BRIDGESTONE

DATA BOOK

2018

OFF-THE-ROAD TIRES

Worldwide Olympic Partner

Notice: Although great care has been taken in producing this manual, we can accept no responsibility for any loss or damage resulting from undetected errors or misprints which may have occurred.

Due to the constant advance of tire technology, the contents of this data book are subject to change without notice.

CONTENTS

INTRODUCTION

1. Industry Standard

Bridgestone Corporation has developed a wide range of tire patterns and specifications, so that the proper Off-the-Road tire can be matched to any vehicle, service, or operating conditions.
Bridgestone's Off-the-Road tires are designed and produced to meet the commonly accepted international standards, those set by the TRA (Tire and Rim Association) in the U.S.A., by the ETRTO (European Tire and Rim Technical Organization) in Europe and/or by the JATMA (Japan Automobile Tire Manufacturers' Association) in Japan*.
Load capacities, inflation pressures, dimensions such as overall tire diameter and width, as well as the relative rims and tube valves follow these standards.
If a tire is to be used for a purpose other than that for which it is originally intended, please consult Bridgestone Corporation for advice.

***Where differences exist between the TRA, ETRTO and JATMA standards,**
Bridgestone selects the most applicable.

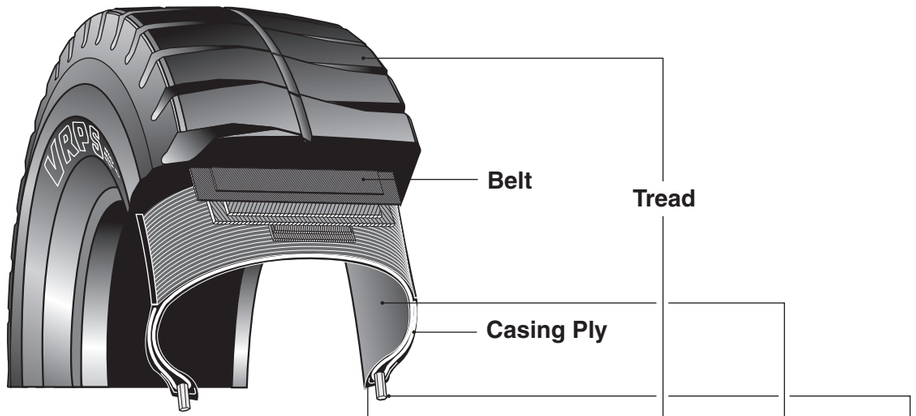
2. Application Vehicle Matching Chart

APPLICATION	VEHICLE
Earthmover Service	Dump Trucks, Motor Scrapers, Articulated Dump Trucks, Coal Haulers, Logging Trucks, Other Mining Trucks, etc.
Grader Service	Motor Graders
Loader & Dozer Service	Front-End Loaders, Back-hoe Loaders, Skid Steer Loaders, Dozers, Underground Trucks, Load-Haul-Dumps, etc.
Mobile Crane Service (High-Speed)	All-Terrain Cranes, High-Speed Vehicles, etc.
Industrial Service	Straddle Carriers, Aircraft Towing Tractors, Container Stackers, Counter-balanced Lift Trucks, Mobile Crushers, Log Stackers, etc.
Logging Service	Log-Skidders
Compactor Service	Compactor, Road Rollers
Sand Service	Sand Service Trucks
Underground Service	Underground Trucks, Load Haul Dumps, Drilling Jumbo

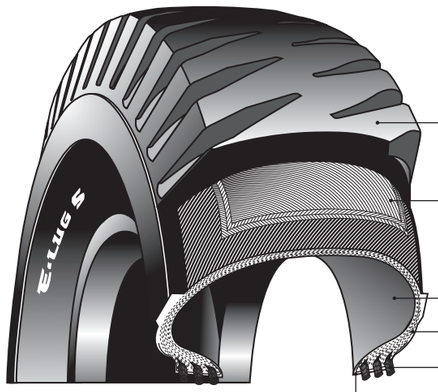
GENERAL INFORMATION

1. Structural Diagram

Off-The-Road Radial Tire (ORR)



Off-The-Road Bias Tire (ORS)



2. Definitions

2.1 Tire Size

The size of each tire is indicated by nominal width and rim diameter in inches and mm.
Radial structure is indicated by the letter “R”. For some tire the aspect ratio is indicated by percentage.

Example
Radial Tire ; 40.00R57, 33.25R35, 445/95R25
Bias Tire ; 21.00-35, 45/65-45

2.2 Star Rating, Ply Rating and Load Index

The load capacity of a tire is indicated by the star rating (in case of radial tire) and the ply rating (in case of bias tire).
The load index is applied in countries where the ETRTO standards are used.

2.3 Overall Diameter (OD)

“Overall Diameter” is twice the section height of a new tire, plus the nominal rim diameter, including 24-hour inflation growth.

2.4 Overall Width (OW)

“Overall Width” is the width of a new tire, including 24-hour inflation growth, and including protective side ribs, bars or decorations.

2.5 Section Width (SW)

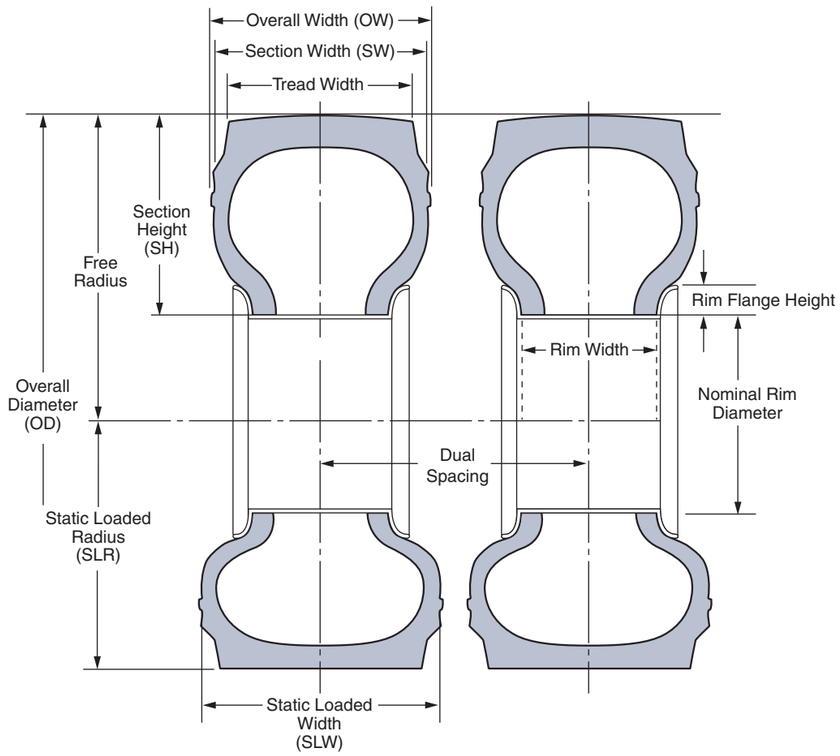
“Section Width” is the width of a new tire, including 24-hour inflation growth and including normal sidewalls, but not including protective side ribs, bars, or decorations.

2.6 Static Loaded Radius and Width (SLR, SLW)

“Static Loaded Radius” is the shortest distance from the axle center to the contact surface of a tire and “Static Loaded Width” is the overall width of a tire, mounted on the approved rim at the specified inflation pressure and placed still and vertically on a flat board, and loaded with the specified load.

2.7 Original Tread Depth (OTD)

“Original Tread Depth” is the tread depth of a new tire measured at the point of tread-indicator where available or one-fourth the width of the tire crown section from the crown center, including 24-hour inflation growth.



3. Classification

3.1 Uses and Characteristics of Off-The-Road Tires

The characteristics that Off-The-Road tires must possess differ according to their function and the type of vehicles they are mounted on.

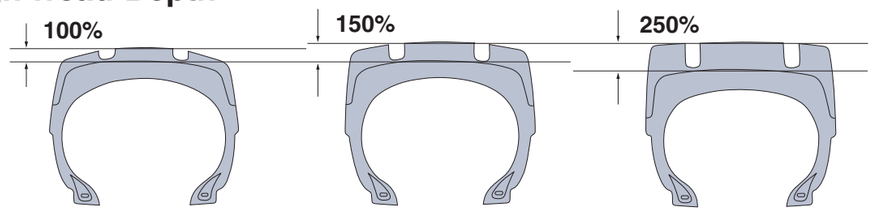
Type/Service	Function	Vehicles	Main tire characteristics required
Earthmover	Transporting	 Rigid dump trucks  Articulated dump trucks  Coal haulers  Scrapers  Off road trucks	Heat-resistance, Cut-resistance, Wear-resistance Shock burst-resistance
Grader	Grading, Leveling	 Graders	Traction, Maneuverability, (directional stability)
Loader and dozer	Loading and dozing	 Loaders, Bulldozers	Cut-resistance, Wear-resistance Stability
Compactor	Compacting	 Tire-rollers	Oil-resistance, Cut-resistance, Wear-resistance
Logging	Log-skidding	 Log-skidders	Traction, Flotation, Cut-resistance
Mobile crane (High-speed)	High-speed Travelling	 All-Terrain Cranes	Heat-resistance, Wear-resistance, Traction
Industrial	Handling & Towing	 Handling & Towing Equipments	Uneven wear, Wear-resistance, Stability
Underground	Underground	 LHDs  Drilling Jumbo  Underground Trucks	Cut-resistance, Wear-resistance

3.2 TRA Classification and Corresponding Bridgestone Off-The-Road Tires

Off-The-Road tires are classified by the TRA as follows, and the names of the tread patterns of the corresponding Bridgestone Off-The-Road tires are described below.

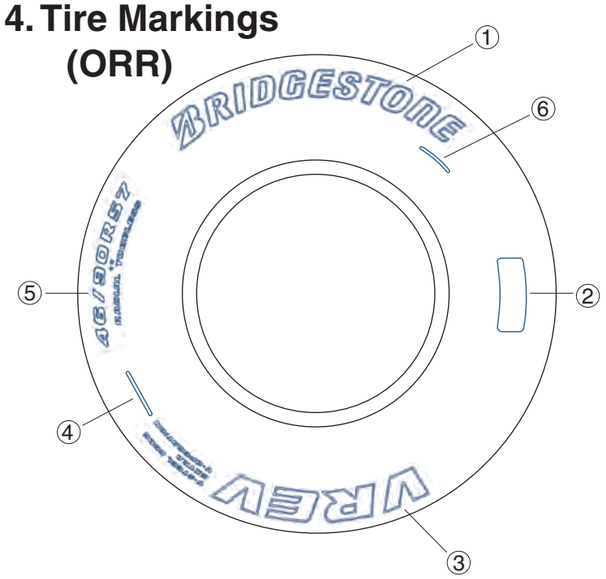
TRA Classification	Tread Type	Bridgestone Tread Pattern	
		Radial	Bias
E= Earthmover (Haulage Service)			
E-2	Traction	VUT VKT VSB VFT VHS VSW	
E-3	Rock	VLT VMT VTS VRL VRF	WL RL VL2
E-4	Rock Deep	L317 VLTS VSNT VMTS VMTP VZTS VZTP VELS VRLS VREP VRDP VRPS VREV VRQP	
E-7	Flotation	VSJ	
G=Grader			
G-1	Rib		RG
G-2	Traction	VUT VSW	GL FG
G-3	Rock	VJT	RL
G-4	Rock Deep	VMTS	
L=Loader & Dozer (Slow Speed Service)			
L-2	Traction Regular	VUT VSW	GL FG
L-3	Rock Regular	VLT VJT VTS	RL VL2
L-4	Rock Deep	VLTS VSNT VSNL	RLS
L-5	Rock Extra-Deep	VSDT VSDL VSDR	DL
L-5S	Smooth Extra-Deep	VSMS VSMS2	STMS
C=Compactor Service			
C-1	Smooth		RR
C-2	Grooved		AL2
LS=Logging Service			
LS-2	Intermediate	VSB	
Mobile Crane Service (High-Speed)			
Mobile Crane Service		VGT VHB VHS VHS2 VSW	
Industrial Service			
Industrial Service		VHB VCH VCHD VCHR VCHS VELS VRLS VSDL VSMS	RL RLS ELS2 STMS YS2
Underground Service			
Underground Service		VSNL VSNT VSDL VSDR VSDT VSMS VSMS2	STMS DL

Design Tread-Depth



Regular Tread	Deep Tread	Extra Deep Tread
E-2/E-3 L-2/L-3 G-2/G-3	E-4 L-4 G-4	L-5/L-5S

4. Tire Markings (ORR)



① Brand Name

② Bridgestone's Specifications Code

③ Pattern Name

④ Serial Number

⑤ Tire Size, Star Rating, Tubeless or Tube Type

⑥ DOT Code
DOT code is necessary for USA public road.

4.1 Type of Tire Size Designation

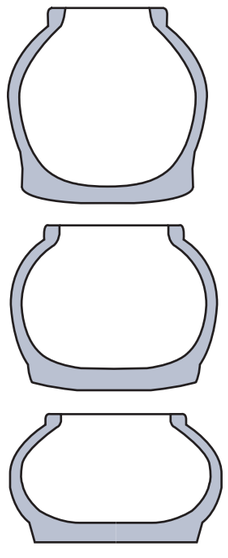
Regular — 27.00 R 49 ☆ ☆
- Star Rating
- Rim Diameter (inches)
- Radial Structure
- Section Width (inches)

Wide Base — 33.25 R 35 ☆ ☆
- Star Rating
- Rim Diameter (inches)
- Radial Structure
- Section Width (inches)

Super Wide Base — 40 / 65 - 39 30PR
- Ply Rating
- Rim Diameter (inches)
- Aspect Ratio 65 Series
- Section Width (inches)

170 E 385 / 95 R 24
- Rim Diameter (inches)
- Radial Structure
- Aspect Ratio 95 Series
- Section Width (mm)
- Speed Symbol
- Load Index

***Tire Aspect Ratio**



$\frac{SH}{SW}$ = 0.95*

$\frac{SH}{SW}$ = 0.80*

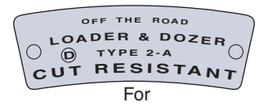
$\frac{SH}{SW}$ = 0.65*

SH, SW : See Page 3

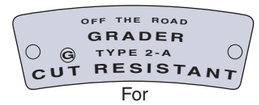
4.2 Type of Tire Structures Classified by Service and Designated by Bridgestone

Each Bridgestone tire has a Bridgestone code number on the tire sidewall according to its specifications.

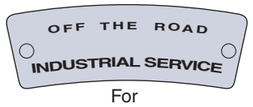
For
Earthmover service



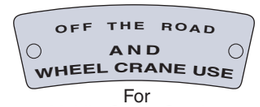
For
Loader and Dozer service



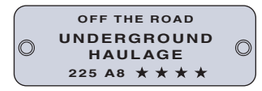
For
Grader service



For
Industrial service



For
Mobile Crane Service



For
Underground Truck Service

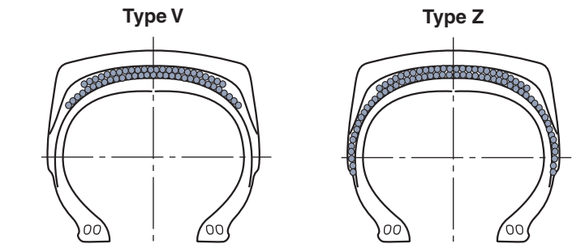
Tire Structures Classified by Type of Service and Bridgestone's Designations

Service	BS Code No.	Structure
Earthmover Service (E)	1A	Standard
	2A	Cut-resistant
	3A	Heat-resistant
Grader Service (G)	1A	Standard
	2A	Cut-resistant
Loader & Dozer Service (D)	2A	Cut-resistant
	2V*	Special cut-resistant (Type"V")
	2Z*	Special cut-resistant (Type"Z")
Logging Service (S)	2V	**Standard

NOTES: *Bias Tire Only
**2V tires are standard for log skidder service since the possibility of the cutting is high in log skidder operations.

D 2 A
- Structure: A: Standard; V: Cut-resistant type "V" (Steel Breaker); Z: Cut-resistant type "Z" (Side Steel Breaker)
- Characteristics: 1: Standard; 2: Cut-resistant; 3: Heat-resistant
- Type of Service: E: Earthmover; G: Grader; D: Loader & Dozer; S: Logging

Steel Breaker Tire



Steel breaker construction

Side steel breaker construction

Steel Breaker Bias Tire

Steel Breaker Off-the-Road tires feature breaker material which is changed from nylon to steel in order to resist cutting and cut bursting. Bridgestone Steel Breaker Off-the-Road tires are widely used on loaders at mining and quarry sites, loaders and underground trucks in underground mines, and also on log loaders.

Side Steel Breaker Bias Tire

In this tire the steel breaker extends to the sidewall of the tire to protect it against damage. The construction is similar to that described above.

4.3 Load Index

The LOAD INDEX is an international numerical code for the maximum load a tire can carry at the speed indicated by its speed symbol under service conditions specified by Bridgestone.

LI	kg	LI	kg	LI	kg	LI	kg	LI	kg	LI	kg
0	45	50	190	100	800	150	3 350	200	14 000	250	60 000
1	46.2	51	195	101	825	151	3 450	201	14 500	251	61 500
2	47.5	52	200	102	850	152	3 550	202	15 000	252	63 000
3	48.7	53	206	103	875	153	3 650	203	15 500	253	65 000
4	50	54	212	104	900	154	3 750	204	16 000	254	67 000
5	51.5	55	218	105	925	155	3 875	205	16 500	255	69 000
6	53	56	224	106	950	156	4 000	206	17 000	256	71 000
7	54.5	57	230	107	975	157	4 125	207	17 500	257	73 000
8	56	58	236	108	1 000	158	4 250	208	18 000	258	75 000
9	58	59	243	109	1 030	159	4 375	209	18 500	259	77 500
10	60	60	250	110	1 060	160	4 500	210	19 000	260	80 000
11	61.5	61	257	111	1 090	161	4 625	211	19 500	261	82 500
12	63	62	265	112	1 120	162	4 750	212	20 000	262	85 000
13	65	63	272	113	1 150	163	4 875	213	20 600	263	87 500
14	67	64	280	114	1 180	164	5 000	214	21 200	264	90 000
15	69	65	290	115	1 215	165	5 150	215	21 800	265	92 500
16	71	66	300	116	1 250	166	5 300	216	22 400	266	95 000
17	73	67	307	117	1 285	167	5 450	217	23 000	267	97 500
18	75	68	315	118	1 320	168	5 600	218	23 600	268	100 000
19	77.5	69	325	119	1 360	169	5 800	219	24 300	269	103 000
20	80	70	335	120	1 400	170	6 000	220	25 000	270	106 000
21	82.5	71	345	121	1 450	171	6 150	221	25 750	271	109 000
22	85	72	355	122	1 500	172	6 300	222	26 500	272	112 000
23	87.5	73	365	123	1 550	173	6 500	223	27 250	273	115 000
24	90	74	375	124	1 600	174	6 700	224	28 000	274	118 000
25	92.5	75	387	125	1 650	175	6 900	225	29 000	275	121 000
26	95	76	400	126	1 700	176	7 100	226	30 000	276	125 000
27	97	77	412	127	1 750	177	7 300	227	30 750	277	128 000
28	100	78	425	128	1 800	178	7 500	228	31 500	278	132 500
29	103	79	437	129	1 850	179	7 750	229	32 500	279	136 000
30	106	80	450	130	1 900	180	8 000	230	33 500		
31	109	81	462	131	1 950	181	8 250	231	34 500		
32	112	82	475	132	2 000	182	8 500	232	35 500		
33	115	83	487	133	2 060	183	8 750	233	36 500		
34	118	84	500	134	2 120	184	9 000	234	37 500		
35	121	85	515	135	2 180	185	9 250	235	38 750		
36	125	86	530	136	2 240	186	9 500	236	40 000		
37	128	87	545	137	2 300	187	9 750	237	41 250		
38	132	88	560	138	2 360	188	10 000	238	42 500		
39	136	89	580	139	2 430	189	10 300	239	43 750		
40	140	90	600	140	2 500	190	10 600	240	45 000		
41	145	91	615	141	2 575	191	10 900	241	46 250		
42	150	92	630	142	2 650	192	11 200	242	47 500		
43	155	93	650	143	2 725	193	11 500	243	48 750		
44	160	94	670	144	2 800	194	11 800	244	50 000		
45	165	95	690	145	2 900	195	12 150	245	51 500		
46	170	96	710	146	3 000	196	12 500	246	53 000		
47	175	97	730	147	3 075	197	12 850	247	54 500		
48	180	98	750	148	3 150	198	13 200	248	56 000		
49	185	99	775	149	3 250	199	13 600	249	58 000		

4.4 Speed Symbol

The SPEED SYMBOL indicates the speed at which the tire can carry a load corresponding to its load index under service conditions specified by Bridgestone.

Speed Symbol	Speed (km/h)
A1	5
A2	10
A3	15
A4	20
A5	25
A6	30
A7	35
A8	40

Speed Symbol	Speed (km/h)
B	50
C	60
D	65
E	70
F	80
G	90

4.5 Conversion Table: Star Rating to Ply Rating

Service	Tire Size	Star Rating	Corresponding Ply Rating
Earthmover	12.00R24	★3	up to 24
	14.00R24	★3	up to 32
	14.00R25	★3	up to 32
	16.00R25	★2	up to 36
	18.00R25	★1	up to 24
		★2	up to 36
	18.00R33	★2	up to 40
	21.00R35	★2	up to 44
	40.00R57	★2	up to 74
	17.5R25	★1	up to 16
	20.5R25	★1	up to 24
		★2	up to 28
	23.5R25	★1	up to 24
		★2	up to 32
	26.5R25	★2	up to 32
	29.5R25	★2	up to 34
	29.5R29	★2	up to 40
	33.25R29	★2	up to 44
	33.25R35	★2	up to 44
	37.25R35	★2	up to 48
	37.5R39	★2	up to 52
	40.5/75R39	★2	up to 54

Service	Tire Size	Star Rating	Corresponding Ply Rating
Grader	14.00R24	★1	up to 16
	16.00R24	★1	up to 16
	17.5R25	★1	up to 16
Loader	15.5R25	★1	up to 16
	17.5R25	★1	up to 16
	20.5R25	★1	up to 24
		★2	up to 28
	23.5R25	★1	up to 24
		★2	up to 32
	26.5R25	★1	up to 24
		★2	up to 36
	29.5R25	★1	up to 28
		★2	up to 34
	29.5R29	★1	up to 34
	35/65R33	★1	up to 36
	45/65R45	★1	up to 50
	50/65R51	★2	up to 54

Note: Due to the practice of altering inflation pressure to improve flotation on sand, Bridgestone does not apply a star rating to tire size 21.00R25 VSJ.

4.6 Size Conversion Table

Metric	Inch
385/95R24, 25	14.00R24, 25
445/95R24, 25	16.00R24, 25
445/80R25	17.5R25
505/95R25	18.00R25
525/80R25	20.5R25
750/65R25	30/65R25

4.7 Dual Specification Codes

Some Bridgestone Off-The-Road Tires have dual specification codes which can be used for both services.

Combination	Construction	Size Designation
Loader & Dozer Service + Earthmover Service	Radial	26.5R25 MS* VLT T DE2 → ★1 D2A, ★2 E2A
	Bias	26.5 – 25 20 VL2 T DE2 → D2A, E2A
Loader & Dozer Service + Grader Service	Radial/Bias	17.5 – 25 12 FG T DG2 → D2A, G2A
Earthmover Service + Grader Service	Radial	17.5R25 ★1 VKT T EG2 → E2A, G2A
Underground Trucks + Loader & Dozer Service	Radial	35/65R33 MT* VSNT T DUH → UGH, D2A

*** Multiple Star Rating**

Bridgestone Radial Tires marked with “LOADER & DOZER ★(one star)” and “EARTHMOVER ★★(two star)” have specified load capacity on each servicing condition.

Strength of tire casing is designed to constrain inflation pressure used.
<26.5R25 as an example>

	Type of Service	Star Rating	Inflation Pressure	Load (Load Index)	Speed (Speed Symbol)
MS	Loader	★(one star)	5.00 bar	15,000 kgs (202)	10 km/hour (A2)
	Earthmover	★★(two stars)	5.25 bar	11,500 kgs (193)	50 km/hour (B)

<35/65R33 as an example>

MT	Underground Trucks	★★★★(four stars)	8.00 bar	29,000 kgs (225)	40 km/hour (A8)
	Loader	★★(two stars)	6.50 bar	28,000 kgs (224)	10 km/hour (A2)

Description on Tire Sidewall

5. Ton-Kilometer-Per-Hour (TKPH)

5.1 Operating TKPH

Earth-moving, mining and logging tires have become increasingly important with the development of large construction vehicles. The primary task of these heavy-duty tires is to haul heavy loads faster, over longer distances. This heavy hauling inevitably causes heat built-up in the tires. As tires have limited resistance to heat, deterioration of the tire may occur at an early stage of operation if used beyond the rated TKPH.

Accordingly, it is necessary when selecting tires, to determine the amount of work which will keep the tire within a safe range to avoid over-heating when the vehicle is operated under given conditions. The amount of work done under the given conditions and within a safe range is shown as “Operating Ton-Kilometer-Per-Hour (Operating TKPH)” which can be determined by the following formula:

Formula for Calculation of Operating TKPH

$$\text{Operating TKPH} = \left(\frac{\text{Mean Tire-Load (MTL)}}{2}\right) \times \left(\text{Average Work Shift Speed (AWSS)}\right)$$

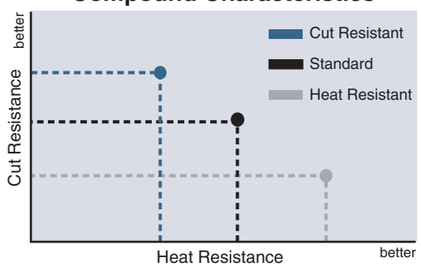
$$\text{MTL [metric tons]} = \frac{\text{Tire Load (Empty)} + \text{Tire Load (Loaded)}}{2}$$

$$\text{AWSS [km/hour]} = \frac{\text{Round Trip Distance[km]} \times \text{Number of Cycles per Shift}}{\text{Total Hours of Operation per Shift}}$$

5.2 Tire TKPH

Tire TKPH varies depending on the tire’s design (size, tread pattern and the type of compound). A High TKPH tire generates less heat than that of lower TKPH tire. However, the lower TKPH tire will have greater cut and wear resistance than the higher TKPH one.

Compound Characteristics



The TKPH method is applicable in the following situations.

(1) One way distance: within 16 km (10 miles)
   a. When haul length exceeds 16 km one way, consult a Bridgestone Representative.
   b. If the round-trip distance is less than 5km (3miles), Tire TKPH figures can be increased by 12%.

(2) Ambient temperature: 38˚C (100˚F)

For ambient temperatures other than 38˚C (100˚F), the Tire TKPH rating should be revised based on the following formula.

a. Radial Tire

Revised TKPH rating = [1 + α × (38˚C–Max. Ambient Temperature ˚C)]* × Tire TKPH

Below	27.00 (33.5)	inches in Section Width: α =0.010
Above	30.00 (37.25)	inches in Section Width: α =0.009

b. Bias Tire

Revised TKPH rating = [1 + α × (38˚C–Max. Ambient Temperature ˚C)]* × Tire TKPH

Below	27.00 (33.5)	inches in Section Width: α =0.006
Above	30.00 (37.25)	inches in Section Width: α =0.005

*Revising coefficient: The value is shown in the following table.

Revising Coefficient

Ambient Temperature		Bias Tire		Radial Tire	
		Tire Section		Tire Section	
˚C	˚F	27.00 and below	30.00 and over	27.00 and below	30.00 and over
14	57	1.144	1.120	1.240	1.216
15	59	1.138	1.115	1.230	1.207
16	61	1.132	1.110	1.220	1.198
18	64	1.120	1.100	1.200	1.180
20	68	1.108	1.090	1.180	1.162
22	72	1.096	1.080	1.160	1.144
24	75	1.084	1.070	1.140	1.126
26	79	1.072	1.060	1.120	1.108
28	82	1.060	1.050	1.100	1.090
30	86	1.048	1.040	1.080	1.072
32	90	1.036	1.030	1.060	1.054
34	93	1.024	1.020	1.040	1.036
36	97	1.012	1.010	1.020	1.018
38	100	1.000	1.000	1.000	1.000
40	104	0.988	0.990	0.980	0.982
42	108	0.976	0.980	0.960	0.964
44	111	0.964	0.970	0.940	0.946
46	115	0.952	0.960	0.920	0.928
48	118	0.940	0.950	0.900	0.910
50	122	0.928	0.940	0.880	0.892

For all ambient temperatures below 14˚C (57˚F), the same TKPH value as calculated at 14˚C (57˚F) should be used.

(3) Maximum speed

a. Radial Tire

For 65km/h(40mph) maximum speed, the loads must be reduces 12% with no change in inflation pressure.

b. Bias Tire

When the maximum speed exceeds 50 km/h (30 mph) under loaded conditions, the following formula is used:

$$\text{Revised TKPH Rating} = \frac{50\ \text{km/h}}{\text{Max. speed}} \times \text{Tire TKPH}$$

Example:

The TKPH Rating for 21.00-35, 36PR RLS E1A is 226; if the tire is to run at 60 km/h when loaded.

$$\frac{50}{60} \times 226 = 188$$

(4) To obtain the TKPH(TMPH) for type 2A-LS, multiply type 2A rating by 0.8.

(5) The respective types of vehicles are subject to the following speed limitations.

Maximum Speed

Type of Vehicle	Maximum Speed
Dump & Scraper	**50 km/h (30 mph)**
Grader	**40 km/h (25 mph)**
Loader & Dozer	**10 km/h (5 mph)**

5.3 Proper TKPH

The average operating TKPH, calculated after several samples, should not exceed the tire TKPH rating. Exceeding the tire TKPH may result in serious tire damage or failure.

