

2017 EDITION, EARTHMOVER & INDUSTRIAL, PORT, INTERMODAL TIRES

TECHNICAL DATA



MICHELIN

CONTENT

GENERAL INFORMATION <i>(EARTHMOVER & INDUSTRIAL, PORT, INTERMODAL TIRES)</i>	4
EARTHMOVER TIRES	13
INDUSTRIAL, PORT AND INTERMODAL TIRES	109

EARTMOVER AND INDUSTRIAL, PORT, INTERMODAL TIRES



RIGID DUMP TRUCKS



LOADERS AND BULLDOZERS



GRADERS



UNDERGROUND MINE MACHINES



INDUSTRIAL, PORT AND INTERMODAL TIRES





ARTICULATED DUMP TRUCKS



SCRAPERS



COMPACTORS

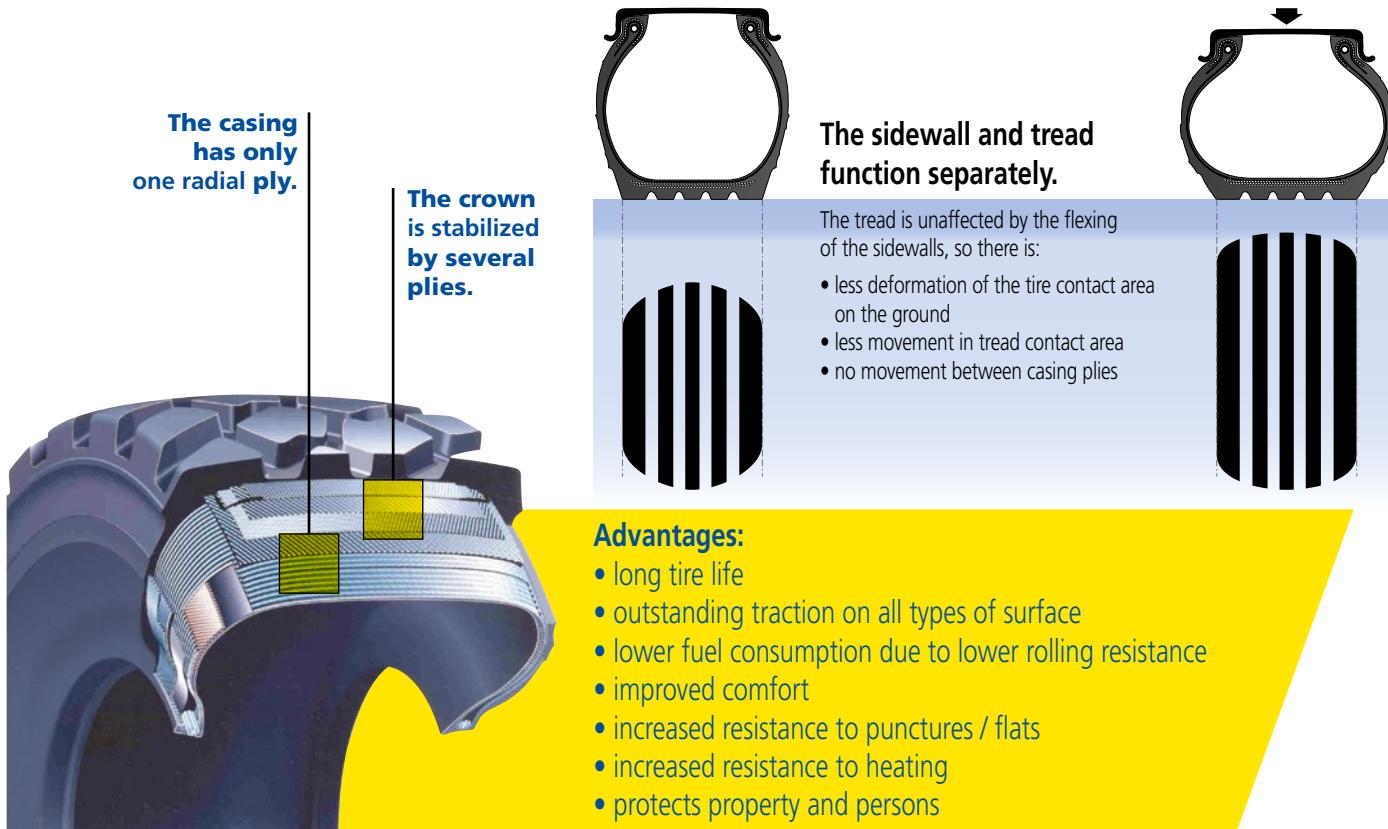


CRANES AND SPECIAL VEHICLES

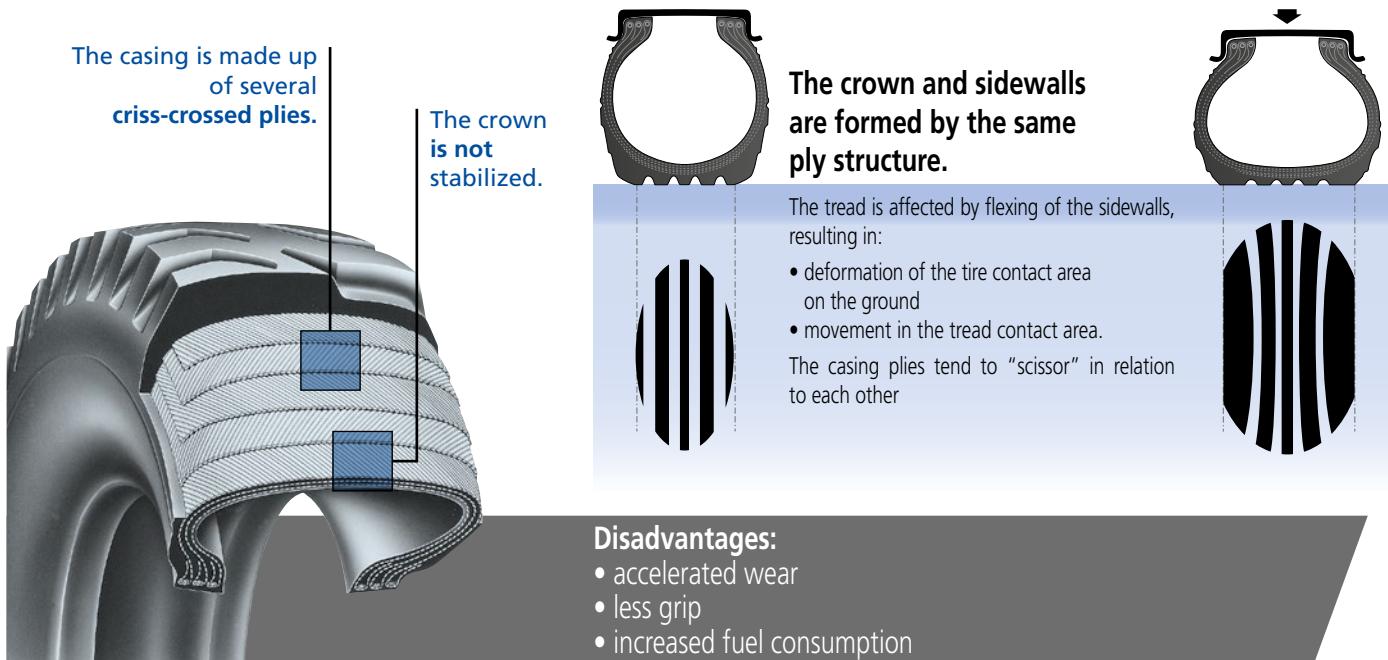


COMPARISON BETWEEN BIAS AND RADIAL TIRES

THE MICHELIN® X® RADIAL



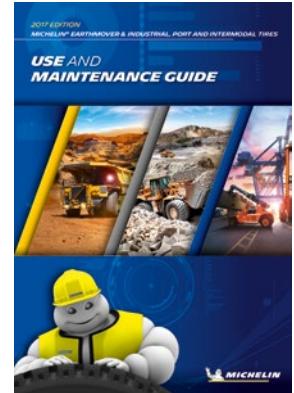
BIAS OR CROSS PLY CONSTRUCTION



ADVICES AND RECOMMENDATIONS ON THE USE OF MICHELIN® EARTHMOVER TIRES

The following information is extracted from the Use and Maintenance Guide of MICHELIN® Earthmover Tires.

For more details, visit our website
www.michelinearthmover.com
 or contact your Michelin representative.



The tire is the only point of contact between the machine and the ground.

Users must ensure that they preserve the life and performance of their tires. To do so, it is recommended that users adhere to the following safety instructions and usage recommendations. These recommendations are subject to more restrictive local provisions: legal, regulatory requirements, etc.

CHOICE OF TIRE

The choice of a tire must be compliant with legislation and with equipment recommended by the vehicle or tire manufacturer or by an official organization (size, load and speed indices, tire structures, etc.).

Additionally, it is necessary to take account the conditions in which the tire will be used in order to ensure its performance can meet the user's expectations. The type of tread pattern depends mainly on conditions of use encountered: adherence, risk of cuts, rapid wear. The optimum performance of equipment depends largely on the choice of tire.

The use of a tread pattern or a tread pattern inappropriate for the work leads to a sharp reduction in the tire's life and may affect vehicle productivity.

In the event of the original vehicle equipment being modified, it is advisable to make sure that the solution offered is compliant with the legislation in force, the machine's technical constraints, conditions of use and the manufacturer's recommendations. Please refer to regulations in force in the local country.

Before being fitted, any secondhand or used tire must be subjected to careful inspection by a specialist tire professional in order to guarantee the safety of the user and compliance with the regulations in force (Vehicle checks and maintenance).

USE OF TIRES

GENERAL RECOMMENDATIONS

Never use the tire beyond the limits of the technical specifications for which it has been approved on the machines.

Certain excessive or abnormal geometrical settings for the machines may have a negative effect on the tire's performance.

Poor use or wrong choice of tire can also contribute to premature wearing of certain mechanical parts.

DUAL MOUNTING

For technical and safety reasons, you must adhere to the recommendations of the manufacturer of the machine. We advise against the following mountings:

- dual mounting of MICHELIN® Radial tires with cross-ply (bias) tires
- dual mounting of a tire of normal tread depth with a deep-treaded tire
- dual mounting of tires of the same type which have different remaining tread depths (some legislation sets a maximum differential).

FITTING

INTRODUCTION



Correct fitting, performed in accordance with recommended operating procedures and complying with the safety rules in force, ensures excellent protection for people and materials and allows the tires' full potential to be exploited.

Poor fitting can cause damage to the tires, the vehicle and/or cause serious injury or even death.

It is therefore essential that these operations are carried out by people who have been trained and who have the appropriate equipment available, and in accordance with the procedures.

We strongly recommend that tire fitting is undertaken by a trained tire professional with proper equipment.

Tube-type tires must be fitted with an appropriate flap and inner tube.

In all cases, it is essential to refer to the technical instructions of the tire manufacturer, vehicle manufacturer and wheel manufacturer, as well as the user manual for the tire-fitting machinery or equipment.

GENERAL PRECAUTIONS

Operators must always wear appropriate protective equipment.

Operators must know recommended procedure.

