

DATA BOOK

OFF-THE-ROAD TIRES



GENERAL INFORMATION

RADIAL TIRE

BIAS TIRE

RIM, VALVE, ORING, FLAP, CONVERSION TABLES

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

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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.
Details will be provided upon request.

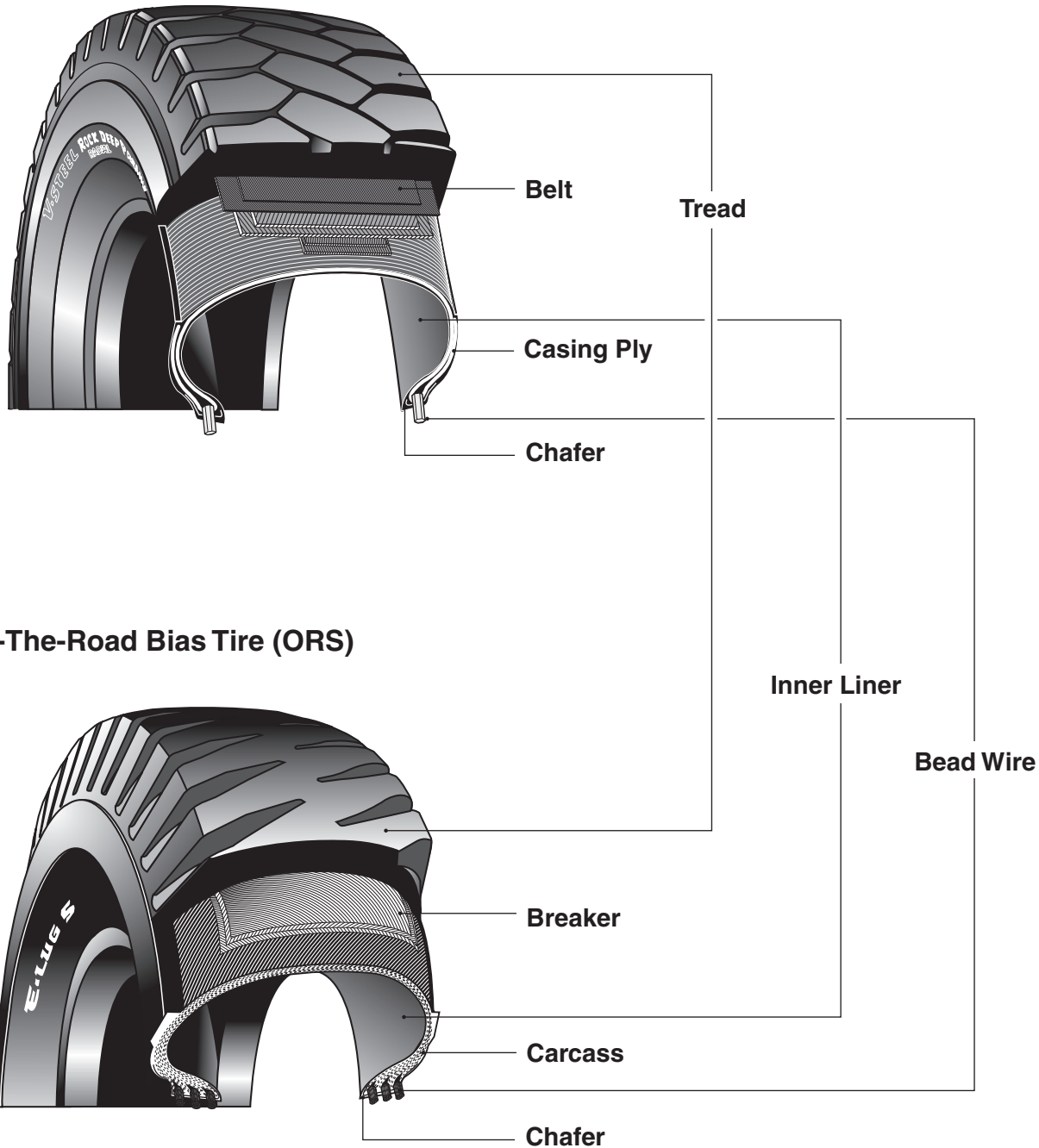
2. Application Vehicle Matching Chart

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	Shovels, Front-End Loaders, Back-hoe Loaders, Skid Steer Loaders, Dozers, Shuttle Trucks, Load-Haul-Dumps, etc.
High-Speed Service	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

GENERAL INFORMATION

1. Structural Diagram

Off-The-Road Radial Tire (ORR)



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 ; 30.00-51, 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)

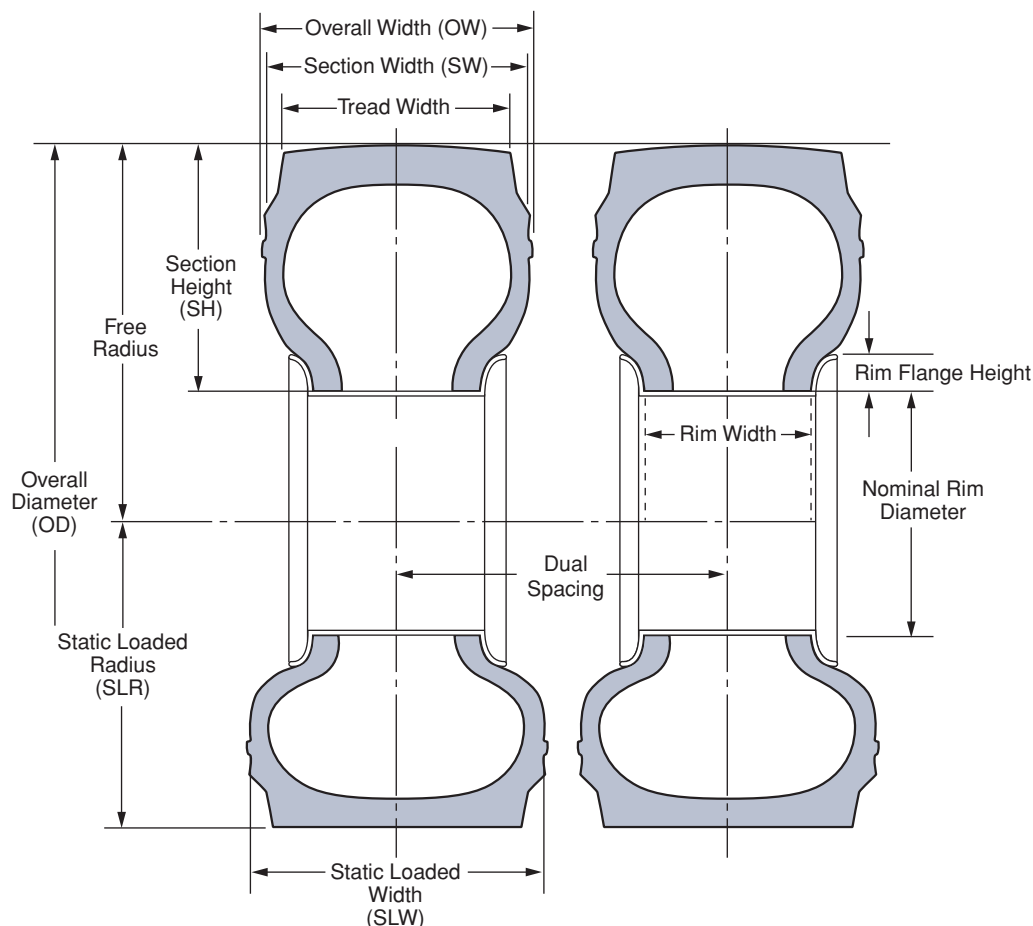
"Section Width" is the width of a new tire, including 24-hour inflation growth and including normal sidewalls, but not including protective side ribs, bars, or decorations.

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 which Off-The-Road tires must possess differ somewhat according to the function they must serve and the type of vehicles on which they are mounted.

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

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	VHS VSB VGT VUT VKT VFT VHB VSW	WL RL VL2
E-3	Rock	VEL VRL VRD VLT VMT VJT	
E-4	Rock Deep	VLTS VSNT L317 VMTS VMTP VZTS VELSL VELS VRLS VRDP VRQP VZTP	RLS ELS2
E-7	Flotation	VSJ	AL SCP2

G=Grader

G-1	Rib	VUT VKT VSW	RG
G-2	Traction		GL FG
G-3	Rock		RL

L=Loader & Dozer (Slow Speed Service)

L-2	Traction Regular	VUT VKT VSW	FG GL
L-3	Rock Regular	VT S VLT VMT VJT	RL VL2
L-4	Rock Deep	VLTS VSNT VSNL	RLS NL
L-5	Rock Extra-Deep	VSDT VSDL	DL
L-5S	Smooth Extra-Deep	VSMS	STMS

C=Compactor Service

C-1	Smooth		RR
C-2	Grooved		AL2

LS=Logging Service

LS-2	Intermediate		FG TGS
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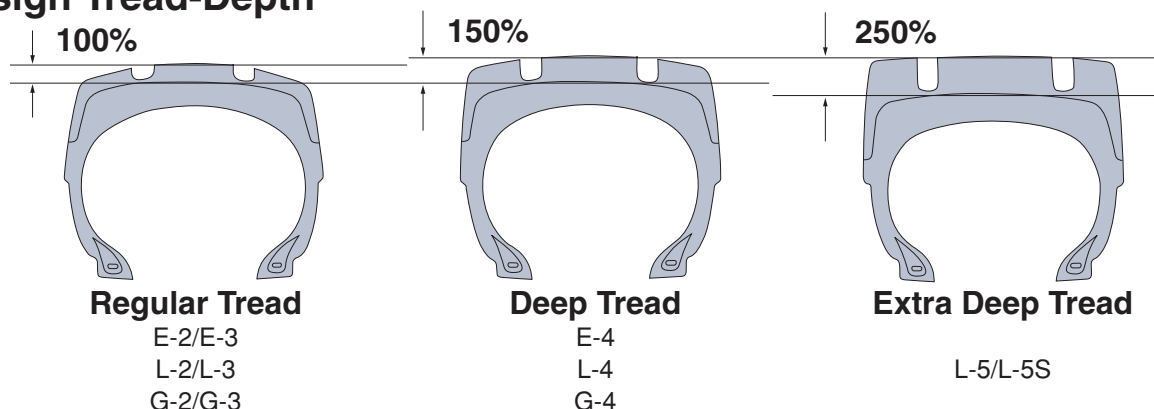
High-Speed Service

High-Speed Service		VHS VHB VSB VGT VKT VSW	
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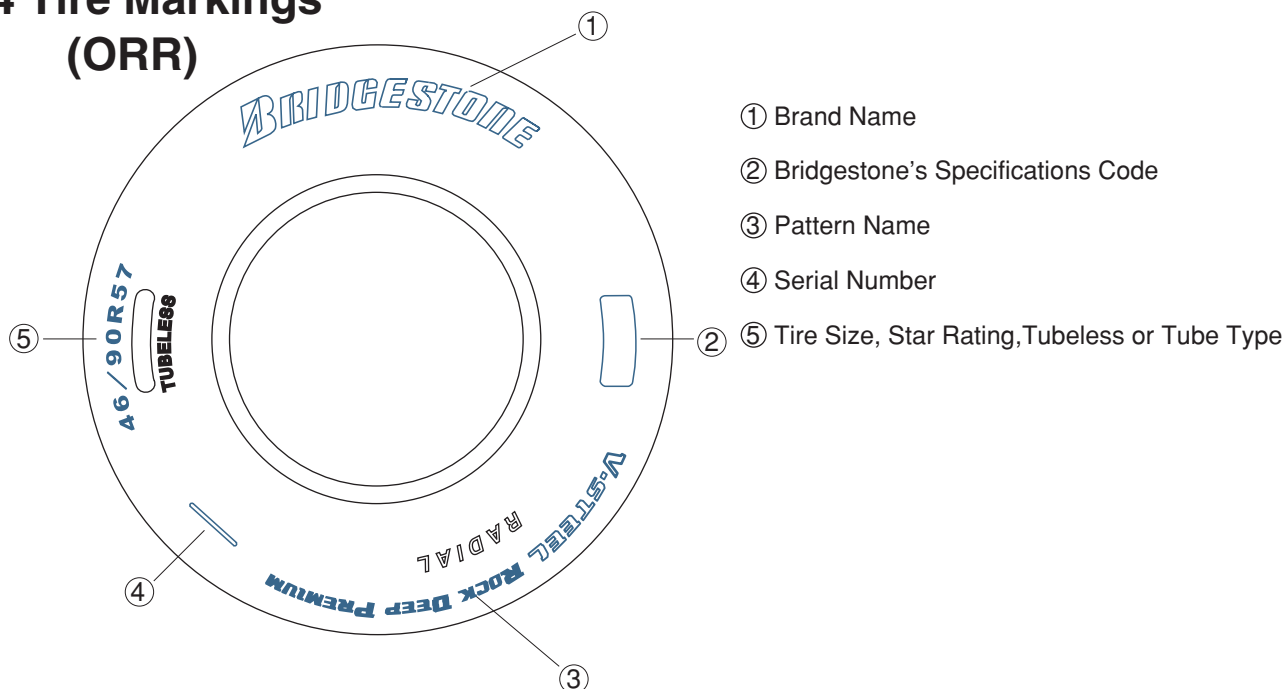
Industrial Service

Industrial Service		VHB VEL VCH VCHD VRLS VELS VCHS VSDL VSMS	RL RLS ELS2 STMS YS2
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Design Tread-Depth



4 Tire Markings (ORR)



4.1 Type of Tire Size Designation

Regular

27.00 R 49 ☆ ☆

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

Wide Base

33.25 R 35 ☆ ☆

- Section Width (inches): **33.25**
- Radial Structure: **R**
- Rim Diameter (inches): **35**
- Star Rating: **☆☆**

Super Wide Base

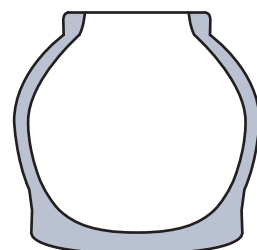
40 / 65 - 39 30PR

- Section Width (inches): **40**
- Aspect Ratio 65 Series: **65**
- Rim Diameter (inches): **39**
- Ply Rating: **30PR**

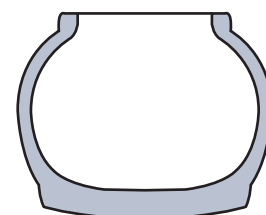
170 E 385 / 95 R 24

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

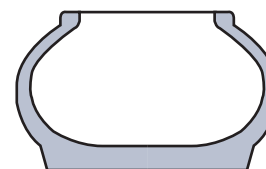
★ Tire Aspect Ratio



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



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



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

★ SH, SW : See Page 3

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

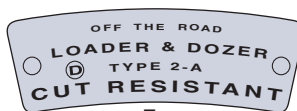
Each Bridgestone tire has a Bridgestone code number on the tire sidewall according to its specifications.



For
Earthmover service



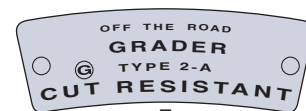
For
Industrial service



For
Loader and Dozer service



For
High-Speed Service



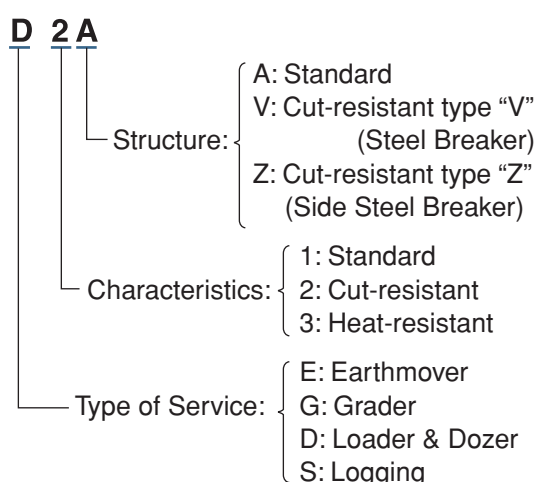
For
Grader service

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

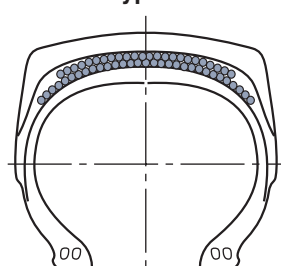
NOTES: *Bias Tire Only

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



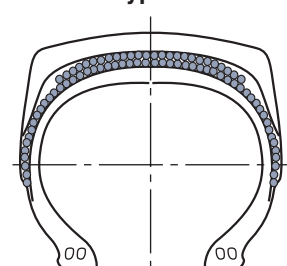
Steel Breaker Tire

Type V



Steel breaker construction

Type Z



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 shuttle 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 a international numerical code associated with 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
Grader	14.00R24	★	up to 16
	16.00R24	★	up to 16
	17.5R25	★	up to 16
Earthmover	12.00R24	★★★	up to 24
	14.00R24	★★★	up to 32
	14.00R25	★★★	up to 32
	16.00R25	★★	up to 36
	18.00R25	★	up to 24
		★★	up to 36
	18.00R33	★★	up to 40
	21.00R33	★★	up to 36
	21.00R35	★★	up to 44
	24.00R35	★★	up to 48
	24.00R49	★★	up to 48
	27.00R49	★★	up to 54
	30.00R51	★★	up to 58
	33.00R51	★★	up to 64
	36.00R51	★★	up to 66
	40.00R57	★★	up to 74
	17.5R25	★	up to 16
	20.5R25	★	up to 24
		★★	up to 28
	25/65R25	★★	up to 32
	23.5R25	★	up to 24
		★★	up to 32

Service	Tire Size	Star Rating	Corresponding Ply Rating
Earthmover	26.5R25	★★	up to 32
	29.5R25	★★	up to 34
	29.5R29	★★	up to 40
	33.25R29	★★	up to 44
	37.5R33	★★	up to 48
	33.25R35	★★	up to 44
	37.25R35	★★	up to 48
	37.5R39	★★	up to 52
	40.5/75R39	★★	up to 54
Loader	15.5R25	★	up to 16
	17.5R25	★	up to 16
	20.5R25	★	up to 24
		★★	up to 28
	23.5R25	★	up to 24
		★★	up to 32
	26.5R25	★	up to 24
		★★	up to 36
	29.5R25	★	up to 28
		★★	up to 34
	29.5R29	★	up to 34
	35/65R33	★	up to 36
	45/65R45	★	up to 50

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 <div style="display: flex; align-items: center;"> <div style="border-top: 1px solid black; width: 100px; margin-right: 5px;"></div> <div style="display: flex; flex-direction: column; align-items: center;"> <div>*1 D2A</div> <div>*2 E2A</div> </div> </div>
	Bias	26.5 – 25 20 VL2 T DE2 <div style="display: flex; align-items: center;"> <div style="border-top: 1px solid black; width: 100px; margin-right: 5px;"></div> <div style="display: flex; flex-direction: column; align-items: center;"> <div>D2A</div> <div>E2A</div> </div> </div>
Loader & Dozer Service + Grader Service	Bias	17.5 – 25 12 FG T DG2 <div style="display: flex; align-items: center;"> <div style="border-top: 1px solid black; width: 100px; margin-right: 5px;"></div> <div style="display: flex; flex-direction: column; align-items: center;"> <div>D2A</div> <div>G2A</div> </div> </div>
Earthmover Service + Grader Service	Radial	17.5R25 *1 VKT T EG2 <div style="display: flex; align-items: center;"> <div style="border-top: 1px solid black; width: 100px; margin-right: 5px;"></div> <div style="display: flex; flex-direction: column; align-items: center;"> <div>E2A</div> <div>G2A</div> </div> </div>

* 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)
Loader	★(one star)	5.25 bar	15,000 kgs (202)	10 km/hour (A2)
Earthmover	★★(two stars)	5.00 bar	11,500 kgs (190)	50 km/hour (B)



RADIAL TIRE TREAD DESIGNS

■ Earthmover Service

E2



V-STEEL
HIGHWAY SERVICE
(VHS)



V-STEEL
S-BLOCK
(VSB)



V-STEEL
G-TRACTION
(VGT)



V-STEEL
ULTRA TRACTION
(VUT)



V-STEEL
K-TRACTION
(VKT)

E2



V-STEEL
F-TRACTION
(VFT)



V-STEEL
H-BLOCK
(VHB)



V-STEEL
SNOW WEDGE
(VSW)



V-STEEL
E-LUG
(VEL)



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

E3

E3



V-STEEL
ROCK DEEP
(VRD)



V-STEEL
L-TRACTION
(VLT)



Wide Base
V-STEEL M-TRACTION
(VMT)



Regular



V-STEEL
J-TRACTION
(VJT)

E4



V-STEEL
L-TRACTION S
(VLTS)



V-STEEL
N-TRACTION
(VSNT)



L317



V-STEEL
M-TRACTION S
(VMTS)

E4



V-STEEL
M-TRACTION
PREMIUM (VMTP)



V-STEEL
Z-TRACTION S
(VZTS)



V-STEEL
ROCK DEEP
PREMIUM (VRDP)

E4



3700R57
4000R57

VELSL



1800R25~
2100R35



4000R57
50/90R57



31/90R49
46/90R57



59/80R63

V-STEEL E-LUG S (VELS)

E4



1400R24~1600R25



2100R33~3700R57



53/80R63, 55/80R63



3700R57, 53/80R63

V-STEEL R-LUG S (VRLS)

■ Sand Service

E4



V-STEEL
ROCK QUARRY
PREMIUM (VRQP)



V-STEEL
Z-TRACTION
PREMIUM (VZTP)



V-STEEL
JAMAL
(VSJ)

E7

■ Grader Service

G2



V-STEEL
U-TRACTION
(VUT)



V-STEEL
K-TRACTION
(VKT)



V-STEEL
SNOW WEDGE
(VSW)

■ Loader & Dozer Service

L2



V-STEEL
U-TRACTION
(VUT)



V-STEEL
K-TRACTION
(VKT)



V-STEEL
SNOW WEDGE
(VSW)



V-STEEL
TRACTION-STABILITY
(VTS)



V-STEEL
L-TRACTION
(VLT)

L3



V-STEEL
M-TRACTION
(VMT)



V-STEEL
J-TRACTION
(VJT)



V-STEEL
L-TRACTION S
(VLTS)



V-STEEL
N-TRACTION
(VSNT)



V-STEEL
N-LUG
(VSNL)

L4

■ High-Speed Service

L5

L5S



V-STEEL
SUPER-DEEP
TRACTION (VSDT)

V-STEEL
D-LUG
(VSDL)



V-STEEL SMOOTH
TREAD-MS
(VSMS)



V-STEEL
HIGHWAY SERVICE
(VHS)



V-STEEL
H-BLOCK
(VHB)



V-STEEL
S-BLOCK
(VSB)

■ Industrial Service



**V-STEEL
G-TRACTION
(VGT)**



**V-STEEL
K-TRACTION
(VKT)**



**V-STEEL
SNOW WEDGE
(VSW)**



**V-STEEL
H-BLOCK
(VHB)**



**V-STEEL
E-LUG
(VEL)**



**V-STEEL
CONTAINER HANDLER
(VCH)**



**V-STEEL
CONTAINER HANDLER DEEP
(VCHD)**



**V-STEEL
R-LUG S
(VRLS)**



**V-STEEL
E-LUG S
(VELS)**



**V-STEEL
CONTAINER HANDLER SS
(VCHS)**



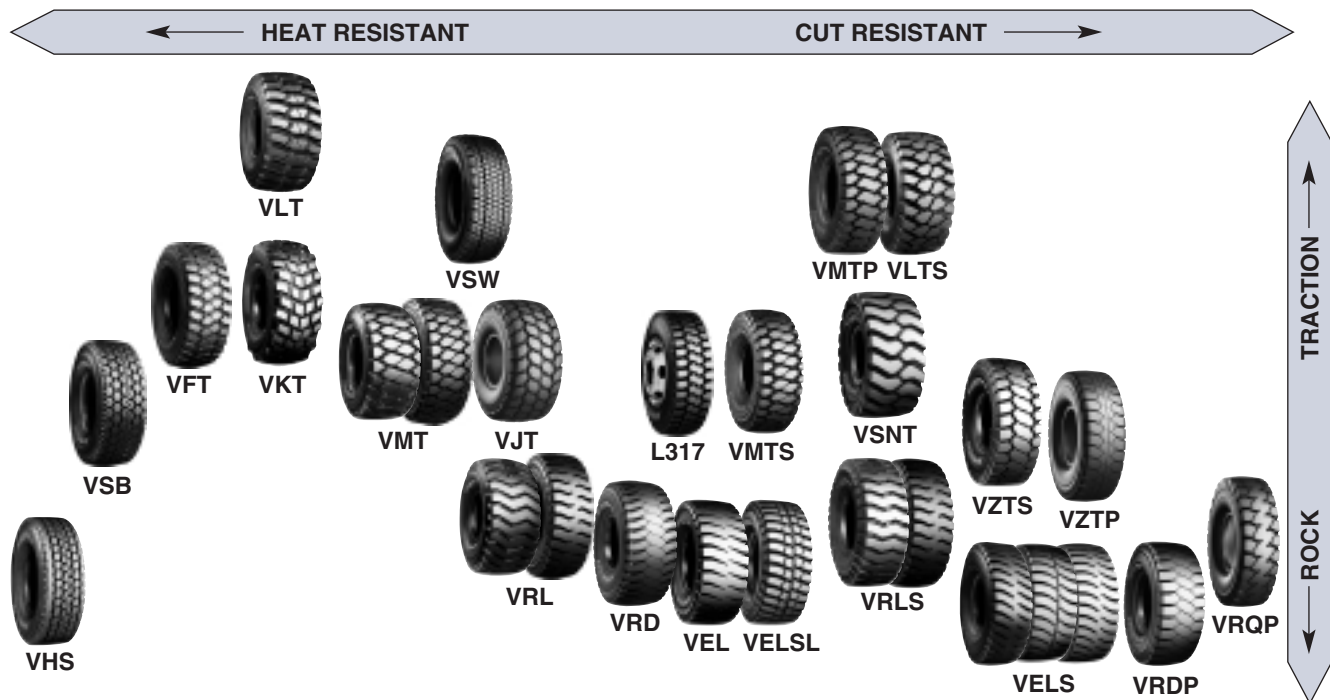
**V-STEEL
D-LUG
(VSDL)**



**V-STEEL
SMOOTH TREAD-MS
(VSMS)**

APPLICATION OF RADIAL TIRES

Earthmover Service



Size	Type	Star Rating
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VHS(E2)		
30.00 R 51	T/L	★2
NEW 36.00 R 51	T/L	★2

VSB(E2)		
14.00 R 24	T/T	★3
14.00 R 25	T/L	★3

VGT(E2)		
17.5 R 25	T/L	★1

VUT(E2)		
335/80 R 20	T/L	
365/80 R 20	T/L	
405/70 R 20	T/L	

VKT(E2)		
14.00 R 24 TG	T/L	★3
14.00 R 24	T/T	★3
17.5 R 25	T/L	★1
18.00 R 25	T/L	★1★2
20.5 R 25	T/L	★1★2
23.5 R 25	T/L	★1★2
25/65 R 25	T/L	★2
26.5 R 25	T/L	★2
29.5 R 25	T/L	★2
29.5 R 29	T/L	★2
37.5 R 33	T/L	★2
33.25 R 35	T/L	★2
37.25 R 35	T/L	★2
37.5 R 39	T/L	★2

