4.50		840		857
6.50 – 16			101	788	
6.50 – 20			865	191	894
7.50 – 16			805		837
7.50 – 18	5.50	205	860	223	892
7.50 – 20	5.50		915		948
8.00 – 16		211	813	230	845
9.00 – 16	6.00	234	855	255	891
9.50 – 20	7.00	254	978	277	1 015
10.00 – 16	8.00	274	895	299	934
11.00 – 16			965		1 010
11.00 – 20	10.00	315	1 069	343	1134
11.00 – 24			1 170		1 215

^a Minimum new tyre overall shall be calculated on the basis of tolerance of -3 % on design section height.

Figures are based on tyres with classification code F–2.

Table 5 — Agricultural steering wheels — Tractor tyres (diagonal construction, low section height) — Tyre size designations, measurement rims and dimensions

Tyre size desig-	Optional size	Measurement	_	mensions of tyres	Dimensio	ns in service
nation	marking	rim width code	Section width	Overall diameter ^a	Maximum overall width	Maximum overall diameter ^b
7.5L – 15	8.25/85 – 15	6.00	210	745	229	774
9.5L - 15	9.50/85 – 15		240	785	262	817
11L - 15	11.50/75 – 15	8.00	280	815	305	850
11L - 16	_		838	838	303	873

Minimum new tyre overall shall be calculated on the basis of tolerance of -3 % on design section height.

Table 6 — Agricultural implement tyres (diagonal construction, normal section height) — Tyre size designations, measurement rims and dimensions

Tyre size	Measurement rim	Design dimens	ions of new tyres	Dimensio	ns in service
designation	width code	Section width	Overall diameter ^a	Maximum overall width	Maximum overall diameter ^b
2.50 – 8	1.50	68	338	71	345
3.00 – 4		90	265	95	270
3.00 – 8	2.50	90	367	95	374
3.50 – 6	2.50	100	343	105	350
3.50 – 8		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	3.00	114	465	120	474
4.00 - 12	3.00	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
5.00 – 12		145	567	152	578
5.00 – 14		145	618	152	630
5.00 – 15	4.00	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		163	684	178	708
6.50 – 16	4.50	173	735	188	761
6.70 – 15]	170	704	185	729
7.00 – 12	5.00	187	652	204	680
a Minimum new	v tyre overall shall be ca	lculated on the bas	sis of tolerance of -3 of	% on design section	height.

b Figures are based on tyres with classification code F–2.

 Table 6 (continued)

Tymo sigo	Measurement rim	Design dimens	ions of new tyres	Dimensions in service		
Tyre size designation	width code	Section width	Overall diameter ^a	Maximum overall width	Maximum overall diameter ^b	
7.00 – 16	5.50	200	769	210	784	
7.00 – 19	5.50	200	345	210	862	
7.50 – 10	6.00	214	634	225	647	
7.50 – 14		194	686	212	713	
7.50 – 16		202	785	220	809	
7.50 – 18	T TO	202	836	220	866	
7.50 – 20	5.50	202	887	220	917	
7.50 – 24		202	989	220	1 020	
7.60 – 15		193	734	210	763	
8.25 – 16		229	832	240	849	
9.00 - 10	6.00	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		315	965	343	999	
11.25 – 24	10.00	325	1 171	354	1 216	
11.25 - 28		325	1 273	354	1 318	
a Minimum new	tyre overall shall be ca	alculated on the ba	sis of tolerance of -3 of	% on design section	ı height.	

Table 7 — Agricultural implement tyres (diagonal construction, low section height) — Tyre size designations, measurement rims and dimensions

		Design di	mensions of	new tyres	Dim	ensions in sei	rvice
Tyre size	Measure- ment rim	Section	Overall o	Overall diameter		Maximum overall diameter	
designation	width code	width	Non- trac- tion pat- tern	Traction pattern	overall width	Non- trac- tion pattern	Traction pattern
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
6.5/80 – 12	500	163	569	588	171	577	597
6.5/80 – 15	550	163	645	663	171	658	677
10.0.80 – 12	950	264	710	730	277	730	751
10.5/80 – 18	950	274	885	907	288	906	930
12.0/80 - 18	950	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
a Minimum ne	ew tyre overall sh	all be calculate	ed on the basis	of tolerance of	-3 % on design	n section height.	