Operators must ensure that the vehicle is stopped, secured (LOTO) and properly stabilized (parking brake engaged, blocks), and motor turned off.

PRECAUTIONS FOR REMOVAL

a) when removing the vehicle wheel

If the tire is twin-fitted or if the rim shows evidence of damage, **the tires must be deflated prior** to removal of the whole fitment (remove the valve core). Failure to observe this could lead to accidents with very serious consequences. Comply with the manufacturers' recommendations and instructions when removing a tire.

- b) **When the tire is removed from the vehicle**
Completely deflate the tire before any operation.

PRECAUTIONS FOR FITTING

- Ensure that the wheel and its components are in good condition
- Verify the compatibility of the tire and the wheel (wheel authorized for the tire) and the pressure capacity of the wheel
- Adhere to the positions, direction of fitting, direction of rotation and any other instructions referred to on the tire sidewall.
- In the case of multi-piece wheels, replace the o-ring seal
- In the case of tubeless mounting
 - with a rubber valve, this must be systematically replaced
 - with metallic valves, check the air tightness and continue with the replacement of valve cores or seals if necessary.
- After fitting the tire to the vehicle, a torque wrench must be used to achieve the optimal torque as specified by the machine manufacturer.

PRECAUTIONS FOR INFLATING

Tire inflation is an essential factor, not only for optimization of tire performance but also in terms of SAFETY.

It is necessary for correct machine behavior (road holding and braking) as well as maintaining the tire's stability.

Only use inflation equipment intended for this purpose and fitted with a pressure limiter.

Everyone should be in the «Safety» zone (see diagram) during tire

inflation. The red zone represents the area of greatest risk for being in the path of any potential discharge in the event of an incident.



* A minimum distance of 6 meters or 20 feet is required from the valve to the safety zone indicated in the diagram

OPERATING PRESSURE

The inflation pressure must follow the manufacturer's recommended inflation pressure.

In the absence of real data used to determine the tire pressure (weighing results, driving conditions, etc...), the operating pressure should be given only by the Michelin Representative or by a qualified professional who is trained to take into account the working conditions of the tire (ground conditions, cycle lengths, transported materials, etc.).

Underinflation or overinflation can significantly affect tire performance.

Running underinflated causes an abnormal rise in temperature of the tire and can cause the degradation of its components. This degradation is irreversible and may lead to damage of the tire, causing rapid deflation. The consequences of running with insufficient pressure are not necessarily immediate and may appear even after rectification of the tire inflation pressure.

STORAGE AND MAINTENANCE



Tires are rubber-based and are subject to natural aging. Storage does not adversely affect the life of the tire, but it must be under specific conditions, limited in time, and as far as possible inside.

- In premises that are well-ventilated, dry and temperate, protected from direct sunlight and bad weather
- Away from any chemical substances, solvents or hydrocarbons likely to interfere with the nature of the rubber
- Away from any object that could penetrate the rubber (sharp metal, wood, etc.)
- Away from any source of heat, flame, incandescent object, material that could cause sparks or electrical discharges and any ozone sources (transformers, electric motors, soldering devices, etc.).

Poor handling of an unfitted tire can cause it to be irreparably damaged.

In order to eliminate the risk of bead damage and the problems which could result, we strongly advise that:

- 1 - The tire is not lifted directly by the bead with a crane hook.
- 2 - Flat straps are used (not steel slings or chains).
- 3 - The tire is lifted under the tread and not on the beads when a forklift truck with telescopic forks is used.

Moreover, accessories must be stored in their original packaging, on surfaces that do not present any danger of cutting, tearing or perforation.

In all cases, for the handling of tires and accessories, operators must

- Be equipped with their protective clothing.
- Observe the safety policies of the company.
- Use suitable material/equipment for the job.
- Not use instruments and/or equipment that may be harmful to tires.

For more information, especially for terms and conditions of storage and height stackings of the tires, see Chapter 3 of the Use and Maintenance Guide.

MACHINE CHECKS AND MAINTENANCE

GENERAL RECOMMENDATIONS

Ensure that the machine is stationary and secured before any inspection.

Tires must be inspected regularly in order to detect any unusual wear and potential damage.

Wheel torque must be checked in accordance with the machine manufacturer's recommendations.

Any perforations, cuts or visible distortion of the tread, sidewalls or flange area must be the subject of a thorough examination of the tire by a tire professional. It is the same for any damage to the rim. In all circumstances do not put a tire that exhibits damage back into operation, such as deformed bead or visible bead wire, separations between components, visible cable cords, damage from petroleum products or corrosive particles, marbling or abrasion of the interior rubber resulting from any running at insufficient pressure. Each time the machine is inspected, check that the valve cap is in good condition. If in doubt, replace it.

CHECKING FOR WEAR



Checking for wear must always be carried out at several points on the tire.

This check can be carried out using a tire depth gauge or by looking for signs of wear on the tread (noted on the sidewall by a symbol when present).

If the legal or technical limit for wear has been reached, the tire must be removed and replaced.

A tire professional should be consulted if there is abnormal wear or a difference in wear between two tires on the same axle.

REPAIR

Not all damage can be repaired.

All repairs must be carried out by a trained and qualified tire professional.

A qualified tire professional should perform a detailed inspection of the tires before repairs can be made. A tire that has been run underinflated or flat may have suffered irreversible damage and only an exhaustive check of the interior of the tire will enable a diagnosis of whether or not the tire can be put back into use.

Therefore, removal of the tire is essential in order to assess

with certainty its actual condition and the type of repair required.



PRESSURE

Given that a tire loses pressure naturally, it is necessary to adjust it periodically.

This check will enable any abnormal loss of pressure to be detected.

This check must be carried out on all the vehicle's tires. A tire operated with insufficient pressure will undergo an abnormal rise in operating temperature, which can lead to irreversible damage of internal components and cause its complete destruction, to include rapid deflation of the tire. The consequences of running with insufficient inflation pressure are not necessarily immediate and may appear even after rectification.

Excessive pressure can cause rapid and irregular wear, resulting in increased susceptibility to impacts (tread damage, rupture of the casing, etc.).

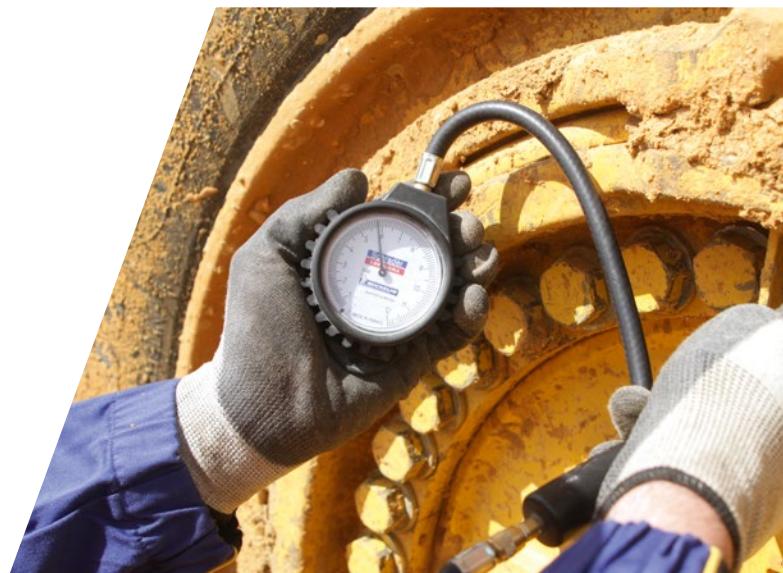
It is recommended that tire pressures are checked when tires are cold. If they are checked after running, the tires are hot and pressure will not be accurate.

If pressure is checked when hot, the pressure should be readjusted according to the manufacturer's recommendations (consult your Michelin representative). Given that pressure increases with temperature, a hot tire must never be deflated.

Always respect the equality of pressure between dual tires.

Inflation with nitrogen is not an exemption from the need to check tire pressure regularly.

In all circumstances, adhere to the pressures recommended by the machine or tire manufacturers.



PRODUCT LIFE

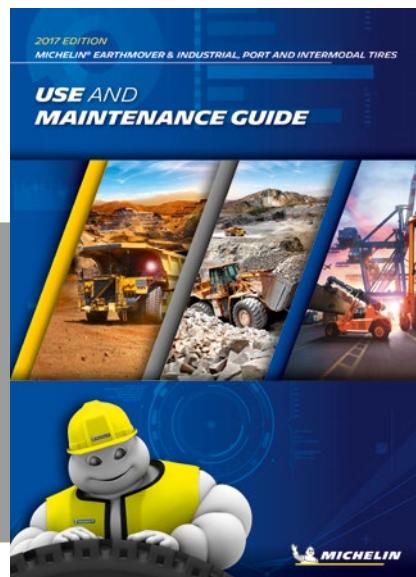
Tires are made from different types of materials and rubber-based components, whose properties are essential to the proper running of the tire itself. These properties evolve over time.

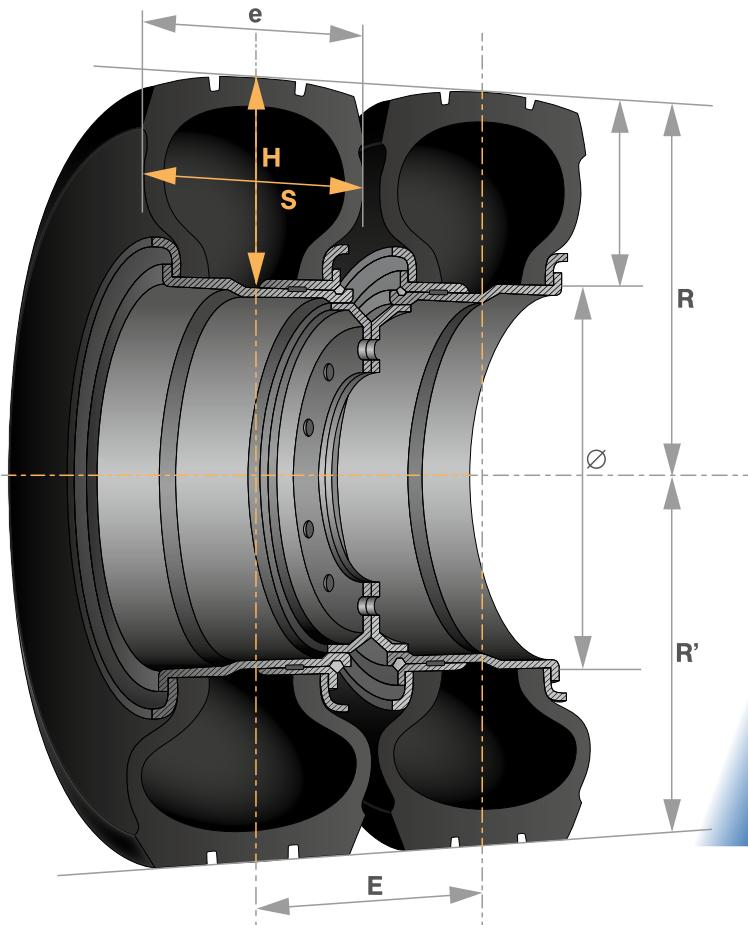
For each tire, this evolution depends on many factors, such as climate, storage conditions (temperature, humidity, position, etc.), and conditions of use (load, speed, inflation pressure, road damage, etc.) to which the tire is subjected during its working life.