RADIAL TIRE

1. Tread Designs

■ Earthmover Service

E2

V-STEEL ULTRA TRACTION (VUT)

V-STEEL K-TRACTION (VKT)

V-STEEL S-BLOCK (VSB)

E2

V-STEEL F-TRACTION (VFT)

V-STEEL H-SERVICE (VHS)

V-STEEL SNOW WEDGE (VSW)

E3

V-STEEL L-TRACTION (VLT)

Wide Base Regular
V-STEEL M-TRACTION (VMT)

V-STEEL TRACTION-STABILITY (VTS)

E3

Wide Base Regular
V-STEEL R-LUG
(VRL)

V-STEEL
ROCK FAST
(VRF)

E4

14.00R24~
16.00R25

21.00R33~
37.00R57

V-STEEL R-LUG S (VRLS)

V-STEEL
ROCK E-PREMIUM
(VREP)

V-STEEL
ROCK DEEP
PREMIUM (VRDP)

■Sand Service

E4

L317

V-STEEL
L-TRACTION S
(VLTS)

V-STEEL
N-TRACTION
(VSNT)

V-STEEL
M-TRACTION S
(VMTS)

V-STEEL
M-TRACTION
PREMIUM (VMTP)

E4

V-STEEL
ROCK PREMIUM
SERVICE (VRPS)

V-STEEL
ROCK EXTRA
V-OPERATION (VREV)

V-STEEL
ROCK QUARRY
PREMIUM (VRQP)

E7

V-STEEL
JAMAL
(VSJ)

■Grader Service

E4

V-STEEL
Z-TRACTION S
(VZTS)

V-STEEL
Z-TRACTION
PREMIUM (VZTP)

18.00R25~
21.00R35

40.00R57

V-STEEL E-LUG S (VELS)

G2

V-STEEL
U-TRACTION
(VUT)

V-STEEL
SNOW WEDGE
(VSW)

G3

V-STEEL
J-TRACTION
(VJT)

G4

V-STEEL
M-TRACTION S
(VMTS)

■Loader & Dozer Service

L2

V-STEEL
U-TRACTION
(VUT)

V-STEEL
SNOW WEDGE
(VSW)

L3

V-STEEL
L-TRACTION
(VLT)

V-STEEL
J-TRACTION
(VJT)

V-STEEL TRACTION-
STABILITY
(VTS)

L4

V-STEEL
L-TRACTION S
(VLTS)

V-STEEL
N-TRACTION
(VSNT)

V-STEEL
N-LUG
(VSNL)

L5

V-STEEL
SUPER-DEEP
TRACTION (VSDT)

L5

V-STEEL
D-LUG
(VSDL)

V-STEEL
SUPER DEEP
ROCK (VSDR)

L5S

V-STEEL SMOOTH
TREAD-MS
(VSMS)

V-STEEL SMOOTH
TREAD-MS 2
(VSMS2)

■Mobile Crane Service (High-Speed)

V-STEEL
G-TRACTION
(VGT)

V-STEEL
H-BLOCK
(VHB)

V-STEEL
HIGHWAY SERVICE
(VHS)

V-STEEL
HIGHWAY SERVICE2
(VHS2)

V-STEEL
SNOW WEDGE
(VSW)

■Industrial Service

V-STEEL
H-BLOCK
(VHB)

V-STEEL
CONTAINER
HANDLER
(VCH)

V-STEEL
CONTAINER
HANDLER DEEP
(VCHD)

V-STEEL
CONTAINER
HANDLER RIB
(VCHR)

V-STEEL CONTAINER
HANDLER STABILITY
AND SAFETY
(VCHS)

V-STEEL
E-LUG S
(VELS)

V-STEEL
R-LUG S
(VRLS)

V-STEEL
D-LUG
(VSDL)

V-STEEL
SMOOTH
TREAD-MS
(VSMS)

2. Application

Earthmover Service

Rigid dump trucks / Bottom dump trucks

VUT(E2)

Size	Type	Star Rating
335/80 R 20	T/L	
365/80 R 20	T/L	
405/70 R 20	T/L	

VKT(E2)

Size	Type	Star Rating
29.5 R 29	T/L	★2
37.5 R 39	T/L	★2

VSB(E2)

Size	Type	Star Rating
14.00 R 24	T/T	★3
14.00 R 25	T/L	★3

VFT(E2)

Size	Type	Star Rating
27.00 R 49	T/L	★2

VHS(E2)

Size	Type	Star Rating
36.00 R 51	T/L	★2

＊**VSW**(E2)

Size	Type	Star Rating
20.5 R 25	T/L	MS
23.5 R 25	T/L	MS

VLT(E3)

Size	Type	Star Rating
20.5 R 25	T/L	MS
23.5 R 25	T/L	MS ★2
750/65(30/65) R 25	T/L	MS
26.5 R 25	T/L	MS
29.5 R 25	T/L	MS ★2
33.25 R 29	T/L	★2
37.25 R 35	T/L	★2
40.5/75 R 39	T/L	★2

VTS(E3)

Size	Type	Star Rating
875/65 R 29	T/L	MS

VMT(E3)

Size	Type	Star Rating
30.00 R 51	T/L	★2
33.00 R 51	T/L	★2
40.00 R 57	T/L	★2

VRL(E3)

Size	Type	Star Rating
29.5 R 35	T/L	★2
33.25 R 35	T/L	★2

VRF(E3)

Size	Type	Star Rating
53/80 R 63	T/L	★2
59/80 R 63	T/L	★2

L317(E4)

Size	Type	Star Rating
11.00 R 20	T/T	★3
12.00 R 20	T/T	★3
11 R 22.5	T/L	14
12 R 22.5	T/L	★3
12.00 R 24	T/T	★3

VLTS(E4)

Size	Type	Star Rating
20.5 R 25	T/L	MS
23.5 R 25	T/L	MS
750/65(30/65) R 25	T/L	★2
26.5 R 25	T/L	★2
29.5 R 25	T/L	★2
875/65 R 29	T/L	MS
NEW 33.25 R 29	T/L	★2

VSNT(E4)

Size	Type	Star Rating
26.5 R 25	T/L	MS
29.5 R 25	T/L	MS
29.5 R 29	T/L	MS
35/65 R 33	T/L	MS MT

VMTS(E4)

Size	Type	Star Rating
14.00 R 25	T/L	★3
16.00 R 25	T/L	★2
18.00 R 25	T/L	★2
27.00 R 49	T/L	★2

T/T: Tube Type　T/L: Tubeless Type
MS: Multiple Star Rating (★1/★2)
MT: Multiple Star Rating (★2/★4)

＊**VSW** is especially designed for snow surface operations.

Articulated dump trucks

Undergound trucks

Off road trucks

Scrapers

VMTP(E4)

Size	Type	Star Rating
12.00 R 24	T/T	★3
18.00 R 33	T/L	★2
21.00 R 33	T/L	★2
21.00 R 35	T/L	★2
24.00 R 35	T/L	★2
27.00 R 49	T/L	★2
33.00 R 51	T/L	★2

VZTS(E4)

Size	Type	Star Rating
37.00 R 57	T/L	★2
40.00 R 57	T/L	★2

VZTP(E4)

Size	Type	Star Rating
46/90 R 57	T/L	★2

VELS(E4)

Size	Type	Star Rating
18.00 R 25	T/L	★2
18.00 R 33	T/L	★2
21.00 R 35	T/L	★2
40.00 R 57	T/L	★2

VRLS(E4)

Size	Type	Star Rating
14.00 R 24	T/T	★3
14.00 R 25	T/L	★3
16.00 R 25	T/L	★2
21.00 R 33	T/L	★2
	T/T	★2
24.00 R 35	T/L	★2
27.00 R 49	T/L	★2
30.00 R 51	T/L	★2
33.00 R 51	T/L	★2
36.00 R 51	T/L	★2
37.00 R 57	T/L	★2

VREP(E4)

Size	Type	Star Rating
27.00 R 49	T/L	★2

VRDP(E4)

Size	Type	Star Rating
27.00 R 49	T/L	★2
33.00 R 51	T/L	★2
42/90 R 57	T/L	★2
40.00 R 57	T/L	★2
46/90 R 57	T/L	★2

VRPS(E4)

Size	Type	Star Rating
33.00 R 51	T/L	★2
42/90 R 57	T/L	★2
40.00 R 57	T/L	★2
46/90 R 57	T/L	★2
50/90 R 57	T/L	★2
53/80 R 63	T/L	★2
59/80 R 63	T/L	★2

VREV(E4)

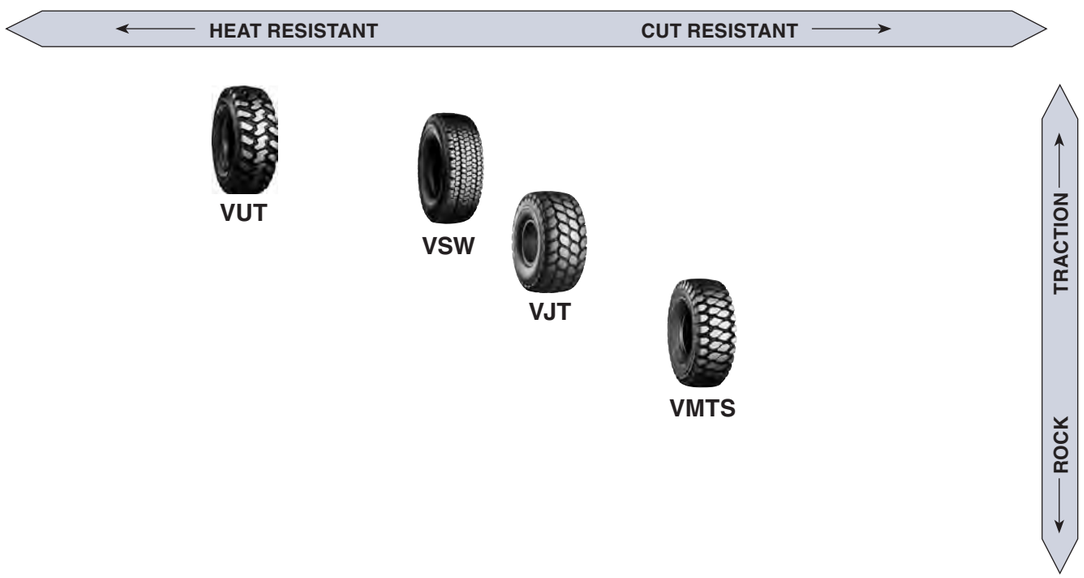
Size	Type	Star Rating
27.00 R 49	T/L	★2
46/90 R 57	T/L	★2

VRQP(E4)

Size	Type	Star Rating
18.00 R 33	T/L	★2
24.00 R 35	T/L	★2

T/T: Tube Type
T/L: Tubeless Type

Grader Service



VUT(G2)

Size	Type	Star Rating
13.00 R 24 TG	T/L	★1
14.00 R 24 TG	T/L	★1
15.5 R 25	T/L	★1★2
17.5 R 25	T/L	★1
20.5 R 25	T/L	★1
23.5 R 25	T/L	★1

*__VSW__(G2)

14.00 R 24 TG	T/L	★1★3
16.00 R 24 TG	T/L	★1
17.5 R 25	T/L	★1

VJT(G3)

20.5 R 25	T/L	★1
23.5 R 25	T/L	★1

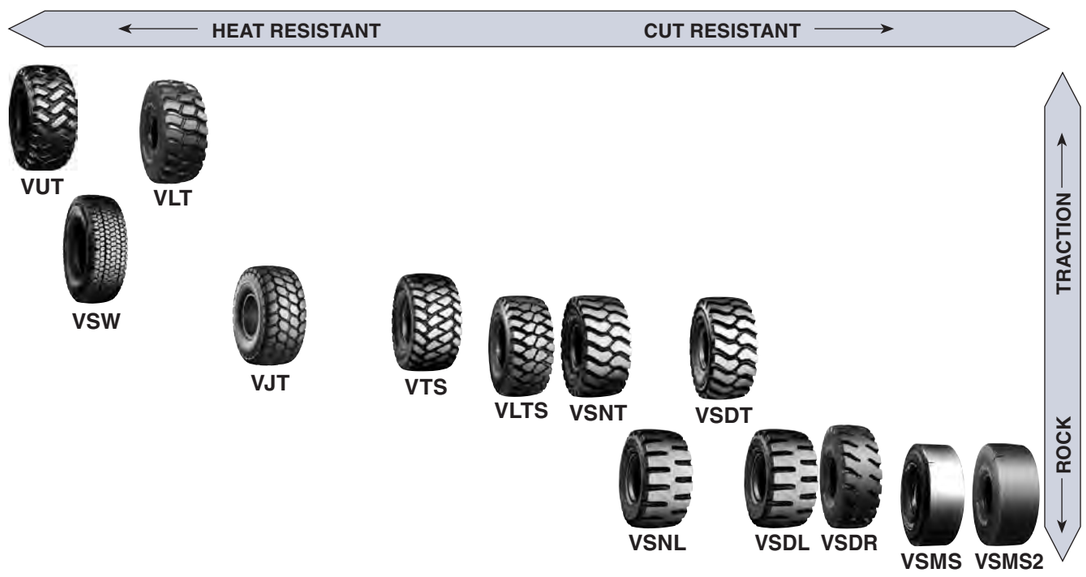
VMTS(G4)

14.00 R 24 TG	T/L	★1

*__VSW__ is especially designed for snow surface operations.

T/L: Tubeless Type
TG: For Semi-Drop Center Rim

Loader & Dozer Service



VUT(L2)

Size	Type	Star Rating
335/80 R 20	T/L	
365/80 R 20	T/L	
405/70 R 20	T/L	
15.5 R 25	T/L	★1★2
17.5 R 25	T/L	★1
20.5 R 25	T/L	★1
23.5 R 25	T/L	★1

*__VSW__(L2)

14.00 R 24 TG	T/L	★1
17.5 R 25	T/L	★1
20.5 R 25	T/L	MS
23.5 R 25	T/L	MS
600/65 R 25	T/L	★1

VLT(L3)

20.5 R 25	T/L	MS
23.5 R 25	T/L	MS
750/65(30/65) R 25	T/L	MS
26.5 R 25	T/L	MS
29.5 R 25	T/L	MS

VJT(L3)

17.5 R 25	T/L	★1★2
20.5 R 25	T/L	★1
23.5 R 25	T/L	★1★2
26.5 R 25	T/L	★1★2
29.5 R 25	T/L	★1★2

T/T: Tube Type
T/L: Tubeless Type
MS: Multiple Star Rating (★1/★2)
MT: Multiple Star Rating (★2/★4)
TG: For Semi-Drop Center Rim

VTS(L3)

550/65 R 25	T/L	★1
650/65 R 25	T/L	★1
775/65 R 29	T/L	★1
875/65 R 29	T/L	MS

VLTS(L4)

20.5 R 25	T/L	MS
23.5 R 25	T/L	MS
875/65 R 29	T/L	MS

VSNT(L4)

26.5 R 25	T/L	MS ★2
29.5 R 25	T/L	MS ★2
29.5 R 29	T/L	MS ★2
35/65 R 33	T/L	MT MS★2

VSNL(L4)

14.00 R 20	T/T	★2
35/65 R 33	T/L	★2
45/65 R 45	T/L	★2

VSDT(L5)

23.5 R 25	T/L	★1★2
26.5 R 25	T/L	★1★2
29.5 R 25	T/L	★1★2
29.5 R 29	T/L	★1★2
35/65 R 33	T/L	★1★2

VSDL(L5)

8.25 R 15	T/T	★2
10.00 R 15	T/T	★2
14.5 R 15	T/L	★2
12.00 R 20	T/T	★2

VSDL(L5) (continued)

15.5 R 25	T/L	★1
17.5 R 25	T/L	★1★2
20.5 R 25	T/L	★1★2
23.5 R 25	T/L	★1★2
26.5 R 25	T/L	★1★2
29.5 R 25	T/L	★1★2
29.5 R 29	T/L	★1★2
35/65 R 33	T/L	★1★2
45/65 R 39	T/L	★1
45/65 R 45	T/L	★1★2
50/65 R 51	T/L	★2
55.5/80 R 57	T/L	
60/80 R 57	T/L	

VSDR(L5)

20.5 R 25	T/L	★1★2

VSMS(L5S)

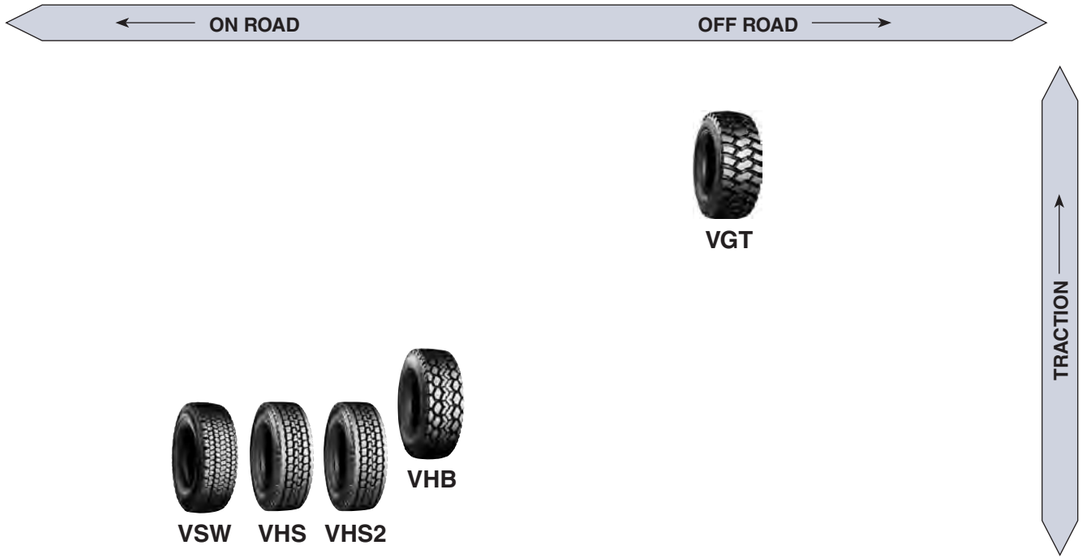
9.00 R 20	T/T	★2
12.00 R 20	T/T	★2
12.00 R 24	T/T	★2
14.00 R 24	T/T	★2
17.5 R 25	T/L	★1★2
18.00 R 25	T/L	★1★2
26.5 R 25	T/L	★1★2
29.5 R 29	T/L	★2

VSMS2(L5S)

17.5 R 25	T/L	★2
26.5 R 25	T/L	★2
NEW 29.5 R 25	T/L	★2
29.5 R 29	T/L	★2

*__VSW__ is especially designed for snow surface operations.

Mobile Crane Service (High-Speed)



VGT

Size	Type
170E 445/80 R 25	T/L

VHB

Size	Type
170E 385/95 R 24	T/T
177E 445/95 R 25	T/L
186E 505/95 R 25	T/L

VHS

Size	Type
170E 385/95 R 24	T/T
170E 385/95 R 25	T/L
170F 385/95 R 25	T/L
177E 445/95 R 25	T/L
174F 445/95 R 25	T/L
186E 505/95 R 25	T/L
179E 525/80 R 25	T/L
176F 525/80 R 25	T/L

VHS2

Size	Type
NEW 174F 445/95 R 25	T/L

***VSW**

Size	Type
170E 385/95 R 25	T/L
177E 445/95 R 25	T/L

***VSW** is especially designed for snow surface operations.

T/T: Tube Type
T/L: Tubeless Type

Industrial Service

VHB

14.00 R 24	T/T	★3
16.00 R 25	T/L	★2
18.00 R 25	T/L	★3

VCH

12.00 R 20	T/T	★3
12.00 R 24	T/T	★2
14.00 R 24	T/T	★3

VCHD

16.00 R 25	T/L	

VCHS

12.00 R 20	T/T	★3
12.00 R 24	T/T	
14.00 R 24	T/T	★3
14.00 R 24 TG	T/L	★3
18.00 R 25	T/L	★3
18.00 R 33	T/L	★3

VELS

18.00 R 33	T/L	★3

VRLS

16.00 R 25	T/L	★2

VSDL

23.5 R 25	T/L	★2
35/65 R 33	T/L	★2

VSMS

18.00 R 25	T/L	★2

VCHR

16.00 R 25	T/L	

Sand Service

VSJ(E7)

16.00 R 20	T/L	28
	T/T	28
21.00 R 25	T/L	

T/T: Tube Type
T/L: Tubeless Type
TG: For Semi-Drop Center Rim

3. Technical Data

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
15"														
8.25R15	VSDL		★2	L5	D2A	-	-	**880** *34.6*	**248** *9.8*	**405** *15.9*	**285** *11.2*	**48.0**	- -	6.50T
10.00R15	VSDL		★2	L5	D2A	-	-	**905** *35.6*	**287** *11.3*	**416** *16.4*	**330** *13.0*	**48.0**	- -	7.50V
14.5R15 Tubeless	VSDL		★2	L5	D2A	-	-	**899** *35.4*	**359** *14.1*	**413** *16.3*	**412** *16.2*	**48.0**	- -	11.00/1.5
20"														
9.00R20	VSMS		★2	L5S	D2A	-	-	**1054** *41.5*	**260** *10.2*	**474** *18.7*	**303** *11.9*	**51.0**	-	7.00T
11.00R20	L317		★3	E4	-	**188**	*129*	**1107** *43.6*	**290** *11.4*	**512** *20.2*	**325** *12.8*	**25.0**	**335** *13.2*	8.00V
12.00R20	L317		★3	E4	-	**208**	*142*	**1146** *45.1*	**308** *12.1*	**523** *20.6*	**346** *13.6*	**25.0**	**384** *15.1*	8.50V
	VSDL		★2	L5	D2A	-	-	**1168** *46.0*	**320** *12.6*	**538** *21.2*	**359** *14.1*	**57.0**	- -	
	VSMS		★2	L5S	D2A	-	-	**1173** *46.2*	**312** *12.3*	**540** *21.3*	**351** *13.8*	**57.0**	- -	
	VCH		★3	Industrial Service	IDU	-	-	See characteristics page 48						
	VCHS	176A5	★3	Industrial Service	IDU	-	-							
14.00R20	VSNL		★2	L4	D2A	-	-	**1196** *47.1*	**360** *14.2*	**550** *21.7*	**414** *16.3*	**34.0**	- -	10.00WI
16.00R20 Tubeless **16.00R20**	VSJ		28	E7	-	-	-	See characteristics page 52						
335/80R20 Tubeless	VUT	136B 147A2		E2 L2	DE2	-	-	**1036** *40.8*	**319** *12.6*	**463** *18.2*	**357** *14.1*	**19.0**	- -	11x20
365/80R20 Tubeless	VUT	141B 153A2		E2 L2	DE2	-	-	**1087** *42.8*	**347** *13.7*	**483** *19.0*	**389** *15.3*	**21.0**	- -	11x20
405/70R20 Tubeless	VUT	143B 155A2		E2 L2	DE2	-	-	**1092** *43.0*	**398** *15.7*	**485** *19.1*	**446** *17.6*	**20.0**	- -	13x20

For the TKPH(TMPH) Ratings, please refer to page 11.

Pattern	Application Max.Speed km/h mph	Tire Load Limits at Various Cold Inflation Pressures																			Size
15"																					
		kPa	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	**675**	**700**	**725**	**750**	**775**	**800**	**825**	
		psi	58	62	65	69	73	76	80	83	87	91	94	98	102	105	109	112	115	120	
VSDL	Loader **10** 5	★																		★2	8.25R15
		kg						**2200**	**2275**	**2350**	**2425**	**2500**	**2575**	**2650**	**2725**	**2800**	**2875**	**2950**	**3025**	**3100**	
		lbs						*4860*	*5020*	*5200*	*5360*	*5540*	*5700*	*5860*	*6000*	*6200*	*6350*	*6500*	*6650*	*6800*	
VSDL		★																		★2	10.00R15
		kg						**2875**	**2975**	**3075**	**3175**	**3275**	**3375**	**3475**	**3575**	**3650**	**3750**	**3850**	**3950**	**4025**	
		lbs						*6350*	*6550*	*6800*	*7000*	*7200*	*7450*	*7650*	*7850*	*8050*	*8250*	*8500*	*8700*	*8900*	
VSDL		★											★2								14.5R15
		kg	**2425**	**2550**	**2650**	**2775**	**2875**	**2975**	**3100**	**3200**	**3300**	**3400**	**3500**								
		lbs	*5360*	*5620*	*5860*	*6100*	*6350*	*6600*	*6800*	*7050*	*7250*	*7500*	*7700*								
20"																					
VSMS	Loader **10** 5	★																		★2	9.00R20
		kg						**3075**	**3250**	**3350**	**3450**	**3550**	**3650**	**3750**	**3875**	**4000**	**4000**	**4125**	**4250**	**4375**	
		lbs						*6800*	*7150*	*7400*	*7600*	*7850*	*8050*	*8250*	*8550*	*8800*	*8800*	*9100*	*9350*	*9650*	
L317	E/M **50** 30	★																★3			11.00R20
		kg			**2500**	**2600**	**2710**	**2810**	**2910**	**3010**	**3100**	**3200**	**3300**	**3390**	**3480**	**3570**	**3670**	**3760**			
		lbs			*5510*	*5730*	*5970*	*6200*	*6420*	*6640*	*6830*	*7050*	*7280*	*7470*	*7670*	*7880*	*8080*	*8290*			
L317		★																★3			12.00R20
		kg			**2770**	**2880**	**2990**	**3110**	**3220**	**3330**	**3430**	**3540**	**3650**	**3750**	**3850**	**3950**	**4060**	**4160**			
		lbs			*6110*	*6350*	*6590*	*6860*	*7100*	*7340*	*7560*	*7800*	*8050*	*8270*	*8490*	*8720*	*8940*	*9170*			
VSDL VSMS	Loader **10** 5	★																		★2	
		kg						**4375**	**4500**	**4625**	**4875**	**5000**	**5150**	**5300**	**5450**	**5600**	**5800**	**5800**	**6000**	**6150**	
		lbs						*9650*	*9900*	*10200*	*10700*	*11000*	*11400*	*11700*	*12000*	*12300*	*12800*	*12800*	*13200*	*13600*	
VCH VCHS	IDU	See characteristics page 49																			
VSNL	Loader **10** 5	★																		★2	14.00R20
		kg						**5200**	**5400**	**5550**	**5750**	**5900**	**6100**	**6250**	**6450**	**6600**	**6800**	**6950**	**7100**	**7300**	
		lbs						*11400*	*11900*	*12300*	*12600*	*13000*	*13400*	*13800*	*14200*	*14600*	*15000*	*15300*	*15700*	*16100*	
VSJ	Sand	See characteristics page 53																			16.00R20
		kPa	**275**	**300**	**325**	**350**	**375**														
		psi	40	44	47	51	54														
VUT	E/M **50** 30	★																			335/80R20
		kg	**1800**	**1900**	**2000**	**2120**	**2240**														
		lbs	*4000*	*4200*	*4400*	*4700*	*5000*														
VUT	Loader **10** 5	★																			
		kg	**2430**	**2575**	**2725**	**2900**	**3075**														
		lbs	*5350*	*5700*	*6000*	*6400*	*6800*														
VUT	E/M **50** 30	★																			365/80R20
		kg	**2060**	**2180**	**2300**	**2430**	**2575**														
		lbs	*4500*	*4800*	*5100*	*5400*	*5700*														
VUT	Loader **10** 5	★																			
		kg	**2900**	**3075**	**3250**	**3450**	**3650**														
		lbs	*6400*	*6800*	*7150*	*7600*	*8000*														
VUT	E/M **50** 30	★																			405/70R20
		kg	**2180**	**2300**	**2430**	**2575**	**2725**														
		lbs	*4800*	*5100*	*5400*	*5700*	*6000*														
VUT	Loader **10** 5	★																			
		kg	**3075**	**3250**	**3450**	**3650**	**3875**														
		lbs	*6800*	*7250*	*7600*	*8100*	*8550*														

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm / inch	OW mm / inch	SLR mm / inch	SLW mm / inch	OTD mm	Minimum Dual Spacing mm / inch	Recommended Rim/Flange Height inch
22.5"														
11R22.5 Tubeless	L317		14	E4	-	**TBA**	*TBA*	**1078** *42.4*	**270** *10.6*	**TBA** *TBA*	**TBA** *TBA*	**25.0**	**TBA** *TBA*	8.25
12R22.5 Tubeless	L317		★3	E4	-	**188**	*129*	**1109** *43.7*	**292** *11.5*	**517** *20.4*	**327** *12.9*	**25.0**	**343** *13.5*	9.00
24"														
12.00R24	L317		★3	E4	-	**177**	*121*	**1254** *49.4*	**319** *12.6*	**577** *22.7*	**355** *14.0*	**31.5**	**391** *15.4*	8.50V
	VMTP		★3	E4	E2A	**136**	*93*	**1254** *49.4*	**319** *12.6*	**577** *22.7*	**355** *14.0*	**31.5**	**391** *15.4*	
	VSMS		★2	L5S	D2A	-	-	**1275** *50.2*	**312** *12.3*	**573** *22.6*	**364** *14.3*	**57.0**	- -	
	VCH		★2	Industrial Service	IDU	-	-	See characteristics page 48						
	VCHS	178A5		Industrial Service	-	-	-							
13.00R24 TG Tubeless	VUT		★1	G2	G2A	-	-	**1290** *50.8*	**357** *14.1*	**585** *23.0*	**380** *15.0*	**25.0**	- -	8.00TG
14.00R24	VSB		★3	E2	E2A	**179**	*123*	**1365** *53.7*	**390** *15.4*	**628** *24.7*	**433** *17.0*	**21.0**	**450** *17.7*	10.00W
				Logging	-	-	-	See characteristics page 50						
	VHB		★3	Industrial Service	IDU	-	-	See characteristics page 48						
	VRLS		★3	E4	E2A-LS	**85**	*58*	**1403** *55.2*	**390** *15.4*	**644** *25.4*	**432** *17.0*	**39.0**	**450** *17.7*	10.00W
	VSMS		★2	L5S	D2A	-	-	**1394** *54.8*	**390** *15.4*	**634** *25.0*	**437** *17.2*	**72.0**	- -	
	VCH		★3	Industrial Service	IDU	-	-	See characteristics page 48						
	VCHS	196A5	★3	Industrial Service	IDU	-	-							

For the TKPH(TMPH) Ratings, please refer to page 11.

Pattern	Application Max.Speed km/h / mph	Tire Load Limits at Various Cold Inflation Pressures	Size
22.5"			
		kPa 450 475 500 525 550 575 600 625 650 675 700 725 750 775 800 815	11R22.5
		psi 65 69 73 76 80 83 87 91 94 98 102 105 109 112 115 118	
L317	E/M	★ 14PR	
	50	**kg** **2150** **2240** **2330** **2420** **2500** **2590** **2670** **2760** **2840** **2920** **3000**	
	30	*lbs* *4740* *4940* *5140* *5340* *5510* *5710* *5890* *6080* *6260* *6440* *6610*	
		kPa 450 475 500 525 550 575 600 625 650 675 700 725 750 775 800 815	12R22.5
		psi 65 69 73 76 80 83 87 91 94 98 102 105 109 112 115 120	
L317		★ ★3	
		kg **2410** **2510** **2610** **2700** **2800** **2890** **2990** **3080** **3170** **3260** **3350** **3440** **3530** **3620** **3710** **3760**	
		lbs *5310* *5530* *5750* *5950* *6170* *6370* *6590* *6790* *6990* *7190* *7390* *7580* *7780* *7980* *8180* *8290*	
24"			
		kPa 450 475 500 525 550 575 600 625 650 675 700 725 750 775 800 825	12.00R24
		psi 65 69 73 76 80 83 87 91 94 98 102 105 109 112 115 120	
L317 VMTP	E/M	★ ★3	
	50	**kg** **3050** **3180** **3300** **3430** **3550** **3670** **3790** **3900** **4020** **4140** **4250**	
	30	*lbs* *6720* *7010* *7280* *7560* *7830* *8090* *8360* *8600* *8860* *9130* *9370*	
VSMS	Loader	★ ★2	
	10	**kg** **4875** **5150** **5300** **5450** **5600** **5800** **6000** **6150** **6300** **6500** **6500** **6700** **6900**	
	5	*lbs* *11000* *11400* *11700* *12000* *12300* *12800* *13200* *13600* *13900* *14300* *14300* *14700* *15200*	
VCH VCHS	IDU	See characteristics page 49	
		kPa 200 225 250 275 300 325 350 375	13.00R24 TG
		psi 29 33 36 40 44 47 51 54	
VUT	Grader	★ ★1	
	40	**kg** **1850** **2000** **2180** **2360** **2500** **2650** **2800** **3000**	
	25	*lbs* *4080* *4400* *4800* *5200* *5520* *5840* *6150* *6600*	
		kPa 450 475 500 525 550 575 600 625 650 675 700 725 750 775 800	14.00R24
		psi 65 69 73 76 80 83 87 91 94 98 102 105 109 112 115	
VSB VRLS	E/M	★ ★3	
	50	**kg** **4000** **4125** **4375** **4500** **4625** **4750** **5000** **5150** **5300** **5450** **5600** **5710** **5830** **5940** **6050**	
	30	*lbs* *8800* *9100* *9650* *9900* *10200* *10500* *11000* *11400* *11700* *12000* *12300* *12500* *12800* *13100* *13400*	
VSB	Logging	See characteristics page 51	
VSMS	Loader	★ ★2	
	10	**kg** **5950** **6200** **6450** **6700** **6950** **7200** **7450** **7700** **7950** **8200** **8450** **8700** **8950** **9200** **9500**	
	5	*lbs* *13120* *13700* *14220* *14800* *15300* *15900* *16400* *16980* *17500* *18080* *19600* *19180* *19690* *20680* *20900*	
VHB VCH VCHS	IDU	See characteristics page 49	

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
14.00R24 TG Tubeless	VUT		★1	G2	G2A	-	-	**1350** *53.1*	**373** *14.7*	**608** *23.9*	**420** *16.5*	**25.5**	- -	8.00TG
	VSW		★3	G2	-	-	-	**1351** *53.2*	**390** *15.4*	**594** *23.4*	**446** *17.6*	**23.5**	- -	10.00VA
		153A8 175A2	★1	L2	DG2				**370** *14.6*		**426** *16.8*			8.00TG
	VMTS		★1	G4	G2A			**1400** *55.1*	**373** *14.7*	**645** *25.4*	**415** *16.3*	**38.0**	- -	
	VCHS	196A5	★3	Industrial Service	IDU	-	-	See characteristics page 48						
385/95R24	VHS	170E		Mobile Crane Service	-	-	-	See characteristics page 50						
	VHB	170E		Mobile Crane Service	-	-	-							
16.00R24 TG Tubeless	VSW		★1	G2	-	-	-	**1485** *58.5*	**417** *16.4*	**680** *26.8*	**467** *18.4*	**22.5**	- -	10.00VA
25"														
14.00R25 Tubeless	VSB		★3	E2	E2A-LS	**179**	*123*	**1365** *53.7*	**390** *15.4*	**628** *24.7*	**433** *17.0*	**21.0**	**450** *17.7*	10.00/1.5
				Logging	-	-	-	See characteristics page 50						
	VMTS		★3	E4	E2A-LS - E3A	**91** - **136**	*62* - *93*	**1406** *55.4*	**391** *15.4*	**650** *25.6*	**435** *17.1*	**38.0**	**450** *17.7*	10.00/1.5
	VRLS		★3	E4	E2A	**85**	*58*	**1403** *55.2*	**391** *15.4*	**650** *25.6*	**435** *17.1*	**39.0**	**450** *17.7*	
385/95R25 Tubeless	VHS	170E 170F		Mobile Crane Service	-	-	-	See characteristics page 50						
	VSW	170E		Mobile Crane Service	-	-	-							
15.5R25 Tubeless	VUT		★2 ★1	G2, L2	DG2	-	-	**1269** *50.0*	**383** *15.1*	**559** *22.0*	**436** *17.2*	**27.0**	- -	12.00/1.3
	VSDL		★1	L5	D2A	-	-	**1329** *52.3*	**393** *15.5*	**606** *23.9*	**443** *17.4*	**64.0**	- -	

For the TKPH(TMPH) Ratings, please refer to page 11.
Will be discontinued.