Table 7 (continued)

		Design di	mensions of	new tyres	Dimensions in service			
Tyre size	Measure- ment rim	Section	Overall o	Overall diameter		Maximum overall diameter		
designation	width code	width	Non- trac- tion pat- tern	Traction pattern	wiuui	Non- trac- tion pattern	Traction pattern	
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	1111	
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	
20.5/70 - 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 – 4	6.00	216	721	-	235	750	-	
9.5L - 14	7.00	241	741	_	263	772	_	
9.5L - 15			767	782		786	802	
11L - 14	8.00	279	752	-	305	783	_	
11L - 15			777	796		797	816	
11L - 16			803	821		822	842	
12.5L – 15	10.00	318	823	_	346	859	-	
12.5L - 16			848	-		884	_	
	ew tyre overall sh	all be calculate	<u> </u>		–3 % on design		_	

 ${\bf Table~8-A gricultural~drive~wheels-Tractor~tyres-Approved~rim~contours}$

Tyre section code	Rim diameter code	Approved rim contoursa
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

a DW and DW-A rims with equivalent flanges are also permitted where W and W-A rims are shown, respectively. Consult the tyre manufacturer for the preferred rim contours.

b For tyres up to 10 PR only.

For 12 PR tyres only.

d For tyres of 12 PR or higher, only.

e VA rims are not interchangeable with DH or DH-H, DH-B, DH-HB or DWM rims.

Table 8 (continued)

Tyre section code	Rim diameter code	Approved rim contoursa
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, 36, 38, 48	W11, W12, W12A
20.8	34. 38, 42	W16A, W16L, W17L, W18L, W18A, DD16, DD18
23.1	26, 30, 34	DW18, DW18A, DW20A, MW20A
24.5	32	DW20A, DW21A, DH21, DH21H
17.5L	24	W15L
19.5L	24	W15L ^b , W16L, DW16A
21L	24	W18L ^b , DW18A
28L	26	DW23A, DW25A
30.5L	32	DW27A, DH27
VA30.5L	32	27VA
DH35.5L	32	DH31 e, DH31He, DH31B e, DH31HB e, 31DWM e
VA35.5L	32	31VA

a DW and DW-A rims with equivalent flanges are also permitted where W and W-A rims are shown, respectively. Consult the tyre manufacturer for the preferred rim contours.

Table 9 — Agricultural steering wheels — Tractor tyres — Approved rim contours

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, 41⁄2J		
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		

b For tyres up to 10 PR only.

c For 12 PR tyres only.

d For tyres of 12 PR or higher, only.

e VA rims are not interchangeable with DH or DH-H, DH-B, DH-HB or DWM rims.

 Table 9 (continued)

Tyre size designation	Approved rim contours
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, 10L8
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
11L - 15 (11.50/75 - 15)	W8L, 8LB, 10LB
11L - 16	W8L, 8LB, 10LB, W10L

 ${\it Table~10-Agricultural~implement~tyres~(normal~section~height)-Approved~rim~contours}$

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			
4.00 – 12	2.50C, 3.008, 3.00D			
4.00 – 15				
4.00 – 18	3.00D			
4.50 – 19	3.00D 3.00D, 3.500			
5.00 – 12	3.00D, 3.50D, 4.00E, 4J			
5.00 – 14	3.000, 3.50D, 4.00E, 4J			
5.00 – 15	3.00D, 4.00E, 4J, 4½J			
5.50 – 16	3.500, 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			

Table 10 (continued)

Tyre size designation	Approved rim contours
7.50 – 10	5.00F, 5.50F, 6.00F
7.50 – 14	5KB, 6KB
7.50 – 16	5.00F, 5K, 5.50F, 6.00F, 6L8
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, 3LB, W8L
9.00 – 24	W7a, W8 a. W8H, W8Hb
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
a For 6 PR tyres only.	
b For 8 PR tyres only.	

 ${\it Table~11-Agricultural~implement~tyres~(low~section~height)-Approved~rim~contours}$

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		
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 ^a , W9, 11		
15.5/80 – 24	W12, W13, W14L		
19.5/80 – 20	W16L		
21.0/80 - 20	16SDC		
12.0/75 - 18	9 ^b , W9, 11		
13.0/75 - 16	9, W9, 11, W11		
14.5/75 – 20	11, 11SDC, 12SDC, 13, 13SDC		
10.0/65 - 16	W8L, W9		
11.0/65 – 12	9.00		
13.0/65 - 18	9 a, 11		
14.0/65 – 16	11		
9.0/70 – 16	W7		
11.5/70 – 16	W8, W8L, W9		
^a For tyres up to 10 PR only.	•		

For tyres up to 8 PR only.

