Product overview

		Steer	Drive	Trailer
Motorway	L	HSL	HDL HD HYBRID	HTL
Allround	R	HSR LSR	HDR HD HYBRID LDR	HTR
On/Off	C	HSC LSC	HDC	HTC
Off	O	HSO HCS MIL T9 LCS	HDO	
City	U	HSU	HDU	
Winter	W	HSW HSU M+S HSW COACH	HDW	HTW

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Commercial Vehicle Tires
Technical Data Book

Continental
Tires – Engineered in Germany.

Imprint

Technical data manuals for other tire groups:

Tires for passenger cars and vans:
Technical Data Book Car, 4x4, Van Tires

Industrial-tires:
Tire Service Data Industrial Vehicles

Motorcycle tires:
Technical Manual Motorcycle tires

Unfavourable weather conditions also accelerate the ageing process as well as the storage conditions thar were covered in the previous section.

An expert should always be called in to make a qualified judgment on the tires.

Regrooving of the tread pattern – usually when there are 2 or 3 millimetres of tread depth left – should be carried out only by qualified experts when the word "REGROOVABLE" is displayed on the tire sidewall.

Tire repairs

Tire damage may initially be just a question of damage to the outer rubber: however, this apparently superficial damage can eventually extend down to, or into, the tire's reinforcing materials (casing/belt). Therefore no time should be lost in taking the tire to a specialist for assessment as soon as any external damage is detected.

Damage to the reinforcing materials, for instance due to a nail puncture or a deep cut, is particularly dangerous because dirt and moisture may penetrate during the time between when the damage occurred and when it was detected. This may even result in more serious damage to the reinforcing materials. Damage to the inside of a tire can also cause a slow puncture.

The tire is then driven underinflated and consequently subjected to excessive strain. All these factors can make a tire non-repairable by the time the damage is finally discovered. If the tire is repaired regardless, even if it is repaired by a reputable tire specialist, it is possible that tire failure can still occur as a result of an overstrained area, other than that originally damaged.

This is why each tire must be carefully inspected by a tire expert before it is repaired. For only a specially trained person can decide whether it is possible to repair the tire and whether the tire will be capable of delivering safe performance after the repair. Repairs must be carried out by an authorized workshop, which is then responsible for inspecting the tire and for doing the job properly.

Repairs to the wheels are forbidden.

Terms and Explanations

Load/Speed Index

The nominal load carrying capacity of a tire is expressed as the Load Index (LI) and is expressed in kg. In addition to this, a reference speed is also determined in connection with the nominal load carrying capacity (refer to speed symbol and reference speed).

Speed symbol and reference speed (km/h)

Each speed symbol is assigned a reference speed in km/h or mph. The tire speed is assigned the nominal load carrying capacity of the tire.

PR

„Ply-rating" (also called „PR"), is an international designation for the solidity of the tire casing. In the past, the tire load-carrying class was only expressed by means of a PR number. The exact designation of load carrying capacity is nowadays expressed as a numerical code, namely the Load Index (or LI).

TT/TL

Tubeless – tires without inner tube
Tube Type – tires with inner tube

Minimum distance between rim centres

Adherence to the minimum distance between rim centres ensures the fault-free performance of two tires in accordance with the ETRTO Standard without chains, when mounted dually (refer also to page 5).

Maximum standard value in service

This is the maximum permissible width in accordance with the ETRTO Standard. It includes dynamic deformations are not included.

Actual value

Width and external diameter as provided by the manufacturer

Stat. radius

Distance from the centre of the wheel to the road surface

Rolling circumference

The distance covered on each revolution of the tire

Tire fitment

Describes single (S) or dual fitment (D)

Load carrying capacity in kg per axle at an inflation pressure in bar or psi

Axle load carrying capacities with single or dual fitment at an adjusted inflation pressure in bar and psi (1 bar ~ 14.5 psi)

Explanation of footnotes

data acc. to DIN 7805/4, WdK Guidelines 134/2, 142/2, 143/14, 143/25
1) Load index single/dual wheel fitment and speed symbol
2) TT = Tube Type, TL = Tubeless
3) For tire pressure of 8.0 bar (116 psi) and over use valve slit cover plate
* in preparation

Contents

Safety remarks

The extensive technical data and other information relating to tires and accessories on the following pages have been compiled to reflect as accurately and completely as possible the current state of development.

If this “Technical Data Book” is to be used as a basis for particularly important decisions, further data covering relevant standards such as **ETRTO**[1], **DIN**[2] and **WdK**[3] can also be called upon. Special information can, of course, also be obtained from us at the following address:

Continental Reifen Deutschland GmbH
P.O. Box 169
30001 Hannover
Germany

This service brochure is of informative character. All liability is excluded, whether for damage or for other legal reasons (see also page 2).

All types are in compliance with **DOT**[4] regulations and are marked accordingly.

Since 1982 all tires have been typed in accordance with **ECE**[5] directive 54 and thus also in accordance with the current **EU**[6] tire directives.

The data provided in this guide based on **average operating conditions as normally found in central Europe.**

Please contact us with respect to operating conditions differing from the above, e.g. for applications outside Central Europe.

The tire sizes given in this guide are not always identical to the ones available in the size range.

Lower inflation pressure, greater loads or higher speeds than those recommended by the vehicle or tire manufacturer shorten the service life of the tire.

These instructions must be followed if vehicle safety – and that of those mounting tires – is to be guaranteed. This applies above all to instructions regarding tire pressure.

Failure to comply with these instructions could result in tire damage that may even lead to tire blow-outs under certain circumstances. This, in turn, could cause traffic accidents involving damage to property and/or personal injury (see also page 5).

1) ETRTO - The European Tyre and Rim Technical Organisation, Brussels
2) DIN - Deutsches Institut für Normung, Berlin (German Institute for Standardization)
3) WdK - Wirtschaftsverband der deutschen Kautschuk-Industrie, Frankfurt/Main
4) DOT - Department of Transportation
5) ECE - Economic Commission for Europe (UN institution in Geneva)
6) EU - European Union, previously EEC

Operating instructions (DIN 7804/7805 and ECE-R 54)

Load capacity and speed
When determining the minimum tire size necessary for the axle of a vehicle, the authorized weight and the maximum design speed of the vehicle should always be used as a basis. Trailers first coming into service on or after January 1, 1990 must be equipped with tires suited for maximum speeds of at least 100 km/h, unless the trailer is clearly marked for a lower speed. The socalled “tolerance catalogue” must also be taken into consideration here. Nominal load capacity = 100% load, as the load index also indicates *).

Reference speed
This is the speed assigned as per nominal load capacity of the tire. The load capacity can be exceeded when the vehicle, due to its construction, has a lower maximum speed and vice versa (see the tables on page 12 and 13).

Inflation pressure
The inflation pressures indicated in the tables are minimum values given for reference purposes. All inflation pressures apply to the “cold” tire, i.e. the state in which the tire is in after having stood outdoors for several hours, not exposed to intense sunlight.

M+S tires
May be mounted on commercial vehicles whose construction allows for a higher maximum speed than approved for the tire if the tire’s lower approved speed is clearly posted in the vehicle in the driver’s field of vision (e.g. sticker on the instrument panel).

Mixed fitment
(radial/crossply) While it is allowed for a vehicle weighing more than 2.8t to be fitted axlewise with tires of different construction, it is recommended that tires of the same construction be mounted in all wheel positions.

Rims
Only the specified rims may be mounted on new commercial vehicles series. Tapered bead seat rims with a diameter of 16" or less should be equipped with safety shoulders (e.g. round hump) if tubeless radial tires are fitted on them. The rim sizes printed in bold type in the table from on page 38 are optimal Continental sizes with respect to service life, wear pattern and durability.

Wheels
The load capacity must be adequate in all cases.

*) See table on page 6

Tire designations

Load indices (LI)

LI	kg	LI	kg	LI	kg	LI	kg	LI	kg	LI	kg
19	77.5	50	190	81	462	112	1120	143	2725	174	6700
20	80	51	195	82	475	113	1150	144	2800	175	6900
21	82.5	52	200	83	487	114	1180	145	2900	176	7100
22	85	53	206	84	500	115	1215	146	3000	177	7300
23	87.5	54	212	85	515	116	1250	147	3075	178	7500
24	90	55	218	86	530	117	1285	148	3150	179	7750
25	92.5	56	224	87	545	118	1320	149	3250	180	8000
26	95	57	230	88	560	119	1360	150	3350	181	8250
27	97.5	58	236	89	580	120	1400	151	3450	182	8500
28	100	59	243	90	600	121	1450	152	3550	183	8750
29	103	60	250	91	615	122	1500	153	3650	184	9000
30	106	61	257	92	630	123	1550	154	3750	185	9250
31	109	62	265	93	650	124	1600	155	3875	186	9500
32	112	63	272	94	670	125	1650	156	4000	187	9750
33	115	64	280	95	690	126	1700	157	4125	188	10000
34	118	65	290	96	710	127	1750	158	4250	189	10300
35	121	66	300	97	730	128	1800	159	4375	190	10600
36	125	67	307	98	750	129	1850	160	4500	191	10900
37	128	68	315	99	775	130	1900	161	4625	192	11200
38	132	69	325	100	800	131	1950	162	4750	193	11500
39	136	70	335	101	825	132	2000	163	4875	194	11800
40	140	71	345	102	850	133	2060	164	5000	195	12150
41	145	72	355	103	875	134	2120	165	5150	196	12500
42	150	73	365	104	900	135	2180	166	5300	197	12850
43	155	74	375	105	925	136	2240	167	5450	198	13200
44	160	75	387	106	950	137	2300	168	5600	199	13600
45	165	76	400	107	975	138	2360	169	5800	200	14000
46	170	77	412	108	1000	139	2430	170	6000	201	14500
47	175	78	425	109	1030	140	2500	171	6150	202	15000
48	180	79	437	110	1060	141	2575	172	6300	203	15500
49	185	80	450	111	1090	142	2650	173	6500	204	16000

Tire designations

In the past the tire load capacity category was indicated solely by a PR number.

Now a numerical code – the load index (LI) – is used to exactly indicate the tire's load carrying capacity. See also page 6 and 8.

A speed symbol (SI) is used to designate the **speed rating** of the tire, as shown in the representation below.

The use of the LI and SI was prompted by the introduction of **ECE*) regulation no. 54** and the EU tire directive for Europe (in force as of January 1, 1993), according to which pneumatic tires intended for road use at speeds in excess of 80 km/h must carry an operational designation comprising LI (single/dual) and SI. Alongside the nominal operational designation a tire may also bear an additional operational designation, e.g. with a lower LI and an SI for higher speeds. These specifications have to be encircled.

Example:

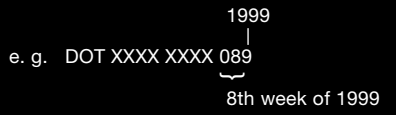
315/70 R 22.5 152/148 L 

An uncoded **maximum** load-capacity and tire-pressure data in lbs (1 lbs = 0.454 kg) and psi (pounds per square inch - 1 bar = 14.5 psi) may also be moulded into the tire.

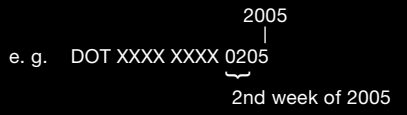
These specifications form part of the designation according to US Safety Regulation FMVSS 119**), which covers all new pneumatic tires for light trucks, trucks, buses and trailers intended for use on public highways as well as motorcycle tires. Canada and Israel also use this specification.

Date of manufacture

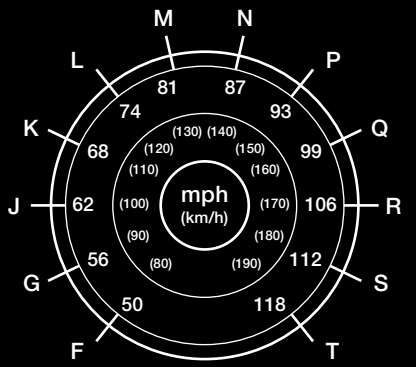
The last 3 digits of the DOT ID no. indicate the week and year of manufacture. For the years 1990 to 1999 a triangle is placed after these three digits (optional supplementary information).



From 2000



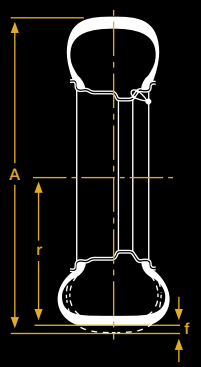
Speed symbols (SI)



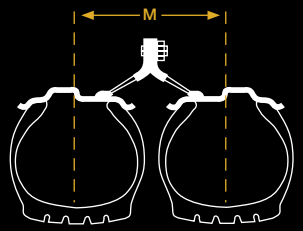
*) ECE = ECONOMIC COMMISSION FOR EUROPE, UN institution in Geneva

**) FMVSS = Federal Motor Vehicle Safety Standard

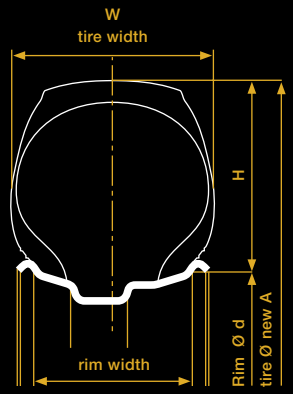
Tire designations



A = Outer diameter on the tire
r = static radius
f = deflection under load



M = Dual-tire spacing



W and Ø new when using the measuring rim

Vehicle tire group	Example of designation		Example comprises details of		
	Tire size [1]	Service [2] description	Tire width W	H:W %	Rim dia code d
Light truck	185 R 14 C	102/100 N	185 mm	~ 90	14
	195/75 R 16 C	107/105 N	195 mm	75	16
Truck	12 R 22.5	152/148 L	300 mm	~ 90	22.5
	315/80 R 22.5	156/150 L (154/150 M) [3]	315 mm	80	22.5
	12.00 R 20	154/150 K	300 mm	100	20
Trailer	365/80 R 20	160/– K	365 mm	80	20
	385/65 R 22.5	160/– K	385 mm	65	22.5
Bus	275/70 R 22.5	148/145 J	275 mm	70	22.5
	295/80 R 22.5	152/148 M	295 mm	80	22.5

1) "R" = radial design
"C" = light truck (van) tire with LI for single tires = 121 and below, see also page 5

2) Service description = load index for single/dual tires plus speed symbol
(see also tables on following pages)

3) Supplementary service description

Units of measurement and definition (DIN 70020)

As a matter of principle the technical data in the tables always complies with the international standards as specified by ISO and the ETRTO. Further details such as other tire sizes or designs, plus the static radius and the rolling circumference comply with DIN/WdK Guidelines.

Lengths
are given in millimetres (mm).

Rim width
The linear distance between the flanges of the rim.

Section height
Half the difference between the overall diameter and the nominal rim diameter.

Tire width
The section width of an inflated tire mounted on its theoretical rim and indicated in the tire size designation.

Overall diameter
The diameter of an inflated tire at the outermost surface of the tread.

Nominal diameter
It is a size code figure for reference purposes only, as indicated in the tire and rim size designation.

Inflation pressure
tire inflation pressure is given in Bar based on cold tire.

Outer diameter New *)
is a nominal size which refers to the tread centre.

Max. outer diameter in service
is the maximum diameter permitted in the tread centre as a result of permanent growth during tire use. Dynamic deformations are not included.

Cross-section width New *)
is a nominal size which refers to the smooth tire wall.

Max. operational width
is the maximum permitted width. This includes scuff ribs, decorative ribs, lettering and permanent growth during use. Dynamic deformations are not included.

Static radius
is the distance from the tire centre to the ground level. Measurements are checked on fitted-tires inflated to the inflation pressure specified in DIN 70020 Part 5.

Rolling circumference
is the distance covered by each revolution of the tire.

