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## **Passenger car tyres and rims —**

Part 1:

**Tyres (metric series)**

**AMENDMENT 1**

*Pneumatiques et jantes pour voitures particulières —*

*Partie 1: Pneumatiques (série millimétrique)*

*AMENDEMENT 1*



Reference number  
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## Foreword

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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.

Amendment 1 to ISO 4000-1:2001 was prepared by Technical Committee ISO/TC 31, *Tyres, rims and valves*, Subcommittee SC 3, *Passenger car tyres and rims*.



## Passenger car tyres and rims —

### Part 1: Tyres (metric series)

#### AMENDMENT 1

Page 2, 4.1.4

Delete the second paragraph and replace the fourth paragraph of the subclause by the following (taken from D.4).

ZR shall be used in the dimensional and constructional characteristics associated with the speed symbol Y and the load index, both placed within parentheses, to identify performance up to 300 km/h for tyres suitable for speeds higher than 300 km/h.

EXAMPLE

**235/45 ZR 17 (97Y)**

For maximum speed capability and load capacity of the tyre over 300 km/h, consult the manufacturer.

Page 2, Table 1

Replace Table 1 with the following table, thereby adding the nominal rim diameter codes 21, 22 and 23.

**Table 1 — Nominal rim diameter code**

Nominal rim diameter code	Nominal rim diameter, $D_r$ mm
10	254
12	305
13	330
14	356
15	381
16	406
17	432
18	457
19	483
20	508
21	533
22	559
23	584

Page 5, Clause 5

Delete Example 2.

Page 8, 6.5

Replace the first paragraph of the subclause with the following.

The range of approved rim widths for the nominal aspect ratio 35 and above is calculated as the product of the nominal section width,  $S_N$ , and the coefficients shown in Table 5. Round the values obtained to the nearest standardized rim width (see ISO 4000-2:2001, Table 2, Dimension *A*). For the nominal aspect ratio 30 and below tyre sizes, the range of approved rim widths is the measuring rim width code  $\pm 0.5$ .

Page 8, Table 5

Delete nominal aspect ratios " $HIS = 30$ " and " $20 \leq HIS \leq 25$ " from the table.

Page 9, Clause 11

Replace the two first paragraphs of Clause 11 by the following.

In selecting tyres for a vehicle, the vehicle maximum load on the tyre shall not be greater than the applicable maximum load-carrying capacity of the tyre. Vehicle maximum load on the tyre is the load on an individual tyre that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by the number of tyres on the axle.

The vehicle normal load on the tyre shall not be greater than 88 % of the maximum load-carrying capacity of the tyre. Vehicle normal load on the tyre is the load on an individual tyre that is determined by distributing (in accordance with Table 8) to each axle its share of the curb weight, accessory weight and normal occupant weight and dividing by the number of tyres on the axle. These, and other relevant weights, are defined below.

Replace the table with the following, to change the minimum and maximum rim width codes to reflect revision of 6.5.

**Table A.7 — Nominal aspect ratio ( $H/S$ ) of 30 ( $K_1 = 0,85$ ;  $K_2 = 0,9$ )**

Nominal section width $S_N$  mm	Measuring rim width $R_m$		Design tyre dimensions  mm		Approved rim width codes	
	code	mm	Section width	Section height	min.	max.
			$S$	$H$		
185	6.5	165	188	56	6,0	7,0
195	7.0	178	200	59	6,5	7,5
205	7.5	190,5	212	62	7,0	8,0
215	7.5	190,5	218	65	7,0	8,0
225	8.0	203	230	68	7,5	8,5
235	8.5	216	242	71	8,0	9,0
245	8.5	216	248	74	8,0	9,0
255	9.0	228,5	260	77	8,5	9,5
265	9.5	241,5	272	80	9,0	10,0
275	9.5	241,5	278	83	9,0	10,0
285	10.0	254	290	86	9,5	10,5
295	10.5	266,5	301	89	10,0	11,0
305	11.0	279,5	313	92	10,5	11,5
315	11.0	279,5	320	95	10,5	11,5
325	11.5	292	331	98	11,0	12,0
335	12.0	305	343	101	11,5	12,5
345	12.0	305	350	104	11,5	12,5
355	12.5	317,5	361	107	12,0	13,0
365	13.0	330	373	110	12,5	13,5
375	13.5	343	385	113	13,0	14,0
385	13.5	343	391	116	13,0	14,0
395	14.0	355,5	403	119	13,5	14,5

Rims outside the approved range in use from previous designs are not approved for new designs.

Replace the table with the following, to change the minimum and maximum rim width codes to reflect revision of 6.5.

**Table A.8 — Nominal aspect ratio ( $H/S$ ) of 25 ( $K_1 = 0,85$ ;  $K_2 = 0,92$ )**

Nominal section width $S_N$  mm	Measuring rim width $R_m$		Design tyre dimensions  mm		Approved rim width codes	
	code	mm	Section width	Section height	min.	max.
			$S$	$H$		
305	11.0	279	313	76	10.5	11.5
315	11.5	292	325	79	11.0	12.0
325	12.0	305	336	81	11.5	12.5
335	12.0	305	343	84	11.5	12.5
345	12.5	318	355	86	12.0	13.0
355	13.0	330	366	89	12.5	13.5
365	13.0	330	373	91	12.5	13.5
375	13.5	343	385	94	13.0	14.0
385	14.0	356	396	96	13.5	14.5
395	14.5	368	408	99	14.0	15.0
405	14.5	368	415	101	14.0	15.0
415	15.0	381	428	104	14.5	15.5
425	15.5	394	438	106	15.0	16.0
435	16.0	406	450	109	15.5	16.5
445	16.0	406	456	111	15.5	16.5
455	16.5	419	468	114	16.0	17.0
465	17.0	432	480	116	16.5	17.5
475	17.0	432	486	119	16.5	17.5
485	17.5	445	498	121	17.0	18.0

Rims outside the approved range in use from previous designs are not approved for new designs.

Replace the table with the following, to change the minimum and maximum rim width codes to reflect revision of 6.5.

**Table A.9 — Nominal aspect ratio ( $H/S$ ) of 20 ( $K_1 = 0,85$ ;  $K_2 = 0,92$ )**

Nominal section width $S_N$  mm	Measuring rim width $R_m$		Design tyre dimensions  mm		Approved rim width codes	
	code	mm	Section width	Section height	min.	max.
			$S$	$H$		
385	14.0	356	396	77	13.5	14.5
395	14.5	368	408	79	14.0	15.0
405	14.5	368	415	81	14.0	15.0
415	15.0	381	428	83	14.5	15.5
425	15.5	394	438	85	15.0	16.0
435	16.0	406	450	87	15.5	16.5
445	16.0	406	456	89	15.5	16.5
455	16.5	419	468	91	16.0	17.0
465	17.0	432	480	93	16.5	17.5
475	17.0	432	486	95	16.5	17.5
485	17.5	445	498	97	17.0	18.0
495	18.0	457	510	99	17.5	18.5
505	18.5	470	521	101	18.0	19.0
515	18.5	470	528	103	18.0	19.0
525	19.0	483	539	105	18.5	19.5
535	19.5	495	551	107	19.0	20.0
545	19.5	495	558	109	19.0	20.0
555	20.0	508	569	111	19,5	20.5
565	20.5	521	581	113	20.0	21.0
575	21.0	533	593	115	20.5	21.5
585	21.0	533	599	117	20.5	21.5
595	21.5	546	611	119	21.0	22.0
605	22.0	559	623	121	21.5	22.5

Rims outside the approved range in use from previous designs are not approved for new designs.