 Table 11 (continued)

Tyre size designation	Approved rim contours
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	BLB
11L – 14	8KB
11L – 15	8LB, 10LB
11L - 16	8LB, W8L, 10LB, W10L
12.5L - 15	10LB
12.5L - 16	W10L, 10LB
a For tyres up to 10 PR only.	

For tyres up to 8 PR only.

Annex A

(informative)

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

The technical data of former standardized tyres with nominal rim diameter codes 15.3, 16.1 and tyres for small tractors are given in <u>Tables A.1</u> to <u>A.9</u>.

Table A.1 — Agricultural tractor steering wheel tyres (diagonal construction, low section height) — Tyre size designations, measurement rims and dimensions

Dimensions in millimetres

Tymo oigo	Ontional size	Maagunamant	Design dimensions of new tyres		Dimensions in service	
Tyre size designation	Optional size marking	Measurement rim width code	Section width	Overall diameter ^a	Maximum overall width	Maximum overall diameter ^b
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

Minimum new tyre overall shall be calculated on the basis of tolerance of -3 % on design section height.

Table A.2 — Agricultural tractor drive wheel tyres (diagonal construction, normal section height) — Tyre size designations, measurement rims and dimensions

Dimensions in millimetres

Type size	Ontional size	Macaurament	Design dimensions of new tyres		Dimension	s in service
designation	Tyre size Optional size Measurement rim width code		Section width	Overall diameter ^a	Maximum overall width	Maximum overall diameter ^b
18.4 – 16.1	-	16.00	467	1 137	505	1 181

Minimum new tyre overall shall be calculated on the basis of tolerance of -3% on design section height.

Table A.3 — Agricultural implement tyres (diagonal construction, low section height) — Tyre size designations, measurement rims and dimensions

Type size	Measurement rim	Design dimensions of new tyres		Design dimensions of new tyres D		Dimension	Dimensions in service	
Tyre size designation	width code	Section width	Overall diameter ^a	Maximum overall width	Maximum over- all diameter			
13.50 - 16.1	11.00	353	1 021	385	1 070			
a Minimum new tyre overall shall be calculated on the basis of tolerance of −3 % on design section height.								

b Figures are based on tyres with classification code F-2.

b Figures are based on tyres with classification code R-1. The tractor manufacturer shall recognize that tyres with deep tread and related increased overall diameter may be used.

Table A.4 — Agricultural implement tyres (diagonal construction, low section height) — Tyre size designations, measurement rims and dimensions

		Design di	Design dimensions of new tyres			Dimensions in service		
Tyre size	Measure- ment rim	Section	Overall diameter a		Maximum	Maximum overall diameter		
designation	width code	width	Non- traction pattern	Traction pattern	overall width	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	
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	_	
a Minimum ne	w tyre overall sh	all be calculate	d on the basis	of tolerance of	-3 % on design	section height.		

Table A.5 — Traction drive wheel tyres for small tractor

Tymo sigo	Measurement rim	Design dimensions of new tyres		Dimensions in service	
Tyre size designation	-3		Overall diameter ^a	Maximum overall width	Maximum over- all diameter ^b
5 - 12	4.00	127	528	137	542
6 – 12			577		593
6 – 14	5.00	155	627	167	647
6 - 16			678		701
7 – 12			640		660
7 – 14	6.00	183	691	198	714
7 – 16			742		768
8 - 16	6.00	211	790	228	819
8 – 18			841		873

Minimum new tyre overall shall be calculated on the basis of tolerance of -3 % on design section height.

Table A.6 — Agricultural implement tyres (low section height — Approved rim contours

Tyre size designation	Approved rim contours a	
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 16.1xW11C		
16.5L – 16.1 16.1xW14C, 16.1xW14CH,		
a WC-Rim should only be applicable up to 16PR.		

b Figures are based on tyres with classification code R–1. The tractor manufacturer shall recognize that tyres with deep tread and related increased overall diameter may be used.

Table A.6 (continued)

Tyre size designation	Approved rim contours a
19L - 16.1	16.1xW16C, 16.1xW16CH
21.5L - 16.1	16.1xW16C, 16.1xW18C, 16.1xW16CH, 16.1xW18CH
13.50 - 16.1	16.1 - W11C
a WC-Rim should only be applicable up to 16PR.	

