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

**Part 2:
Tyre load ratings**

*Pneumatiques (série à marquage «équivalent nappes») et jantes pour
tracteurs et machines agricoles —*

Partie 2: Capacités de charge des pneumatiques



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 4251-2 was prepared by Technical Committee ISO/TC 31, *Tyres, rims and valves*, Subcommittee SC 5, *Agricultural tyres and rims*.

This sixth edition cancels and replaces the fifth edition (ISO 4251-2:1998), which has been technically revised.

ISO 4251 consists of the following parts, under the general title *Tyres (ply rating marked series) and rims for agricultural tractors and machines*:

- *Part 1: Tyre designation and dimensions, and approved rim contours*
- *Part 2: Tyre load ratings*
- *Part 3: Rims*
- *Part 4: Tyre classification and nomenclature*
- *Part 5: Logging and forestry service tyres*

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

Part 2: Tyre load ratings

1 Scope

This part of ISO 4251 specifies load ratings for the ply rating marked series of tyres for agricultural tractors and machines.

Tyre designation and dimensions, and approved rim contours, rim dimensions, and tyre classification and nomenclature are given in ISO 4251-1, ISO 4251-3 and ISO 4251-4 respectively.

2 Normative references

The following referenced documents are indispensable for the application 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*

3 Terms and definitions

For the purposes of this part of ISO 4251, the terms and definitions given in ISO 4223-1 and the following apply.

3.1

load/inflation pressure relationship

loads as given in the tables which are maximum values and are valid for the reference inflation pressures indicated.

3.2

cyclic loading application

gradual increase of payload to maximum allowable load with unloading before off-field transport.

4 Tyre loads

4.1 Agricultural drive wheels — Tractor tyres

Basic tyre loads for tyres of diagonal construction, used as singles at a maximum speed of 30 km/h, and reference inflation pressures are given in Table 1.

On combine harvesters in cyclic loading service, except hillside combines, a load of up to 170 % of the basic tyre loads given in Table 1 is permitted for speeds up to 10 km/h with an inflation pressure increase of approximately 30 % (consult tyre manufacturers). This load increase shall include all possible field and user modifications that increase vehicle mass. The wheel and rim manufacturers shall be consulted concerning the strength of the wheels.

Tyre loads at different speeds (load/speed relationship) are given in Table 2 for tyres of diagonal construction with normal section height and tyres of diagonal construction with low section height.

Loads for tyres of diagonal and radial constructions for special cultivation work and corresponding reference inflation pressures are given in

- a) Table 3 for a maximum speed of 30 km/h;
- b) Table 4 for cultivation work at a maximum speed of 10 km/h.

4.2 Agricultural steering wheels — Tractor tyres

Basic tyre loads at a maximum speed of 30 km/h, and their corresponding reference inflation pressures, are given in Table 5 for tyres of diagonal construction.

Tyre loads at different speeds (load/speed relationship) are given in Table 6 for tyres of diagonal construction with normal and low section heights.

On combine harvesters in cyclic loading application, except hillside combines, a load of up to 150 % of the basic tyre loads given in Table 5 is permitted for speeds up to 10 km/h. This load increase shall include all possible field and user modifications that increase vehicle mass. The wheel and rim manufacturers shall be consulted concerning the strength of the wheel.

4.3 Agricultural implement tyres

Basic tyre loads at a maximum speed of 30 km/h and their corresponding reference inflation pressures are given in Table 7 for tyres of diagonal construction.

Table 1 — Agricultural drive wheels — Tractor tyres (diagonal construction) — Basic tyre loads (BTL) for tires used as singles at a maximum speed of 30 km/h and at reference inflation pressures (IP)

Tyre size designation	Load index	Ply rating	Basic tyre load	Inflation pressure
	LI	PR	BTL kg	IP kPa
8.3 – 16	81	4	462	150
	90	6	600	230
8.3 – 24	92	4	630	160
	100	6	800	240
9.5 – 16	88	4	560	140
	96	6	710	210
9.5 – 24	97	4	730	160
	106	6	950	240
9.5 – 32	102	4	850	140
	110	6	1 060	210
	116	8	1 250	280
9.5 – 36	104	4	900	140
	112	6	1 120	210
	118	8	1 320	280
11.2 – 24	102	4	850	130
	110	6	1 060	180
	116	8	1 250	240
	119	10	1 360	300
11.2 – 28	104	4	900	130
	112	6	1 120	180
	118	8	1 320	240
11.2 – 36	109	4	1 030	120
11.2 – 38	110	4	1 060	120
12.4 – 16	111	8	1 090	220
	119	12	1 360	330
12.4 – 24	106	4	950	110
	115	6	1 215	170
	120	8	1 400	230
12.4 – 28	109	4	1 030	110
	117	6	1 285	170
	122	8	1 500	230
12.4 – 32	110	4	1 060	110
	119	6	1 360	170
	124	8	1 600	230
	128	10	1 800	280