Load capacities
are given in kgs (weight in the sense of mass)

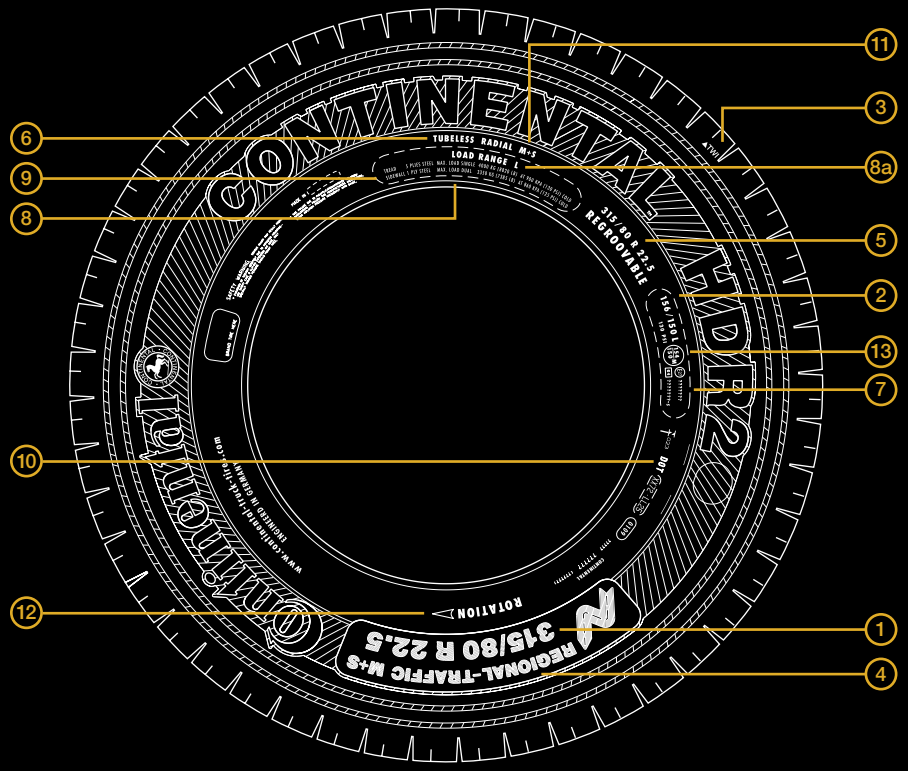
Dual-tire spacing
Maintaining the minimum spacing distance ensures that the two tires in a dual fitment arrangement function without any infringing the ETRTO standards providing the tires are not fitted with chains.

In the course of development, a variety of designations for tire dimensions have been introduced, some of which are used concurrently. The following combination is most frequently used: tire width in mm, then H : W (height : width) in % and finally the codes for the tire construction – for example R for "radial" and "-" for "crossply" – and the nominal rim diameter as code.

When planning vehicle wheel space, automotive designers must proceed on the basis of the maximum values for tire width and outer diameter, taking into account the tire's static and dynamic deformation. In this way they ensure that all standardly approved tires will fit in all cases. If this is not possible in exceptional cases, appropriate measures are to be taken to exclude any possible risk to safety.

*) Construction size

Side wall designations



The tire designation markings satisfy both the US standard (FMVSS 119) and the European standard (ECE-R 54).

Explanation

DOT = Department of Transportation

ETRTO = The European Tire and Rim Technical Organisation, Brussels

ECE = Economic Commission for Europe (UN Institution in Geneva)

FMVSS = Federal Motor Vehicle Safety Standard

(1) **Size designation**
315 = tire width in mm
80 = aspect ratio (section height to section width) = 80%
R = radial construction
22.5 = rim diameter (code)

(2) **Service description**
Consisting of
156 = load index for single fitment
150 = load index for dual fitment
L = code letter for speed Rating

(3) **TWI**
Tread Wear Indicator

(4) **Recommended application**
only Continental Truck Tires

(5) **Regroovable**
The manufacturer has designed the tire for regrooving

(6) **Tubeless**
Tube Type

(7) E = tires complies with value set forth in ECE-R 54
4 = country code for the country in which the approval number was issued (here: 4 = Netherlands)

(8) **US load designation**
Of single/dual fitment and indication of max. inflation pressure in psi (1 bar = 14.5 psi)

(8a) **Load range**
In accordance with US standard

(9) Data as per US safety standard on inner construction or number of plies, in this case
Tread: under the tread there are five steel cord plies (including carcass)
Sidewall: viewed from the side there is one steel cord ply (in this case the carcass ply)

(10) **DOT**
= U.S. Department of Transportation (responsible for tire safety standards)

(11) **M+S**
Designation for winter use suitability (Mud & Snow)

(12) **Rotation**
Recommended direction of rotation

(13) **Single Point**
Alternative load and speed

Load capacities

for various maximum design speeds

Maximum in km/h (determined by vehicle design)	C-tires with load index 121 (1450 kg) or less as single fitments Approved load capacity in % of the nominal load capacity [2] equals the load index for reference speed				
	L 120	M *) 130	N *) 140	P *) 150	Q – T 160 – 190
160	–	–	–	–	**100**
155	–	–	–	–	100
150	–	–	–	**100**	100
140	–	–	**100**	100	100
138	–	–	100	100	100
136	–	–	100	100	100
134	–	–	100	100	100
132	–	–	100	100	100
130	–	**100**	100	100	100
128	–		100	100	100
126	–		100	100	100
124	–		100	100	100
122	–		100	100	100
120	**100**		100	**100**	**100**
118			100.5		
116			101		
114			101.5		
112			102		
110			102.5		
108			103		
106			103.5		
104			104		
102			104.5		
100			105		
95			106.5		
90	see	see	107.5	see	see
85	column	column	108.5	column	column
80	N	N	110	N	N
75			111		
70			112.5		
65			113.5		
60			115		
55			117.5		
50			120		
45			122		
40 [1]			125		
35 [1]			129		
30 [1]			135		
25 [1]			142		
20 [1]			150		
15 [1]			160		
Application restricted speed					
10 [1]			175		
5 [1]			190		
Standstill [1]			210		

Load capacities

for various maximum design speeds

Maximum in km/h (determined by vehicle design)	Tires with load index 122 (1500 kg) or more as single fitments Approved load capacity in % of the nominal load capacity [2] equals the load index for reference speed						
	D 65	F 80	G 90	J 100	K 110	L 120	M 130
130	–	–	–	–	–	–	**100**
127.5	–	–	–	–	–	–	100
125	–	–	–	–	–	–	100
122.5	–	–	–	–	–	–	100
120	–	–	–	–	–	**100**	100
117.5	–	–	–	–	–		100
115	–	–	–	–	–		100
112.5	–	–	–	–	–		100
110	–	–	–	–	**100**		100
107.5	–	–	–	–			100
105	–	–	–	–			100
102.5	–	–	–	–			100
100	–	–	–	**100**			100
95	–	–	–				101
90	–	–	**100**				102
85	–	–	102				103
80	–	**100**					104
75	–	102.5					105.5
70	–	105					107
65	**100**	107.5					108.5
60	100						110
55	–						111
50	102						112
45	–						113
40 [1]	107						115
35 [1]	–	see	see	see	see	see	119
30 [1]	116	column	column	column	column	column	125
25 [1]	–	M	M	M	M	M	135
20 [1]	140						150
15 [1]	150						165
Application restricted speed							
10 [1] [3]	165						180
5 [1] [3]	190						210
Standstill [1] [3]	225						250

1) Dual-tires = 2 x single load capacity
2) A sign indicating the max speed must be attached to trailers restricted to speeds below 100 km/h (62 mph).
3) Ask the tire manufacturer about these applications.
*) On M-, N- and P-tires can be interpolated in steps of 1.25 mph (2 km/h) from 87 mph (140 km/h) upwards.

Tires with SI ratings P and Q under full load at speeds of over 140 km/h should be inflated an extra 0.1 bar for every excess 10 km/h. No excess loads are applicable over 65 km/h for tires on heavy trailers (with laden weight > 3.5 t).

The load/speed variation given on this page do not apply to the additional service description (the so called Single Point).

See general notes on page 5.

This table is only applicable in conjunction with air pressure multiplier on page 14.
If applied please check dual spacing (dual tire contact) and rim status.

Air pressure multiplier

for increased load capacity due to maximum design speed

Maximum speed in km/h (determined by vehicle type)	Air pressure multiplier for reference speed (speed index) of tire	
	G, J, K, L, M 90 km/h - 130 km/h	N, P, Q, R, S 140 km/h - 180 km/h
140		1
135		1
130	1	1
125	1	1
120	1	1
115	1	1.01
110	1	1.02
105	1	1.06
100	1	1.06
95	1	1.08
90	1	1.09
85	1	1.10
80	1	1.12
75	1.01	1.14
70	1.02	1.15
65	1.04	1.15
60	1.06	1.18
55	1.07	1.22
50	1.08	1.25
45	1.09	1.28
40	1.10	1.30
35	1.11	1.30
30	1.13	1.30
25	1.17	1.30
20	1.21	1.30
15	1.25	1.30
10	1.30	1.35
5	1.40	1.35
0	1.40	1.40

The multipliers cited are to be used for an operating pressure of up to 10 bar.

Example: In the case of a K-rated tire (110 km/h) and nominal inflated pressure of 7.5 bar, the inflation pressure can be increased to 8.85 bar if the vehicle's maximum design speed is set at 40 km/h (1.18 x 7.5 bar) to exploit an increased load capacity of 115% of nominal load capacity.

Load capacities of tires in special cases

(DIN 7804/7805 and WdK-LL 140)

Case	Type of service	Approved load capacity as % of the nominal load capacity in the tables
1	**Special-service vehicles:** Fire-brigade vehicles with special superstructures, road flushers, road sweepers, garbage trucks, cherry-pickers, municipal service vehicles of a similar nature and other public utility vehicles.	110
2	**Commercial vehicles:** With special superstructures (concrete mixers, aircraft refuellers) used in local service with maximum service speeds not in excess of 60 km/h.	110
3	**Regular-service buses (M 3-Class II):** In urban service, with maximum service-related speeds of up to 60 km/h.	110
4	**Regular-service buses (M 3-Class I):** (see also DIN 7805) In urban and suburban service, if average speed does not exceed 40 km/h.	115
5	Tires on the **front axle of trucks** with facilities for **snow removal** (front-end snow plough/rotary snow plough and the like) at service-related speeds of 50 km/h 62 km/h	 120 115
6	For internal use on aircraft refuellers at speeds of up to 30 km/h (inflation pressure + 15%, no reduction for dual fitment).	135
7	Caravans and other **passenger-car trailers** (only for C tires, see also WdK directive 195, page 3) for speeds of up to 100 km/h.	105

Please note: This chart is not applicable in conjunction with the charts on pages 12 or 13 in correspondence with the chart on page 14.

Truck chassis with crane superstructure (mobile crane)

Tire size	PR	Single/ dual fitment	Load capacity (kg) per axle and speed (km/h)								Tire pressure [2]
			Stationary [1]	10	20	50	65	70	75	80	bar (psi)
10.00 R 20	16	S	16500	12000	10000	7700	7200	7000	6800	6700	**9.0** (131)
11 R 22.5		D	33000	24000	20000	14000	13000	12800	12400	12000	
11.00 R 20	16	S	17900	13000	10800	8300	7800	7600	7400	7200	**10.0** (145)
12 R 22.5		D	35800	26000	21600	14800	14000	13600	13200	12800	
12.00 R 20	18	S	20500	14750	12300	9200	8700	8550	8400	8250	**10.0** (145)
13 R 22.5		D	41000	29500	24600	16600	15700	15400	15200	14800	
14.00 R 20	18	S	22500	16200	13500	10080	9675	9450	9225	9000	**8.0** (116)
		D	45000	32400	27000	18100	17400	17000	16600	16500	
12.00 R 24	20	S	25000	18000	15000	11450	10675	10450	10280	10000	**10.0** (145)
		D	48700	35000	29200	20000	18700	18300	18000	17500	

1) When boom is swung out in unfavourable position

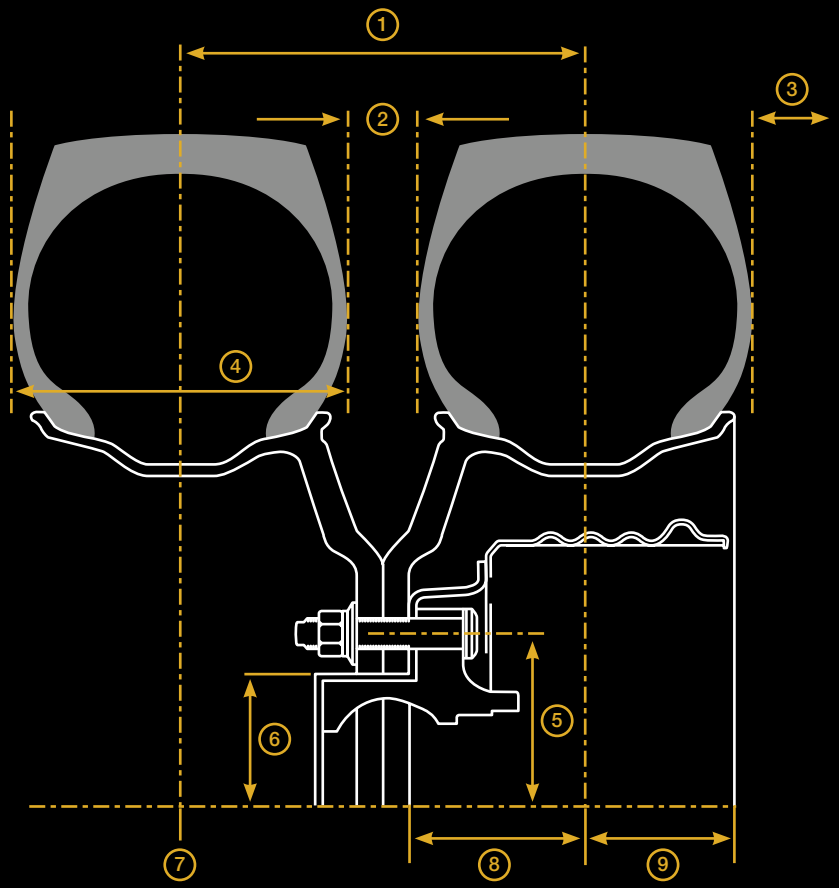
2) For inflation pressure of 8.0 bar (116 psi) and over use valve slit cover plate

Bus tire fitment

Recommended inflation pressures for tires on town and country buses for various axle loads

Tire size	Operating code	Load index	Single/ dual fitment	Max. permitted axle weight (kg) for inflation pressure (bar) (psi) **including +10% extra as per German Transport Association (DIN 7805)** +15% extra as per German Transport Association (DIN 78 05)									
				4.5 (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
10.00 R 20	146/143	146	S	3960	4310	4650	4985	5315	5640	5960	6275	**6590**	6900
		143	D	7195	7830	8450	9060	9660	10250	10830	11405	**11970**	12535
385/55 R 22.5	160/ -	160	S	5940	6465	6975	7480	7975	8460	8945	9415	**9885**	10350
275/70 R 22.5	148/145	148	S	4160	4525	4885	5235	5580	5925	6260	6590	**6920**	7245
		145	D	7660	8335	8995	9640	10280	10910	11525	12140	**12740**	13340
305/70 R 22.5	150/148	150	S	4425	4810	5195	5570	5935	6300	6655	7010	**7360**	7705
		148	D	8320	9050	9770	10475	11165	11850	12520	13185	**13840**	14490
295/80 R 22.5	152/148	152	S	4685	5100	5505	5900	6290	6675	7055	7430	**7800**	8165
		148	D	8320	9050	9770	10475	11165	11850	12520	13185	**13840**	14490
11 R 22.5	148/145	148	S	4160	4525	4885	5235	5580	5925	6260	6590	**6920**	7245
		145	D	7660	8335	8995	9640	10280	10910	11525	12140	**12740**	13340

Wheels and rims



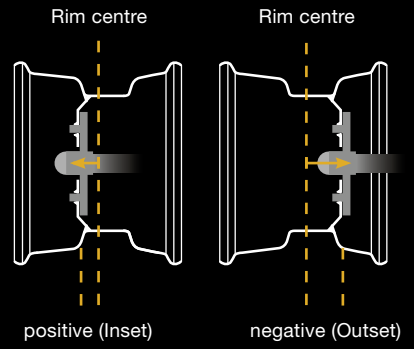
Dual spacing

1. dual spacing
2. tire clearence
3. vehicle clearence
4. tire section width
5. bolt circle diameter
6. center hole diameter
7. tire center line
8. negative outset
9. backspace

Offset

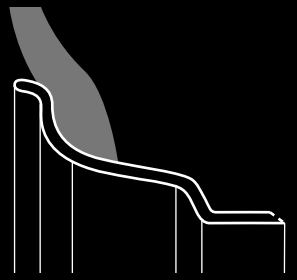
The offset is the distance from the centre of the wheel to the inside surface of the wheel disk on the hub. The wheel insertion depth can be positive, negative or zero.

The insertion depth not only ensures adequate space for the brake drums, it also determines drive characteristics, tracking width, steering swivel, pin offset and wheel bearing guidance. In the case of twin tire fitment, the insertion depth also influences the distance between centres.