VFT(E2)		
18.00 R 33	T/L	★2
24.00 R 49	T/L	★2
27.00 R 49	T/L	★2

VHB(E2)		
14.00 R 24	T/T	★3

* VSW(E2)		
20.5 R 25	T/L	MS
23.5 R 25	T/L	MS

VEL(E3)		
18.00 R 25	T/L	★2
18.00 R 33	T/L	★2
21.00 R 35	T/L	★2
24.00 R 35	T/L	★2

VRL(E3)		
33.25 R 29	T/L	★2
29.5 R 35	T/L	★2
33.25 R 35	T/L	★2
37.25 R 35	T/L	★2
37.5 R 39	T/L	★2
40.5/75 R 39	T/L	★2
27.00 R 49	T/L	★2

Size	Type	Star Rating
------	------	-------------

VRD(E3)		
59/80 R 63	T/L	★2

VLT(E3)		
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 ★2
29.5 R 25	T/L	MS ★2
33.25 R 29	T/L	★2
NEW 37.25 R 35	T/L	★2
NEW 40.5/75 R 39	T/L	★2

VMT(E3)		
17.5 R 25	T/L	★2
20.5 R 25	T/L	★2
23.5 R 25	T/L	★2
26.5 R 25	T/L	★2
29.5 R 25	T/L	★2
30.00 R 51	T/L	★2
33.00 R 51	T/L	★2
36.00 R 51	T/L	★2
40.00 R 57	T/L	★2

VJT(E3)		
NEW 23.5 R 25	T/L	MS
NEW 26.5 R 25	T/L	MS

VLTS(E4)		
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

VSNT(E4)		
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

L317(E4)		
11.00 R 20	T/T	★3
12.00 R 20	T/T	★3
12 R 22.5	T/L	★3
12.00 R 24	T/T	★3

VMTS(E4)		
14.00 R 24	T/T	★3
14.00 R 25	T/L	★3
16.00 R 25	T/L	★2
18.00 R 25	T/L	★2
18.00 R 33	T/L	★2
21.00 R 35	T/L	★2
24.00 R 35	T/L	★2
24.00 R 49	T/L	★2
27.00 R 49	T/L	★2

Size	Type	Star Rating
------	------	-------------

VMTP(E4)		
12.00 R 24	T/T	★3
18.00 R 33	T/L	★2
NEW 21.00 R 33	T/L	★2
21.00 R 35	T/L	★2
24.00 R 35	T/L	★2
24.00 R 49	T/L	★2
27.00 R 49	T/L	★2
33.00 R 51	T/L	★2

VZTS(E4)		
37.00 R 57	T/L	★2
40.00 R 57	T/L	★2

VELSL(E4)		
37.00 R 57	T/L	★2
40.00 R 57	T/L	★2

VELS(E4)		
18.00 R 25	T/L	★2
18.00 R 33	T/L	★2
21/90 R 33	T/L	★2
21.00 R 35	T/L	★2
31/90 R 49	T/L	★2
40.00 R 57	T/L	★2
46/90 R 57	T/L	★2
50/90 R 57	T/L	★2

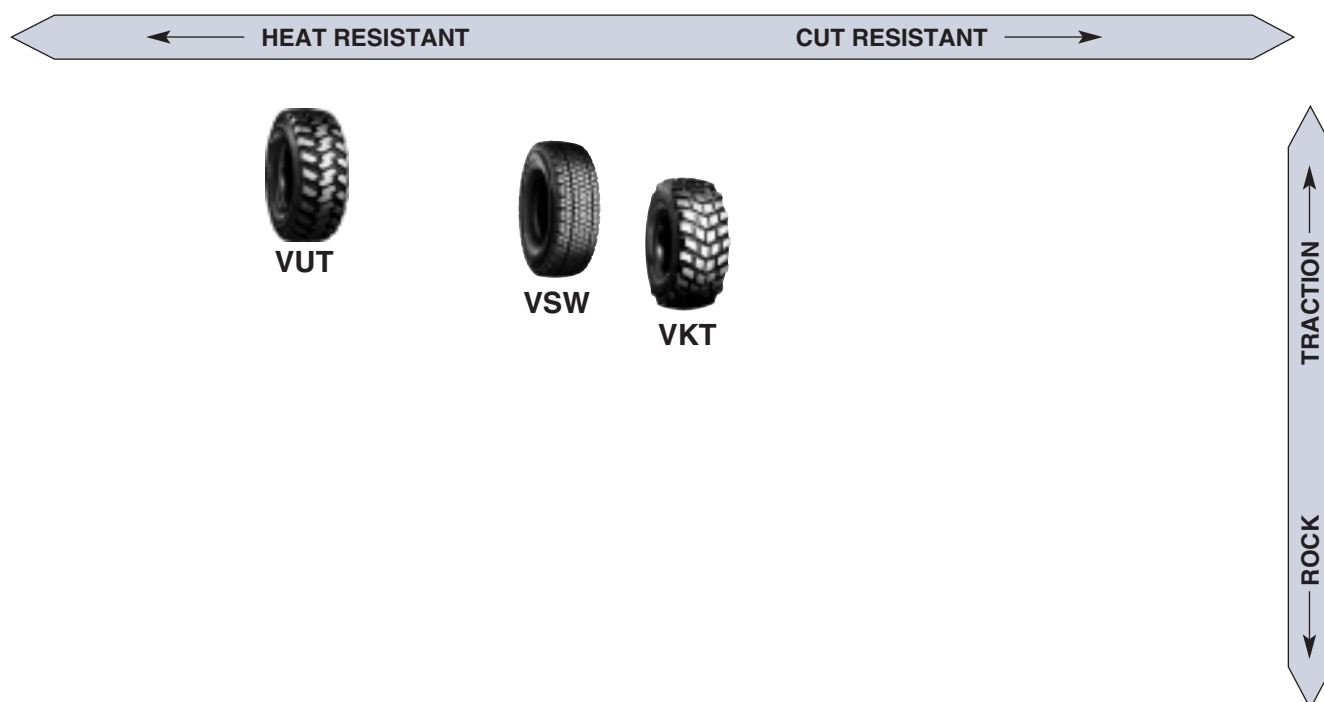
VRLS(E4)		
14.00 R 24	T/T	★3
14.00 R 25	T/L	★3
16.00 R 25	T/L	★2
21.00 R 33	T/L	★2
	T/T	★2
24.00 R 35	T/L	★2
24.00 R 49	T/L	★2
27.00 R 49	T/L	★2
30.00 R 51	T/L	★2
33.00 R 51	T/L	★2
36.00 R 51	T/L	★2
37.00 R 57	T/L	★2
53/80 R 63	T/L	★2

VRDP(E4)		
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
53/80 R 63	T/L	★2
55/80 R 63	T/L	★2
59/80 R 63	T/L	★2

VRQP(E4)		
NEW 18.00 R 33	T/L	★2

VZTP(E4)		
NEW 46/90 R 57	T/L	★2

■ Grader Service



Size	Type	Star Rating
------	------	-------------

VUT(G2)

13.00R 24 TG	T/L	★1
	T/T	★1
14.00R 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

VKT(G2)

14.00 R 24 TG	T/L	★1
16.00 R 24 TG	T/L	★1
17.5 R 25	T/L	★1
20.5 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

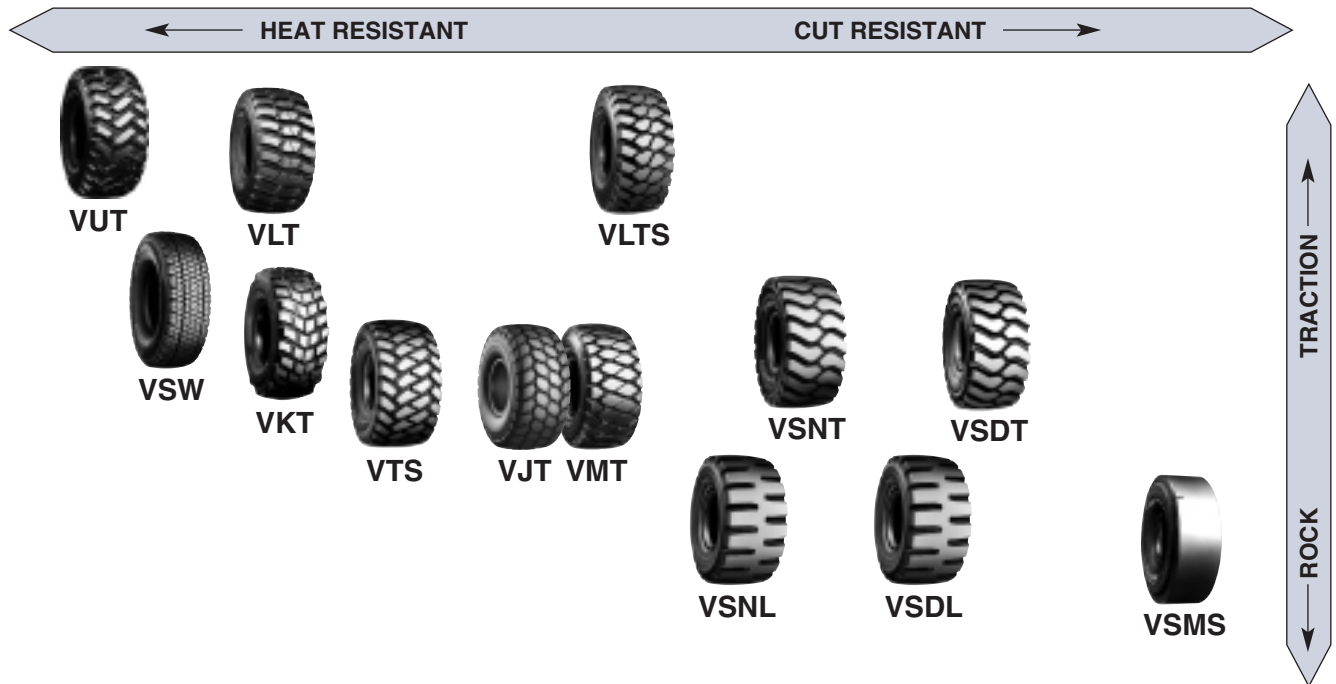
* **VSW** is especially designed for snow surface operations.

T/T: Tube Type

T/L: Tubeless Type

TG: For Semi-Drop Center Rim

■ Loader & Dozer Service



Size	Type	Star Rating
------	------	-------------

VUT(L2)

335/80 R 20	T/L	
365/80 R 20 TG	T/T	
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

VKT(L2)

14.00 R 24 TG	T/L	★1
15.5 R 25	T/L	★1
17.5 R 25	T/L	★1
20.5 R 25	T/L	★1★2
23.5 R 25	T/L	★1★2
26.5 R 25	T/L	★1★2

* VSW(L2)

14.00 R 24 TG	T/L	★1★3
17.5 R 25	T/L	★1
20.5 R 25	T/L	MS
23.5 R 25	T/L	MS

VTS(L3)

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

T/T: Tube Type
T/L: Tubeless Type
MS: Multiple Star Rating
TG: For Semi-Drop Center Rim

Size	Type	Star Rating
------	------	-------------

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

VMT(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

VJT(L3)

NEW 20.5 R 25	T/L	★1
NEW 23.5 R 25	T/L	MS
NEW 26.5 R 25	T/L	MS

VLTS(L4)

20.5 R 25	T/L	MS
23.5 R 25	T/L	MS
29.5 R 25	T/L	★1

VSNT(L4)

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 ★2

VSNL(L4)

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

Size	Type	Star Rating
------	------	-------------

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

VSDL(L5)

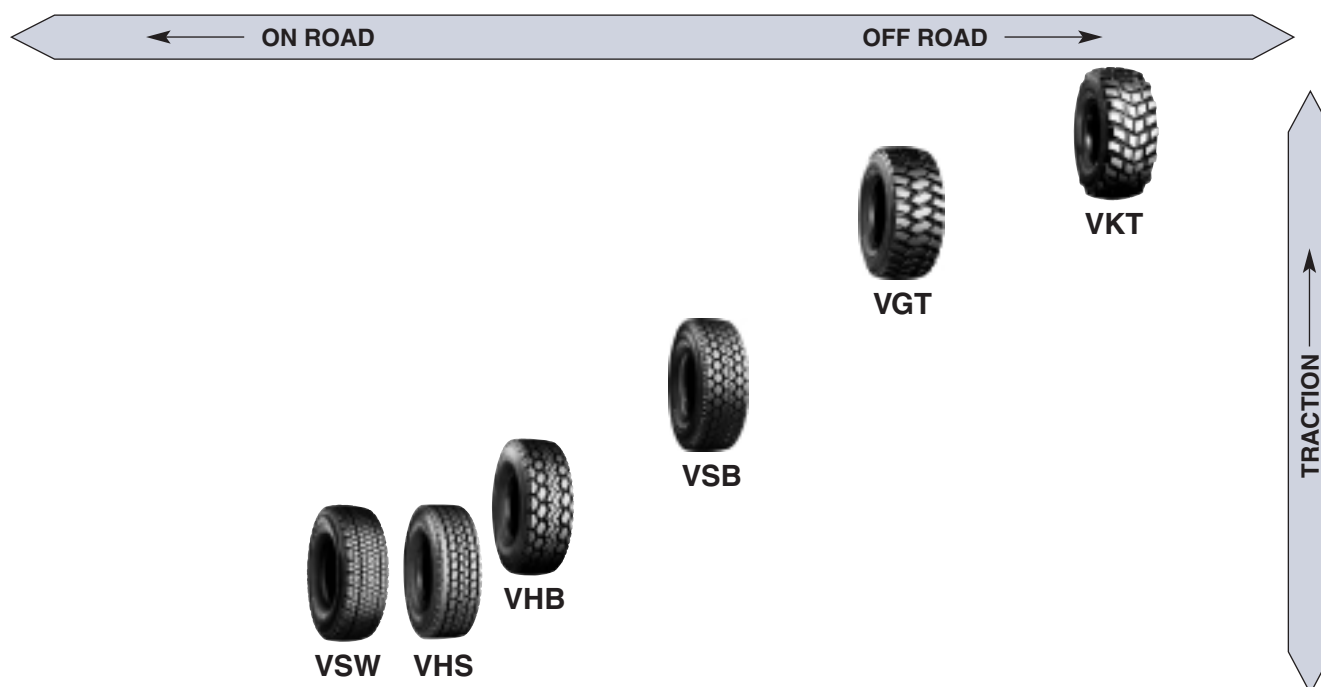
8.25 R 15	T/T	★2
10.00 R 15	T/T	★2
14.5 R 15	T/L	★2
12.00 R 20	T/T	★2
17.5 R 25	T/L	★1★2
20.5 R 25	T/L	★1★2
23.5 R 25	T/L	★1★2
26.5 R 25	T/L	★1★2
29.5 R 25	T/L	★1★2
29.5 R 29	T/L	★1★2
35/65 R 33	T/L	★1★2
45/65 R 39	T/L	★1
45/65 R 45	T/L	★1★2
50/65 R 51	T/L	★1★2
55.5/80 R 57	T/L	

VSMS(L5S)

9.00 R 20	T/T	★2
12.00 R 20	T/T	★2
12.00 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

* VSW is especially designed for snow surface operations.

■ High-Speed Service



Size	Type	Star Rating
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VHS

170E 385/95 R 24 (14.00R24)	T/T	★3
170E 385/95 R 25 (14.00R25)	T/L	★3
177E 445/95 R 25 (16.00R25)	T/L	★2
186E 505/95 R 25 (18.00R25)	T/L	★2
179E 525/80 R 25 (20.5R25)	T/L	★2

VHB

170E 385/95 R 24 (14.00R24)	T/T	★3
177E 445/95 R 25 (16.00R25)	T/L	★2
186E 505/95 R 25 (18.00R25)	T/L	★2
179E 525/80 R 25 (20.5R25)	T/L	★2

Size	Type	Star Rating
------	------	-------------

VSB

170E 385/95 R 24 (14.00R24)	T/T	
170E 385/95 R 25 (14.00R25)	T/L	

VGT

24 R 21	T/L	★1
170E 445/80 R 25 (17.5R25)	T/L	★2

VKT

177E 445/95 R 25 (16.00R25)	T/L	★2
179E 525/80 R 25 (20.5R25)	T/L	★2

Size	Type	Star Rating
------	------	-------------

* VSW

170E 385/95 R 25 (14.00R25)	T/L	★3
177E 445/95 R 25 (16.00R25)	T/L	★2
186E 505/95 R 25 (18.00R25)	T/L	★2

* 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/T	★2
18.00	R 25	T/T	★3



VEL

18.00	R 25	T/L	★3
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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	★2
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VRLS

16.00	R 25	T/L	★2
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VELS

18.00	R 33	T/L	★3
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VCHS

14.00	R 24	T/T	★3
18.00	R 25	T/L	★3
18.00	R 33	T/L	★3



VSDL

23.5	R 25	T/L	★2
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VSMS

18.00	R 25	T/L	★2
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■ Sand Service



VSJ(E7)

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

RADIAL TIRE TECHNICAL DATA

Tire Size	Load Index/ Speed Symbol	TRA Code or Application	Pattern	Star Rating	Type	Recommended Rim/ Flange Height (inch)	Approximate Inflated Dimensions								OTD	Minimum	
							OD		OW		SLR		SLW			inch	mm
							inch	mm	inch	mm	inch	mm	inch	mm			
8.25R15		L5	VSDL	★2	T/T	6.50T	34.6	880	9.8	248	15.9	405	11.2	285	48.0	-	-
10.00R15		L5	VSDL	★2	T/T	7.50V	35.6	905	11.3	287	16.4	416	13.0	330	48.0	-	-
14.5R15		L5	VSDL	★2	T/L	11.00/1.5	35.4	899	14.1	359	16.3	413	16.2	412	48.0	-	-
9.00R20		L5S	VSMS	★2	T/T	7.00T	41.5	1054	10.2	260	18.7	474	11.9	303	51.0	-	-
11.00R20		E4	L317	★3	T/T	8.00V	43.6	1107	11.4	290	20.2	512	12.8	325	25.0	13.2	335
12.00R20		E4	L317	★3	T/T	8.50V	45.1	1146	12.1	308	20.6	523	13.6	346	25.0	15.1	384
		L5	VSDL	★2	T/T	8.50V	46.0	1168	12.6	320	21.2	538	14.1	359	57.0	-	-
		L5S	VSMS	★2	T/T	8.50V	46.2	1173	12.3	312	21.3	540	13.8	351	57.0	-	-
		Industrial Service	VCH	★3	T/T	8.50V	44.9	1140	12.4	315	20.2	512	14.2	360	29.5	15.0	380
14.00R20		L4	VSNL	★2	T/T	10.00WI	47.1	1196	14.2	360	21.7	550	16.3	414	34.0	-	-
16.00R20		E7	VSJ	28	T/T	10.00W	51.8	1315	16.3	414	23.2	590	18.7	475	18.5	20.5	520
335/80R20	136B/147A2	E2 L2	VUT		T/L	11X20	40.8	1036	12.6	319	18.2	463	14.1	357	19.0	-	-
365/80R20 TG	153A2	L2	VUT		T/T	11.00TG	42.8	1087	13.7	347	19.0	483	15.3	389	21.0	-	-
365/80R20	141B/153A2	E2 L2	VUT		T/L	11X20	42.8	1087	13.7	347	19.0	483	15.3	389	21.0	-	-
405/70R20	143B/155A2	E2 L2	VUT		T/L	13X20	43.0	1092	15.7	398	19.1	485	17.6	446	20.0	-	-
24R21		High-Speed Service	VGT	★1	T/L	18.00/1.5	54.3	1380	23.7	601	24.5	623	25.5	647	24.5	-	-
12R22.5		E4	L317	★3	T/L	9.00	43.7	1109	11.5	292	20.4	517	12.9	327	25.0	13.5	343
12.00R24		E4	L317	★3	T/T	8.50V	49.4	1254	12.6	319	22.7	577	14.0	355	31.5	15.4	391
		E4	VMTP	★3	T/T	8.50V	49.4	1256	12.6	319	22.7	577	14.0	355	31.5	15.4	391
		L5S	VSMS	★2	T/T	8.50V	50.2	1275	12.3	312	22.6	573	14.3	364	57.0	-	-
		Industrial Service	VCH	★2	T/T	8.50V	49.4	1254	12.7	323	22.0	558	14.8	376	29.5	-	-
13.00R24 TG		G2	VUT	★1	T/L,T/T	8.00TG	50.8	1290	14.1	357	23.0	585	15.0	380	25.0	-	-
14.00R24 TG		E2	VKT	★3	T/L	10.00VA	53.2	1351	15.4	390	24.1	612	17.4	442	25.0	17.7	450
		L2,G2	VKT	★1	T/L	8.00TG	53.2	1351	14.6	370	24.1	612	16.6	422	25.0	-	-
		L2,G2	VSW	★1	T/L	8.00TG	53.2	1351	14.6	370	23.4	594	16.8	426	23.5	-	-
		L2,G2	VSW	★3	T/L	10.00VA	53.2	1351	15.4	390	23.4	594	17.6	446	23.5	-	-
		G2	VUT	★1	T/L	8.00TG	53.3	1354	14.7	373	24.1	611	16.5	420	25.5	-	-

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

Tire Size	Load Index/ Speed Symbol	TRA Code or Application	Pattern	Star Rating	Type	Recommended Rim/ Flange Height (inch)	Approximate Inflated Dimensions								OTD	Minimum	
							OD		OW		SLR		SLW			inch	mm
							inch	mm	inch	mm	inch	mm	inch	mm			
14.00R24		E2	VSB	★3	T/T	10.00W	53.7	1365	15.4	390	24.7	628	17.0	433	21.0	17.7	450
		E2	VKT	★3	T/T	10.00W	53.2	1351	15.4	390	24.1	612	17.4	442	25.0	17.7	450
		E2	VHB	★3	T/T	10.00W	53.4	1357	15.1	383	24.8	630	16.1	410	23.5	17.7	450
		E4	VMTS	★3	T/T	10.00W	55.1	1400	15.2	386	25.3	642	16.9	428	38.0	17.7	450
		E4	VRLS	★3	T/T	10.00W	55.2	1403	15.4	390	25.4	644	17.0	432	39.0	17.7	450
		Industrial Service	VHB	★3	T/T	10.00W	53.4	1357	15.1	383	24.8	630	16.1	410	23.5	17.7	450
		Industrial Service	VCH	★3	T/T	10.00W	54.8	1393	15.4	390	24.0	610	18.1	460	33.0	18.9	480
	196A5	Industrial Service	VCHS	★3	T/T	10.00W	55.6	1412	15.1	383	24.6	626	17.5	445	63.0	18.9	480
385/95R24 (14.00R24)	170E	High-Speed Service	VHS	★3	T/T	10.00W	53.4	1356	15.1	384	24.6	626	16.6	422	23.0	17.7	450
	170E	High-Speed Service	VHB	★3	T/T	10.00W	53.4	1357	15.1	383	24.8	630	16.1	410	23.5	17.7	450
	170E	High-Speed Service	VSB		T/T	10.00W	53.7	1365	15.4	390	24.7	628	17.0	433	21.0	17.7	450
16.00R24 TG		G2	VKT	★1	T/L	10.00VA	58.0	1473	16.7	424	26.6	675	18.5	470	28.5	-	-
		G2	VSW	★1	T/L	10.00VA	58.5	1485	16.4	417	26.8	680	18.4	467	22.5	-	-
14.00R25		E2	VSB	★3	T/L	10.00/1.5	53.7	1365	15.4	390	24.7	628	17.0	433	21.0	17.7	450
		E4	VMTS	★3	T/L	10.00/1.5	55.4	1406	15.3	389	25.6	650	17.1	435	38.0	17.7	450
		E4	VRLS	★3	T/L	10.00/1.5	55.2	1403	15.3	389	25.6	650	17.1	435	39.0	17.7	450
385/95R25 (14.00R25)	170E	High-Speed Service	VHS	★3	T/L	10.00/1.5	53.4	1356	15.1	384	24.6	626	16.6	422	23.0	17.7	450
	170E	High-Speed Service	VSB		T/L	10.00/1.5	53.7	1365	15.4	390	24.7	628	17.0	433	21.0	17.7	450
	170E	High-Speed Service	VSW	★3	T/L	10.00W	53.3	1355	15.5	394	24.8	631	16.8	427	23.5	17.7	450
15.5R25		L2,G2	VUT	★1★2	T/L	12.00/1.3	50.0	1269	15.1	383	22.0	559	17.2	436	27.0	-	-
		L2	VKT	★1	T/L	12.00/1.3	50.2	1275	15.4	392	22.4	570	17.5	445	23.5	-	-
16.00R25		E4	VMTS	★2	T/L	11.25/2.0	60.4	1535	17.7	450	27.4	696	20.0	507	45.0	20.2	513
		E4	VRLS	★2	T/L	11.25/2.0	60.3	1531	17.6	448	27.4	697	20.1	510	45.0	20.2	513
		Industrial Service	VHB	★2	T/L	11.25/2.0	58.4	1484	17.3	440	27.2	690	18.7	475	22.5	20.2	513
		Industrial Service	VCHD	★2	T/L	11.25/2.0	59.1	1500	17.1	435	25.8	655	19.8	503	54.0	20.6	523
		Industrial Service	VRLS	★2	T/L	11.25/2.0	60.3	1531	17.6	448	28.1	713	17.6	488	45.0	21.3	540
445/95R25 (16.00R25)	177E	High-Speed Service	VHS	★2	T/L	11.25/2.0	58.4	1484	17.1	435	26.9	684	18.9	480	25.5	20.2	513
	177E	High-Speed Service	VHB	★2	T/L	11.25/2.0	58.4	1484	17.3	440	27.2	690	18.7	475	22.5	20.2	513
	177E	High-Speed Service	VKT	★2	T/L	11.25/2.0	58.3	1480	16.9	428	28.2	717	18.7	474	28.5	20.2	513
	177E	High-Speed Service	VSW	★2	T/L	11.25/2.0	58.4	1484	17.1	435	27.4	695	18.7	476	23.0	20.2	513