Table 1 (continued)

Tyre size designation	Load index	Ply rating	Basic tyre load	Inflation pressure
	LI	PR	BTL kg	IP kPa
12.4 – 36	112	4	1 120	110
	121	6	1 450	170
	126	8	1 700	230
12.4 – 38	113	4	1 150	110
	122	6	1 500	170
	127	8	1 750	230
12.4 – 42	115	4	1 215	110
	123	6	1 550	170
13.6 – 16	100	4	800	100
	109	6	1 030	150
	114	8	1 180	190
13.6 – 24	109	4	1 030	100
	118	6	1 320	160
	123	8	1 550	200
	128	10	1 800	250
13.6 – 28	112	4	1 120	100
	121	6	1 450	160
	125	8	1 650	200
	130	10	1 900	250
13.6 – 36	116	4	1 250	100
	125	6	1 650	160
	129	8	1 850	200
	134	10	2 120	250
13.6 – 38	117	4	1 285	100
	126	6	1 700	160
	131	8	1 950	200
	136	10	2 240	250
13.6 – 46	129	6	1 850	150
	134	8	2 120	190
14.9 – 24	112	4	1 120	80
	123	6	1 550	140
	128	8	1 800	180
	132	10	2 000	230
14.9 – 26	124	6	1 600	140
	129	8	1 850	180
	133	10	2 060	230

Table 1 (continued)

Tyre size designation	Load index	Ply rating	Basic tyre load	Inflation pressure
	LI	PR	BTL kg	IP kPa
14.9 – 28	125	6	1 650	140
	130	8	1 900	180
	134	10	2 120	230
14.9 – 30	126	6	1 700	140
	131	8	1 950	180
	135	10	2 180	230
14.9 – 38	129	6	1 850	140
	135	8	2 180	180
	139	10	2 430	230
15.5 – 38	127	6	1 750	140
	133	8	2 060	180
	137	10	2 300	230
16.9 – 24	126	6	1 700	130
	133	8	2 060	170
	136	10	2 240	200
16.9 – 26	128	6	1 800	130
	134	8	2 120	170
	137	10	2 300	200
16.9 – 28	129	6	1 850	130
	135	8	2 180	170
	139	10	2 430	200
	143	12	2 725	240
16.9 – 30	130	6	1 900	130
	137	8	2 300	170
	140	10	2 500	200
16.9 – 34	133	6	2 060	130
	139	8	2 430	170
	142	10	2 650	200
16.9 – 38	135	6	2 180	130
	141	8	2 575	170
	143	10	2 725	200
18.4 – 24	131	6	1 950	110
	135	8	2 180	140
	141	10	2 575	180
	145	12	2 900	220

Table 1 (continued)

Tyre size designation	Load index	Ply rating	Basic tyre load	Inflation pressure
	LI	PR	BTL kg	IP kPa
18.4 – 26	132	6	2 000	110
	136	8	2 240	140
	142	10	2 650	180
	146	12	3 000	230
18.4 – 28	133	6	2 060	110
	138	8	2 360	140
	143	10	2 725	180
	147	12	3 075	220
18.4 – 30	134	6	2 120	110
	139	8	2 430	140
	145	10	2 900	180
	149	12	3 250	230
18.4 – 34	137	6	2 300	110
	142	8	2 650	140
	146	10	3 000	180
	150	12	3 350	230
	153	14	3 650	260
18.4 – 38	139	6	2 430	110
	143	8	2 725	140
	148	10	3 150	180
	152	12	3 550	230
18.4 – 42	145	8	2 900	140
	150	10	3 350	180
	154	12	3 750	230
20.8 – 34	145	8	2 900	130
	149	10	3 250	160
	154	12	3 750	200
20.8 – 38	148	8	3 150	130
	151	10	3 450	160
	156	12	4 000	200
20.8 – 42	153	10	3 650	160
	158	12	4 250	200
23.1 – 26	145	8	2 900	110
	149	10	3 250	140
	153	12	3 650	170
	156	14	4 000	200