Pattern	Application Max.Speed km/h mph	Tire Load Limits at Various Cold Inflation Pressures																	Size
		kPa	**200**	**225**	**250**	**275**	**300**	**325**	**350**	**375**							**525**	**550**	
		psi	29	33	36	40	44	47	51	54							76	80	
VUT VSW VMTS	Grader ★ **40** 25	★ **kg** *lbs*	**2240** *4940*	**2430** *5360*	**2650** *5840*	**2800** *6150*	**3000** *6600*	**3250** *7150*	**3350** *7400*	★1 **3650** *8050*	★3 VSW=Consult a Bridgestone Representative.								**14.00R24 TG**
VSW	Loader ★ **10** 5	★ **kg** *lbs*															★1 **6700** *14800*	**6900** *15200*	
VCHS	IDU	See characteristics page 49																	
VHS VHB	High-Speed	See characteristics page 51																	**385/95R24**
VSW	Grader ★ **40** 25	★ **kg** *lbs*	★1 **2900** *6400*	**3150** *6950*	**3350** *7400*	**3650** *8050*	**3875** *8550*	**4125** *9100*	**4375** *9650*	**4625** *10200*									**16.00R24 TG**
25"																			
		kPa	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	**675**	**700**	**725**	**750**	**775**	**800**		
		psi	65	69	73	76	80	83	87	91	94	98	102	105	109	112	115		
VSB VMTS VRLS	E/M ★ **50** 30	★ **kg** *lbs*	**4000** *8800*	**4125** *9100*	**4375** *9650*	**4500** *9900*	**4625** *10200*	**4750** *10500*	**5000** *11000*	**5150** *11400*	**5300** *11700*	**5450** *12000*	**5600** *12300*	**5710** *12500*	**5830** *12800*	**5940** *13100*	★3 **6050** *13400*		**14.00R25**
VSB	Logging	See characteristics page 51																	
VHS VSW	High-Speed	See characteristics page 51																	**385/95R25**
		kPa	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**							
		psi	58	62	65	69	73	76	80	83	87	91	94						
VUT VSDL	Loader ★ **10** 5	★ **kg** *lbs*	★1 **5000** *11000*	**5150** *11400*	**5450** *12000*	**5600** *12300*	**5800** *12800*	**6150** *13600*	**6300** *13900*	**6500** *14300*	**6700** *14800*	**6900** *15200*	★2 **7100** *15700*						
		kPa	**125**	**150**	**175**	**200**	**225**	**250**	**275**	**300**									
		psi	18	22	25	29	33	36	40	44									
VUT	Grader ★ **40** 25	★ **kg** *lbs*	★1 **1550** *3420*	**1750** *3860*	**2000** *4400*	**2180** *4800*	**2360** *5200*	**2575** *5680*	**2800** *6150*	**3000** *6600*	For slope and ditching service, inflation pressures should be increased by 100kPa (15psi) with no increase in load rating. For extreme conditions, consult a Bridgestone Representative for additional recommended operating requirements.								**15.5R25**

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
16.00R25 Tubeless	VMTS		★2	E4	E2A-LS	**123**	*84*	**1535** *60.4*	**450** *17.7*	**696** *27.4*	**507** *20.0*	**45.0**	**513** *20.2*	11.25/2.0
	VRLS		★2	E4	E2A E1A	**112** **146**	*77* *100*	**1531** *60.3*	**448** *17.6*	**697** *27.4*	**510** *20.1*	**45.0**	**513** *20.2*	
	VHB		★2	Industrial Service	IDU	-	-	See characteristics page 48						
	VCHD	200A5		Industrial Service	-	-	-							
	VCHR	200A5		Industrial Service	-	-	-							
	VRLS		★2	Industrial Service	IDU	-	-							
445/95R25 Tubeless	VHB	177E		Mobile Crane Service	-	-	-	See characteristics page 50						
	VHS	177E 174F		Mobile Crane Service	-	-	-							
New	VHS2	174F		Mobile Crane Service	-	-	-							
	VSW	177E		Mobile Crane Service	-	-	-							
17.5R25 Tubeless	VUT		★1	G2, L2	DG2	-	-	**1340** *52.8*	**444** *17.5*	**586** *23.1*	**500** *19.7*	**28.0**	- -	14.00/1.5
	VSW	153A8 176A2	★1	G2 L2	DG2	-	-	**1340** *52.8*	**440** *17.3*	**597** *23.5*	**480** *18.9*	**27.0**	- -	
	VJT	176A2 182A2	★1 ★2	L3	D2A	-	-	**1352** *53.2*	**443** *17.4*	**604** *23.8*	**510** *20.1*	**30.0**	- -	
	VSDL		★2 ★1	L5	D2A	-	-	**1400** *55.1*	**440** *17.3*	**639** *25.2*	**495** *19.5*	**68.0**	- -	
	VSMS		★2 ★1	L5S	D2A	-	-	**1371** *54.0*	**440** *17.3*	**631** *24.8*	**487** *19.2*	**68.5**	- -	
	VSMS2		★2	L5S	D2A	-	-	**1371** *54.0*	**453** *17.8*	**631** *24.8*	**487** *19.2*	**68.5**	- -	
445/80R25 Tubeless	VGT	170E		Mobile Crane Service	-	-	-	See characteristics page 50						

For the TKPH(TMPH) Ratings, please refer to page 11.
Will be discontinued.

Pattern	Application Max.Speed km/h mph	Tire Load Limits at Various Cold Inflation Pressures	Size
VMTS VRLS	E/M **50** 30	**kPa** 450 475 500 525 550 575 600 625 650 675 700 psi 65 69 73 76 80 83 87 91 94 98 102 ★ ★2 **kg** **5150** **5450** **5600** **5800** **6000** **6300** **6500** **6700** **6900** **7100** **7300** *lbs* *11400* *12000* *12300* *12800* *13200* *13900* *14300* *14800* *15200* *15700* *16100*	**16.00R25**
VHB VCHD VCHR VRLS	IDU	See characteristics page 49	
VHB VHS VHS2 VSW	High-Speed	See characteristics page 51	**445/95R25**
VUT VSW VJT VSDL VSMS VSMS2	Loader **10** 5	**kPa** 400 425 450 475 500 525 550 575 600 625 650 psi 58 62 65 69 73 76 80 83 87 91 94 ★ ★1 ★2 **kg** **6000** **6150** **6500** **6700** **7100** **7300** **7500** **7750** **8000** **8250** **8500** *lbs* *13200* *13600* *14300* *14800* *15700* *16100* *16500* *17100* *17600* *18200* *18700*	**17.5R25**
VUT VSW	Grader **40** 25	**kPa** 125 150 175 200 225 250 275 300 psi 18 22 25 29 33 36 40 44 ★ ★1 **kg** **1850** **2120** **2360** **2650** **2900** **3075** **3350** **3650** *lbs* *4080* *4680* *5200* *5840* *6400* *6800* *7400* *8050* For slope and ditching service, inflation pressures should be increased by 100kPa (15psi) with no increase in load rating. For extreme conditions, consult a Bridgestone Representative for additional recommended operating requirements.	
VGT	High-Speed	See characteristics page 51	**445/80R25**

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
18.00R25 Tubeless	VMTS		★2	E4	E2A	**169**	*116*	**1654** *65.1*	**505** *19.9*	**754** *29.7*	**571** *22.5*	**51.0**	**587** *23.1*	13.00/2.5
	VELS		★2	E4	E2A E1A	**144** **179**	*99* *123*	**1642** *64.6*	**515** *20.3*	**744** *29.3*	**580** *22.8*	**50.0**	**587** *23.1*	
	VSMS		★2 ★1	L5S	D2A	-	-	**1675** *65.9*	**512** *20.2*	**733** *28.9*	**592** *23.3*	**84.5**	- -	
			★2	Industrial Service	IDU	-	-	See characteristics page 48						
	VHB		★3	Industrial Service	IDU	-	-							
	VCHS	214A5	★3	Industrial Service	IDU	-	-							
505/95R25 Tubeless	VHB	186E		Mobile Crane Service	-	-	-	See characteristics page 50						
	VHS	186E		Mobile Crane Service	-	-	-							
20.5R25 Tubeless	VSW		MS	E2, L2	DE2	-	-	**1470** *57.9*	**530** *20.9*	**640** *25.2*	**603** *23.7*	**29.0**	- -	17.00AL/1.7(★1only) 17.00/2.0
	VUT		★1	G2, L2	DG2	-	-	**1473** *58.0*	**533** *21.0*	**643** *25.3*	**608** *23.9*	**30.5**	- -	
	VLT	177B 186A2	MS	E3 L3	DE2	**149** -	*102* -	**1498** *59.0*	**530** *20.9*	**676** *26.6*	**586** *23.1*	**40.0**	- -	
	VJT	186A2	★1	L3	D2A DG2	-	-	**1480** *58.3*	**530** *20.9*	**652** *25.7*	**609** *24.0*	**33.0**	- -	
				G3										
	VLTS	177B 186A2	MS	E4 L4	DE2	**126** -	*86* -	**1478** *58.2*	**530** *20.9*	**667** *26.3*	**581** *22.9*	**49.0**	- -	
	VSDL		★2 ★1	L5	D2A	-	-	**1552** *61.1*	**531** *20.9*	**702** *27.6*	**600** *23.6*	**78.0**	- -	
	VSDR		★2 ★1	L5	D2A	-	-	**1552** *61.1*	**531** *20.9*	**702** *27.6*	**600** *23.6*	**78.0**	-	
525/80R25 Tubeless	VHS	179E 176F		Mobile Crane Service	-	-	-	See characteristics page 50						
21.00R25 Tubeless	VSJ			E7	-	-	-	See characteristics page 52						

For the TKPH(TMPH) Ratings, please refer to page 11.
Will be discontinued.

Pattern	Application Max.Speed km/h mph	Tire Load Limits at Various Cold Inflation Pressures																	Size
		kPa	450	475	500	525	550	575	600	625	650	675	700	725	750	775	800	825	18.00R25
		psi	65	69	73	76	80	83	87	91	94	98	102	105	109	112	115	120	
VMTS VELS	E/M **50** 30	★ **kg** *lbs*	★2 **6700** *14800*		**7100** *15700*	**7300** *16100*	**7500** *16500*	**7750** *17100*	**8000** *17600*	**8250** *18200*	**8500** *18700*	**8750** *19300*	**9000** *19800*	**9250** *20400*					
VSMS	Loader **10** 5	★ **kg** *lbs*	★1 **11200** *24700*		**11800** *26000*	**12150** *26800*	**12500** *27600*	**12850** *28300*	**13200** *29100*	**13600** *30000*	**14000** *30900*	**14500** *32000*	**15000** *33100*	**15000** *33100*	**15500** *34200*	★2 **16000** *35300*			
VSMS VHB VCHS	IDU	See characteristics page 49																	
VHB VHS	High-Speed	See characteristics page 51																	505/95R25
		kPa	275	300	325	350	375	400	425	450	475	500	525						20.5R25
		psi	40	44	47	51	54	58	62	65	69	73	76						
VSW VLT VLTS	E/M **50** 30	★ **kg** *lbs*	★1 **4375** *9650*		**4750** *10500*	**5000** *11000*	**5300** *11700*	**5600** *12300*	**5800** *12800*	**6150** *13600*	**6500** *14300*	**6700** *14800*	**6900** *15200*	★2 **7300** *16100*					
		kPa	125	150	175	200	225	250	275	300									
		psi	18	22	25	29	33	36	40	44									
VUT VJT	Grader **40** 25	★ **kg** *lbs*	★1 **2430** *5360*		**2800** *6150*	**3150** *6950*	**3450** *7600*	**3875** *8550*	**4125** *9100*	**4375** *9650*	**4625** *10200*								
		For slope and ditching service, inflation pressures should be increased by 100kPa (15psi) with no increase in load rating. For extreme conditions, consult a Bridgestone Representative for additional recommended operating requirements.																	
		kPa	400	425	450	475	500	525	550	575	600	625	650						
		psi	58	62	65	69	73	76	80	83	87	91	94						
VUT VSW VLT VJT VLTS VSDL VSDR	Loader **10** 5	★ **kg** *lbs*	★1 **8000** *17600*		**8250** *18200*	**8750** *19300*	**9000** *19800*	**9500** *20900*	**9750** *21500*	**10000** *22000*	**10300** *22700*	**10900** *24000*	**11200** *24700*	★2 **11500** *25400*					
VHS	High-Speed	See characteristics page 51																	525/80R25
VSJ	Sand	See characteristics page 53																	21.00R25

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
23.5R25 Tubeless	VSW		MS	E2, L2	DE2	-	-	**1596** *62.8*	**620** *24.4*	**692** *27.2*	**689** *27.1*	**31.5**	- -	19.50/2.5
	VUT		★1	G2, L2	DG2	-	-	**1599** *63.0*	**620** *24.4*	**702** *27.6*	**688** *27.1*	**33.5**	- -	
	VLT	185B	★2	E3	E2A	**190**	*130*	**1623** *63.9*	**616** *24.3*	**734** *28.9*	**680** *26.8*	**42.5**	- -	
		195A2	MS		DE2	**153**	*105*							
				L3		-	-							
	VJT	195A2	★1	L3	D2A	-	-	**1600** *63.0*	**617** *24.3*	**696** *27.4*	**695** *27.4*	**35.0**	- -	
		201A2	★2											
			★1	G3	G2A									
	VLTS	185B	MS	E4	DE2	**161**	*110*	**1616** *63.6*	**612** *24.1*	**729** *28.7*	**675** *26.6*	**54.0**	- -	
		195A2		L4		-	-							
	VSDT	201A2	★2	L5	D2A	-	-	**1660** *65.4*	**621** *24.4*	**745** *29.3*	**680** *26.8*	**79.0**	- -	
		195A2	★1											
	VSDL		★2	L5	D2A	-	-	**1672** *65.8*	**613** *24.1*	**755** *29.7*	**677** *26.7*	**87.0**	- -	
			★1											
			★2	Industrial Service	IDU	-	-	See characteristics page 48						
550/65R25 Tubeless	VTS		★1	L3	D2A	-	-	**1350** *53.1*	**547** *21.5*	**594** *23.4*	**605** *23.8*	**32.5**	- -	(14.00/1.5) 17.00/2.0
600/65R25 Tubeless	VSW	187A2	★1	L2	D2A	-	-	**1424** *56.0*	**600** *23.6*	**627** *24.7*	**668** *26.3*	**31.5**	- -	(17.00/1.7, 17.00/2.0) 19.50/2.5
650/65R25 Tubeless	VTS		★1	L3	D2A	-	-	**1502** *59.1*	**642** *25.3*	**660** *26.0*	**710** *28.0*	**37.0**	- -	19.50/2.5
750/65R25 (30/65R25) Tubeless	VLT	190B	MS	E3	DE2	**225**	*154*	**1625** *64.0*	**765** *30.1*	**718** *28.3*	**831** *32.7*	**43.0**	- -	(22.00/3.0) 24.00/3.0
		202A2		L3		-	-							
	VLTS	190B	★2	E4	E2A-LS	**195**	*134*	**1623** *63.9*	**765** *30.1*	**713** *28.1*	**832** *32.8*	**55.0**	- -	
26.5R25 Tubeless	VLT	193B	MS	E3	DE2	**190**	*130*	**1747** *68.8*	**684** *26.9*	**787** *31.0*	**736** *29.0*	**45.0**	- -	22.00/3.0
		202A2		L3		-	-							

For the TKPH(TMPH) Ratings, please refer to page 11.

Pattern	Application Max.Speed km/h mph	Tire Load Limits at Various Cold Inflation Pressures																	Size
		kPa	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**						23.5R25
		psi	40	44	47	51	54	58	62	65	69	73	76						
VSW	E/M	★					★1						★2						
VLT	**50**	**kg**	**5600**	**6000**	**6500**	**6700**	**7100**	**7500**	**7750**	**8250**	**8500**	**9000**	**9250**						
VLTS	30	*lbs*	*12300*	*13200*	*14300*	*14800*	*15700*	*16500*	*17100*	*18200*	*18700*	*19800*	*20400*						
		kPa	**125**	**150**	**175**	**200**	**225**	**250**	**275**	**300**									
		psi	18	22	25	29	33	36	40	44									
VUT	Grader	★						★1											
VJT	**40**	**kg**	**3150**	**3550**	**4000**	**4500**	**4875**	**5300**	**5600**	**6000**									
	25	*lbs*	*6950*	*7850*	*8800*	*9900*	*10700*	*11700*	*12300*	*13200*									
		For slope and ditching service, inflation pressures should be increased by 100kPa (15psi) with no increase in load rating. For extreme conditions, consult a Bridgestone Representative for additional recommended operating requirements.																	
		kPa	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	
		psi	40	44	47	51	54	58	62	65	69	73	76	80	83	87	91	94	
VUT	Loader	★									★1							★2	
VSW	**10**	**kg**						**10300**	**10600**	**11200**	**11500**	**12150**	**12500**	**12850**	**13200**	**13600**	**14000**	**14500**	
VLT	5	*lbs*						*22700*	*23400*	*24700*	*25400*	*26800*	*27600*	*28300*	*29100*	*30000*	*30900*	*32000*	
VJT																			
VLTS																			
VSDT																			
VSDL																			
VSDL	IDU	See characteristics page 49																	
VTS	Loader	★									★1								550/65R25
	10	**kg**						**7500**	**7750**	**8250**	**8500**								
	5	*lbs*						*16500*	*17100*	*18200*	*18700*								
VSW		★									★1								600/65R25
		kg						**8750**	**9000**	**9500**	**9750**								
		lbs						*19300*	*19800*	*20900*	*21500*								
VTS		★									★1								650/65R25
		kg						**10000**	**10600**	**10900**	**11500**								
		lbs						*22000*	*23400*	*24000*	*25400*								
VLT	E/M	★									★2								750/65R25 (30/65R25)
VLTS	**50**	**kg**	**6900**	**7300**	**7750**	**8250**	**8750**	**9250**	**9750**	**10300**	**10600**								
	30	*lbs*	*15200*	*16100*	*17100*	*18200*	*19300*	*20400*	*21500*	*22700*	*23400*								
VLT	Loader	★									★1								
	10	**kg**						**13200**	**13600**	**14500**	**15000**								
	5	*lbs*						*29100*	*30000*	*32000*	*33100*								
VLT	E/M	★					★1						★2						26.5R25
	50	**kg**	**7100**	**7500**	**8000**	**8500**	**9000**	**9500**	**9750**	**10300**	**10600**	**11200**	**11500**						
	30	*lbs*	*15700*	*16500*	*17600*	*18700*	*19800*	*20900*	*21500*	*22700*	*23400*	*24700*	*25400*						
VLT	Loader	★									★1							★2	
	10	**kg**						**12850**	**13200**	**14000**	**14500**	**15000**	**15500**	**16000**	**16500**	**17000**	**18000**	**18500**	
	5	*lbs*						*28300*	*29100*	*30900*	*32000*	*33100*	*34200*	*35300*	*36400*	*37500*	*39700*	*40800*	

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
26.5R25 Tubeless	VJT	202A2	★1	L3	D2A	-	-	**1737** *68.4*	**682** *26.9*	**754** *29.7*	**795** *31.3*	**38.0**	- -	22.00/3.0
		209A2	★2											
	VLTS	193B	★2	E4	E2A-LS	**186**	*127*	**1736** *68.3*	**678** *26.7*	**784** *30.9*	**743** *29.3*	**59.0**	- -	
	VSNT		MS	E4	DE2	**165**	*113*	**1779** *70.0*	**685** *27.0*	**780** *30.7*	**774** *30.5*	**57.5**	- -	
				L4		-	-							
			★2		D2A									
	VSDT	209A2	★2	L5	D2A	-	-	**1775** *69.9*	**697** *27.4*	**790** *31.1*	**778** *30.6*	**88.0**	- -	
		202A2	★1											
	VSDL		★2	L5	D2A	-	-	**1790** *70.5*	**684** *26.9*	**797** *31.4*	**761** *30.0*	**95.5**	- -	
			★1											
	VSMS		★2	L5S	D2A	-	-	**1775** *69.9*	**684** *26.9*	**800** *31.5*	**760** *29.9*	**95.0**	- -	
			★1											
	VSMS2		★2	L5S	D2A	-	-	**1775** *69.9*	**704** *27.7*	**800** *31.5*	**760** *29.9*	**95.0**	- -	
29.5R25 Tubeless	VLT	200B	★2	E3	E3A	**304**	*208*	**1877** *73.9*	**762** *30.0*	**840** *33.1*	**830** *32.7*	**48.0**	- -	25.00/3.5
		208A2	MS		DE2	**200**	*137*							
				L3		-	-							
	VJT	216A2	★2	L3	D2A	-	-	**1865** *73.4*	**762** *30.0*	**810** *31.9*	**878** *34.6*	**42.0**	- -	
		208A2	★1											
	VLTS	200B	★2	E4	E2A-LS	**225**	*154*	**1865** *73.4*	**762** *30.0*	**835** *32.9*	**844** *33.2*	**65.0**	- -	
	VSNT		MS	E4	DE2	**220**	*151*	**1905** *75.0*	**773** *30.4*	**849** *33.4*	**835** *32.9*	**60.0**	- -	
				L4		-	-							
			★2		D2A									
	VSDT	216A2	★2	L5	D2A	-	-	**1903** *74.9*	**779** *30.7*	**845** *33.3*	**869** *34.2*	**96.0**	- -	
		208A2	★1											
	VSDL		★2	L5	D2A	-	-	**1925** *75.8*	**766** *30.2*	**855** *33.7*	**846** *33.3*	**104.0**	- -	
			★1											
	New VSMS2		★2	L5S	D2A	-	-	**1908** *75.1*	**790** *31.1*	**TBA** *TBA*	**TBA** *TBA*	**104.0**	- -	
29"														
775/65R29 Tubeless	VTS		★1	L3	D2A	-	-	**1740** *68.5*	**775** *30.5*	**762** *30.0*	**843** *33.2*	**43.0**	- -	(24.00/3.5) 25.00/3.5
875/65R29 Tubeless	VTS	203B	MS	E3	DE2	**237**	*162*	**1865** *73.4*	**850** *33.5*	**792** *31.2*	**963** *37.9*	**47.5**	- -	27.00/3.5 (28.00/3.5)
		214A2		L3		-	-							
	VLTS	203B	MS	E4	DE2	**225**	*154*	**1868** *74.0*	**858** *33.8*	**827** *32.6*	**938** *36.9*	**60.0**	- -	
		214A2		L4		-	-							
29.5R29 Tubeless	VKT		★2	E2	E2A-LS	**330**	*226*	**1958** *77.1*	**765** *30.1*	**870** *34.3*	**841** *33.1*	**44.0**	- -	25.00/3.5
					E1A	**401**	*275*							
	VSNT		MS	E4	DE2	**232**	*159*	**2000** *78.7*	**774** *30.5*	**905** *35.6*	**849** *34.6*	**60.0**	- -	
				L4		-	-							
			★2		D2A									

For the TKPH(TMPH) Ratings, please refer to page 11.
Will be discontinued.

Pattern	Application Max.Speed km/h mph		Tire Load Limits at Various Cold Inflation Pressures																	Size
		kPa	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**		
		psi	40	44	47	51	54	58	62	65	69	73	76	80	83	87	91	94		
VLTS VSNT	E/M	★	★1										★2							26.5R25
	50	**kg**	**7100**	**7500**	**8000**	**8500**	**9000**	**9500**	**9750**	**10300**	**10600**	**11200**	**11500**							
	30	*lbs*	*15700*	*16500*	*17600*	*18700*	*19800*	*20900*	*21500*	*22700*	*23400*	*24700*	*25400*							
VJT VSNT VSDT VSDL VSMS VSMS2	Loader	★	★1															★2		
	10	**kg**						**12850**	**13200**	**14000**	**14500**	**15000**	**15500**	**16000**	**16500**	**17000**	**18000**	**18500**		
	5	*lbs*						*28300*	*29100*	*30900*	*32000*	*33100*	*34200*	*35300*	*36400*	*37500*	*39700*	*40800*		
VLT VLTS VSNT	E/M	★	★1										★2							29.5R25
	50	**kg**	**8500**	**9250**	**9750**	**10300**	**10900**	**11500**	**11800**	**12500**	**12850**	**13600**	**14000**							
	30	*lbs*	*18700*	*20400*	*21500*	*22700*	*24000*	*25400*	*26000*	*27600*	*28300*	*30000*	*30900*							
VLT VJT VSNT VSDT VSDL VSMS2	Loader	★	★1															★2		
	10	**kg**						**15500**	**16000**	**17000**	**17500**	**18000**	**19000**	**19500**	**20000**	**20600**	**21200**	**22400**		
	5	*lbs*						*34200*	*35300*	*37500*	*38600*	*39700*	*41900*	*43000*	*44100*	*45400*	*46700*	*49400*		
29"																				
VTS	Loader	★	★1																	775/65R29
	10	**kg**						**15000**	**15500**	**16500**	**17000**									
	5	*lbs*						*33100*	*34200*	*36400*	*37500*									
VTS VLTS	E/M	★	★2																	875/65R29
	50	**kg**	**10000**	**10900**	**11500**	**12150**	**12850**	**13600**	**14000**	**14500**	**15500**									
	30	*lbs*	*22000*	*24000*	*25400*	*26800*	*28300*	*30000*	*30900*	*32000*	*34200*									
VTS VLTS	Loader	★	★1																	
	10	**kg**						**18500**	**19500**	**20600**	**21200**									
	5	*lbs*						*40800*	*43000*	*45400*	*46700*									
VKT VSNT	E/M	★	★2																	29.5R29
	50	**kg**	**9250**	**9750**	**10300**	**10900**	**11500**	**12150**	**12500**	**13200**	**13600**	**14500**	**15000**							
	30	*lbs*	*20400*	*21500*	*22700*	*24000*	*25400*	*26800*	*27600*	*29100*	*30000*	*32000*	*33100*							
VSNT	Loader	★	★1															★2		
	10	**kg**						**16500**	**17000**	**18000**	**18500**	**19500**	**20000**	**20600**	**21200**	**22400**	**23000**	**23600**		
	5	*lbs*						*36400*	*37500*	*39700*	*40800*	*43000*	*44100*	*45400*	*46700*	*49400*	*50700*	*52000*		

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
29.5R29 Tubeless	VSDT	218A2	★2	L5	D2A	-	-	**1989** *78.3*	**779** *30.7*	**883** *34.8*	**872** *34.3*	**96.0**	- -	25.00/3.5
		211A2	★1											
	VSDL		★2	L5	D2A	-	-	**2008** *79.1*	**776** *30.6*	**900** *35.4*	**856** *33.7*	**104.5**	- -	
			★1											
	VSMS		★2	L5S	D2A	-	-	**2008** *79.1*	**773** *30.4*	**912** *35.9*	**829** *32.6*	**104.5**	- -	
	VSMS2		★2	L5S	D2A	-	-	**2008** *79.1*	**792** *31.2*	**912** *35.9*	**829** *32.6*	**104.5**	- -	
33.25R29 Tubeless	VLT		★2	E3	E2A	**349**	*239*	**2081** *81.9*	**853** *33.6*	**925** *36.4*	**950** *37.4*	**54.0**	- -	27.00/3.5
New	VLTS		★2	E4	E2A	**TBA**	*TBA*	**2093** *82.4*	**853** *33.6*	**TBA** *TBA*	**TBA** *TBA*	**69.0**	- -	
33"														
18.00R33 Tubeless	VMTP		★2	E4	E2A	**185**	*127*	**1870** *73.6*	**515** *20.3*	**846** *33.3*	**575** *22.6*	**55.0**	**587** *23.1*	13.00/2.5
					E1A	**229**	*157*							
	VELS		★2	E4	E2A	**170**	*116*	**1856** *73.1*	**512** *20.2*	**856** *33.7*	**575** *22.6*	**49.0**	**587** *23.1*	
					E1A	**211**	*145*							
			★3	Industrial Service	IDU	-	-	See characteristics page 48						
	VRQP		★2	E4	E2ALS	**122**	*84*	**1890** *74.4*	**515** *20.3*	**876** *34.5*	**575** *22.6*	**64.5**	**587** *23.1*	13.00/2.5
					E2A	**152**	*104*							
	VCHS	219A5	★3	Industrial Service	IDU	-	-	See characteristics page 48						
21.00R33 Tubeless	VMTP		★2	E4	E2A	**237**	*162*	**1998** *78.7*	**578** *22.8*	**909** *35.8*	**650** *25.6*	**61.0**	**701** *27.6*	15.00/3.0
					E1A	**293**	*201*							
	VRLS		★2	E4	E2A	**227**	*155*	**1978** *77.9*	**578** *22.8*	**899** *35.4*	**650** *25.6*	**54.0**	**701** *27.6*	
21.00R33														
35/65R33 Tubeless	VSNT	225A8	MT	E4	DUH	**250**	*171*	**2075** *81.7*	**904** *35.6*	**936** *36.9*	**976** *38.4*	**62.5**	- -	28.00/3.5
				L4		-	-							
			MS	E4	DE2	**250**	*171*							
				L4		-	-							
			★2		D2A									
	VSNL		★2	L4	D2A	-	-	**2075** *81.7*	**880** *34.6*	**936** *36.9*	**981** *38.6*	**62.5**	- -	
	VSDT	224A2	★2	L5	D2A	-	-	**2075** *81.7*	**890** *35.0*	**914** *36.0*	**990** *39.0*	**96.0**	- -	
		217A2	★1											
	VSDL		★2	L5	D2A	-	-	**2075** *81.7*	**880** *34.6*	**917** *36.1*	**951** *37.4*	**95.0**	- -	
			★1											
			★2	Industrial Service	IDU	-	-	See characteristics page 48						

For the TKPH(TMPH) Ratings, please refer to page 11.
Will be discontinued.