Table A.7 — Agricultural tractor drive wheel tyres (normal section height) — Approved rim contours

Tyre size designation		Approved rim contours a	
	18.4 - 16.1	16.1xW16C, 16.1xW16CH	
а	WC-Rim should only be applicable up to 16PR.		

Table A.8 — Agricultural tractor steering wheel tyres (low section height) — Approved rim contours

Tyre size designation	Approved rim contours a	
14L - 16.1	16.1xW11C	
16.5L - 16.1	16.1xW14C, 16.1xW14CH	
14.5/75 – 16.1 16.1xW11C		
a WC-Rim should only be applicable up to 16PR.		

 ${\bf Table~A.9-Small~tractor~tyres-Approved~rim~contours}$

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	

Annex B (informative)

Comparison values for rolling circumference (RC), rolling circumference index (RCI), speed radius index (SRI)

Table B.1 — Rolling circumference (RC), rolling circumference index (RCI), speed radius index (SRI)

Tyre size designation	Rolling circumference (RC)	Rolling circumference index (RCI)	Speed radius index (SRI)	
8.3 - 16	2 372	30	375	
8.3 – 24	2 975	34	475	
8.3 – 38	4 024	40	725	
8.3 – 44	4 474	42	395	
9.5 – 16	2 534	31	400	
9.5 – 22	2 987	34	475	
9.5 – 24	3 137	35	500	
9.5 – 32	3 738	_	600	
9.5 – 36	4 038	40	650	
9.5 – 38	4 188	_	670	
9.5 – 42	4 487	42	725	
9.5 – 44	4 637	_	750	
9.5 – 48	4 937	44	800	
11.2 – 20	2 999	_	470	
11.2 – 24	3 300	36	525	
11.2 - 28	3 601	38	575	
11.2 - 36	4 201	41	675	
11.2 - 38	4 351	41	700	
11.2 - 42	4 651	_	750	
12.4 - 16	2 855	33	450	
12.4 – 24	3 462	37	550	
12.4 – 28	3 764	_	600	
12.4 – 32	4 064	40	650	
12.4 - 36	4 364	41	700	
12.4 - 38	4 514	42	725	
12.4 - 42	4 814	43	775	
13.6 - 16	3 001	34	475	
13.6 – 24	3 611	38	575	
13.6 - 26	3 762	_	600	
13.6 – 28	3 912	39	625	
13.6 - 36	4 513	_	725	
13.6 - 38	4 663	43	750	
	I.	T. Control of the Con	1	

Table B.1 (continued)

Tyre size designation	Rolling circumference (RC)	Rolling circumference index (RCI)	Speed radius index (SRI)
_	mm		
13.6 – 46	5 263	45	825
13.6 - 48	5 413	_	870
14.9 – 24	3 773	39	600
14.9 – 26	3 924	39	625
14.9 – 28	4 075	40	650
14.9 – 30	4 226	41	675
14.9 – 38	4827	43	775
15.5 – 38	4 674	43	750
16.9 - 24	3 967	_	625
16.9 – 26	4 119	40	650
16.9 – 28	4 271	41	675
16.9 - 30	4 422	42	700
16.9 – 34	4 723	43	750
16.9 - 38	5 024	44	800
18.4 - 24	4 159	_	650
18.4 – 26	4 311	41	675
18.4 – 28	4 463	42	700
18.4 – 30	4 615	_	725
18.4 - 34	4 917	44	775
18.4 - 38	5 218	45	825
18.4 – 42	5 518	46	875
18.4 – 46	5 818	47	925
20.8 - 34	5 144	_	825
20.8 - 38	5 446	46	875
20.8 – 42	5 747	47	925
23.1 - 26	4 754	43	750
23.1 - 30	5 060	44	800
23.1 - 34	5 364	45	825
24.5 – 32	5 344	45	850
17.5L - 24	3 771	39	600
19.5L – 24	3 983	40	625
21L - 24	4 166	_	650
28L - 26	4 786	43	750
30.5L - 32	5 388	_	875
VA30.5L - 32	5 388	_	875
VA35.5L - 32	5 853	47	925
DH35.5L - 32	5 853	47	925

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²⁾ To be published.

³⁾ To be published.





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