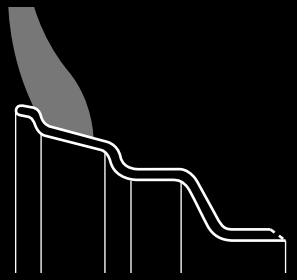


There are three main types of rim for commercial vehicle tires:

One-piece well base rims for tubeless tires

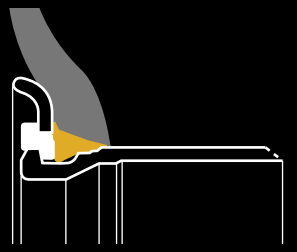


Standard and low-profile light trucks 14"-17"



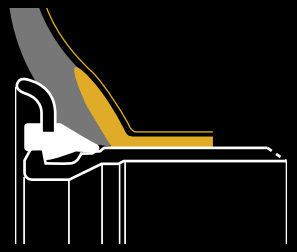
Standard and low-profile 17.5", 19.5", 22.5"

Multi-part flat base rims for tubeless tires



80-series tires 20"

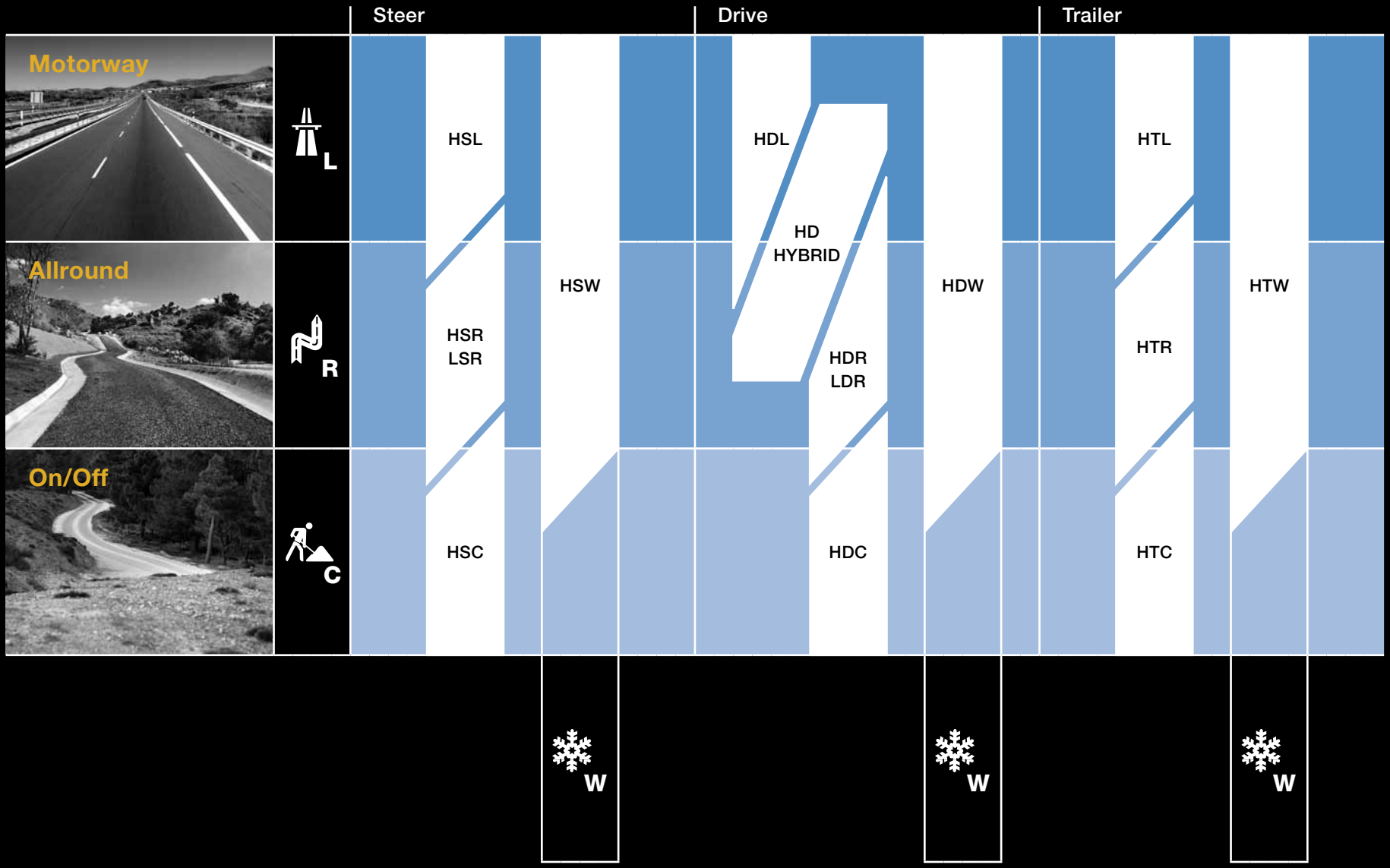
Multi-part flat base rims for tires with inner tubes



High profile ratio mainly 20"

Please contact rim manufacturers for detailed information regarding available rim sizes and variants.

Customer Segment Goods



Customer Segment People

		All axles				Drive			
 Motorway	L		HSL	HSW COACH			HDL HD HYBRID	HDW SCAN	
 Allround	R		HSR	HSW HSW SCAN			HD HYBRID	HDW SCAN	
 City	U		HSU HSU M+S	HSW SCAN HSU M+S			HDU	HDW SCAN	
	W			W				W	

Customer Segment Construction

		Steer	Drive	Trailer
 Allround	R	HSR	HDR	HTR
 On/Off	C	HSC LSC LCS	HDC	HTC
 Off	O	HSO HCS MIL T9	HDO	

Tread pattern overview Goods

Steer

Motorway


HSL 2


HSL 2
50 / 55 series


HSL 1

Allround


HSR 2


HSR 2
65 / 55 series


HSR 1
55 / 65 series


HSR 1
22.5


HSR 1
19.5


HSR
9 + 10 R 22.5


HSR
11 + 12 R 22.5


HSR
20 / 22 / 24


RS 415 N
13 R 22.5


RS 63
7.50 R 20
8.25 R 20


LSR 1


LSR 1
9.5 R 17.5
10.0 R 17.5

Drive

Motorway


M + S
HDL 2


M + S
HDL 1


M + S
HDL 1
SUPERDRIVE


M + S
HD HYBRID
also for Allround

Allround


M + S
HDR 2
also as ContiRe


M + S
HDR +
22.5
also as ContiRe


M + S
HDR
19.5 / 22.5


M + S
HDR
20 / 22 / 24

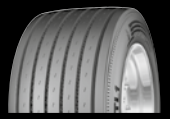

M + S
LDR 1
17.5

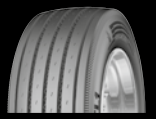

M + S
LDR 1
17.5

Trailer

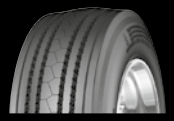
Motorway


HTL 2


HTL 1
19.5
also as ContiRe


HTL 1
22.5


HTL


HTL
19.5

Allround


HTR 2
also as ContiRe


HTR 1
55 series
also as ContiRe


HTR 1
19.5


HTR
also as ContiRe


HTR
425/65 R 22.5
445/65 R 22.5

Tread pattern overview Goods

Steer

On/Off


M + S

HSC 1

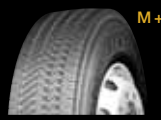

M + S

HSC 1
(alternative tread pattern)
also as ContiRe


M + S

HSC
20 / 22

Winter


M + S

HSW 2 SCANDINAVIA


M + S

HSW 2 SCANDINAVIA
55 / 65 series


M + S

HSW SCANDINAVIA
65 series


M + S

HSW SCANDINAVIA
also as ContiRe

Drive

On/Off


M + S

HDC 1
also as ContiRe


M + S

HDC

Winter


M + S

HDW 2 SCANDINAVIA


M + S

HDW SCANDINAVIA
also as ContiRe


M + S

HDW
also as ContiRe

Trailer

On/Off


M + S

HTC 1
also as ContiRe


M + S

HTC
19.5 / 22.5

Winter


M + S

HTW 2 SCANDINAVIA


M + S

HTW

Tread pattern overview People

All axles

Motorway


HSL 2


HSL 1

Allround


HSR 2
22.5


HSR 1
22.5


HSR 1
19.5


HSR
11 + 12 R 22.5

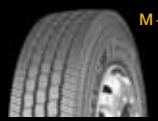
City


HSU 1
also as ContiRe


HSU


M + S
HSU 1 M+S
also as ContiRe

Winter


M + S
HSW 2 COACH


M + S
HSW 2 SCANDINAVIA


M + S
HSW SCANDINAVIA
also as ContiRe


M + S
HSU 1 M+S
also as ContiRe

Drive

Motorway


M + S
HDL 2


M + S
HDL 1

Allround


M + S
HD HYBRID
also for Motorway

City


M + S
HDU 1
55 series


M + S
HDU
also as ContiRe

Winter


M + S
HDW 2 SCANDINAVIA


M + S
HDW SCANDINAVIA
also as ContiRe

Tread pattern overview Construction

Steer

Allround

HSR 2

HSR 2
65 / 55 series

HSR 1
55 / 65 series

HSR 1
22.5

HSR 1
19.5

HSR
9 + 10 R 22.5

HSR
11 + 12 R 22.5

HSR
20 / 22 / 24

Drive

M + S

HDR 2
also as ContiRe

M + S

HDR +
22.5
also as ContiRe

M + S

HDR
19.5 / 22.5

M + S

HDR
20 / 22 / 24

Trailer

HTR 2
also as ContiRe

HTR 1
55 series
also as ContiRe

HTR 1
19.5

HTR
also as ContiRe

HTR
425/65 R 22.5
445/65 R 22.5

Tread pattern overview Construction

Steer

On/Off


M + S

HSC 1
also as ContiRe


M + S

HSC 1
11 / 12 / 13 R 22.5


M + S

HSC
20 / 22 series


M + S

LSC

Off


M + S

HSO / T9


M + S

HSO SAND


M + S

HCS


M + S

MIL


M + S

LCS

Drive

On/Off


M + S

HDC 1
also as ContiRe


M + S

HDC

Off


M + S

HDO

Trailer

On/Off


M + S

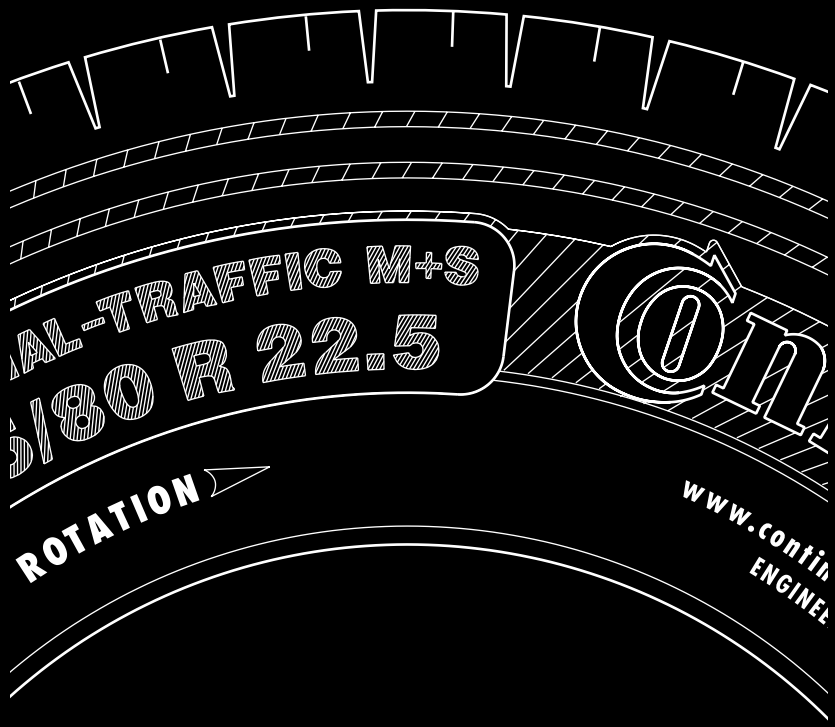
HTC 1
also as ContiRe


M + S

HTC
19.5 / 22.5

M+S Designation

All Continental drive axle tires have the M+S designation. In addition, special steering axle and trailer tires also have this designation. The best traction on wintry roads is obtained by HSW-/HDW-Scandinavia tread patterns. Below you find the most common products from our truck tire range. You find on the opposite page the complete truck tire articles that have an M+S designation.



M+S Designated Tires

Steer	
Tire size	Tread pattern
265/70 R 17.5	LCS
9.5 R 17.5	LSC
245/70 R 19.5	HSW SCANDINAVIA
265/70 R 19.5	HSW SCANDINAVIA
285/70 R 19.5	HSW SCANDINAVIA
295/80 R 22.5	HSC 1, HSW SCANDINAVIA, HSW 2 SCANDINAVIA, HSW 2 COACH
315/80 R 22.5	HSC 1, HSW SCANDINAVIA, HSW 2 SCANDINAVIA
275/70 R 22.5	HSU 1 M+S, HSW
315/70 R 22.5	HSW SCANDINAVIA, HSW 2 SCANDINAVIA
385/65 R 22.5	HSC 1, HSW SCANDINAVIA, HSW 2 SCANDINAVIA
385/55 R 22.5	HSW SCANDINAVIA, HSW 2 SCANDINAVIA
10 R 22.5	T9
11 R 22.5	HSC 1
12 R 22.5	HSC 1
13 R 22.5	HSC 1
365/85 R 20	HCS
395/85 R 20	HCS
11.00 R 20	HSC
12.00 R 20	HSC, HSO SAND
14.00 R 20	HCS, HSO SAND, MIL
12.00 R 24	HSC, HSC 1

Drive	
Tire size	Tread pattern
205/75 R 17.5	LDR 1
215/75 R 17.5	LDR 1
225/75 R 17.5	LDR 1
235/75 R 17.5	LDR 1
245/75 R 17.5	LDR
265/70 R 17.5	LDR 1
8 R 17.5	LDR
8.5 R 17.5	LDR
9.5 R 17.5	LDR 1
10 R 17.5	LDR 1

Drive	
Tire size	Tread pattern
245/70 R 19.5	HDR
265/70 R 19.5	HDR
285/70 R 19.5	HDR
305/70 R 19.5	HDR
295/80 R 22.5	HDC 1, HDL 1, HDL 2, HDR+, HDR 2, HDW, HDW SCANDINAVIA, HDW 2 SCANDINAVIA, HSW 2 COACH, HD HYBRID
315/80 R 22.5	HDC 1, HDL 1, HDO, HDR+, HDR 2, HDW, HDW SCANDINAVIA, HDW 2 SCANDINAVIA, HD HYBRID
255/70 R 22.5	HDR
275/70 R 22.5	HDR, HDU, HSU 1 M+S, HDW SCANDINAVIA
305/70 R 22.5	HDR
315/70 R 22.5	HDL 1, HDL 2, HDR+, HDR 2, HDW SCANDINAVIA, HDW 2 SCANDINAVIA, HD HYBRID
295/60 R 22.5	HDR+, HDL 2, HD HYBRID
315/60 R 22.5	HDR+, HDL 2, HD HYBRID
385/55 R 22.5	HDC, HDU 1
495/45 R 22.5	HDL 1 SUPERDRIVE
10 R 22.5	RMS
11 R 22.5	HDR, HDW
12 R 22.5	HDC 1, HDR, HDW
13 R 22.5	HDC 1, HDO, HDW
10.00 R 20	HDR
12.00 R 20	HDC, HDC 1
12.00 R 24	HDC 1

Trailer	
Tire size	Tread pattern
265/70 R 19.5	HTW
275/70 R 22.5	HTC
385/65 R 22.5	HTC 1
425/65 R 22.5	HTC
445/65 R 22.5	HTC, HTC 1
385/55 R 22.5	HTW 2 SCANDINAVIA
385/65 R 22.5	HTW 2 SCANDINAVIA

Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions								Load Index	Tire fitment	Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]		Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference				**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %														
205/65 R 17.5	**HTR**	129/127J (130/130F)		J 100 (F 80)	TL	**6.00** 6.75	**231** 239	**213** 221	**721**	**204** 213	**711**		**332**	**2155**	130 129 130 127	S S D D		2370 2310 4745 4370	2560 2495 5125 4720	2745 2675 5490 5060	2925 2850 5855 5395	3105 3025 6215 5725	3280 3195 6565 6045	3455 3365 6915 6370	3630 3530 7260 6685	3800 3700 7600 7000
245/70 R 17.5	**LSR 1**	136/134 M		M 130	TL	**6.75** 7.50	**270** 279	**250** 258	**803**	**240** 248	**789**		**360**	**2390**	146 143 136 146 141 134	S S S D D D	 2690 5095	3745 3405 2930 7495 6435 5545	4045 3675 3160 8090 6945 5985	4335 3940 3390 8675 7445 6415	4620 4200 3610 9245 7935 6840	4905 4455 3835 9810 8420 7260	5185 4710 4050 10370 8900 7670	5460 4955 4265 10920 9370 8075	5730 5205 4480 11460 9835 8480	6000 5450 12000 10300
	LDR 1	136/134 M		M 130	TL																						
	HTR	143/141 J (146/146 F)		J 100 (F 80)	TL																						
265/70 R 17.5	**LSR 1**	139/136 M		M 130	TL	6.75 **7.50**	286 **295**	264 **272**	**831**	254 **262**	**817**		**376**	**2492**	139 137 136 134	S S D D	3065 3055 5650 5635	3335 3325 6150 6130	3600 3585 6635 6615	3860 3845 7115 7090	4115 4100 7585 7560	4365 4350 8050 8020	4615 4600 8505 8480	4860 8960		
	LCS	137/134 L		L 120	TL																						
	LDR 1	139/136 M		M 130	TL																						
205/75 R 17.5	**LSR 1**	124/122 M		M 130	TL	5.25 **6.00** 6.75	222 **231** 239	205 **213** 221	**765**	197 **204** 212	**753**		**353**	**2295**	124 122	S D	2125 3985	2310 4335	2495 4680	2675 5015	2850 5350	3025 5675	3200 6000			
	LDR 1	124/122 M		M 130	TL																						
215/75 R 17.5	**LSR 1**	126/124 M		M 130	TL	**6.00** 6.75	**239** 246	**220** 228	**779**	**211** 219	**767**		**359**	**2340**	135 126 133 124	S S D D	 2385 4490	2850 2595 5385 4885	3075 2800 5815 5275	3295 3005 6235 5655	3515 3200 6645 6030	3730 3400 7050 6400	3940 7450	4150 7845	4360 8240	
	LDR 1	126/124 M		M 130	TL																						
	HTR	135/133 J		J 100	TL																						
225/75 R 17.5	**LSR 1**	129/127 M		M 130	TL	6.00 **6.75**	246 **254**	227 **235**	**797**	218 **226**	**783**		**366**	**2390**	129 127	S D	2455 4650	2675 5060	2885 5460	3095 5855	3295 6240	3500 6620	3700 7000			
	LDR 1	129/127 M		M 130	TL																						
235/75 R 17.5	**LSR 1**	132/130 M		M 130	TL	**6.75** 7.50	**262** 271	**242** 250	**811**	**233** 241	**797**		**373**	**2430**	143 132 141 130	S S D D	 2520 4795	3405 2745 6435 5215	3675 2960 6945 5630	3940 3175 7445 6035	4200 3385 7935 6435	4455 3590 8420 6825	4710 3795 8900 7215	4955 4000 9370 7600	5205 9835	5450 10300
	LDR 1	132/130 M		M 130	TL																						
	HTR	143/141 J		J 100	TL																						

See flap inside back cover for footnotes

Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions									Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]		Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment									
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
245/75 R 17.5	**LSR**	134/132 M (136/134 L)		M 130 (L 120)	TL	**6.75** 7.50	**270** 279	**250** 258	**827**	**240** 248	**813**		**379**	**2480**	136 134 134 132	S S D D	2690 2675 5095 5045	2930 2910 5545 5490	3160 3140 5985 5925	3390 3365 6415 6355	3610 3590 6840 6775	3835 3810 7260 7185	4050 4025 7670 7595	4265 4240 8075 8000	4480 8480	
	LDR	134/132 M (136/134 L)		M 130 (L 120)	TL																					
8.5 R 17.5	**LSR**	121/120 L		L 120	TL	5.25 **6.00** 6.75	233 **242** 251	216 **224** 232	**817**	207 **215** 223	**802**		**374**	**2445**	121 120	S D	2160 4170	2350 4535	2535 4895	2720 5250	2900 5600					
	LDR	121/120 L		L 120	TL																					
9.5 R 17.5	**LSC**	129/127 L (131/128 M)		L 120 (M 130)	TL	6.00 **6.75**	261 **270**	242 **250**	**857**	232 **240**	**842**		**391**	**2565**	131 129 128 127	S S D D	2460 2455 4540 4650	2675 2675 4940 5060	2885 2885 5335 5460	3095 3095 5715 5855	3300 3295 6095 6240	3500 3500 6470 6620	3700 3700 6835 7000	3900 7200		
	LSR 1	129/127 L		L 120	TL																					
	LDR 1	129/127 L		L 120	TL																					
10 R 17.5	**LSR 1**	134/132 L		L 120	TL	6.75 **7.50**	277 **286**	256 **264**	**875**	246 **254**	**858**		**398**	**2615**	134 132	S D	2675 5045	2910 5490	3140 5925	3365 6355	3590 6775	3810 7185	4025 7595	4240 8000		
	LDR 1	134/132 L		L 120	TL																					
8 R 17.5 C	**LSR**	117/116 L		L 120	TL	**5.25** 6.00 6.75	**225** 234 243	**208** 216 224	**797**	**200** 208 216	**784**		**367**	**2390**	117 113 116 112	S S D D	2040 1955 3970 3815	2220 2130 4320 4150	2395 2300 4660 4480	2570 5000						
	LDR	113/112 M		M 130	TL																					
445/45 R 19.5	**HTL 1**	160/ - J		J 100	TL	**14.00** 15.00	**0** 0	**454** 464	**911**	**436** 446	**903**		**416**	**2712**	160	S	5165	5620	6065	6505	6935	7360	7775	8190	8595	9000
	HTL 1 ContiRe	160/ - J		J 100	TL																					
385/55 R 19.5	**HTL 1**	156/ - J		J 100	TL	**11.75** 12.25	**0** 0	**396** 401	**935**	**381** 386	**919**		**422**	**2785**	156	S					6165	6540	6910	7280	7640	8000
	HTL	156/ - J		J 100	TL																					
385/65 R 19.5	**HTR**	160/ - K		K 110	TL	**11.75** 12.25	**0** 0	**405** 410	**1015**	**389** 394	**995**		**454**	**3015**	160	S	5165	5620	6065	6505	6935	7360	7775	8190	8595	9000

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Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions									Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]		Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment										
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			4.5 (65)	5.0 (73)	5.5 (80)	6.0 (87)	6.5 (94)	7.0 (102)	7.5 (109)	8.0 (116)	8.5 (123)	9.0 (131)
245/70 R 19.5	**HSR 1**	136/134 M		M 130	TL	**6.75**	**270**	**250**	**853**	**240**	**839**		**389**	**2560**	141	S	3095	3365	3635	3895	4155	4405	4655	4905	5150	
						7.50	279	258		248					136	S	2690	2930	3160	3390	3610	3835	4050	4265	4480	
	HSW SCAN	136/134 M		M 130	TL										140	D	6010	6540	7055	7565	8065	8560	9045	9525	10000	
	HDR	136/134 M		M 130	TL										134	D	5095	5545	5985	6415	6840	7260	7670	8075	8480	
	HTR 1	141/140 J		J 100	TL	6.75	270	250		240																
						7.50	**279**	**258**	**853**	**248**	**839**		**389**	**2560**												
265/70 R 19.5	**HSR 1**	140/138 M		M 130	TL	**6.75**	**286**	**264**	**881**	**254**	**867**		**401**	**2645**	143	S		3560	3845	4120	4395	4665	4930	5190	5450	
						7.50	295	272		262					140	S	3155	3430	3700	3970	4230	4490	4745	5000		
	HSW SCAN	140/138 M		M 130	TL										141	D		6735	7270	7795	8310	8815	9315	9810	10300	
	HDR	140/138 M		M 130	TL										138	D	5955	6480	6995	7495	7995	8480	8960	9440		
	HTR 1	143/141 J		J 100	TL	**7.50**	**295**	**272**	**881**	**262**	**867**		**401**	**2645**												
						8.25	303	282		270																
	HTW	143/141 J		J 100	TL																					
285/70 R 19.5	**HSR 1**	145/143 M		M 130	TL	**7.50**	**311**	**286**	**911**	**275**	**895**		**413**	**2730**	150	S		4185	4515	4840	5160	5475	5790	6095	6400	6700
						8.25	318	294		283					145	S	3485	3790	4090	4385	4675	4965	5245	5525	5800	
	HSW SCAN	145/143 M		M 130	TL	9.00	327	302		291					148	D		7870	8495	9105	9710	10305	10885	11465	12035	12600
	HDR	145/143 M		M 130	TL										143	D	6550	7125	7690	8245	8790	9330	9860	10380	10900	
	HTR 1	150/148 J		J 100	TL	**8.25**	**318**	**294**	**911**	**283**	**895**		**413**	**2730**												
						9.00	327	302		291																
305/70 R 19.5	**HSR 1**	148/145 M		M 130	TL	**8.25**	**334**	**309**	**941**	**297**	**923**		**424**	**2815**	148	S	3785	4120	4445	4765	5080	5390	5695	6000	6300	
						9.00	343	317		305					145	D	6970	7585	8185	8775	9355	9930	10490	11050	11600	
	HDR	148/145 M		M 130	TL																					
495/45 R 22.5	**HDL 1 Superdrive**	169/ - K		K 110	TL	16.00	0	510		496					169	S	6660	7245	7820	8385	8940	9485	10025	10555	11080	11600
						17.00	**0**	**520**	**1036**	**506**	**1025**		**470**	**3142**												
355/50 R 22.5	**HSL 2**	154/- K (152/- L)		K 110 (L 120)	TL	**11.75**	**0**	**401**	**1012**	**361**	**996**		**435**	**2812**	154	S	4305	4685	5055	5420	5780	6130	6480	6825	7160	7500
															152	S	4265	4640	5010	5370	5725	6075	6420	6760	7100	

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Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions									Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]		Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment									
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
385/55 R 22.5	**HSL 2**	160/ - K (158/ - L)		K 110 (L 120)	TL	**11.75** 12.25	**0** 0	**396** 401	**1012**	**381** 386	**996**		**461**	**3020**	160 158	S S	5165 5110	5620 5555	6065 6000	6505 6430	6935 6855	7360 7275	7775 7690	8190 8095	8595 8500	9000
	HSR 2	160/ - K (158/ - L)		K 110 (L 120)	TL																				
	HSW 2 SCAN *	160/ - K (158/ - L)		K 110 (L 120)	TL																				
	HTW 2 SCAN	160/ - K (158/ - L)		K 110 (L 120)	TL																				
	HSR 1	158/ - L (160/ - K)		L 120 (K 110)																					
	HSW SCAN	158/ - L (160/ - K)		L 120 (K 110)																					
	HDU 1	160/ - J		J 100																					
	HDC	158/- K (160/- J)		K 110 (J 100)																					
	HTL 1	160/ - K (158/ - L)		K 110 (L 120)																					
	HTR 1	160/ - K (158/ - L)		K 110 (L 120)																					
	HTR 1 ContiRe	160/ - K (158/ - L)		K 110 (L 120)																					

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Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions									Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]		Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment									
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
295/60 R 22.5	**HSR 1**	150/147 L		L 120	TL	**9.00** 9.75	**329** 338	**304** 312	**940**	**292** 300	**926**		**434**	**2806**	150 147	S D	3845 7060	4185 7685	4515 8290	4840 8890	5160 9480	5475 10055	5790 10630	6095 11190	6400 11750	6700 12300
	HDL 2	150/147 L		L 120	TL																				
	HSL 2	150/147 L		L 120	TL																				
	HD Hybrid*	150/147 L		L 120	TL																				
	HD Hybrid ContiRe*	150/147 L		L 120	TL																				
	HDR+	150/147 K		K 110	TL																				
	HDR+ ContiRe	150/147 K		K 110	TL																				
305/60 R 22.5	**HSR 1**	150/147 L		L 120	TL	**9.00** 9.75	**336** 344	**310** 318	**952**	**298** 306	**938**		**437**	**2840**	150 147	S D	3845 7060	4185 7685	4515 8290	4840 8890	5160 9480	5475 10055	5790 10630	6095 11190	6400 11750	6700 12300
	HDR+	150/147 K		K 110	TL																				
315/60 R 22.5	**HSL 2**	152/148 L		L 120	TL	**9.00** 9.75	**344** 352	**318** 326	**966**	**305** 313	**950**		**442**	**2880**	154 152 150 148	S S D D	4305 4075 7695 7235	4685 4435 8370 7870	5055 4785 9035 8495	5420 5130 9685 9105	5780 5470 10325 9710	6130 5805 10955 10305	6480 6135 11580 10885	6825 6460 12195 11465	7160 6780 12800 12035	7500 7100 13400 12600
	HSR 1	152/148 L		L 120	TL																				
	HSL 2	154/150 L		L 120	TL																				
	HDL 2	152/148 L		L 120	TL																				
	HD Hybrid*	152/148 L		L 120	TL																				
	HD Hybrid ContiRe*	152/148 L		L 120	TL																				
	HDR+	152/148 K		K 110	TL																				
	HDR+ ContiRe	152/148 K		K 110	TL																				

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Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions									Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]		Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment									
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
385/65 R 22.5	**HSR 2**	160/ - K (158/- L)		K 110 (L 120)	TL	**11.75** 12.25	**0** 0	**405** 410	**1092**	**389** 394	**1072**		**495**	**3250**	160 158	S S	5165 5110	5620 5555	6065 6000	6505 6430	6935 6855	7360 7275	7775 7690	8190 8095	8595 8500	9000
	HSW 2 SCAN *	160/ - K (158/- L)		K 110 (L 120)	TL																				
	HSC 1	160/ - K (158/- L)		K 110 (L 120)	TL																				
	HSW SCAN	158/ - L (160/ - J)		L 120 (J 100)	TL																				
	HSR 1	158/ - L (160/ - K)		L 120 (K 110)	TL																				
	HTL 2	160/ - K (158/- L)		K 110 (L 120)	TL																				
	HTW 2 SCAN	160/ - K (158/- L)		K 110 (L 120)	TL																				
	HTR	160/ - K (158/ - L)		K 110 (L 120)	TL																				
	HTR ContiRe	160/ - K (158/ - L)		K 110 (L 120)	TL																				
	HTR 2	160/ - K (158/- L)		K 110 (L 120)	TL																				
	HTR 2 ContiRe	160/ - K (158/- L)		K 110 (L 120)	TL																				
	HTL	160/ - K		K 110	TL																				
	HTC 1	160/ - K		K 110	TL																				

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Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions								Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]	PR	Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment									
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
385/65 R 22.5	**HTC 1 ContiRe**	160/ - K		K 110	TL	**11.75** 12.25	**0** 0	**405** 410	**1092**	**389** 394	**1072**		**495**	**3250**	160 158	S S	5165 5110	5620 5555	6065 6000	6505 6430	6935 6855	7360 7275	7775 7690	8190 8095	8595 8500	9000
425/65 R 22.5	**HTR**	165/ - K		K 110	TL	**13.00** 14.00	**0** 0	**447** 457	**1146**	**430** 440	**1124**		**514**	**3405**	165	S	6190	6735	7270	7795	8310	8815	9315	9810	10300	
	HTC	165/ - K		K 110	TL																					
445/65 R 22.5	**HTC 1**	169/ - K	20	K 110	TL	**13.00** 14.00	**0** 0	**472** 482	**1174**	**454** 464	**1150**		**524**	**3485**	169 168	S S	6660 6430	7245 6995	7820 7550	8385 8095	8940 8630	9485 9160	10025 9675	10555 10190	11080 10695	11600 11200
	HTR 2	169/ - K	20	K 110	TL																					
	HTR	168/ - K	20	K 110	TL																					
	HTC	168/ - K	20	K 110	TL																					
255/70 R 22.5	**HSR 1**	140/137 M (142/140 L)	20	M 130 (L 120)	TL	**6.75** 7.50 8.25	**278** 287 295	**257** 265 273	**944**	**247** 255 263	**930**		**434**	**2835**	142 140 140 137	S S D D	3185 3155 6010 5805	3465 3430 6540 6315	3740 3700 7055 6815	4010 3970 7565 7305	4275 4230 8065 7790	4535 4490 8560 8265	4795 4745 9045 8735	5045 5000 9525 9200	5300 10000	
	HDR	140/137 M (142/140 L)		M 130 (L 120)	TL																					