Table 1 (continued)

Tyre size designation	Load index	Ply rating	Basic tyre load	Inflation pressure
	LI	PR	BTL kg	IP kPa
23.1 – 30	146	8	3 000	110
	151	10	3 450	140
	155	12	3 875	170
23.1 – 34	149	8	3 250	110
	153	10	3 650	140
	157	12	4 125	170
24.5 – 32	156	10	4 000	140
	159	12	4 375	170
17.5L – 24	123	6	1 550	110
	129	8	1 850	150
	134	10	2 120	190
19.5L – 24	134	8	2 120	140
	138	10	2 360	170
	142	12	2 650	210
21L – 24	141	10	2 575	150
	146	12	3 000	190
	151	16	3 450	250
28L – 26	151	10	3 450	120
	154	12	3 750	140
	158	14	4 250	170
30.5L – 32	162	12	4 750	140
VA35.5L – 32	178	20	7 750	190

Table 2 — Agricultural drive wheels — Tractor tyres — Tyre loads at different speeds (load/speed relationship)

Maximum speed ^a km/h	Maximum tyre load ^b %
10 ^c	140
20	120
25	107
30	100

^a The values given for the maximum tyre loads also apply when drive wheel tractor tyres are fitted on the front axles (steering wheels).

^b Expressed as a percentage of the basic tyre loads given in Table 1. If national legislation permits speeds in excess of 30 km/h, for example up to 40 km/h, a tyre load of 90 % of the basic tyre load shall be permitted at a speed of 35 km/h, and a tyre load of 80 % of the basic tyre load shall be permitted at a speed of 40 km/h. Tyres intended for higher speeds, for example multipurpose applications (MPT), will form the subject of a future International Standard.

^c This applies to drive wheel tractor tyres fitted on front axles of front-end loaders used in intermittent service. Tyre inflation pressures shall be increased by 30 kPa for operating at these overloads.

Table 3 — Agricultural drive wheel — Tractor tyres for special cultivation work (diagonal and radial constructions) — Basic tyre loads (BTL) at a maximum speed of 30 km/h and at reference inflation pressures (IP)

Tyre size designation		6 PR		8 PR	
Diagonal	Radial	BTL kg	IP kPa	BTL kg	IP kPa
7.2 – 36	—	865	280	1 005	370
7.2 – 40	—	935		1 090	
8.3 – 36	8.3 R 36	970	240	1 160	320
8.3 – 38	8.3 R 38			1 255	
8.3 – 42	8.3 R 42	1 055		1 290	
8.3 – 44	8.3 R 44	1 080			
9.5 – 36	9.5 R 36	1 130	210	1 335	280
9.5 – 38	9.5 R 38			1 485	
9.5 – 44	9.5 R 44	1 255		1 560	
9.5 – 48	9.5 R 48	1 320			

Table 4 — Agricultural drive wheels — Tractor tyres for special cultivation work (diagonal and radial constructions) — Tyre loads (L) for special cultivation work at a maximum speed of 10 km/h and at reference inflation pressures (IP)

Tyre size designation		6 PR		8 PR	
Diagonal	Radial	L kg	IP kPa	L kg	IP kPa
7.2 – 36	—	1 115	290	1 325	390
7.2 – 40	—	1 180		1 400	
8.3 – 36	8.3 R 36	1 290	260	1 535	350
8.3 – 38	8.3 R 38			1 600	
8.3 – 42	8.3 R 42	1 400		1 665	
8.3 – 44	8.3 R 44	1 440		1 710	
9.5 – 36	9.5 R 36	1 495	230	1 750	300
9.5 – 38	9.5 R 38			1 800	
9.5 – 44	9.5 R 44	1 665		1 945	
9.5 – 48	9.5 R 48	1 750		2 045	

NOTE Special cultivation work excludes road application except field to farm transit at speeds not exceeding 25 km/h.