Pattern	Application Max.Speed km/h mph	Tire Load Limits at Various Cold Inflation Pressures																	Size
		kPa	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	29.5R29
		psi	40	44	47	51	54	58	62	65	69	73	76	80	83	87	91	94	
VSDT	Loader	★										★1						★2	
VSDL	**10**	**kg**						**16500**	**17000**	**18000**	**18500**	**19500**	**20000**	**20600**	**21200**	**22400**	**23000**	**23600**	
VSMS	5	*lbs*						*36400*	*37500*	*39700*	*40800*	*43000*	*44100*	*45400*	*46700*	*49400*	*50700*	*52000*	
VSMS2																			
VLT	E/M	★											★2						33.25R29
VLTS	**50**	**kg**	**11200**	**12150**	**12850**	**13600**	**14000**	**15000**	**15500**	**16500**	**17000**	**17500**	**18500**						
	30	*lbs*	*24700*	*26800*	*28300*	*30000*	*30900*	*33100*	*34200*	*36400*	*37500*	*38600*	*40800*						
33"																			
		kPa	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	**675**	**700**						18.00R33
		psi	65	69	73	76	80	83	87	91	94	98	102						
VMTP	E/M	★											★2						
VELS	**50**	**kg**	**7750**	**8000**	**8500**	**8750**	**9000**	**9250**	**9750**	**10000**	**10300**	**10600**	**10900**						
VRQP	30	*lbs*	*17100*	*17600*	*18700*	*19300*	*19800*	*20400*	*21500*	*22000*	*22700*	*23400*	*24000*						
VCHS	IDU	See characteristics page 49																	
VELS																			
VMTP	E/M	★											★2						21.00R33
VRLS	**50**	**kg**	**10000**	**10300**	**10900**	**11200**	**11500**	**11800**	**12500**	**12850**	**13200**	**13600**	**14000**						
	30	*lbs*	*22000*	*22700*	*24000*	*24700*	*25400*	*26000*	*27600*	*28300*	*29100*	*30000*	*30900*						
VSNT	UG E/M	See characteristics page 84																	35/65R33
		kPa	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	
		psi	40	44	47	51	54	58	62	65	69	73	76	80	83	87	91	94	
VSNT	E/M	★											★2						
	50	**kg**	**10600**	**11500**	**12150**	**12850**	**13600**	**14000**	**15000**	**15500**	**16000**	**17000**	**17500**						
	30	*lbs*	*23400*	*25400*	*26800*	*28300*	*30000*	*30900*	*33100*	*34200*	*35300*	*37500*	*38600*						
VSNT	Loader	★										★1						★2	
VSNL	LHD	**kg**						**19500**	**20600**	**21200**	**22400**	**23000**	**23600**	**25000**	**25750**	**26500**	**27250**	**28000**	
VSDT	**10**	*lbs*						*43000*	*45400*	*46700*	*49400*	*50700*	*52000*	*55100*	*56800*	*58400*	*60000*	*61500*	
VSDL	5																		
VSDL	IDU	See characteristics page 49																	

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
35"														
21.00R35 Tubeless	VMTP		★2	E4	E2A	**237**	*162*	**2048**	**577**	**922**	**655**	**61.0**	**701**	15.00/3.0
					E1A	**293**	*201*	*80.6*	*22.7*	*36.3*	*25.8*		*27.6*	
					E3A	**342**	*234*							
	VELS		★2	E4	E2A	**227**	*155*	**2044**	**577**	**935**	**650**	**59.0**	**701**	
					E1A	**281**	*192*	*80.5*	*22.7*	*36.8*	*25.6*		*27.6*	
24.00R35 Tubeless	VMTP		★2	E4	E2A	**314**	*215*	**2184**	**660**	**975**	**734**	**68.0**	**795**	17.00/3.5
					E1A	**388**	*266*	*86.0*	*26.0*	*38.4*	*28.9*		*31.3*	
					E3A	**453**	*310*							
	VRLS		★2	E4	E2A	**314**	*215*	**2175**	**660**	**980**	**734**	**59.0**	**795**	
					E1A	**388**	*266*	*85.6*	*26.0*	*38.6*	*28.9*		*31.3*	
					E3A	**453**	*310*							
	VRQP		★2	E4	E2ALS	**207**	*142*	**2194**	**660**	**995**	**745**	**71.5**	**795**	
					E2A	**259**	*177*	*86.4*	*26.0*	*39.2*	*29.3*		*31.3*	
29.5R35 Tubeless	VRL		★2	E3	-	-	-	**2120**	**768**	**932**	**844**	**39.5**	-	25.00/3.5
					E1A	**380**	*260*	*83.5*	*30.2*	*36.7*	*33.2*		-	
33.25R35 Tubeless	VRL		★2	E3	-	-	-	**2228**	**846**	**990**	**970**	**49.0**	-	27.00/3.5
					E1A	**472**	*323*	*87.7*	*33.3*	*39.0*	*38.2*		-	
37.25R35 Tubeless	VLT		★2	E3	E2A	**417**	*286*	**2388**	**954**	**1054**	**1063**	**59.5**	-	31.00/4.0
					E1A	**569**	*390*	*94.0*	*37.6*	*41.5*	*41.9*		-	
39"														
37.5R39 Tubeless	VKT		★2	E2	-	-	-	**2524**	**982**	**1120**	**1080**	**51.0**	-	32.00/4.5
					E1A	**696**	*477*	*99.4*	*38.7*	*44.1*	*42.5*		-	
40.5/75R39 Tubeless	VLT		★2	E3	E2A	**500**	*342*	**2609**	**1002**	**1157**	**1127**	**58.5**	-	32.00/4.5
					E1A	**682**	*467*	*102.6*	*39.4*	*45.6*	*44.4*		-	
45/65R39 Tubeless	VSDL		★1	L5	D2A	-	-	**2580**	**1074**	**1116**	**1205**	**116.0**	-	32.00/4.5
								101.6	*42.3*	*43.9*	*47.4*		-	36.00/4.5

For the TKPH(TMPH) Ratings, please refer to page 11.

Pattern	Application Max.Speed km/h mph	Tire Load Limits at Various Cold Inflation Pressures												Size
35"														
		kPa	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	**675**	**700**	21.00R35
		psi	65	69	73	76	80	83	87	91	94	98	102	
VMTP	E/M	★	★2											
VELS	**50**	**kg**	**10300**	**10600**	**11200**	**11500**	**11800**	**12150**	**12850**	**13200**	**13600**	**14000**	**14500**	
	30	*lbs*	*22700*	*23400*	*24700*	*25400*	*26000*	*26800*	*28300*	*29100*	*30000*	*30900*	*32000*	
VMTP		★	★2											24.00R35
VRLS		**kg**	**13200**	**13600**	**14000**	**14500**	**15500**	**16000**	**16500**	**17000**	**17500**	**18000**	**18500**	
VRQP		*lbs*	*29100*	*30000*	*30900*	*32000*	*34200*	*35300*	*36400*	*37500*	*38600*	*39700*	*40800*	
		kPa	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**	29.5R35
		psi	40	44	47	51	54	58	62	65	69	73	76	
VRL	E/M	★	★2											
	50	**kg**	**10000**	**10600**	**11200**	**11800**	**12500**	**13200**	**13600**	**14500**	**15000**	**15500**	**16000**	
	30	*lbs*	*22000*	*23400*	*24700*	*26000*	*27600*	*29100*	*30000*	*32000*	*33100*	*34200*	*35300*	
VRL		★	★2											33.25R35
		kg	**12150**	**12850**	**14000**	**14500**	**15500**	**16000**	**17000**	**17500**	**18500**	**19000**	**20000**	
		lbs	*26800*	*28300*	*30900*	*32000*	*34200*	*35300*	*37500*	*38600*	*40800*	*41900*	*44100*	
VLT		★	★2											37.25R35
		kg	**14500**	**15500**	**16500**	**17500**	**18500**	**19500**	**20600**	**21200**	**22400**	**23000**	**23600**	
		lbs	*32000*	*34200*	*36400*	*38600*	*40800*	*43000*	*45400*	*46700*	*49400*	*50700*	*52000*	
39"														
VKT	E/M	★	★2											37.5R39
	50	**kg**	**16000**	**17000**	**18000**	**19000**	**20000**	**21200**	**21800**	**23000**	**23600**	**25000**	**25750**	
	30	*lbs*	*35300*	*37500*	*39700*	*41900*	*44100*	*46700*	*48100*	*50700*	*52000*	*55100*	*56800*	
VLT		★	★2											40.5/75R39
		kg	**18000**	**19000**	**20600**	**21800**	**22400**	**23600**	**25000**	**25750**	**27250**	**28000**	**29000**	
		lbs	*39700*	*41900*	*45400*	*48100*	*49400*	*52000*	*55100*	*56800*	*60000*	*61500*	*64000*	
VSDL	Loader	★	★1											45/65R39
	10	**kg**						**33500**	**34500**	**36500**	**37500**	**40000**		
	5	*lbs*						*74000*	*76000*	*80500*	*82500*	*88000*		

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
45"														
45/65R45 Tubeless	VSNL		★2	L4	D2A	-	-	**2730** *107.5*	**1123** *44.2*	**1190** *46.8*	**1275** *50.2*	**75.0**	- -	36.00/4.5
	VSDL		★2 ★1	L5	D2A	-	-	**2730** *107.5*	**1123** *44.2*	**1188** *46.8*	**1274** *50.2*	**111.5**	- -	
49"														
27.00R49 Tubeless	VFT		★2	E2	E2A - E3A	**557** - **804**	*382* - *551*	**2646** *104.2*	**750** *29.5*	**1207** *47.5*	**860** *33.9*	**44.0**	**892** *35.1*	19.50/4.0
	VMTS		★2	E4	E2A E1A E3A	**486** **600** **702**	*333* *411* *481*	**2690** *105.9*	**750** *29.5*	**1230** *48.4*	**860** *33.9*	**64.0**	**892** *35.1*	
	VMTP		★2	E4	E2A E1A E3A	**440** **544** **636**	*301* *373* *436*	**2700** *106.3*	**750** *29.5*	**1239** *48.8*	**860** *33.9*	**73.0**	**892** *35.1*	
	VRLS		★2	E4	E2A E1A E3A	**415** **513** **600**	*284* *351* *411*	**2687** *105.8*	**750** *29.5*	**1228** *48.3*	**860** *33.9*	**66.5**	**892** *35.1*	
	VREP		★2	E4	E2A E1A E3A	**457** **564** **660**	*313* *386* *452*	**2690** *105.9*	**750** *29.5*	**1231** *48.4*	**860** *33.9*	**66.5**	**892** *35.1*	
	VRDP		★2	E4	E2A E1A E3A	**415** **513** **600**	*284* *351* *411*	**2711** *106.7*	**750** *29.5*	**1240** *48.8*	**860** *33.9*	**76.0**	**892** *35.1*	
	VREV		★2	E4	E2A E1A E3A	**415** **513** **600**	*284* *351* *411*	**2720** *107.1*	**750** *29.5*	**1246** *49.1*	**860** *33.9*	**83.0**	**892** *35.1*	
51"														
30.00R51 Tubeless	VMT		★2	E3	- - E3A	- - **1065**	- - *729*	**2850** *112.2*	**854** *33.6*	**1294** *50.9*	**950** *37.4*	**45.0**	**993** *39.1*	22.00/4.5
	VRLS		★2	E4	E2A E1A E3A	**496** **603** **717**	*340* *413* *491*	**2904** *114.3*	**854** *33.6*	**1311** *51.6*	**963** *37.9*	**74.5**	**993** *39.1*	
33.00R51 Tubeless	VMT		★2	E3	- E1A E3A	- **1018** **1209**	- *697* *828*	**2988** *117.6*	**932** *36.7*	**1338** *52.7*	**1052** *41.4*	**48.0**	**1074** *42.3*	24.00/5.0
	VMTP		★2	E4	E2A E1A E3A	**591** **700** **832**	*405* *479* *570*	**3063** *120.6*	**932** *36.7*	**1376** *54.2*	**1052** *41.4*	**89.5**	**1074** *42.3*	
	VRLS		★2	E4	E2A E1A E3A	**558** **679** **807**	*382* *465* *553*	**3035** *119.5*	**932** *36.7*	**1371** *54.0*	**1051** *41.4*	**78.5**	**1074** *42.3*	
	VRDP		★2	E4	E2A E1A E3A	**558** **679** **807**	*382* *465* *553*	**3061** *120.5*	**932** *36.7*	**1376** *54.2*	**1051** *41.4*	**87.0**	**1074** *42.3*	
	VRPS		★2	E4	E2A E1A E3A	**558** **679** **807**	*382* *465* *553*	**3061** *120.5*	**932** *36.7*	**1376** *54.2*	**1051** *41.4*	**87.0**	**1074** *42.3*	
36.00R51 Tubeless	VHS		★2	E2	- - E3A	- - **1485**	- - *1017*	**3108** *122.4*	**1015** *40.0*	**1390** *54.7*	**1163** *45.4*	**44.0**	**1184** *46.6*	26.00/5.0
	VRLS		★2	E4	E2A E1A E3A	**642** **781** **927**	*440* *535* *635*	**3204** *126.1*	**1015** *40.0*	**1431** *56.3*	**1153** *45.4*	**86.5**	**1184** *46.6*	
50/65R51 Tubeless	VSDL		★2	L5	D2A	-	-	**3070** *120.9*	**1278** *50.3*	**1347** *53.0*	**1361** *53.6*	**128.0**	- -	40.00/4.5

For the TKPH(TMPH) Ratings, please refer to page 11.
Will be discontinued.

Pattern	Application Max.Speed km/h mph		Tire Load Limits at Various Cold Inflation Pressures													Size
45"																
		kPa	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	**675**	**700**	
		psi	58	62	65	69	73	76	80	83	87	91	94	98	102	
VSNL	Loader	★	★1										★2			45/65R45
VSDL	**10**	**kg**	**35500**	**37500**	**38750**	**40000**	**42500**	**43750**	**45000**	**46250**	**47500**	**50000**	**51500**			
	5	*lbs*	*78500*	*82500*	*85500*	*88000*	*93500*	*96500*	*99000*	*102000*	*104500*	*110000*	*113500*			
49"																
VFT	E/M	★	★2													27.00R49
VMTS	**50**	**kg**		**19500**	**20000**	**20600**	**21800**	**22400**	**23000**	**23600**	**25000**	**25750**	**26500**	**27250**		
VMTP	30	*lbs*		*43000*	*44100*	*45400*	*48100*	*49400*	*50700*	*52000*	*55100*	*56800*	*58400*	*60000*		
VRLS																
VREP																
VRDP																
VREV																
51"																
VMT	E/M	★	★2													30.00R51
VRLS	**50**	**kg**		**23600**	**25000**	**25750**	**26500**	**28000**	**29000**	**30000**	**30750**	**31500**	**32500**	**33500**		
	30	*lbs*		*52000*	*55100*	*56800*	*58400*	*61500*	*64000*	*66000*	*68000*	*69500*	*71500*	*74000*		
VMT		★	★2													33.00R51
VMTP		**kg**		**27250**	**29000**	**30000**	**30750**	**32500**	**33500**	**34500**	**35500**	**36500**	**37500**	**38750**		
VRLS		*lbs*		*60000*	*64000*	*66000*	*68000*	*71500*	*74000*	*76000*	*78500*	*80500*	*82500*	*85500*		
VRDP																
VRPS																
VHS		★	★2													36.00R51
VRLS		**kg**		**33500**	**35500**	**36500**	**37500**	**38750**	**40000**	**41250**	**42500**	**43750**	**45000**	**46250**		
		lbs		*74000*	*78500*	*80500*	*82500*	*85500*	*88000*	*91000*	*93500*	*96500*	*99000*	*102000*		
VSDL	Loader	★	★2													50/65R51
	10	**kg**	**45000**	**47500**	**50000**	**51500**	**54500**	**56000**	**58000**	**60000**	**61500**	**63000**	**65000**			
	5	*lbs*	*99000*	*104500*	*110000*	*113500*	*120000*	*123000*	*127500*	*131500*	*135500*	*139000*	*143500*			

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm / inch	OW mm / inch	SLR mm / inch	SLW mm / inch	OTD mm	Minimum Dual Spacing mm / inch	Recommended Rim/Flange Height inch
57"														
37.00R57 Tubeless	VZTS		★2	E4	E2A	**694**	*475*	**3422** *134.7*	**1044** *41.1*	**1541** *60.7*	**1190** *46.9*	**87.5**	**1217** *47.9*	27.00/6.0
					E1A	**845**	*579*							
					E3A	**1003**	*687*							
	VRLS		★2	E4	E2A	**694**	*475*	**3410** *134.3*	**1044** *41.1*	**1535** *60.4*	**1190** *46.9*	**87.5**	**1217** *47.9*	
					E1A	**845**	*579*							
					E3A	**1003**	*687*							
42/90R57 Tubeless	VRDP		★2	E4	E2A	**715**	*490*	**3456** *136.1*	**1060** *41.7*	**1539** *60.6*	**1210** *47.7*	**97.0**	**1323** *52.1*	27.00/6.0
					E1A	**870**	*596*							29.00/6.0
					E3A	**1033**	*708*							
	VRPS		★2	E4	E2A	**715**	*490*	**3456** *136.1*	**1060** *41.7*	**1539** *60.6*	**1210** *47.7*	**97.0**	**1323** *52.1*	
					E1A	**870**	*596*							
					E3A	**1033**	*708*							
40.00R57 Tubeless	VMT		★2	E3	E2A	**1204**	*825*	**3512** *138.3*	**1108** *43.6*	**1560** *61.4*	**1264** *49.8*	**64.0**	**1311** *51.6*	29.00/6.0
					E1A	**1463**	*1002*							
					E3A	**1739**	*1191*							
	VZTS		★2	E4	E2A	**773**	*529*	**3585** *141.1*	**1140** *44.9*	**1606** *63.2*	**1289** *50.7*	**91.5**	**1311** *51.6*	
					E1A	**940**	*644*							
					E3A	**1117**	*765*							
	VELS		★2	E4	E2A	**773**	*529*	**3562** *140.2*	**1127** *44.4*	**1582** *62.3*	**1291** *50.8*	**91.5**	**1311** *51.6*	
					E1A	**940**	*644*							
					E3A	**1117**	*765*							
	VRDP		★2	E4	E2A	**773**	*529*	**3575** *140.7*	**1108** *43.6*	**1591** *62.6*	**1264** *49.8*	**97.0**	**1311** *51.6*	
					E1A	**940**	*644*							
					E3A	**1117**	*765*							
	VRPS		★2	E4	E2A	**773**	*529*	**3575** *140.7*	**1108** *43.6*	**1591** *62.6*	**1264** *49.8*	**97.0**	**1311** *51.6*	
					E1A	**940**	*644*							
					E3A	**1117**	*765*							
46/90R57 Tubeless	VZTP		★2	E4	E2A	**766**	*525*	**3585** *141.1*	**1145** *45.1*	**1591** *62.6*	**1299** *51.1*	**97.0**	**1412** *55.6*	29.00/6.0
					E1A	**927**	*635*							(32.00/6.0)
					E3A	**1103**	*755*							
	VRDP		★2	E4	E2A	**796**	*545*	**3572** *140.6*	**1145** *45.1*	**1586** *62.4*	**1299** *51.1*	**97.0**	**1412** *55.6*	
					E1A	**968**	*663*							
					E3A	**1150**	*788*							
	VRPS		★2	E4	E2A	**796**	*545*	**3572** *140.6*	**1145** *45.1*	**1586** *62.4*	**1299** *51.1*	**97.0**	**1412** *55.6*	
					E1A	**968**	*663*							
					E3A	**1150**	*788*							
	VREV		★2	E4	E2A	**876**	*600*	**3572** *140.6*	**1145** *45.1*	**1586** *62.4*	**1299** *51.1*	**97.0**	**1412** *55.6*	
					E1A	**968**	*663*							
						(1065)*	*(729)**							
					E3A	**1150**	*788*							
						(1265)*	*(866)**							
55.5/80R57 Tubeless	VSDL			L5	D2A	-	-	**3740** *147.2*	**1395** *54.9*	**1634** *64.3*	**1616** *63.6*	**125.5**	- -	44.00/6.0
50/90R57 Tubeless	VRPS		★2	E4	E2A	**884**	*605*	**3840** *151.2*	**1283** *50.5*	**1702** *67.0*	**1471** *57.9*	**107.0**	**1562** *61.5*	32.00/6.0
					E1A	**1092**	*748*							34.00/6.0
					E3A	**1278**	*875*							32.00/6.5
														34.00/6.5
60/80R57 Tubeless	VSDL			L5	D2A	-	-	**3952** *155.6*	**1491** *58.7*	**1738** *68.4*	**1755** *69.1*	**118.0**	- -	47.00/6.0

For the TKPH(TMPH) Ratings, please refer to page 11.
*If you operate with this TKPH(TMPH), consult your Bridgestone Representative.
Will be discontinued.

Pattern	Application Max.Speed km/h / mph		Tire Load Limits at Various Cold Inflation Pressures														Size
57"																	
		kPa	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	**675**	**700**		
		psi	58	62	65	69	73	76	80	83	87	91	94	98	102		
VZTS	E/M	★	★2														**37.00R57**
VRLS	**50**	**kg**			**37500**	**38750**	**40000**	**41250**	**43750**	**45000**	**46250**	**47500**	**48750**	**50000**	**51500**		
	30	*lbs*			*82500*	*85500*	*88000*	*91000*	*96500*	*99000*	*102000*	*104500*	*107500*	*110000*	*113500*		
VRDP		★	★2														**42/90R57**
VRPS		**kg**			**38750**	**40000**	**41250**	**42500**	**45000**	**46250**	**47500**	**48750**	**50000**	**51500**	**53000**		
		lbs			*85500*	*88000*	*91000*	*96500*	*99000*	*102000*	*104500*	*107500*	*110000*	*113500*	*117000*		
VMT		★	★2														**40.00R57**
VZTS		**kg**			**42500**	**45000**	**46250**	**48750**	**50000**	**51500**	**53000**	**54500**	**56000**	**58000**	**60000**		
VELS		*lbs*			*93500*	*99000*	*102000*	*107500*	*110000*	*113500*	*117000*	*120000*	*123500*	*128000*	*132500*		
VRDP																	
VRPS																	
VZTP		★	★2														**46/90R57**
VRDP		**kg**			**45000**	**47500**	**48750**	**51500**	**53000**	**54500**	**56000**	**58000**	**60000**	**61500**	**63000**		
VRPS		*lbs*			*99000*	*104500*	*107500*	*113500*	*117000*	*120000*	*123500*	*128000*	*132500*	*135500*	*139000*		
VREV																	
VSDL	Loader	★															**55.5/80R57**
	10	**kg**					**82500**	**85000**	**90000**	**92500**	**95000**	**97500**	**100000**	**103000**	**106000**	* About some exceptions, consult a bridgestone representative.	
	5	*lbs*					*182000*	*187500*	*198000*	*203500*	*209000*	*214500*	*220500*	*227000*	*233500*		
VRPS	E/M	★	★2														**50/90R57**
	50	**kg**			**56000**	**58000**	**60000**	**63000**	**65000**	**67000**	**69000**	**71000**	**73000**	**75000**	**77500**		
	30	*lbs*			*123500*	*128000*	*132500*	*139000*	*143500*	*147500*	*152000*	*156500*	*161000*	*165500*	*171000*		
VSDL	Loader	★															**60/80R57**
	10	**kg**	**82000**	**85750**	**89500**	**93250**	**97000**	**100500**	**104000**	**107750**	**111000**	**114750**	**118000**				
	5	*lbs*	*180500*	*189250*	*197500*	*205500*	*213500*	*221500*	*229500*	*237250*	*245000*	*252500*	*260000*				

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
63"														
53/80R63 Tubeless	VRF		★2	E3	-	-	-	**3741** *147.3*	**1311** *51.6*	**1615** *63.6*	**1524** *60.0*	**64.0**	**1626** *64.0*	36.00/5.0
					E1A	**1330**	*911*							38.00/5.0
					E3A	**1626**	*1115*							
	VRPS		★2	E4	E2A	**974**	*667*	**3828** *150.7*	**1304** *51.3*	**1657** *65.2*	**1511** *59.5*	**110.0**	**1626** *64.0*	
					E1A	**1150**	*788*							
					E3A	**1408**	*964*							
59/80R63 Tubeless	VRF		★2	E3	E1A	**1784**	*1222*	**4022** *158.3*	**1459** *57.4*	**1710** *67.3*	**1712** *67.4*	**71.0**	**1780** *70.0*	44.00/5.0
					E3A	**2050**	*1404*							
					E1A	**1686**	*1155*							41.00/5.0
					E3A	**1937**	*1327*							
	VRPS		★2	E4	E2A	**1228**	*841*	**4017** *158.1*	**1467** *57.8*	**1710** *67.3*	**1712** *67.4*	**116.0**	**1780** *70.0*	44.00/5.0
					E1A	**1515**	*1038*							
					E3A	**1773**	*1214*							
					E2A	**1160**	*795*							41.00/5.0
					E1A	**1431**	*980*							
					E3A	**1675**	*1147*							

For the TKPH(TMPH) Ratings, please refer to page 11.

Pattern	Application Max.Speed km/h mph		Tire Load Limits at Various Cold Inflation Pressures								Size
63"											
		kPa	**450**	**475**	**500**	**525**	**550**	**575**	**600**		**53/80R63**
		psi	65	69	73	76	80	83	87		
VRF	E/M	★	★2								
VRPS	**50**	**kg**	**67000**	**69000**	**71000**	**75000**	**77500**	**80000**	**82500**		
	30	*lbs*	*147500*	*152000*	*156500*	*165500*	*171000*	*176500*	*182000*		
VRF		★	★2								**59/80R63**
VRPS		**kg**	**80000**	**82500**	**87500**	**90000**	**92500**	**95000**	**100000**	* 44.00/5.0 Rim	
		lbs	*176500*	*182000*	*193000*	*198500*	*204000*	*209500*	*220500*		
		★	★2								
		kg	**77000**	**79000**	**84000**	**86000**	**89000**	**91000**	**96000**	* 41.00/5.0 Rim	
		lbs	*169300*	*174600*	*185200*	*190500*	*195800*	*201050*	*211650*		

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Approximate Inflated Dimensions OD mm / inch	OW mm / inch	SLR mm / inch	SLW mm / inch	OTD mm	Minimum Dual Spacing mm / inch	Recommended Rim/Flange Height inch
Industrial Service											
20"											
12.00R20	VCH		★3	Industrial Service	**1140** *44.9*	**315** *12.4*	**512** *20.2*	**360** *14.2*	**29.5**	**380** *15.0*	8.50V
	VCHS	176A5	★3	Industrial Service	**1139** *44.8*	**297** *11.7*	**507** *20.0*	**355** *14.0*	**41.5**	**375** *14.8*	
24"											
12.00R24	VCH		★2	Industrial Service	**1254** *49.4*	**323** *12.7*	**558** *22.0*	**376** *14.8*	**29.5**	**391** *15.4*	8.50V
	VCHS	178A5		Industrial Service	**1263** *49.7*	**310** *12.2*	**580** *22.8*	**351** *13.8*	**42.0**	**391** *15.4*	
14.00R24	VHB		★3	Industrial Service	**1357** *53.4*	**383** *15.1*	**630** *24.8*	**410** *16.1*	**23.5**	**450** *17.7*	10.00W
	VCH		★3	Industrial Service	**1393** *54.8*	**390** *15.4*	**610** *24.0*	**460** *18.1*	**32.0**	**480** *18.9*	
	VCHS	196A5	★3	Industrial Service	**1412** *55.6*	**383** *15.1*	**626** *24.6*	**445** *17.5*	**63.0**	**480** *18.9*	
14.00R24 TG Tubeless	VCHS	196A5	★3	Industrial Service	**1412** *55.6*	**383** *15.1*	**626** *24.6*	**445** *17.5*	**63.0**	**480** *18.9*	10.00VA
25"											
16.00R25 Tubeless	VHB		★2	Industrial Service	**1484** *58.4*	**440** *17.3*	**690** *27.2*	**475** *18.7*	**22.5**	**513** *20.2*	11.25/2.0
	VCHD	200A5		Industrial Service	**1500** *59.1*	**435** *17.1*	**655** *25.8*	**503** *19.8*	**54.0**	**513** *20.2*	
	VCHR	200A5		Industrial Service	**1504** *59.2*	**435** *17.1*	**674** *26.5*	**500** *19.7*	**50.0**	**513** *20.2*	
	VRLS		★2	Industrial Service	**1531** *60.3*	**448** *17.6*	**713** *28.1*	**488** *17.6*	**45.0**	**540** *21.3*	
18.00R25 Tubeless	VHB		★3	Industrial Service	**1610** *63.4*	**515** *20.3*	**733** *28.9*	**565** *22.2*	**26.0**	**587** *23.1*	13.00/2.5
	VCHS	214A5	★3	Industrial Service	**1650** *65.0*	**504** *19.8*	**707** *27.8*	**596** *23.5*	**64.0**	**600** *23.6*	
	VSMS		★2	Industrial Service	**1681** *66.2*	**512** *20.2*	**730** *28.7*	**592** *23.3*	**84.5**	**612** *24.1*	
23.5R25 Tubeless	VSDL		★2	Industrial Service	**1672** *65.8*	**613** *24.1*	**755** *29.7*	**687** *27.0*	**87.0**	**722** *28.4*	19.50/2.5
33"											
18.00R33 Tubeless	VCHS	219A5	★3	Industrial Service	**1856** *73.1*	**494** *19.4*	**803** *31.6*	**585** *23.0*	**70.0**	**600** *23.6*	13.00/2.5
	VELS		★3	Industrial Service	**1860** *73.2*	**512** *20.2*	**800** *31.5*	**604** *23.8*	**49.0**	**634** *25.0*	
35/65R33 Tubeless	VSDL		★2	Industrial Service	**2075** *81.7*	**880** *34.6*	**900** *35.4*	**986** *38.8*	**95.0**	- -	28.00/3.5

Pattern	Application	Star Rating		Inflation Pressure kPa / psi	km/h / mph	Tire Load Limits at Various Speeds 0 Static	Creep Creep	5 3	10 5	15 9	20 12	25 15	30 19	35 22		Size
Industrial Service																
20"																
VCH VCHS	Industrial	★3	Load	**1000** 145	**kg** *lbs*	**9230** *20350*	**9230** *20350*	**9230** *20350*	**9230** *20350*	**9230** *20350*	**9230** *20350*	**9230** *20350*	**8875** *19570*	**8875** *19570*		12.00R20
			Steering Wheel	**1000** 145	**kg** *lbs*	**7100** *15620*	**7100** *15620*	**7100** *15620*	**7100** *15620*	**7100** *15620*	**7100** *15620*	**7100** *15620*	**6570** *14480*	**6570** *14480*		
24"																
VCH	Industrial	★2	Load	**960** 139	**kg** *lbs*	**12420** *27385*	**11040** *24345*	**10005** *22060*	**9315** *20540*	**8970** *19780*	**8765** *19320*	**8625** *19020*				12.00R24
			Steering Wheel	**960** 139	**kg** *lbs*	**9935** *21910*	**8830** *19475*	**8005** *17650*	**7450** *16430*	**7175** *15825*	**7010** *15455*	**6900** *15215*				
VCHS	Industrial		Load	**1000** 145	**kg** *lbs*	**9750** *21500*	**9750** *21500*	**9750** *21500*	**9750** *21500*	**9750** *21500*	**9750** *21500*	**9750** *21500*	**9375** *20670*	**9375** *20670*	*Compliant with the ETRTO standard of industrial tires	
			Steering Wheel	**1000** 145	**kg** *lbs*	**7500** *16500*	**7500** *16500*	**7500** *16500*	**7500** *16500*	**7500** *16500*	**7500** *16500*	**7500** *16500*	**6935** *15200*	**6935** *15200*		
VHB VCH VCHS	Industrial	★3	Load	**1000** 145	**kg** *lbs*	**18000** *39690*	**16000** *35280*	**14500** *31970*	**13500** *29765*	**13000** *28665*	**12700** *28005*	**12500** *27560*	**12400** *27340*			14.00R24
			Steering Wheel	**1000** 145	**kg** *lbs*	**14400** *31750*	**12800** *28225*	**11600** *25580*	**10800** *23815*	**10400** *22930*	**10160** *22400*	**10000** *22050*	**9920** *21875*			
VCHS	Industrial	★3	Load	**1000** 145	**kg** *lbs*	**18000** *39690*	**16000** *35280*	**14500** *31970*	**13500** *29765*	**13000** *28665*	**12700** *28005*	**12500** *27560*	**12400** *27340*			14.00R24 TG
			Steering Wheel	**1000** 145	**kg** *lbs*	**14400** *31750*	**12800** *28225*	**11600** *25580*	**10800** *23815*	**10400** *22930*	**10160** *22400*	**10000** *22050*	**9920** *21875*			
25"																
VHB VRLS	Industrial	★2	Load	**960** 139	**kg** *lbs*	**21870** *48225*	**19440** *42865*	**17615** *38845*	**16400** *36165*	**15795** *34825*	**15430** *34025*	**15185** *33490*	**15065** *33220*			16.00R25
			Steering Wheel	**960** 139	**kg** *lbs*	**17495** *38580*	**15550** *34290*	**14095** *31075*	**13120** *28935*	**12635** *27860*	**12345** *27220*	**12150** *26790*	**12050** *26575*			
VCHD VCHR	Industrial			**1000** 145	**kg** *lbs*	**18200** *40140*	**18200** *40140*	**18200** *40140*	**18200** *40140*	**14000** *30900*	**14000** *30900*	**14000** *30900*			*Compliant with the ETRTO standard of industrial tires (For straddle carrier use only)	
VHB VCHS	Industrial	★3	Load	**1000** 145	**kg** *lbs*	**30600** *67475*	**27200** *59975*	**24650** *54355*	**22950** *50605*	**22100** *48730*	**21590** *47605*	**21250** *46855*	**21080** *46480*			18.00R25
			Steering Wheel	**1000** 145	**kg** *lbs*	**24480** *53980*	**21760** *47980*	**19720** *43480*	**18360** *40485*	**17680** *38985*	**17270** *38085*	**17000** *37485*	**16865** *37185*			
VSMS	Industrial	★2	Load	**960** 139	**kg** *lbs*	**28800** *63505*	**25600** *56450*	**23200** *51155*	**21600** *47630*	**20800** *45865*	**20320** *44805*	**20000** *44100*	**19840** *43745*			
			Steering Wheel	**960** 139	**kg** *lbs*	**23040** *50805*	**20480** *45160*	**18560** *40925*	**17280** *38100*	**16640** *36690*	**16255** *35845*	**16000** *35280*	**15870** *34995*			
VSDL	Industrial	★2	Load	**690** 100	**kg** *lbs*	**26100** *57550*	**23200** *51155*	**21025** *46360*	**19575** *43160*	**18850** *41565*	**18415** *40605*	**18125** *39965*	**17980** *39645*			23.5R25
			Steering Wheel	**690** 100	**kg** *lbs*	**20880** *46040*	**18560** *40925*	**16820** *37090*	**15660** *34530*	**15080** *33250*	**14730** *32485*	**14500** *31970*	**14385** *31715*			
33"																
VCHS VELS	Industrial	★3	Load	**1000** 145	**kg** *lbs*	**35100** *77395*	**31200** *68795*	**28275** *62345*	**26325** *58045*	**25350** *55895*	**24765** *54605*	**24375** *53745*	**24180** *53315*			18.00R33
			Steering Wheel	**1000** 145	**kg** *lbs*	**28080** *61915*	**24960** *55035*	**22620** *49875*	**21060** *46435*	**20280** *44715*	**19810** *43685*	**19500** *42995*	**19345** *42655*			
VSDL	Industrial	★2	Load	**780** 113	**kg** *lbs*	**50400** *111130*	**44800** *98785*	**40600** *89525*	**37800** *83350*	**36400** *80260*	**35560** *78410*	**35000** *77175*				35/65R33
			Steering Wheel	**780** 113	**kg** *lbs*	**40320** *88905*	**35840** *79025*	**32480** *71620*	**30240** *66680*	**29120** *64210*	**28450** *62725*	**28000** *61740*				

Off-the-Road Tires Used for Industrial Vehicle Applications

1) Industrial Vehicles comprise vehicles such as counter-balanced lift trucks, container handlers, straddle carriers, aircraft tow tractors, mobile crushers, log stackers etc., used on hard improved surfaces, smooth floors and runways.
2) Use Specifications of **Industrial Service only.**
3) Consult a Rim Manufacturer when inflation pressure exceeds 800kPa (116psi).
4) For Speeds exceeding 30km/h (18mph), consult a Bridgestone Representative.
5) For tire sizes and star ratings other than listed above, consult a Bridgestone Representative.
6) For Minimum Dual Spacing information, please consult a Bridgestone Representative.