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Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions								Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]	PR	Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment									
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
275/70 R 22.5	**HSR1**	148/145 M		M 130	TL	**7.50** 8.25	**303** 311	**279** 287	**974**	**267** 275	**961**		**447**	**2920**	152 151 148 148 145	S S S D D	4075 3960 3615 7235 6660	4435 4310 3935 7870 7245	4785 4650 4245 8495 7820	5130 4985 4550 9105 8385	5470 5315 4855 9710 8940	5805 5640 5150 10305 9485	6135 5960 5440 10885 10025	6460 6275 5730 11465 10555	6780 6590 6015 12035 11080	7100 6900 6300 12600 11600
	HSW	148/145 L (152/148 E)		L 120 (E 70)	TL																				
	HSU1 M+S	148/145 J (152/148 E)		J 100 (E 70)	TL																				
	HSU1 M+S ContiRe	148/145 J (152/148 E)		J 100 (E 70)	TL																				
	HSU1	148/145 J (152/148 E)		J 100 (E 70)	TL																				
	HSU1 ContiRe	148/145 J (152/148 E)		J 100 (E 70)	TL																				
	HDR	148/145 L	16	L 120	TL																				
	HDW SCAN	148/145 L	16	L 120	TL																				
	HDU	148/145 J (151/148 E)	16	J 100 (E 70)	TL																				
	HDU ContiRe	148/145 J (151/148 E)	16	J 100 (E 70)	TL																				
	HTC	148/145 J	16	J 100	TL																				
305/70 R 22.5	**HSR1**	152/148 L (150/148 M)		L 120 (M 130)	TL	**8.25** 9.00	**334** 343	**309** 317	**1018**	**297** 305	**1000**		**463**	**3050**	154 152 150 150 148	S S S D D	4305 4075 4025 7695 7575	4685 4435 4380 8370 8240	5055 4785 4725 9035 8890	5420 5130 5070 9685 9535	5780 5470 5405 10325 10165	6130 5805 5735 10955 10785	6480 6135 6060 11580 11395	6825 6460 6380 12195 12000	7160 6780 6700 12800 12600	7500 7100 13400
	HSU1	150/148 J (154/150 E)		J 100 (E 70)	TL																				
	HDR	150/148 M	16	M 130	TL																				

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Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions									Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]		Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment									
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
315/70 R 22.5	**HSL 2**	156/150 L (154/150 M)		L 120 (M 130)	TL	**9.00** 9.75	**351** 358	**318** 326	**1032**	**312** 320	**1014**		**468**	**3090**	156 154 152 150 148	S S S D D	4590 4305 4265 7695 7575	4995 4685 4640 8370 8240	5390 5055 5010 9035 8890	5780 5420 5370 9685 9535	6165 5780 5725 10325 10165	6540 6130 6075 10955 10785	6910 6480 6420 11580 11395	7280 6825 6760 12195 12000	7640 7160 7100 12800 12600	8000 7500 13400
	HSL 1	154/150 L (152/148 M)		L 120 (M 130)	TL																				
	HSL 2	154/150 L (152/148 M)		L 120 (M 130)	TL																				
	HSR 1	154/150 L (152/148 M)		L 120 (M 130)	TL																				
	HSR 2	154/150 L (152/148 M)		L 120 (M 130)	TL																				
	HSW SCAN	154/150 L (152/148 M)		L 120 (M 130)	TL																				
	HSW 2 SCAN*	154/150 L (152/148 M)		L 120 (M 130)	TL																				
	HDL 1	154/150 L (152/148 M)		L 120 (M 130)	TL																				
	HDL 2	154/150 L (152/148 M)		L 120 (M 130)	TL																				
	HD Hybrid*	154/150 L (152/148 M)		L 120 (M 130)	TL																				
	HDR 2	154/150 L (152/148 M)		L 120 (M 130)	TL																				
	HDR 2 ContiRe	154/150 L (152/148 M)		L 120 (M 130)	TL																				
	HDW 2 SCAN*	154/150 L (152/148 M)		L 120 (M 130)	TL																				

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Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions									Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]		Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment									
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
315/70 R 22.5	**HDR+**	152/148 M (154/150 L)		M 130 (L 120)	TL	**9.00** 9.75	**351** 358	**318** 326	**1032**	**312** 320	**1014**		**468**	**3090**	156 154 152 150 148	S S S D D	4590 4305 4265 7695 7575	4995 4685 4640 8370 8240	5390 5055 5010 9035 8890	5780 5420 5370 9685 9535	6165 5780 5725 10325 10165	6540 6130 6075 10955 10785	6910 6480 6420 11580 11395	7280 6825 6760 12195 12000	7640 7160 7100 12800 12600	8000 7500 13400
	HDR+ ContiRe	152/148 M (154/150 L)		M 130 (L 120)	TL																					
	HDW SCAN	152/148 M (154/150 L)		M 130 (L 120)	TL																					
	HDW SCAN ContiRe	152/148 M (154/150 L)		M 130 (L 120)	TL																					
295/80 R 22.5	**HSW 2 Coach***	152/148 M		M 130	TL	**8.25** 9.00	**326** 335	**302** 310	**1062**	**290** 298	**1044**		**487**	**3185**	152 148 152 148	S D S D	4265 7575 4265 7575	4640 8240 4640 8240	5010 8890 5010 8890	5370 9535 5370 9535	5725 10165 5725 10165	6075 10785 6075 10785	6420 11395 6420 11395	6760 12000 6760 12000	7100 12600 7100 12600	
	HSL 1	152/148 M		M 130	TL																					
	HSL 2	152/148 M		M 130	TL																					
	HSR 1	152/148 M		M 130	TL																					
	HSR 2	152/148 M		M 130	TL																					
	HSW SCAN	152/148 M		M 130	TL																					
	HSW 2 SCAN*	152/148 M		M 130	TL																					
	HSW SCAN ContiRe	152/148 M		M 130	TL																					
	HSC	152/148 K		K 110	TL																					
	HSC 1	152/148 K		K 110	TL																					
	HSU	152/148 J		J 100	TL																					
	HDL 1	152/148 M		M 130	TL																					
	HD Hybrid*	152/148 M		M 130	TL																					
	HDR+	152/148 M		M 130	TL																					

See flap inside back cover for footnotes

Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions									Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]		Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment									
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
295/80 R 22.5	**HDR 2**	152/148 M		M 130	TL	**8.25** 9.00	**326** 335	**302** 310	**1062**	**290** 298	**1044**		**487**	**3185**	152 148	S D	4265 7575	4640 8240	5010 8890	5370 9535	5725 10165	6075 10785	6420 11395	6760 12000	7100 12600	
	HDR 2 ContiRe	152/148 M		M 130	TL										152 148	S D	4265 7575	4640 8240	5010 8890	5370 9535	5725 10165	6075 10785	6420 11395	6760 12000	7100 12600	
	HDR+ ContiRe	152/148 M		M 130	TL																					
	HDW	152/148 M		M 130	TL																					
	HDW SCAN	152/148 M		M 130	TL																					
	HDW 2 SCAN *	152/148 M		M 130	TL																					
	HDW ContiRe	152/148 M		M 130	TL																					
	HDC 1	152/148 K		K 110	TL																					
	HDC	152/148 K		K 110	TL																					
315/80 R 22.5	**HSL 1**	156/150 L (154/150 M)		L 120 (M 130)	TL	**9.00** 9.75	**351** 360	**318** 326	**1096**	**312** 320	**1076**		**500**	**3280**	156 154 150	S S D	4590 4505 8055	4995 4905 8760	5390 5290 9455	5780 5675 10140	6165 6050 10810	6540 6420 11470	6910 6785 12120	7280 7140 12765	7640 7500 13400	8000
	HSL 2	156/150 L (154/150 M)		L 120 (M 130)	TL																					
	HSR 1	156/150 L (154/150 M)		L 120 (M 130)	TL																					
	HSR 2	156/150 L (154/150 M)		L 120 (M 130)	TL																					
	HSW 2 SCAN *	156/150 L (154/150 M)		L 120 (M 130)	TL																					
	HSC 1 ContiRe	156/150 K		K 110	TL																					

See flap inside back cover for footnotes

Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions									Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]		Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment									
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
315/80 R 22.5	**HSC 1**	156/150 K		K 110	TL	**9.00** 9.75	**351** 360	**318** 326	**1096**	**312** 320	**1076**		**500**	**3280**	156 154 150	S S D	4590 4505 8055	4995 4905 8760	5390 5290 9455	5780 5675 10140	6165 6050 10810	6540 6420 11470	6910 6785 12120	7280 7140 12765	7640 7500 13400	8000
	HSW SCAN	154/150 M (156/150 L)		M 130 (L 120)	TL																				
	HDL 1	156/150 L (154/150 M)		L 120 (M 130)	TL																				
	HDL 2	156/150 L (154/150 M)		L 120 (M 130)	TL																				
	HD Hybrid *	156/150 L (154/150 M)		L 120 (M 130)	TL																				
	HDR+	156/150 L (154/150 M)		L 120 (M 130)	TL																				
	HDR+ ContiRe	156/150 L (154/150 M)		L 120 (M 130)	TL																				
	HDR 2	156/150 L (154/150 M)		L 120 (M 130)	TL																				
	HDR 2 ContiRe	156/150 L (154/150 M)		L 120 (M 130)	TL																				
	HDW 2 SCAN *	156/150 L (154/150 M)		L 120 (M 130)	TL																				
	HDC 1 ContiRe	156/150 K		K 110	TL																				
	HDC 1	156/150 K		K 110	TL																				

See flap inside back cover for footnotes

Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions								Load Index	Tire fitment	Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]	PR	Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference				4.5 (65)	5.0 (73)	5.5 (80)	6.0 (87)	6.5 (94)	7.0 (102)	7.5 (109)	8.0 (116)	8.5 (123)	9.0 (131)
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %													
315/80 R 22.5	**HDO**	156/150 G		G 90	TL	**9.00** 9.75	**351** 360	**318** 326	**1096**	**312** 320	**1076**		**500**	**3280**	156 154 150	S S D	4590 4505 8055	4995 4905 8760	5390 5290 9455	5780 5675 10140	6165 6050 10810	6540 6420 11470	6910 6785 12120	7280 7140 12765	7640 7500 13400	8000
	HDW SCAN	154/150 M (156/150 L)		M 130 (L 120)	TL																						
	HDW SCAN ContiRe	154/150 M (156/150 L)		M 130 (L 120)	TL																						
	HDW	154/150 M (156/150 L)		M 130 (L 120)	TL																						
	HTR	156/150 K		K 110	TL																						
9 R 22.5	**HSR**	133/131 L	14	L 120	TL	**6.00** 6.75	**250** 259	**231** 239	**986**	**222** 230	**970**		**455**	**2960**	133 131	S D	2890 5475	3145 5955	3395 6430	3640 6895	3880 7350	4120 7800				
10 R 22.5	**HSR**	144/142 K		K 110	TL	**6.75** 7.50	**277** 286	**256** 264	**1038**	**246** 254	**1020**		**476**	**3110**	144 140 142 138	S S D D	3530 3320 6685 6270	3840 3610 7275 6820	4145 3900 7850 7365	4445 4180 8420 7895	4740 4455 8975 8415	5030 4730 9525 8930	5315 5000 10065 9440	5600 10600		
	T9	140/138 K	14	K 110	TL																						
	RMS	144/142 K	14	K 110	TL																						
11 R 22.5	**HSR**	148/145 L	16	L 120	TL	7.50 **8.25**	305 **314**	282 **290**	**1070**	271 **279**	**1050**		**489**	**3200**	148 145	S D	3785 6970	4120 7585	4445 8185	4765 8775	5080 9355	5390 9930	5695 10490	6000 11050	6300 11600	
	HSC 1	148/145 K	16	K 110	TL																						
	HSU 1	148/145 J	16	J 100	TL																						
	HDR	148/145 L	16	L 120	TL																						
	HDW	148/145 L	16	L 120	TL																						
	HTR	148/145 L	16	L 120	TL																						

See flap inside back cover for footnotes

Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions								Load Index	Tire fitment	Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]	PR	Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference				4.5 (65)	5.0 (73)	5.5 (80)	6.0 (87)	6.5 (94)	7.0 (102)	7.5 (109)	8.0 (116)	8.5 (123)	9.0 (131)
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %													
12 R 22.5	**HSR**	152/148 L (150/148 M)		L 120 (M 130)	TL	**8.25** 9.00	**329** 338	**304** 312	**1104**	**292** 300	**1084**		**504**	**3306**	152 150 148	S S D	4265 4225 7575	4640 4600 8240	5010 4960 8890	5370 5320 9535	5725 5670 10165	6075 6020 10785	6420 6360 11395	6760 6700 12000	7100 12600	
	HSC 1	152/148 K		K 110	TL																						
	HDR	152/148 L	16	L 120	TL																						
	HDW	152/148 L	16	L 120	TL																						
	HDC 1	152/148 K	16	K 110	TL																						
13 R 22.5	**HSR**	154/150 L (156/150 K)	16	L 120 (K 110)	TL	**9.00** 9.75	**350** 358	**318** 326	**1146**	**312** 320	**1124**		**521**	**3428**	156 154 149 150 146	S S S D D	4590 4505 4315 8055 7970	4995 4905 4695 8760 8675	5390 5290 5070 9455 9360	5780 5675 5435 10140 10035	6165 6050 5795 10810 10700	6540 6420 6150 11470 11355	6910 6785 6500 12120 12000	7280 7140 12765	7640 7500 13400	8000
	HSC 1	154/150 K (156/150 G)	16	K 110 (G 90)	TL																						
	HSO MIL	149/146 J	16	J 100	TL																						
	HDC 1	154/150 K (156/150 G)	16	K 110 (G 90)	TL																						
	HDC 1 ContiRe	154/150 K (156/150 G)	16	K 110 (G 90)	TL																						
	HDW	154/150 K	16	K 110	TL																						
	HDO	154/150 G	16	G 90	TL																						

See flap inside back cover for footnotes

Regrooving recommendations

All Continental tires on which regrooving is permitted have on both sidewalls, in accordance with ECE regulation 54, the word

REGROOVABLE

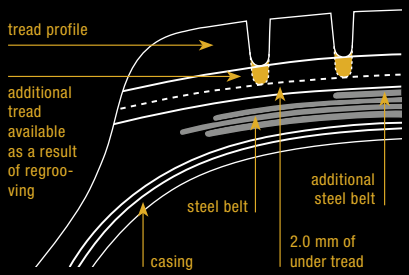
The additional tread depth of up to 4 mm gained by regrooving means a significant increase in performance.

As part of their design all-steel truck tires have a so-called tread stock between the upper edge of the belt and the tread grooves. This tread stock is intended to prevent stones etc. penetrating into the steel belt and the casing.

Provided it is marked “REGROOVABLE“, a commercial vehicle tire may be regrooved down to a residual undertread thickness of 2 mm above the breaker or belt. All additional regulations of the respective country have to be met.

Although tires can be retreaded after reaching the legal wear limit, regrooving is not advisable in every case. The tread stock thickness is reduced and stones etc. can more easily penetrate and damage the steel belts, leading to rust formation. This has decidedly negative effect on the tire’s suitability for remoulding.

The best time for regrooving is when the tread is worn down to about 3 mm. The tire must then be checked to make sure the wear is even all round. Attention should be paid to local or uneven wear patches.



Example:

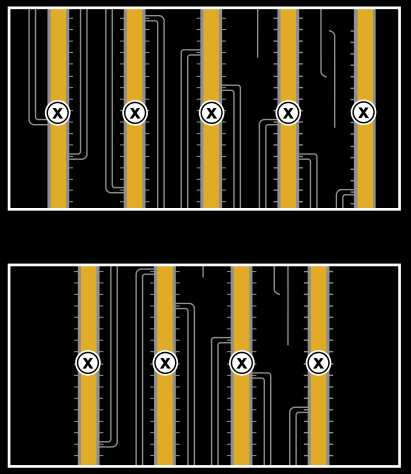
Tire size	315/80 R 22.5
Original tread depth of new tire	20.0 mm
Additional tread as a result of regrooving	4.0 mm

Regrooving should be carried out by an expert, in order to avoid premature failure as well as any reduction in the tire’s suitability for retreading.

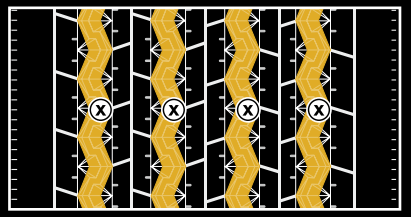
In some countries (e.g. Germany for KOM-100 coaches and Austria for coaches) regrooving of front axle tires for coaches is prohibited. In general regrooving on front axle coach tires is not recommended.

All Continental tires on which regrooving ispermitted are marked “regroovable“.