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

Tire Size	Load Index/ Speed Symbol	TRA Code or Application	Pattern	Star Rating	Type	Recommended Rim/ Flange Height (inch)	Approximate Inflated Dimensions								OTD	Minimum	
							OD		OW		SLR		SLW			inch	mm
							inch	mm	inch	mm	inch	mm	inch	mm			
17.5R25		E2	VGT	★1	T/L	14.00/1.5	52.5	1334	17.3	440	24.0	610	19.3	490	24.0	-	-
		E2,L2,G2	VKT	★1	T/L	14.00/1.5	52.9	1343	17.3	440	23.6	600	19.3	490	27.0	-	-
		L2,G2	VUT	★1	T/L	14.00/1.5	52.8	1340	17.5	444	23.1	586	19.7	500	28.0	-	-
		L2,G2	VSW	★1	T/L	14.00/1.5	52.8	1340	17.3	440	23.5	597	18.9	480	27.0	-	-
		E3,L3	VMT	★1★2	T/L	14.00/1.5	53.4	1357	17.3	440	23.6	600	20.2	514	30.0	-	-
		L5	VSDL	★1★2	T/L	14.00/1.5	55.1	1400	17.3	440	25.2	639	19.5	495	68.0	-	-
		L5S	VSMS	★1★2	T/L	14.00/1.5	54.1	1374	17.3	440	24.5	623	19.2	487	68.5	-	-
445/80R25(17.5R25)	170E	High-Speed Service	VGT	★2	T/L	14.00/1.5	52.7	1339	17.3	440	24.0	610	19.1	485	24.0	-	-
18.00R25		E2	VKT	★1★2	T/L	13.00/2.5	63.4	1610	20.1	510	28.9	733	22.5	571	31.0	23.1	587
		E3	VEL	★2	T/L	13.00/2.5	63.2	1605	19.9	506	28.7	729	22.8	580	34.0	23.1	587
		E4	VMTS	★2	T/L	13.00/2.5	64.9	1649	20.2	514	29.7	754	22.5	571	51.0	23.1	587
		E4	VELS	★2	T/L	13.00/2.5	64.5	1638	20.3	515	29.3	744	22.8	580	50.0	23.1	587
		L5S	VSMS	★1★2	T/L	13.00/2.5	65.9	1675	20.2	512	28.9	733	23.3	592	84.0	-	-
		Industrial Service	VHB	★3	T/L	13.00/2.5	63.4	1610	20.3	515	28.9	733	22.2	565	26.0	23.1	587
		Industrial Service	VEL	★3	T/L	13.00/2.5	63.3	1609	20.0	507	28.6	727	22.5	571	34.0	24.1	612
	214A5	Industrial Service	VCHS	★3	T/L	13.00/2.5	65.0	1650	19.8	504	27.8	707	23.5	596	64.0	23.6	600
		Industrial Service	VSMS	★2	T/L	13.00/2.5	66.2	1681	20.0	507	28.7	730	23.3	592	84.0	24.1	612
505/95R25 (18.00R25)	186E	High-Speed Service	VHS	★2	T/L	13.00/2.5	62.7	1593	19.9	505	28.6	727	22.2	565	26.0	23.1	587
	186E	High-Speed Service	VHB	★2	T/L	13.00/2.5	63.4	1610	20.3	515	28.9	733	22.2	565	26.0	23.1	587
	186E	High-Speed Service	VSW	★2	T/L	13.00/2.5	63.4	1610	20.3	515	26.7	730	22.7	576	26.0	-	-
20.5R25		E2,L2,G2	VKT	★1	T/L	17.00/2.0(17.00/1.7)	57.9	1470	20.9	530	25.4	644	23.5	597	30.5	-	-
		E2,L2	VKT	★2	T/L	17.00/2.0	57.9	1470	20.9	530	25.4	644	23.5	597	30.5	-	-
		E2 L2	VSW	MS	T/L	17.00/2.0	57.9	1470	20.9	530	25.2	640	23.7	603	30.5	-	-
		L2,G2	VUT	★1	T/L	17.00/2.0(17.00/1.7)	58.0	1473	21.0	533	25.3	643	23.9	608	30.5	-	-
	177B/186A2	E3 L3	VLT	MS	T/L	17.00/2.0	58.9	1495	21.0	533	26.6	676	23.1	586	40.0	-	-
		E3	VMT	★2	T/L	17.00/2.0	58.3	1480	20.9	530	25.7	652	23.5	597	33.0	-	-
		L3	VMT	★1	T/L	17.00/2.0(17.00/1.7)	58.3	1480	20.9	530	25.7	652	23.5	597	33.0	-	-
	NEW 186A2	L3	VJT	★1	T/L	17.00/2.0(17.00/1.7)	58.3	1480	20.9	530	25.7	652	23.5	597	33.0	-	-
	177B/186A2	E4 L4	VLTS	MS	T/L	17.00/2.0	58.2	1478	20.9	530	26.3	667	22.9	581	49.0	-	-
	L5	VSDL	★1★2	T/L	17.00/2.0(17.00/1.7)	61.1	1552	20.9	531	27.7	704	23.0	583	78.0	-	-	

T/T: Tube Type T/L: Tubeless Type MS: Multi Star Rating

Tire Size	Load Index/ Speed Symbol	TRA Code or Application	Pattern	Star Rating	Type	Recommended Rim/ Flange Height (inch)	Approximate Inflated Dimensions								OTD	Minimum	
							OD		OW		SLR		SLW			inch	mm
							inch	mm	inch	mm	inch	mm	inch	mm			
525/80R25 (20.5R25)	179E	High-Speed Service	VHS	★2	T/L	17.00/2.0	58.3	1480	21.0	533	26.7	677	22.8	578	31.0	-	-
	179E	High-Speed Service	VHB	★2	T/L	17.00/2.0	57.7	1465	20.9	530	26.4	670	22.6	575	22.5	-	-
	179E	High-Speed Service	VKT	★2	T/L	17.00/2.0	57.9	1470	20.9	530	26.0	660	23.2	590	30.5	-	-
21.00R25		E7	VSJ		T/L	15.00/3.0	68.0	1728	23.0	584	30.9	784	25.6	649	22.5	27.0	685
23.5R25		E2,L2	VKT	★1★2	T/L	19.50/2.5	63.1	1602	24.1	612	27.2	690	27.0	686	33.0	-	-
		E2 L2	VSW	MS	T/L	19.50/2.5	62.8	1596	24.4	620	27.2	692	27.1	689	31.5	-	-
		L2,G2	VUT	★1	T/L	19.50/2.5	63.0	1599	24.4	620	27.6	702	27.1	688	33.5	-	-
	185B/195A2	E3 L3	VLT	MS	T/L	19.50/2.5	63.9	1623	24.1	612	28.9	734	26.8	680	42.5	-	-
		E3,L3	VMT	★1★2	T/L	19.50/2.5	63.0	1600	24.3	617	27.6	702	27.1	688	35.0	-	-
	NEW 185B/195A2	E3 L3	VJT	MS	T/L	19.50/2.5	63.1	1602	24.3	616	27.4	696	27.4	695	35.0	-	-
	185B/195A2	E4 L4	VLTS	MS	T/L	19.50/2.5	63.6	1616	24.1	612	28.7	729	26.6	675	54.0	-	-
	195A1/201A2	L5	VSDT	★1★2	T/L	19.50/2.5	65.4	1660	24.4	621	29.3	745	26.8	680	79.0	-	-
		L5	VSDL	★1★2	T/L	19.50/2.5	65.8	1672	23.9	608	29.7	755	26.7	677	87.0	-	-
	Industrial Service	VSDL	★2	T/L	19.50/2.5	65.8	1672	23.9	608	29.7	755	27.0	687	87.0	28.4	722	
25/65R25		E2	VKT	★2	T/L	20.00/2.0	58.5	1486	25.0	635	26.4	670	27.2	690	30.5	-	-
650/65R25		L3	VTs	★1	T/L	19.50/2.5	59.1	1502	25.3	642	26.0	660	28.0	710	37.0	-	-
750/65R25 (30/65R25)	190B/202A2	E3 L3	VLT	MS	T/L	24.00/3.0	64.0	1625	30.1	765	28.3	718	32.7	831	43.0	-	-
	190B	E4	VLTS	★2	T/L	24.00/3.0	63.9	1623	30.1	765	28.1	713	32.8	832	55.0	-	-
26.5R25		E2	VKT	★2	T/L	22.00/3.0	68.3	1735	26.7	677	29.8	756	30.4	772	39.0	-	-
		L2	VKT	★1★2	T/L	22.00/3.0	68.3	1735	26.7	677	29.8	756	30.4	772	39.0	-	-
	193B/202A2	E3 L3	VLT	MS	T/L	22.00/3.0	69.1	1755	26.6	675	31.0	787	29.0	736	45.0	-	-
		E3,L3	VMT	★1★2	T/L	22.00/3.0	68.5	1740	26.9	684	29.7	754	30.2	766	38.0	-	-
	NEW 193B/202A2	E3 L3	VJT	MS	T/L	22.00/3.0	68.5	1740	26.9	684	29.7	754	30.2	766	38.0	-	-
	193B	E4	VLTS	★2	T/L	22.00/3.0	68.3	1736	26.6	675	30.9	784	29.3	743	60.0	-	-
		E4 L4	VSNT	MS	T/L	22.00/3.0	70.0	1779	27.0	685	31.5	799	29.1	740	57.5	-	-
	202A2/209A2	L5	VSDT	★1★2	T/L	22.00/3.0	69.9	1775	27.4	697	31.1	790	30.6	778	88.0	-	-
		L5	VSDL	★1★2	T/L	22.00/3.0	70.5	1790	26.9	684	31.4	797	30.0	761	95.5	-	-
	L5S	VSMS	★1★2	T/L	22.00/3.0	69.9	1775	26.9	684	31.9	810	29.4	746	95.0	-	-	

T/T: Tube Type T/L: Tubeless Type MS: Multi Star Rating

Tire Size	Load Index/ Speed Symbol	TRA Code or Application	Pattern	Star Rating	Type	Recommended Rim/ Flange Height (inch)	Approximate Inflated Dimensions								OTD	Minimum		
							OD		OW		SLR		SLW			inch	mm	
							inch	mm	inch	mm	inch	mm	inch	mm				
29.5R25		E2	VKT	★2	T/L	25.00/3.5	73.3	1861	30.0	762	32.4	822	33.2	844	44.0	-	-	
	200B/208A2	E3 L3	VLT	MS	T/L	25.00/3.5	74.1	1881	30.0	762	33.1	840	32.7	830	48.0	-	-	
	208A2	E3,L3	VMT	★1★2	T/L	25.00/3.5	73.4	1865	30.0	762	31.8	808	34.2	868	42.0	-	-	
	200B/208A2	E4,L4	VLTS	★1★2	T/L	25.00/3.5	73.4	1865	30.0	762	32.9	835	33.2	844	65.0	-	-	
		E4 L4	VSNT	MS	T/L	25.00/3.5	75.0	1905	30.2	768	33.4	849	32.9	835	60.0	-	-	
	208A2/216A2	L5	VSDT	★1★2	T/L	25.00/3.5	75.0	1905	30.7	779	33.3	845	34.2	869	96.0	-	-	
		L5	VSDL	★1★2	T/L	25.00/3.5	75.8	1925	30.2	766	33.7	855	33.3	846	104.0	-	-	
775/65R29		L3	VTs	★1	T/L	25.00/3.5 (24.00/3.5)	68.5	1740	30.5	775	30.0	762	33.2	843	43.0	-	-	
875/65R29		L3	VTs	★1	T/L	27.00/3.5 (28.00/3.5)	73.4	1865	33.5	850	31.7	804	38.7	982	47.5	-	-	
29.5R29		E2	VKT	★2	T/L	25.00/3.5	77.1	1958	30.1	765	34.3	870	33.1	841	44.0	-	-	
		E4 L4	VSNT	MS	T/L	25.00/3.5	78.7	2000	30.5	774	35.6	905	34.6	849	60.0	-	-	
	211A2/218A2	L5	VSDT	★1★2	T/L	25.00/3.5	78.3	1989	30.7	779	34.8	883	34.3	872	96.0	-	-	
		L5	VSDL	★1★2	T/L	25.00/3.5	79.1	2008	30.6	776	35.4	900	33.7	856	104.5	-	-	
		L5S	VSMS	★2	T/L	25.00/3.5	79.1	2008	30.2	766	35.6	904	33.9	861	104.5	-	-	
33.25R29		E3	VRL	★2	T/L	27.00/3.5	81.5	2070	33.6	853	35.4	899	36.6	930	44.0	-	-	
		E3	VLT	★2	T/L	27.00/3.5	82.0	2083	33.7	856	35.7	906	37.1	943	54.0	-	-	
18.00R33		E2	VFT	★2	T/L	13.00/2.5	71.3	1811	19.7	500	32.4	822	22.3	567	30.5	23.1	587	
		E3	VEL	★2	T/L	13.00/2.5	71.1	1805	19.7	500	32.9	835	22.0	560	35.0	23.1	587	
		E4	VMTS	★2	T/L	13.00/2.5	73.3	1862	20.3	515	33.4	849	22.7	576	51.0	23.1	587	
		E4	VMTP	★2	T/L	13.00/2.5	73.6	1870	20.3	515	33.3	846	22.6	575	55.0	23.1	587	
		E4	VELS	★2	T/L	13.00/2.5	73.1	1856	20.2	512	33.7	856	22.6	575	49.0	23.1	587	
	NEW	E4	VRQP	★2	T/L	13.00/2.5	74.4	1890	20.3	515	34.5	876	22.6	575	64.5	23.1	587	
		Industrial Service	VELS	★3	T/L	13.00/2.5	73.2	1860	20.2	512	31.5	800	23.8	604	49.0	25.0	634	
	219A5	Industrial Service	VCHS	★3	T/L	13.00/2.5	73.1	1856	19.5	495	31.6	803	23.0	585	68.5	23.6	600	
21/90R33		E4	VELS	★2	T/L	13.00/2.5	73.1	1856	20.7	527	33.4	848	23.1	586	49.0	23.6	600	
21.00R33	NEW	E4	VMTP	★2	T/L	15.00/3.0	78.7	1998	22.8	578	35.8	909	25.6	650	61.0	27.6	701	
		E4	VRLS	★2	T/L,T/T	15.00/3.0	77.9	1978	22.8	578	35.4	899	25.6	650	54.0	27.6	701	
35/65R33		E4 L4	VSNT	MS★2	T/L	28.00/3.5	81.7	2075	35.6	904	36.9	936	38.4	976	62.5	-	-	
	NEW	L4	VSNL	★2	T/L	28.00/3.5	81.7	2075	34.6	880	36.9	936	38.6	981	62.5	-	-	
		217A2	L5	VSDT	★1	T/L	28.00/3.5	81.7	2075	35.0	890	36.0	914	39.0	990	96.0	-	-
			L5	VSDL	★1★2	T/L	28.00/3.5	81.7	2075	34.6	880	36.1	917	37.4	951	95.0	-	-
37.5R33		E2	VKT	★2	T/L	32.00/4.5	93.5	2372	38.8	982	41.3	1050	43.3	1100	51.0	-	-	

T/T: Tube Type T/L: Tubeless Type MS: Multi Star Rating

Tire Size	Load Index/ Speed Symbol	TRA Code or Application	Pattern	Star Rating	Type	Recommended Rim/ Flange Height (inch)	Approximate Inflated Dimensions								OTD	Minimum	
							OD		OW		SLR		SLW			inch	mm
							inch	mm	inch	mm	inch	mm	inch	mm			
21.00R35		E3	VEL	★2	T/L	15.00/3.0	78.5	1993	22.4	568	35.9	912	25.4	646	37.5	27.6	701
		E4	VMTS	★2	T/L	15.00/3.0	80.2	2038	22.6	575	36.7	932	25.8	655	54.0	27.6	701
		E4	VMTP	★2	T/L	15.00/3.0	80.6	2048	22.7	577	36.3	922	25.8	655	61.0	27.6	701
		E4	VELS	★2	T/L	15.00/3.0	80.5	2044	22.7	577	36.8	935	25.6	650	59.0	27.6	701
24.00R35		E3	VEL	★2	T/L	17.00/3.5	83.6	2123	26.0	660	37.4	950	29.2	741	44.0	31.3	795
		E4	VMTS	★2	T/L	17.00/3.5	85.6	2175	26.0	660	38.6	980	28.9	734	59.0	31.3	795
		E4	VMTP	★2	T/L	17.00/3.5	86.4	2194	26.0	660	38.4	975	28.9	734	68.0	31.3	795
		E4	VRLS	★2	T/L	17.00/3.5	85.6	2175	26.0	660	38.6	980	28.9	734	59.0	31.3	795
29.5R35		E3	VRL	★2	T/L	25.00/3.5	83.5	2120	30.2	768	36.7	932	33.2	844	39.5	-	-
33.25R35		E2	VKT	★2	T/L	27.00/3.5	87.6	2224	33.7	856	39.0	990	37.6	955	49.5	-	-
		E3	VRL	★2	T/L	27.00/3.5	87.7	2228	33.3	846	39.0	990	38.2	970	49.0	-	-
37.25R35		E2	VKT	★2	T/L	31.00/4.0	93.3	2370	37.6	954	41.1	1045	41.9	1063	51.0	-	-
		E3	VRL	★2	T/L	31.00/4.0	93.3	2370	37.6	954	41.1	1045	41.9	1063	51.0	-	-
	NEW	E3	VLT	★2	T/L	31.00/4.0	94.0	2388	37.6	954	41.5	1054	41.9	1063	59.5	-	-
37.5R39		E2	VKT	★2	T/L	32.00/4.5	99.4	2524	38.7	982	44.1	1120	42.5	1080	51.0	-	-
		E3	VRL	★2	T/L	32.00/4.5	99.4	2526	38.7	982	44.1	1120	42.5	1080	48.5	-	-
40.5/75R39		E3	VRL	★2	T/L	32.00/4.5	101.9	2588	39.4	1002	45.2	1147	44.3	1125	48.5	-	-
	NEW	E3	VLT	★2	T/L	32.00/4.5	102.6	2609	39.4	1002	45.6	1157	44.4	1127	58.5	-	-
45/65R39		L5	VSDL	★1	T/L	32.00/4.5(36.00/4.5)	101.6	2580	42.3	1074	43.9	1116	47.4	1205	116.0	-	-
45/65R45		L5	VSDL	★1★2	T/L	36.00/4.5	107.5	2730	44.2	1123	46.8	1188	50.2	1274	111.5	-	-
24.00R49		E2	VFT	★2	T/L	17.00/3.5	97.9	2486	25.8	656	45.2	1147	29.1	738	38.5	31.3	795
		E4	VMTS	★2	T/L	17.00/3.5	99.6	2529	25.8	656	45.9	1166	28.9	735	59.0	31.3	795
		E4	VMTP	★2	T/L	17.00/3.5	100.3	2547	25.8	656	46.3	1175	28.9	735	68.0	31.3	795
		E4	VRLS	★2	T/L	17.00/3.5	99.6	2531	25.8	656	45.9	1166	29.1	738	59.0	31.3	795
27.00R49		E2	VFT	★2	T/L	19.50/4.0	104.2	2646	29.5	750	47.5	1207	32.9	835	44.0	35.1	892
		E3	VRL	★2	T/L	19.50/4.0	104.1	2645	29.5	750	47.4	1205	32.9	835	42.5	35.1	892
		E4	VMTS	★2	T/L	19.50/4.0	105.9	2690	29.5	750	48.4	1230	32.9	835	64.0	35.1	892
		E4	VMTP	★2	T/L	19.50/4.0	106.6	2708	29.5	750	48.8	1239	32.9	835	73.0	35.1	892
		E4	VRLS	★2	T/L	19.50/4.0	106.1	2694	29.5	750	48.5	1231	32.9	835	66.5	35.1	892
		E4	VRDP	★2	T/L	19.50/4.0	106.7	2711	29.5	750	48.8	1240	32.9	835	76.0	35.1	892
31/90R49		E4	VELSF	★2	T/L	19.50/4.0	106.1	2694	30.4	771	48.3	1228	33.9	862	66.5	37.6	956

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

Tire Size	Load Index/ Speed Symbol	TRA Code or Application	Pattern	Star Rating	Type	Recommended Rim/ Flange Height (inch)	Approximate Inflated Dimensions								OTD	Minimum	
							OD		OW		SLR		SLW			inch	mm
							inch	mm	inch	mm	inch	mm	inch	mm			
30.00R51		E2	VHS	★2	T/L	22.00/4.5	111.3	2826	33.6	854	50.5	1282	37.4	950	37.5	39.1	993
		E3	VMT	★2	T/L	22.00/4.5	112.2	2850	33.6	854	50.9	1294	37.4	950	45.0	39.1	993
		E4	VRLS	★2	T/L	22.00/4.5	114.6	2911	33.6	854	51.6	1311	37.9	963	74.5	39.1	993
33.00R51		E3	VMT	★2	T/L	24.00/5.0	117.6	2988	36.7	932	52.7	1338	41.4	1052	48.0	42.3	1074
		E4	VMTP	★2	T/L	24.00/5.0	120.6	3063	36.7	932	54.2	1376	41.4	1052	89.5	42.3	1074
		E4	VRLS	★2	T/L	24.00/5.0	120.2	3052	36.7	932	54.0	1371	41.4	1051	78.5	42.3	1074
		E4	VRDP	★2	T/L	24.00/5.0	120.5	3061	36.7	932	54.2	1375.5	41.4	1051	87.0	42.3	1074
36.00R51	NEW	E2	VHS	★2	T/L	26.00/5.0	122.4	3108	40.0	1015	54.7	1390	45.4	1163	44.0	46.6	1184
		E3	VMT	★2	T/L	26.00/5.0	123.9	3148	40.0	1015	55.2	1403	45.4	1153	52.5	46.6	1184
		E4	VRLS	★2	T/L	26.00/5.0	126.1	3204	40.0	1015	56.3	1431	45.4	1153	86.5	46.6	1184
50/65R51		L5	VSDL	★1★2	T/L	40.00/4.5	120.9	3070	50.3	1278	53.0	1347	53.6	1361	128.0	-	-
37.00R57		E4	VZTS	★2	T/L	27.00/6.0	134.7	3422	41.1	1044	60.7	1541	46.9	1190	87.5	47.9	1217
		E4	VELSL	★2	T/L	27.00/6.0	133.4	3388	41.1	1044	60.0	1524	46.9	1190	77.0	47.9	1217
		E4	VRLS	★2	T/L	27.00/6.0	134.3	3410	41.1	1044	60.4	1535	46.9	1190	87.5	47.9	1217
		E4	VRLSC	★2	T/L	27.00/6.0	135.4	3440	40.5	1028	60.7	1541	46.2	1174	85.0	47.9	1217
42/90R57		E4	VRDP	★2	T/L	27.00/6.0	136.1	3456	41.7	1060	60.6	1539	47.7	1210	97.0	52.1	1323
40.00R57		E3	VMT	★2	T/L	29.00/6.0	138.3	3512	43.6	1108	61.4	1560	49.8	1264	64.0	53.6	1361
		E4	VZTS	★2	T/L	29.00/6.0	141.1	3585	44.9	1140	63.2	1606	50.7	1289	91.5	53.6	1361
		E4	VELSL	★2	T/L	29.00/6.0	139.4	3542	43.6	1108	62.0	1575	49.8	1264	80.0	53.6	1361
		E4	VELS	★2	T/L	29.00/6.0	140.2	3562	44.4	1127	62.3	1582	50.8	1291	91.5	53.6	1361
		E4	VELSC	★2	T/L	29.00/6.0	140.0	3557	43.6	1108	62.3	1582	49.8	1264	88.0	53.6	1361
		E4	VRDP	★2	T/L	29.00/6.0	140.7	3575	43.6	1108	62.6	1591	49.8	1264	97.0	53.6	1361
46/90R57		E4	VELSF	★2	T/L	29.00/6.0 (32.00/6.0)	140.0	3557	45.1	1145	62.1	1577	51.1	1299	88.0	55.6	1412
		E4	VRDP	★2	T/L	29.00/6.0 (32.00/6.0)	140.7	3575	45.1	1145	62.4	1586	51.1	1299	97.0	55.6	1412
	NEW	E4	VZTP	★2	T/L	29.00/6.0 (32.00/6.0)	141.1	3585	45.1	1145	62.6	1591	51.1	1299	97.0	55.6	1412
55.5/80R57		L5	VSDL		T/L	44.00/6.0	147.2	3740	55.5	1410	64.3	1634	63.6	1616	125.5	-	-
50/90R57		E4	VELS	★2	T/L	34.00/6.5 (32.00/6.5)	150.6	3825	50.5	1283	66.7	1694	57.9	1471	91.5	61.5	1562
53/80R63		E4	VRLSA	★2	T/L	36.00/5.0	148.8	3780	51.2	1300	64.2	1630	59.5	1511	83.5	64.0	1626
		E4	VRDP	★2	T/L	36.00/5.0	150.9	3833	51.2	1300	65.2	1657	59.5	1511	110.0	64.0	1626
55/80R63		E4	VRDP	★2	T/L	41.00/5.0	154.0	3912	55.1	1400	65.8	1672	65.0	1652	110.0	68.2	1730
59/80R63		E3	VRD	★2	T/L	44.00/5.0	158.5	4025	57.9	1470	67.3	1710	67.4	1712	71.0	70.0	1780
		E4	VRDP	★2	T/L	44.00/5.0	158.5	4025	57.9	1470	67.3	1710	67.4	1712	116.0	70.0	1780

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

RADIAL TIRE LOAD AND INFLATION PRESSURE TABLES

■ Earthmover Service

50km/h (30mph) Maximum Speed

Table: R1

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)												
	kPa psi	450 65	475 69	500 73	525 76	550 80	575 83	600 87	625 91	650 94	675 98	700 102	800 116
14.00R24 (14.00R24TG)	Kg lbs	4000 8800	4125 9100	4375 9650	4500 9900	4625 10200	4750 10500	5000 11000	5150 11400	5300 11700	5450 12000	5600 12300	6050*** 13400***
14.00R25	Kg lbs	4000 8800	4125 9100	4375 9650	4500 9900	4625 10200	4750 10500	5000 11000	5150 11400	5300 11700	5450 12000	5600 12300	6050*** 13400***
16.00R25	Kg lbs	5150 11400	5450 12000	5600 12300	5800 12800	6000 13200	6300 13900	6500 14300	6700 14800	6900 15200	7100 15700	7300** 16100**	
18.00R25	Kg lbs	6700 14800	7100* 15700*	7300 16100	7500 16500	7750 17100	8000 17600	8250 18200	8500 18700	8750 19300	9000 19800	9250** 20400**	
18.00R33	Kg lbs	7750 17100	8000 17600	8500 18700	8750 19300	9000 19800	9250 20400	9750 21500	10000 22000	10300 22700	10600 23400	10900** 24000**	
21/90R33	Kg lbs	8200 18100	8500 18700	9000 19900	9300 20400	9550 21000	9800 21600	10300 22800	10600 23400	10900 24100	11200 24800	11600** 25500**	
21.00R33	Kg lbs	10000 22000	10300 22700	10900 24000	11200 24700	11500 25400	11800 26000	12500 27600	12850 28300	13200 29100	13600 30000	14000** 30900**	
21.00R35	Kg lbs	10300 22700	10600 23400	11200 24700	11500 25400	11800 26000	12150 26800	12850 28300	13200 29100	13600 30000	14000 30900	14500** 32000**	
24.00R35	Kg lbs	13200 29100	13600 30000	14000 30900	14500 32000	15500 34200	16000 35300	16500 36400	17000 37500	17500 38600	18000 39700	18500** 40800**	
24.00R49	Kg lbs	15500 34200	16500 36480	17000 37500	17500 38600	18500 40800	19000 41900	19500 43000	20000 44100	20600 45400	21200 46700	21800** 48100**	
27.00R49	Kg lbs	19500 43000	20000 44100	20600 45400	21800 48100	22400 49400	23000 50700	23600 52000	25000 55100	25750 56800	26500 58400	27250** 60000**	
31/90R49	Kg lbs	20550 45300	21400 47100	22200 49000	23050 50800	23850 52600	24650 54400	25450 56200	26250 57900	27050 59600	27850 61400	28600** 63100**	
30.00R51	Kg lbs	23600 52000	25000 55100	25750 56800	26500 58400	28000 61500	29000 64000	30000 66000	30750 68000	31500 69500	32500 71500	33500** 74000**	
33.00R51	Kg lbs	27250 60000	29000 64000	30000 66000	30750 68000	32500 71500	33500 74000	34500 76000	35500 78500	36500 80500	37500 82500	38750** 85500**	
36.00R51	Kg lbs	33500 74000	35500 78500	36500 80500	37500 82500	38750 85500	40000 88000	41250 91000	42500 93500	43750 96500	45000 99000	46250** 102000**	
37.00R57	Kg lbs	37500 82500	38750 85500	40000 88000	42150 91000	43750 96500	45000 99000	46250 102000	47500 104500	48750 107500	50000 110000	51500** 113500**	
42/90R57	Kg lbs	38750 85500	40000 88000	41250 91000	42500 96500	45000 99000	46250 105000	47500 104500	48750 107500	50000 110000	51500 113500	53000** 117000**	
40.00R57	Kg lbs	42500 93500	45000 99000	46250 102000	48750 107500	50000 110000	51500 113500	53000 117000	54500 120000	56000 123500	58000 128000	60000** 132500**	
46/90R57	Kg lbs	44500 98000	46250 102000	48000 106000	49750 109500	51500 113500	53250 117500	55000 121500	56750 125000	58500 129000	60250 133000	62000** 136500**	
50/90R57	Kg lbs	54500 120000	56000 123500	58000 128000	60000 132500	63000 139000	65000 143500	67000 147500	69000 152000	71000 156500	73000 161000	75000** 165500**	
53/80R63	Kg lbs	67050 147800	69800 153900	72550 160000	75250 165900	77950 171800	80550 177600	83200** 183400**					
55/80R63	Kg lbs	76000 168000	79500 175000	82500 181500	85500 188500	88500 195000	91500 201500	94500** 208000**					
59/80R63	Kg lbs	81900 180000	85200 188000	88600 195000	91900 203000	95200 210000	98400 217000	101600** 224000**					

Note: Bold face figures denote maximum load for symbols shown.