Table 5 — Agricultural steering wheels — Tractor tyres (diagonal construction) — Basic tyre loads (BTL) at a maximum speed of 30 km/h and at reference inflation pressures (IP)

Tyre size	Optional size marking	Load index	Ply rating	Basic tyre load	Inflation pressure
		LI	PR	BTL kg	IP kPa
4.00 – 12		60	4	250	340
		66	4	300	340
		69	4	325	340
		72	4	355	340
4.50 – 16		73	4	365	310
		81	6	462	450
4.50 – 19		75	4	387	310
		83	6	487	450
5.00 – 15		73	4	365	280
		81	6	462	420
5.00 – 16		76	4	400	280
5.50 – 16		78	4	425	250
		86	6	530	370
6.00 – 14		85	6	515	360
6.00 – 16		80	4	450	230
		88	6	560	340
		94	8	670	450
8.00 – 16		99	6	775	280
		109	10	1 030	440
6.00 – 19		85	4	515	230
		93	6	650	330
6.00 – 20		94	6	670	330
6.50 – 16		85	4	515	230
		91	6	615	310
		97	8	730	420
6.50 – 20		90	4	600	230
		97	6	730	310
		103	8	875	420
7.50 – 16		91	4	615	200
		98	6	750	280
		103	8	875	370
7.50 – 18		94	4	670	200
		101	6	825	280
		106	8	950	370
7.50 – 20		103	6	875	280
		108	8	1 030	340

Table 5 (continued)

Tyre size	Optional size marking	Load index	Ply rating	Basic tyre load	Inflation pressure
		LI	PR	BTL kg	IP kPa
9.00 – 16		104	6	900	230
		111	8	1 090	310
		116	10	1 250	390
9.50 – 20		116	8	1 250	300
10.00 – 16		107	6	975	200
		115	8	1 215	280
		119	10	1 360	340
11.00 – 16		113	6	1 150	200
		118	8	1 320	250
		122	10	1 500	310
11.00–20		122	8	1 500	280
		126	10	1 700	330
		131	12	1 950	410
11.00 – 24		126	8	1 700	280
		131	10	1 950	330
11L – 16		112	8	1 120	300
		116	10	1 250	360
		120	12	1 400	440

Table 6 — Agricultural steering wheels — Tractor tyres (diagonal construction) — Basic tyre loads (BTL) at a maximum speed of 30 km/h and at reference inflation pressures (IP)

Maximum speed km/h	Maximum tyre load ^a %
With front-end loaders: 10 ^b	200
10	150
20	135
25	115
30	100

^a Expressed as a percentage of the basic tyre loads given in Table 5. If national legislation permits speeds in excess of 30 km/h, for example up to 40 km/h, a tyre load of 90 % of the basic tyre load shall be permitted at a speed of 35 km/h, and a tyre load of 80 % of the basic tyre load shall be permitted at a speed of 40 km/h. Tyres intended for higher speeds, for example multipurpose applications (MPT), will form the subject of a future International Standard.

^b This applies to steering wheel tractor tyres of 6 PR and more fitted on front axles of front-end loaders used in agricultural intermittent service for short distances (100 m maximum). Tyre inflation pressures shall be increased by 30 kPa for operating at these overloads.

Table 7 — Agricultural implement tyres (diagonal construction) — Basic tyre loads (BTL) at a maximum speed of 30 km/h and at reference inflation pressures (IP)

Tyre size designation	Ply rating PR	Free rolling		Drive		IP kPa
		LI	BTL kg	LI	BTL kg	
2.50 – 8	2	28	100	16	71	225
3.00 – 4	2	16	71	4	50	175
3.00 – 8	2	32	112	20	80	200
3.50 – 6	2	32	112	20	80	150
	4	45	165	33	115	300
3.50 – 8	2	38	132	25	93	150
4.00 – 4	2	30	106	18	75	150
	4	43	155	31	109	275
4.00 – 8	2	43	155	31	109	150
	4	57	230	44	160	275
	6	65	290	54	206	425
4.00 – 9	4	65	290	53	206	300
4.00 – 10	2	49	185	37	128	150
	4	62	265	49	185	275
4.00 – 12	2	54	212	42	150	150
	4	66	300	54	212	275
	6	75	387	63	272	425
4.00 – 15	4	72	355	60	250	275
4.00 – 18	2	67	307	55	218	170
	4	81	462	69	325	300
4.50 – 19	2	66	300	54	212	125
5.00 – 12	2	61	257	48	180	125
	4	74	375	62	265	225
5.00 – 14	4	73	365	61	257	225
5.00 – 15	2	68	315	55	218	125
	4	79	437	67	307	225
	6	88	560	75	387	350
5.50 – 16	4	84	500	72	355	200
5.90 – 15	4	83	487	71	345	200
6.00 – 9	2	63	272	50	190	100
6.00 – 16	2	80	450	68	315	125
	4	89	580	77	412	200
	6	95	690	83	487	275
	8	103	875	91	615	400