These aging factors vary so much that it is impossible to predict the life of a tire with any accuracy. This is why, in addition to regular user checks, it is recommended to have the tires regularly checked by a qualified tire professional, who will determine whether the tire is fit to continue in operation.

Michelin may in no way be held responsible for damage that may occur as a result of use contrary to its instructions.

The preceding information
is extracted from the
USE AND MAINTENANCE GUIDE
OF MICHELIN® EARTHMOVER TIRES.
For more details, visit our website
www.michelinearthmover.com
or contact your Michelin representative.



EXPLANATION OF THE DIFFERENT MEASUREMENTS

e	maximum overall section width section width on measuring rim (this rim is indicated in bold).
D	external tire diameter ($R \times 2$).
Ø	nominal bead seat diameter (rim diameter).
S	standard section width.
H	minimum dual spacing (on measuring rim).
R	standard section height.
R'	free radius ($2R = D$).
R'	static loaded radius*.
RC	rolling circumference*
Tread depth	tire tread depth in mm (rubber depth that can be used without risking damage to plies).
Cap.	Interior capacity of the tire (to calculate the nitrogen quantity when inflated with nitrogen, or the liquid quantity when filled). This information is not required when inflated with air.

* determined by the reference conditions.

The dimensional data given in tabular form in this publication (as indicated above) conforms to those of the European Standard (E.T.R.T.O.). They are given for information only and may change.

READING GUIDE FOR LOAD, PRESSURE AND USE TABLES**READING GUIDE FOR PRESSURE, LOAD AND USE TABLES**

Remember: the correct pressure for the tire (on a site and for a job) depends on the working conditions and type of use.

In order to obtain optimum performance from tire, it is advised that:

- the machine is weighed under working loads,
- the maximum distance allowed per hour for the tire is not exceeded.

The shaded box of pressure, load and use tables is the value defined by the industry standards. Up to this limit, the tire works in an optimal zone leading to a better balance of performance.

The use of Michelin® earthmover tires outside the specification of pressure, load and use tables must have a prior technical validation given by your Michelin® representative.

CONTENT

TECHNICAL DATA EARTHMOVER TIRES

	CLASSIFICATION OF MICHELIN® TIRES	15
	TIRE MARKINGS	18
	MICHELIN® EARTHMOVER TIRE COMPOUNDS	19
	LOAD INDEX - SPEED SYMBOL	20
	EQUIVALENCE OF RESISTANCE INDEX	21
	TECHNOLOGY OF MICHELIN® RADIAL CASING TIRES	22
	ADVICE AND RECOMMENDATIONS ON THE USE OF MICHELIN® EARTHMOVER TIRES	24
	CHARACTERISTICS OF MICHELIN® EARTHMOVER TIRES	26
	COMPONENTS USED WITH MICHELIN® EARTHMOVER TIRES	83
	HELP WITH THE USE OF EARTHMOVER TIRES	96
	TIRES FOR TRANSPORT MACHINES: TKPH (T MPH) METHOD	102
	MICHELIN® EARTHMOVER TIRES FOR TRANSPORT MACHINES K COEFFICIENT CALCULATED AND USED FOR THE TKPH (T MPH) METHOD	105
	MICHELIN® EARTHMOVER TIRES FOR SPECIFIC USES	106
	APPROXIMATE LOOSE MATERIAL DENSITIES UNITS OF MEASURE AND CONVERSION TABLES	143

IDENTIFICATION OF EARTHMOVER TIRES

MICHELIN® tires are designed for a specific use as specified in this catalog.

Any other use constitutes an abnormal use.

However, in some cases, Michelin may issue a waiver which will specify the conditions and the permitted operational limits for a specific application.

Michelin disclaims any responsibility for any abnormal use of its tires or absence of any express written permission (derogation).

Unless otherwise specified, MICHELIN® off-the-road tires comply with internationally accepted standards that are established by TRA (Tire and Rim Association),

ETRTO (European Tire and Rim Technical Organisation),

JATMA (Japan Automobile Tire Manufacturers Association),

and/or ISO (International Standards Organisation).

Among other things, the standards encompass load capacity, inflation pressure, overall diameter, overall width, and related valves and rims.

Some differences may exist between these standards. In such case, Michelin refers to the most appropriate.

PLEASE NOTE

Tire load and pressure tables (pages 26 to 84)

These tables are classified according to the various applications of earthmoving machines.

In the load and pressure tables, the shaded boxes indicate the normalized values.

These values reflect the optimal use, the best balance of performances.

These values are given for information purpose only and may not be used for legal or statutory actions.

2017 edition N° 32

The most current version is available on www.michelinearthmover.com

CONTENT

CLASSIFICATION OF MICHELIN® TIRES	15
ACCORDING TO THEIR ASPECT RATIO	16
ACCORDING TO THE STANDARDISED USAGE (ISO-ETRTO-TRA-JATMA*)	17
ACCORDING TO THEIR TREAD DEPTHS	17
SUMMARY	14
TIRE MARKINGS	18
MICHELIN® EARTMOVER TIRE COMPOUNDS	19
LOAD INDEX - SPEED SYMBOL	20
EQUIVALENCE OF RESISTANCE INDEX (PR: PLY RATING)	21
TECHNOLOGY OF MICHELIN® RADIAL CASING TIRES	22
ADVICE AND RECOMMENDATIONS ON THE USE OF MICHELIN® EARTMOVER TIRES	24
USE OF TIRES.....	24
EXPLANATION OF THE DIFFERENT USES	24
CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES	26
COMPONENTS USED WITH MICHELIN® EARTMOVER TIRES	84
APPROVED RIMS FOR MICHELIN® EARTMOVER TIRES	84
TUBES AND FLAPS FOR MICHELIN® EARTMOVER TIRES	88
SEALS FOR MICHELIN® EARTMOVER TIRES	90
VALVES AND ASSOCIATED ACCESSORIES FOR MICHELIN® EARTMOVER TIRES	91
HELP WITH THE USE OF EARTMOVER TIRES	96
MICHELIN® EARTMOVER TIRES FOR TRANSPORT MACHINES.....	96
MICHELIN® EARTMOVER TIRES FOR MOBILE CRANES, SPECIAL APPLICATIONS, RAPID INTERVENTION VEHICLES (CIVIL AND MILITARY)	97
MICHELIN® EARTMOVER TIRES USED IN DESERT AND SIMILAR CONDITIONS	97
MICHELIN® EARTMOVER TIRES FOR WORKING MACHINES SURFACE LOADERS IN REHANDLING, PRODUCTION, EXTRACTION AND FACE WORK	98
MICHELIN® EARTMOVER TIRES FOR WORKING MACHINES: DOZERS	99
MICHELIN® EARTMOVER TIRES FOR WORKING MACHINES: GRADERS.....	99
MICHELIN® EARTMOVER TIRES FOR COMPACTORS	100
MICHELIN® EARTMOVER TIRES FOR ROADBUILDING MACHINERY (PLANERS, STABILIZER MIXERS, PAVERS)	100
MICHELIN® EARTMOVER TIRES FOR UNDERGROUND MACHINES.....	101
TIRES FOR TRANSPORT MACHINES: TKPH (TMPH) METHOD	102
FACTORS TO BE CONSIDERED WHEN SELECTING THE MOST APPROPRIATE TIRE	102
MICHELIN® EARTMOVER TIRES FOR TRANSPORT MACHINES	
K COEFFICIENT CALCULATED AND USED FOR THE TKPH (TMPH) METHOD	105
MICHELIN® EARTMOVER TIRES FOR SPECIFIC USES	106
APPROXIMATE LOOSE MATERIAL DENSITIES	
UNITS OF MEASURE AND CONVERSION TABLES	143

CLASSIFICATION OF MICHELIN® TIRES

ACCORDING TO THEIR ASPECT RATIO

The wide diversity of earthmover machines and their uses requires the development of numerous ranges of tires.

Earthmover tires differ from those mounted on cars or commercial vehicles by:

- Their size and weight
- Their tread depths which are proportionally greater
- More reinforcements to deal with the harsher conditions of use

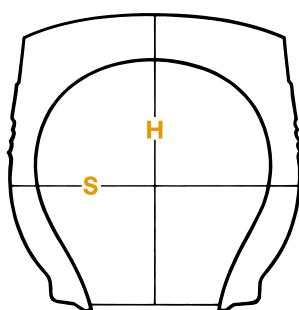
There are several families of earthmover tires, characterized by their aspect ratio H/S (ratio in % between the height of the sidewall H and the section width of the tire S).

H = standard section height (see page 12) - **S = standard section width** (see page 12)

• **100 SERIES
(STANDARD)**

The H/S ratio is approximately equal to 1.

$$\begin{array}{c} \mathbf{1} \\ \hline \mathbf{\frac{H}{S} = 100 \%} \end{array}$$



The section width is expressed in inches with two decimal places.

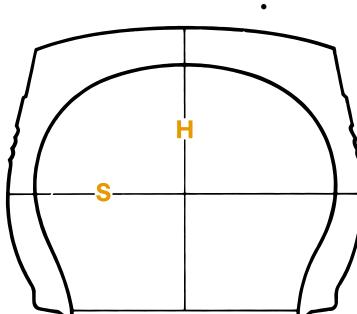
Examples: 18.00 R 33

Tires for rigid trucks, handling equipment, etc.
The aspect ratio is not indicated in the size designation.

• **80 SERIES**

The H/S ratio is approximately equal to 0.80.

$$\begin{array}{c} \mathbf{0.80} \\ \hline \mathbf{\frac{H}{S} = 80 \%} \end{array}$$



The section width is expressed in inches and fractions of an inch.

Examples: 8.25 R 15, 20.5 R 25

The aspect ratio is not indicated in the size designation.
Or the section width is expressed in inches followed by the number 80

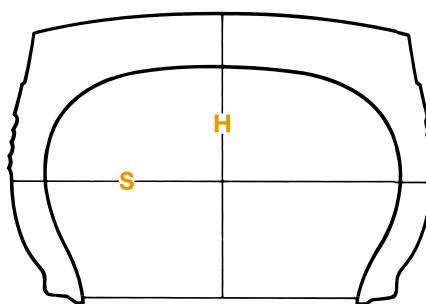
Example: 59/80 R 63

Tires for rigid trucks, articulated dumpers, loaders, handling equipment, etc.

• **65 SERIES**

The H/S ratio is approximately equal to 0.65.

$$\begin{array}{c} \mathbf{0.65} \\ \hline \mathbf{\frac{H}{S} = 65 \%} \end{array}$$



The section width is expressed in inches or in millimeters, followed by the number 65.

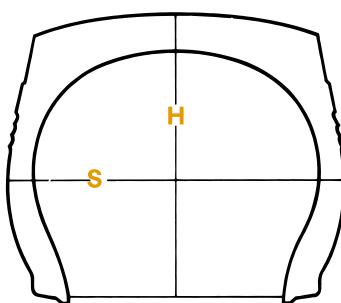
Examples: 35/65 R 33, 750/65 R 25

Tires for large loaders, articulated trucks, etc.