HSL 2



HSL 1 ECO-PLUS



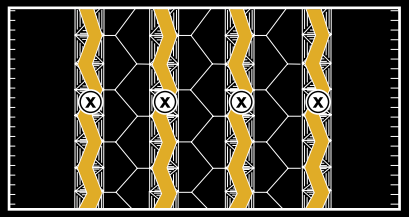
Size	Depth (mm)	Width (mm)
355/50 R 22.5	2.5	10
385/55 R 22.5	2.5	10
315/60 R 22.5	3.5	10
295/60 R 22.5	2.5	10

Size	Depth (mm)	Width (mm)
315/70 R 22.5	3.0	12
295/80 R 22.5	3.0	12
315/80 R 22.5	3.0	12

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

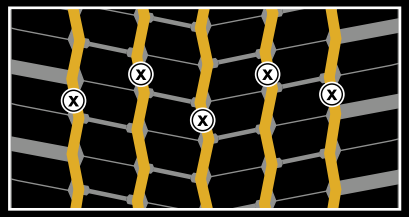
Regrooving recommendations

HSL ECO-PLUS



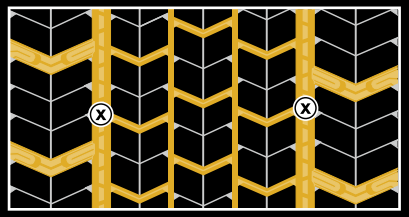
Size	Depth (mm)	Width (mm)
315/70 R 22.5	3.5	8-10
295/80 R 22.5	3.5	8-10
315/80 R 22.5	3.5	8-10

HDL 2



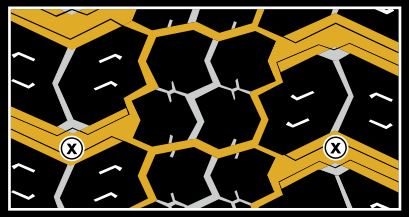
Size	Depth (mm)	Width (mm)
315/60 R 22.5	3.5	A:10 B:8
295/60 R 22.5	2.5	A:10 B:8
315/70 R 22.5	3.0	A:10 B:8
295/80 R 22.5	3.0	A:10 B:8
315/80 R 22.5	3.0	A:10 B:8

HDL 1 ECO-PLUS



Size	Depth (mm)	Width (mm)
315/70 R 22.5	3.0	A:10 B:5-6
295/80 R 22.5	3.0	A:10 B:5-6
315/80 R 22.5	3.0	A:10 B:5-6

HDL ECO-PLUS

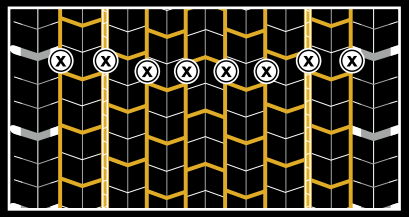


Size	Depth (mm)	Width (mm)
315/70 R 22.5	3.5	A:12-14 B:7-8
295/80 R 22.5	3.5	A:12-14 B:7-8
315/80 R 22.5	3.5	A:12-14 B:7-8

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

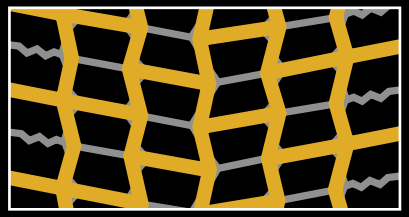
Regrooving recommendations

HDL 1 SUPERDRIVE



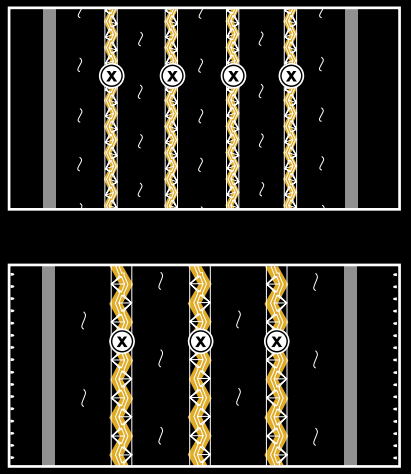
Size	Depth (mm)	Width (mm)
495/45 R 22.5	2.5	A:12 B:5-7

HD HYBRID



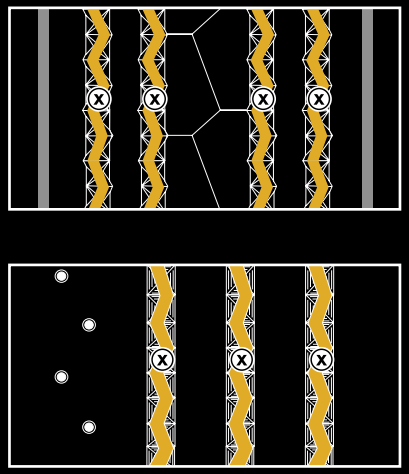
Size	Depth (mm)	Width (mm)
295/60 R 22.5	2.5	A:6 B:10 C:4
315/60 R 22.5	3.5	A:6 B:10 C:4
315/70 R 22.5	3.0	A:6 B:10 C:4
295/80 R 22.5	3.5	A:6 B:10 C:4
315/80 R 22.5	3.5	A:6 B:10 C:4

HTL 1 ECO-PLUS



Size	Depth (mm)	Width (mm)
445/45 R 19.5	3.0	13
385/55 R 22.5	3.5	13

HTL ECO-PLUS

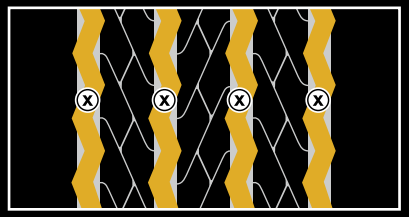


Size	Depth (mm)	Width (mm)
385/55 R 19.5	3.0	8-10
385/65 R 22.5	3.0	12-14

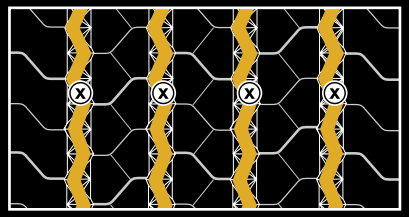
Ⓧ Tread depth measuring points (§ 36 min. tread depth)

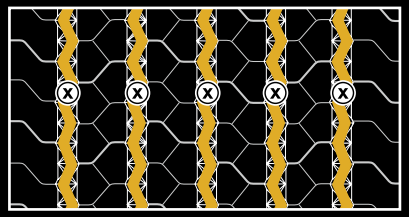
Regrooving recommendations

HSR 2

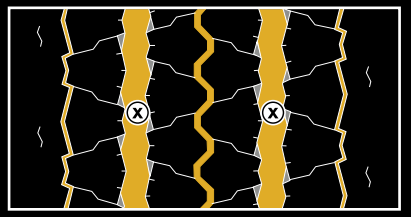


HSR 1

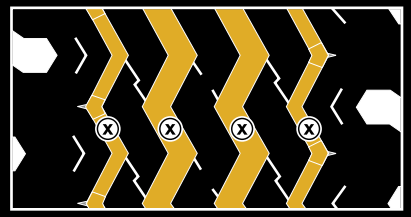




HSR



HSR*) / RS 415 N**)



Size	Depth (mm)	Width (mm)
315/80 R 22.5	3.0	10
315/70 R 22.5	3.0	10
295/80 R 22.5	3.0	10

Size	Depth (mm)	Width (mm)
245/70 R 19.5	3.0	9-11
265/70 R 19.5	3.0	9-11
285/70 R 19.5	3.0	10-12
305/70 R 19.5	3.0	10-12
295/60 R 22.5	2.5	10-12
305/60 R 22.5	3.5	10-12
315/60 R 22.5	3.5	10-12
275/70 R 22.5	2.5	10-12
305/70 R 22.5	3.0	10-12
315/70 R 22.5	3.0	10-12
295/80 R 22.5	3.0	10-12
315/80 R 22.5	3.0	10-12
385/55 R 22.5	3.0	10-12
385/65 R 22.5	3.5	10-12

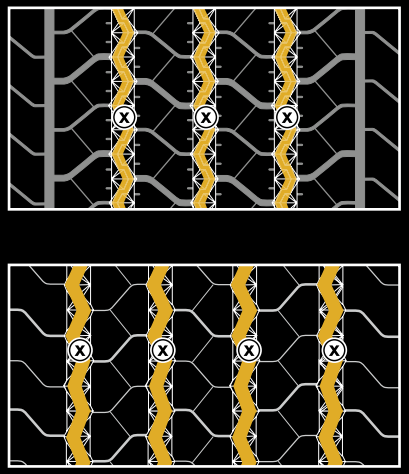
Size	Depth (mm)	Width (mm)
11 R 22.5	3.5	A:10-12 B:4-5
12 R 22.5	3.5	A:10-12 B:4-5

Size	Depth (mm)	Width (mm)
9 R 22.5*)	3.0	7-8
10 R 22.5*)	3.5	7-8
13 R 22.5**)	3.5	7-8

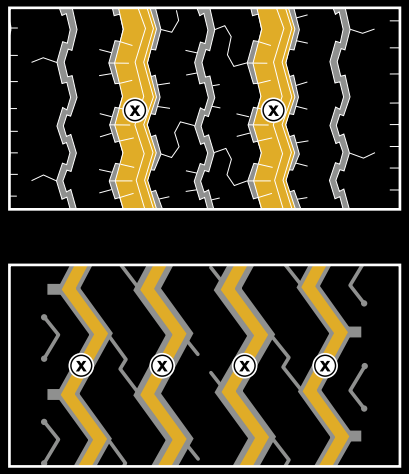
Ⓧ Tread depth measuring points (§ 36 min. tread depth)

Regrooving recommendations

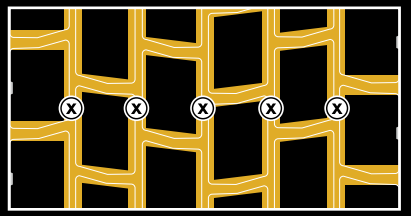
LSR 1



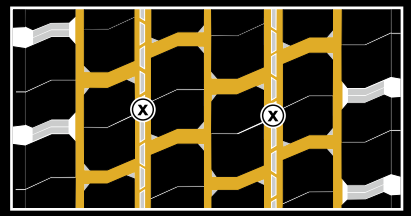
LSR



HDR 2



HDR+ / HDR



B A A A B A A A B

Size	Depth (mm)	Width (mm)
245/70 R 17.5	2.5	9-11
265/70 R 17.5	2.5	9-11
205/75 R 17.5	2.5	9-11
215/75 R 17.5	2.5	9-11
225/75 R 17.5	2.5	9-11
235/75 R 17.5	2.5	9-11
9.5 R 17.5	2.5	7-8
10 R 17.5	2.5	7-8

Size	Depth (mm)	Width (mm)
8 R 17.5	2.0	7
8.5 R 17.5	2.0	7
205/75 R 17.5	3.0	7-8
215/75 R 17.5	2.0	7-8
225/75 R 17.5	3.0	7-8
235/75 R 17.5	3.0	7-8
245/75 R 17.5	2.5	7-8

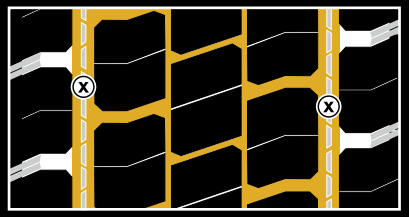
Size	Depth (mm)	Width (mm)
315/70 R 22.5	3.5	6-7
315/80 R 22.5	3.5	6-7
295/80 R 22.5	3.5	6-7

Size	Depth (mm)	Width (mm)
245/70 R 19.5	3.0	A:7-9 B:3-5
265/70 R 19.5	3.0	A:7-9 B:3-5
285/70 R 19.5	3.0	A:7-9 B:3-5
305/70 R 19.5	3.0	A:7-9 B:3-5
295/60 R 22.5	3.0	A:7-9 B:3-5
305/60 R 22.5	3.0	A:7-9 B:3-5
315/60 R 22.5	3.0	A:7-9 B:3-5
275/70 R 22,5	3.5	A:7-9 B:3-5
305/70 R 22.5	3.5	A:7-9 B:3-5
315/70 R 22.5	3.5	A:7-9 B:3-5
295/80 R 22.5	4.0	A:7-9 B:3-5
315/80 R 22.5	4.0	A:7-9 B:3-5

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

Regrooving recommendations

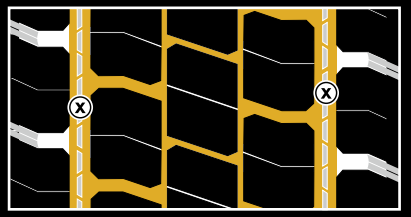
HDR



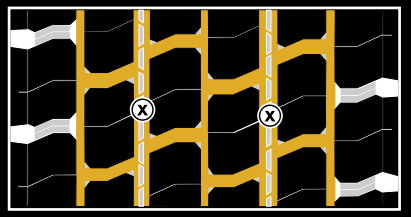
A B B B B B A

Size	Depth (mm)	Width (mm)
11 R 22.5	3.5	A:10-12 B:5-7
12 R 22.5	4.0	A:10-12 B:5-7

LDR 1



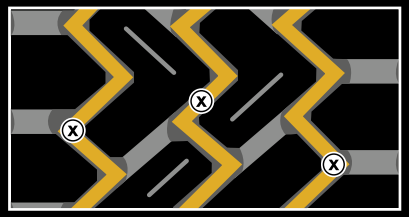
A A B A B A A



B A A A B A A A B

Size	Depth (mm)	Width (mm)
245/70 R 17.5	2.5	A:9-11 B:5-7
265/70 R 17.5	2.5	A:7-9 B:3-5
205/75 R 17.5	2.5	A:8-10 B:4-6
215/75 R 17.5	2.5	A:8-10 B:4-6
225/75 R 17.5	2.5	A:8-10 B:4-6
235/75 R 17.5	2.5	A:9-11 B:5-7
9.5 R 17.5	2.5	A:11 B:5-7
10 R 17.5	2.5	A:11 B:5-7

LDR

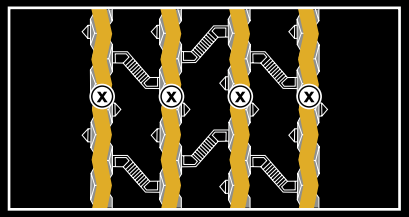


Size	Depth (mm)	Width (mm)
8.5 R 17.5	2.0	7
205/75 R 17.5	3.0	7-8
215/75 R 17.5	3.0	7-8
225/75 R 17.5	3.0	7-8
235/75 R 17.5	3.0	7-8
245/75 R 17.5	4.0	7-8

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

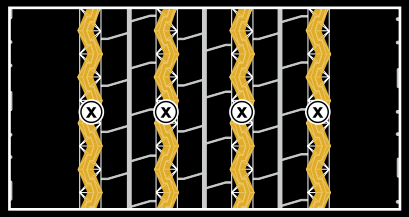
Regrooving recommendations

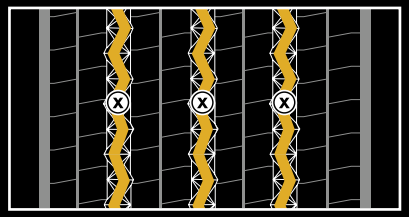
HTR 2



Size	Depth (mm)	Width (mm)
385/65 R 22.5	3.0	11
445/65 R 22.5	3.5	13

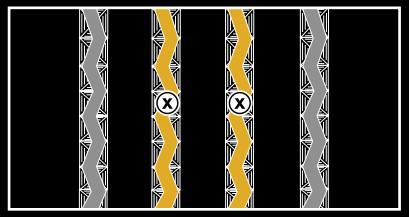
HTR 1

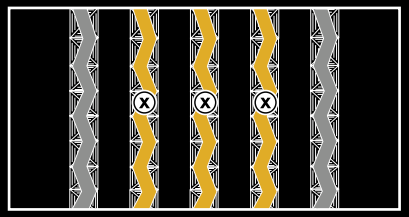




Size	Depth (mm)	Width (mm)
245/70 R 19.5	3.0	8-10
265/70 R 19.5	3.0	8-10
285/70 R 19.5	3.0	8-10
385/55 R 22.5	3.5	10-12

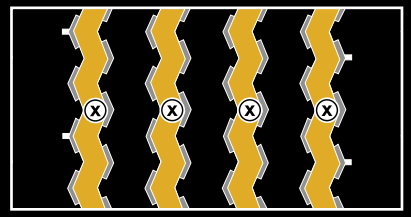
HTR





Size	Depth (mm)	Width (mm)
205/65 R 17.5	2.0	7-8
245/70 R 17.5	3.0	7-8
215/75 R 17.5	2.5	7-8
235/75 R 17.5	3.0	7-8
425/65 R 22.5	3.5	10-12
445/65 R 22.5	3.5	10-12

HTR

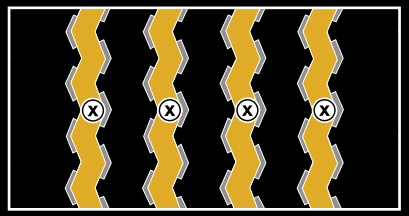


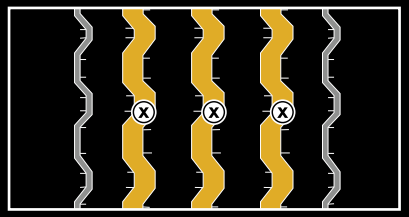
Size	Depth (mm)	Width (mm)
385/65 R 19.5	3.5	7-8
245/70 R 19.5	3.0	7-8
265/70 R 19.5	3.0	7-8
285/70 R 19.5	3.0	7-8
385/65 R 22.5	3.5	7-8