Table 7 (continued)

Tyre size designation	Ply rating PR	Free rolling		Drive		IP kPa
		LI	BTL kg	LI	BTL kg	
6.40 – 15	4	88	560	76	400	200
	6	94	670	82	475	275
6.50 – 16	2	84	500	72	355	125
	4	93	650	80	450	200
	6	99	775	87	545	275
	8	105	925	93	650	375
6.70 – 15	4	94	670	82	475	220
	6	101	825	89	580	300
7.00 – 12	4	88	560	75	387	175
	6	95	690	83	487	250
7.00 – 16	4	95	690	83	487	175
	6	101	825	89	580	250
	8	108	1 000	96	710	350
7.00 – 19	6	103	875	91	615	250
7.50 – 10	4	94	670	82	475	250
	6	107	975	95	690	400
	8	111	1 090	99	775	500
7.50 – 14	4	96	710	84	500	190
7.50 – 16	2	88	560	75	387	100
	4	96	710	84	500	150
	6	104	900	92	630	225
	8	112	1 120	99	775	325
	10	116	1 250	103	875	400
	12	121	1 450	108	1 030	500
7.50 – 18	2	89	580	77	412	100
	4	97	730	85	515	150
	6	106	950	94	670	225
7.50 – 20	4	99	775	87	545	150
	6	107	975	95	690	225
	8	116	1 250	103	875	325
	10	120	1 400	107	975	400
7.50 – 24	4	101	825	89	580	160
	8	117	1 285	104	900	325

Table 7 (continued)

Tyre size designation	Ply rating PR	Free rolling		Drive		IP kPa
		LI	BTL kg	LI	BTL kg	
7.60 – 15	4	97	730	85	515	190
	6	105	925	93	650	280
	8	111	1 090	99	775	360
8.25 – 16	4	103	875	91	615	160
	6	110	1 060	98	750	230
9.00 – 10	4	99	775	87	545	170
	10	117	1 285	104	900	360
9.00 – 16	8	118	1 320	105	925	275
	10	121	1 450	109	1 030	325
9.00 – 24	6	121	1 450	109	1 030	190
	8	129	1 850	117	1 285	280
10.00 – 12	6	107	975	95	690	200
10.00 – 15	8	121	1 450	109	1 030	240
11.00 – 16	6	122	1 500	110	1 060	175
11.25 – 24	8	129	1 850	117	1 285	200
11.25 – 28	8	131	1 950	119	1 360	200
	10	136	2 240	123	1 550	260
5.5/85 – 9	8	93	650	—	—	500
13.5/85 – 28	10	151	3 450	139	2 430	280
16.5/85 – 24	8	154	3 750	142	2 650	190
	14	165	5 150	153	3 650	330
16.5/85 – 28	10	159	4 375	147	3 075	230
6.5/80 – 12	2	71	345	59	243	120
	4	84	500	72	355	240
	6	93	650	80	450	360
6.5/80 – 15	2	76	400	64	280	120
	4	90	600	78	425	240
10.0/80 – 12	4	101	825	89	580	150
	6	110	1 060	98	1 060	230
	8	116	1 250	103	875	310
10.5/80 – 18	6	121	1 450	109	1 030	220
	8	127	1 750	115	1 215	300
	10	131	1 950	119	1 360	370

Table 7 (continued)