Tire Size	Pattern	LI/SS	TRA Code or Application	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
Mobile Crane Service (High-Speed)										
24"										
385/95R24	VHS	170E	Mobile Crane Service	**1356** *53.4*	**384** *15.1*	**626** *24.6*	**422** *16.6*	**23.0**	**450** *17.7*	10.00W
	VHB	170E	Mobile Crane Service	**1357** *53.4*	**383** *15.1*	**630** *24.8*	**410** *16.1*	**23.5**	**450** *17.7*	
25"										
385/95R25 Tubeless	VHS	170E 170F	Mobile Crane Service	**1356** *53.4*	**384** *15.1*	**626** *24.6*	**422** *16.6*	**23.0**	**450** *17.7*	10.00/1.5
	VSW	170E	Mobile Crane Service	**1355** *53.3*	**394** *15.5*	**631** *24.8*	**427** *16.8*	**23.5**	**450** *17.7*	
445/95R25 Tubeless	VHB	177E	Mobile Crane Service	**1484** *58.4*	**440** *17.3*	**690** *27.2*	**475** *18.7*	**22.5**	**513** *20.2*	11.25/2.0
	VHS	177E 174F	Mobile Crane Service	**1484** *58.4*	**435** *17.1*	**684** *26.9*	**480** *18.9*	**25.5**	**513** *20.2*	
New	VHS2	174F	Mobile Crane Service	**1484** *58.4*	**435** *17.3*	**684** *26.9*	**480** *18.9*	**25.5**	**513** *20.2*	
	VSW	177E	Mobile Crane Service	**1484** *58.4*	**435** *17.1*	**695** *27.4*	**476** *18.7*	**23.0**	**513** *20.2*	
445/80R25 Tubeless	VGT	170E	Mobile Crane Service	**1339** *52.7*	**440** *17.3*	**610** *24.0*	**485** *19.1*	**24.0**	- -	14.00/1.5
505/95R25 Tubeless	VHB	186E	Mobile Crane Service	**1610** *63.4*	**515** *20.3*	**778** *30.6*	**565** *22.2*	**26.0**	**587** *23.1*	13.00/2.5
	VHS	186E	Mobile Crane Service	**1590** *62.6*	**510** *20.1*	**727** *28.6*	**565** *22.2*	**25.5**	**587** *23.1*	
525/80R25 Tubeless	VHS	179E 176F	Mobile Crane Service	**1480** *58.3*	**537** *21.1*	**677** *26.7*	**578** *22.8*	**31.0**	- -	17.00/2.0

Tire Size	Pattern	LI/SS	TRA Code or Application	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
Logging Service										
24"										
14.00R24*	VSB		Truck, Trailers	**1365** *53.7*	**387** *15.2*	**628** *24.7*	**433** *17.0*	**21.0**	**450** *17.7*	10.00W
25"										
14.00R25* Tubeless	VSB		Truck, Trailers	**1365** *53.7*	**387** *15.2*	**628** *24.7*	**433** *17.0*	**21.0**	**450** *17.7*	10.00

* USA use only

Will be discontinued.

Pattern	Application	Inflation Pressure	Tire Load Limits at Various Speeds														Size
Mobile Crane Service (High-Speed)			*Consult a Rim Manufacturer when inflation pressure exceeds 800kPa (116psi).														
24"																	
		kPa psi	**km/h** mph	**0** Static	**Creep** Creep	**5** 3	**10** 5	**15** 9	**20** 12	**30** 19	**40** 25	**50** 31	**60** 37	**70** 43	**80** 50	**90** 56	**100** 62	
VHS VHB (170E)	High-Speed	**900** 131	**kg** *lbs*	**17700** *39000*	**14400** *31700*	**12700** *28100*	**11000** *24300*	**9850** *21700*	**8900** *19600*	**7800** *17200*	**7450** *16400*	**7100** *15600*	**6700** *14800*	**6000** *13200*	**4925** *10800*	**4200** *9250*	**3600** *7950*	385/95R24
25"																		
VHS VSW (170E)	High-Speed	**900** 131	**kg** *lbs*	**17700** *39000*	**14400** *31700*	**12700** *28100*	**11000** *24300*	**9850** *21700*	**8900** *19600*	**7800** *17200*	**7450** *16400*	**7100** *15600*	**6700** *14800*	**6000** *13200*	**4925** *10800*	**4200** *9250*	**3600** *7950*	385/95R25
VHS (170F)	High-Speed	**900** 131	**kg** *lbs*	**17700** *39000*	**14400** *31700*	**12700** *28000*	**11000** *24200*	**9900** *21800*	**9000** *19800*	**7500** *16500*	**6900** *15200*	**6700** *14800*	**6600** *14500*	**6300** *13900*	**6000** *13200*	**5640** *12400*	**5100** *11200*	
VHB VHS VSW (177E)	High-Speed	**900** 131	**kg** *lbs*	**21500** *47500*	**17500** *38500*	**15500** *34200*	**13400** *29600*	**12000** *26400*	**10800** *23800*	**9500** *20900*	**9050** *20000*	**8600** *19000*	**8100** *18000*	**7300** *16100*	**6000** *13200*	**5100** *11300*	**4375** *9650*	445/95R25
VHS VHS2 (174F)	High-Speed	**900** 131	**kg** *lbs*	**21500** *47400*	**17600** *38800*	**15500** *34100*	**13500** *29700*	**11100** *24400*	**10000** *22200*	**8400** *18500*	**7700** *17000*	**7500** *16500*	**7400** *16200*	**7050** *15500*	**6700** *14800*	**6300** *13900*	**5700** *12600*	
VGT	High-Speed	**700** 102	**kg** *lbs*	**17700** *39000*	**14400** *31700*	**12700** *28100*	**11000** *24300*	**9850** *21700*	**8900** *19600*	**7800** *17200*	**7450** *16400*	**7100** *15600*	**6700** *14800*	**6000** *13200*	**4925** *10800*	**4200** *9250*	**3600** *7950*	445/80R25
VHB VHS	High-Speed	**900** 131	**kg** *lbs*	**28000** *61800*	**22700** *50200*	**20200** *44500*	**17500** *38500*	**15600** *34300*	**14100** *31000*	**12300** *27200*	**11800** *26000*	**11200** *24700*	**10600** *23400*	**9500** *20900*	**7800** *17200*	**6650** *14700*	**5700** *12600*	505/95R25
VHS (179E)	High-Speed	**700** 102	**kg** *lbs*	**22900** *50400*	**18600** *40900*	**16500** *36300*	**14300** *31400*	**12700** *28000*	**11500** *25300*	**10100** *22200*	**9600** *21200*	**9150** *20200*	**8700** *19100*	**7750** *17100*	**6350** *14000*	**5400** *12000*	**4650** *10200*	525/80R25
VHS (176F)	High-Speed	**700** 102	**kg** *lbs*	**21500** *47200*	**17600** *38700*	**15500** *34100*	**13500** *29600*	**11700** *25800*	**10600** *23500*	**8900** *19600*	**8200** *18000*	**7950** *17500*	**7800** *17200*	**7450** *16400*	**7100** *15600*	**6700** *14700*	**6050** *13300*	

Maximum load at mentioned speed symbol.

Pattern	Application Max.Speed km/h mph	Tire Load Limits at Various Cold Inflation Pressures													Size
Logging Service															
24"															
		kPa psi		**450** 65	**480** 70	**520** 75	**550** 80	**590** 85	**620** 90	**660** 95	**690** 100	**720** 105	**760** 110	**790** 115	
VSB*	Truck, Trailers	Load Range									J		L		14.00R24
	90 55	**kg** *lbs*	Dual	**3610** *7960*	**3780** *8340*	**3950** *8710*	**4110** *9070*	**4270** *9410*	**4420** *9750*	**4580** *10090*	**4750** *10500*	**4880** *10800*	**5010** *11100*	**5150** *11400*	
		kg *lbs*	Single	**3700** *8150*	**3910** *8620*	**4110** *9070*	**4310** *9500*	**4500** *9930*	**4690** *10340*	**4870** *10730*	**5150** *11400*	**5300** *11700*	**5450** *12000*	**5600** *12300*	
25"															
VSB*	Truck, Trailers	**kg** *lbs*	Dual	**3610** *7960*	**3780** *8340*	**3950** *8710*	**4110** *9070*	**4270** *9410*	**4420** *9750*	**4580** *10090*	**4750** *10500*	**4880** *10800*	**5010** *11100*	**5150** *11400*	14.00R25
	90 55	**kg** *lbs*	Single	**3700** *8150*	**3910** *8620*	**4110** *9070*	**4310** *9500*	**4500** *9930*	**4690** *10340*	**4870** *10730*	**5150** *11400*	**5300** *11700*	**5450** *12000*	**5600** *12300*	

* USA use only

Tire Size	Pattern	LI/SS	Star Rating	TRA Code or Application	Approximate Inflated Dimensions OD mm / inch	OW mm / inch	SLR mm / inch	SLW mm / inch	OTD mm	Minimum Dual Spacing mm / inch	Recommended Rim/Flange Height inch
Sand Service 20"											
16.00R20 Tubeless *1	VSJ		28	E7	**1315** *51.8*	**414** *16.3*	**590** *23.2*	**475** *18.7*	**18.5**	**520** *20.5*	10.00V
16.00R20											10.00W
25"											
21.00R25 Tubeless	VSJ			E7	**1728** *68.0*	**589** *23.2*	**784** *30.9*	**649** *25.6*	**22.5**	**685** *27.0*	15.00/3.0

*1 When you mount 16.00R20 VSJ tubeless tire on flat base rim (10.00V), installation of "sealing ring" is recommended. For further information, please consult a Bridgestone representative.

Pattern	Application	Ply Rating	Max. Speed	Tire Cold Inflation Pressures at Various Load Limits														Size
Sand Service 20"				*It is Recommended that 90% of the below indicated loads per tire is to be applied when used on a dual axle.														
				kg lbs	**4250** 9370	**4500** 9920	**4750** 10470	**5000** 11020	**5250** 11570	**5500** 12130	**6000** 13230	**7000** 15430	**8000** 17640	**8500** 18740	**9000** 19840	**9500** 20940		
VSJ	Sand	28PR	**65km/h** 40mph	**kPa** *psi*	**490** *71*	**540** *78*	**580** *84*	**630** *91*	**680** *98*	**720** *105*								16.00R20
			50km/h 30mph	**kPa** *psi*	**390** *57*	**420** *61*	**450** *65*	**490** *71*										
			16km/h 10mph	**kPa** *psi*	**280** *41*	**300** *44*	**320** *47*	**350** *51*										
25"																		
VSJ	Sand	-	**65km/h** 40mph	**kPa** *psi*							**330** *48*	**410** *60*	**490** *71*	**540** *78*	**590** *85*	**630** *92*		21.00R25
			50km/h 30mph	**kPa** *psi*							**260** *38*	**320** *47*	**390** *57*	**420** *61*				
			16km/h 10mph	**kPa** *psi*							**200** *28*	**230** *34*	**280** *41*	**300** *44*				

BIAS TIRE

1. Tread Designs

■Earthmover Service

E3

W-LUG
(WL)

R-LUG
(RL)

V-LUG2
(VL2)

L4

R-LUG S
(RLS)

L5

D-LUG
(DL)

L5S

SMOOTH TREAD-MS
(STMS)

■Grader Service

G1

RIB GRADER
(RG)

G2

G-LUG
(GL)

FAST GRIP
(FG)

G3

R-LUG
(RL)

■Loader & Dozer Service

L2

G-LUG
(GL)

FAST GRIP
(FG)

L3

R-LUG
(RL)

V-LUG2
(VL2)

■Compactor Service

C1

ROAD ROLLER
(RR)

C2

ALLIGATOR2
(AL2)

■Industrial Service

R-LUG
(RL)

R-LUG S
(RLS)

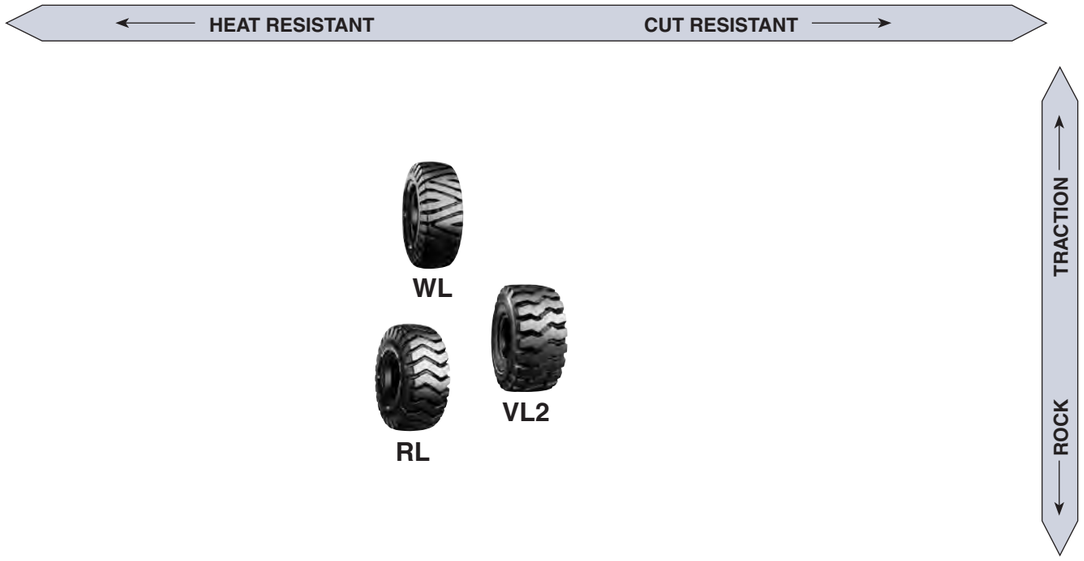
E-LUG S2
(ELS2)

SMOOTH TREAD-MS
(STMS)

YARD SERVICE-2
(YS2)

2. Application

■Earthmover Service



Size	Type	Ply Rating

WL(E3)

9.00-20	T/T	14

RL(E3)

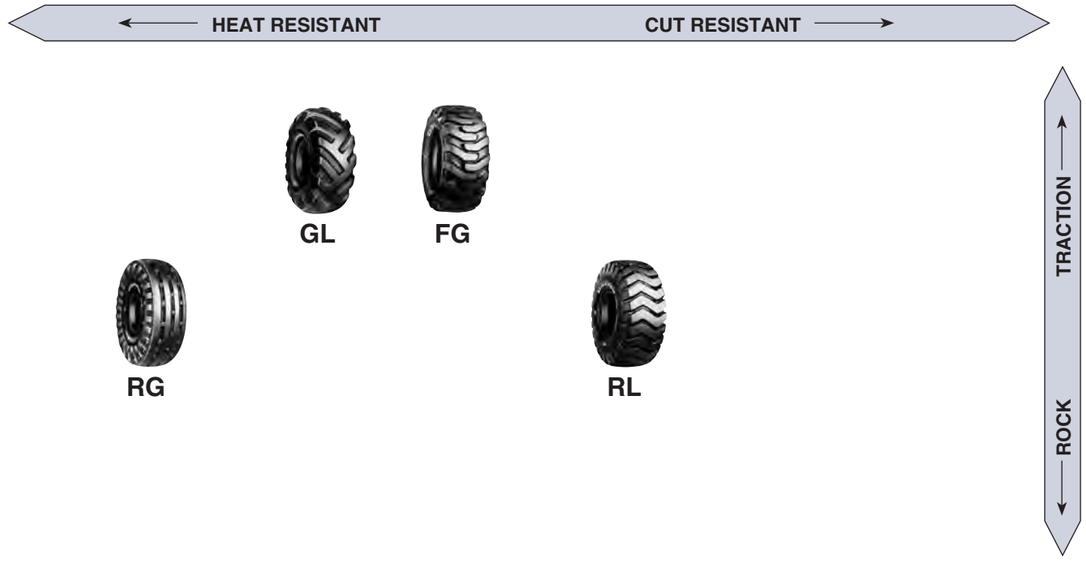
10.00-20	T/T	14
11.00-20	T/T	14
12.00-20	T/T	18
12.00-24	T/T	20
14.00-24	T/T	24 28
16.00-25	T/L	28
18.00-25	T/L	32
37.25-35	T/L	36

VL2(E3)

20.5-25	T/L	16 20
23.5-25	T/L	16 20 24
26.5-25	T/L	20 24 26
29.5-25	T/L	22 28

T/T: Tube Type
T/L: Tubeless Type

■Grader Service



Size	Type	Ply Rating

RG(G1)

9.00-20	T/T	10

GL(G2)

9.00-20	T/T	14

FG(G2)

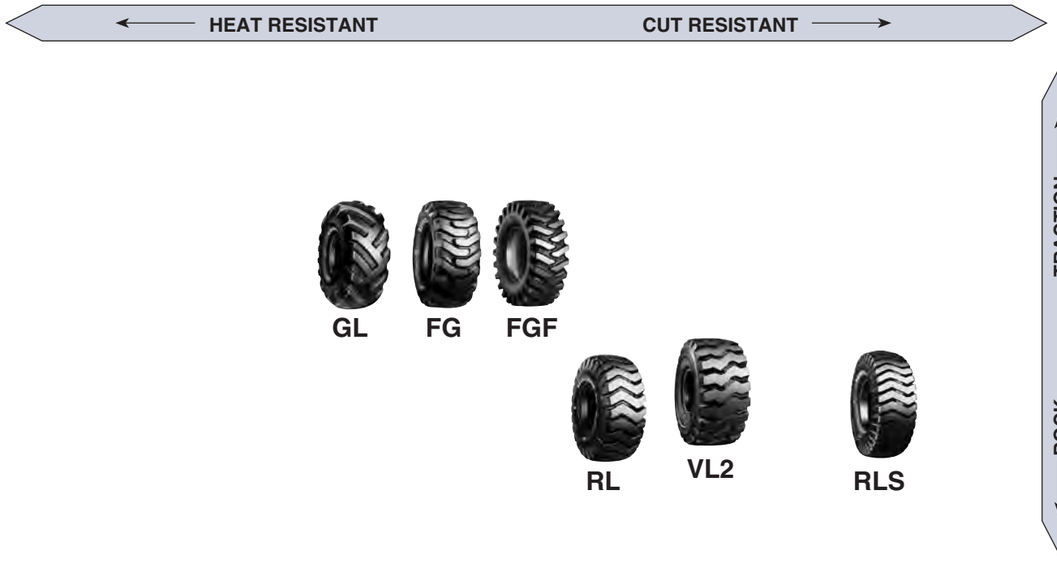
13.00-24 TG	T/L	12
	T/T	10
14.00-24 TG	T/L	12 14
	T/T	12 16
16.00-24 TG	T/T	16
17.5-25	T/L	12
20.5-25	T/L	12

RL(G3)

16.00-24 TG	T/T	16

T/T: Tube Type
T/L: Tubeless Type
TG: For Semi-Drop Center Rim

Loader & Dozer Service



GL(L2)

Size	Type	Ply Rating
9.00-20	T/T	14

FG(L2)

Size	Type	Ply Rating
27x8.50-15	T/T	4
33x12.5-15	T/T	8
12.5/70-16	T/L	6 8
10-16.5	T/L	6 8
12-16.5	T/L	8 10
	T/T	8
15.5/60-18	T/L	8
15.5/70-18	T/L	8
10.00-20	T/T	14
11.00-20	T/T	10 16
42x17-20	T/T	10
17.5/65-20	T/L	10
13.00-24 TG	T/L	12
14.00-24 TG	T/L	12
	T/T	12
16.9-24	T/T	10
18.4-24	T/T	10
17.5-25	T/L	12
20.5-25	T/L	12

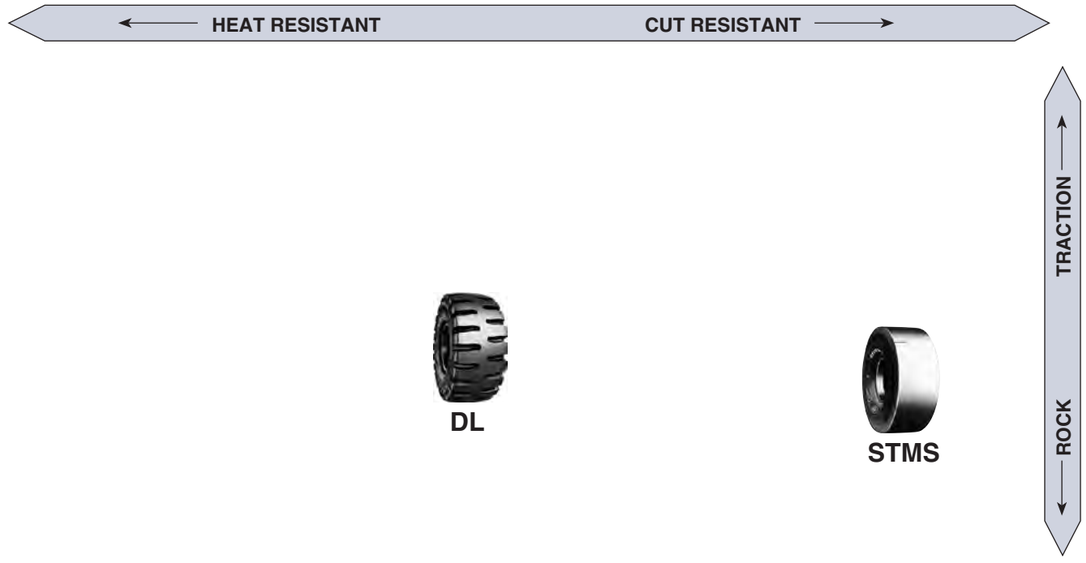
FGF(L2)

Size	Type	Ply Rating
10.00-20	T/T	16

RL(L3)

Size	Type	Ply Rating
12.00-24	T/T	20
14.00-24 TG	T/L	12
16.00-24 TG	T/T	16

T/T: Tube Type
T/L: Tubeless Type
TG: For Semi-Drop Center Rim



VL2(L3)

Size	Type	Ply Rating
15.5-25	T/L	12
17.5-25	T/L	16
	T/T	16
20.5-25	T/L	16 20
	T/T	16 20
23.5-25	T/L	16 20 24
	T/T	16 20 24
26.5-25	T/L	16 20 24 26
	T/T	24
29.5-25	T/L	22 28

RLS(L4)

Size	Type	Ply Rating
14.00-24	T/T	20
26.5-25	T/L	26
29.5-25	T/L	28

DL(L5)

Size	Type	Ply Rating
17.5-25	T/L	16
20.5-25	T/L	16
23.5-25	T/L	20
26.5-25	T/L	20 26
29.5-25	T/L	28
35/65-33	T/L	42
40/65-39	T/L	56
45/65-45	T/L	58
50/65-51	T/L	62
65/65-57	T/L	62

STMS(L5S)

Size	Type	Ply Rating
12.00-24	T/T	16 20
14.00-24	T/T	20
17.5-25	T/L	20
18.00-25	T/L	24 28 32
26.5-25	T/L	32 36
29.5-29	T/L	34

T/T: Tube Type
T/L: Tubeless Type

Compactor Service

RR

Size	Type	Ply Rating
RR(C1)		
7.50-15	T/T	12
9.5/65-15	T/T	6
7.50-16	T/L	6
	T/T	6
10.5/80-16	T/L	6
9.00-20	T/T	10
14/70-20	T/T	12

AL2

Size	Type	Ply Rating
AL2(C2)		
23.1-26	T/L	8
	T/T	8

T/T: Tube Type
T/L: Tubeless Type

Industrial Service

RL

Size	Type	Ply Rating
RL		
12.00-20	T/T	20
14.00-24	T/T	24 28
14.00-24 TG	T/L	24
16.00-25	T/L	28 32
18.00-25	T/L	40
21.00-25	T/L	40
21.00-35	T/L	40

RLS

Size	Type	Ply Rating
RLS		
16.00-25	T/L	28 32

ELS2

Size	Type	Ply Rating
ELS2		
18.00-25	T/L	40
18.00-33	T/L	36
21.00-35	T/L	40

STMS

Size	Type	Ply Rating
STMS		
12.00-24	T/T	20
18.00-25	T/L	40

YS2

Size	Type	Ply Rating
YS2		
16.00-25	T/L	32

T/T: Tube Type
T/L: Tubeless Type
TG: For Semi-Drop Center Rim

3. Technical Data

Tire Size	Pattern	Ply Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm / inch	OW mm / inch	SLR mm / inch	SLW mm / inch	OTD mm	Minimum Dual Spacing mm / inch	Recommended Rim/Flange Height inch
15"													
7.50-15	RR	12	C1	-	-	-	**775** *30.5*	**209** *8.2*	**360** *14.2*	**225** *8.9*	-	**250** *9.8*	6.00GS
27x8.50-15	FG	4	L2	-	-	-	**686** *27.0*	**208** *8.2*	**317** *12.5*	**218** *8.6*	**16.5**	- -	7JA
9.5/65-15	RR	6	C1	-	-	-	**669** *26.3*	**238** *9.4*	**312** *12.3*	**242** *9.5*	-	- -	7JA
33x12.5-15	FG	8	L2	-	-	-	**851** *33.5*	**318** *12.5*	**TBA** *TBA*	**TBA** *TBA*	**22.5**	- -	10.00F
16"													
7.50-16 Tubeless	RR	6	C1	-	-	-	**814** *32.0*	**228** *9.0*	**379** *14.9*	**243** *9.6*	-	**250** *9.8*	6.00GS 6LB
7.50-16							**776** *30.6*	**220** *8.7*	**361** *14.2*	**224** *8.8*			
10.5/80-16 Tubeless	RR	6	C1	-	-	-	**804** *31.7*	**272** *10.7*	**375** *14.8*	**285** *11.2*	-	- -	8LB
12.5/70-16 Tubeless	FG	6 8	L2	-	-	-	**860** *33.9*	**319** *12.6*	**389** *15.3*	**336** *13.2*	**21.0**	- -	10LB
16.5"													
10-16.5 Tubeless	FG	6 8	L2	-	-	-	**771** *30.4*	**268** *10.6*	**353** *13.9*	**278** *10.9*	**19.5**	- -	8.25
12-16.5 Tubeless	FG	8 10	L2	-	-	-	**831** *32.7*	**315** *12.4*	**376** *14.8*	**325** *12.8*	**20.0**	- -	9.75
12-16.5		8											
18"													
15.5/60-18 Tubeless	FG	8	L2	-	-	-	**932** *36.7*	**398** *15.7*	**416** *16.4*	**404** *15.9*	**21.5**	- -	W10
15.5/70-18 Tubeless	FG	8	L2	-	-	-	**1035** *40.7*	**405** *15.9*	**459** *18.1*	**424** *16.7*	**20.5**	- -	W13

Pattern	Application Max.Speed km/h / mph		Tire Load Limits at Various Cold Inflation Pressures																				Size
15"																							
		kPa	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	**675**	**700**	**725**	**750**				7.50-15
		psi	51	54	58	62	65	69	73	76	80	84	87	91	94	98	102	105	109				
RR	Compactor	PR																	12				
	10	**kg**	**1700**	**1750**	**1850**	**1900**	**1950**	**2060**	**2120**	**2180**	**2240**	**2300**	**2300**	**2360**	**2430**	**2500**	**2575**	**2575**	**2650**				
	5	*lbs*	*3740*	*3860*	*4080*	*4180*	*4300*	*4540*	*4680*	*4800*	*4940*	*5080*	*5080*	*5200*	*5360*	*5520*	*5680*	*5680*	*5840*				
		kPa	**180**	**200**	**220**	**240**	**260**	**280**	**300**	**325**													27x8.50-15
		psi	26	29	32	35	38	41	44	47													
FG	Loader	PR					4																
	10	**kg**	**695**	**740**	**780**	**820**	**860**																
	5	*lbs*	*1530*	*1630*	*1720*	*1805*	*1895*																
RR	Compactor	PR						6															9.5/65-15
	10	**kg**				**1100**	**1155**	**1205**	**1255**	**1315**													
	5	lbs				*2430*	*2550*	*2560*	*2770*	*2900*													
		kPa	**120**	**140**	**160**	**180**	**200**	**220**	**240**	**260**	**280**	**300**	**325**	**350**	**375**	**400**	**425**	**450**					33x12.5-15
		psi	17	20	23	26	29	32	35	38	41	44	47	51	54	58	62	65					
FG	Loader	PR											8										
	10	**kg**				**1510**	**1605**	**1695**	**1785**	**1870**	**1950**	**2035**	**2130**										
	5	*lbs*				*3330*	*3540*	*3735*	*3935*	*4125*	*4300*	*4485*	*4695*										
16"																							
RR	Compactor	PR																6					7.50-16
	10	**kg**							**1405**	**1470**	**1535**	**1600**	**1675**	**1750**	**1820**	**1890**							
	5	*lbs*							*3100*	*3240*	*3380*	*3530*	*3690*	*3860*	*4010*	*4170*							
RR		PR										6											10.5/80-16
		kg							**1645**	**1725**	**1800**	**1875**											
		lbs							*3630*	*3800*	*3970*	*4130*											
FG	Loader	PR					6			8													12.5/70-16
	10	**kg**	**1050**	**1145**	**1240**	**1330**	**1410**	**1495**	**1570**	**1645**													
	5	*lbs*	*2315*	*2525*	*2735*	*2930*	*3110*	*3295*	*3460*	*3625*													
16.5"																							
FG	Loader	PR								6				8									10-16.5
	10	**kg**				**1140**	**1215**	**1285**	**1350**	**1415**	**1475**	**1540**	**1610**	**1685**	**1750**	**1820**							
	5	*lbs*				*2515*	*2680*	*2830*	*2975*	*3120*	*3250*	*3395*	*3550*	*3715*	*3860*	*4010*							
FG		PR												8					10				12-16.5
		kg				**1470**	**1565**	**1655**	**1740**	**1820**	**1905**	**1980**	**2075**	**2170**					**2540**				
		lbs				*3240*	*3450*	*3650*	*3835*	*4010*	*4200*	*4365*	*4575*	*4785*					*5600*				
18"																							
FG	Loader	PR						8															15.5/60-18
	10	**kg**	**1525**	**1670**	**1805**	**1935**	**2060**	**2195**															
	5	*lbs*	*3360*	*3680*	*3980*	*4265*	*4540*	*4840*															
FG		PR						8															15.5/70-18
		kg	**1725**	**1885**	**2040**	**2185**	**2325**	**2455**															
		lbs	*3800*	*4155*	*4495*	*4815*	*5125*	*5410*															

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	Ply Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
20"													
9.00-20	RG	10	G1	-	-	-	**1023** *40.3*	**267** *10.5*	**473** *18.6*	**291** *11.5*	**15.0**	- -	7.00T
	RR	10	C1	-	-	-	**1001** *39.4*	**268** *10.6*	**458** *18.0*	**297** *11.7*	-	**310** *12.2*	
	GL	14	G2, L2	-	-	-	**1023** *40.3*	**255** *10.0*	**478** *18.8*	**276** *10.9*	**21.0**	- -	
	WL	14	E3	SCR	-	-	**1027** *40.4*	**257** *10.1*	**466** *18.3*	**280** *11.0*	**19.5**	**310** *12.2*	
10.00-20	FG	14	L2	-	-	-	**1076** *42.4*	**281** *11.1*	**479** *18.9*	**307** *12.1*	**24.0**	- -	7.50V
	FGF	16	L2	-	-	-	**1057** *41.6*	**276** *10.9*	**478** *18.8*	**302** *11.9*	**18.0**	**334** *13.1*	
	RL	14	E3	CRT	**42**	*29*	**1067** *42.0*	**285** *11.2*	**489** *19.3*	**304** *12.0*	**22.5**	- -	
11.00-20	FG	10 16	L2	-	-	-	**1100** *43.3*	**299** *11.8*	**510** *20.0*	**323** *12.7*	**24.5**	**352** *13.9*	8.00V
	RL	14	E3	CRT	**49**	*34*	**1090** *42.9*	**296** *11.7*	**514** *20.2*	**311** *12.2*	**24.0**	**344** *13.5*	
12.00-20	RL	18	E3	SCR	**52**	*36*	**1138** *44.8*	**316** *12.4*	**513** *20.2*	**331** *13.0*	**25.5**	**382** *15.0*	8.50V
		20	Industrial Service	IDU	-	-	See characteristics page 76						
14/70-20	RR	12	C1	-	-	-	**972** *38.3*	**351** *13.8*	**448** *17.6*	**392** *15.4*	-	- -	11.00TG

For the TKPH(TMPH) Ratings, please refer to page 11.