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

Regrooving recommendations

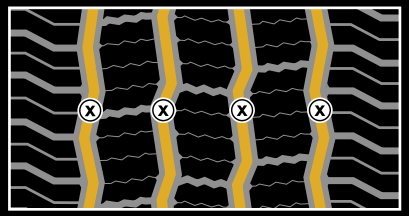
HTR / HT 41





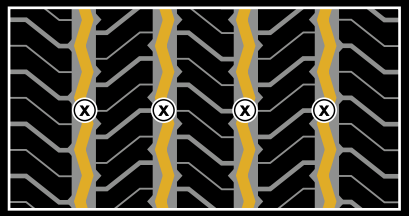
Size	Depth (mm)	Width (mm)
315/80 R 22.5	3.5	A:7-8 B:4-5
11 R 22.5	3.5	A:7-8 B:4-5

HSW 2 COACH



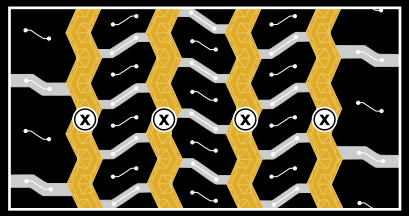
Size	Depth (mm)	Width (mm)
295/80 R 22.5	3.5	10

HSW 2 SCANDINAVIA



Size	Depth (mm)	Width (mm)
315/80 R 22.5	3.0	8
295/80 R 22.5	3.0	8
315/70 R 22.5	3.5	8

HSW SCANDINAVIA



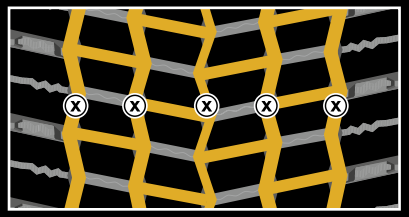
Size	Depth (mm)	Width (mm)
245/70 R 19.5	3.0	11
265/70 R 19.5	3.0	11
285/70 R 19.5	3.0	11
385/55 R 22.5 *)	3.0	10-12
385/65 R 22.5 *)	3.0	10-12
275/70 R 22.5	3.5	10-12
315/70 R 22.5	3.0	10-12
295/80 R 22.5	3.5	10-12
315/80 R 22.5	3.5	10-12

*) alternative tread pattern

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

Regrooving recommendations

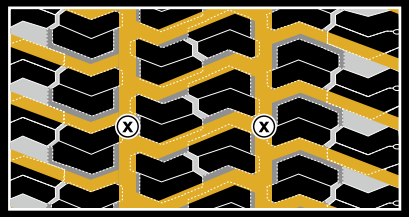
HDW 2 SCANDINAVIA



A A A A B A A A A

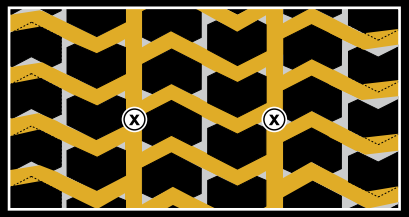
Size	Depth (mm)	Width (mm)
295/60 R 22.5	2.5	A:8 B:4
315/60 R 22.5	3.5	A:8 B:4
315/70 R 22.5	3.0	A:8 B:4
295/80 R 22.5	3.0	A:8 B:4
315/80 R 22.5	3.0	A:8 B:4

HDW SCANDINAVIA



Size	Depth (mm)	Width (mm)
275/70 R 22.5	3.0	8-10
295/80 R 22.5	3.5	8-10
315/80 R 22.5	3.5	8-10

HDW



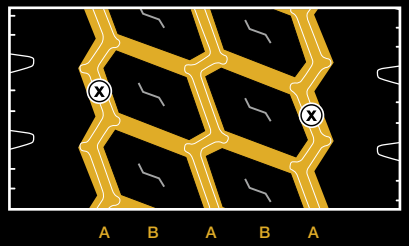
Size	Depth (mm)	Width (mm)
295/80 R 22.5	4.0	8-10
315/80 R 22.5	4.0	8-10
11 R 22.5	3.5	8-10
12 R 22.5	4.0	8-10
13 R 22.5	4.0	8-10

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

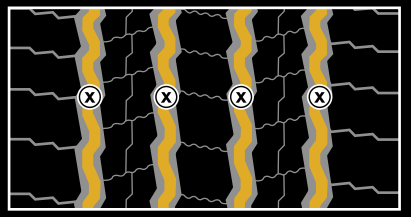
Regrooving recommendations

HTW 2 SCANDINAVIA

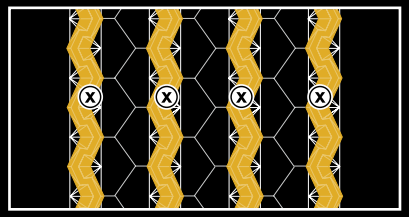
HTW



HSU 1 M+S



HSU 1



Size	Depth (mm)	Width (mm)
385/55 R 22.5	3.0	10
385/65 R 22.5	3.0	10

Size	Depth (mm)	Width (mm)
265/70 R 19.5	3.0	A:10-12 B:10

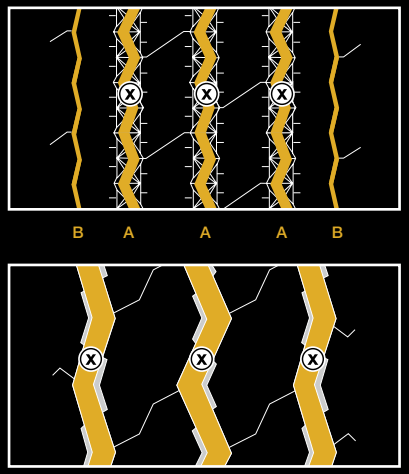
Size	Depth (mm)	Width (mm)
275/70 R 22.5	3.5	8

Size	Depth (mm)	Width (mm)
275/70 R 22.5	3.5	10-12
305/70 R 22.5	4.0	10-12
11 R 22.5	4.0	10-12

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

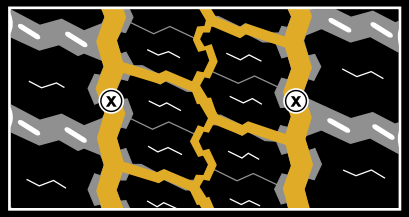
Regrooving recommendations

HSU



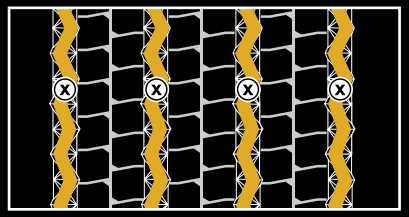
Size	Depth (mm)	Width (mm)
295/80 R 22.5	4.0	A:8-10 B:3-4
305/70 R 22.5	4.0	8-10
12 R 22.5	3.5	A:8-10 B:3-4

HMS 45



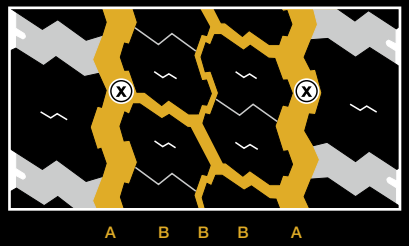
Size	Depth (mm)	Width (mm)
315/80 R 22.5	3.5	A:8-10 B:4-6

HDU 1



Size	Depth (mm)	Width (mm)
385/55 R 22.5	3.0	10-12

HDU

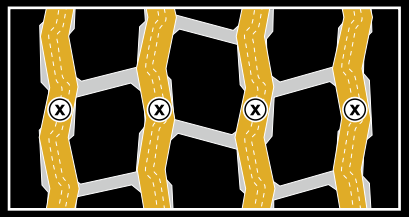


Size	Depth (mm)	Width (mm)
275/70 R 22.5	5.0	A:8-10 B:4-6

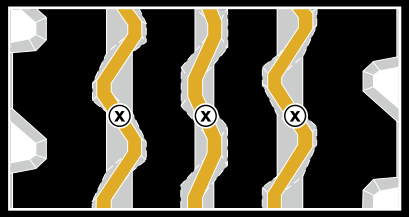
Ⓧ Tread depth measuring points (§ 36 min. tread depth)

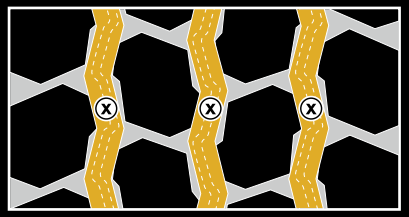
Regrooving recommendations

HSC 1

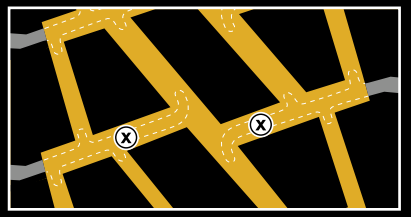


HSC / HSC+ / LSC

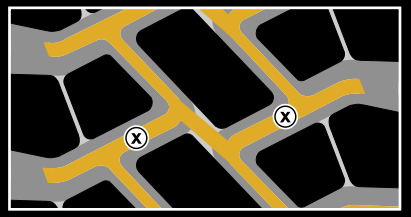




HDC 1



HDC / HDC+



Size	Depth (mm)	Width (mm)
385/65 R 22.5	3.5	12
315/80 R 22.5	3.5	12
13 R 22.5	3.5	12

Size	Depth (mm)	Width (mm)
9.5 R 17.5	2.5	10
295/80 R 22.5	3.5	10-12
315/80 R 22.5	3.5	10-12
11 R 22.5	3.5	10-12
12 R 22.5	3.5	10-12
13 R 22.5	3.5	10-12

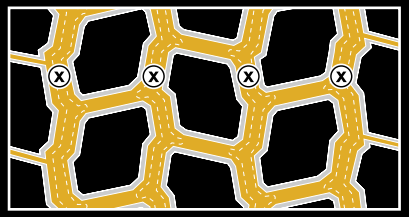
Size	Depth (mm)	Width (mm)
315/80 R 22.5	3.5	A:12 B:7
12 R 22.5	3.5	A:12 B:7
13 R 22.5	3.5	A:12 B:7

Size	Depth (mm)	Width (mm)
385/55 R 22.5	4.0	10-12
295/80 R 22.5	4.0	10-12
315/80 R 22.5	4.0	10-12
12 R 22.5	4.0	10-12
13 R 22.5	4.0	10-12

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

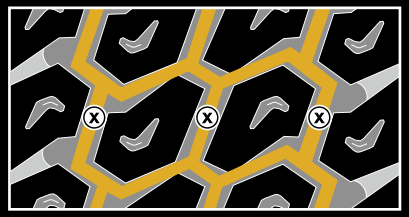
Regrooving recommendations

HTC 1



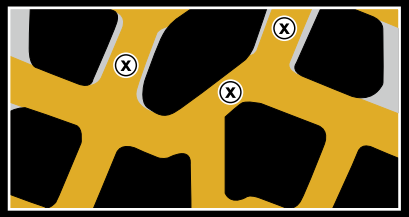
Size	Depth (mm)	Width (mm)
385/65 R 22.5	3.5	A:10 B:7
445/65 R 22.5	3.5	A:10 B:7

HTC



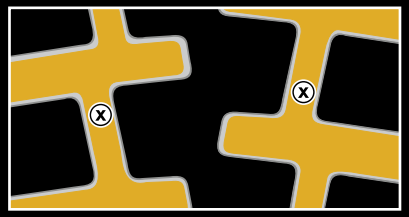
Size	Depth (mm)	Width (mm)
385/65 R 22.5	3.5	10-12
425/65 R 22.5	3.5	10-12
445/65 R 22.5	3.5	10-12
275/70 R 22.5	4.0	10-12

HSO



Size	Depth (mm)	Width (mm)
13 R 22.5	3.0	8

HDO



Size	Depth (mm)	Width (mm)
315/80 R 22.5	4.0	10-12
13 R 22.5	4.0	10-12

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions								Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]	PR	Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment									
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
7.50 R 15	**HTR**	135/133 G (134/132 J)	16	G 90 (J 100)	TT	5.00 5.50 **6.00** 6.50	230 236 **242** 247	208 213 **218** 223	**784**	202 207 **212** 217	**772**		**357**	**2355**	135 134 133 132	S S D D		2850 2770 5385 5230	3075 2990 5815 5645	3295 3205 6235 6050	3515 3420 6645 6450	3730 3630 7050 6845	3940 3835 7450 7235	4150 4035 7845 7620	4360 4240 8240 8000	
8.25 R 15	**HTR**	143/141 G (141/140 J)		G 90 (J 100)	TT	5.50 6.00 **6.50** 7.00	253 259 **265** 270	231 236 **241** 246	**850**	224 229 **234** 239	**836**		**384**	**2550**	143 141 141 140	S S D D		3560 3365 6735 6540	3845 3635 7270 7055	4120 3895 7795 7565	4395 4155 8310 8065	4665 4405 8815 8560	4930 4655 9315 9045	5190 4905 9810 9525	5450 5150 10300 10000	
205/70 R 15	**HTR**	124/122 J		J 100	TT	5.00 **5.50** 6.00 6.50	240 **246** 252 258	208 **213** 219 225	**681**	198 **203** 209 214	**669**		**313**	**2040**	124 122	S D		2090 3920	2255 4235	2420 4540	2580 4840	2735 5135	2895 5425	3045 5715	3200 6000	
7.00 R 16	**LSR**	117/116 L	12	L 120	TT	**6.00**	**233**	**211**	**792**	**203**	**784**		**364**	**2390**	117 116	S D		2220 4320	2395 4660	2570 5000						
	LDR	117/116 L	12	L 120	TT																					
7.50 R 16	**LSR**	121/120 L	12	L 120	TT	5.00 5.50 **6.00** 6.50	230 236 **242** 247	208 213 **218** 223	**818**	200 205 **210** 215	**802**		**371**	**2445**	121 120	S D		2215 4275	2390 4615	2560 4950	2730 5275	2900 5600				
	LDR	121/120 L	12	L 120	TT																					
																	3,25 (47)	**3,50** (51)	**3,75** (54)	**4,00** (58)	**4,25** (62)	**4,50** (65)	**4,75** (69)	**5,00** (69)	**5,25** (73)	**5,50** (80)
7.50 R 16 C	**HSO SAND**	112/110 N	8	N 140	TT	5.00 5.50 **6.00** 6.50	230 236 **242** 247	208 213 **218** 223	**818**	200 205 **210** 215	**802**		**371**	**2445**	112 110	S D	1725 3265	1830 3465	1935 3660	2035 3855	2135 4050	2240 4240				

See flap inside back cover for footnotes

Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions								Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]	PR	Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference	Load Index	Tire fitment									
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %			**4.5** (65)	**5.0** (73)	**5.5** (80)	**6.0** (87)	**6.5** (94)	**7.0** (102)	**7.5** (109)	**8.0** (116)	**8.5** (123)	**9.0** (131)
7.50 R 20	**RS 63**	128/127 K	12	K 110	TT	5.00 5.50 **6.00** 6.50	230 236 **242** 247	208 213 **218** 223	**944**	200 205 **210** 215	**928**		**433**	**2830**	128 127	S D		2750 5345	2965 5770	3180 6185	3390 6595	3600 7000				
8.25 R 20	**RS 63**	133/131 K	14	K 110	TT	5.50 6.00 **6.50** 7.00	253 259 **265** 270	229 234 **239** 244	**980**	220 225 **230** 235	**962**		**447**	**2930**	133 131	S D		3145 5955	3395 6430	3640 6895	3880 7350	4120 7800				
9.00 R 20	**HSR**	140/137 K	14	K 110	TT	6.00 6.50 **7.00** 7.50	285 291 **297** 302	258 263 **268** 273	**1038**	248 253 **258** 263	**1018**		**471**	**3100**	140 137	S D		3610 6650	3900 7175	4180 7695	4455 8200	4730 8705	5000 9200			
10.00 R 20	**HSR**	146/143 K	16	K 110	TT	6.50 7.00 7.33 **7.50** 8.00	305 311 314 **316** 322	276 281 284 **286** 291	**1074**	265 270 273 **275** 280	**1052**		**485**	**3205**	146 143	S D		4115 7480	4445 8075	4765 8655	5080 9230	5390 9795	5695 10350	6000 10900		
	HDR	146/143 K	16	K 110	TT																					
11.00 R 20	**HSR**	150/146 K	16	K 110	TT	7.33 7.50 **8.00** 8.50 9.00	321 323 **329** 335 340	290 292 **297** 302 307	**1104**	279 281 **286** 291 296	**1082**		**498**	**3295**	150 146	S D		4380 7845	4725 8470	5070 9080	5405 9680	5735 10270	6060 10855	6380 11430	6700 12000	
	HSC	150/146 K	16	K 110	TT																					
12.00 R 20	**HSC**	154/151 K (156/151 G)		K 110 (G 90)	TT	7.33 8.00 **8.50** 9.00	346 354 **360** 366	307 314 **319** 324	**1146**	301 308 **313** 318	**1122**		**515**	**3420**	156 154 151 150 149	S S D D D		4995 4905 9025 8760 8500	5390 5290 9740 9455 9175	5780 5675 10440 10140 9835	6165 6050 11130 10810 10485	6540 6420 11810 11470 11125	6910 6785 12485 12120 11760	7280 7140 13145 12765 12380	7640 7500 13800 13400 13000	8000
	HSR	154/150 K (156/150 G)	18	K 110 (G 90)	TT																					
	HSO SAND	154/149 J	18	J 100	TT																					
	HDC	154/150 K (156/150 G)		K 110 (G 90)	TT																					