Tyre size designation	Ply rating PR	Free rolling		Drive		IP kPa
		LI	BTL kg	LI	BTL kg	
12.5/80 – 18	6	128	1 800	116	1 250	190
	8	134	2 120	122	1 500	250
	10	139	2 430	126	1 700	310
	12	142	2 650	129	1 850	370
	14	146	3 000	134	2 120	430
	16	148	3 150	135	2 180	490
12.0/75 – 18	6	123	1 550	111	1 090	190
	8	130	1 900	118	1 320	260
	10	135	2 180	123	1 550	330
13.0/75 – 16	10	135	2 180	123	1 550	300
10.5/65 – 16	8	119	1 360	106	950	300
	10	123	1 550	111	1 090	380
	12	126	1 700	114	1 180	450
	14	130	1 900	116	1 320	530
11.0/65 – 12	4	99	775	87	545	140
	6	114	1 180	101	825	190
	10	119	1 360	106	950	360
13.0/65 – 18	6	123	1 550	111	1 090	180
	8	129	1 850	117	1 285	240
	10	134	2 120	122	1 500	300
	12	138	2 360	125	1 650	360
	14	141	2 575	128	1 800	430
	16	144	2 800	131	1 950	490
14.0/65 – 16	8	130	1 900	118	1 320	230
	10	134	2 120	122	1 500	280
	14	142	2 650	129	1 850	400
15.0/55 – 17	6	124	1 600	112	1 120	160
	8	129	1 850	117	1 285	210
	10	134	2 120	122	1 500	260
	12	138	2 360	125	1 650	310
19.0/45 – 17	10	138	2 360	125	1 650	225
	14	144	2 800	131	1 950	280
14.5/75 – 20	8	140	2 500	127	1 750	220
11.5/70 – 16	14	135	2 180	123	1 550	480
11.5/70 – 18	14	138	2 360	125	1 650	480

Table 7 (continued)

Tyre size designation	Ply rating PR	Free rolling		Drive		IP kPa
		LI	BTL kg	LI	BTL kg	
15.0/70 – 18	8	137	2 300	124	1 600	210
	10	141	2 575	128	1 800	260
	12	145	2 900	133	2 060	310
	14	148	3 150	135	2 180	360
16.0/70 – 20	8	142	2 650	129	1 850	200
	10	147	3 075	135	2 180	250
	12	151	3 450	139	2 430	300
	14	154	3 750	142	2 650	350
	16	156	4 000	144	2 800	400
20.5/70 – 20	12	160	4 500	148	3 150	230
	16	166	5 300	154	3 750	320
	20	170	6 000	159	4 250	390
15.5/80 – 24	10	154	3 750	142	2 650	250
	12	157	4 125	145	2 900	300
	14	160	4 500	148	3 150	350
19.5/80 – 20	12	163	4 875	151	3 450	240
21.0/80 – 20	8	158	4 250	146	3 000	150
	12	167	5 450	155	3 875	220
7.5L – 15	8	113	1 150	100	800	370
8.5L – 14	6	107	975	85	690	250
9.5L – 14	4	101	825	89	580	170
	6	108	1 000	96	710	220
	8	116	1 250	103	875	300
9.5L – 15	6	104	900	92	630	190
	8	111	1 090	99	775	280
11L – 14	6	110	1 060	98	750	190
11L – 15	6	106	950	94	670	170
	8	112	1 120	100	800	220
	10	117	1 285	104	900	280
11L – 16	6	108	1 000	96	710	170
	8	114	1 180	101	825	220
	10	119	1 360	105	925	280

Table 7 (continued)

Tyre size designation	Ply rating PR	Free rolling		Drive		IP kPa
		LI	BTL kg	LI	BTL kg	
12L – 15	6	108	1 000	96	710	170
	8	114	1 180	101	825	220
	10	118	1 320	105	925	180
12.5L – 15	6	118	1 320	105	925	190
	8	123	1 550	111	1 090	250
	10	128	1 800	116	1 250	300
	12	132	2 000	120	1 400	360
12.5L – 16	8	125	1 650	113	1 150	250
	12	133	2 060	121	1 450	360
	14	135	2 180	123	1 550	390

Annex A (informative)

Tyres with nominal rim diameter codes 15.3 and 16.1 and small agricultural tractor tyres

The technical data of the former standardized tyres with nominal rim diameter codes 15.3 and 16.1 are given in Tables A.1, A.2, A.3, A.4 and A.5.