Pattern	Application Max.Speed km/h mph		Tire Load Limits at Various Cold Inflation Pressures																	Size
20"																				
		kPa	**140**	**160**	**180**	**200**	**220**	**240**	**260**	**280**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	9.00-20
		psi	20	23	26	29	32	35	38	41	44	47	51	54	58	62	65	69	73	
RG	Grader	PR											10						14	
GL	**40**	**kg**	**955**	**1035**	**1110**	**1180**	**1245**	**1310**	**1375**	**1435**	**1495**	**1565**	**1635**	**1705**	**1780**	**1850**	**1910**	**1965**	**2025**	
	25	*lbs*	*2110*	*2280*	*2450*	*2600*	*2740*	*2890*	*3040*	*3160*	*3300*	*3460*	*3600*	*3760*	*3920*	*4060*	*4210*	*4340*	*4480*	
		kPa	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	**675**	**700**			
		psi	51	54	58	62	65	69	73	76	80	83	87	91	94	98	102			
RR	Compactor	PR								10										
	10	**kg**	**2900**	**3000**	**3150**	**3250**	**3350**	**3450**	**3550**	**3650**										
	5	*lbs*	*6400*	*6600*	*6950*	*7150*	*7400*	*7600*	*7850*	*8050*										
GL	Loader	PR															14			
	10	**kg**						**3150**	**3250**	**3350**	**3450**	**3450**	**3550**	**3630**	**3710**	**3790**	**3875**			
	5	*lbs*						*6950*	*7150*	*7400*	*7600*	*7600*	*7850*	*8000*	*8190*	*8360*	*8550*			
		kPa	**200**	**220**	**240**	**260**	**280**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**	**550**		
		psi	29	32	35	38	41	44	47	51	54	58	62	65	69	73	76	80		
WL	E/M	PR																14		
	50	**kg**	**1280**	**1350**	**1420**	**1490**	**1555**	**1620**	**1695**	**1770**	**1845**	**1915**	**1985**	**2055**	**2120**	**2185**	**2245**	**2310**		
	30	*lbs*	*2820*	*2980*	*3130*	*3280*	*3430*	*3570*	*3740*	*3900*	*4070*	*4220*	*4380*	*4530*	*4670*	*4820*	*4950*	*5090*		
		kPa	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	**675**	**700**	**725**	**750**						10.00-20
		psi	69	73	76	80	83	87	91	94	98	102	105	109						
FG	Loader	PR								14				16						
FGF	**10**	**kg**	**3550**	**3650**	**3750**	**3875**	**4000**	**4125**	**4125**	**4250**	**4345**	**4440**	**4530**	**4620**						
	5	*lbs*	*7850*	*8050*	*8250*	*8550*	*8800*	*9100*	*9100*	*9350*	*9580*	*9790*	*9990*	*10180*						
		kPa	**200**	**220**	**240**	**260**	**280**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**				
		psi	29	32	35	38	41	44	47	51	54	58	62	65	69	73				
RL	E/M	PR														14				
	50	**kg**	**1445**	**1530**	**1610**	**1685**	**1760**	**1830**	**1920**	**2005**	**2085**	**2170**	**2245**	**2320**	**2395**	**2470**				
	30	*lbs*	*3190*	*3370*	*3550*	*3710*	*3880*	*4030*	*4230*	*4420*	*4600*	*4780*	*4950*	*5110*	*5280*	*5450*				
		kPa	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	**675**	**700**							11.00-20
		psi	65	69	73	76	80	83	87	91	94	98	102							
FG	Loader	PR	10										16							
	10	**kg**	**3750**	**3875**	**4000**	**4125**	**4250**	**4250**	**4375**	**4500**	**4675**	**4780**	**4880**							
	5	*lbs*	*8300*	*8550*	*8800*	*9100*	*9350*	*9350*	*9650*	*9900*	*10300*	*10540*	*10740*							
		kPa	**200**	**220**	**240**	**260**	**280**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**					
		psi	29	32	35	38	41	44	47	51	54	58	62	65	69					
RL	E/M	PR													14					
	50	**kg**	**1570**	**1660**	**1750**	**1830**	**1910**	**1990**	**2085**	**2180**	**2270**	**2355**	**2440**	**2525**	**2605**					
	30	*lbs*	*3460*	*3660*	*3860*	*4030*	*4210*	*4390*	*4600*	*4810*	*5000*	*5190*	*5380*	*5570*	*5740*					
		kPa	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**								12.00-20
		psi	40	44	47	51	54	58	62	65	69	73								
RL	E/M	PR										18								
	50	**kg**	**2180**	**2300**	**2430**	**2500**	**2650**	**2725**	**2800**	**2900**	**3000**	**3075**								
	30	*lbs*	*4800*	*5080*	*5360*	*5520*	*5840*	*6000*	*6150*	*6400*	*6600*	*6800*								
RL	IDU	See characteristics page 77																		
		kPa	**240**	**260**	**280**	**300**	**325**	**350**	**375**	**400**	**425**	**450**								14/70-20
		psi	35	38	41	44	47	51	54	58	62	65								
RR	Compactor	PR										12								
	10	**kg**	**2775**	**2905**	**3035**	**3160**	**3310**	**3460**	**3600**	**3740**	**3875**	**4005**								
	5	*lbs*	*6100*	*6400*	*6700*	*6950*	*7300*	*7650*	*7950*	*8250*	*8550*	*8850*								

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	Ply Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
42x17-20	FG	10	L2	-	-	-	**1085** *42.7*	**435** *17.1*	**480** *18.9*	**452** *17.8*	**25.5**	- -	14.00TG
17.5/65-20 Tubeless	FG	10	L2	-	-	-	**1107** *43.6*	**450** *17.7*	**494** *19.4*	**477** *18.8*	**25.0**	- -	W14L
24"													
12.00-24	RL	20	E3	DE2	**66**	*45*	**1250** *49.2*	**330** *13.0*	**576** *22.7*	**341** *13.4*	**24.5**	- -	8.5
			L3		-	-							8.50V
	STMS	16	L5S	D2A	-	-	**1275** *50.2*	**321** *12.6*	**606** *23.9*	**339** *13.3*	**55.0**	- -	8.5
		20											8.50V
			Industrial Service	IDU	-	-	See characteristics page 76						
13.00-24 TG Tubeless	FG	12	G2	G2A	-	-	**1286** *50.6*	**340** *13.4*	**588** *23.1*	**374** *14.7*	**28.0**	-	8.00TG
			G2, L2	DG2									(10.00VA)
13.00-24 TG		10	G2	G2A	-	-							
14.00-24	RL	28	E3	E2A	**109**	*75*	**1366** *53.8*	**387** *15.2*	**627** *24.7*	**400** *15.7*	**28.0**	**450** *17.7*	10.00W
		24											
			Industrial Service	IDU	-	-	See characteristics page 76						
		28											
	RLS	20	L4	D2A	-	-	**1407** *55.4*	**390** *15.4*	**646** *25.4*	**440** *17.3*	**48.0**	**450** *17.7*	10.00W
	STMS	20	L5S	D2A	-	-	**1373** *54.1*	**367** *14.4*	**646** *25.4*	**391** *15.4*	**78.0**	- -	

For the TKPH(TMPH) Ratings, please refer to page 11.

Pattern	Application Max.Speed km/h mph		Tire Load Limits at Various Cold Inflation Pressures																	Size
		kPa	**120**	**140**	**160**	**180**	**200**	**220**	**240**	**260**	**280**	**300**								
		psi	17	20	23	26	29	32	35	38	41	44								
FG	Loader	PR	10																	42x17-20
	10	**kg**				**2740**	**2915**	**3080**	**3240**	**3395**	**3545**	**3690**								
	5	*lbs*				*6040*	*6425*	*6790*	*7140*	*7485*	*7815*	*8135*								
FG		PR	10																	17.5/65-20
		kg	**2130**	**2330**	**2520**	**2700**	**2875**	**3040**	**3195**											
		lbs	*4695*	*5135*	*5555*	*5950*	*6340*	*6700*	*7045*											
24"																				
		kPa	**475**	**500**	**525**	**550**														12.00-24
		psi	69	73	76	80														
RL	E/M	PR	20																	
	50	**kg**	**3350**	**3450**	**3550**	**3650**														
	30	*lbs*	*7400*	*7600*	*7850*	*8050*														
		kPa	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	**675**	**700**	**725**	**750**	**775**	**800**	**825**			
		psi	69	73	76	80	83	87	91	94	98	102	105	109	112	115	120			
RL	Loader	PR	16														20			
STMS	**10**	**kg**	**5000**	**5150**	**5300**	**5450**	**5600**	**5600**	**5800**	**6000**	**6150**	**6270**	**6410**	**6540**	**6660**	**6780**	**6900**			
	5	*lbs*	*11000*	*11400*	*11700*	*12000*	*12300*	*12300*	*12800*	*13200*	*13600*	*13790*	*14100*	*14390*	*14700*	*14900*	*15200*			
STMS	IDU	See characteristics page 77																		
		kPa	**125**	**150**	**175**	**200**	**225**	**250**	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**				13.00-24 TG
		psi	18	22	25	29	33	36	40	44	47	51	54	58	62	65				
FG	Grader	PR	10						12											
	40	**kg**	**1700**	**1900**	**2060**	**2240**	**2360**	**2500**	**2650**	**2725**										
	25	*lbs*	*3740*	*4180*	*4540*	*4940*	*5200*	*5520*	*5840*	*6000*										
FG	Loader	PR	12																	
	10	**kg**									**4500**	**4750**	**5000**	**5150**	**5300**	**5600**				
	5	*lbs*									*9900*	*10500*	*11000*	*11400*	*11700*	*12300*				
		kPa	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**		14.00-24
		psi	40	44	47	51	54	58	62	65	69	73	76	80	83	87	91	94		
RL	E/M	PR	24															28		
	50	**kg**	**3350**	**3550**	**3750**	**3875**	**4000**	**4250**	**4375**	**4500**	**4625**	**4750**	**4875**	**5000**	**5150**	**5300**	**5450**	**5600**		
	30	*lbs*	*7400*	*7850*	*8250*	*8550*	*8800*	*9350*	*9650*	*9900*	*10200*	*10500*	*10700*	*11000*	*11400*	*11700*	*12000*	*12300*		
		kPa	**575**	**600**	**625**	**650**	**675**	**700**												
		psi	83	87	91	94	98	102												
RLS	Loader	PR	20																	
STMS	**10**	**kg**	**7500**	**7750**	**8000**	**8250**	**8250**	**8500**												
	5	*lbs*	*16500*	*17100*	*17600*	*18200*	*18200*	*18700*												
RL	IDU	See characteristics page 77																		

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	Ply Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
14.00-24 TG Tubeless	FG	14	G2	G2A	-	-	**1336** *52.6*	**365** *14.4*	**597** *23.5*	**406** *16.0*	**31.0**	- -	8.00TG (10.00VA)
		12	G2, L2	DG2	-	-	**1336** *52.6*	**365** *14.4*	**610** *24.0*	**392** *15.4*			8.00TG 10.00VA
	RL	12	L3	D2A	-	-	**1366** *53.8*	**387** *15.2*	**614** *24.2*	**410** *16.1*	**28.0**	**450**	10.00VA (8.00TG)
		24	Industrial Service	IDU	-	-	See characteristics page 76						
14.00-24 TG	FG	12	G2	G2A	-	-	**1336** *52.6*	**365** *14.4*	**610** *24.0*	**392** *15.4*	**31.0**	- -	8.00TG (10.00VA)
		16						**390** *15.4*		**417** *16.4*			10.00VA (8.00TG)
		12	L2	D2A			**1330** *52.3*	**390** *15.4*	**610** *24.0*	**417** *16.4*			10.00VA
16.00-24 TG	FG	16	G2	G2A	-	-	**1453** *57.2*	**438** *17.2*	**638** *25.1*	**500** *19.7*	**32.5**	- -	10.00VA
	RL	16	G3, L3	DG2	-	-	**1478** *58.2*	**419** *16.5*	**671** *26.4*	**446** *17.6*	**33.5**	**513** *20.2*	
16.9-24	FG	10	L2	-	-	-	**1320** *52.0*	**447** *17.6*	**591** *23.3*	**462** *18.2*	**30.5**	- -	W15L
18.4-24	FG	10	L2	-	-	-	**1385** *54.5*	**483** *19.0*	**612** *24.1*	**516** *20.3*	**32.5**	- -	W16L
25"													
15.5-25 Tubeless	VL2	12	L3	D2A	-	-	**1284** *50.6*	**410** *15.6*	**568** *22.4*	**448** *17.6*	**27.0**	- -	12.00/1.3
16.00-25 Tubeless	RL	28	E3	E2A	**139**	*95*	**1478** *58.2*	**432** *17.0*	**671** *26.4*	**459** *18.1*	**33.5**	**513** *20.2*	11.25/2.0
		28 32	Industrial Service	IDU	-	-	See characteristics page 76						
	RLS	28 32	Industrial Service	IDU	-	-							
	YS2	32	Industrial Service	IDU	-	-							

For the TKPH(TMPH) Ratings, please refer to page 11.

Pattern	Application Max.Speed km/h mph	Tire Load Limits at Various Cold Inflation Pressures															Size
		kPa	**125**	**150**	**175**	**200**	**225**	**250**	**275**	**300**	**325**	**350**	**375**	**400**	**425**		14.00-24 TG
		psi	18	22	25	29	33	36	40	44	47	51	54	58	62		
FG	Grader	PR	12							14		16					
	40	**kg**	**2060**	**2300**	**2500**	**2650**	**2800**	**3075**	**3250**	**3450**	**3550**	**3650**					
	25	*lbs*	*4540*	*5080*	*5520*	*5840*	*6150*	*6800*	*7150*	*7600*	*7850*	*8050*					
FG RL	Loader	PR	12														
	10	**kg**													**6300**		
	5	*lbs*													*13900*		
RL	IDU	See characteristics page 77															
		kPa	**150**	**175**	**200**	**225**	**250**	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	16.00-24 TG
		psi	22	25	29	33	36	40	44	47	51	54	58	62	65	69	
FG RL	Grader	PR	16														
	40	**kg**	**2650**	**3000**	**3250**	**3450**	**3650**	**4000**	**4250**	**4500**							
	25	*lbs*	*5840*	*6600*	*7150*	*7600*	*8050*	*8800*	*9350*	*9900*							
RL	Loader	PR	16														
	10	**kg**									**7100**	**7300**	**7750**	**8000**	**8250**		
	5	*lbs*									*15700*	*16100*	*17100*	*17600*	*18200*		
		kPa	**120**	**140**	**160**	**180**	**200**	**220**	**240**								16.9-24
		psi	17	20	23	26	29	32	35								
FG	Loader	PR	10														
	10	**kg**	**2300**	**2520**	**2725**	**2920**	**3105**	**3280**	**3455**								
	5	*lbs*	*5070*	*5555*	*6005*	*6435*	*6845*	*7230*	*7615*								
FG		PR	10														18.4-24
		kg	**2765**	**3025**	**3270**	**3505**	**3725**	**3940**									
		lbs	*6095*	*6670*	*7210*	*7725*	*8210*	*8685*									
25"																	
		kPa	**225**	**250**	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	15.5-25
		psi	33	36	40	44	47	51	54	58	62	65	69	73	76	80	83	
VL2	Loader	PR	12															
	10	**kg**	**4000**	**4250**	**4500**	**4750**	**4875**	**5150**	**5300**	**5600**								
	5	*lbs*	*8800*	*9350*	*9900*	*10500*	*10700*	*11400*	*11700*	*12300*								
RL	E/M	PR	28															
	50	**kg**			**4375**	**4625**	**4875**	**5000**	**5300**	**5450**	**5600**	**5800**	**6000**	**6300**	**6500**	**6500**	**6700**	
	30	*lbs*			*9650*	*10200*	*10700*	*11000*	*11700*	*12000*	*12300*	*12800*	*13200*	*13900*	*14300*	*14300*	*14800*	
RL RLS YS2	IDU	See characteristics page 77																16.00-25

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	Ply Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm / inch	OW mm / inch	SLR mm / inch	SLW mm / inch	OTD mm	Minimum Dual Spacing mm / inch	Recommended Rim/Flange Height inch
17.5-25 Tubeless	FG	12	G2, L2	DG2	-	-	**1345** *53.0*	**450** *17.7*	**588** *23.1*	**480** *18.9*	**27.5**	- -	14.00/1.5
	VL2	16	L3	D2A	-	-	**1348** *53.1*	**444** *17.5*	**597** *23.5*	**470** *18.5*	**30.5**	- -	
	DL	16	L5	D2A	-	-	**1410** *55.5*	**445** *17.5*	**656** *25.8*	**470** *18.5*	**69.5**	- -	
	STMS	20	L5S	D2A / D2Z	-	-	**1385** *54.5*	**450** *17.7*	**645** *25.4*	**462** *18.2*	**69.0**	- -	
17.5-25	VL2	16	L3	D2A	-	-	**1348** *53.1*	**444** *17.5*	**597** *23.5*	**470** *18.5*	**30.5**	- -	
18.00-25 Tubeless	RL	32	E3	E2A	**173**	*118*	**1607** *63.3*	**508** *20.0*	**727** *28.6*	**572** *22.5*	**37.5**	**587** *23.1*	13.00/2.5
		40	Industrial Service	IDU	-	-	See characteristics page 76						
	ELS2	40	Industrial Service	IDU	-	-	See characteristics page 76						
	STMS	24 / 28 / 32	L5S	D2A	-	-	**1675** *65.9*	**520** *20.5*	**762** *30.0*	**550** *21.7*	**84.0**	- -	13.00/2.5
		40	Industrial Service	IDU	-	-	See characteristics page 76						
20.5-25 Tubeless	FG	12	G2, L2	DG2	-	-	**1493** *58.8*	**534** *21.0*	**652** *25.7*	**551** *21.7*	**29.5**	- -	17.00/1.7 (12,16PR) 17.00/2.0
	VL2	16 / 20	E3 / L3	DE2	**80** -	*55* -	**1494** *58.8*	**542** *21.3*	**641** *25.2*	**587** *23.1*	**33.0**	- -	
	DL	16	L5	D2A	-	-	**1558** *61.3*	**548** *21.6*	**714** *28.1*	**570** *22.4*	**79.5**	- -	
20.5-25	VL2	16 / 20	L3	D2A	-	-	**1494** *58.8*	**542** *21.3*	**641** *25.2*	**587** *23.1*	**33.0**	- -	
21.00-25 Tubeless	RL	40	Industrial Service	IDU	-	-	See characteristics page 76						

For the TKPH(TMPH) Ratings, please refer to page 11.

Pattern	Application Max.Speed km/h / mph	Tire Load Limits at Various Cold Inflation Pressures	Size
		kPa 125 150 175 200 / psi 18 22 25 29	17.5-25
FG	Grader **40** 25	PR 12 / **kg** **2120 2360 2575 2900** / *lbs* *4680 5200 5680 6400*	
		For slope and ditching service, inflation pressures should be increased by 100kPa (15psi) with no increase in load rating. For extreme conditions, consult a Bridgestone Representative for additional recommended operating requirements.	
		kPa 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 / psi 33 36 40 44 47 51 54 58 62 65 69 73 76 80 83	
FG VL2 DL STMS	Loader **10** 5	PR 12 16 20 / **kg** **4750 5000 5300 5600 5800 6150 6300 6700 6900 7100 7300 7500 7750 8000 8250** / *lbs* *10500 11000 11700 12300 12800 13600 13900 14800 15200 15700 16100 16500 17100 17600 18200*	
RL	E/M **50** 30	PR 32 / **kg** **5600 6000 6300 6500 6900 7100 7300 7500 7750 8000 8250 8500 8750** / *lbs* *12300 13200 13900 14300 15200 15700 16100 16500 17100 17600 18200 18700 19300*	18.00-25
		kPa 375 400 425 450 475 500 525 550 575 600 625 650 675 700 725 750 / psi 54 58 62 65 69 73 76 80 83 87 91 94 98 102 105 109	
STMS	Loader **10** 5	PR 24 28 32 / **kg** **10000 10450 10900 11500 11500 11800 12150 12500 12850 13200 13600 13600 14000 14500 14500 15000** / *lbs* *22000 23000 24000 25400 25400 26000 26800 27600 28300 29100 30000 30000 30900 32000 32000 33100*	
RL ELS2 STMS	IDU	See characteristics page 77	
		kPa 125 150 175 200 225 250 275 300 325 350 375 400 425 450 / psi 18 22 25 29 33 36 40 44 47 51 54 58 62 65	20.5-25
VL2	E/M **50** 30	PR 16 20 / **kg** **4125 4500 4875 5150 5450 5800 6000** / *lbs* *9100 9900 10700 11400 12000 12800 13200*	
FG	Grader **40** 25	PR 12 / **kg** **2800 3150 3550** / *lbs* *6150 6950 7850*	
		For slope and ditching service, inflation pressures should be increased by 100kPa (15psi) with no increase in load rating. For extreme conditions, consult a Bridgestone Representative for additional recommended operating requirements.	
FG VL2 DL	Loader **10** 5	PR 12 16 20 / **kg** **6300 6700 7100 7500 7750 8250 8500 8750 9250 9500** / *lbs* *13900 14800 15700 16500 17100 18200 18700 19300 20400 20900*	
RL	IDU	See characteristics page 77	21.00-25

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	Ply Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
23.5-25 Tubeless	VL2	16 20 24	E3 L3	DE2	**107**	*73*	**1607** *63.3*	**618** *24.3*	**682** *26.9*	**688** *27.1*	**43.0**	- -	19.50/2.5
		20		D2A	-	-							
	DL	20	L5	D2A	-	-	**1673** *65.9*	**616** *24.3*	**779** *30.7*	**646** *25.4*	**88.0**	- -	
23.5-25	VL2	16 20 24	L3	D2A	-	-	**1607** *63.3*	**618** *24.3*	**682** *26.9*	**688** *27.1*	**43.0**	- -	
26.5-25 Tubeless	VL2	20 24 26	E3 L3	DE2	**132**	*90*	**1738** *68.4*	**683** *26.9*	**745** *29.3*	**734** *28.9*	**44.0**	- -	22.00/3.0
		16 24		D2A	-	-							
	RLS	26	L4	D2A	-	-	**1785** *70.3*	**700** *27.6*	**800** *31.5*	**736** *29.0*	**67.0**	- -	
	DL	20 26	L5	D2A	-	-	**1798** *70.8*	**694** *27.3*	**820** *32.3*	**726** *28.6*	**97.0**	- -	
	STMS	32 36	L5S	D2A	-	-	**1798** *70.8*	**680** *26.8*	**827** *32.6*	**719** *28.3*	**95.0**	- -	
26.5-25	VL2	24	L3	D2A	-	-	**1738** *68.4*	**683** *26.9*	**745** *29.3*	**734** *28.9*	**44.0**	- -	
29.5-25 Tubeless	VL2	22 28	E3 L3	DE2	**150**	*103*	**1850** *72.8*	**770** *30.3*	**792** *31.2*	**833** *32.8*	**49.0**	- -	25.00/3.5
	RLS	28	L4	D2A	-	-	**1912** *75.3*	**784** *30.9*	**813** *32.0*	**805** *31.7*	**74.0**	- -	
	DL	28	L5	D2A	-	-	**1900** *74.8*	**768** *30.2*	**873** *34.4*	**805** *31.7*	**105.5**	- -	
26"													
23.1-26 Tubeless	AL2	8	C2	-	-	-	**1490** *58.7*	**595** *23.4*	**654** *25.7*	**618** *24.3*	**19.0**	- -	DW20A DW20B
23.1-26	AL2	8	C2	-	-	-	**1490** *58.7*	**595** *23.4*	**654** *25.7*	**618** *24.3*	**19.0**	- -	
29"													
29.5-29 Tubeless	STMS	34	L5S	D2A D2Z	-	-	**2009** *79.1*	**777** *30.6*	**931** *36.7*	**792** *31.2*	**103.0**	- -	25.00/3.5
33"													
18.00-33 Tubeless	ELS2	36	Industrial Service	IDU	-	-	See characteristics page 76						
35/65-33 Tubeless	DL	42	L5	D2V	-	-	**2075** *81.7*	**896** *35.3*	**979** *38.5*	**945** *37.2*	**97.0** *97.0*	- -	28.00/3.5

For the TKPH(TMPH) Ratings, please refer to page 11.

Pattern	Application Max.Speed km/h mph	Tire Load Limits at Various Cold Inflation Pressures																	Size
		kPa	**175**	**200**	**225**	**250**	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**630**
		psi	25	29	33	36	40	44	47	51	54	58	62	65	69	73	76	80	92
VL2 DL	Loader **10** 5	PR					16				20				24				
		kg			**8000**	**8500**	**9000**	**9500**	**10000**	**10600**	**10900**	**11200**	**11800**	**12150**	**12500**				
		lbs			*17600*	*18700*	*19800*	*20900*	*22000*	*23400*	*24000*	*24700*	*26000*	*26800*	*26700*				
VL2	E/M **50** 30	PR			16			20		24									
		kg	**5300**	**5800**	**6150**	**6500**	**6900**	**7300**	**7750**	**8000**									
		lbs	*11700*	*12800*	*13600*	*14300*	*15200*	*16100*	*17100*	*17600*									
VL2		PR				20		24	26										
		kg	**6700**	**7300**	**7750**	**8250**	**8750**	**9250**	**9500**										
		lbs	*14800*	*16100*	*17100*	*18200*	*19300*	*20400*	*20900*										
VL2 RLS DL STMS	Loader **10** 5	PR					16			20		24		26				32	36
		kg					**11500**	**12150**	**12500**	**13200**	**13600**	**14000**	**14500**	**15000**	**15500**	**16000**	**16500**	**17000**	**18600**
		lbs					*25400*	*26800*	*27600*	*29100*	*30000*	*30900*	*32000*	*33100*	*34200*	*35300*	*36480*	*37500*	*41000*
VL2	E/M **50** 30	PR						22			28								
		kg	**8000**	**8750**	**9250**	**10000**	**10600**	**10900**	**11500**										
		lbs	*17600*	*19300*	*20400*	*22000*	*23400*	*24000*	*25400*										
VL2 RLS DL	Loader **10** 5	PR							22				28						
		kg			**12150**	**12850**	**13600**	**14500**	**15000**	**16000**	**16500**	**17000**	**17500**						
		lbs			*26800*	*28300*	*30000*	*32000*	*33100*	*35300*	*36480*	*37500*	*38600*						
26"																			
		kPa	**110**																
		psi	16																
AL2	Compactor	PR	8																
	10	**kg**	**2850**																
	5	*lbs*	*6285*																
29"																			
		kPa	**225**	**250**	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**				
		psi	33	36	40	44	47	51	54	58	62	65	69	73	76				
STMS	Loader	PR											34						
	10	**kg**	**12850**	**14000**	**14500**	**15500**	**16000**	**17000**	**17500**	**18000**	**19000**	**19500**	**20000**	**20600**	**21200**				
	5	*lbs*	*28300*	*30900*	*32000*	*34200*	*35300*	*37500*	*38600*	*39700*	*41900*	*43000*	*44100*	*45400*	*46700*				
33"																			
ELS2	IDU	See characteristics page 77																	
		kPa	**375**	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**						
		psi	54	58	62	65	69	73	76	80	83	87	91						
DL	Loader	PR											42						
	10	**kg**	**19500**	**20000**	**21200**	**21800**	**22400**	**23000**	**23600**	**24300**	**25000**	**25750**	**26500**						
	5	*lbs*	*43000*	*44100*	*46700*	*48100*	*49400*	*50700*	*52000*	*53600*	*55100*	*56800*	*58400*						

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	Ply Rating	TRA Code or Application	Spec	TKPH	TMPH	Approximate Inflated Dimensions OD mm inch	OW mm inch	SLR mm inch	SLW mm inch	OTD mm	Minimum Dual Spacing mm inch	Recommended Rim/Flange Height inch
35"													
21.00-35 Tubeless	RL	40	Industrial Service	IDU	-	-	See characteristics page 78						
	ELS2	40	Industrial Service	IDU	-	-							
37.25-35 Tubeless	RL	36	E3	E1A	**358**	*245*	**2330** *91.7*	**955** *37.6*	**1060** *41.7*	**1000** *39.4*	**51.5**	- -	31.00/4.0
39"													
40/65-39 Tubeless	DL	56	L5	D2V	-	-	**2420** *95.3*	**1020** *40.2*	**1112** *43.8*	**1070** *42.1*	**106.5**	- -	32.00/4.0
45"													
45/65-45 Tubeless	DL	58	L5	D2V	-	-	**2730** *107.5*	**1146** *45.1*	**1261** *49.6*	**1185** *46.6*	**116.0**	- -	36.00/4.5
51"													
50/65-51 Tubeless	DL	62	L5	D2A D2V	-	-	**3070** *120.9*	**1260** *49.6*	**1412** *55.6*	**1300** *51.2*	**127.5**	- -	40.00/4.5
57"													
65/65-57 Tubeless	DL	62	L5	D2V	-	-	**3735** *147.0*	**1640** *64.6*	**1672** *65.8*	**1706** *67.2*	**142.5**	- -	52.00/6.0

For the TKPH(TMPH) Ratings, please refer to page 11.

Pattern	Application Max.Speed km/h mph	Tire Load Limits at Various Cold Inflation Pressures																		Size
35"																				
RL ELS2	IDU	See characteristics page 79																		21.00-35
		kPa	**175**	**200**	**225**	**250**	**275**	**300**	**325**											37.25-35
		psi	25	29	33	36	40	44	47											
RL	E/M	PR	36																	
	50	**kg**	**13600**	**14500**	**15500**	**16500**	**17500**	**18500**	**19500**											
	30	*lbs*	*30000*	*32000*	*34200*	*36400*	*38600*	*40800*	*43000*											
39"																				
		kPa	**275**	**300**	**325**	**350**	**375**	**400**	**425**	**450**	**475**	**500**	**525**	**550**	**575**	**600**	**625**	**650**	**675**	**700**	40/65-39
		psi	40	44	47	51	54	58	62	65	69	73	76	80	83	87	91	94	98	102	
DL	Loader	PR	56																	
	10	**kg**	**22400**	**23600**	**25000**	**25750**	**27250**	**28000**	**29000**	**30000**	**30750**	**31500**	**32500**	**34500**	**34500**	**36500**	**37500**	**38750**	**40000**	**41250**	
	5	*lbs*	*49400*	*52000*	*55100*	*56800*	*60000*	*61500*	*64000*	*66000*	*68000*	*69500*	*71500*	*76100*	*76000*	*80500*	*82700*	*85400*	*88200*	*90900*	
45"																				
DL	Loader	PR	58																	
	10	**kg**	**30000**	**31500**	**32500**	**34500**	**35500**	**37500**	**38750**	**40000**	**41250**	**42500**	**43750**	**45000**	**46250**	**47250**	**48250**	**49250**	**50000**		45/65-45
	5	*lbs*	*66000*	*69500*	*71500*	*76000*	*78500*	*82500*	*85500*	*88000*	*91000*	*93500*	*96500*	*99000*	*102000*	*104200*	*106400*	*108600*	*110000*		
51"																				
DL	Loader	PR	62																	
	10	**kg**	**37500**	**40000**	**42500**	**43750**	**46250**	**47500**	**48750**	**51500**	**53000**	**54500**	**56000**	**58000**	**58000**	**60000**	**61500**	**63000**			50/65-51
	5	*lbs*	*82500*	*88000*	*93500*	*96500*	*102000*	*104500*	*107500*	*113500*	*117000*	*120000*	*123500*	*128000*	*128000*	*132500*	*135500*	*139000*			
57"																				
DL	Loader	PR	62																	
	10	**kg**	**67000**	**71000**	**73000**	**77500**	**80000**	**82500**	**87500**	**90000**	**92500**	**95000**									65/65-57
	5	*lbs*	*147500*	*156500*	*161000*	*171000*	*176500*	*182000*	*193000*	*198500*	*204000*	*209500*									

1) Figures under the star rating denote the maximum load and inflation pressures.
2) For Loader & Dozer Service, Tire Load Limits will depend on a type of the operation. Please refer to page 82.