Earthmover Service

50km/h (30mph) Maximum Speed

Table: R2

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)											
	kPa psi	275 40	300 44	325 47	350 51	375 54	400 58	425 62	450 65	475 69	500 73	525 76
17.5R25	Kg lbs	3350 7400	3550 7850	3750 8250	4000 8800	4125* 9100*	4375 9650	4625 10200	4750 10500	5000 11000	5150 11400	5450** 12000**
20.5R25	Kg lbs	4375 9650	4750 10500	5000 11000	5300 11700	5600* 12300*	5800 12800	6150 13600	6500 14300	6700 14800	6900 15200	7300** 16100**
23.5R25	Kg lbs	5600 12300	6000 13200	6500 14300	6700 14800	7100* 15700*	7500 16500	7750 17100	8250 18200	8500 18700	9000 19800	9250** 20400**
25/65R25	Kg lbs	5600 12350	6000 13200	6300 13850	6700 14800	7100 15600	7450 16350	7750** 17100**				
750/65R25 (30/65R25)	Kg lbs	7750 17000	8250 18150	8750 19250	9250 20350	9750 21450	10300 22650	10600** 23400**				
26.5R25	Kg lbs	7100 15700	7500 16500	8000 17600	8500 18700	9000* 19800*	9500 20900	9750 21500	10300 22700	10600 23400	11200 24700	11500** 25400**
29.5R25	Kg lbs	8500 18700	9250 20400	9750 21500	10300 22700	10900* 24000*	11500 25400	11800 26000	12500 27600	12850 28300	13600 30000	14000** 30900**
29.5R29	Kg lbs	9250 20400	9750 21500	10300 22700	10900 24000	11500* 25400*	12150 26800	12500 27600	13200 29100	13600 30000	14500 32000	15000** 33100**
33.25R29	Kg lbs	11200 24700	12150 26800	12850 28300	13600 30000	14000 30900	15000 33100	15500 34200	16500 36400	17000 37500	17500 38600	18500** 40800**
35/65R33	Kg lbs	10600 23400	11500 25400	12150 26800	12850 28300	13600 30000	14000 30900	15000 33100	15500 34200	16000 35300	17000 37500	17500** 38600**
37.5R33	Kg lbs	14500 32000	15500 34200	16500 36480	17500 38600	18500 40800	19500 43000	20600 45400	21200 46700	22400 49400	23000 50700	24300** 53600**
29.5R35	Kg lbs	10000 22000	10600 23400	11200 24700	11800 26000	12500 27600	13200 29100	13600 30000	14500 32000	15000 33100	15500 34200	16000** 35300**
33.25R35	Kg lbs	12150 26800	12850 28300	14000 30900	14500 32000	15500 34200	16000 35300	17000 37500	17500 38600	18500 40800	19000 41900	20000** 44100**
37.25R35	Kg lbs	14500 32000	15500 34200	16500 36400	17500 38600	18500 40800	19500 43000	20600 45400	21200 46700	22400 49400	23000 50700	23600** 52000**
37.5R39	Kg lbs	16000 35300	17000 37500	18000 39700	19000 41900	20000 44100	21200 46700	21800 48100	23000 50700	23600 52000	25000 55100	25750** 56800**
40.5/75R39	Kg lbs	18000 39700	19000 41900	20600 45400	21800 48100	22400 49400	23600 52000	25000 55100	25750 56800	27250 60000	28000 61500	29000** 64000**

Note: Bold face figures denote maximum load for symbols shown.

■ Earthmover Service (L317)

50km/h (30mph) Maximum Speed

Table: R3

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)													
	kPa psi	450 65	475 69	500 73	525 76	550 80	575 83	600 87	625 91	650 94	675 98	700 102	775 112	815 118
11.00R20	Kg	2500	2600	2710	2810	2910	3010	3100	3200	3300	3390	3480	3760***	
	lbs	5510	5730	5970	6200	6420	6640	6830	7050	7280	7470	7670	8290***	
12.00R20	Kg	2770	2880	2990	3110	3220	3330	3430	3540	3650	3750	3850	4160***	
	lbs	6110	6350	6590	6860	7100	7340	7560	7800	8050	8270	8490	9170***	
12R22.5	Kg	2410	2510	2610	2700	2800	2890	2990	3080	3170	3260	3350	3620	3760***
	lbs	5310	5530	5750	5950	6170	6370	6590	6790	6990	7190	7390	7980	8290***
12.00R24	Kg	3050	3180	3300	3430	3550	3670	3790	3900	4020	4140	4250***		
	lbs	6720	7010	7280	7560	7830	8090	8360	8600	8860	9130	9370***		

Note: Bold face figures denote maximum load for symbols shown.

LOAD CAPACITIES FOR EARTHMOVER SERVICE

(1) Excess Loads

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 in the tables (R1, R2) for the tire by an amount not greater than shown in the following table:

	Maximum Excess Loads	
	Load	*Pressure
Radial Tires	7%	14%

*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%.

The inflation pressure should not exceed 800kPa (116psi).

The above maximum excess loads will result in reduced tire performance and MUST BE APPROVED BY BRIDGESTONE.

(2) The Variation in Load Carrying Capacity with Speed

Operating Speed (km/h)	Variation in Load Capacity (%)	
<15	*	
15	+12%	
20	+10%	
25	+8%	
30	+6%	
35	+4%	
40	+3%	
45	+2%	
50 (Reference Speed for Earthmover Service)	0	
	E2, E3	E4
55	-2%	-2%
60	-6%	-6%
65	-12%	-12%
70	-20%*	*
75	-30%*	*
80	-42%*	*
>80	*	*

*Consult a Bridgestone Representative.

The variation in load carrying capacity with speed of earthmoving equipment tires is determined by applying the percentages shown above to the tire load capacities specified for EARTHMOVER SERVICE (Table: R1, R2, R3) at the corresponding inflation pressure.

■ Grader Service

40km/h (25mph) Maximum Speed

Table: R4

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)								
	kPa psi	200 29	225 33	250 36	275 40	300 44	325 47	350 51	375 54
13.00R24TG	Kg	1850	2000	2180	2360	2500	2650	2800	3000*
	lbs	4080	4400	4800	5200	5520	5840	6150	6600*
14.00R24TG	Kg	2240	2430	2650	2800	3000	3250	3350	3650*
	lbs	4940	5360	5840	6150	6600	7150	7400	8050*
16.00R24TG	Kg	2900	3150	3350	3650	3875	4125	4375	4625*
	lbs	6400	6950	7400	8050	8550	9100	9650	10200*

Note: For 14.00R24TG VSW ★3, consult a Bridgestone Representative.

■ Grader Service

40km/h (25mph) Maximum Speed

Table: R5

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)								
	kPa psi	125 18	150 22	175 25	200 29	225 33	250 36	275 40	300 44
15.5R25	Kg	1550	1750	2000	2180	2360	2575	2800	3000*
	lbs	3420	3860	4400	4800	5200	5680	6150	6600*
17.5R25	Kg	1850	2120	2360	2650	2900	3075	3350	3650*
	lbs	4080	4680	5200	5840	6400	6800	7400	8050*
20.5R25	Kg	2430	2800	3150	3450	3875	4125	4375	4625*
	lbs	5360	6150	6950	7600	8550	9100	9650	10200*
23.5R25	Kg	3150	3550	4000	4500	4875	5300	5600	6000*
	lbs	6950	7850	8800	9900	10700	11700	12300	13200*

Notes: 1) Bold face figures denote maximum load for symbols shown.

2) 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.

THE VARIATION IN LOAD CAPACITY WITH SPEED FOR GRADER SERVICE

Maximum Speed	% Change to Loads in Above Table with No Increase in Infl. Pressure
40 km/h (25 mph)	No Change
50 km/h (30 mph)	-9%
60 km/h (35 mph)	-18%
65 km/h (40 mph)	-27%

■ Loader & Dozer Service

10km/h (5mph) Maximum Speed

Distance up to 76m (250ft)

Table: R6

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)													
	kPa psi	525 76	550 80	575 83	600 87	625 91	650 94	675 98	700 102	725 105	750 109	775 112	800 115	825 120
8.25R15	Kg lbs	2200 4860	2275 5020	2350 5200	2425 5360	2500 5540	2575 5700	2650 5860	2725 6000	2800 6200	2875 6350	2950 6500	3025 6650	3100** 6800**
10.00R15	Kg lbs	2875 6350	2975 6550	3075 6800	3175 7000	3275 7200	3375 7450	3475 7650	3575 7850	3650 8050	3750 8250	3850 8500	3950 8700	4025** 8900**
9.00R20	Kg lbs	3075 6800	3250 7150	3350 7400	3450 7600	3550 7850	3650 8050	3750 8250	3875 8550	4000 8800	4000 8800	4125 9100	4250 9350	4375** 9650**
12.00R20	Kg lbs	4375 9650	4500 9900	4625 10200	4875 10700	5000 11000	5150 11400	5300 11700	5450 12000	5600 12300	5800 12800	5800 12800	6000 13200	6150** 13600**
14.00R20	Kg lbs	5200 11400	5400 11900	5550 12300	5750 12600	5900 13000	6100 13400	6250 13800	6450 14200	6600 14600	6800 15000	6950 15300	7100 15700	7300** 16100**
12.00R24	Kg lbs	4875 11000	5150 11400	5300 11700	5450 12000	5600 12300	5800 12800	6000 13200	6150 13600	6300 13900	6500 14300	6500 14300	6700 14700	6900** 15200**
14.00R24TG	Kg lbs	6700 14800	6900* 15200*											
18.00R25	Kg lbs	11200 24700	11800* 26000*	12150 26800	12500 27600	12850 28300	13200 29100	13600 30000	14000 30900	14400 31800	14800 32700	15200 33500	15500 34200	16000** 35300**

Note: Bold face figures denote maximum load for symbols shown.

■ Loader & Dozer Service

10km/h (5mph) Maximum Speed

Distance up to 76m (250ft)

Table: R7

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)					
	kPa psi	275 40	300 44	325 47	350 51	375 54
335/80R20	Kg lbs	2430 5350	2575 5700	2725 6000	2900 6400	3075 6800
365/80R20	Kg lbs	2900 6400	3075 6800	3250 7150	3450 7600	3650 8000
405/70R20	Kg lbs	3075 6800	3250 7250	3450 7600	3650 8100	3875 8550

Note: Bold face figures denote maximum load for symbols shown.

Distance up to 76m (250ft)

Table: R8

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)											
	kPa psi	400 58	425 62	450 65	475 69	500 73	525 76	550 80	575 83	600 87	625 91	650 94
14.5R15	Kg lbs	2425 5360	2550 5620	2650 5860	2775 6100	2875 6350	2975 6600	3100 6800	3200 7050	3300 7250	3400 7500	3500** 7700**
15.5R25	Kg lbs	5000 11000	5150 11400	5450 12000	5600 12300	5800* 12800*	6150 13600	6300 13900	6500 14300	6700 14800	6900 15200	7100** 15700**
17.5R25	Kg lbs	6000 13200	6150 13600	6500 14300	6700 14800	7100* 15700*	7300 16100	7500 16500	7750 17100	8000 17600	8250 18200	8500** 18700**
20.5R25	Kg lbs	8000 17600	8250 18200	8750 19300	9000 19800	9500* 20900*	9750 21500	10000 22000	10300 22700	10900 24000	11200 24700	11500** 25400**
23.5R25	Kg lbs	10300 22700	10600 23400	11200 24700	11500 25400	12150* 26800*	12500 27600	12850 28300	13200 29100	13600 30000	14000 30900	14500** 32000**
26.5R25	Kg lbs	12850 28300	13200 29100	14000 30900	14500 32000	15000* 33100*	15500 34200	16000 35300	16500 36400	17000 37500	18000 39700	18500** 40800**
29.5R25	Kg lbs	15500 34200	16000 35300	17000 37500	17500 38600	18000* 39700*	19000 41900	19500 43000	20000 44100	20600 45400	21200 46700	22400** 49400**
29.5R29	Kg lbs	16500 36400	17000 37500	18000 39700	18500 40800	19500* 43000*	20000 44100	20600 45400	21200 46700	22400 49400	23000 50700	23600** 52000**

Note: Bold face figures denote maximum load for symbols shown.

■ Loader & Dozer Service 10km/h (5mph) Maximum Speed

Distance up to 76m (250ft)

Table: R9

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)											
	kPa psi	400 58	425 62	450 65	475 69	500 73	525 76	550 80	575 83	600 87	625 91	650 94
650/65R25	Kg lbs	9750 21500	10000 22000	10600 23400	10900 24000	11500* 25400*						
750/65R25 (30/65R25)	Kg lbs	12500 27600	13200 29100	13600 30000	14000 30900	15000* 33100*						
775/65R29	Kg lbs	14500 32000	15000 33100	15500 34200	16000 35300	17000* 37500*						
875/65R29	Kg lbs	18000 39700	18500 40800	19500 43000	20000 44100	21200* 46700*						
35/65R33	Kg lbs	19500 43000	20600 45400	21200 46700	22400 49400	23000* 50700*	23600 52000	25000 55100	25750 56800	26500 58400	27250 60000	28000** 61500**
45/65R39	Kg lbs	33500 74000	34500 76000	36500 80500	37500 82500	40000* 88000*						
45/65R45	Kg lbs	35500 78500	37500 82500	38750 85500	40000 88000	42500* 93500*	43750 96500	45000 99000	46250 102000	47500 104500	50000 110000	51500** 113500**
50/65R51	Kg lbs	45000 99000	47500 104500	50000 110000	51500 113500	54500* 120000*	56000 123000	58000 127500	60000 131500	61500 135500	63000 139000	65000** 145000**

Note: Bold face figures denote maximum load for symbols shown.

■ Loader & Dozer Service 10km/h (5mph) Maximum Speed

Distance up to 76m (250ft)

Table: R10

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)									
	kPa psi	500 73	525 76	550 80	575 83	600 87	625 91	650 94	675 98	700 102
55.5/80R57	Kg lbs	82500 182000	85000 187500	90000 198000	92500 203500	95000 209000	97500 214500	100000 220500	103000 227000	106000 233500

Note: Bold face figures denote maximum load for symbols shown.

LOAD CAPACITIES FOR LOADER & DOZER SERVICE

(1) Excess Loads

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 in the tables (R6, R7, R8 & R9) for the tire by an amount not greater than shown in the following table:

	Maximum Excess Loads	
	Load	*Pressure
Radial Tires	7%	14%

*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%.

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

The above maximum excess loads will result in reduced tire performance and MUST BE APPROVED BY BRIDGESTONE.

(2) The Variation in Load Carrying Capacity with Speed

Max Speed	% Load Change
Static	+60%
Creep	+30%
4 km/h (2-1/2 mph)	+15%
10 km/h (5 mph)	No Change
15 km/h (10 mph)	-13%
25 km/h (15 mph)	-20%

* Tables R6, R7, R8 & R9

Over 25 km/h (15 mph): Consult a Bridgestone Representative.

High-Speed Service

Table: R11

Tire Size Designation	Star Rating	Load Index	Inflation Pressure	Tire Load Limits at Various Speeds (100kPa=1bar)														
		Speed Symbol	bar psi	km/h mph	0 0	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
385/95R24 (14.00R24)	***	170 E	9.0 131	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 (14.00R25)	***	170 E	9.0 131	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
445/80R25 (17.5R25)	**	170 E	7.0 102	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
445/95R25 (16.00R25)	**	177 E	9.0 131	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
505/95R25 (18.00R25)	**	186 E	9.0 131	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
525/80R25 (20.5R25)	**	179 E	7.0 102	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

Note: Consult a Rim Manufacturer when inflation pressure exceeds 800kPa (116 psi).

High-Speed Service

88km/h (55mph) Maximum Speed (100kpa=1bar)

Tire Size Designation	Star Rating	Load	Inflation Pressure
24R21	*	7120 kg 15700 lbs	580 kPa 85psi

Table: R12

Sand Service

Table: R13

Tire Size Designation	Maximum Speed	Tire Cold Inflation Pressures at Various Load Limits (100kPa=1bar)												
		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
16.00R20	65km/h 40mph	kPa psi	490 71	540 78	580 84	630 91	680 98	720 105						
	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								
21.00R25	65km/h 40mph	kPa psi							330 48	410 60	490 71	540 78	590 85	630 92
	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		

Note: It is recommended that 90% of the above indicated loads per tire is to be applied when used on a dual axle.

Industrial Service

Table: R14

Tire Size Designations	Star Rating	Inflation Pressures	Tire Load Limits at Various Speeds (100kPa=1bar)								
		kPa <i>psi</i>		0 km/h <i>Static</i>	Creep <i>Creep</i>	5 km/h <i>3 mph</i>	10 km/h <i>5 mph</i>	15 km/h <i>9 mph</i>	20 km/h <i>12 mph</i>	25 km/h <i>15 mph</i>	30 km/h <i>19 mph</i>
12.00R24	**	960	kg	12400	11000	10000	9300	8950	8750	8600	
		139	lbs	27400	24300	22100	20500	19800	19300	19000	
14.00R24 14.00R24 TG	***	1000	kg	18000	16000	14500	13500	13000	12700	12500	12400
		145	lbs	39690	35280	31970	29770	28670	28000	27560	27340
16.00R25	**	960	kg	21870	19440	17620	16400	15800	15430	15190	15070
		139	lbs	48230	42870	38850	26170	34830	34030	33490	33220
18.00R25	**	960	kg	28800	25600	23200	21600	20800	20320	20000	19840
		139	lbs	63500	56450	51160	47630	45860	44810	44100	43750
	***	1000	kg	30600	27200	24650	22950	22100	21590	21250	21080
		145	lbs	67470	59980	54350	50610	48730	47610	46860	46480
18.00R33	***	1000	kg	35100	31200	28275	26325	25350	24765	24375	24180
		145	lbs	77400	68800	62350	58050	55900	54610	53750	53320
23.5R25	**	690	kg	26100	23200	21025	19575	18850	18415	18125	17980
		100	lbs	57550	51160	46360	43160	41560	40610	39970	39650

Table: R15

Counter balanced lift trucks	Star Rating		Inflation Pressures	Tire Load Limits at Various Speeds (100kPa=1bar)									
			kPa <i>psi</i>		0 km/h <i>Static</i>	Creep <i>Creep</i>	5 km/h <i>3 mph</i>	10 km/h <i>5 mph</i>	15 km/h <i>9 mph</i>	20 km/h <i>12 mph</i>	25 km/h <i>15 mph</i>	30 km/h <i>19 mph</i>	35 km/h <i>22 mph</i>
12.00R20	***	Load Wheel	1000	kg	9230							8875	
			145	lbs	20350							19570	
		Steering Wheel	1000	kg	7100							6570	
			145	lbs	15620							14480	

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) **To obtain the maximum permissible loads on Industrial Vehicles Steering Wheels, multiply the above loads by 0.8.**
- 4) Consult a Rim Manufacturer when inflation pressure exceeds 800kPa (116 psi).
- 5) For Speeds exceeding 30 km/h (18 *mph*), consult a Bridgestone Representative.
- 6) For tire sizes and star ratings other than listed above, consult a Bridgestone Representative.

TON-KM-PER-HOUR (TKPH), TON-MILE-PER-HOUR (TMPH)

■TKPH (Ton-Km-Per-Hour) Rating Table at 38°C Ambient Temperature—Radial Tires

Tires for Earthmover Service (Maximum Speed of 50km/h or less)

TRA Classification		High-Speed Service					E2		E2	E2			E2	E3			E3		E3			E4
Pattern		VHS	VHB	VSB	VKT	VSW	VHS		VSB	VKT/VFT			VHB	VEL/VRL			VRD		VMT			L317
Bridgestone Code No.							1A	3A	2A	2A	1A	3A	2A	2A	1A	3A	1A	3A	2A	1A	3A	
TIRE SIZE	11.00R20																					[188](*)3
	12.00R20																					[208](*)3
	12R22.5																					[188](*)3
	12.00R24																					[177](*)3
	13.00R24																					
	14.00R24.25 (385/95R24.25)	205(*)3	205(*)3	270		205			179(*)3	106(*)3	141(*)3		136(*)3									
	16.00R24.25 (445/95R24.25)	269	269		202																	
	18.00R25 (505/95R25)	348	348							193	183(*)1 239(*)2			181	224							
	18.00R33									227	281	328		213	263	307						
	21.00R35													284	351							
	24.00R35														448	524						
	24.00R49									455	562											
	27.00R49									557	688	804		521	644	753						
	30.00R51						1001	1171												897	1065	
	33.00R51																		837	1018	1209	
	36.00R51																		974	1185	1407	
	40.00R57																		1204	1463	1739	
	59/80R63																*	*				

For the TKPH (TMPH) Ratings of Radial Tires:

If the round-trip distance is less than 5km (or 3 miles), the above ratings can be increased by 12%.

If the ambient temperature is over 38°C (or 100°F), consult a Bridgestone Representative.

If the Maximum Speed exceeds 50km/h (or 30 mph), consult a Bridgestone Representative.

To obtain the TKPH (TMPH) for type 2A-LS, multiply type 2A rating by 0.8. (except VRQP and VZTP)

When haul length exceeds 16km (10 miles) one way, consult a Bridgestone Representative.

* : Consult a Bridgestone Representative

[] WS Value

11.00R20 (775kpa)

12R22.5 (815kpa)

12.00R20 (775kpa)

12.00R24 (700kpa)

■TKPH (Ton-Km-Per-Hour) Rating Table at 38°C Ambient Temperature—Radial Tires

Tires for Earthmover Service (Maximum Speed of 50km/h or less)

TRA Classification		E4			E4			E4			E4		E4			E4			E4	E4
Pattern		VMTS			VMTP			VZTS			VELSL		VELS/VRLS			VRDP			VRQP	VZTP
Bridgestone Code No.		2A	1A	3A	2A	1A	3A	2A	1A	3A	1A	3A	2A	1A	3A	2A	1A	3A	2ALS	2ALS
TIRE SIZE	12.00R24				[136](*)3															
	14.00R24.25	91(*)3	119(*)3	136(*)3									85(*)3							
	16.00R25	123											112	146						
	18.00R25	169	209	244									144	179						
	18.00R33	199	246	287	185	229	267						170	211	246				122	
	21/90R33												170	211	246					
	21.00R33												227	281						
	21.00R35	265	328	383	237	293							227	281	328					
	24.00R35	338	418	489	314	388							314	388	453				207	
	24.00R49	398	492	575	361		522						341	421	492					
	27.00R49	486	600	702	440	544	636						415	513	600	415	513	600		
	31/90R49												427	528	618					
	30.00R51												496	603	717					
	33.00R51				591	700	855						558	679	807	558	679	807		
	36.00R51												642	781	927					
	37.00R57							694	845	1003		1148	694	845	1003					
	42/90R57															715	870	1033		
	40.00R57							773	940	1117	1050	1330	773	940	1117	773	940	1117		
	46/90R57												796	968	1150	796	968	1150		585
	50/90R57												884	1092	1278					
	53/80R63												**1045	**1233	**1512	974	1150	1408		
	55/80R63															1137	1341	1643		
	59/80R63															*	*	*		

For the TKPH (TMPH) Ratings of Radial Tires:

If the round-trip distance is less than 5km (or 3 miles), the above ratings can be increased by 12%.

If the ambient temperature is over 38°C (or 100°F), consult a Bridgestone Representative.

If the Maximum Speed exceeds 50km/h (or 30 mph), consult a Bridgestone Representative.

To obtain the TKPH (TMPH) for type 2A-LS, multiply type 2A rating by 0.8. (except VRQP and VZTP)

When haul length exceeds 16km (10 miles) one way, consult a Bridgestone Representative.

* : Consult a Bridgestone Representative

** : VRLSA

[] WS Value

■TKPH (Ton-Km-Per-Hour) Rating Table at 38°C Ambient Temperature—Radial Tires

Wide Base Tires for Earthmover Service (Maximum Speed of 50km/h or less)

TRA Classification			High-Speed Service				E2	E2			E3			E3		E3		E4	E4
Pattern			VHS	VHB	VG	VKT	VG	VKT			VRL			VLT		VMT/VJT		VLTS	VSNT
Bridgestone Code No.							3A	2A	1A	3A	2A	1A	3A	2A	1A	2A	1A	2A	2A
TIRE SIZE	24R21	*			520														
	17.5R25	*					145	95											
	(445/80R25)	**			180												144		
	20.5R25	*						129	166										
	(525/80R25)	**	308	308		232		160	206	232				149		149	194	126	
	23.5R25	*						166	213							153	201	129	
		**						205	263					190		190	248	161	
	25/65R25	**						162											
	30/65R25	**												225				195	
	(750/65R25)																		
	26.5R25	**						257	312					220		220	293	186	165
	29.5R25	**						310	376	420				266		266	354	225	220
	29.5R29	**						330	401										232
	33.25R29	**						407	494		319	435		349	476				
	35/65R33	**																	250
	37.5R33	**							648										
	29.5R35	**										380							
	33.25R35	**						441			346	472							
	37.25R35	**						530	644	720	413	563		417	569				
	37.5R39	**							696			608							
	40.5/75R39	**									495	675	765	500	682				

For the TKPH (TMPH) Ratings of Radial Tires:

If the round-trip distance is less than 5km (or 3 miles), the above ratings can be increased by 12%.

If the ambient temperature is over 38°C (or 100°F), consult a Bridgestone Representative.

If the Maximum Speed exceeds 50km/h (or 30 mph), consult a Bridgestone Representative.

To obtain the TKPH (TMPH) for type 2A-LS, multiply type 2A rating by 0.8. (except VRQP and VZTP)

When haul length exceeds 16km (10 miles) one way, consult a Bridgestone Representative.

■TMPH (Ton-Mile-Per-Hour) Rating Table at 100°F Ambient Temperature—Radial Tires

Tires for Earthmover Service (Maximum Speed of 50km/h or less)

TRA Classification		High-Speed Service					E2		E2	E2			E2	E3			E3		E3			E4
Pattern		VHS	VHB	VSB	VKT	VSW	VHS		VSB	VKT/VFT			VHB	VEL/VRL			VRD		VMT			L317
Bridgestone Code No.							1A	3A	2A	2A	1A	3A	2A	2A	1A	3A	1A	3A	2A	1A	3A	
TIRE SIZE	11.00R20																					[129](*3)
	12.00R20																					[142](*3)
	12R22.5																					[129](*3)
	12.00R24																					[121](*3)
	13.00R24																					
	14.00R24.25 (385/95R24.25)	140(*3)	140(*3)	185		140				123(*3)	73(*3)	97(*3)		93(*3)								
	16.00R24.25 (445/95R24.25)	184	184		138																	
	18.00R25 (505/95R25)	238	238								125(*1)											
										132	164(*2)			124	153							
	18.00R33									155	192	225		146	180	210						
	21.00R35													195	240							
	24.00R35														307	359						
	24.00R49									312	385											
	27.00R49									382	471	551		357	441	516						
	30.00R51						686	802												614	729	
	33.00R51																		573	697	828	
	36.00R51																		667	812	964	
	40.00R57																		825	1002	1191	
	59/80R63																*	*				

For the TKPH (TMPH) Ratings of Radial Tires:

If the round-trip distance is less than 5km (or 3 miles), the above ratings can be increased by 12%.