• **90 SERIES**

The H/S ratio is approximately equal to 0.90.

$$\begin{array}{c} \mathbf{0.90} \\ \hline \mathbf{\frac{H}{S} = 90 \%} \end{array}$$



The section width is expressed in inches followed by the number 90.

Example: 50/90 R 57

Tires for rigid trucks

Other series of tires are also available: 95 series, 75 series, etc.

ACCORDING TO THE STANDARDIZED USAGE (ISO-ETRTO-TRA-JATMA*)

The four main categories of earthmover tire are defined by their use. The category to which it belongs is indicated on the sidewall of the tire.

This is an international classification:

- | | |
|--|--|
| C
G
E
L | Compactor
Grader
Earthmoving
Loader and bulldozer |
|--|--|

* **ISO**: International Standard Organisation
ETRTO: European Tire and Rim Organisation
TRA: Tire and Rim Association
JATMA: Japan Automobile Tire Manufacturers Association

Within these categories, there are different tread depths and special tread patterns, for very specific uses. These are identified by a number.

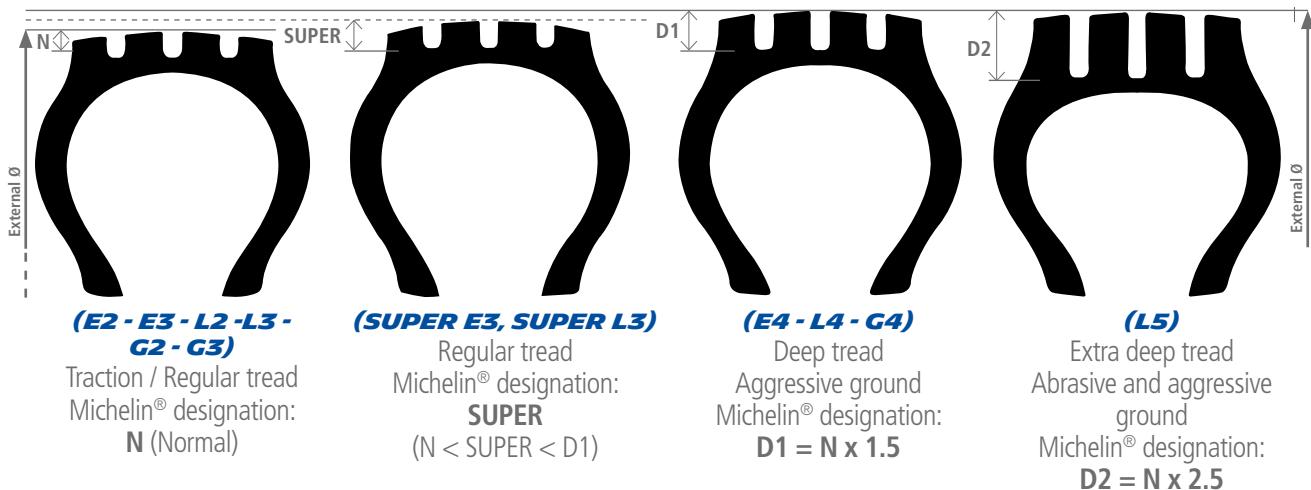
They must be chosen according to the type of ground and the tire's condition of use.

The letter "S" indicates a smooth tread; example: L-5S.

- | | |
|---|---|
|  | 1 Ribbed (normal tread depth)
2 Traction (normal tread depth)
3 Normal (normal tread depth)
4 Deep (deep tread)
7 Flotation |
|---|---|

ACCORDING TO THEIR TREAD DEPTHS

The tread depth 'SUPER, D1, D2' is sometimes indicated on the sidewall tire.



SUMMARY

CODE	TREAD PATTERN	APPLICATION
C1	SMOOTH	compactor
E1	RIBBED	
E2	TRACTION	
E3	ROCK	Transport
E4	ROCK (deep tread)	
E7	FLOTATION	
G1	RIBBED	
G2	TRACTION	
G3	ROCK	
G4	ROCK (deep tread)	Grader
G5	ROCK (very-deep tread)	
L2	TRACTION	
L3	ROCK	
L4	ROCK (deep tread)	
L5	ROCK (very-deep tread)	
L35	SMOOTH	
L45	SMOOTH (deep tread)	Loader
L55	SMOOTH (very-deep tread)	Bulldozer

In addition, Michelin® provides complementary identification to some earthmover tires:
 T = Traction, R = Rock, V = speed, F = Flotation,
 P = Multi purpose, S/R = Smooth/Rock
 e.g.: L3T "Normal tread depth tire (L3; Standardized
 identification code) where traction is needed
 (T; Michelin® code)"

TIRE MARKINGS

WHAT YOU CAN LEARN FROM THE SIDEWALL MARKING



**MICHELIN®
XMINE D2**

- ❶ Nominal section width of the tire (in inches): 35
- ❷ Tire series: aspect ratio = 0.65
- ❸ Radial construction: R
- ❹ Rim diameter (in inches): 33
- ❺ Load index of the tire: **
- ❻ Type of use: loader (L) with deep tread (5)
- ❼ Radial tire
- ❽ Tire for loader
- ❾ Tubeless tire
- ❿ Manufacturer: MICHELIN®
- ❾❿ Tread pattern: XMINED2



**MICHELIN®
X-CRANE +**



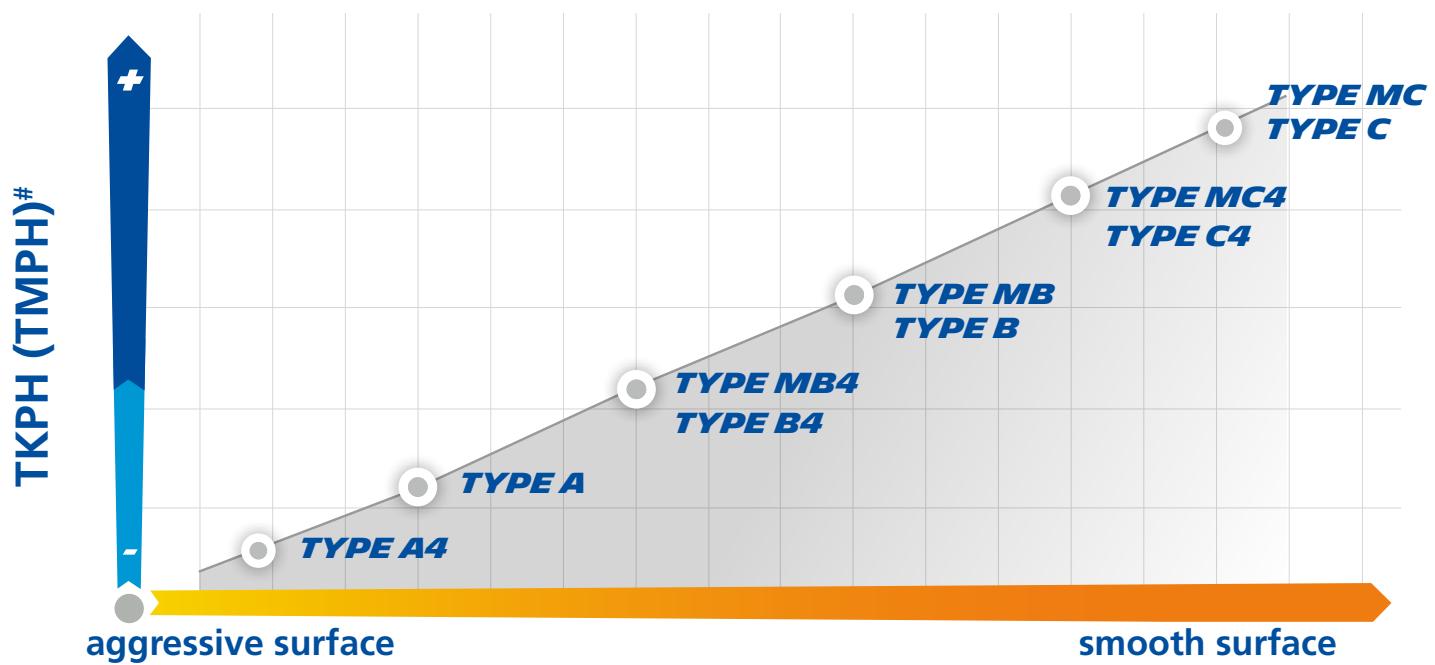
**MICHELIN®
XDR2**

- Radial construction
- Nominal section width of the tire (in mm): 525
- Tire series: aspect ratio = 0.80
- Rim diameter (in inches): 25
- Tubeless
- Brand: MICHELIN®
- Tread pattern: X-CRANE +
- ❿ Load index of the tire: 170
- ❿ Reference speed symbol of the tire: F
- ❿ Regroovable

- Radial construction
- Nominal section width of the tire (in inches): 37
- Rim diameter (in inches): 57
- Tubeless
- Brand: MICHELIN®
- ❯ Tire compound: B4 (explanation page 19)
- Tread pattern: XDR2
- Identification code: E4
(transport, "deep" tread)
- Load capacity: **

MICHELIN® EARTMOVER TIRE COMPOUNDS

	TYPES	DESCRIPTION	TKPH (T MPH) [#]
Aggression Resistant	A4	Particularly resistant to cuts, tread tearing and abrasion on very rough surfaces	Minimum
	A	Particularly resistant to cuts, tread tearing and abrasion at average speeds which are higher than those for A4 (above)	Low
Standard	B4	Compromise solution between abrasion resistance and average speed on rough surfaces	Moderate
	MB4	Same as Type B4 but with a higher wear resistance	
	B	Higher resistance to internal heat generation on surfaces which are not particularly rough	Average
Heat Resistant	MB	Same as Type B but with a higher wear resistance	
	C4	Adapted to running on long cycles at high speeds on well-maintained roads	High
	MC4	Same as Type C4 but with a higher wear resistance	
Heat Resistant	C	Very high resistance to high average speeds on long cycles run on well-maintained roads	Very High
	MC	Same as Type C but with a higher wear resistance	



TKPH: Ton kilometer per hour
T MPH: Ton mile per hour
(# see page 102)



LOAD INDEX - SPEED SYMBOL

Some tires bear a load index and a speed symbol.

LOAD INDEX (LI) AND MAXIMUM LOAD (KG/LB)

The LOAD INDEX is a numerical code which indicates the maximum load a tire can carry at the speed corresponding to its speed symbol, under specified conditions.