Tire Size	Pattern	Ply Rating	TRA Code or Application	Approximate Inflated Dimensions OD mm / inch	OW mm / inch	SLR mm / inch	SLW mm / inch	OTD mm	Minimum Dual Spacing mm / inch	Recommended Rim/Flange Height inch
Industrial Service										
20"										
12.00-20	RL	20	Industrial Service	**1138** *44.8*	**316** *12.4*	**507** *20.0*	**348** *13.7*	**24.0**	**378** *14.9*	8.50V
24"										
12.00-24	STMS	20	Industrial Service	**1275** *50.2*	**321** *12.6*	**606** *23.9*	**339** *13.3*	**55.0**	**391** *15.4*	8.50V
14.00-24	RL	24 28	Industrial Service	**1366** *53.8*	**387** *15.2*	**627** *24.7*	**400** *15.7*	**28.0**	**450** *17.7*	10.00W
14.00-24 TG Tubeless	RL	24	Industrial Service	**1360** *53.5*	**395** *15.6*	**614** *24.2*	**410** *16.1*	**28.0**	**450** *17.7*	10.00VA
25"										
16.00-25 Tubeless	RL	28 32	Industrial Service	**1495** *58.9*	**445** *17.5*	**671** *26.4*	**459** *18.1*	**33.5**	**513** *20.2*	11.25/2.0
	RLS	28 32	Industrial Service	**1548** *60.9*	**438** *17.2*	**722** *28.4*	**460** *18.1*	**57.0**	**513** *20.2*	
	YS2	32	Industrial Service	**1465** *57.7*	**430** *16.9*	**658** *25.9*	**472** *18.6*	**49.2**	**513** *20.2*	
18.00-25 Tubeless	RL	40	Industrial Service	**1608** *63.3*	**508** *20.0*	**727** *28.6*	**572** *22.5*	**36.0**	**587** *23.1*	13.00/2.5
	ELS2	40	Industrial Service	**1685** *66.3*	**515** *20.3*	**796** *31.3*	**530** *20.9*	**66.5**	**587** *23.1*	
	STMS	40	Industrial Service	**1675** *65.9*	**520** *20.5*	**762** *30.0*	**550** *21.7*	**84.0**	**587** *23.1*	
21.00-25 Tubeless	RL	40	Industrial Service	**1750** *68.9*	**570** *22.4*	**775** *30.5*	**620** *24.4*	**41.0**	**668** *26.3*	15.00/3.0
33"										
18.00-33 Tubeless	ELS2	36	Industrial Service	**1878** *73.9*	**515** *20.3*	**887** *34.9*	**533** *21.0*	**66.5**	**587** *23.1*	13.00/2.5

Pattern	Appli.	Ply Rating		Inflation Pressure kPa / psi	km/h / mph	Tire Load Limits at Various Speeds 0 Static	Creep Creep	5 3	10 5	15 9	20 12	25 15	30 19	Size
Industrial Service														
20"														
RL	IDU	20	Load	**1000**	**kg**	**11880**	**10560**	**9570**	**8910**	**8580**	**8380**	**8250**	**8185**	**12.00-20**
			Wheel	145	*lbs*	*26200*	*23290*	*21100*	*19650*	*18920*	*18480*	*18190*	*18050*	
			Steering	**1000**	**kg**	**9505**	**8450**	**7655**	**7130**	**6865**	**6705**	**6600**	**6550**	
			Wheel	145	*lbs*	*20960*	*18630*	*16880*	*15720*	*15135*	*14785*	*14550*	*14440*	
24"														
STMS	IDU	20	Load	**1000**	**kg**	**12420**	**11040**	**10005**	**9315**	**8970**	**8765**	**8625**	**8555**	**12.00-24**
			Wheel	145	*lbs*	*27385*	*24345*	*22060*	*20540*	*19780*	*19320*	*19020*	*18865*	
			Steering	**1000**	**kg**	**9935**	**8830**	**8005**	**7450**	**7175**	**7010**	**6900**	**6845**	
			Wheel	145	*lbs*	*21910*	*19475*	*17650*	*16430*	*15825*	*15455*	*15215*	*15090*	
RL	IDU	24	Load	**1000**	**kg**	**17100**	**15200**	**13775**	**12825**	**12350**	**12065**	**11875**	**11780**	**14.00-24**
			Wheel	145	*lbs*	*37705*	*33515*	*30375*	*28280*	*27230*	*26605*	*26185*	*25975*	
			Steering	**1000**	**kg**	**13680**	**12160**	**11020**	**10260**	**9880**	**9650**	**9500**	**9425**	
			Wheel	145	*lbs*	*30165*	*26810*	*24300*	*22625*	*21785*	*21280*	*20945*	*20780*	
		28	Load	**1000**	**kg**	**18000**	**16000**	**14500**	**13500**	**13000**	**12700**	**12500**	**12400**	
			Wheel	145	*lbs*	*39690*	*35280*	*31970*	*29765*	*28665*	*28005*	*27560*	*27340*	
			Steering	**1000**	**kg**	**14400**	**12800**	**11600**	**10800**	**10400**	**10160**	**10000**	**9920**	
			Wheel	145	*lbs*	*31750*	*28225*	*25580*	*23815*	*22930*	*22400*	*22050*	*21875*	
25"														
RL RLS YS2	IDU	28	Load	**900**	**kg**	**20700**	**18400**	**16675**	**15525**	**14950**	**14605**	**14375**	**14260**	**16.00-25**
			Wheel	131	*lbs*	*45645*	*40570*	*36770*	*34230*	*32965*	*32205*	*31695*	*31445*	
			Steering	**900**	**kg**	**16560**	**14720**	**13340**	**12420**	**11960**	**11685**	**11500**	**11410**	
			Wheel	131	*lbs*	*36515*	*32455*	*29415*	*27385*	*26370*	*25765*	*25355*	*25155*	
		32	Load	**1000**	**kg**	**22500**	**20000**	**18125**	**16875**	**16250**	**15875**	**15625**	**15500**	
			Wheel	145	*lbs*	*49610*	*44100*	*39965*	*37210*	*35830*	*35005*	*34455*	*34175*	
			Steering	**1000**	**kg**	**18000**	**16000**	**14500**	**13500**	**13000**	**12700**	**12500**	**12400**	
			Wheel	145	*lbs*	*39690*	*35280*	*31970*	*29765*	*28665*	*28005*	*27560*	*27340*	
RL ELS2 STMS	IDU	40	Load	**1000**	**kg**	**30600**	**27200**	**24650**	**22950**	**22100**	**21590**	**21250**	**21080**	**18.00-25**
			Wheel	145	*lbs*	*67475*	*59975*	*54355*	*50605*	*48730*	*47605*	*46855*	*46480*	
			Steering	**1000**	**kg**	**24480**	**21760**	**19720**	**18360**	**17680**	**17270**	**17000**	**16865**	
			Wheel	145	*lbs*	*53980*	*47980*	*43480*	*40485*	*38985*	*38085*	*37485*	*37185*	
RL	IDU	40	Load	**1000**	**kg**	**36385**	**32345**	**29310**	**27290**	**26280**	**25670**	**25270**	**25065**	**21.00-25**
			Wheel	145	*lbs*	*80230*	*71320*	*64630*	*60170*	*57950*	*56610*	*55720*	*55270*	
			Steering	**1000**	**kg**	**29110**	**25875**	**23450**	**21830**	**21025**	**20535**	**20215**	**20050**	
			Wheel	145	*lbs*	*64185*	*57055*	*51705*	*48135*	*46360*	*45290*	*44575*	*44215*	
33"														
ELS2	IDU	36	Load	**1000**	**kg**	**33300**	**29600**	**26825**	**24975**	**24050**	**23495**	**23125**	**22940**	**18.00-33**
			Wheel	145	*lbs*	*73425*	*65270*	*59150*	*55070*	*53030*	*51805*	*50990*	*50580*	
			Steering	**1000**	**kg**	**26640**	**23680**	**21460**	**19980**	**19240**	**18795**	**18500**	**18350**	
			Wheel	145	*lbs*	*58740*	*52215*	*47320*	*44055*	*42425*	*41445*	*40790*	*40465*	

Tire Size	Pattern	Ply Rating	TRA Code or Application	Approximate Inflated Dimensions				OTD	Minimum Dual Spacing	Recommended Rim/Flange Height
				OD	OW	SLR	SLW			
				mm *inch*	**mm** *inch*	**mm** *inch*	**mm** *inch*	**mm**	**mm** *inch*	inch
35"										
21.00-35 Tubeless	RL	40	Industrial Service	**2008** *79.1*	**570** *22.4*	**937** *36.9*	**648** *25.5*	**41.0**	**701** *27.6*	15.00/3.0
	ELS2	40	Industrial Service	**2040** *80.3*	**592** *23.3*	**955** *37.6*	**617** *24.3*	**67.0**	**701** *27.6*	

Pattern	Appli.	Ply Rating		Inflation Pressure	Tire Load Limits at Various Speeds								Size
35"													
				kPa psi	**km/h** mph	**0** Static	**Creep** Creep	**5** 3	**10** 5	**15** 9	**20** 12	**25** 15	**30** 19	
RL ELS2	IDU	40	Load Wheel	**1000** 145	**kg** *lbs*	**43740** *96445*	**38880** *85730*	**35235** *77695*	**32805** *72335*	**31590** *69655*	**30860** *68050*	**30375** *66975*	**30130** *66440*	**21.00-35**
			Steering Wheel	**1000** 145	**kg** *lbs*	**34990** *77155*	**31105** *68585*	**28190** *62155*	**26245** *57870*	**25270** *55725*	**24690** *54440*	**24300** *53580*	**24105** *53150*	

Off-the-Road Tires Used for Industrial Vehicle Applications

1) Industrial Vehicles comprise vehicles such as counter-balanced lift trucks, container handlers, straddle carriers, aircraft tow tractors, mobile crushers, log stackers etc., used on hard improved surfaces, smooth floors and runways.
2) Use Specifications of **Industrial Service only.**
3) Consult a Rim Manufacturer when inflation pressure exceeds 800kPa (116psi).
4) For Speeds exceeding 30km/h (18mph), consult a Bridgestone Representative.
5) For tire sizes and star ratings other than listed above, consult a Bridgestone Representative.
6) For RTG (Rubber Tired Gantry Crane) operation, consult a Bridgestone Representative.

REMARKS & SPECIAL OPERATIONS

1. Remarks

Both rules of 1.1 and 1.2 can't be applied at the same time.

1.1 Excess Load

Due to the specialized nature of Off-The-Road vehicle usage, loads in excess of those in the appropriate above-listed load tables are often encountered.
These excess loads result from items such as actual vehicle weight exceeding the design weight, varying density of materials, field modifications to the equipment, load transfer, etc.
Only under these conditions, the actual tire load in service may exceed the above load ratings for the tire(*) by an amount not greater than shown in the following table:

For Radial Tires

	E2, E3, E4*	L**
Maximum Excess Load	7%	7%
Maximum Excess Pressure	14%	14%
Maximum Pressure	**800kPa** *116psi*	**825kPa** *120psi*

(except for underground vehicles)

When excess loads are encountered, cold inflation pressures must be increased to compensate for higher loads. For each 1% increase in load, the inflation pressure must be increased by 2%.

*except following sizes on the list

11.00R20	335/80R20	405/70R20	12.00R24
12.00R20	365/80R20	12R22.5	

About 63" tires, consult a Bridgestone representative.

**except 55.5/80R57 and 60/80R57

The maximum excess loads will result in reduced tire performance.

For Bias Tires

	E2, E3, E4*	L**	
			L5/L5S***
Maximum Excess Load	15%	15%	0%
Maximum Excess Pressure	30%	30%	+100kPa
Maximum Pressure	**825kPa** *120psi*	**825kPa** *120psi*	

(except for underground vehicles)

When excess loads are encountered, cold inflation pressures must be increased to compensate for higher loads. For each 1% increase in load, the inflation pressure must be increased by 2%.

*except following sizes on the list

9.00-20	10.00-20	11.00-20

**except following sizes on the list

27x8.50-15	10-16.5	15.5/70-18	16.9-24
33x12.5-15	12-16.5	42x17-20	18.4-24
12.5/70-16	15.5/60-18	17.5/65-20	

***For L5/L5S tires following sizes on the list, on front tires for front end loaders, it is permissible to increase inflation pressure up to 100kPa (15psi) above, with no increase in load.
(Maximum inflation pressure should not exceed 825 kPa (120psi).)

17.5-25	26.5-25	35/65-33	50/65-51
20.5-25	29.5-25	40/65-39	65/65-57
23.5-25	29.5-29	45/65-45	

The maximum excess loads will result in reduced tire performance.

1.2 The Variation in Load Carrying Capacity with Operating Speed

For Radial Tires

Maximum Speed (km/h)	G	L*
Static	-	+60%
Creep		+30%
5		+14%
10		0
15		-13%
20		-
25		-20%
30		
35		-26%
40	0	-30%
45	-	
50	-9%	
55	-	
60	-18%	
65	-27%	
70		
75		
80		
80<		

(except for underground vehicles)

Reference speed for calculating load variance

* About the size of 55.5/80R57 and 60/80R57, consult a Bridgestone representative.

This table doesn't secure to prevent the risk derived from heat buildup.

For Bias Tires

Maximum Speed (km/h)	G	L*
Static	-	+60%
Creep		+30%
5		+14%
10		0
15		-13%
20		-
25		-20%
30		
35		-26%
40	0	-30%
45	-	
50	-9%	
55	-	
60	-18%	
65	-27%	
70		
75		
80		
80<		

(except for underground vehicles)

Reference speed for calculating load variance

*except following sizes on the list

27x8.50-15	10-16.5	15.5/70-18	16.9-24
33x12.5-15	12-16.5	42x17-20	18.4-24
12.5/70-16	15.5/60-18	17.5/65-20	

This table doesn't secure to prevent the risk derived from heat buildup.

1.3 The Variation in Load Carrying Capacity with Operating Speed for Mobile Crane

Speed	Maximum Load	
	Speed Symbol: E	Speed Symbol: F
30 km/h (20 mph)	+30%	+25%
40 km/h (25 mph)	+24%	+15%
50 km/h (30 mph)	+18%	+12%
60 km/h (35 mph)	+12%	+10%
70 km/h (43 mph)	0%	+5%
80 km/h (50 mph)	-18%	0%
90 km/h (55 mph)	-30%	-6%
100 km/h (62 mph)	-40%	-15%

Reference speed for calculating load variance

This table doesn't secure to prevent the risk derived from heat buildup.

2. Special Operations

Please check your operation to make sure of the Tire Load Limit.

Type/Service	Type of Operations	Reference No.
Earthmover	Standard	-
	Underground Truck Service	2.1.3
	When the vehicle is driven over the highway for delivery, or moved by an operator to a new job site - Drive-Away	2.2.1
Loader & Dozer	Distance of picking up and relocating material Less than 76m (one way) - Standard	-
	Distance of picking up and relocating material More than 76m (one way) - Load-and-Carry Operations	2.1.1
	Underground Load Haul Dump Service	2.1.2
	Underground Truck Service	2.1.3
	When the vehicle is driven over the highway for delivery, or moved by an operator to a new job site - Drive-Away	2.2.2

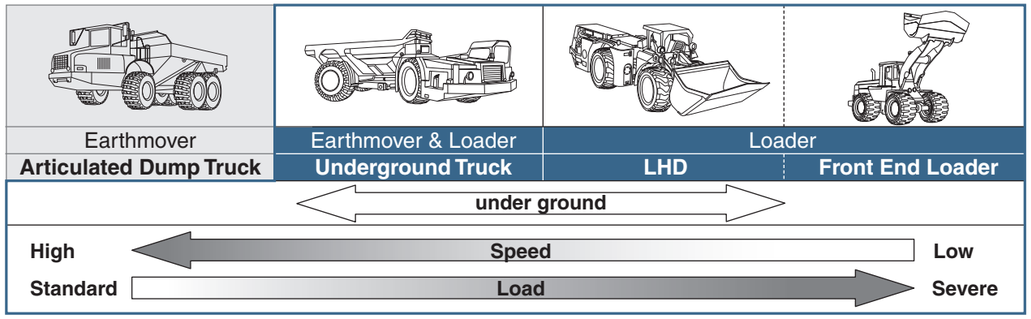
2.1 For Load-and-Carry Operations

Service conditions of a loader is defined as “picking up material and relocating a short distance away, a maximum of 76m (250 feet), one way, with a maximum speed of 10km/h (5 mph)”. However, a loader can pick up a load and transport such load to another location and return unloaded for a longer distance. This type of service is called as **Load-and-Carry** operations. Transportation usually occurs at low speeds, up to 25km/h (15 mph), and distances are limited.

The tires when used in Load-and-Carry operations may encounter heat problems especially on the front axle tires. To avoid such problems, Bridgestone recommends the following operating conditions.

For tires over 33" inch rim diameter tires, careful study is required to maximize tire life while considering Ton-Kilometer-Per-Hour limits. Please consult a Bridgestone representative for more information.

If you need to use the tire beyond this recommendation, please consult a Bridgestone representative.



2.1.1 For Front End Loader Service

For Radial Tires

Tread Class	Inflation Pressure: Conventional size (95 series) ★1	Inflation Pressure: Conventional size (95 series) ★2	Inflation Pressure: Wide base size (80, 65 series) ★1	Inflation Pressure: Wide base size (80, 65 series) ★2	Load Capacity* 10km/h (5mph)	Maximum Cycle Distance (m)	Allowable Average Work-shift Speed (km/h)
L2, L3	Standard Inflation Pressure		Standard Inflation Pressure**		100% of STD. load	1800	16
L4							14
L5						1500 (VSDT)	10
						1200 (VSDL, VSDR)	6
L5S						1200	5

* STD.load: Maximum permissible load at standard inflation pressure for respective tire size and star rating.
Please refer to the load - inflation pressure table for loader and dozer service “10km/h (5mph) service” .

** On front tires for front end loaders, it is permissible to increase inflation pressure up to 100kPa (15psi) above that shown in the load - inflation pressure table for loader and dozer service “10km/h (5mph) service” with no increase in load.

For Bias Tires

Tread Class	Inflation Pressure for Front Tires	Load Capacity* 10km/h (5mph) Rim Diameter 29" and below	Load Capacity* 10km/h (5mph) Rim Diameter 33" and above	Maximum Cycle Distance (m)	Allowable Average Work-shift Speed (km/h)
L2, L3	Standard inflation pressure + 100kpa (15psi)	90% of STD. load	**	1200	10
L4				500	3
L5			85% of STD. load	300	
L5S					

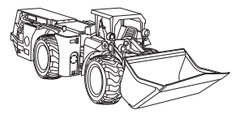
* STD.load: Maximum permissible load at standard inflation pressure for respective tire size and star rating.
Please refer to the load - inflation pressure table for loader and dozer service “10km/h (5mph) service”.

** Not permissible

The inflation pressure should not exceed 825kPa (120psi).

2.1.2 For Load Haul Dump Service

Since a load haul dump (LHD) unit has a similar structure and operational characteristics as load and carry service on a front end loader, the following operating parameters are recommended.



For Radial Tires

Tread Class	Inflation Pressure: Conventional size (95 series)	Inflation Pressure: Wide base size (80, 65 series)	Load Capacity* 10km/h (5mph)	Maximum Cycle Distance (m)	Allowable Average Work-shift Speed (km/h)
	★2 D2A				
L2, L3	**				
L4	Standard Inflation Pressure		100% of STD. load	1800	14
L5				1500 (VSDT)	10
				1200 (VSDL, VSDR)	6
L5S				1200	5

*See note in Table 2.1.1. **Not permissible

For Bias Tires

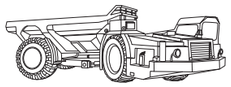
Tread Class	Inflation Pressure for Front Tires	Load Capacity* 10km/h (5mph) Rim Diameter 29" and below	Load Capacity* 10km/h (5mph) Rim Diameter 33" and above	Maximum Cycle Distance (m)	Allowable Average Work-shift Speed (km/h)
L2, L3	**				
L4	Standard inflation pressure + 100kpa (15psi)	90% of STD. load	**	500	3
L5			85% of STD. load	300	
L5S					

*See note in Table 2.1.1. **Not permissible

The inflation pressure must meet 1.1 for maximum excess load.

2.1.3 For Underground Truck Service

Underground truck service is defined as small and low vehicle height dump truck used in underground mines. However, the application is considered to be similar to load and carry operation which has relatively slower speed and shorter distance with more load than normal dump truck use.
Consequently, the severity to the tire is estimated using the load and carry concept.
Bridgestone defines the recommendation in this section.



For Radial Tires

	Tread Class & Pattern			Inflation Pressure	Load Capacity*	Speed	
						Maximum Speed (km/h)	Allowable Average Work-shift Speed (km/h)
35/65R33	L4	VSNT	MT DUH	700 kpa	**	25	10
				800 kpa		40	10
Wide base size (80, 65 series) 15" – 33"	L4	VSNT	★2 D2A	650 kpa	100% of STD. load	25	14
	L5	VSDT					10
		VSDL					6
	L5S	VSMS					5
		VSMS2					
Conventional size (95 series) 15" – 33"	E4	VELS	★2 E2A	700 kpa	115% of STD. load	30	14
		VMTP					
		VRLS					

*See note in 2.1.1.
**Underground Truck Load and Inflation Table

	kPa						
km/h	500	550	600	650	700	750	800
25	23000	25000	26500	28000	30000		
40	20000	21800	23000	24300	25750	27250	29000

For over Maximum Speed, consult a Bridgestone Representative.

For Bias Tires
Not recommendable.

2.2 Drive-Away Tires on Vehicles

2.2.1 Off-the-Road Tires for Earthmover

(1) Recommendations for Off-the-Road Tires

Because of the special extra-heavy construction of Off-the-Road tires, special precautions must be observed to protect these expensive tires when the vehicle is driven over the highway for delivery, or moved by an operator to a new job site.

If the precautions are not observed, excessive tire heat is built up and the tires most likely will fail prematurely. These precautions are as follows and apply to tires on all vehicles in transit—driven or towed. Consult a Bridgestone Representative for specific information before starting out on a drive-away trip.

(2) Load and Pressure

[1] Vehicles must be empty during transportation.
[2] Inflation pressure is to be checked before starting, each break and adjusted to the pressure recommended for over-the-highway transit by Bridgestone.
[3] Inflation pressures are not to be reduced by “bleeding” tires during transportation.
[4] Periodical inflation pressure checks during transportation (i.e. every 2 hours) is recommended. Although operational pressure build-up in tires is normal during transportation, when it increases 20% or more than the cold pressure reading, it indicates over heating, and the vehicle should be stopped and a Bridgestone Representative should be consulted.

(3)Speed

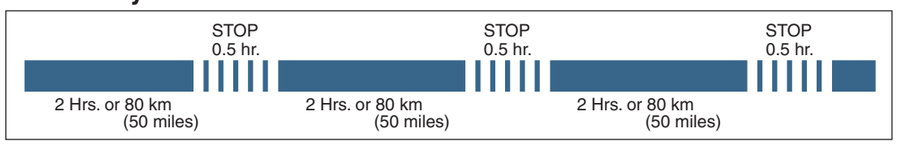
[1] Regular tread tires (E-3):
(Note: For deep tread tires (E-4), always consult a Bridgestone Representative.)
a. Maximum highway speed:

Maximum Speed (Drive-Away)

		Maximum Speed	
Radial / Bias	Regular	50 km/h	30 mph
	Wide Base	32 km/h	20 mph

b. Stop for a 30-minute cooling period after each 80 km (50 miles) of driving or before 2 hours of continual operation, whichever comes first. (shown in the following figure)
c. One-hour minimum midday lunch stop should be observed during full day operations. (shown in the following figure)

Drive-Away



[2] Vehicles in transit should be accompanied by responsible personnel in a pilot car to enforce these precautions and maintain a check on equipment. This is good insurance for a valuable investment.

2.2.2 Off-the-Road Tires for Loader & Dozer

During or after the operation, please wait for the following hours prior to start Drive-Away.

Size & Pattern	Load per tire [ton]		Maximum Travel Distance (One way)				
			5 km or 3.1 Mil	10 km or 6.2 Mil	20 km or 12.4 Mil	50 km or 31 Mil	60 km or 37 Mil
35/65R33 VSDL	16.6	Rest time prior to traveling (Hour)	2	4	5	7	9
		Maximum speed on traveling	10 km/h or 6.2 MPH				
45/65R45 VSDL	30.3	Rest time prior to traveling (Hour)	2	3	5	10	11
		Maximum speed on traveling	10 km/h or 6.2 MPH				
50/65R51 VSDL	40.3	Rest time prior to traveling (Hour)	3	5	9	20	23
		Maximum speed on traveling	20 km/h or 12.4 MPH			10 km/h or 6.2 MPH	
555/80R57 VSDL	64.8	Rest time prior to traveling (Hour)	1.5	3.5	7	10	14
		Maximum speed on traveling	20 km/h or 12.4 MPH			10 km/h or 6.2 MPH	
60/80R57 VSDL	69.5	Rest time prior to traveling (Hour)	1	2	4	9	11
		Maximum speed on traveling	10 km/h or 6.2 MPH				
65/65-57 DL	64.8	Rest time prior to traveling (Hour)	3	6.5	10	*	
		Maximum speed on traveling	20 km/h or 12.4 MPH		10 km/h or 6.2 MPH		

*Please consult a Bridgestone representative.

Remarks;
1. Time for cooling temperature of the tire (Parked up the loader) should be applied prior to start to travel on the road.
2. Ambient temperature of 38˚C or 100˚F is assumed.
3. Maximum load on tire should be less than the Load per tire in the above table.
4. Air pressure for “Drive-Away” should be the same as our recommended figures, and need to confirm whether it would not be higher figures that we experienced prior to travel.
5. We recommend that it would be best way for Giant loaders to use tow hauler for long way traveling. The drive away distance should be shorter than 60km (37 miles) within 20 km/h as the maximum speed to minimize the risk of tire heat damage.
6. If you have a plan of Drive-Away, please consult a Bridgestone representative.

OTHER SPECIFICATION

1. O-Ring Specifications

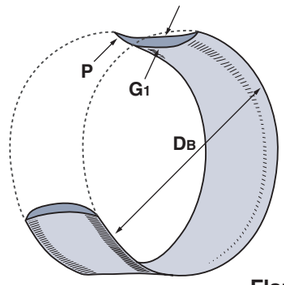
Code No.	Applicable Size		Diameter		Inner Circumference	
	Radial	Bias	mm	inch	mm	inch
P-24A	13.00R24 TG 14.00R24 TG 16.00R24 TG	13.00-24 TG 14.00-24 TG -	6.6	0.26	1768	69.61
P-25AX	14.00R25* 15.5R25 17.5R25 20.5R25 29.5R25 385/95R25 445/80R25 445/95R25	- 15.5-25 17.5-25 20.5-25 - - - -	6.8	0.27	1779	70.04
P-25B	14.00R25** 16.00R25 17.5R25 18.00R25 20.5R25 21.00R25 23.5R25 26.5R25 29.5R25 30/65R25(750/65R25) 385/95R25 445/80R25 445/95R25 505/95R25 525/80R25 550/65R25 600/65R25 650/65R25 750/65R25	- 16.00-25 17.5-25 18.00-25 20.5-25 21.00-25 23.5-25 26.5-25 29.5-25 - - - - - - - - - -	9.8	0.39	1779	70.04
P-29B	29.5R29 33.25R29 775/65R29 875/65R29	29.5-29 - - -	9.8	0.39	2127	83.74
P-33B	18.00R33 21.00R33 35/65R33	18.00-33 - 35/65-33	9.8	0.39	2382	93.78
P-35B	21.00R35 24.00R35 29.5R35 33.25R35 37.25R35	21.00-35 - - - 37.25-35	9.8	0.39	2572	101.26
P-39B	37.5R39 - 40.5/75R39 45/65R39	- 40/65-39 - -	9.8	0.39	2900	114.17
P-45B	45/65R45	45/65-45	9.8	0.39	3326	130.94
P-49B	27.00R49	-	9.8	0.39	3611	142.17
P-51C	30.00R51 33.00R51 36.00R51 50/65R51	- - - 50/65-51	12.7	0.5	3694	145.43
P-57C	37.00R57 40.00R57 42/90R57 46/90R57 50/90R57 55.5/80R57 60/80R57 -	- - - - - - - 65/65-57	12.7	0.5	4129	162.56
P-63C	53/80R63 59/80R63	- -	12.7	0.5	4580	180.31

* For Rim Size 10.00-25
** For Rim Size 11.25-25

2. Flap Specifications

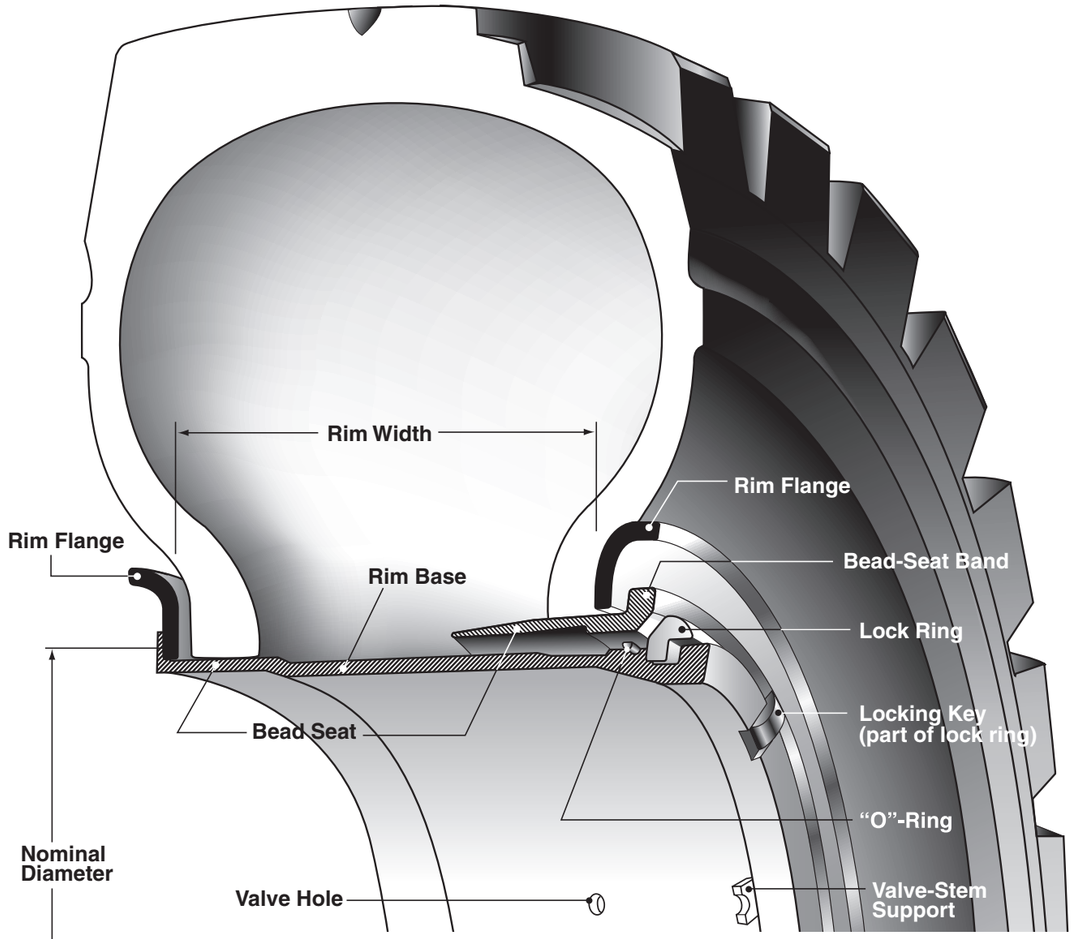
Flap	πD_B		G_1		P	
	mm	inch	mm	inch	mm	inch
550/600-15	1175	46.3	4.0	0.16	129	5.1
650/700/750-15	1177	46.3	4.5	0.18	169	6.7
12/65B-15	1196	47.1	7.0	0.28	270	10.6
750/825AR15	1201	47.3	6.0	0.24	184	7.2
750/825-R16	1255	49.4	5.0	0.20	174	6.9
200D1000-R15	1201	47.3	6.5	0.26	205	8.1
700A825-R20	1255	49.4	5.0	0.20	180	7.1
900A111-R20	1201	47.3	6.0	0.24	205	8.1
1100B13/80-R20	1594	62.8	6.5	0.26	218	8.6
1400/14/80R20	1594	62.8	8.5	0.33	240	9.4
1300A1600-20	1618	63.7	8.0	0.31	246	9.7
42x17-20	1576	62.1	9.0	0.35	390	15.4
14/70-20	1587	62.5	9.0	0.35	331	13.0
1300-24	1916	75.4	9.0	0.35	229	9.0
1200A1400-24,25	1942	76.5	9.0	0.35	232	9.1
1100B1300-R24	1922	75.7	7.5	0.30	220	8.7
1300/1400-24,25	1942	76.5	9.0	0.35	232	9.1
1400/1600R24,25	1942	76.5	9.0	0.35	260	10.2
1600-24,25	1916	75.4	9.0	0.35	293	11.5
155A1800-24,25	1926	75.8	6.0	0.24	340	13.4
235-25	1934	76.1	9.0	0.35	560	22.1
265-25	2010	79.1	12.0	0.47	570	22.4
2100R33	2553	100.5	9.0	0.35	413	16.3