If the ambient temperature is over 38°C (or 100°F), consult a Bridgestone Representative.

If the Maximum Speed exceeds 50km/h (or 30 mph), consult a Bridgestone Representative.

To obtain the TKPH (TMPH) for type 2A-LS, multiply type 2A rating by 0.8. (except VRQP and VZTP)

When haul length exceeds 16km (10 miles) one way, consult a Bridgestone Representative.

* : Consult a Bridgestone Representative

[] WS Value

11.00R20 (775kpa)

12R22.5 (815kpa)

12.00R20 (775kpa)

12.00R24 (700kpa)

TMPH (Ton-Mile-Per-Hour) Rating Table at 100°F Ambient Temperature—Radial Tires

Tires for Earthmover Service (Maximum Speed of 50km/h or less)

TRA Classification	E4			E4			E4			E4		E4			E4			E4	E4
Pattern	VMTS			VMTP			VZTS			VELSL		VELS/VRLS			VRDP			VRQP	VZTP
Bridgestone Code No.	2A	1A	3A	2A	1A	3A	2A	1A	3A	1A	3A	2A	1A	3A	2A	1A	3A	2ALS	2ALS
12.00R24				[93](*)3															
14.00R24.25	62(*)3	82(*)3	93(*)3									58(*)3							
16.00R25	84											77	100						
18.00R25	116	143	167									99	123						
18.00R33	136	168	197	127	157	183						116	145	168				84	
21/90R33												116	145	168					
21.00R33												155	192						
21.00R35	182	225	262	162	201							155	192	225					
24.00R35	232	286	335	215	266							215	266	310				142	
24.00R49	273	337	394	247		358						234	288	337					
27.00R49	333	411	481	301	373	436						284	351	411	284	351	411		
31/90R49												292	362	423					
30.00R51												340	413	491					
33.00R51				405	479	586						382	465	553	382	465	553		
36.00R51												440	535	635					
37.00R57							475	579	687		786	475	579	687					
42/90R57															490	596	708		
40.00R57							529	644	765	719	911	529	644	765	529	644	765		
46/90R57												545	663	788	545	663	788		401
50/90R57												605	748	875					
53/80R63												**716	**845	**1036	667	788	964		
55/80R63															779	918	1125		
59/80R63															*	*	*		

For the TKPH (TMPH) Ratings of Radial Tires:

If the round-trip distance is less than 5km (or 3 miles), the above ratings can be increased by 12%.

If the ambient temperature is over 38°C (or 100°F), consult a Bridgestone Representative.

If the Maximum Speed exceeds 50km/h (or 30 mph), consult a Bridgestone Representative.

To obtain the TKPH (TMPH) for type 2A-LS, multiply type 2A rating by 0.8. (except VRQP and VZTP)

When haul length exceeds 16km (10 miles) one way, consult a Bridgestone Representative.

* : Consult a Bridgestone Representative

** : VRLSA

[] WS Value

■TMPH (Ton-Mile-Per-Hour) Rating Table at 100°F Ambient Temperature—Radial Tires

Wide Base Tires for Earthmover Service (Maximum Speed of 50km/h or less)

TRA Classification			High-Speed Service				E2	E2				E3			E3		E3		E4	E4
Pattern			VHS	VHB	VG	VKT	VG	VKT				VRL			VLT		VMT/VJT		VLTS	VSNT
Bridgestone Code No.							3A	2A	1A	3A		2A	1A	3A	2A	1A	2A	1A	2A	2A
TIRE SIZE	24R21	*			356															
	17.5R25	*					99	65												
	(445/80R25)	**			123												99			
	20.5R25	*						88	114											
	(525/80R25)	**	211	211		159		110	141	159					102		102	133	86	
	23.5R25	*						114	146								105	138	88	
		**						140	180						130		130	170	110	
	25/65R25	**						111												
	30/65R25	**													154				134	
	(750/65R25)																			
	26.5R25	**						176	214						151		151	201	127	113
	29.5R25	**						212	258	288					182		182	242	154	151
	29.5R29	**						226	275											159
	33.25R29	**						279	338			218	298		239	326				
	35/65R33	**																		171
	37.5R33	**							444											
	29.5R35	**											260							
	33.25R35	**						302				237	323							
	37.25R35	**						363	441	493		283	386		286	390				
	37.5R39	**							477				416							
	40.5/75R39	**										339	462	524	342	467				

For the TKPH (TMPH) Ratings of Radial Tires:

If the round-trip distance is less than 5km (or 3 miles), the above ratings can be increased by 12%.

If the ambient temperature is over 38°C (or 100°F), consult a Bridgestone Representative.

If the Maximum Speed exceeds 50km/h (or 30 mph), consult a Bridgestone Representative.

To obtain the TKPH (TMPH) for type 2A-LS, multiply type 2A rating by 0.8. (except VRQP and VZTP)

When haul length exceeds 16km (10 miles) one way, consult a Bridgestone Representative.

LOAD-AND-CARRY OPERATIONS FOR FRONT END LOADER SERVICE

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 (5mph)”. 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 **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-Mile-Per-Hour limits. Please consult Bridgestone representative for more information.

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



For Radial Tires

Tread Class	Inflation Pressure						Load Capacity* 10km/h (5mph)	Maximum Cycle Distance (m)	Allowable Average Work-shift Speed (km/h)
	Rim Diameter								
	29" and below				33" and above				
	Conventional size (95 series)		Wide base size (85, 65 series)		Wide base size (65 series)				
	★	★★	★	★★	★	★★			
L2, L3	550kpa (80psi)	825kpa (120psi)	500kpa (73psi)	650kpa (94psi)	600kpa (87psi)	750kpa (109psi)	100% of STD.load	1800	16
L4									14
L5								1500 (VSDT)	10
								1200 (VSDL)	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” .

BIAS TIRE TREAD DESIGNS

■ Earthmover Service

E3

E4



W-LUG
(WL)



R-LUG
(RL)



V-LUG2
(VL2)



R-LUG S
(RLS)



E-LUG S2
(ELS2)

■ Sand Service

E7

■ Grader Service

G1

G2



ALLIGATOR
(AL)



SAND CLIPPER-2
(SCP2)



RIB GRADER
(RG)



G-LUG
(GL)



FAST GRIP
(FG)

■ Loader & Dozer Service

G3

L2

L3



R-LUG
(RL)



FAST GRIP
(FG)



G-LUG
(GL)



R-LUG
(RL)



V-LUG2
(VL2)

L4



**R-LUG S
(RLS)**



**N-LUG
(NL)**

L5



**D-LUG
(DL)**

L5S



**SMOOTH TREAD-MS
(STMS)**

■ **Compactor Service**

C1



**ROAD ROLLER
(RR)**

C2



**ALLIGATOR2
(AL2)**

■ **Logging Service**

LS2



**FAST GRIP
(FG)**



**TIMBER GRIP S
(TGS)**

■ **Industrial Service**



**R-LUG
(RL)**



**R-LUG S
(RLS)**



**E-LUG S2
(ELS2)**



**SMOOTH TREAD-MS
(STMS)**



**YARD SERVICE-2
(YS2)**

APPLICATION OF BIAS TIRES

■ Earthmover Service



Size	Type	Ply Rating
------	------	------------

WL(E3)

8.25-20	T/T	12
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	16 18
12.00-24	T/T	20
14.00-24	T/T	20 24 28
14.00-25	T/T	24
16.00-25	T/L	24 28 32
	T/T	28
18.00-25	T/L	32
	T/T	32
21.00-25	T/L	24 32
18.00-33	T/L	32
21.00-35	T/L	36
37.25-35	T/L	36

VL2(E3)

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

Size	Type	Ply Rating
------	------	------------

RLS(E4)

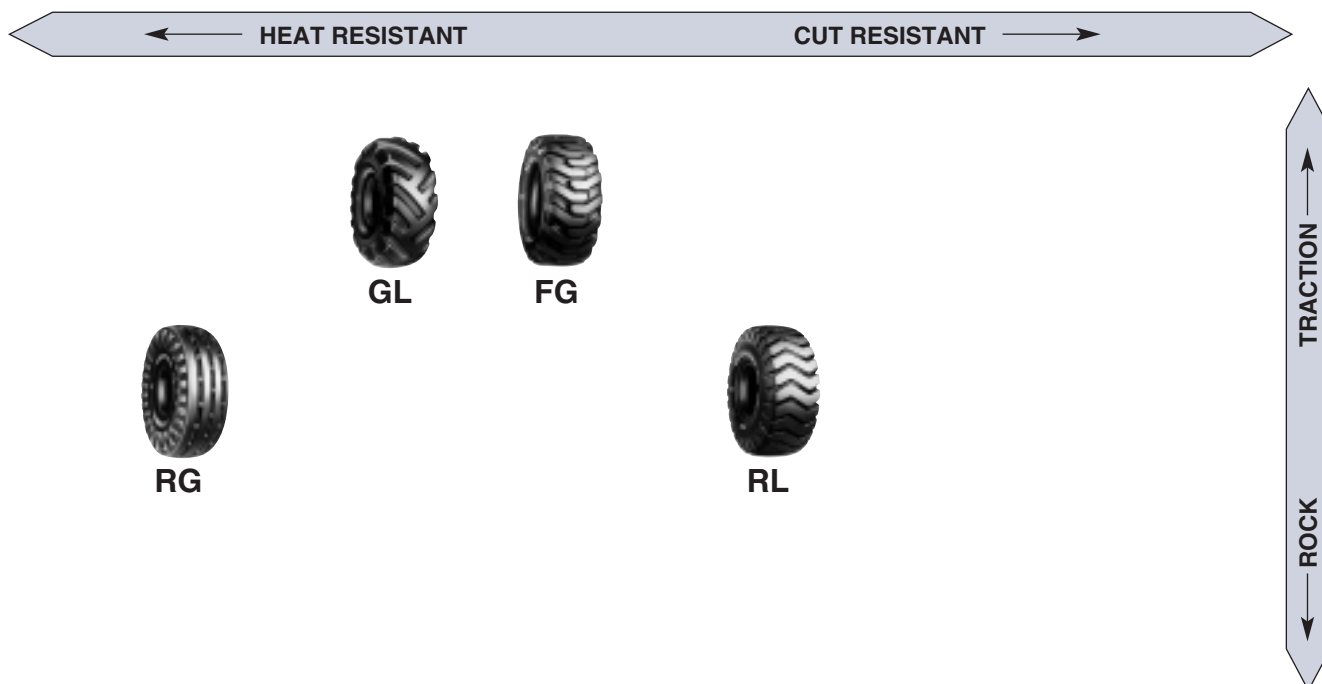
16.00-25	T/L	28
18.00-25	T/L	32
18.00-33	T/L	32 36
21.00-35	T/L	36
24.00-35	T/L	36

ELS2(E4)

18.00-25	T/L	32
	T/T	32
18.00-33	T/L	32
21.00-35	T/L	36 40

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

■ Grader Service



Size	Type	Ply Rating
------	------	------------

RG(G1)

9.00-20	T/T	10
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GL(G2)

9.00-20	T/T	12 14
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FG(G2)

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

RL(G3)

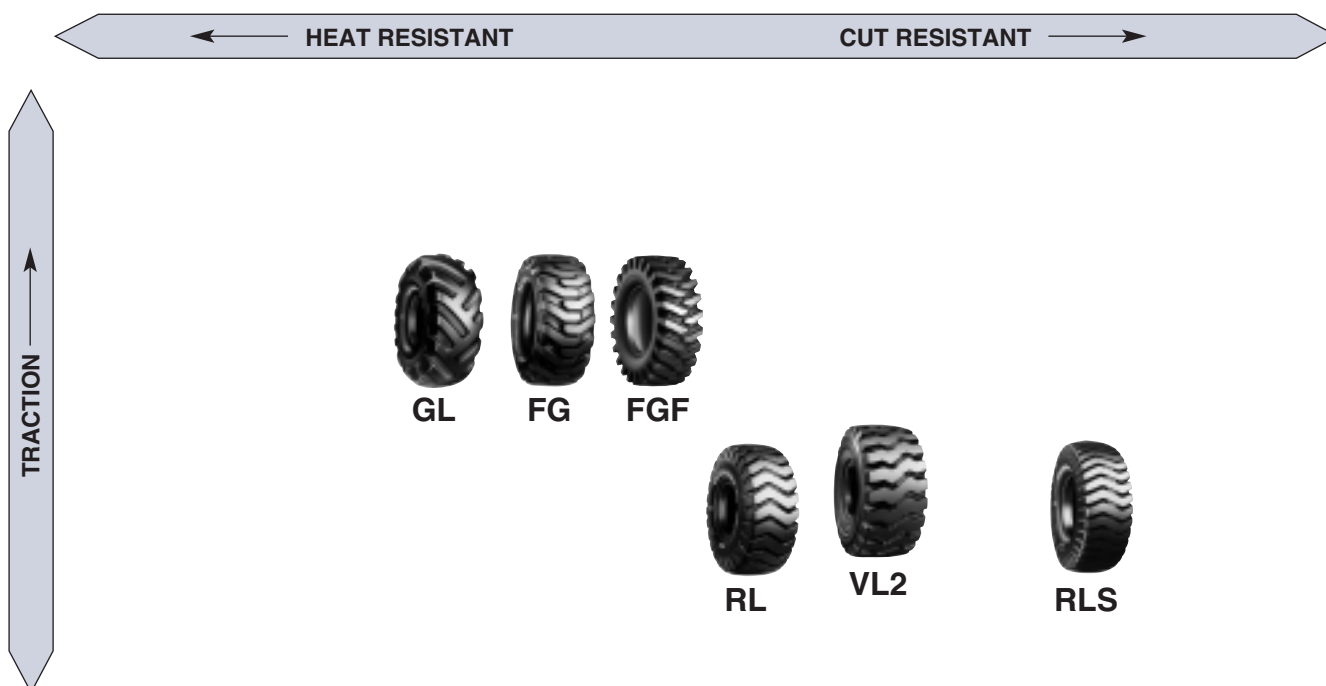
16.00-24 TG	T/T	16
18.00-25	T/L	16

T/T: Tube Type

T/L: Tubeless Type

TG: For Semi-Drop Center Rim

■ Loader & Dozer Service



Size	Type	Ply Rating
------	------	------------

FG(L2)

5.70-12	T/L	4
	T/T	4
23X8.50-12	T/T	4
5.50-15	T/T	6
27X8.50-15	T/L	4
	T/T	4
10-15	T/T	6
12/65-15	T/T	10
33x12.5-15	T/T	6 8
14.0/65-15	T/L	8
12.5/70-16	T/L	6 8
10-16.5	T/L	4 6 8
12-16.5	T/L	6
12.5/65-18	T/L	8
15.5/70-18	T/L	8
	T/T	8
10.00-20	T/T	10 12 14
11.00-20	T/T	10 12 16
42X17-20	T/T	10
17.5/65-20	T/L	10
	T/T	10
15.5/70-20	T/L	10
13.00-24 TG	T/T	12
13.00-24	T/L	12
	T/T	12

Size	Type	Ply Rating
------	------	------------

FG(L2)

14.00-24 TG	T/T	12
14.00-24	T/L	12 14
	T/T	12
16.9-24	T/L	10
	T/T	10
18.4-24	T/L	10
	T/T	10
15.5-25	T/L	12
	T/T	12
17.5-25	T/L	12 16
	T/T	12 16
20.5-25	T/L	12 16
	T/T	12 16
23.5-25	T/L	12 16
	T/T	16
16.9-28	T/T	8 10

FGF(L2)

10.00-20	T/T	14 16
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Size	Type	Ply Rating
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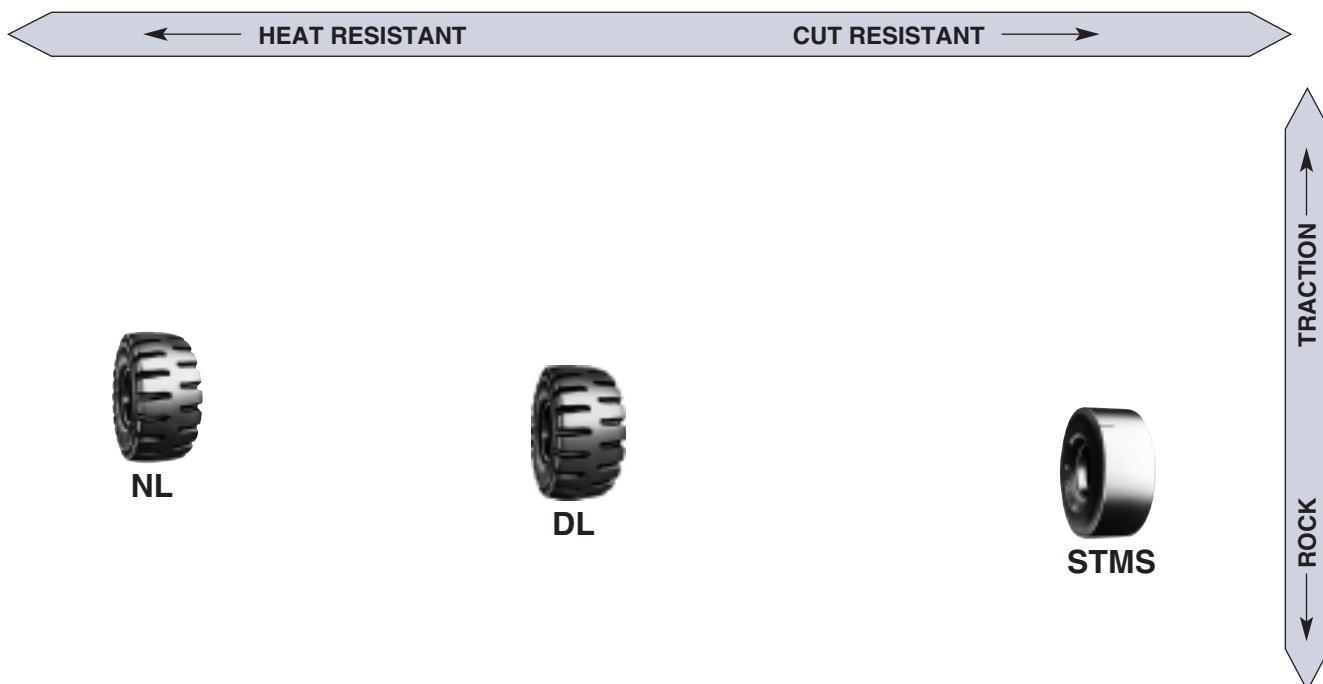
GL(L2)

9.00-20	T/T	12 14
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RL(L3)

12.00-20	T/T	20
12.00-24	T/T	16 20
13.00-24 TG	T/L	12
14.00-24 TG	T/L	12 16
	T/T	12 16
14.00-24	T/T	24
16.00-24 TG	T/L	16
	T/T	16
18.00-25	T/L	16
29.5-29	T/L	28

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



Size	Type	Ply Rating
------	------	------------

VL2(L3)

15.5-25	T/L	12
	T/T	12
17.5-25	T/L	12 16
	T/T	12 16
20.5-25	T/L	16 20 24
	T/T	12 16 20
23.5-25	T/L	12 16 20 24
	T/T	16 20 24
26.5-25	T/L	16 20 24 26 32
	T/T	20 24
29.5-25	T/L	22 28

RLS(L4)

14.00-24	T/T	20
18.00-25	T/T	32
23.5-25	T/L	16 20
26.5-25	T/L	20 26 32
29.5-25	T/L	28

Size	Type	Ply Rating
------	------	------------

NL(L4)

35/65-33	T/L	24 30
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DL(L5)

17.5-25	T/L	16
20.5-25	T/L	12 16
23.5-25	T/L	16 20
26.5-25	T/L	20 26 32
29.5-25	T/L	22 28
35/65-33	T/L	24 30 42
40/65-39	T/L	30 36 56
41.25/70-39	T/L	34 42
45/65-45	T/L	38 46 58
50/65-51	T/L	50 62
65/65-57	T/L	62
55.5/80-57	T/L	68

Size	Type	Ply Rating
------	------	------------

STMS(L5S)

12.00-24	T/T	16 20
14.00-24	T/T	20
16.00-25	T/L	24
17.5-25	T/L	16 20
18.00-25	T/L	24 28 32
	T/T	24
20.5-25	T/L	16
	T/T	28
21.00-25	T/L	32
23.5-25	T/L	20
26.5-25	T/L	26 32 36
	T/T	32
29.5-29	T/L	34

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

■ Compactor Service



RR



AL2

Size	Type	Ply Rating
------	------	------------

RR(C1)

7.50-15	T/T	12
95/65-15	T/T	6
7.50-16	T/L	6
	T/T	6
10.5/80-16	T/L	6
8.25-20	T/T	10
9.00-20	T/T	10
11.00-20	T/T	12
12.00-20	T/T	14
14/70-20	T/T	12

AL2(C2)

23.1-26	T/L	8
	T/T	8

■ Logging Service



FG



TGS

FG(LS2)

22/65-25	T/L	16
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TGS(LS2)

23.1-26	T/T	10
24.5-32	T/T	16
30.5L-32	T/T	16

■ Sand Service



AL



SCP2

AL(E7)

9.00-15	T/T	6
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SCP2(E7)

14.00-20	T/T	12 18
16.00-20	T/T	12

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

■ Industrial Service



RL

Size	Type	Ply Rating
------	------	------------

RL

10.00-20	T/T	16
11.00-20	T/T	16
12.00-20	T/T	20
12.00-24	T/T	20
14.00-24 TG	T/L	24
14.00-24	T/T	24 28
16.00-25	T/L	28 32
	T/T	28
18.00-25	T/L	36 40
21.00-25	T/L	32 40
21.00-35	T/L	40



RLS

RLS

14.00-24 TG	T/L	24 28
16.00-25	T/L	28 32
23.5-25	T/L	36



ELS2

ELS2

18.00-25	T/L	36 40
18.00-33	T/L	36
21.00-35	T/L	40



STMS

STMS

12.00-24	T/T	20
18.00-25	T/L	40



YS2

YS2

16.00-25	T/L	28 32
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T/T: Tube Type
T/L: Tubeless Type
TG: For Semi-Drop Center Rim

BIAS TIRE TECHNICAL DATA

Tire Size	TRA Code or Application	Pattern	Ply Rating	Type	Recommended Rim/ Flange Height (inch)	Approximate Inflated Dimensions								OTD	Minimum Dual Spacing	
						OD		OW		SLR		SLW				
						inch	mm	inch	mm	inch	mm	inch	mm	mm	inch	mm
5.70-12	L2	FG	4	T/L,T/T	5JA	22.4	570	6.0	153	10.4	265	6.4	163	15.5	-	-
23x8.50-12	L2	FG	4	T/T	7JA	22.4	570	8.5	215	10.4	263	8.7	221	14.5	-	-
5.50-15	L2	FG	6	T/T	4.50E	26.5	674	5.9	150	12.1	307	6.3	161	16.5	-	-
7.50-15	C1	RR	12	T/T	6.00GS	30.5	775	8.2	209	14.2	360	8.9	225	-	9.8	250
27x8.50-15	L2	FG	4	T/L,T/T	7JA	27.0	686	8.2	208	12.4	316	8.7	221	16.5	-	-
9.00-15	E7	AL	6	T/T	5.1/2K, 5.50F	33.5	851	9.7	247	14.8	377	10.9	277	8.0	-	-
95/65-15	C1	RR	6	T/T	7JA	26.4	671	9.6	243	12.4	315	9.8	250	-	10.6	270
10-15	L2	FG	6	T/T	9.00F	30.1	765	9.6	245	14.0	355	10.8	274	20.0	-	-
12/65-15	L2	FG	10	T/T	10.00F	30.6	777	12.3	312	13.9	353	12.5	318	19.0	-	-
33x12.5-15	L2	FG	6 8	T/T	10.00F	33.5	851	12.5	318	15.2	385	13.2	336	22.5	-	-
14.0/65-15	L2	FG	8	T/L	11LB	33.7	856	14.1	357	15.1	383	14.5	369	22.5	-	-
7.50-16	C1	RR	6	T/L,T/T	6.00GS(6LB)	32.0	814	9.1	230	15.0	380	9.4	238	-	9.8	250
10.5/80-16	C1	RR	6	T/L	8LB	31.8	807	10.8	275	14.9	378	11.3	287	-	11.9	302
12.5/70-16	L2	FG	6 8	T/L	10LB	33.9	860	12.6	319	15.1	384	13.2	336	21.0	-	-
10-16.5	L2	FG	4 6 8	T/L	8.25	30.4	771	10.6	268	13.7	347	10.9	278	19.5	-	-
12-16.5	L2	FG	6	T/L	9.75	32.7	831	12.4	315	14.8	377	12.7	323	20.0	-	-
12.5/65-18	L2	FG	8	T/L	W10	34.6	879	12.4	315	15.9	405	12.9	327	19.5	-	-
15.5/70-18	L2	FG	8	T/L,T/T	W13	40.8	1036	15.7	400	18.1	460	16.5	419	20.5	-	-
8.25-20	C1	RR	10	T/T	6.50T	38.3	974	9.4	240	17.6	446	9.7	247	-	11.2	284
	E3	WL	12	T/T	6.50T	38.9	988	9.4	238	17.7	450	9.9	252	18.0	11.2	284
9.00-20	G1	RG	10	T/T	7.00T	40.3	1023	10.5	267	18.6	473	11.3	288	15.0	-	-
	C1	RR	10	T/T	7.00T	39.6	1005	10.4	265	18.7	474	11.0	280	-	12.2	310
	L2,G2	GL	12 14	T/T	7.00T	40.3	1023	10.0	255	18.5	469	10.9	278	21.0	12.2	310
	E3	WL	14	T/T	7.00T	40.4	1027	10.1	257	18.3	466	11.0	280	19.5	12.2	310
10.00-20	L2	FG	10 12 14	T/T	7.50V	41.9	1064	11.1	281	18.6	472	12.3	312	24.0	-	-
	L2	FGF	14 16	T/T	7.50V	41.6	1057	10.9	276	18.8	478	11.9	302	18.0	-	-
	E3	RL	14	T/T	7.50V	42.0	1067	11.2	285	19.8	502	11.3	286	22.5	13.1	334
	Industrial Service	RL	16	T/T	7.50V	42.0	1067	11.2	285	19.8	502	11.3	286	22.5	13.1	334