LI	MAXIMUM LOAD		LI	MAXIMUM LOAD		LI	MAXIMUM LOAD		LI	MAXIMUM LOAD		LI	MAXIMUM LOAD	
	KG	LB		KG	LB		KG	LB		KG	LB		KG	LB
120	1 400	3 090	150	3 350	7 390	180	8 000	17 640	210	19 000	41 890	240	45 000	99 210
121	1 450	3 200	151	3 450	7 610	181	8 250	18 190	211	19 500	43 000	241	46 250	101 960
122	1 500	3 310	152	3 550	7 830	182	8 500	18 740	212	20 000	44 100	242	47 500	104 720
123	1 550	3 420	153	3 650	8 050	183	8 750	19 290	213	20 600	45 420	243	48 750	107 470
124	1 600	3 530	154	3 750	8 270	184	9 000	19 840	214	21 200	46 750	244	50 000	110 250
125	1 650	3 640	155	3 875	8 540	185	9 250	20 390	215	21 800	48 070	245	51 500	113 540
126	1 700	3 750	156	4 000	8 820	186	9 500	20 940	216	22 400	49 390	246	53 000	117 950
127	1 750	3 860	157	4 125	9 090	187	9 750	21 500	217	23 000	50 700	247	54 500	120 150
128	1 800	3 970	158	4 250	9 370	188	10 000	22 050	218	23 600	52 040	248	56 000	123 480
129	1 850	4 080	159	4 375	9 650	189	10 300	22 710	219	24 300	53 580	249	58 000	127 890
130	1 900	4 190	160	4 500	9 920	190	10 600	23 370	220	25 000	55 120	250	60 000	132 300
131	1 950	4 300	161	4 625	10 200	191	10 900	24 030	221	25 750	56 780	251	61 500	135 580
132	2 000	4 410	162	4 750	10 470	192	11 200	24 690	222	26 500	58 430	252	63 000	138 890
133	2 060	4 540	163	4 875	10 750	193	11 500	25 360	223	27 250	60 070	253	65 000	143 300
134	2 120	4 670	164	5 000	11 020	194	11 800	26 020	224	28 000	61 740	254	67 000	147 710
135	2 180	4 810	165	5 150	11 350	195	12 150	26 790	225	29 000	63 940	255	69 000	152 120
136	2 240	4 940	166	5 300	11 690	196	12 500	27 560	226	30 000	66 150	256	71 000	156 530
137	2 300	5 070	167	5 450	12 020	197	12 850	28 330	227	30 750	67 790	257	73 000	160 930
138	2 360	5 200	168	5 600	12 350	198	13 200	29 100	228	31 500	69 460	258	75 000	165 340
139	2 430	5 360	169	5 800	12 790	199	13 600	29 990	229	32 500	71 660	259	77 500	170 660
140	2 500	5 510	170	6 000	13 230	200	14 000	30 870	230	33 500	73 870	260	80 000	176 400
141	2 575	5 680	171	6 150	13 560	201	14 500	31 970	231	34 500	76 070	261	82 500	181 880
142	2 650	5 840	172	6 300	13 890	202	15 000	33 070	232	35 500	78 280	262	85 000	187 390
143	2 725	6 010	173	6 500	14 330	203	15 500	34 180	233	36 500	80 480	263	87 500	192 900
144	2 800	6 170	174	6 700	14 770	204	16 000	35 280	234	37 500	82 690	264	90 000	198 450
145	2 900	6 390	175	6 900	15 210	205	16 500	36 380	235	38 750	85 430	265	92 500	203 920
146	3 000	6 610	176	7 100	15 650	206	17 000	37 480	236	40 000	88 200	266	95 000	209 440
147	3 075	6 780	177	7 300	16 090	207	17 500	38 590	237	41 250	90 940	267	97 500	214 950
148	3 150	6 950	178	7 500	16 530	208	18 000	39 690	238	42 500	93 710	268	100 000	220 500
149	3 250	7 170	179	7 750	17 090	209	18 500	40 790	239	43 750	96 470	269	103 000	227 370

SPEED SYMBOLS

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

CODE	A2	A3	A4	A5	A6	A8	B	C	D	E	F	G
speed (km/h)	10	15	20	25	30	40	50	60	65	70	80	90
speed (mph)	6	9	12	15	19	25	31	37	40	43	50	56

Examples of tire marking:

23.5 R 25 X-SUPER TERRAIN TL 185 B ; this tire is able to carry 9250 kg at a speed of 50 km/h (20 390 lb at 31 mph)
445/95 R 25 X-CRANE TL 174 F ; this tire is able to carry 6 700 kg at a maximum speed of 80 km/h (14 770 lb at 50 mph)

It is imperative:

- not to exceed the permitted maximum speed of the tire
- not to exceed the permitted maximum distances in one hour as indicated in the tables of tire characteristics
- that, at the time of fitting, the various markings be checked, in order to be certain that the tire is suitable for operation at the maximum allowed vehicle speed and load.

EQUIVALENCE OF RESISTANCE INDEX (PR: PLY RATING)

To be used as a reference for the replacement of a bias ply tire by a Michelin® radial tire.

SIZES AND MARKINGS	WORK MACHINES PR	TRANSPORT MACHINES PR	SIZES AND MARKINGS	WORK MACHINES PR	TRANSPORT MACHINES PR	SIZES AND MARKINGS	WORK MACHINES PR	TRANSPORT MACHINES PR
7.50 R 15	12		17.5 R 25 **	20	24	35/65 R 33 *	36	
8.25 R 15	12		18.00 R 25 *	24		35/65 R 33 ** (1)		
10.00 R 15			445/95 R 25 (174E, 177E, 177F)			35/65 R 33 E4*** L4*** (1)		
350/65 R 15 (1)			445/80 R 25 (170E)			37.5 R 33 **	48	
14.5 R 15			18.00 R 25 **		36	21.00 R 35 **	44	
400/80 R 15 (1)			20.5 R 25 *	24		24.00 R 35 **	48	
9.00 R 20	16		20.5 R 25 **		28	29.5 R 35 **	40	
10.00 R 20	16		505/85 R 25 (183E)			33.25 R 35 **	44	
12.00 R 20	18		550/65 R 25 * (1)			37.25 R 35 **	48	
E20 (13./80 R 20) (1)			21.00 R 25 **		40	37.5 R 39 **	52	
14.00 R 20 (1)			23.5 R 25 *	28		40/65 R 39 *	42	
16.00 R 20			23.5 R 25 **		32	40.5/75 R 39 **		54
525/70 R 20.5			525/80 R 25 (179E)			45/65 R 39 * (1)		
24 R 20.5			600/65 R 25 * (1)			45/65 R 45 *	50	
24 R 21			650/65 R 25 (1)			24.00 R 49 **		48
12.00 R 24 ***	24	24	26.5 R 25 *	32		27.00 R 49 **		54
13.00 R 24 TG *	14		26.5 R 25 **		32	30.00 R 51 **		64
14.00 R 24 TG *	16		750/65 R 25 (1)			33.00 R 51 **		68
14.00 R 24	24		29.5 R 25 *	34		36.00 R 51 **		74
14.00 R 24 ***	28	32	29.5 R 25 **		34	50/65 R 51 ** (1)		
385/95 R 24 (170E, 170F)			850/65 R 25 (1)			37.00 R 57 ** (1)		
15.00 R 24 (17/80 R 24) (1)			26.5 R 29 **		34	40.00 R 57 **		78
16.00 R 24 TG *	16		775/65 R 29 (1)			50/80 R 57 ** (1)		
16.00 R 24 **		36	29.5 R 29 *	34		55/80 R 57 * (1)		
13.00 R 25 ***		28	29.5 R 29 **		40	50/90 R 57 ** (1)		
14.00 R 25 ***		32	33.25 R 29 **		44	60/80 R 57 (1)		
385/95 R 25 (170E, 170F)			800/65 R 29 * (1)			53/80 R 63 ** (1)		
15.5 R 25 *	16		875/65 R 29 (1)			55/80 R 63 ** (1)		
16.00 R 25 **		36	18.00 R 33 **		40	56/80 R 63 ** (1)		
395/80 R 25 (165E)			21.00 R 33 **		32	59/80 R 63 ** (1)		
17.5 R 25 *	16		33.5 R 33 **		44			

(1) no corresponding PR in these sizes which are only made in radial construction.

TECHNOLOGY OF MICHELIN® RADIAL CASING TIRES

A tire's construction is the key to its performance, and outstanding tire performance is a key competitive advantage for transport and working machines in the earthmover industry.

Earthmoving equipment can achieve outstanding performance by using radial tires.

COMPOSITION

The radial design combines metal or fabric plies, extending from one bead to the other, with a belt made of several steel plies designed to reinforce the crown of the tire.

A UNIQUE CONSTRUCTION WITH NUMEROUS ADVANTAGES

The sidewalls and crown work independently:

- Minimizing the deformation of the contact patch and the weight of the tire
- Improving adhesion and traction while slowing down the rate of wear
- Increasing the load capacity as the metal casing can take higher inflation pressures

The flexibility of the sidewalls of a radial tire therefore provides greater comfort:

- No compromise on stability
- Better resistance to damage and punctures



TIRE PERFORMANCE LEVELS THAT TRANSFORM MACHINE PERFORMANCE

Michelin® invented the radial design and is an expert in this field.

Radial tires significantly improve the productivity of earthmover machines.

The radial technology offers the best compromise between the following factors: load, speed, operational efficiency of the machines, tire service life, operator safety, etc.

Using a radial tire also improves fuel economy and reduces the environmental footprint.



MICHELIN® XHA2



23.5 - 25 BIAS

Two machines are launched at 30 km/h. After disengaging the motor, we measure the distance traveled. The machine, equipped with Michelin® tires, has less rolling resistance and therefore travels further. This equates to lower fuel consumption in operation.

Image from tests carried out in our research and development in Almeria in Spain.

Find this test and many other videos on www.michelinearthmover.com or contact your Michelin® account manager.

**ADVICE AND RECOMMENDATIONS
ON THE USE OF MICHELIN® EARTHMOVER TIRES****24**

USE OF TIRES.....	24
EXPLANATION OF THE DIFFERENT USES	24

CHARACTERISTICS OF MICHELIN® EARTHMOVER TIRES**26**

ADVICE AND RECOMMENDATIONS ON THE USE OF MICHELIN® EARTMOVER TIRES

USE OF TIRES

FITTING OF TG EARTMOVER TIRES (24 INCH DIAMETER)

TG tires (XGLA2, XSNOPLUS) must only be fitted on drop-center and semi drop-center or single piece wheels.

Do not fit these tires on flat base rims which are incompatible because they have differences in seat diameter.

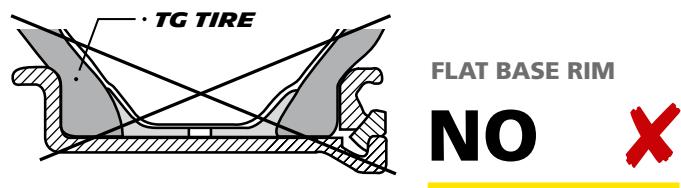


FITTING OF 15.5 R 25* AND 17.5 R 25* EARTMOVER TIRES

L2* (XTL A and XSNOPLUS) and L3* (XHA) and the XCRANE+ dimension 445/95 R 25 can be fitted to :

- multi piece SDC or Flat Base rims
- single piece rims

NOTE: L3** and L5 tires can only be fitted to multi piece rims.



EXPLANATION OF THE DIFFERENT USES

Important: load/pressure scales are classified according different uses of machines.

LOADERS

Front Laden

This table is used in priority. The loads come from the weighing of the loader or the axle weight given by the manufacturer.

This is the pressure, load and use tables, built from the maximum reference point given by the standards.

For front tires of the loader, it is possible to increase the pressure value given in Table Front Laden up to 1 bar without changing the carrying capacity. The resulting pressure must remain below the maximum values of inflation pressure when the latter are specified (see previous page).

Front Tipping

This table is used when the only information available is that of the operating weight and tipping load of the loader (See page 100). This table can not be used to determine the operating pressure of dimensions 35/65 R 33 and beyond.