O-Ring



Flap

3. Rim and Valve



Five-piece fully-tapered bead-seat rim
with air-sealing "O"-ring gasket for earthmover

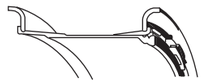
8.50V × 24

- 24 — Nominal Diameter of Rim (inches)
- V — Flange Type
- 8.50 — Rim Width (inches)

3.1 Rim Designation

Full Tapered Bead Seat Rims (5 pieces)

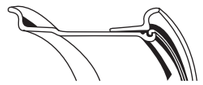
Ⓐ



Recommended Rim/ Flange Height	Tire Size	
	Radial	Bias
11.00/1.5	14.5R15	-
11.25/2.0	16.00R25	16.00-25
	445/95R25	-
13.00/2.5	18.00R25	18.00-25
	505/95R25	-
	18.00R33	18.00-33
15.00/3.0	21.00R25	21.00-25
	21.00R33	-
	21.00R35	21.00-35
17.00/2.0	550/65R25	-
	600/65R25	-
17.00/3.5	24.00R35	24.00-35
19.50/2.5	23.5R25	23.5-25
	600/65R25	-
	650/65R25	-
19.50/4.0	27.00R49	-
22.00/3.0	750/65R25(30/65R25)	-
	26.5R25	26.5-25
22.00/4.5	30.00R51	-
24.00/3.0	750/65R25(30/65R25)	-
24.00/3.5	775/65R29	-
24.00/5.0	33.00R51	-
25.00/3.5	29.5R25	29.5-25
	775/65R29	-
	29.5R29	29.5-29
	29.5R35	-
26.00/5.0	36.00R51	-
27.00/3.5	875/65R29	-
	33.25R29	-
	33.25R35	-
27.00/6.0	37.00R57	-
	42/90R57	-
28.00/3.5	875/65R29	-
	35/65R33	35/65-33
29.00/6.0	40.00R57	-
	42/90R57	-
	46/90R57	-
31.00/4.0	37.25R35	37.25-35
32.00/4.0	-	40/65-39
32.00/4.5	37.5R39	-
	40.5/75R39	-
	45/65R39	-
32.00/6.0	46/90R57	-
	50/90R57	-
32.00/6.5	50/90R57	-
34.00/6.0	50/90R57	-
34.00/6.5	50/90R57	-
36.00/4.5	45/65R39	-
	45/65R45	45/65-45
36.00/5.0	53/80R63	-
38.00/5.0	53/80R63	-
40.00/4.5	50/65R51	50/65-51
41.00/5.0	59/80R63	-
44.00/5.0	59/80R63	-
44.00/6.0	55.5/80R57	-
47.00/6.0	60/80R57	-
52.00/6.0	-	65/65-57

Full Tapered Bead Seat Rims (3 pieces)

Ⓑ



Recommended Rim/ Flange Height	Tire Size	
	Radial	Bias
10.00/1.5	14.00R25	14.00-25
	385/95R25	-
12.00/1.3	15.5R25	15.5-25
14.00/1.5	17.5R25	17.5-25
	445/80R25	-
	550/65R25	-
17.00AL/1.7(★1only)	20.5R25	-
17.00/1.7	-	20.5-25
	600/65R25	-
17.00/2.0	20.5R25	20.5-25
	525/80R25	-
	550/65R25	-

Drop Center Rims (DC, W, DW)

Ⓒ

Recommended Rim/ Flange Height	Tire Size	
	Radial	Bias
7JA	-	27x8.50-15
	-	9.5/65-15
11LB	-	14.0/65-15
6LB	-	7.50-16
8LB	-	10.5/80-16
10LB	-	12.5/70-16
8.25	-	10-16.5
	11R22.5	-
9.00	12R22.5	-
9.75	-	12-16.5
W10	-	15.5/60-18
W13	-	15.5/70-18
W14L	-	17.5/65-20
W15L	-	16.9-24
W16L	-	18.4-24
DW20A	-	23.1-26
DW20B	-	23.1-26

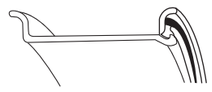
Semi Drop Center Rims (SDC)

Ⓓ

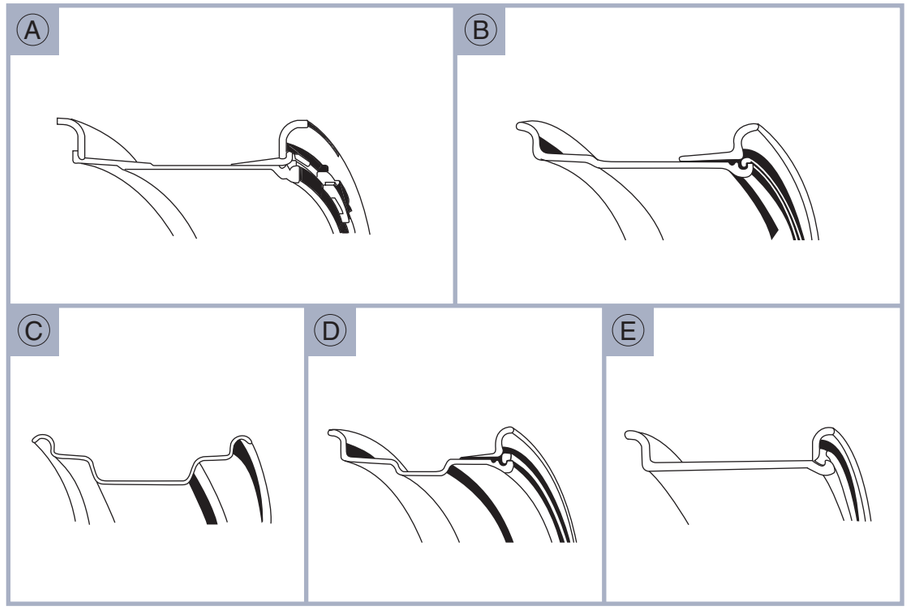
Recommended Rim/ Flange Height	Tire Size	
	Radial	Bias
6.00GS	-	7.50-15
	-	7.50-16
8.00TG	13.00R24 TG	13.00-24 TG
	14.00R24 TG	14.00-24 TG
10.00F	-	33x12.5-15
10.00VA	-	13.00-24 TG
	14.00R24 TG	14.00-24 TG
	16.00R24 TG	16.00-24 TG
11x20	335/80R20	-
	365/80R20	-
11.00TG	-	14/70-20
13x20	405/70R20	-
14.00TG	-	42x17-20

Flat Base Rims

Ⓔ

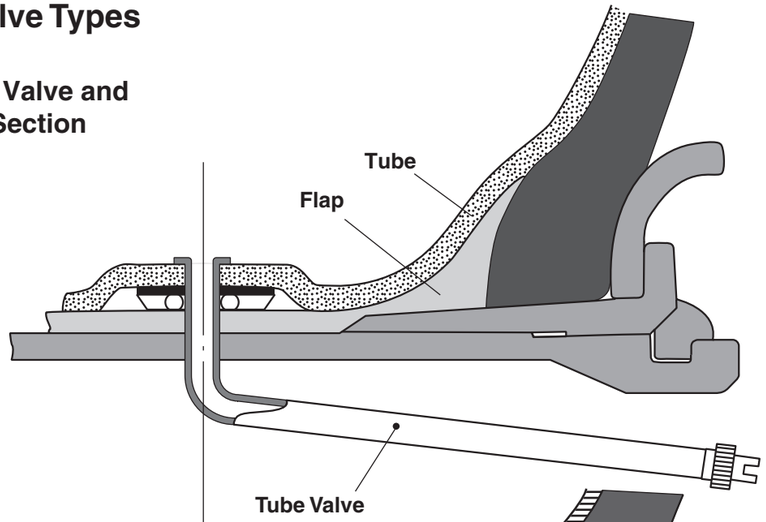


Recommended Rim/ Flange Height	Tire Size	
	Radial	Bias
6.50T	8.25R15	-
7.00T	9.00R20	9.00-20
7.50V	10.00R15	-
	-	10.00-20
8.00V	11.00R20	11.00-20
8.5	-	12.00-24
8.50V	12.00R20	12.00-20
	12.00R24	12.00-24
10.00V	16.00R20	-
10.00WI	14.00R20	-
10.00W	16.00R20	-
	14.00R24	14.00-24

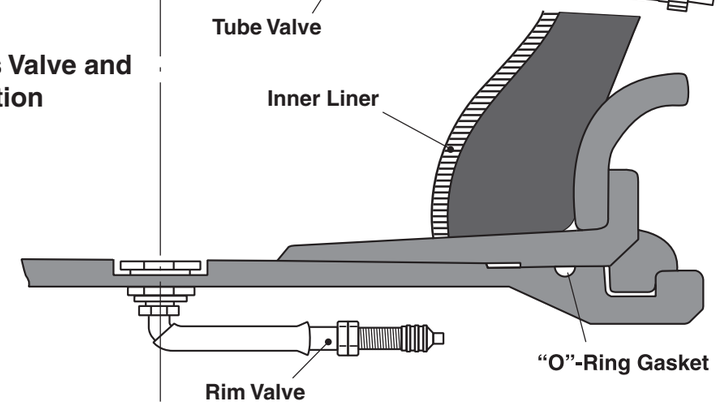


3.2 Valve Types

Tube Valve and Rim Section



Tubeless Valve and Rim Section

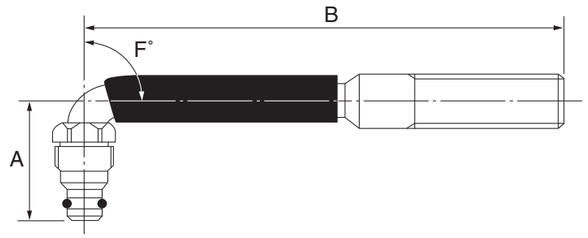


Tube Valve

Tubeless Valve

Interchangeable Swivel Valves For Tubeless Or Tube Type Tires

TRJ4000-4 1/2



Large Bore Valves

Valve No.	Dimensions (mm)		
	A	B	F°
TRJ650	27.5	79.5	80°
TRJ4000-4 1/2	31	114.0	90°
TRJ4000-8	31	203.0	90°
TRJ4000-7 1/2	31	190.5	90°

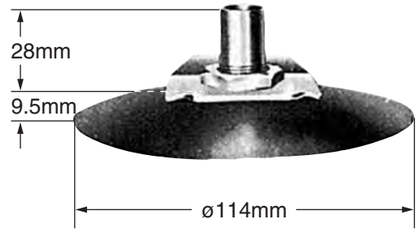
This type of VALVE consists of a combination of the rubber base SP-4000 or SP-2.

Tubeless Type Spud

SP2

Tube Type Spud

SP4000

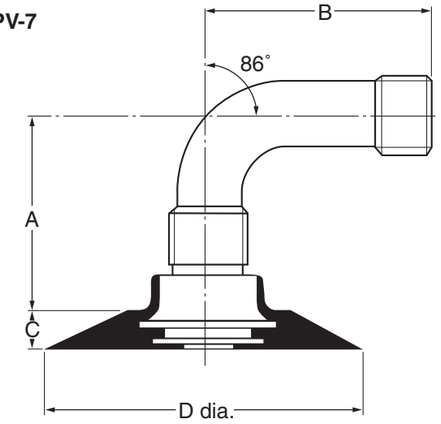


Tube Type Rubber Base Valves

TR218

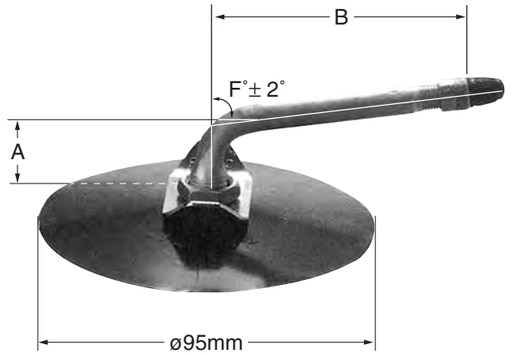
Valve No.	Dimensions (mm)	
	A	B
TR218A	20.6	11.1
TR220A	30.2	20.7

PV-7



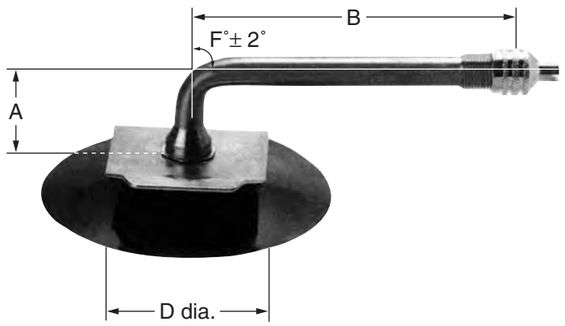
Valve No.	Dimensions (mm)			
	A	B	C	D dia.
PV-7	73	100	7	90

JS75



Valve No.	Dimensions (mm)		
	A	B	F˚
JS75	24	70	82˚
TR76A	24	86	86˚
TR77A	24	105	86˚
TR77E	35	94	86˚
TR78A	24	127	86˚
TR175A	24	115	86˚
TR177A	24	95	86˚
JS177B	28	91	86˚
JS179	36	133	86˚
JS179A	29	137	86˚
TR179A	24	141	86˚
PV38	24	136	80˚
PV89	42.8	123	86˚
V3-02-3	35.8	44.5	85˚
V3-02-15	23.3	145.5	86˚

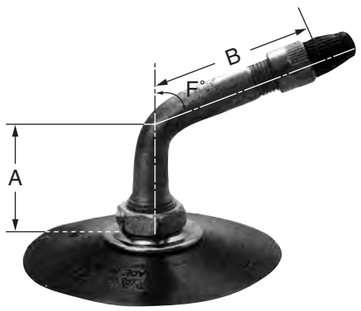
JSJ1175



Large Bore Valves

Valve No.	Dimensions (mm)			
	A	B	D dia.	F˚
JSJ1078S	30	121	32	84˚
JSJ1175	35	105	32	88˚
JSJ1175B	35	105	32	80˚
JSJ1175C	35	102	32	60˚

JS2



Valve No.	Dimensions (mm)		
	A	B	F˚
JS2	26	33	70˚

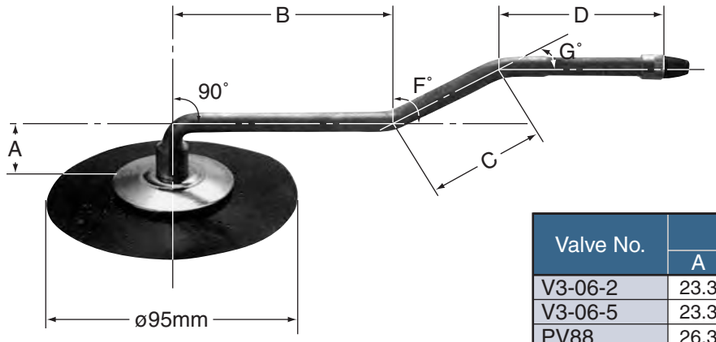
Tube Type Rubber Covered Valves

TR13

Valve No.	Dimensions (mm)
	E
TR13	11.5
TR15	16.5

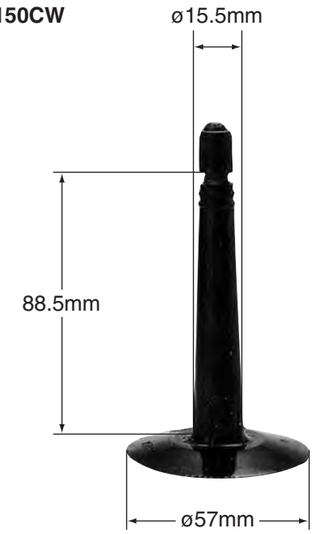
Tube Type Screw-on Valves

PV88



Valve No.	Dimensions (mm)					
	A	B	C	D	F˚	G˚
V3-06-2	23.3	44.5	20.8	37.5	55˚	55˚
V3-06-5	23.3	62.5	25.9	49.0	41˚	41˚
PV88	26.3	80.5	47.0	54.5	30˚	30˚
PV118	35.4	130.0	84.0	–	10˚	–

TR150CW



Valves, TR150 and TR150CW, are also called Hand Bendable Valves, that is, their stems are made of very flexible material permitting manual bending in all directions and to any angle.

OTHER INFORMATION

1. Unit Conversion Tables

INFLATION PRESSURE

kPa	psi	Bar	kg/cm²	kPa	psi	Bar	kg/cm²	kPa	psi	Bar	kg/cm²	kPa	psi	Bar	kg/cm²
10	1	0.1	0.1	260	38	2.6	2.7	510	74	5.1	5.2	760	110	7.6	7.8
20	3	0.2	0.2	270	39	2.7	2.8	520	75	5.2	5.3	770	112	7.7	7.9
30	4	0.3	0.3	280	41	2.8	2.9	530	77	5.3	5.4	780	113	7.8	8.0
40	6	0.4	0.4	290	42	2.9	3.0	540	78	5.4	5.5	790	115	7.9	8.1
50	7	0.5	0.5	300	44	3.0	3.1	550	80	5.5	5.6	800	116	8.0	8.2
60	9	0.6	0.6	310	45	3.1	3.2	560	81	5.6	5.7	810	117	8.1	8.3
70	10	0.7	0.7	320	46	3.2	3.3	570	83	5.7	5.8	820	119	8.2	8.4
80	12	0.8	0.8	330	48	3.3	3.4	580	84	5.8	5.9	830	120	8.3	8.5
90	13	0.9	0.9	340	49	3.4	3.5	590	86	5.9	6.0	840	122	8.4	8.6
100	15	1.0	1.0	350	51	3.5	3.6	600	87	6.0	6.1	850	123	8.5	8.7
110	16	1.1	1.1	360	52	3.6	3.7	610	88	6.1	6.2	860	125	8.6	8.8
120	17	1.2	1.2	370	54	3.7	3.8	620	90	6.2	6.3	870	126	8.7	8.9
130	19	1.3	1.3	380	55	3.8	3.9	630	91	6.3	6.4	880	128	8.8	9.0
140	20	1.4	1.4	390	57	3.9	4.0	640	93	6.4	6.5	890	129	8.9	9.1
150	22	1.5	1.5	400	58	4.0	4.1	650	94	6.5	6.6	900	131	9.0	9.2
160	23	1.6	1.6	410	59	4.1	4.2	660	96	6.6	6.7	910	132	9.1	9.3
170	25	1.7	1.7	420	61	4.2	4.3	670	97	6.7	6.8	920	133	9.2	9.4
180	26	1.8	1.8	430	62	4.3	4.4	680	99	6.8	6.9	930	135	9.3	9.5
190	28	1.9	1.9	440	64	4.4	4.5	690	100	6.9	7.0	940	136	9.4	9.6
200	29	2.0	2.0	450	65	4.5	4.6	700	102	7.0	7.1	950	138	9.5	9.7
210	30	2.1	2.1	460	67	4.6	4.7	710	103	7.1	7.2	960	139	9.6	9.8
220	32	2.2	2.2	470	68	4.7	4.8	720	104	7.2	7.3	970	141	9.7	9.9
230	33	2.3	2.3	480	70	4.8	4.9	730	106	7.3	7.4	980	142	9.8	10.0
240	35	2.4	2.4	490	71	4.9	5.0	740	107	7.4	7.5	990	144	9.9	10.1
250	36	2.5	2.6	500	73	5.0	5.1	750	109	7.5	7.7	1000	145	10.0	10.2

WEIGHT

FROM POUND TO KILOGRAM

lb	kg	lb	kg	lb	kg	lb	kg
1	0.5	260	117.9	1200	544.3	5000	2268.0
10	4.5	280	120.0	1300	589.7	5200	2358.7
20	9.1	300	136.1	1400	635.0	5400	2449.4
30	13.6	320	145.2	1500	680.4	5600	2540.2
40	18.1	340	154.2	1600	725.8	5800	2630.9
50	22.7	360	163.3	1700	771.1	6000	2721.6
60	27.2	380	172.4	1800	816.5	7000	3175.2
70	31.8	400	181.4	1900	861.8	8000	3628.8
80	36.3	420	190.5	2000	907.2	9000	4082.4
90	40.8	440	199.6	2200	997.9	10000	4536.0
100	45.4	460	208.7	2400	1088.6	11000	4989.6
110	49.9	480	217.7	2600	1179.4	12000	5443.2
120	54.4	500	226.8	2800	1270.1	13000	5896.8
130	59.0	520	235.9	3000	1360.8	14000	6350.4
140	63.5	540	244.9	3200	1451.5	15000	6804.0
150	68.0	560	254.0	3400	1542.2	16000	7257.6
160	72.6	580	263.1	3600	1633.0	17000	7711.2
170	77.1	600	272.2	3800	1723.7	18000	8164.8
180	81.6	700	317.5	4000	1814.4	19000	8618.4
190	86.2	800	362.9	4200	1905.1	20000	9072.0
200	90.7	900	408.2	4400	1995.8		
220	99.8	1000	453.6	4600	2086.6		
240	108.9	1100	499.0	4800	2177.3		

FROM KILOGRAM TO POUND

kg	lb	kg	lb	kg	lb	kg	lb
1	2.2	130	286.6	600	1322.8	2500	5511.5
5	11.0	140	308.6	650	1433.0	2600	5732.0
10	22.0	150	330.7	700	1543.2	2700	5952.4
15	33.1	160	352.7	750	1653.5	2800	6173.0
20	44.1	170	374.8	800	1763.7	2900	6393.3
25	55.1	180	396.8	850	1873.9	3000	6613.8
30	66.1	190	418.9	900	1984.1	3500	7716.1
35	77.2	200	440.9	950	2094.4	4000	8818.4
40	88.2	210	463.0	1000	2204.6	4500	9920.7
45	99.2	220	485.0	1100	2425.1	5000	11023.0
50	110.2	230	507.1	1200	2645.5	5500	12125.3
55	121.3	240	529.1	1300	2866.0	6000	13227.6
60	132.3	250	551.2	1400	3086.4	6500	14329.9
65	143.3	260	573.2	1500	3306.9	7000	15432.2
70	154.3	270	595.2	1600	3527.4	7500	16534.5
75	165.3	280	617.3	1700	3747.8	8000	17636.8
80	176.4	290	639.3	1800	3968.3	8500	18739.1
85	187.4	300	661.4	1900	4188.7	9000	19841.4
90	198.4	350	771.6	2000	4409.2	9500	20943.7
95	209.4	400	881.8	2100	4629.7	10000	22046.0
100	220.5	450	992.1	2200	4850.1		
110	242.5	500	1102.3	2300	5070.6		
120	264.6	550	1212.5	2400	5291.0		

TEMPERATURE

˚C	˚F	˚C	˚F	˚C	˚F	˚C	˚F	˚C	˚F	˚C	˚F
-19	-2.2	11	51.8	41	105.8	71	159.8	101	213.8	131	267.8
-18	-0.4	12	53.6	42	107.6	72	161.6	102	215.6	132	269.6
-17	1.4	13	55.4	43	109.4	73	163.4	103	217.4	133	271.4
-16	3.2	14	57.2	44	111.2	74	165.2	104	219.2	134	273.2
-15	5.0	15	59.0	45	113.0	75	167.0	105	221.0	135	275.0
-14	6.8	16	60.8	46	114.8	76	168.8	106	222.8	136	276.8
-13	8.6	17	62.6	47	116.6	77	170.6	107	224.6	137	278.6
-12	10.4	18	64.4	48	118.4	78	172.4	108	226.4	138	280.4
-11	12.2	19	66.2	49	120.2	79	174.2	109	228.2	139	282.2
-10	14.0	20	68.0	50	122.0	80	176.0	110	230.0	140	284.0
-9	15.8	21	69.8	51	123.8	81	177.8	111	231.8	141	285.8
-8	17.6	22	71.6	52	125.6	82	179.6	112	233.6	142	287.6
-7	19.4	23	73.4	53	127.4	83	181.4	113	235.4	143	289.4
-6	21.2	24	75.2	54	129.2	84	183.2	114	237.2	144	291.2
-5	23.0	25	77.0	55	131.0	85	185.0	115	239.0	145	293.0
-4	24.8	26	78.8	56	132.8	86	186.8	116	240.8	146	294.8
-3	26.6	27	80.6	57	134.6	87	188.6	117	242.6	147	296.6
-2	28.4	28	82.4	58	136.4	88	190.4	118	244.4	148	298.4
-1	30.2	29	84.2	59	138.2	89	192.2	119	246.2	149	300.2
0	32.0	30	86.0	60	140.0	90	194.0	120	248.0	150	302.0
1	33.8	31	87.8	61	141.8	91	195.8	121	249.8	160	320.0
2	35.6	32	89.6	62	143.6	92	197.6	122	251.6	170	338.0
3	37.4	33	91.4	63	145.4	93	199.4	123	253.4	180	356.0
4	39.2	34	93.2	64	147.2	94	201.2	124	255.2	190	374.0
5	41.0	35	95.0	65	149.0	95	203.0	125	257.0	200	392.0
6	42.8	36	96.8	66	150.8	96	204.8	126	258.8		
7	44.6	37	98.6	67	152.6	97	206.6	127	260.6		
8	46.4	38	100.4	68	154.4	98	208.4	128	262.4		
9	48.2	39	102.2	69	156.2	99	210.2	129	264.2		
10	50.0	40	104.0	70	158.0	100	212.0	130	266.0		

TREAD DEPTH CONVERSION TABLE

FROM INCH TO MILIMETER

inch/32	mm	inch/32	mm	inch/32	mm	inch/32	mm
1	0.8	21	16.7	41	32.5	105	83.3
2	1.6	22	17.5	42	33.3	110	87.3
3	2.4	23	18.3	43	34.1	115	91.3
4	3.2	24	19.1	44	34.9	120	95.3
5	4.0	25	19.8	45	35.7	125	99.2
6	4.8	26	20.6	46	36.5	130	103.2
7	5.6	27	21.4	47	37.3	135	107.2
8	6.4	28	22.2	48	38.1	140	111.1
9	7.1	29	23.0	49	38.9	145	115.1
10	8.0	30	23.8	50	39.7	150	119.1
11	8.7	31	24.6	55	43.7	155	123.0
12	9.5	32	25.4	60	47.6	160	127.0
13	10.3	33	26.2	65	51.6	165	131.0
14	11.1	34	27.0	70	55.6	170	134.9
15	11.9	35	27.8	75	59.5	175	138.9
16	12.7	36	28.6	80	63.5	180	142.9
17	13.5	37	29.4	85	67.5	185	146.9
18	14.3	38	30.2	90	71.4	190	150.8
19	15.1	39	31.0	95	75.4	195	154.8
20	15.9	40	31.8	100	79.4	200	158.8

FROM MILIMETER TO INCH

mm	inch/32	mm	inch/32	mm	inch/32	mm	inch/32
1	1.3	19	23.9	37	46.6	75	95.5
2	2.5	20	25.2	38	47.9	80	100.8
3	3.8	21	26.5	39	49.1	85	107.1
4	5.0	22	27.7	40	50.4	90	113.4
5	6.3	23	29.0	41	51.7	95	119.7
6	7.6	24	30.2	42	52.1	100	126.0
7	8.8	25	31.5	43	54.2	105	132.3
8	10.1	26	32.8	44	55.4	110	138.6
9	11.3	27	34.0	45	56.7	115	144.9
10	12.6	28	35.3	46	58.0	120	151.2
11	13.9	29	36.5	47	59.2	125	157.5
12	15.1	30	37.8	48	60.5	130	163.8
13	16.4	31	39.1	49	61.7	135	170.1
14	17.6	32	40.3	50	63.0	140	176.4
15	18.9	33	41.6	55	69.3	145	182.7
16	20.2	34	42.8	60	75.6	150	189.0
17	21.4	35	44.1	65	81.9		
18	22.7	36	45.4	70	88.2		

PRESSURE

	kg/cm²	kPa	bar	psi
kg/cm²	1	98.07	0.9807	14.22
kPa	0.0102	1	0.01	0.1450
bar	1.020	100	1	14.503
psi	0.0703	6.895	0.06895	1

LENGTH

	m.meter	c.meter	meter	k.meter	inch	foot	yard	mile
m.meter	1	0.10000	0.00100	-	0.03937	0.00328	0.00109	-
c.meter	10.0000	1	0.01000	0.00001	0.39371	0.03281	0.01094	-
meter	1000.00	100.00	1	0.00100	39.3707	3.28089	1.09363	0.00062
k.meter	-	100000	1000.00	1	39370.7	3280.89	1093.63	0.62138
inch	25.3995	2.53995	0.02540	0.00003	1	0.08333	0.02778	0.00002
foot	304.794	30.4794	0.30479	0.00030	12.0000	1	0.33333	0.00019
yard	914.383	91.4383	0.91438	0.00091	36.0000	3.00000	1	0.00057
mile	-	160931	1609.31	1.60931	63360.0	5280.00	1760.00	1

AREA

	meter²	are	hectare	k.meter²	foot²	yard²	acre	mile²
meter²	1	0.010000	0.000100	0.000001	10.7639	1.19600	0.000247	0.000000
are	100.000	1	0.010000	0.000100	1076.39	119.600	0.024710	0.000039
hectare	10000.0	100.000	1	0.010000	107639.0	11960.0	2.47105	0.003861
k.meter²	-	10000.0	100.000	1	-	-	247.105	0.386098
foot²	0.092903	0.000929	0.000009	0.000000	1	0.111111	0.000023	0.000000
yard²	0.836130	0.008361	0.000084	0.000000	9.00000	1	0.000207	0.00000
acre	4046.87	40.4687	0.404687	0.004047	43560.2	4840.00	1	0.001562
mile²	-	25900.2	259.002	2.59002	-	-	640.000	1

WEIGHT

	gram	k.gram	ton	s.ton	l.ton	ounce	pound
gram	1	0.00100	-	-	-	0.03527	0.00220
k.gram	1000.00	1	0.00100	0.00110	0.00098	35.2739	2.20462
ton	-	1000.00	1	1.10230	0.98421	35273.9	2204.62
s.ton	907185	907.185	0.90719	1	0.89286	32000.0	2000.00
l.ton	-	1016.04	1.01604	1.12000	1	35840.0	2240.00
ounce	28.3495	0.02835	0.00003	0.00003	0.00003	1	0.06250
pound	453.592	0.45359	0.00045	0.00050	0.00045	16.0000	1

CAPACITY

	cub.meter	liter	cub.inch	cub.foot	cub.yard	U.S.gallon	U.K.gallon
cub.meter	1	1000.00	61027.1	35.3147	1.30802	264.186	220.216
liter	0.00100	1	61.0271	0.03532	0.00131	0.26419	0.22022
cub.inch	0.00002	0.01639	1	0.00058	0.00002	0.00433	0.00361
cub.foot	0.02832	28.3167	1728.00	1	0.03704	7.48051	6.23549
cub.yard	0.76455	764.554	46656.0	27.0000	1	201.974	168.358
U.S.gallon	0.00379	3.78543	231.000	0.13368	0.00495	1	0.83270
U.K.gallon	0.00455	4.54596	277.413	0.16037	0.00594	1.20091	1

FORCE

1 kgf = 9.81 N

POWER (horse power)

1 hp = 550 ft • lbf/s = 745.7 W

1 PS = 75 m • kgf/s = 735.5 W

2. Specific Weight (Approximately)

Material	Pounds/cu.yd	Metric Tons/m³	Material	Pounds/cu.yd	Metric Tons/m³
Anthracite	2000	1.2	Iron ore: Magnetite	4700	2.8
Basalt	3400	2.0	Limestone	2500	1.5
Bauxite	2400	1.4	Pyrites	4400	2.6
Clay: dry	2500	1.5	Over-Burden		
wet	2900	1.7	75%rock-25%earth	3400	2.0
Coal	1200	0.7	50%rock-50%earth	2900	1.7
Copper ore	2700	1.6	25%rock-75%earth	2700	1.6
Crushed gypsum	2700	1.6	Sand: dry	2400	1.4
Earth: dry	2500	1.5	wet	3000	1.8
wet	2700	1.6	Sandstone	2500	1.5
Granite	2900	1.7	Snow: dry	170	0.1
Gravel: dry	2900	1.7	wet	840	0.5
wet	3400	2.0	Uranium	2700	1.6

Note: Weight of materials varies with moisture content, grain size, degree of compaction, etc. Test must be made to know exact weight.

MEMO

DATA BOOK

VEGETABLE OIL INK
Printed in Japan with vegetable oil ink on recycled paper
17ORA01E(Dec'17)