Tire Size	TRA Code or Application	Pattern	Ply Rating	Type	Recommended Rim/ Flange Height (inch)	Approximate Inflated Dimensions								OTD	Minimum	
						OD		OW		SLR		SLW			inch	mm
						inch	mm	inch	mm	inch	mm	inch	mm			
11.00-20	C1	RR	12	T/T	8.00V	41.5	1054	11.6	295	18.8	478	12.6	321	-	13.9	352
	L2	FG	10 12 16	T/T	8.00V	43.3	1100	11.8	299	18.6	472	12.3	312	24.5	13.9	352
	E3	RL	14	T/T	8.00V	42.9	1090	11.7	296	19.9	506	12.2	311	24.0	13.9	352
	Industrial Service	RL	16	T/T	8.00V	42.9	1090	11.7	296	19.9	506	12.2	311	24.0	13.9	352
12.00-20	C1	RR	14	T/T	8.50V	43.7	1110	12.4	315	20.2	513	13.6	346	-	14.9	378
	E3,L3	RL	16 18 20	T/T	8.50V	44.8	1138	12.4	316	21.1	536	13.0	331	25.5	15.0	382
	Industrial Service	RL	20	T/T	8.50V	44.8	1138	12.4	316	21.1	536	13.0	331	25.5	15.1	384
14.00-20	E7	SCP2	12	T/T	7.50V	47.5	1206	13.9	354	19.8	504	15.6	395	10.5	-	-
	E7	SCP2	18	T/T	9.00V	47.5	1206	14.6	370	22.0	559	15.7	400	10.5	-	-
42x17-20	L2	FG	10	T/T	14.00TG	42.4	1077	17.0	431	19.7	500	17.3	440	25.5	-	-
16.00-20	E7	SCP2	12	T/T	9.00V	52.0	1320	16.5	419	23.3	592	16.9	428	14.5	-	-
17.5/65-20	L2	FG	10	T/L,T/T	W14L	43.6	1107	17.7	450	19.1	486	18.5	470	25.0	-	-
14/70-20	C1	RR	12	T/T	11.00TG	38.2	970	14.8	375	17.8	451	15.2	385	-	16.8	426
15.5/70-20	L2	FG	10	T/L	W13	41.9	1063	15.8	401	18.7	476	16.5	419	21.5	-	-
12.00-24	E3,L3	RL	16 20	T/T	8.5, 8.50V	48.5	1232	12.5	318	22.0	560	13.8	351	24.5	15.4	391
	L5S	STMS	16 20	T/T	8.50V	50.2	1275	12.6	321	23.9	606	13.3	339	55.0	-	-
	Industrial Service	RL	20	T/T	8.5, 8.50V	48.5	1232	12.5	318	22.0	560	13.8	351	24.5	15.4	391
	Industrial Service	STMS	20	T/T	8.50V	50.2	1275	12.6	321	23.9	606	13.3	339	55.0	15.4	391
13.00-24 TG	L2,G2	FG	12 16	T/L,T/T	8.00TG(10.00VA)	50.6	1286	13.4	340	21.8	554	14.9	378	28.0	-	-
	L3	RL	12	T/L	8.00TG	51.5	1308	13.7	349	23.0	583	15.4	391	26.5	-	-
13.00-24	L2,G2	FG	10 12	T/L,T/T	8.00TG	50.6	1284	13.3	337	21.7	550	14.9	378	28.0	-	-
14.00-24 TG	L2	FG	12	T/L	10.00VA(8.00TG)	52.6	1336	15.6	395	23.9	606	15.5	394	31.0	-	-
	G2	FG	12 14	T/L,T/T	8.00TG(10.00VA)	52.6	1336	14.8	375	23.9	606	14.7	374	31.0	-	-
	G2	FG	16	T/L,T/T	10.00VA(8.00TG)	52.6	1336	15.6	395	23.9	606	15.5	394	31.0	-	-
	L3	RL	12 16	T/L,T/T	10.00VA(8.00TG)	53.3	1355	15.2	387	24.2	614	16.1	410	28.0	17.7	450
	Industrial Service	RL	24	T/L	10.00VA	53.5	1360	15.6	395	24.2	614	16.1	410	28.0	17.7	450
	Industrial Service	RLS	24 28	T/L	10.00VA	55.4	1407	15.4	390	25.4	646	17.3	440	48.0	-	-
14.00-24	E3,L3	RL	20 24 28	T/T	10.00W	53.3	1355	15.2	387	24.7	627	15.7	410	28.0	17.7	450
	L4	RLS	20	T/T	10.00W	55.4	1407	15.4	390	25.4	646	17.3	440	48.0	17.7	450
	L5S	STMS	20	T/T	10.00W	54.1	1373	14.4	367	25.4	646	15.4	391	78.0	-	-
	Industrial Service	RL	24 28	T/T	10.00W	53.3	1355	14.4	367	24.7	627	15.7	400	28.0	17.7	450

Tire Size	TRA Code or Application	Pattern	Ply Rating	Type	Recommended Rim/ Flange Height (inch)	Approximate Inflated Dimensions								OTD	Minimum	
						OD		OW		SLR		SLW			inch	mm
						inch	mm	inch	mm	inch	mm	inch	mm			
16.00-24 TG	G2	FG	12 16	T/T	10.00VA	57.2	1453	17.2	438	25.1	638	19.7	500	32.5	-	-
	L3,G3	RL	16	T/L,T/T	10.00VA	58.2	1478	16.5	419	26.4	671	17.6	446	33.5	20.2	513
16.9-24	L2	FG	10	T/L,T/T	W15L	52.0	1320	17.6	447	23.3	591	18.2	462	30.5	-	-
18.4-24	L2	FG	10	T/L,T/T	W16L	54.5	1385	19.0	483	24.1	612	20.3	516	32.5	-	-
14.00-25	E3	RL	24	T/T	10.00/1.5	53.3	1355	15.0	380	24.7	627	15.7	400	28.0	17.7	450
15.5-25	L2	FG	12	T/L,T/T	12.00/1.3	50.6	1284	15.7	410	22.2	565	15.7	399	23.5	-	-
	L3	VL2	12	T/L,T/T	12.00/1.3	50.6	1284	15.6	410	22.4	568	17.6	448	27.0	-	-
16.00-25	E3	RL	24 28 32	T/L,T/T	11.25/2.0	58.2	1478	17.0	432	26.4	671	18.1	459	33.5	20.2	513
	E4	RLS	28	T/L	11.25/2.0	60.9	1548	17.7	450	28.4	722	18.1	460	57.0	20.2	513
	L5S	STMS	24	T/L	11.25/2.0	60.5	1537	17.7	450	28.3	720	18.1	460	76.5	-	-
	Industrial Service	RL	28 32	T/L,T/T	11.25/2.0	58.2	1478	17.5	445	26.4	671	18.1	459	33.5	20.2	513
	Industrial Service	RLS	28 32	T/L	11.25/2.0	60.9	1548	17.2	438	28.4	722	18.1	460	57.0	20.2	513
	Industrial Service	YS2	28 32	T/L	11.25/2.0	57.7	1465	16.9	430	25.9	658	18.6	472	49.2	20.2	513
17.5-25	L2,G2	FG	12 16	T/L,T/T	14.00/1.5	53.0	1345	17.7	450	23.5	596	18.6	472	27.5	-	-
	L3	VL2	12 16	T/L,T/T	14.00/1.5	53.1	1348	17.5	444	23.5	597	18.5	470	30.5	-	-
	L5	DL	16	T/L	14.00/1.5	55.5	1410	17.5	445	25.8	656	18.5	470	69.5	-	-
	L5S	STMS	16 20	T/L	14.00/1.5	54.5	1385	17.7	450	25.4	645	18.2	462	69.0	-	-
18.00-25	E3,L3,G3	RL	16 32	T/L,T/T	13.00/2.5	63.1	1602	19.8	503	28.6	727	22.5	572	37.5	23.1	587
	E4,L4	RLS	32	T/L,T/T	13.00/2.5	64.6	1642	20.3	515	29.3	745	22.8	578	57.5	23.1	587
	E4	ELS2	32	T/L,T/T	13.00/2.5	66.3	1685	20.9	530	31.3	796	21.5	545	66.5	23.1	587
	L5S	STMS	24 28 32	T/L,T/T	13.00/2.5	65.9	1675	20.5	520	30.0	762	21.7	550	84.0	-	-
	Industrial Service	RL	36 40	T/L	13.00/2.5	63.1	1602	20.0	508	28.6	727	22.5	572	36.0	23.1	587
	Industrial Service	ELS2	36 40	T/L	13.00/2.5	66.3	1685	20.3	515	31.3	796	20.9	530	66.5	23.1	587
	Industrial Service	STMS	40	T/L	13.00/2.5	65.9	1675	20.5	520	30.0	762	21.7	550	84.0	23.1	587
20.5-25	L2,G2	FG	12 16	T/L,T/T	17.00/2.0(17.00/1.7)	58.8	1493	21.0	534	25.7	652	21.7	551	29.5	-	-
	E3,L3	VL2	12 16	T/L,T/T	17.00/2.0(17.00/1.7)	58.8	1494	21.3	542	25.2	641	23.1	587	33.0	-	-
	E3,L3	VL2	20 24	T/L,T/T	17.00/2.0	58.8	1494	21.3	542	25.2	641	23.1	587	33.0	-	-
	L5	DL	12 16	T/L	17.00/2.0(17.00/1.7)	61.3	1558	21.6	548	28.1	714	22.4	570	79.5	-	-
	L5S	STMS	16	T/L	17.00/2.0(17.00/1.7)	61.3	1558	21.6	550	28.9	734	22.7	580	77.0	-	-
	L5S	STMS	28	T/T	17.00/2.0	61.3	1558	21.6	550	28.9	734	22.7	580	77.0	-	-

Tire Size	TRA Code or Application	Pattern	Ply Rating	Type	Recommended Rim/ Flange Height (inch)	Approximate Inflated Dimensions								OTD	Minimum	
						OD		OW		SLR		SLW			inch	mm
						inch	mm	inch	mm	inch	mm	inch	mm			
21.00-25	E3	RL	24 32	T/L	15.00/3.0	68.7	1745	22.8	580	30.5	775	24.4	620	41.0	-	-
	L5S	STMS	32	T/L	15.00/3.0	70.8	1798	22.6	574	32.2	819	24.1	612	90.5	-	-
	Industrial Service	RL	32 40	T/L	15.00/3.0	68.7	1745	22.0	560	30.5	775	24.4	620	41.0	26.3	668
22/65-25	LS	FG	16	T/L	17.00/2.0	54.5	1384	23.1	587	24.6	626	25.7	654	26.5	-	-
23.5-25	L2	FG	12 16	T/L,T/T	19.50/2.5	63.6	1615	24.6	625	27.8	708	26.7	678	33.5	-	-
	E3,L3	VL2	12 16 20 24	T/L,T/T	19.50/2.5	63.3	1607	24.3	618	26.9	682	27.1	688	43.0	-	-
	L4	RLS	16 20	T/L	19.50/2.5	65.3	1658	24.2	615	28.5	724	26.3	668	67.5	-	-
	L5	DL	16 20	T/L	19.50/2.5	65.9	1673	24.3	616	30.7	779	25.4	646	88.0	-	-
	L5S	STMS	20	T/L	19.50/2.5	66.1	1679	24.3	618	30.6	776	25.9	658	96.0	-	-
	Industrial Service	RLS	36	T/L	19.50/2.5	65.3	1658	24.2	615	28.5	724	26.3	668	67.5	27.4	695
26.5-25	E3,L3	VL2	16 20 24 26 32	T/L,T/T	22.00/3.0	68.4	1738	26.9	683	29.3	745	28.9	734	44.0	-	-
	L4	RLS	20 26 32	T/L	22.00/3.0	70.3	1785	27.6	700	31.5	800	29.0	736	67.0	-	-
	L5	DL	20 26 32	T/L	22.00/3.0	70.8	1798	27.3	694	32.1	815	28.6	727	97.0	-	-
	L5S	STMS	26 32 36	T/L,T/T	22.00/3.0	70.8	1798	26.8	680	32.6	827	28.3	719	95.0	-	-
29.5-25	E3,L3	VL2	22 28	T/L	25.00/3.5	72.8	1850	30.3	770	31.2	792	32.8	833	49.0	-	-
	L4	RLS	28	T/L	25.00/3.5	75.3	1912	30.9	784	32.0	813	31.7	805	74.0	-	-
	L5	DL	22 28	T/L	25.00/3.5	75.0	1904	30.2	768	34.4	873	31.7	805	105.5	-	-
23.1-26	C2	AL2	8	T/L,T/T	DW20	58.0	1472	23.4	595	25.7	654	24.3	618	19.0	-	-
	LS	TGS	10	T/T	DW20A	64.3	1632	23.4	594	29.4	747	24.9	633	51.0	-	-
16.9-28	L2	FG	8 10	T/T	W15L	54.4	1382	16.7	424	24.6	625	17.3	439	31.5	-	-
29.5-29	L3	RL	28	T/L	25.00/3.5	77.8	1977	30.5	775	35.0	889	32.5	826	48.5	-	-
	L4	RLS2	28	T/L	25.00/3.5	79.6	2023	30.0	763	34.3	872	32.4	822	75.5	-	-
	L5S	STMS	34	T/L	25.00/3.5	79.6	2023	29.5	749	36.7	931	31.2	792	103.0	-	-
24.5-32	LS	TGS	16	T/T	DW21A	72.1	1831	24.3	618	32.8	833	24.8	631	54.0	-	-
30.5L-32	LS	TGS	16	T/T	DW27A	72.7	1847	30.7	780	33.1	840	31.1	790	56.0	-	-
18.00-33	E3	RL	32	T/L	13.00/2.5	71.7	1822	19.7	501	32.8	832	22.4	569	37.5	23.1	587
	E4	RLS	32 36	T/L	13.00/2.5	73.9	1877	19.8	504	33.9	860	20.9	530	56.5	23.1	587
	E4	ELS2	32	T/L	13.00/2.5	73.2	1860	20.0	509	34.9	887	21.0	533	66.5	23.1	587
	Industrial Service	ELS2	36	T/L	13.00/2.5	73.2	1860	20.0	509	34.9	887	21.0	533	66.5	23.1	587

Tire Size	TRA Code or Application	Pattern	Ply Rating	Type	Recommended Rim/ Flange Height (inch)	Approximate Inflated Dimensions								OTD	Minimum	
						OD		OW		SLR		SLW			inch	mm
						inch	mm	inch	mm	inch	mm	inch	mm			
35/65-33	L4	NL	24 30 42	T/L	28.00/3.5	82.1	2085	35.0	890	37.5	953	36.5	928	62.5	-	-
	L5	DL	24 30 42	T/L	28.00/3.5	82.1	2085	35.0	890	38.5	979	37.2	945	97.0	-	-
21.00-35	E3	RL	36	T/L	15.00/3.0	78.7	2000	22.6	575	35.9	911	23.6	600	41.0	27.6	701
	E4	RLS	36	T/L	15.00/3.0	80.3	2040	23.1	588	37.4	950	24.0	610	59.5	27.6	701
	E4	ELS2	36 40	T/L	15.00/3.0	80.3	2040	23.3	592	37.8	961	24.3	617	67.0	27.6	701
	Industrial Service	RL	40	T/L	15.00/3.0	78.7	2000	22.6	575	36.9	937	25.5	648	41.0	27.6	701
	Industrial Service	ELS2	40	T/L	15.00/3.0	80.3	2040	23.3	592	37.6	955	24.3	617	67.0	27.6	701
24.00-35	E4	RLS	36 42	T/L	17.00/3.5	86.6	2199	25.8	655	39.3	998	27.4	696	66.0	31.3	795
37.25-35	E3	RL	36	T/L	31.00/4.0	91.7	2330	37.6	955	41.7	1060	39.4	1000	51.5	-	-
40/65-39	L5	DL	30 36 56	T/L	32.00/4.0	95.3	2420	40.2	1020	43.8	1112	42.1	1070	106.5	-	-
41.25/70-39	L5	DL	34 42	T/L	32.00/4.5	98.8	2510	41.5	1054	45.1	1145	43.5	1104	115.5	-	-
45/65-45	L4	NL	50	T/L	36.00/4.5	108.3	2750	45.6	1158	48.0	1219	49.2	1250	72.0	-	-
	L5	DL	38 46 58	T/L	36.00/4.5	107.5	2730	45.1	1146	49.6	1261	46.6	1185	116.0	-	-
50/65-51	L5	DL	50 62	T/L	40.00/4.5	120.9	3070	49.6	1260	55.6	1412	51.2	1300	127.5	-	-
65/65-57	L5	DL	62	T/L	52.00/6.0	147.0	3735	64.6	1640	65.8	1672	67.2	1706	142.5	-	-
55.5/80-57	L5	DL	68	T/L	44.00/6.0	141.3	3590	55.5	1410	63.8	1620	56.8	1443	121.5	-	-

BIAS TIRE LOAD AND INFLATION PRESSURE TABLES

■ Earthmover Service

50km/h (30mph) Maximum Speed

Table: B1

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)																
	kPa psi	275 40	300 44	325 47	350 51	375 54	400 58	425 62	450 65	475 69	500 73	525 76	550 80	575 83	600 87	625 91	650 94
12.00-20	Kg lbs	2180 4800	2300 5080	2430 5360	2500 5520	2650 5840	2725 6000	2800 6150	2900(16) 6400(16)	3000 6600	3075(18) 6800(18)	3150 6950	3250(20) 7150(20)				
12.00-24	Kg lbs	2500 5520	2575 5680	2725 6000	2800 6150	3000 6600	3075 6800	3150 6950	3250(16) 7150(16)	3350 7400	3450 7600	3550 7850	3650(20) 8050(20)				
14.00-24	Kg lbs	3350 7400	3550 7850	3750 8250	3875 8550	4000 8800	4250 9350	4375 9650	4500 9900	4625(20) 10200(20)	4750 10500	4875 10700	5000 11000	5150(24) 11400(24)			5600(28) 12300(28)
16.00-24 (16.00-24TG)	Kg lbs			4875(16) 10700(16)						6000(24) 13200(24)							
14.00-25	Kg lbs	3350 7400	3550 7850	3750 8250	3875 8550	4000 8800	4250 9350	4375 9650	4500 9900	4625(20) 10200(20)	4750 10500	4875 10700	5000 11000	5150(24) 11400(24)			
16.00-25	Kg lbs	4375 9650	4625 10200	4875 10700	5000 11000	5300 11700	5450 12000	5600 12300	5800 12800	6000(24) 13200(24)	6300 13900		6500 14300	6700(28) 14800(28)			7250(32) 16000(32)
18.00-25	Kg lbs	5600(16) 12300(16)	6000 13200	6300 13900	6500 14300	6900 15200	7100 15700	7300(24) 16100(24)	7500 16500	7750 17100	8000 17600	8250 18200	8500 18700	8750(32) 19300(32)			
21.00-25	Kg lbs	7300 16100	7750 17100	8000 17600	8500 18700	8750(24) 19300(24)	9000 19800	9500 20900	9750 21500	10000 22000	10300(32) 22700(32)						
18.00-33	Kg lbs	6500 14300	6900 15200	7300 16100	7500 16500	8000 17600	8250 18200	8500 18700	8750 19300	9000 19800	9250 20400	9750 21500	10000 22000	10300(32) 22700(32)			10900(36) 24000(36)
21.00-35	Kg lbs	8750 19300	9000 19800	9500 20900	10000 22000	10300 22700	10900 24000	11200 24700	11500 25400	11800 26000	12150(32) 26800(32)	12500 27600	12850(36) 28300(36)	13200 29100	13600 30000	14000(40) 30900(40)	
24.00-35	Kg lbs	11200 24700	11800 26000	12150 26800	12850 28300	13200 29100	14000 30900	14500 32000	15000 33100	15500(36) 34200(36)		16000 35300	16500 36400	17000(42) 37500(42)			

Note: Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

■ Earthmover Service

50km/h (30mph) Maximum Speed

Table: B2

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)													
	kPa psi	175 25	200 29	225 33	250 36	275 40	300 44	325 47	350 51	375 54	400 58	475 69	525 76	600 87
20.5-25	Kg lbs	4125 9100	4500 9900	4875 10700	5150 11400	5450(16) 12000(16)	5800 12800	6000(20) 13200(20)	6300 13900	6500 14300	6700(24) 14800(24)			
23.5-25	Kg lbs	5300 11700	5800 12800	6150(16) 13600(16)	6500 14300	6900 15200	7300(20) 16100(20)	7750 17100	8000(24) 17600(24)					
26.5-25	Kg lbs	6700 14800	7300 16100	7750 17100	8250(20) 18200(20)	8750 19300	9250(24) 20400(24)	9500(26) 20900(26)	10000(28) 22000(28)					
29.5-25	Kg lbs	8000 17600	8750 19300	9250 20400	10000(22) 22000(22)	10600 23400	10900 24000	11500(28) 25400(28)						
29.5-29	Kg lbs	8500 18700	9250 20400	10000 22000	10600 23400	11200 24700	11800 26000	12150(28) 26800(28)	12850 28300	13200 29100	14000(34) 30900(34)			
33.5-33	Kg lbs	11500 25400	12500 27600	13200 29100	14000 30900	15000 33100	16000 35300	16500 36400	17500 38600	18000 39700	18500(38) 40800(38)			
29.5-35	Kg lbs	9250 20400	10000 22000	10900 24000	11500 25400	12150 26800	12850 28300	13600(28) 30000(28)	14000 30900	14500 32000	15000(34) 33100(34)			
33.25-35	Kg lbs	11200 24700	12150 26800	12850 28300	14000 30900	14500 32000	15500 34200	16000(32) 35300(32)	17000 37500	17500 38600	18000(38) 39700(38)			
37.25-35	Kg lbs	13600 30000	14500 32000	15500 34200	16500 36400	17500(30) 38600(30)	18500 40800	19500(36) 43000(36)						
37.5-39	Kg lbs	15000 33100	16000 35300	17000 37500	18500 40800	19500 43000	20600 45400	21200 46700	22400 49400	23000 50700	24300(44) 53600(44)	26500(52) 58400(52)		

Note: Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

Earthmover Service

50km/h (30mph) Maximum Speed

Table: B3

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)																
	kPa <i>psi</i>	200 <i>29</i>	220 <i>32</i>	240 <i>35</i>	260 <i>38</i>	280 <i>41</i>	300 <i>44</i>	325 <i>47</i>	350 <i>51</i>	375 <i>54</i>	400 <i>58</i>	425 <i>62</i>	450 <i>65</i>	475 <i>69</i>	500 <i>73</i>	525 <i>76</i>	550 <i>80</i>
8.25-20	Kg <i>lbs</i>	1075 <i>2370</i>	1135 <i>2500</i>	1195 <i>2630</i>	1255 <i>2765</i>	1310 <i>2890</i>	1365 <i>3010</i>	1430 <i>3150</i>	1490 <i>3280</i>	1555 <i>3430</i>	1615 <i>3560</i>	1670 <i>3680</i>	1730 <i>3810</i>	1785 <i>3940</i>	1840 <i>4060</i>	1890(12) 4170(12)	
9.00-20	Kg <i>lbs</i>	1280 <i>2820</i>	1350 <i>2980</i>	1420 <i>3130</i>	1490 <i>3280</i>	1555 <i>3430</i>	1620 <i>3570</i>	1695 <i>3740</i>	1770 <i>3900</i>	1845 <i>4070</i>	1915 <i>4220</i>	1985 <i>4380</i>	2055 <i>4530</i>	2120 <i>4670</i>	2185 <i>4820</i>	2245 <i>4950</i>	2310(14) 5090(14)
10.00-20	Kg <i>lbs</i>	1445 <i>3190</i>	1530 <i>3370</i>	1610 <i>3550</i>	1685 <i>3710</i>	1760 <i>3880</i>	1830 <i>4030</i>	1920 <i>4230</i>	2005 <i>4420</i>	2085 <i>4600</i>	2170 <i>4780</i>	2245 <i>4950</i>	2320 <i>5110</i>	2395 <i>5280</i>	2470(14) 5450(14)		
11.00-20	Kg <i>lbs</i>	1570 <i>3460</i>	1660 <i>3660</i>	1750 <i>3860</i>	1830 <i>4030</i>	1910 <i>4210</i>	1990 <i>4390</i>	2085 <i>4600</i>	2180 <i>4810</i>	2270 <i>5000</i>	2355 <i>5190</i>	2440 <i>5380</i>	2525 <i>5570</i>	2605(14) 5740(14)	2685 <i>5920</i>	2760 <i>6080</i>	2840(16) 6260(16)

Note: Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

LOAD CAPACITIES FOR EARTHMOVER SERVICE

(1) Excess Loads

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 in the tables (B1, B2) for the tire by an amount not greater than shown in the following table:

	Maximum Excess Loads	
	Load	*Pressure
Bias Tires	15%	30%

*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%.

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

The above maximum excess loads will result in reduced tire performance and MUST BE APPROVED BY BRIDGESTONE.

The tires listed in Table B3 shall not be applied.

(2) The Variation in Load Carrying Capacity with Speed

Operating Speed (km/h)	Variation in Load Capacity (%)
<15	*
15	+12%
20	+10%
25	+8%
30	+6%
35	+4%
40	+3%
45	+2%
50 (Reference Speed for Earthmover Service)	0
>50	*

*Consult a Bridgestone Representative.

The variation in load carrying capacity with speed of earthmoving equipment tires is determined by applying the percentages shown above to the tire load capacities specified for EARTHMOVER SERVICE (Table: B1, B2) at the corresponding inflation pressure.

The tires listed in Table B3 shall not be applied.

■ Grader Service

40km/h (25mph) Maximum Speed

Table: B4

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)										
	kPa psi	125 18	150 22	175 25	200 29	225 33	250 36	275 40	300 44	325 47	350 51
13.00-24TG (13.00-24)	Kg lbs	1700 3740	1900 4180	2060 4540	2240 4940	2360 5200	2500 5520	2650 5840	2725(12) 6000(12)	2900 6400	3075(16) 6800(16)
14.00-24TG	Kg lbs	2060 4540	2300 5080	2500 5520	2650 5840	2800 6150	3075(12) 6800(12)	3250 7150	3450(14) 7600(14)	3550 7850	3650(16) 8050(16)
16.00-24TG	Kg lbs	2650 5840	3000 6600	3250 7150	3450 7600	3650(12) 8050(12)	4000 8800	4250 9350	4500(16) 9900(16)		
*17.5-25	Kg lbs	2120 4680	2360 5200	2575 5680	2900(12) 6400(12)	3000 6600	3150 6950	3350(16) 7400(16)			
18.00-25	Kg lbs	3150 6950	3550 7850	3875 8550	4125 9100	4500 9900	5000(16) 11000(16)				
*20.5-25	Kg lbs	2800 6150	3150 6950	3550(12) 7850(12)	3750 8250	4000(16) 8800(16)					
*23.5-25	Kg lbs	3650 8050	4000 8800	4375 9650	4750(16) 10500(16)						

*For slope and ditching service, inflation pressures should be increased by 100 kPa (15 psi) with no increase in load rating. For extreme conditions, consult a Bridgestone Representative for additional recommended operating requirements.