Table A.1 — Agricultural steering wheels — Tractor tyres (diagonal construction) — Basic tyre loads (BTL) at a maximum speed of 30 km/h and at reference inflation pressures (IP)

Tyre size designation	Optional size marking	6 PR			8 PR			10 PR			12 PR		
		LI	BTL kg	IP kPa	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa
14L – 16.1	14.0/80 – 16.1	117	1 285	170	123	1 550	230	127	1 750	280	131	1 950	340
16.5L – 16.1	—	—	—	—	128	1 800	220	133	2 060	280	—	—	—
14.5/75 – 16.1	—	—	—	—	—	—	—	124	1 600	280	—	—	—

Table A.2 — Agricultural drive wheels — Tractor tyres (code designation) — Basic tyre loads (BTL) at a maximum speed of 30 km/h and at reference inflation pressures (IP)

Tyre size designation	6 PR			8 PR			10 PR		
	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa
18.4 – 16.1	116	1 250	110	121	1 450	140	—	—	—

Table A.3 — Agricultural implement tyres (diagonal construction, normal section height) — Basic tyre loads (BTL) at a maximum speed of 30 km/h and at reference inflation pressures (IP)

Tyre size designation	6 PR			8 PR			10 PR			12 PR			14 PR		
	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa
13.5 – 16.1	124	1 600	140	129	1 850	180	135	2 180	240	—	—	—	—	—	—
14L – 16.1	—	—	—	—	—	—	129	1 850	230	133	2 060	280	—	—	—
16.5L – 16.1	133	2 060	170	137	2 300	190	143	2 725	250	145	2 900	280	149	3 250	330
19L – 16.1	—	—	—	—	—	—	148	3 150	220	—	—	—	—	—	—
21.5L – 16.1	—	—	—	147	3 075	170	151	3 450	190	154	3 750	220	157	4 125	250

NOTE 1 For speeds up to a maximum of 10 km/h, loads may be increased by 20 % with a corresponding inflation pressure increase of up to 30 % (consult tyre and rim manufacturers).

NOTE 2 On agricultural trailers operated on improved surfaces at speeds up to a maximum of 30 km/h, loads may be increased by 20 % with a corresponding 30 % increase in inflation pressure where national standardization does not impose restrictions (consult tyre and rim manufacturers).

Table A.4 — Agricultural implement tyres (diagonal construction, low section height) — Basic tyre loads (BTL) at a maximum speed of 30 km/h and at reference inflation pressures (IP)

Tyre size designation	4 PR			6 PR			8 PR			10 PR			12 PR			14 PR		
	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa
10.0/75 – 15.3	103	875	150	112	1 120	230	118	1 320	310	122	1 500	390	—	—	—	—	—	—
11.5/80 – 15.3	—	—	—	120	1 400	200	125	1 650	270	130	1 900	340	134	2 120	410	—	—	—
12.5/80 – 15.3	—	—	—	—	—	—	—	—	—	—	—	—	139	2 430	370	142	2 650	430
10.5/85 – 15.3	—	—	—	—	—	—	—	—	—	129	1 850	370	133	2 060	440	—	—	—

NOTE 1 For speeds up to a maximum of 10 km/h, loads may be increased by 20 % with a corresponding inflation pressure increase of up to 30 % (consult tyre and rim manufacturers).

NOTE 2 On agricultural trailers operated on improved surfaces at speeds up to a maximum of 30 km/h, loads may be increased by 20 % with a corresponding 30 % increase in inflation pressure where national standardization does not impose restrictions (consult tyre and rim manufacturers).

Table A.5 — Small agricultural tractor tyres — Basic tyre loads (BTL) at a maximum speed of 30 km/h and at reference inflation pressures (IP)

Tyre size designation	2 PR			4 PR			6 PR		
	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa	LI	BTL kg	IP kPa
5 – 12	40	140	110	56	224	230	—	—	—
6 – 12	48	180	100	63	272	290	—	—	—
6 – 14	—	—	—	66	300	190	—	—	—
6 – 16	—	—	—	70	335	190	—	—	—
7 – 12	55	218	80	69	325	160	80	450	250
7 – 14	—	—	—	72	355	160	84	500	250
7 – 16	62	265	80	75	387	160	—	—	—
8 – 16	71	345	70	83	487	120	91	615	190
9 – 18	—	—	—	85	515	120	94	670	190

Bibliography

- [1] ISO 4251-1, *Tyres (ply rating marked series) and rims for agricultural tractors and machines — Part 1: Tyre designation and dimensions, and approved rim contours*
- [2] ISO 4251-3, *Tyres (ply rating marked series) and rims for agricultural tractors and machines — Part 3: Rims*
- [3] ISO 4251-4, *Tyres (ply rating marked series) and rims for agricultural tractors and machines — Part 4: Tyre classification and nomenclature*

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