Rear Unladen

This table is used when the weight of the rear axle of the unladen loader is known or when the rear axle weight is given by the manufacturer.

COMPACTOR

10 and 15 km/h These tables are given according to the maximum work speeds of the compactors. In all cases, the indications and the instructions provided by the manufacturer must be applied (Table indicating the pressure according to the work to be carried out).

UNDERGROUND MINING MACHINES

This is the table that is used for tires fitted to underground transport machines.



GRADERS**All axles**

This is the table that is used when the axle weight has been determined (by weighing or from the manufacturer's data).

This table is derived from a reference speed of 40 km/h.

For higher speeds, a reduction in carrying capacity, as shown in the table below, is applied in accordance with the standards (ex: Year Book TRA 2017, page 4-28).

SPEED OF USE (KM/H)	VARIATION IN LOAD CAPACITY (%)
40	0
50	- 9
60	- 18
65	- 27

TRANSPORT (RIGID DUMP TRUCKS, TRUCKS, ...), ARTICULATED DUMP TRUCKS, SCRAPERS**Standard**

Table loads / pressures built from the reference point "Off-the-road haulage service". This is the table that is used when one has determined the axle load (by weighing or by the manufacturer).

CRANES AND SIMILAR SPECIALIZED MACHINES**Standard**

This is the table Load / Speed / Pressure that is used to adjust the pressure at the desired load based on maximum rates of use for the tires fitted on vehicles (all terrain, mobile cranes, intervention vehicles...). There are two ranges of tires. Reference speed 70 km/h, Speed symbol E or reference speed 80 km/h, Speed symbol F.

USE IN DESERTS AND SIMILAR CONDITIONS

Depending on whether the vehicle is fitted single or twin, the corresponding load table will be adopted.

1/ Road (Road in single / Road in twin):

These pressures are to be applied when the vehicle runs on good roads (This means asphalt or compacted surfaces). For these conditions the pressures have been calculated for a maximum speed of 80 km/h (50 mph) or 65 km/h (40 mph) depending on the tire size considered.

2/ Track (Track in single / Track in twin):

These pressures are recommended for driving on roads in poor condition, washboard (corrugated) and gravel or desert surfaces.

For these conditions the pressures have been calculated

- for a maximum speed of 65 km/h (40 mph).if the speed on road is 80 km/h (50 mph),
- or a maximum speed of 50 km/h (30 mph).if the speed on road is 65 km/h (40 mph).

3/ Sand (Sand in single / sand in twin):

These pressures are used to allow the vehicle to cross without difficulty the difficult areas where the problem of adhesion or depression can be important. To avoid premature depletion of the kilometric performance, the speed must be limited

- to 20 km/h (12,5 mph) if the speed on road is 80 km/h (50 mph),
- to 15 km/h (9,3 mph) if the speed on road is 65 km/h (40 mph).

After "sand" use, the pressure must be readjusted for subsequent conditions of use (road or track).

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm inches	Dual Spacing mm inches	Cap. l gallons				
			mm inches	inches	inches	inches	32 ^d	inches	gallons				

15"

7.50 R 15 Tube Type

MICHELIN® XLISSÉ COMPACTEUR C1 123461			198 7.8	770 30.3	338 13.3	2324 91.5	9 11.3		40 11	5.5 6.0 6.00S 6.5 B6.5	See page 84 to 89
---	--	--	------------	-------------	-------------	--------------	-----------	--	----------	------------------------------------	-------------------

7.50 R 15 Tube Type

MICHELIN® XMINÉ D2 LS 123342	6 3.7		230 9.1	840 33.1	385 15.2	2551 100.4	46 58		39 10	5.5 6.0 6.00S 6.5 B6.5	See page 84 to 89
--	----------	--	------------	-------------	-------------	---------------	----------	--	----------	------------------------------------	-------------------

8.25 R 15 Tube Type

MICHELIN® XMINÉ D2 LS 123352	6 3.7		250 9.8	882 34.7	402 15.8	2680 105.5	48 60.5		47 12	6.0 6.5 B6.5 7.0	See page 84 to 89
--	----------	--	------------	-------------	-------------	---------------	------------	--	----------	---------------------------	-------------------

10.00 R 15 Tube Type

MICHELIN® XMINÉ D2 LS 123372	6 3.7		295 11.6	910 35.8	411 16.2	2748 108.2	48 60.5		70 18	7.0 7.5	See page 84 to 89
--	----------	--	-------------	-------------	-------------	---------------	------------	--	----------	------------	-------------------

350/65 R 15 (32x14.5 R 15)
Tubeless

MICHELIN® XMINÉ D2 LS 826683	6 3.7		348 13.7	844 33.2	379 14.9	2543 100.1	36 45.4		91 24	10.50 11.50	See page 84 to 89
--	----------	--	-------------	-------------	-------------	---------------	------------	--	----------	----------------	-------------------

14.5 R 15 Tubeless

MICHELIN® XMINÉ D2 LS 123101	6 3.7		380 15	894 35.2	408 16.1	2711 106.7	48 60.5		90 24	10.50 11.00BD 11.0 11.50	See page 84 to 89
--	----------	--	-----------	-------------	-------------	---------------	------------	--	----------	-----------------------------------	-------------------

400/80 R 15 (38x16 R 15) Tubeless

MICHELIN® XMINÉ D2 LS 735466	6 3.7		385 15.2	996 39.2	445 17.5	2996 118	34 42.8		128 34	11.50	See page 84 to 89
--	----------	--	-------------	-------------	-------------	-------------	------------	--	-----------	-------	-------------------

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)										
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--	--

15"													
		Machine - Utilisation	bar	3	3.5	3.75	4	4.5	5	5.5	6	7	8
			psi	44	51	54	58	65	73	80	87	102	116
X LISSE COMPACTEUR C1		Compactors	10 km/h 6 mph	1250 2756	1400 3087	1470 3241	1540 3396	1680 3704	1830 4035	1970 4344	2120 4675	2420 5336	2725 6009
			15 km/h 9 mph	1020 2249	1135 2503	1190 2624	1250 2756	1375 3032	1500 3308	1600 3528	1700 3749	1980 4366	2180 4807

		Machine - Utilisation	bar	3	3.5	3.75	4	4.5	5	5.5	6	7	8
			psi	44	51	54	58	65	73	80	87	102	116
XMINE D2 LS		Loaders	Front laden	1850 4079	2000 4410	2075 4575	2150 4741	2250 4961	2400 5292	2500 5513	2650 5843	2900 6395	3150 6946
			Rear unladen	1475 3252	1600 3528	1650 3638	1725 3804	1800 3969	1925 4245	2000 4410	2125 4686	2325 5127	2525 5568
XMINE D2 LS	underground mine machines	All axles	1675 3693	1800 3969	1875 4134	1925 4245	2025 4465	2150 4741	2250 4961	2375 5237	2600 5733	2825 6229	

		Machine - Utilisation	bar	3	3.5	3.75	4	4.5	5	5.5	6	7	8
			psi	44	51	54	58	65	73	80	87	102	116
XMINE D2 LS		Loaders	Front laden	2000 4410	2200 4851	2300 5072	2400 5292	2550 5623	2700 5954	2850 6284	3000 6615	3300 7277	3600 7938
			Rear unladen	1600 3528	1750 3859	1850 4079	1925 4245	2050 4520	2150 4741	2275 5016	2400 5292	2650 5843	2875 6339
XMINE D2 LS	underground mine machines	All axles	1800 3969	1975 4355	2075 4575	2150 4741	2300 5072	2425 5347	2575 5678	2700 5954	2975 6560	3250 7166	

		Machine - Utilisation	bar	3	3.5	4	4.5	5	5.5	6	6.5	7	8
			psi	44	51	58	65	73	80	87	94	102	116
XMINE D2 LS		Loaders	Front laden	2400 5292	2600 5733	2800 6174	3000 6615	3200 7056	3350 7387	3500 7718	3700 8159	3900 8600	4300 9482
			Rear unladen	1925 4245	2075 4575	2250 4961	2400 5292	2550 5623	2675 5898	2800 6174	2965 6538	3125 6891	3450 7607
XMINE D2 LS	underground mine machines	All axles	2150 4741	2350 5182	2525 5568	2700 5954	2875 6339	3025 6670	3150 6946	3325 7332	3500 7718	3875 8544	

		Machine - Utilisation	bar	3	3.5	3.75	4	4.5	5	5.5	6	7	8
			psi	44	51	54	58	65	73	80	87	102	116
XMINE D2 LS		Loaders	Front laden	2400 5292	2660 5865	2790 6152	2920 6439	3150 6946	3400 7497	3570 7872	3750 8269	4200 9261	4600 10143
			Rear unladen	1920 4234	2128 4692	2232 4922	2336 5151	2520 5557	2720 5998	2856 6297	3000 6615	3360 7409	3680 8114
XMINE D2 LS	underground mine machines	All axles	2160 4763	2394 5279	2511 5537	2628 5795	2835 6251	3060 6747	3213 7085	3375 7442	3780 8335	4140 9129	

		Machine - Utilisation	bar	3	3.5	3.75	4	4.5	5	5.5	6	7	8
			psi	44	51	54	58	65	73	80	87	102	116
XMINE D2 LS		Loaders	Front laden	2550 5623	2850 6284	2975 6560	3100 6836	3350 7387	3600 7938	3850 8489	4100 9041	4600 10143	5100 11246
			Rear unladen	2050 4520	2275 5016	2375 5237	2475 5457	2675 5898	2875 6339	3075 6780	3275 7221	3675 8103	4075 8985
XMINE D2 LS	underground mine machines	All axles	2300 5072	2575 5678	2675 5898	2800 6174	3025 6670	3250 7166	3475 7662	3700 8159	4150 9151	4600 10143	

		Machine - Utilisation	bar	3	3.5	3.75	4	4.5	5	5.5	6	7	8
			psi	44	51	54	58	65	73	80	87	102	116
XMINE D2 LS		Loaders	Front laden	3300 7277	3650 8048	3825 8434	4000 8820	4350 9592	4700 10364	5050 11135	5400 11907	6100 12451	6600 14553
			Rear unladen	2650 5843	2925 6450	3050 6725	3200 7056	3475 7662	3750 8269	4050 8930	4325 9537	4875 10749	5275 11631
XMINE D2 LS	underground mine machines	All axles	2975 6560	3275 7221	3450 7607	3600 7938	3900 8600	4225 9316	4550 10033	4850 10694	5500 12128	5950 13120	

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32 ^d	Dual Spacing mm inches	Cap. l gallons				
			mm inches	mm inches	mm inches	mm inches	mm 32 ^d	mm inches	l gallons				

20"

9.00 R 20 Tube Type

MICHELIN® XMINI D2 LSR* 123382	6 3.7		277 10.9	1054 41.5	484 19.1	3203 126.1	51 64.3		98 26	6.5 - B6.5 7.0T 7.0 B 7.0 7.33V B7.5 7.5	See page 84 to 89
--	----------	--	-------------	--------------	-------------	---------------	------------	--	----------	--	-------------------