Note: Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

■ Grader Service

40km/h (25mph) Maximum Speed

Table: B5

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)															
	kPa psi	140 20	160 23	180 26	200 29	220 32	240 35	260 38	280 41	300 44	325 47	350 51	375 54	425 62	450 65	500 73
9.00-20	Kg lbs	955 2110	1035 2280	1110 2450	1180 2600	1245 2740	1310 2890	1375 3040	1435 3160	1495 3300	1565 3460	1635(10) 3600(10)		1850(12) 4060(12)		2025(14) 4480(14)
10.00-20	Kg lbs	1080 2380	1170 2580	1255 2770	1335 2940	1410 3100	1485 3280	1555 3420	1625 3580	1690 3720	1770(10) 3900(10)	1850 4080	1925(12) 4240(12)		2150(14) 4760(14)	2300(16) 5060(16)
11.00-20	Kg lbs	1175 2590	1275 2810	1365 3000	1450 3200	1535 3380	1615 3560	1690 3720	1765 3900	1840 4060	1925(10) 4240(10)	2010 4440	2095(12) 4620(12)			2500(16) 5500(16)

Note: Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

THE VARIATION IN LOAD CAPACITY WITH SPEED FOR GRADER SERVICE

Maximum Speed	% Change to Loads in Above Table with No Increase in Infl. Pressure
40 km/h (25 mph)	No Change
50 km/h (30 mph)	-9%
60 km/h (35 mph)	-18%
65 km/h (40 mph)	-27%

■ Loader & Dozer Service

10km/h (5mph) Maximum Speed

Distance Up to 76m (250ft)

Table: B6

Tire Size Designa- tion	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)																				
	kPa psi	120 17	140 20	160 23	180 26	200 29	220 32	240 35	260 38	280 41	300 44	325 47	350 51	375 54	400 58	425 62	450 65	475 69	500 73	525 76	550 80
5.70-12	Kg lbs				420 925	445 980	470 1035	495 1090	520 1145	545 1200	565 1245	590 1300	620(4) 1365(4)								
23x8.50-12	Kg lbs				550 1210	585 1290	620 1365	655 1445	685(4) 1510(4)												
5.50-15	Kg lbs				595 1310	630 1390	665 1465	700 1545	735 1620	765 1685	800 1765	835 1840	875 1930	910 2005	945 2085	980 2160	1015 2235	1045 2305	1075 2370	1110 2445	1140(6) 2515(6)
7.50-15	Kg lbs				1030 2270	1095 2415	1155 2545	1215 2680	1275(4) 2810(4)												
27x8.50-15	Kg lbs				695 1530	740 1630	780 1720	820 1805	860(4) 1895(4)												
10-15	Kg lbs				1200 2645	1275 2810	1350 2975	1420 3130	1490 3285	1555 3430	1620(6) 3570(6)	1695 3735	1770 3900	1845 4065	1915 4220	1985 4375	2050 4520	2120 4675	2185(10) 4815(10)		
12/65-15	Kg lbs										1530 3375	1645 3625	1760 3880	1875 4135	1985 4375	2095(10) 4620(10)					
33x12.5-15	Kg lbs				1510 3330	1605 3540	1695 3735	1785(6) 3935(6)	1870 4125	1950 4300	2035 4485	2130(8) 4695(8)									
14.0/65-15	Kg lbs	1175 2590	1285 2830	1390 3065	1485 3275	1580 3485	1675 3690	1760(8) 3880(8)													
12.5/70-16	Kg lbs	1050 2315	1145 2525	1240 2735	1330 2930	1410(6) 3110(6)	1495 3295	1570 3460	1645(8) 3625(8)												
10-16.5	Kg lbs				1140 2515	1215 2680	1285(4) 2830(4)	1350 2975	1415 3120	1475 3250	1540 3395	1610(6) 3550(6)	1685 3715	1750 3860	1820(8) 4010(8)						
12-16.5	Kg lbs				1470 3240	1565 3450	1655 3650	1740 3835	1820(6) 4010(6)	1905 4200	1980 4365	2075 4575	2170(8) 4785(8)								
10-18	Kg lbs				1450 3195	1540 3395	1630 3595	1715 3780	1795 3955	1875 4135	1955 4310	2045 4510	2140 4715	2225 4905	2310 5090	2395 5280	2475 5455	2555 5630	2635(10) 5810(10)		
12.5/65-18	Kg lbs	1065 2345	1165 2570	1260 2775	1350 2975	1435 3165	1515 3340	1595 3515	1670(8) 3680(8)												
15.5/60-18	Kg lbs	1525 3360	1670 3680	1805 3980	1935 4265	2060 4540	2195(8) 4840(8)														
15.5/70-18	Kg lbs	1725 3800	1885 4155	2040 4495	2185 4815	2325 5125	2455(8) 5410(8)														
13.5-20TG	Kg lbs				2300 5070	2445 5390	2585 5700	2720 5995	2850 6285	2980 6570	3100 6835	3250 7165	3395(10) 7485(10)								
15.5/70-20	Kg lbs	1835 4045	2010 4430	2175 4795	2330 5135	2475 5455	2620 5775	2755 6075	2890(10) 6370(10)												
42x17-20	Kg lbs				2740(6) 6040(6)	2915 6425	3080 6790	3240 7140	3395 7485	3545 7815	3690(10) 8135(10)										
17.5/65-20	Kg lbs	2130 4695	2330 5135	2520 5555	2700 5950	2875 6340	3040 6700	3195(10) 7045(10)													

Continue to next page.

Continued page.

Tire Size Designa- tion	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)																				
	kPa <i>psi</i>	120 17	140 20	160 23	180 26	200 29	220 32	240 35	260 38	280 41	300 44	325 47	350 51	375 54	400 58	425 62	450 65	475 69	500 73	525 76	550 80
16.9-24	Kg <i>lbs</i>	2300 5070	2520 5555	2725 6005	2920 6435	3105 6845	3280 7230	3455(10) 7615(10)													
18.4-24	Kg <i>lbs</i>	2765 6095	3025 6670	3270 7210	3505 7725	3725 8210	3940(10) 8685(10)														
19.5-24	Kg <i>lbs</i>									3150(16) 6950(16)											
22/70-24 (20-24)	Kg <i>lbs</i>										6500(12) 14300(12)										
16.9-28	Kg <i>lbs</i>	2455 5410	2690 5930	2905 6405	3115 6865	3310(8) 7295(8)	3500 7715	3685(10) 8125(10)													
16.9-30	Kg <i>lbs</i>	2535 5590	2775 6115	3000 6615	3215 7085	3420 7540	3615 7970	3805(10) 8390(10)													

Note: Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

■ Loader & Dozer Service 10km/h (5mph) Maximum Speed

Distance Up to 76m (250ft)

Table: B7

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)																		
	kPa psi	300 44	375 54	425 62	450 65	475 69	500 73	525 76	550 80	575 83	600 87	625 91	650 94	675 98	700 102	725 105	750 109	825 120	850 124
9.00-20	Kg lbs					3150 6950	3250 7150	3350 7400	3450 7600	3450 7600	3550(12) 7850(12)				3875(14) 8550(14)				
10.00-20	Kg lbs					3550(10) 7850(10)	3650 8050	3750 8250	3875(12) 8550(12)	4000 8800	4125 9100	4125 9100	4250(14) 9350(14)	4345 9580	4440 9790	4530 9990	4620(16) 10180(16)		
11.00-20	Kg lbs				3750(10) 8300(10)	3875 8550	4000 8800	4125(12) 9100(12)	4250 9350	4250 9350	4375 9650	4500 9900	4675 10300	4780 10540	4880(16) 10740(16)				
12.00-20	Kg lbs					4375 9650	4500 9900	4625 10200	4750 10500	4875 10700	5000 11000	5150 11400	5300 11700	5450 12000		5600(18) 12300(18)		6000(20) 13200(20)	
12.00-24	Kg lbs					5000 11000	5150 11400	5300 11700	5450 12000	5600 12300	5600 12300	5800 12800	6000 13200	6150(16) 13600(16)	6270 13790	6410 14100	6540 14390	6900(20) 15200(20)	
13.00-24 (13.00-24TG)	Kg lbs	4375 9625	5000 11000	5300 11700	5600(12) 12300(12)	5600 12300	5800 12800	6000 13200	6300 13600	6300 13900	6500(16) 14300(16)								
14.00-24 (14.00-24TG)	Kg lbs			6300(12) 13900(12)	6500 14300	6700 14800	6900 15200	7100 15700	7300(16) 16100(16)	7500 16500	7750 17100	8000 17600	8000 17600	8250 18200	8500(20) 18700(20)				9500(24) 21000(24)
16.00-25	Kg lbs					8750 19300	9000 19800	9250 20400	9750 21500	10000 22000	10000 22000	10300 22700	10600(24) 23400(24)						
18.00-25	Kg lbs	8750(12) 19300(12)	10000(16) 22000(16)	10900 24000	11500 25400	11500 25400	11800 26000	12150 26800	12500(24) 27600(24)	12850 28300	13200 29100	13600 30000	13600(28) 30000(28)	14000 30900	14500 32000	14500 32000	15000(32) 33100(32)		
21.00-25	Kg lbs					14500 32000	15000 33100	15500 34200	16000 35300	16500 36480	17000 37500	17000 37500	17500(32) 38600(32)						

Note: Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

■ Loader & Dozer Service 10km/h (5mph) Maximum Speed

Distance Up to 76m (250ft)

Table: B8

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)											
	kPa psi	325 47	350 51	375 54	400 58	425 62	450 65	475 69	500 73	525 76	550 80	600 87
13.00-24TG	Kg lbs	4500 9900	4750 10500	5000 11000	5150 11400	5300 11700	5600(12) 12300(12)	5600 12300	5800 12800	6000 13200	6150 13600	6500(16) 14300(16)
14.00-24TG	Kg lbs	5450 12000	5600 12300	6000 13200	6150 13600	6300(12) 13900(12)	6500 14300	6700 14800	6900 15200	7100 15700	7300(16) 16100(16)	
16.00-24TG	Kg lbs	7100(12) 15700(12)	7300 16100	7750 17100	8000 17600	8250(16) 18200(16)						

Note: Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

■ Loader & Dozer Service 10km/h (5mph) Maximum Speed

Distance Up to 76m (250ft)

Table: B9

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)																
	kPa psi	225 33	250 36	275 40	300 44	325 47	350 51	375 54	400 58	425 62	450 65	475 69	500 73	525 76	550 80	575 83	600 87
15.5-25	Kg lbs	4000 8800	4250 9350	4500 9900	4750 10500	4875 10700	5150 11400	5300 11700	5600(12) 12300(12)								
17.5-25	Kg lbs	4570 10500	5000 11000	5300 11700	5600 12300	5800 12800	6150(12) 13600(12)	6300 13900	6700 14800	6900 15200	7100 15700	7300(16) 16100(16)	7500 16500	7750 17100	8000 17600	8250(20) 18200(20)	
*20.5-25	Kg lbs	6300 13900	6700(12) 14800(12)	7100 15700	7500 16500	7750 17100	8250(16) 18200(16)	8500 18700	8750 19300	9250 20400	9500(20) 20900(20)	9750 21500	10000 22000	10300(24) 22700(24)			
23.5-25	Kg lbs	8000(12) 17600(12)	8500 18700	9000 19800	9500(16) 20900(16)	10000 22000	10600 23400	10900(20) 24000(20)	11200 24700	11800 26000	12150 26800	12500(24) 26700(24)					
**26.5-25	Kg lbs	10000 22000	10900 24000	11500(16) 25400(16)	12150 26800	12500 27600	13200(20) 29100(20)	13600 30000	14000(24) 30900(24)	14500 32000	15000(26) 33100(26)	15500(28) 34200(28)	16000 35300	16500 36480	17000(32) 37500(32)		
29.5-25	Kg lbs	12150 26800	12850 28300	13600 30000	14500 32000	15000(22) 33100(22)	16000 35300	16500 36480	17000 37500	17500(28) 38600(28)							
29.5-29	Kg lbs	12850 28300	14000 30900	14500 32000	15500 34200	16000 35300	17000 37500	17500 38600	18000 39700	19000(28) 41900(28)	19500 43000	20000 44100	20600 45400	21200(34) 46700(34)			
37.25-35	Kg lbs	20600 45400	21800 48100	23000 50700	24300 53600	25750 56800	26500 58400	28000 61500	29000 64000	30000 66000	30750(36) 68000(36)						

* 28 Ply Rating / 11500 kg @ 625 kPa (25400lbs. @ 91psi)

**36 Ply Rating / 18600 kg @ 630 kPa (41000 lbs. @ 92psi)

Note: Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

■ Loader & Dozer Service

10km/h (5mph) Maximum Speed

Distance Up to 76m (250ft)

Table: B10

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)																		
	kPa <i>psi</i>	275 40	300 44	325 47	350 51	375 54	400 58	425 62	450 65	475 69	500 73	525 76	550 80	575 83	600 87	625 91	650 94	675 98	700 102
35/65-33	Kg	16500	17000	18000	19000(24)	19500	20000	21200	21800(30)	22400	23000	23600	24300	25000	25750	26500(42)			
	lbs	36480	37500	39700	41900(24)	43000	44100	46700	48100(30)	49400	50700	52000	53600	55100	56800	58400(42)			
40/65-39	Kg	22400	23600	25000	25750	27250(30)	28000	29000	30000	30750(36)	31500	32500	34500	34500	36500	37500	38750	40000	41250(56)
	lbs	49400	52000	55100	56800	60000(30)	61500	64000	66000	68000(36)	69500	71500	76100	76000	80500	82700	85400	88200	90900(56)
41.25/70-39	Kg	27250	29000	30000	31500	32500(34)	33500	35500	36500	37500(42)									
	lbs	60000	64000	66000	69500	71500(34)	74000	78500	80500	82500(42)									
45/65-45	Kg	30000	31500	32500	34500	35500	37500	38750(38)	40000	41250	42500	43750(46)	45000	46250(50)	47250	48250	49250	50000(58)	
	lbs	66000	69500	71500	76000	78500	82500	85500(38)	88000	91000	93500	96500(46)	99000	102000(50)	104200	106400	108600	110000(58)	
50/65-51	Kg	37500	40000	42500	43750	46250	47500	48750	51500	53000	54500	56000(50)	58000	58000	60000	61500	63000(62)		
	lbs	82500	88000	93500	96500	102000	104500	107500	113500	117000	120000	123500(50)	128000	128000	132500	135500	139000(62)		
65/65-57	Kg	67000	71000	73000	77500	80000	82500	87500	90000	92500	95000(62)								
	lbs	147500	156500	161000	171000	176500	182000	193000	198500	204000	209500(62)								

Notes: 1) Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

2) When the inflation pressure of 65/65-57 exceeds 500 kPa (73 psi), consult a Bridgestone Representative.

■ Loader & Dozer Service

10km/h (5mph) Maximum Speed

Distance Up to 76m (250ft)

Table: B11

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)												
	kPa	310	340	380	410	450	480	510	550	580	620	690	720
	psi	45	50	55	60	65	70	75	80	85	90	100	105
55.5/80-57	Kg	66000	69750	74500	77750	82000	85250	88250	92250	95250(68)	99000	105500	107730(84)
	lbs	145000	156000	164000	171000	180500	187500	194000	203000	210000(68)	218000	232000	237500(84)

LOAD CAPACITIES FOR LOADER & DOZER SERVICE

(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 in the tables (B7, B8, B9, B10) for the tire by an amount not greater than shown in the following table:

	Maximum Excess Loads	
	Load	*Pressure
Bias Tires	15%	30%

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

The above maximum excess loads will result in reduced tire performance and MUST BE APPROVED BY BRIDGESTONE.

The tires listed in Table B6, B11 shall not be applied,

(2)The Variation in Load Carrying Capacity with Speed

Max Speed	% Load Change
Static	+60%
Creep	+30%
4 km/h (2-1/2 mph)	+15%
10 km/h (5 mph)	No Change
15 km/h (10 mph)	-13%
25 km/h (15 mph)	-20%

*Table: B7, B8, B9, B10
The tires listed in Tables B6, B11, shall not be applied.
Over 25 km/h (15 mph): Consult a Bridgestone Representative.

(3)For L5/L5S, On front tires for front end loaders, it is permissible to increase inflation pressure up to 100 kPa (15 psi) above that shown in the tables; B9, B10, and B11, with no increase in load. (Maximum inflation pressure should not exceed 825 kPa (120 psi).)

The tires listed in Tables; B6, B7, B8, shall not be applied.

■ Compactor Service

10km/h (5mph) Maximum Speed

Table: B12

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)																
	kPa <i>psi</i>	110 16	240 35	260 38	280 41	300 44	325 47	350 51	375 54	400 58	425 62	450 65	475 69	500 73	525 76	550 80	575 83
95/65-15	Kg <i>lbs</i>		1100 2430	1155 2550	1205 2560	1255 2770	1315(6) 2900(6)										
7.50-16	Kg <i>lbs</i>		1405 3100	1470 3240	1535 3380	1600 3530	1675 3690	1750 3860	1820 4010	1890(6) 4170(6)							
8.25-20	Kg <i>lbs</i>		1935 4270	2025 4460	2115 4660	2200 4850	2310 5090	2410 5310	2510 5330	2605 5740	2700 5950	2790 6150	2880 6350	2970 6550	3055 6750	3140 6900	3225(10) 7100(10)
23.1-26	Kg <i>lbs</i>	2850(8) 6285(8)															
10.5/80-16	Kg <i>lbs</i>		1645 3630	1725 3800	1800 3970	1875(6) 4130(6)											
12.00-16	Kg <i>lbs</i>		2830 6250	2965 6550	3095 6800	3220 7100	3375 7450	3525 7750	3670 8100	3815 8400	3950 8700	4085(10) 9000(10)					
14/70-20	Kg <i>lbs</i>		2775 6100	2905 6400	3035 6700	3160 6950	3310 7300	3460 7650	3600 7950	3740 8250	3875 8550	4005(12) 8850(12)					

Note: Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

10km/h (5mph) Maximum Speed

Table: B13

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)															
	kPa psi	510 75	550 80	580 85	620 90	650 95	685 100	720 105	755 110	790 115	825 120	860 125	895 130	930 135	965 140	1000 145
7.50-15	Kg lbs	2120 4680	2205 4860	2285 5040	2360 5200	2440 5380	2510 5540	2585 5700	2660(12) 5860(12)							
9.00-20	Kg lbs	3650(10) 8050(10)														
11.00-20	Kg lbs	4490 9900	4670(12) 10300(12)													
12.00-20	Kg lbs	5125 11300	5305 11700	5490(14) 12100(14)												
13.00-24	Kg lbs	6665 14700	6895 15200	7165 15800	7395 16300	7665 16900	7890 17400	8120 17900	8345 18400	8525 18800	8755 19300	8980 19800	9160 20200	9390 20700	9570 21100	9795(26) 21600(26)

Notes: 1) Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

2) Consult a Rim Manufacturer when inflation pressure exceeds 800kPa (116 psi).

■ Logging Service

32km/h (20mph) Maximum Speed

Table: B14

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures			
	kPa <i>psi</i>	140 20	170 25	210 30
23.1-26	Kg <i>lbs</i>	3245(10) 7160(10)		
24.5-32	Kg <i>lbs</i>	3945 8700	4495 9910	5005(16) 11030(16)
30.5L-32	Kg <i>lbs</i>	4710 10390	5370(16) 11840(16)	
23.1-34	Kg <i>lbs</i>	3675 8100		4660(14) 10270(14)

16km/h (10mph) Maximum Speed

Table: B15

Tire Size Designation	Tire Load Limits at Various Cold Inflation Pressures						
	kPa <i>psi</i>	105 15	140 20	170 25	210 30	245 30	270 40
23.1-26	Kg <i>lbs</i>	2995 6600	3540 7810	4030(10) 8890(10)			
24.5-32	Kg <i>lbs</i>	3635 8020	4305 9490	4905 10810	5455 12030		6455(16) 14230(16)
30.5L-32	Kg <i>lbs</i>	4345 9580	5140 11330	5855 12910	6520 14370	7130(16) 15720(16)	
23.1-34	Kg <i>lbs</i>	3390 7470	4005 8830	4565 10070		5560(14) 12260(14)	

10km/h Maximum Speed

Table: B16

Tire Size Designation	Tire Load Limit	
	kPa <i>psi</i>	375 54
22/65-25	Kg <i>lbs</i>	7225(16) 15930(16)

20km/h Maximum Speed

Table: B17

Tire Size Designation	Tire Load Limit	
	kPa <i>psi</i>	325 47
22/65-25	Kg <i>lbs</i>	5680(16) 12525(16)

Notes: 1) Figures in parentheses denote ply rating for which bold face loads and inflations are maximum.

2) Inflation Pressure 100kPa=1bar

Sand Service

Table: B18

Tire Size Designation	Maximum Speed	Tire Load Limits at Various Cold Inflation Pressures (100kPa=1bar)						
		bar psi	0.7 10	1.0 15	1.4 20	1.7 25	2.1 30	2.4 35
9.00-15	10km/h 5mph	Kg	785	995	1175	1340	1485	1630
		lbs	1730	2190	2590	2950	3280	3600
	50km/h 30mph	Kg	535	680	800	915	1020	1115
		lbs	1180	1500	1770	2020	2250	2460
	65km/h 40mph	Kg	455	575	680	775	860	945
		lbs	1000	1270	1500	1710	1900	2080
14.00-20	10km/h 5mph	Kg	1960	2485	2950	3355	3720	4080
		lbs	4320	5480	6500	7400	8200	9000
	50km/h 30mph	Kg	1340	1695	2015	2285	2550	2790
		lbs	2950	3740	4440	5040	5620	6150
	65km/h 40mph	Kg	1135	1435	1695	1940	2160	2360
		lbs	2500	3160	3740	4280	4760	5200
16.00-20	10km/h 5mph	Kg	2605	3310	3900	4450	4950	5450
		lbs	5740	7300	8600	9800	10900	12000
	50km/h 30mph	Kg	1780	2260	2680	3040	3380	3720
		lbs	3920	4980	5900	6700	7450	8200
	65km/h 40mph	Kg	1505	1915	2260	2580	2860	3130
		lbs	3320	4220	4980	5680	6300	6900

When tires are to be used under conditions other than those recommended above, consult a Bridgestone Representative.

Industrial Service

Table: B19

Tire Size Designation	Ply Rating	Inflation Pressures		Tire Load Limits at Various Speeds (100kPa=1bar)							
		kPa psi		0 km/h Static	Creep Creep	5 km/h 3 mph	10 km/h 5 mph	15 km/h 9 mph	20 km/h 12 mph	25 km/h 15 mph	30 km/h 19 mph
10.00-20	16	900	Kg	8640	7680	6960	6480	6240	6095	6000	5950
		131	lbs	19050	16930	15350	14290	13760	13440	13230	13120
11.00-20	16	900	Kg	9360	8320	7540	7020	6760	6605	6500	6450
		131	lbs	20640	18350	16630	15480	14910	14560	14330	14220
12.00-20	20	1000	Kg	11880	10560	9570	8910	8580	8380	8250	8185
		145	lbs	26200	23290	21100	19650	18920	18480	18190	18050
12.00-24	20	1000	Kg	12420	11040	10005	9315	8970	8765	8625	8555
		145	lbs	27390	24340	22060	20540	19780	19320	19020	18870
14.00-24 [14.00-24TG]	24	1000	Kg	17100	15200	13775	12825	12350	12065	11875	11780
		145	lbs	37710	33520	30370	28280	27230	26600	26180	25980
	28	1000	Kg	18000	16000	14500	13500	13000	12700	12500	12400
		145	lbs	39690	35280	31970	29770	28670	28000	27560	27340
16.00-25	28	900	Kg	20700	18400	16675	15525	14950	14605	14375	14260
		131	lbs	45640	40570	36770	34230	32970	32200	31700	31440
	32	1000	Kg	22500	20000	18125	16875	16250	15875	15625	15500
		145	lbs	49610	44100	39970	37210	35830	35000	34450	34180
18.00-25	36	1000	Kg	28800	25600	23200	21600	20800	20320	20000	19840
		145	lbs	63500	56450	51160	47630	45860	44810	44100	43750
	40	1000	Kg	30600	27200	24650	22950	22100	21590	21250	21080
		145	lbs	67470	59980	54350	50610	48730	47610	46860	46480
21.00-25	32	780	Kg	31500	28000	25375	23625	22750	22225	21875	21525
		113	lbs	69460	61740	55950	52090	50160	49010	48230	47460
	36	900	Kg	34265	30460	27605	25700	24750	24180	23800	23605
		131	lbs	75560	67160	60870	56670	54570	53310	52470	52050
	40	1000	Kg	36385	32345	29310	27290	26280	25670	25270	25065
		145	lbs	80230	71320	64630	60170	57950	56610	55720	55270
23.5-25	36	830	Kg	28020	24905	22570	21015	20235	19770	19455	19300
		120	lbs	61780	54910	49770	46330	44620	43590	42900	42560
18.00-33	36	1000	Kg	33300	29600	26825	24975	24050	23495	23125	22940
		145	lbs	73430	65270	59150	55070	53030	51810	50990	50580
21.00-35	40	1000	Kg	43735	38875	35230	32800	31585	30855	30370	30130
		145	lbs	96430	85720	77680	72320	69650	68040	66970	66430

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) **To obtain the maximum permissible loads on Industrial Vehicles Steering Wheels, multiply the above loads by 0.8.**
- 4) Consult a Rim Manufacturer when inflation pressure exceeds 800kPa (116 psi).
- 5) For Speeds exceeding 30 km/h (18 mph), consult a Bridgestone Representative.
- 6) For tire sizes and ply ratings other than listed above, consult a Bridgestone Representative.
- 7) For RTG (RUBBER TIERED GANTRY CRANE) operation, consult a Bridgestone Representative.

TON-KM-PER-HOUR (TKPH), TON-MILE-PER-HOUR (TMPH)

■ TKPH (Ton-Km-Per-Hour) Rating Table at 38°C Ambient Temperature—Bias Tires

Tires for Earthmover Service (Maximum Speed of 50km/h or less)

TRA Classification		E3			E4		E4	
Pattern		RL			RLS		ELS2	
Bridgestone Code No.		2A	1A	3A	2A	1A	2A	1A
TIRE SIZE	10.00-20	42						
	11.00-20	49						
	12.00-20	52						
	12.00-24	66						
	14.00-24/25	109						
	16.00-24/25	139			111			
	18.00-25	173			153		153	
							(LS 139)	
	21.00-25	212		356				
	18.00-33	190	212		161	182	161	182
	21.00-35		270		204	226	204	
	24.00-35				234	277		

Wide Base Tires for Earthmover Service (Maximum Speed of 50km/h or less)

TRA Classification		E3		
Pattern		RL/VL2		
Bridgestone Code No.		2A	1A	3A
TIRE SIZE	20.5-25	80		
	23.5-25	107		
	26.5-25	132		
	29.5-25	150		
	29.5-29	204		
	37.25-35		358	467

■TMPH (Ton-Mile-Per-Hour) Rating Table at 100°F Ambient Temperature—Bias Tires

Tires for Earthmover Service (Maximum Speed of 30 Miles per Hour or less)

TRA Classification		E3			E4		E4	
Pattern		RL			RLS		ELS2	
Bridgestone Code No.		2A	1A	3A	2A	1A	2A	1A
TIRE SIZE	10.00-20	29						
	11.00-20	34						
	12.00-20	36						
	12.00-24	45						
	14.00-24/25	75						
	16.00-24/25	95			76			
	18.00-25	118			105		105 (LS 95)	
	21.00-25	145		244				
	18.00-33	130	145		110	125	110	125
	21.00-35		185		140	155	140	
	24.00-35				160	190		

Wide Base Tires for Earthmover Service (Maximum Speed of 30 Miles per Hour or less)

TRA Classification		E3		
Pattern		RL/VL2		
Bridgestone Code No.		2A	1A	3A
TIRE SIZE	20.5-25	55		
	23.5-25	73		
	26.5-25	90		
	29.5-25	103		
	29.5-29	140		
	37.25-35		245	320

LOAD-AND-CARRY OPERATIONS FOR FRONT END LOADER SERVICE

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 (5mph)”. 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 **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 (Ton-Mile-Per-Hour) limits. Please consult Bridgestone representative for more information.