See flap inside back cover for footnotes

Specifications and load capacities

Tire size	Operating code					Rim		Tire dimensions								Load Index	Tire fitment	Load capacity (kg) per axle at inflation pressure [3] (bar) (psi)									
	Pattern	Load/ Speed Index [1]	PR	Speed Index and ref. speed (km/h)	TT TL [2]	Rim-width	Min. distance between rim centres	Max. standard value in service		Actual value			Stat. radius	Rolling circum-ference				4.5 (65)	5.0 (73)	5.5 (80)	6.0 (87)	6.5 (94)	7.0 (102)	7.5 (109)	8.0 (116)	8.5 (123)	9.0 (131)
								Width	Outer-Ø	Width + 1 %	Outer-Ø ± 1 %		± 1,5 %	± 2 %													
14.00 R 20	**HCS**	164/160 J (166/160 G)	22	J 100 (G 90)	TL	9.00	414	367		360						166	S		7275	7850	8420	8975	9525	10065	10600		
						10.00	**426**	**377**	**1268**	**370**	**1238**		**565**	**3780**		164	S		6865	7405	7940	8465	8985	9495	10000		
	MIL	160/157 G	18	G 90	TT											160	S		6875	7420	7955	8480	9000				
	HSO SAND	160/157 G	18	G 90	TT											160	D		12355	13335	14295	15245	16175	17090	18000		
	HSO SAND	160/157 G	18	G 90	TL											157	D		12605	13600	14585	15550	16500				
365/80 R 20	**HTR**	160/ - K	20	K 110	TL	**10.00**	**0**	**379**	**1116**	**348**	**1092**		**501**	**3310**		160	S		5620	6065	6505	6935	7360	7775	8190	8595	9000
365/85 R 20	**HCS**	164/- J	20	J 100	TL	**10.00**	**0**	**379**	**1152**	**364**	**1128**		**524**	**3310**		164	S		6865	7405	7940	8465	8985	9495	10000		
395/85 R 20	**HCS**	168/- J (166/-K)	20	J 100 (K 110)	TL	**10.00**	**0**	**401**	**1206**	**386**	**1180**		**524**	**3600**		168	S		7325	7905	8475	9035	9585	10130	10665	11200	
																166	S		6930	7480	8020	8550	9075	9590	10095	10600	
12.00 R 24	**HSR**	160/156 K	20	K 110	TT	7.33	346	307		301						160	S		5885	6350	6810	7260	7705	8140	8570	9000	
						8.00	354	314		308						156	D		10465	11290	12105	12905	13695	14475	15240	16000	
	HSC	160/156 K	20	K 110	TT	**8.50**	**360**	**319**	**1250**	**313**	**1226**		**566**	**3740**													
	HSC 1	160/156 K	20	K 110	TT	9.00	366	324		318																	
	HDC	160/156 K	20	K 110	TT																						
	HDC 1	160/156 K	20	K 110	TT																						

See flap inside back cover for footnotes

Regrooving recommendations

All Continental tires on which regrooving is permitted have on both sidewalls, in accordance with ECE regulation 54, the word

REGROOVABLE

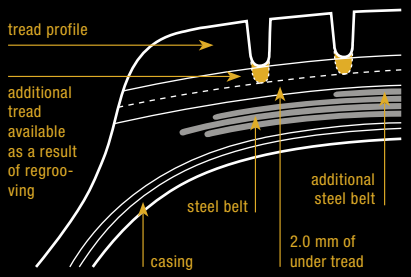
The additional tread depth of up to 4 mm gained by regrooving means a significant increase in performance.

As part of their design all-steel truck tires have a so-called tread stock between the upper edge of the belt and the tread grooves. This tread stock is intended to prevent stones etc. penetrating into the steel belt and the casing.

Provided it is marked “REGROOVABLE“, a commercial vehicle tire may be regrooved down to a residual undertread thickness of 2 mm above the breaker or belt. All additional regulations of the respective country have to be met.

Although tires can be retreaded after reaching the legal wear limit, regrooving is not advisable in every case. The tread stock thickness is reduced and stones etc. can more easily penetrate and damage the steel belts, leading to rust formation. This has decidedly negative effect on the tire’s suitability for remoulding.

The best time for regrooving is when the tread is worn down to about 3 mm. The tire must then be checked to make sure the wear is even all round. Attention should be paid to local or uneven wear patches.



Example:

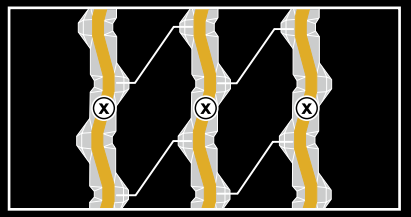
Tire size	315/80 R 22.5
Original tread depth of new tire	20.0 mm
Additional tread as a result of regrooving	4.0 mm

Regrooving should be carried out by an expert, in order to avoid premature failure as well as any reduction in the tire’s suitability for retreading.

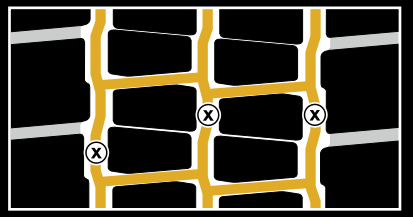
In some countries (e.g. Germany for KOM-100 coaches and Austria for coaches) regrooving of front axle tires for coaches is prohibited. In general regrooving on front axle coach tires is not recommended.

All Continental tires on which regrooving ispermitted are marked “regroovable“.

HSR



HDR



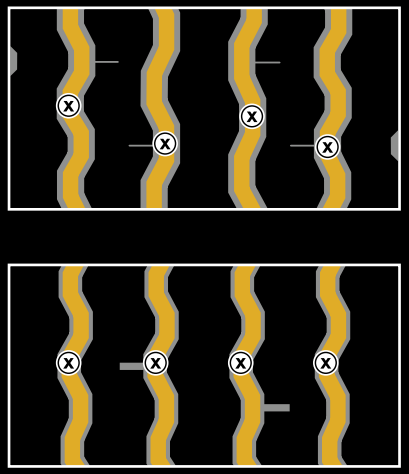
Size	Depth (mm)	Width (mm)
9.00 R 20	3.5	7-8
10.00 R 20	3.5	7-8
11.00 R 20	3.5	7-8
12.00 R 20	3.5	7-8
11.00 R 22	3.5	7-8
12.00 R 24	2.5	7-8

Size	Depth (mm)	Width (mm)
9.00 R 20	4.0	6-7
10.00 R 20	3.5	6-7
11.00 R 22	4.0	6-7

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

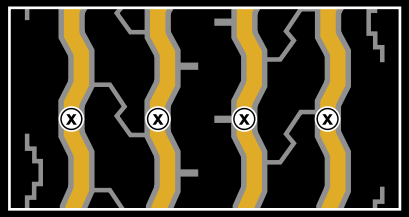
Regrooving recommendations

RS 63



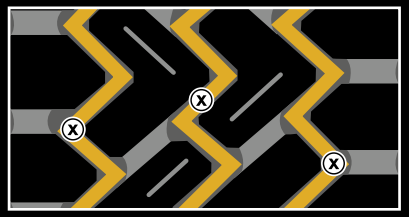
Size	Depth (mm)	Width (mm)
7.50 R 20	3.0	7
8.25 R 20	3.0	7

LSR



Size	Depth (mm)	Width (mm)
7.00 R 16	1.5	7

LDR

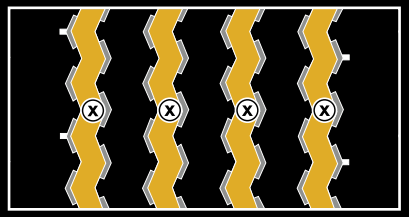


Size	Depth (mm)	Width (mm)
7.00 R 16	1.5	7

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

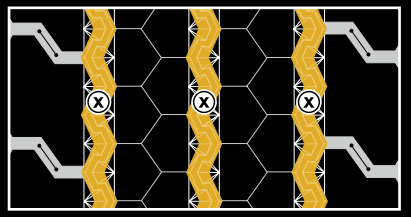
Regrooving recommendations

HTR / HT 63 / HS 62



Size	Depth (mm)	Width (mm)
365/80 R 20	3.5	7-8

HSU 1

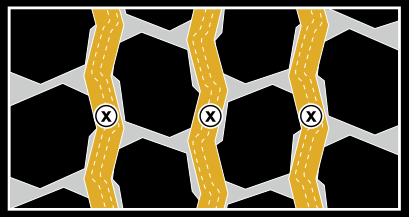


Size	Depth (mm)	Width (mm)
10.00 R 20	4.0	10-12

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

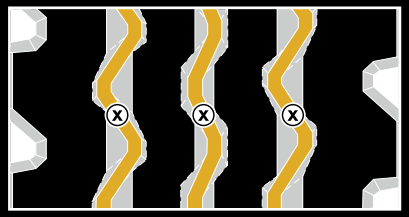
Regrooving recommendations

HSC 1



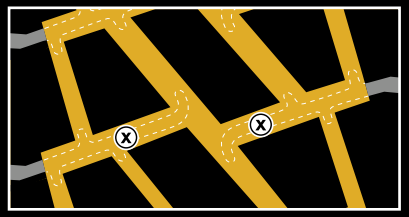
Size	Depth (mm)	Width (mm)
12.00 R 24	3.5	15

HSC / HSC+



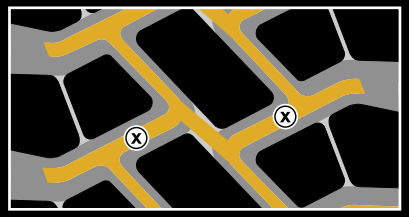
Size	Depth (mm)	Width (mm)
9.00 R 20	4.0	10-12
10.00 R 20	3.5	10-12
11.00 R 20	3.5	10-12
12.00 R 20	3.5	10-12
11.00 R 22	3.5	10-12
12.00 R 24	3.5	10-12

HDC 1



Size	Depth (mm)	Width (mm)
12.00 R 24	3.5	A:12 B:7

HDC



Size	Depth (mm)	Width (mm)
12.00 R 20	4.0	10-12
12.00 R 24	3.0	10-12

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

Regrooving recommendations

HSO SAND

Size	Depth (mm)	Width (mm)
12.00 R 20	4.0	12-14
14.00 R 20	3.0	12-14

HCS

Size	Depth (mm)	Width (mm)
14.00 R 20	4	A:18 B:10
395/85 R 20	4	A:18 B:10
365/85 R 24	4	A:18 B:10

Ⓧ Tread depth measuring points (§ 36 min. tread depth)

Maintenance and care

The pre-condition for successful maintenance and care is the correct choice of tire, in accordance with the recommendations of the tire manufacturer. See also previous sections on this subject.

Storage

Unused tires should be stored in cool, dry, dark and lightly ventilated rooms. Tires which are not fitted on rims should be stored standing up. Avoid contact with fuel, lubricants, solvents and chemicals.

Should tires, tubes and bead flaps need to be stored temporarily, they may age more quickly and develop cracks if they are exposed to intense sunlight or extreme heat. Effective air circulation accelerates this process.

Inner tubes may be particularly affected if their packaging is damaged.

Fitting the tire

Before demounting a tire, unscrew and remove the valve insert; then wait until all the air has escaped. If a tube-type tire is fitted with an angled valve as per DIN 7786-80 GD 80, unscrew the valve stem and wait until the escaping air ceases to make a noise before removing the tire.

Particular care should be taken when fitting the tire. Only rust-free rims of the right size should be used. These should not be damaged or show any signs of wear and tear. The loose flange side should be examined with great care.

Always use new rubber tubeless valves or new inner tubes and flaps on new tires or new seals for tubeless metal valves.

Take special care after tire repairs: inner tubes stretch in use and may form dangerous folds when re-fitted. If in doubt, always fit new inner tubes in order to avoid tube failure.

It is particularly important with large tires that these should already fit on the rim flange with as little inflation pressure as possible. See also WdK-Guideline 104, where detailed fitting recommendations are given.

As a guide:
When fitting, do not exceed 150% of the maximum standard inflation pressure. Under no circumstances must 10 bar be exceeded. Use only recommended fitting tools and equipment.

Should the tire bead be jammed on the rim and the pressure be high, the bead may get damaged or even destroyed.

With tube type tires, check that valves still move freely after the filler nozzle has been removed. This is important for later inflation pressure checks under difficult conditions.

Fast-running wheels should be balanced statically and dynamically to ensure smooth running.

Fitting the wheel on to the vehicle

Vehicle axle data such as toe-in, king pin inclination and castor as well as axle alignment must be checked and if necessary adjusted to within tolerances.

Only then should the wheel be fitted.

When fitting make sure that the axle hub is perfectly centred. Extra care is necessary with large, heavy tires which do not have special centering.

If necessary re-balance the wheel when it is fitted on the vehicle.

Always remember to check that the valves move freely and are easily accessible. Valve extensions are necessary for dual tires.

Checking the inflation pressure requires the free movement and easy access of the valves, even when the have become dirty in operation.

Valve caps, preferably high pressure type, must be fitted.

On rolling road testers where the vehicle performance is examined, restrictive testing regulations must be observed: depending on the roller diameter only short tests may be carried out and these always below maximum speed.

If a vehicle has the same type of tires on all round e.g. radial tires, this will guarantee optimum driving characteristics and maximum driving stability.

The use of different tire designs on each axle should be a rare exception. Where vehicles are being used on the highway, minimum tread depths as specified in the latest national regulations must be observed. For motor vehicles, trailers or semitrailers it is essential that tires of the same construction are fitted to the same axle.

Minimum tread depth

The legal minimum tread depth is 1.0 mm and must cover the complete width and circumference of the tread. The depth should be measured in the tread groove with the tread wear indicator (the area with the indicator should not be taken).

Vehicle in operation

The inflation pressure must be correct. Otherwise poor vehicle handling and pronounced, irregular tread wear are inevitable.

If pressure is insufficient, the rolling resistance will increase and with it the fuel consumption. Hidden defects in the tire may also occur which later lead to tire failure.

Tire inflation pressures specified by vehicle and tire manufacturers are contained in the vehicle manual and, for instance, on the vehicle mud guard. These may vary with different loads and service conditions, and must be adjusted before commencing a journey. Specified inflation pressures always apply to cold tires. It is quite normal for the pressure to increase as the tires warm up during driving. Do not reduce pressure when the tires are hot.

Never use different inflation pressures for the same axle.

Pressure checks must be made when the tires are cold. An increase in inflation pressure during running is normal and must never be re-adjusted.

The spare wheel should be inflated to at least the maximum inflation pressure given in the vehicle manual. Remember to always include the spare wheel when checking inflation pressures.

A balanced, even style of driving reduces the strain on the tires. Every hasty reaction on the accelerator, brakes or steering shortens the life of the tires.

The same also applies of course to all other forms of peak strain such a servere scuffing of the tire along the kerb or driving over obstacles that may be in the road. These can all result in damage to the tires construction.

Strain on the tire should be avoided. This has the same effect as insufficient pressure.

Do not exceed the tire's permitted maximum speed, otherwise tire damage is inevitable.

Maintenance and care of the vehicle´s tires

The high quality standard of the tires and vehicle, which is achieved by the measures and recommendations stated above, can only be ensured by **regular checking of all factors.**

For example, pressure checks and external inspections of the tires (including the sidewalls to the inside of the vehicle and between dual tires).

Pressure checking devices and small replacement parts such as valve inserts, caps and extensions should always be close at hand.

Tires age as a result of physical and chemical processes and this may impair their performance.

Tires, which are fitted to mainly stationary vehicles or those which are not used regularly, are particularly prone to premature ageing.