12.00 R 20 Tube Type

MICHELIN® XMINI D2 LSR 123392	6 3.7		323 12.7	1174 46.2	534 21	3555 140	57 71.8		146 39	8.0 8.5 B 8.5 8.5V 8.50V 9.0 9.00V	See page 84 to 89
---	----------	--	-------------	--------------	-----------	-------------	------------	--	-----------	--	-------------------

E20 PIL X LC 13/80 R 20 Tube Type

MICHELIN® X LISSÉ COMPACTEUR C1 240750			322 12.7	1050 41.3	470 18.5	3160 124.4	12 15.1		140 37	7.33V - 7.5 B 7.5 - 8.0 B8.0 - 8.0V 8.00V - 8.5 B8.5 - 8.50V 9.00V - 10.0 - 10.00V 9.0	See page 84 to 89
--	--	--	-------------	--------------	-------------	---------------	------------	--	-----------	---	-------------------

14.00 R 20 Tubeless

MICHELIN® XMINI D2 LSR 372138	6 3.7		368 14.5	1236 48.7	557 21.9	3745 147.4	48 60.5		175 46	10.00W 10.0	See page 84 to 89
---	----------	--	-------------	--------------	-------------	---------------	------------	--	-----------	----------------	-------------------

16.00R20 Tubeless

MICHELIN® XZL E2 173G 123357	70 43.5		438 17.2	1343 52.9	615 24.2	4080 160.6	27 34		315 83	10.00W 11.25	See page 84 to 89
--	------------	--	-------------	--------------	-------------	---------------	----------	--	-----------	-----------------	-------------------

450/70 R 20 Tubeless

MICHELIN® XMINI D2 LS** 976013	8 5		433 17	1163 45.8	515 20.3	3488 137.3	37 46.6		229 61	15.00T	See page 84 to 89
--	--------	--	-----------	--------------	-------------	---------------	------------	--	-----------	--------	-------------------

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	--------------------------	--	--	--	--	--	--	--	--	--	--

20"													
Machine - Utilisation		bar	3	4	5	6	7	8	9	10	11		
		psi	44	58	73	87	102	116					
XMINE D2 *LSR	Loaders	Front tip.load	5100 11246	5800 12789	6450 14222	7150 15766	7800 17199	8500 18743					
		Front laden	3000 6615	3400 7497	3800 8379	4200 9261	4600 10143	5000 11025					
		Rear unladen	2400 5292	2700 5954	3050 6725	3350 7387	3700 8159	4000 8820					
XMINE D2 *LSR	underground mine machines	All axles	2700 5954	3050 6725	3400 7497	3800 8379	4150 9151	4500 9923					
Machine - Utilisation		bar	3	4	5	6	7	8	9	10	11		
		psi	44	58	73	87	102	116					
XMINE D2 LSR	Loaders	Front tip.load	5800 12789	6800 14994	7800 17199	8850 19514	9850 21719	10900 24035					
		Front laden	3400 7497	4000 8820	4600 10143	5200 11466	5800 12789	6400 14112					
		Rear unladen	2700 5954	3200 7056	3700 8159	4150 9151	4650 10253	5100 11246					
XMINE D2 LSR	underground mine machines	All axles	3050 6725	3600 7938	4150 9151	4700 10364	5200 11466	5750 12679					
Machine - Utilisation		bar	3	4	5	6	7	8	8.5	9	10		
		psi	44	58	73	87	102	116	123	131			
X LISSE COMPACTEUR C1	Compactors	10 km/h 6 mph	2520 5557	3100 6836	3660 8070	4260 9393	4840 10672	5420 11951	5710 12591	6000 13230			
		15 km/h 9 mph	2240 4939	2760 6086	3260 7188	3790 8357	4310 9504	4820 10628	5000 11025				
Machine - Utilisation		bar	3	4	5	5.5	6	6.5	7	8	8.5		
		psi	44	58	73	80	87	94	102	116	123		
XMINE D2 LSR	Loaders	Front laden	4140 9129	4920 10849	5690 12546	6070 13384	6460 14244	6850 15104	7230 15942	8010 17662			
		Rear unladen	2430 5358	3100 6836	3770 8313	4100 9041	4430 9768	4770 10518	5100 11246	5770 12723			
		All axles	3480 7673	4200 9261	4920 10849	5280 11642	5640 12436	6000 13230	6360 14024	7070 15589	7793 17184		
Machine - Utilisation		bar	2	3	4	5	6	7	8	8.5	9		
		psi	29	44	58	73	87	102	116	123	131		
XZL E2	Cranes and Similar Specialized Machines	0 km/h 0 mph	3580 7894	4830 10650	6125 13506	7390 16295	8660 19095	9900 21830	11200 24696	12075 26625	12950 28555	14700 32414	
		5 km/h 3 mph	2850 6284	3950 8710	5000 11025	6100 13451	7200 15876	8100 17861	9250 20396	9825 21664	10400 22932	11550 25468	
		10 km/h 6 mph	2750 6064	3750 8269	4750 10474	5750 12679	6700 14774	7600 16758	8700 19184	9125 20121	9550 21058	10600 23373	
		20 km/h 12 mph	2500 5513	3250 7166	4250 9371	5000 11025	6000 13230	6860 15126	7600 16758	8075 17805	8550 18853	9500 20948	
		30 km/h 19 mph	2250 4961	3000 6615	3750 8269	4500 9923	5250 11576	6000 13230	6860 15126	7225 15931	7590 16736		
		40 km/h 25 mph	2000 4410	2750 6064	3550 7828	4250 9371	5000 11025	5750 12679	6500 14333	6830 15060	7160 15788		
		50 km/h 31 mph	1950 4300	2700 5954	3500 7718	4200 9261	4900 10805	5700 12569	6350 14002	6725 14829	7100 15656		
		65 km/h 40 mph	1850 4079	2650 5843	3400 7497	4150 9151	4850 10694	5550 12238	6300 13892	6650 14663	7000 15435		
		80 km/h 50 mph	1800 3969	2600 5733	3350 7387	4100 9041	4800 10584	5500 12128	6250 13781	6550 14443	6850 15104		
		90 km/h 56 mph	1750 3859	2550 5623	3300 7277	4050 8930	4750 10474	5450 12017	6200 13671	6500 14333			
Machine - Utilisation		bar	5	5.5	6	6.5	7	7.25	7.5	7.75	8	8.25	
		psi	73	80	87	94	102	105	109	112	116	120	
XMINE D2 **LS	Loaders	Front laden	6700 14774	7100 15656	7750 17089	8000 17640	8500 18743	8750 19294	9000 19845	9250 20396	9500 20948	9750 21499	
		Rear unladen	5360 11819	5680 12524	6200 13671	6400 14112	6800 14994	7000 15435	7200 15876	7400 16317	7600 16758	7800 17199	
		All axles	6000 13230	6500 14333	6900 15215	7300 16097	7750 17089	8000 17640	8250 18191	8500 18743	8550 18853	8750 19294	

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH TPMPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32 ^d	Dual Spacing mm inches	Cap. l gallons				
			mm inches	inches	inches	inches	mm inches	inches	gallons				

20.5"

525/65 R 20.5 Tubeless

MICHELIN® XS E7 173F 109421 (9)			521 20.5	1200 47.2	548 21.6	3640 143.3	17 21.4		337 89	16.00	See page 84 to 89
--	--	--	-------------	--------------	-------------	---------------	------------	--	-----------	-------	-------------------

24 R 20.5 Tubeless

MICHELIN® XS E7 176F 109174 (9)			602 23.7	1374 54.1	620 24.4	4150 163.4	17 21.4		538 142	18.00	See page 84 to 89
--	--	--	-------------	--------------	-------------	---------------	------------	--	------------	-------	-------------------

21"

24 R 21 Tubeless

MICHELIN® XZL E2 176G 110257 (9)			608 23.9	1388 54.6	631 24.8	4200 165.4				18.00/1.5	See page 84 to 89
---	--	--	-------------	--------------	-------------	---------------	--	--	--	-----------	-------------------

24"

12.00 R 24 Tube Type

MICHELIN® XZH E3*** 123369	35 21.7	119 82	321 12.6	1258 49.5	591 23.3	3857 151.9	30 37.8		171 45	7.33V 8.0 8.00V 8.50V 8.5	See page 84 to 89
----------------------------------	------------	-----------	-------------	--------------	-------------	---------------	------------	--	-----------	---------------------------------------	-------------------

12.00 R 24 Tube Type

MICHELIN® XKA L3*** 242110	14 8.7		1244 49	569 22.4	3775 148.6	21 26.5		155 41	7.33V 7.5		
MICHELIN® XMINI D2 L5R 242046	6 3.7		1280 50.4	594 23.4	3906 153.8		57	138 36	8.0 8.00V 8.50V	See page 84 to 89	
MICHELIN® XSM D2+ L5S 123647	4 2.5		325 12.8	1264 49.8	580 22.8	3840 151.2		140 37	8.5		

13.00 R 24 Tubeless

MICHELIN® XGL A2 L2+TG 123386 (6)(10)	16 9.9		335 13.2	1296 51	570 22.4	3875 152.6	25 31.5		215 57	8.00 TG SDC 9.00/1.5 DC 10.00 VA SDC	See page 84 to 89
--	-----------	--	-------------	------------	-------------	---------------	------------	--	-----------	--	-------------------

14.00 R 24 Tube Type

MICHELIN® XKA E3*** 251590	14 8.7		401 15.8	1380 54.3	638 25.1	4205 165.6	24 30.2		270 71	9.00V 9.0	
MICHELIN® XKD1A E4*** 251592	18 11.2	84 58	401 15.8	1412 55.6	657 25.9	4313 169.8	37 46.6		270 71	10.0 10.00W	See page 84 to 89

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

20.5"

	Machine - Utilisation	bar	1	2	3	4	5	6	7	8		
		psi	15	29	44	58	73	87	102	116		
XS E7	Desert conditions 80 km/h max.	Road in single	1450 3197	2150 4741	2850 6284	3600 7938	4300 9482	5000 11025	5750 12679	6500 14333		
		Track in single	1700 3749	2600 5733	3500 7718	4450 9812	5250 11576					
		Sand in single	2300 5072	3850 8489	5250 11576							
XS E7	Desert conditions 80 km/h max.	Machine - Utilisation	bar	1	2	2.5	3	3.5	4	4.5	5	
		psi	15	29	36	44	51	58	65	73	80	
		Road in single	1950 4300	2950 6505	3450 7607	4000 8820	4500 9923	5010 11047	5520 12172	6050 13340	6575 14498	7100 15656
XS E7	Desert conditions 80 km/h max.	Track in single	2550 5623	3650 8048	4250 9371	4750 10474	5300 11687	5850 12899	6400 14112	6750 14884	7100 15656	
		Sand in single	3500 7718	5350 11797	6400 14112	7100 15656						

21"

	Machine - Utilisation	bar	1	2	2.5	3	3.5	4	4.5	5	5.5	6
		psi	15	29	36	44	51	58	65	73	80	87
XZL E2	Desert conditions 80 km/h max.	Road in single	1950 4300	2950 6505	3450 7607	4000 8820	4500 9923	5010 11047	5520 12172	6050 13340	6575 14498	7100 15656
		Track in single	2550 5623	3650 8048	4250 9371	4750 10474	5300 11687	5850 12899	6400 14112	6750 14884	7100 15656	
		Sand in single	3500 7718	5350 11797	6400 14112							