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



For Bias Tires

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

OTHER SPECIFICATIONS

O-Ring Specifications

Code No.	Applicable Size (BIAS & RADIAL)	Diameter		Inner Circumference	
		mm	inch	mm	inch
P- 24A	13.00-24 13.00R-24TG 14.00-24 14.00R-24TG 16.00-24 16.00R-24TG 16.9-24 18.4-24	6.6	0.26	1768	69.61
P- 25AX	14.00R-25 (*1) 15.5R-25 17.5R-25 20.5R-25 29.5R25 385/95R25 445/80R25	6.8	0.27	1779	70.04
P- 25B	14.00R-25 (*2) 16.00R-25 17.5R-25 18.00R-25 20.5R-25 21.00R-25 22/65-25 23.5R-25 24.00-25 25/65R25 26.5R-25 29.5R-25 30/65R25 385/95R25 445/80R25 445/95R25 505/95R25 525/80R25 650/65R25 750/65R25	9.8	0.39	1779	70.04
P- 29B	17.5R29 24.00-29 29.5R-29 33.25R29 775/65R29 875/65R29	9.8	0.39	2127	83.74
P- 33B	18.00R-33 21/90R33 21.00R33 27.00-33 35/65R-33 37.5R-33	9.8	0.39	2382	93.78
P- 35B	21.00R-35 24.00R-35 29.5R-35 33.25R-35 37.25R-35	9.8	0.39	2572	101.26
P- 39B	33.5-39 37.5R-39 40/65-39 405/75R39 41.25/70-39 45/65R39	9.8	0.39	2900	114.17
P- 45B	45/65R-45	9.8	0.39	3326	130.94
P- 49B	24.00R-49 27.00R-49 31/90R49	9.8	0.39	3611	142.17
P- 51C	30.00R-51 33.00R-51 36.00R-51 50/65-51	12.7	0.50	3694	145.43

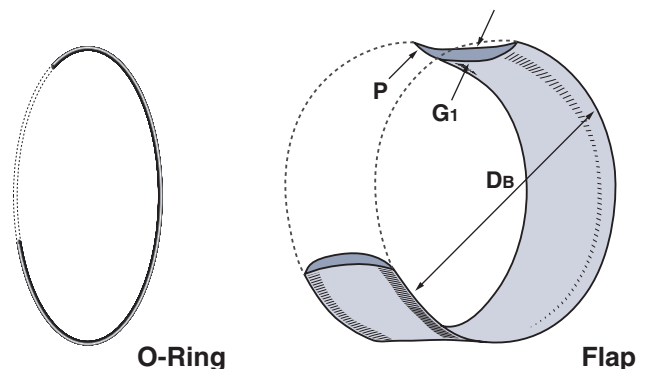
Code No.	Applicable Size (BIAS & RADIAL)	Diameter		Inner Circumference	
		mm	inch	mm	inch
P- 57C	37.00R57 40.00R-57 42/90R57 46/90R57 50/90R57 55.5/80R-57 65/65-57	12.7	0.50	4129	162.56
P- 63C	53/80R63 55/80R63 59/80R63	12.7	0.50	4580	180.31

Notes: (*1) For Rim Size 10.00-25

(*2) For Rim Size 11.25-25

Flap Specifications

Size	πD_B		G_1		P	
	mm	inch	mm	inch	mm	inch
23 X 8.50/26 X 9-12	947	37.3	6.0	0.24	194	7.6
5.50-15	1182	46.5	4.0	0.16	127	5.0
33 X 12.5-15	1203	47.4	7.0	0.27	275	10.8
10-15	1205	47.4	7.0	0.27	280	11.0
9.00-15	1178	46.4	4.0	0.16	160	6.3
10-18	1446	56.9	8.0	0.32	300	11.8
13.00/14.00-20	1628	64.1	8.0	0.32	246	9.7
13.5-20	1576	62.1	9.0	0.35	305	12.0
42 X 17-20	1576	62.1	9.0	0.35	390	15.4
16.00-20, 21	1600	63.0	9.0	0.35	293	11.5
19.5-24	1916	75.4	12.0	0.47	459	18.1
13.00/14.00-24, 25	1942	76.5	9.0	0.35	232	9.1
12.00A14.00-24, 25	1942	76.5	9.0	0.35	232	9.1
16.00-24, 25	1916	75.4	9.0	0.35	293	11.5
15.5A/18.00-24, 25	1926	75.8	6.0	0.24	340	13.4
18.00-25XXX	1916	75.4	9.0	0.35	293	11.5
21.00-24, 25	1919	75.6	12.0	0.47	395	15.6
17.5-25	1916	75.4	12.0	0.47	359	14.1
20.5-25	1916	75.4	12.0	0.47	462	18.2
23.5-25	1934	76.1	9.0	0.35	560	22.1
20.5/24.00-25	1916	75.4	12.0	0.47	459	18.1
26.5-25	2010	79.1	12.0	0.47	570	22.4
29.5/69 X 35-25	1928	75.9	12.0	0.47	700	27.6
29.5-29	2244	88.4	12.0	0.47	700	27.6
18.00-33	2553	100.5	9.0	0.35	310	12.2
27.00-33	2568	101.1	12.0	0.47	547	21.5
16.00R20	1600	63.0	9.0	0.35	293	11.5
11.00A13.00R24	1934	76.1	8.5	0.33	220	8.7
14.00/16.00R24, 25	1942	76.5	9.0	0.35	260	10.2
21.00R-25	1924	75.8	7.5	0.30	404	15.9
21.00R-33	2556	100.7	9.0	0.35	410	16.2

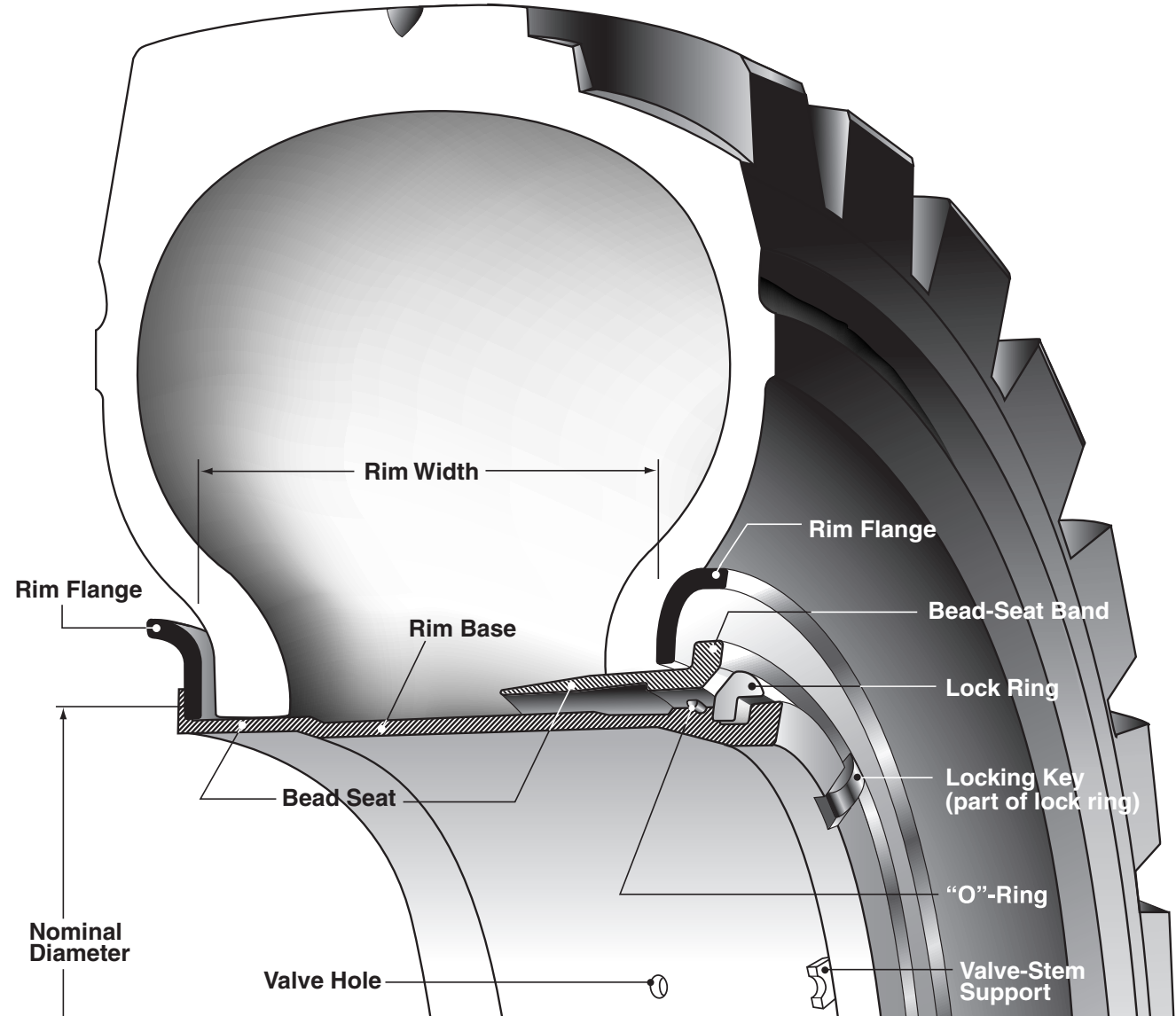


O-Ring

Flap

Rim and Valve





Rim Designation

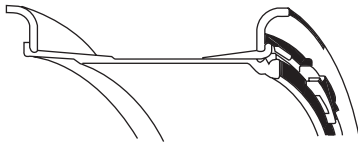



Five-piece fully-tapered bead-seat rim
with air-sealing "O"-ring gasket for earthmover

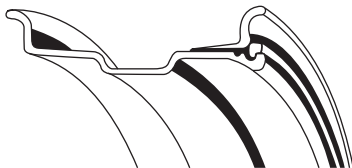
8.50V × 24


- Nominal Diameter of Rim (inches)
- Flange Type
- Rim Width (inches)

Full Tapered Bead Seat Rims (5 pieces)			5° Drop Center Rims Full Tapered Bead Seat Rims (DC)			Semi Drop Center Rims (SDC)		Semi Drop Center Rims 5° Flat Base Rims (SDC) Flat Base Rims	
(A) 			(B) 			(C) 		(D) 	
Tire size Designation	Rim Contours	Flange Height	Tire size Designation	Rim Contours	Flange Height	Tire size Designation	Rim Contours	Tire size Designation	Rim Contours
16.00 X 25 445/95R25	11.25	2.0	14.00 X 25 385/95R25	10.00	1.5	335/80R20	11 X 20	8.25 X 20NHS	6.5, 6.50T 7.0, 7.00T
18.00 X 25 505/95R25			12.00DC ^(12PR max one-star max) 13.00DC ^(12PR max one-star max)	1.3 1.41		405/70R20	13 X 20		
18.00 X 33 21.00 X 25 21.00 X 33 21.00 X 35	13.00	2.5			15.5 X 25	12.00DC ^(12PR max one-star max) 13.00DC ^(12PR max one-star max)	1.3 1.41	13.00-24TG	8.00TG (14PR Max) 9.00DC (12PR Max) 10.00VA
24.00 X 25 24.00 X 35 24.00 X 49			15.00	3.0					17.5 X 25
27.00 X 49 31/90R49	17.00	3.5			445/80R25	14.00	1.5	16.00-24TG	
30.00 X 51 33.00 X 51 36.00 X 51 37.00 X 57 40.00 X 57			20.5 X 25	4.5 5.0 5.0 6.0 6.0					17.00 17.00AL ^(16PR max one-star max)
46/90R57 50/90R57 53/80R63 55/80R63 59/80R63	525/80R25	6.0 6.0 6.5 5.0 5.0			17.00	2.0	16.00X 24TG	10.00VA 9.00DC (one-star max)	
23.5 X 25 26.5 X 25			25.00	3.5				27.00	3.5
29.5 X 25 29.5 X 29 29.5 X 35	32.00	4.5			25/65 X 25 650/65R25	19.50 19.50	2.5 2.5		
33.25 X 29 33.25 X 35			24.00	3.0				775/65R29 875/65R29	25.00 (24.00) 27.00 (28.00)
33.5 X 39 37.25 X 35	24.00	3.0			45/65R39	32.00 (36.00)	4.5		
37.5 X 33 37.5 X 39			24.00	3.0				55.5/80 X 57	44.00
25/65 X 25 650/65R25	24.00	3.0							
30/65 X 25 750/65R25			24.00	3.0					
775/65R29	25.00 (24.00)	3.5							
875/65R29			27.00 (28.00)	3.5					
35/65 X 33	28.00	3.5							
40/65 X 39			32.00	4.0					
40.5/75 X 39	32.00	4.5							
41.25/70 X 39			32.00	4.5					
45/65R39	32.00 (36.00)	4.5							
45/65 X 45			36.00	4.5					
50/65 X 51	40.00	4.5							
65/65-57			52.00	6.0					
55.5/80 X 57	44.00	6.0							

(A)


(B)


(C)


(D)


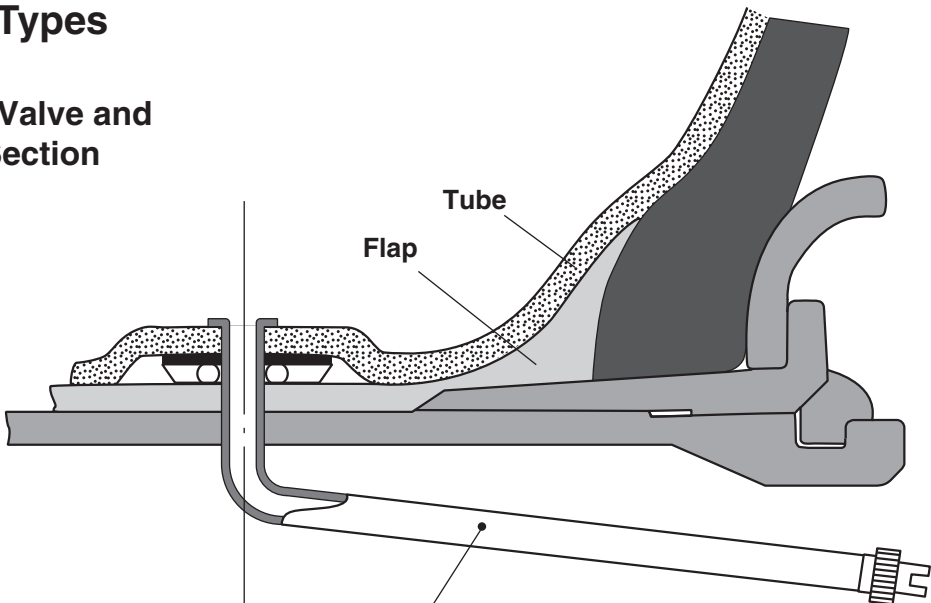
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() : option size

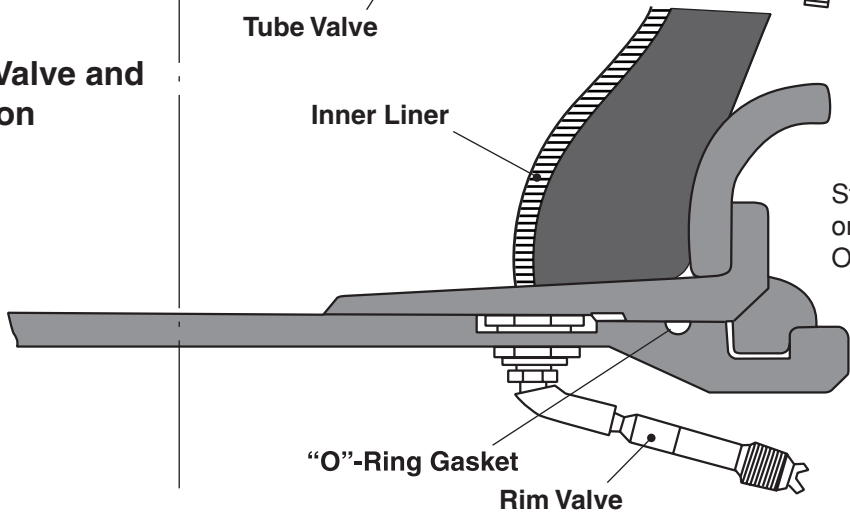
Note: Tire size designation(X) includes "R" (Radial Ply) or "—" (Bias Ply).

Valve Types

Tube Valve and Rim Section



Tubeless Valve and Rim Section



Standard valve location is on center line
Optional location is shown.

Tube Valve

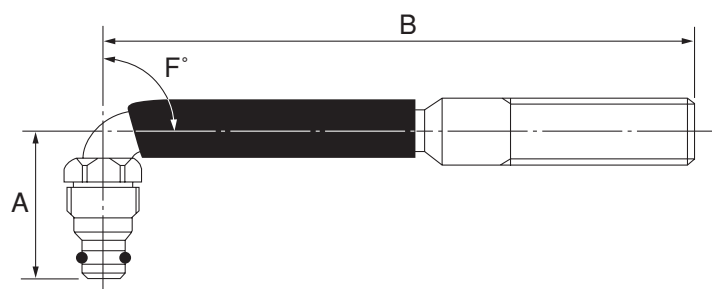


Tubeless Valve



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.

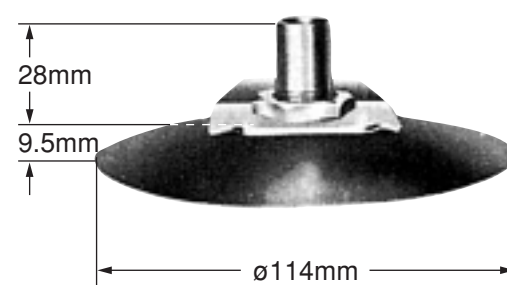
Tubeless Type Spud

SP2



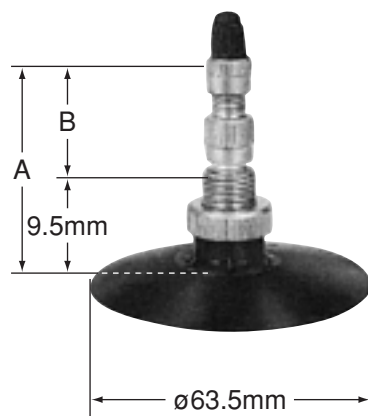
Tube Type Spud

SP4000



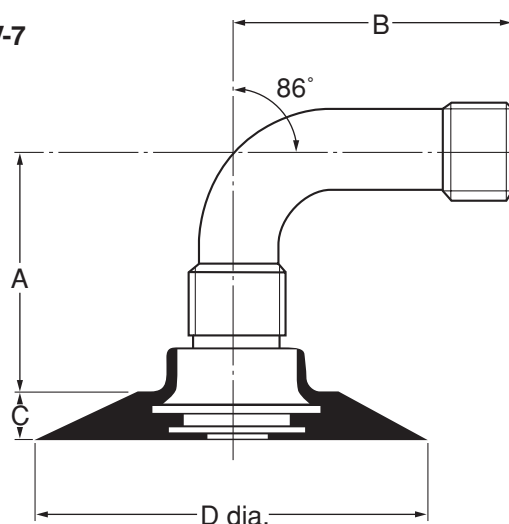
Tube Type Rubber Base Valves

TR218



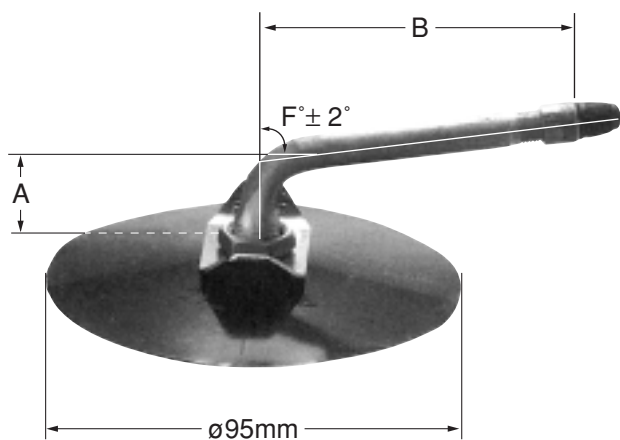
Valve No.	Dimensions (mm)	
	A	B
TR218A	20.6	11.1
TR220A	30.2	20.7

PV-7



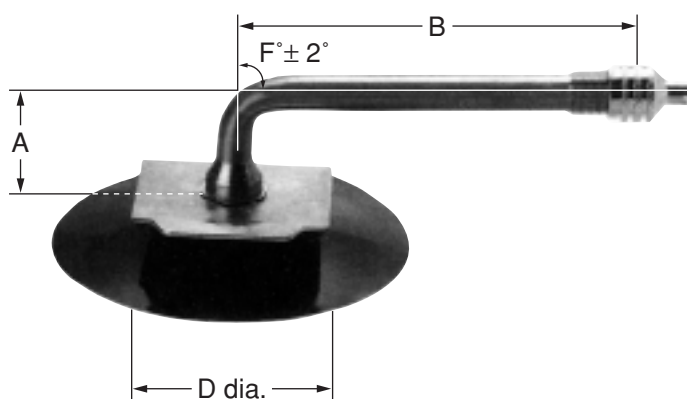
Valve No.	Dimensions (mm)			
	A	B	C	D dia.
PV-7	73	100	7	90

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°

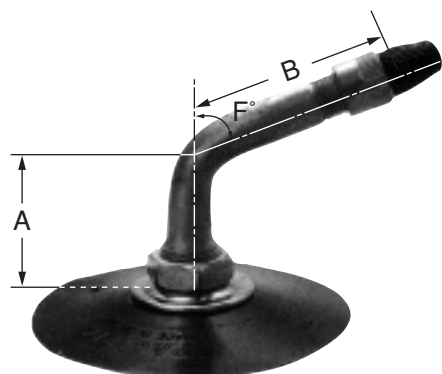
JSJ1175



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°

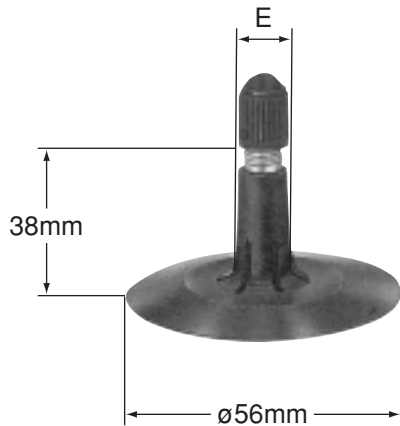
JS2



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

Tube Type Rubber Covered Valves

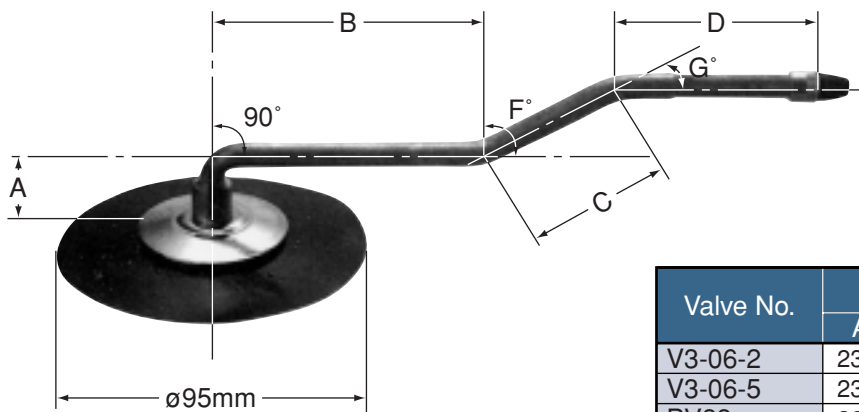
TR13



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

Unit Conversion Tables

INFLATION PRESSURE

kg/cm ²	lb/in ²	kPa	bar	kg/cm ²	lb/in ²	kPa	bar
0.1	1	10	0.1	2.6	37	250	2.5
0.2	3	20	0.2	2.7	38	260	2.6
0.3	4	30	0.3	2.8	40	270	2.7
0.4	6	40	0.4	2.9	41	280	2.8
0.5	7	50	0.5	3.0	43	290	2.9
0.6	9	60	0.6	3.1	44	300	3.0
0.7	10	70	0.7	3.2	45	310	3.1
0.8	11	80	0.8	3.3	47	320	3.2
0.9	13	90	0.9	3.4	48	330	3.3
1.0	14	100	1.0	3.5	50	340	3.4
1.1	16	110	1.1	3.6	51	350	3.5
1.2	17	120	1.2	3.7	53	360	3.6
1.3	18	130	1.3	3.8	54	370	3.7
1.4	20	140	1.4	3.9	55	380	3.8
1.5	21	150	1.5	4.0	57	390	3.9
1.6	23	160	1.6	4.1	58	400	4.0
1.7	24	170	1.7	4.2	60	410	4.1
1.8	26	180	1.8	4.3	61	420	4.2
1.9	27	190	1.9	4.4	62	430	4.3
2.0	28	200	2.0	4.5	64	440	4.4
2.1	30	210	2.1	4.6	65	450	4.5
2.2	31	220	2.2	4.7	67	460	4.6
2.3	33	230	2.3	4.8	68	470	4.7
2.4	34	240	2.4	4.9	70	480	4.8
2.5	36	250	2.5	5.0	71	490	4.9

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		

kg/cm ²	lb/in ²	kPa	bar	kg/cm ²	lb/in ²	kPa	bar
5.1	72	490	4.9	7.6	108	740	7.4
5.2	74	500	5.0	7.7	109	750	7.5
5.3	75	510	5.1	7.8	111	760	7.6
5.4	77	520	5.2	7.9	112	770	7.7
5.5	78	530	5.3	8.0	114	780	7.8
5.6	80	540	5.4	8.1	115	790	7.9
5.7	81	550	5.5	8.2	116	800	8.0
5.8	82	560	5.6	8.3	118	810	8.1
5.9	84	570	5.7	8.4	119	820	8.2
6.0	85	580	5.8	8.5	121	830	8.3
6.1	87	590	5.9	8.6	122	840	8.4
6.2	88	600	6.0	8.7	124	850	8.5
6.3	89	610	6.1	8.8	125	860	8.6
6.4	91	620	6.2	8.9	126	870	8.7
6.5	92	630	6.3	9.0	128	880	8.8
6.6	94	640	6.4	9.1	129	890	8.9
6.7	95	650	6.5	9.2	131	900	9.0
6.8	97	660	6.6	9.3	132	910	9.1
6.9	98	670	6.7	9.4	133	920	9.2
7.0	99	680	6.8	9.5	135	930	9.3
7.1	101	690	6.9	9.6	136	940	9.4
7.2	102	700	7.0	9.7	138	950	9.5
7.3	104	710	7.1	9.8	139	960	9.6
7.4	105	720	7.2	9.9	141	970	9.7
7.5	107	730	7.3	10.0	142	980	9.8

WEIGHT (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

(CENTIGRADE/FAHRENHEIT)

°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		

PRESSURE

	kg/cm ²	kPa	bar	psi
kg/cm ²	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

	meter ²	are	hectare	k.meter ²	foot ²	yard ²	acre	mile ²
meter ²	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.meter ²	-	10000.0	100.000	1	-	-	247.105	0.386098
foot ²	0.092903	0.000929	0.000009	0.000000	1	0.111111	0.000023	0.000000
yard ²	0.836130	0.008361	0.000084	0.000000	9.00000	1	0.000207	0.000000
acre	4046.87	40.4687	0.404687	0.004047	43560.2	4840.00	1	0.001562
mile ²	-	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

$$1 \text{ kgf} = 9.81 \text{ N}$$

POWER (horse power)

$$1 \text{ hp} = 550 \text{ ft} \cdot \text{lbf/s} = 745.7 \text{ W}$$

$$1 \text{ PS} = 75 \text{ m} \cdot \text{kgf/s} = 735.5 \text{ W}$$

Specific Weight (Approximately)

Material	Pounds/cu.yd	Metric Tons/m ³	Material	Pounds/cu.yd	Metric Tons/m ³
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.

DATA BOOK



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