24"

	Machine - Utilisation	bar	4	4.5	5	5.5	6	6.5	7	8	8.5	
		psi	58	65	73	80	87	94	102	116	123	
XZH ***E3	Transport	Standard	2700 5954	2950 6505	3200 7056	3475 7662	3750 8269	4000 8820	4250 9371	4500 9923	4650 10253	
XSM D2+ L5S XMIN D2 L5R	Loaders	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5	5	5.5	6
		psi	29	36	44	51	58	65	73	80	87	102
		Front tip.load	3900 8600	4600 10143	5200 11466	5850 12899	6550 14443	7150 15766	7800 17199	8450 18632	9100 20066	10350 22822
XKA ***L3 XSM D2+ L5S XMIN D2 L5R	underground mine machines	Front laden	2300 5072	2700 5954	3050 6725	3450 7607	3850 8489	4200 9261	4600 10143	4975 10970	5350 11797	6100 13451
		Rear unladen	1850 4079	2150 4741	2450 5402	2750 6064	3100 6836	3350 7387	3700 8159	4000 8820	4300 9482	4900 10805
		All axles	2050 4520	2450 5402	2750 6064	3100 6836	3450 7607	3800 8379	4150 9151	4475 9867	4800 10584	5500 12128

	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5	5			
		psi	29	36	44	51	58	65	73			
XGL A2 *TG L2	Loaders	Front tip.load	4500 9923	5250 11576	6100 13451	6900 15215	7650 16868	8400 18522	9200 20286			
		Front laden	2650 5843	3100 6836	3600 7938	4050 8930	4500 9923	4950 10915	5400 11907			
		Rear unladen	2100 4631	2500 5513	2900 6395	3250 7166	3600 7938	3950 8710	4300 9482			
XGL A2 *TG L2	Graders	All axles	1900 4190	2225 4906	2550 5623	2900 6395						

	Machine - Utilisation	bar	4	5	5.5	6	6.5	7	8			
		psi	58	73	80	87	94	102	116			
XKA ***E3 XK D1A ***E4	Transport	Standard	3750 8269	4500 9923	4850 10694	5600 12348	5700 12569	5800 12789	6150 13561			

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm inches	Dual Spacing mm inches	Cap. l gallons				
			mm inches	inches	inches	inches	32 ^d	inches	gallons				

24" CONTINUED

14.00 R 24 Tube Type

MICHELIN® XKA E3*** 251590	14 8.7		401 15.8	1380 54.3	638 25.1	4205 165.6	24 30.2	270 71	9.00V 9.0 10.0 10.00W	See page 84 to 89
MICHELIN® XKD1A E4*** 251592	18 11.2	84 58		1412 55.6	657 25.9	4313 169.8	37 46.6			
MICHELIN® XSM D2+ L5S 123597	4 2.5			1395 54.9	636 25	4227 166.4	58 73.1			

14.00 R 24 TG Tubeless

MICHELIN® XSNOPLUS L2*TG 123861 (6)	16 9.9		372 14.6	1364 53.7	545 21.5	3941 155.2	24 30.2	264 70	8.00 TG SDC 9.00/1.5 DC 10.00VA SDC	See page 84 to 89
MICHELIN® XGL A2 L2*TG 123395 (6)			371 14.6	1360 53.5	592 23.3	4051 159.5	25 31.5			

15.00 R 24 Pil (17/80 R 24)
Tube Type

MICHELIN® X LISSÉ COMPACTEUR C1 252211			415 16.3	1334 52.5	592 23.3	4002 157.6	21 26.5		320 85	9.0 9.00V 10.0W 10.00W 10.0	See page 84 to 89
--	--	--	-------------	--------------	-------------	---------------	------------	--	-----------	---	-------------------

16.00 R 24 Tubeless

MICHELIN® XGL A2 L2*TG 123903 (6)	16 9.9		435 17.1	1500 59.1	646 25.4	4451 175.2	27 34		412 109	10.00 VA SDC	See page 84 to 89
--	------------------	--	-------------	--------------	-------------	---------------	----------	--	------------	--------------	-------------------

385/95 R 24 Tube Type

MICHELIN® XSNOPLUS 170E 432272	70 43.5		386 15.2	1358 53.5	635 25	4156 163.6	24 30.2	283 75	9.00V 9.0 10.0/2.0 10.00W	See page 84 to 89
MICHELIN® XMH S E2T 170E 957157			389 15.3	1361 53.6	632 24.9	4155 163.6				

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)										
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--	--

24" CONTINUED

	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5	5	5.5	6	7
		psi	29	36	44	51	58	65	73	80	87	102
XSM D2+ L55	Loaders	Front tip.load	5550 12238	6400 14112	7300 16097	8150 17971	9100 20066	10050 22160	10900 24035	11750 25909		
		Front laden	3250 7166	3750 8269	4300 9482	4800 10584	5350 11797	5900 13010	6400 14112	6900 15215		
		Rear unladen	2600 5733	3000 6615	3450 7607	3850 8489	4300 9482	4700 10364	5100 11246	5500 12128		
XX A ***E3 XX D1A ***E4 XSM D2+ L55	underground mine machines	All axles	2950 6505	3400 7497	3850 8489	4300 9482	4800 10584	5300 11687	5750 12679	6200 13671	6550 14443	7250 15986

	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5	5	5.5		
		psi	29	36	44	51	58	65	73	80		
XSNOPPLUS *TG L2 XGL A2 *TG L2	Loaders	Front tip.load	5550 12238	6400 14112	7300 16097	8150 17971	9100 20066	10050 22160	10900 24035	11750 25909		
		Front laden	3250 7166	3750 8269	4300 9482	4800 10584	5350 11797	5900 13010	6400 14112	6900 15215		
		Rear unladen	2600 5733	3000 6615	3450 7607	3850 8489	4300 9482	4700 10364	5100 11246	5500 12128		
XSNOPPLUS *TG L2 XGL A2 *TG L2	Graders	All axles	2300 5072	2725 6009	3125 6891	3550 7828						

	Machine - Utilisation	bar	3	4	5	6	6.5	7	7.5	8	8.5	
		psi	44	58	73	87	94	102	109	116	123	
X LISSE COMPACTEUR C1	Compactors	10 km/h 6 mph	5320 11731	6540 14421	7750 17089	8965 19768	9570 21102	10180 22447	10790 23792	11390 25115	12000 26460	
		15 km/h 9 mph	4740 10452	5820 12833	6900 15215	7980 17596	8520 18787					

	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5	5			
		psi	29	36	44	51	58	65	73			
XGL A2 *TG L2	Loaders	Front tip.load	7650 16868	8750 19294	9850 21719	10900 24035	12000 26460	13100 28886	14200 31311			
		Front laden	4500 9923	5150 11356	5800 12789	6400 14112	7050 15545	7700 16979	8350 18412			
		Rear unladen	3600 7938	4100 9041	4650 10253	5100 11246	5650 12458	6150 13561	6700 14774			
XGL A2 *TG L2	Graders	All axles	3150 6946	3625 7993	4125 9096	4625 10198						

	Machine - Utilisation	bar	5	6	7	8	9					
		psi	73	87	102	116	131					
XSNOPPLUS XMHS E2T	Cranes and Similar Specialized Machines	30 km/h 19 mph	4860 10716	5880 12965	6460 14244	7000 15435	7800 17199					
		40 km/h 25 mph	4635 10220	5610 12370	6165 13594	6675 14718	7450 16427					
		50 km/h 31 mph	4410 9724	5340 11775	5865 12932	6355 14013	7100 15656					
		60 km/h 37 mph	4190 9239	5070 11179	5565 12271	6030 13296	6720 14818					
		65 km/h 40 mph	4020 8864	4865 10727	5345 11786	5790 12767	6450 14222					
		70 km/h 43 mph	3740 8247	4525 9978	4970 10959	5385 11874	6000 13230					
		80 km/h 50 mph	3086 6805	3735 8236	4100 9041	4445 9801	4950 10915					
		90 km/h 56 mph	2620 5777	3170 6990	3480 7673	3770 8313	4200 9261					
		100 km/h 62 mph	2245 4950	2715 5987	2980 6571	3230 7122	3600 7938					

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm inches	Dual Spacing mm inches	Cap. l gallons				
			mm inches	mm inches	mm inches	mm inches	mm inches	mm inches	l gallons				

24" CONTINUED

385/95 R 24 Tube Type

MICHELIN® X-CRANE 170F 778245	80 49.7		376 14.8	1361 53.6	631 24.8	4153 163.5	23 29		284 75	10.00W 10.0 11.25/1.3	See page 84 to 89
---	------------	--	-------------	--------------	-------------	---------------	----------	--	-----------	------------------------------------	-------------------

25"

14.00 R 25 Tubeless

MICHELIN® XH D1A E4*** 123331	22 13.7	102 70	401 15.8	1410 55.5	650 25.6	4291 168.9	38 47.9		275 73	10.00/1.5 10.00/1.5 11.25/1.3	See page 84 to 89
---	------------	-----------	-------------	--------------	-------------	---------------	------------	--	-----------	--	-------------------

385/95 R 25 Tubeless

MICHELIN® XSNPLUS E2 170E 705961			388 15.3	1365 53.7		4163 163.9	25 31.5		280 74		
	70 43.5				632 24.9					9.50/1.7 CR 10.00/1.5 11.25/1.3	See page 84 to 89
MICHELIN® XMHS 170E 254174			391 15.4	1361 53.6		4155 163.6	24 30.2		278 73		

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Ident-ification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)								
------------	------------------------------	--	--	--	--	--	--	--	--	--

24" CONTINUED

	Machine - Utilisation	bar	5	6	7	8	9			
		psi	73	87	102	116	131			
X-CRANE	Cranes and Similar Specialized Machines	30 km/h 19 mph	4750 10474	5440 11995	6125 13506	6815 15027	7500 16538			
		40 km/h 25 mph	4370 9636	5005 11036	5635 12425	6270 13825	6900 15215			
		50 km/h 31 mph	4255 9382	4870 10738	5490 12105	6105 13462	6720 14818			
		60 km/h 37 mph	4180 9217	4785 10551	5390 11885	5995 13219	6600 14553			
		65 km/h 40 mph	4085 9007	4675 10308	5270 11620	5860 12921	6450 14222			
		70 km/h 43 mph	3990 8798	4570 10077	5145 11345	5725 12624	6300 13892			
		80 km/h 50 mph	3800 8379	4350 9592	4900 10805	5450 12017	6000 13230			
		90 km/h 56 mph	3570 7872	4090 9018	4605 10154	5120 11290	5640 12436			
		100 km/h 62 mph	3230 7122	3700 8159	4165 9184	4630 10209	5100 11246			

25"

	Machine - Utilisation	bar	4	4.5	5	5.5	5.75	6	7	8.5
		psi	58	65	73	80	83	87	102	123
XH D1 A ***E4	Transport	Standard	3750 8269	4100 9041	4500 9923	4850 10694	5100 11246	5250 11576	5800 12789	6350 14002

	Machine - Utilisation	bar	5	6	7	8	9			
		psi	73	87	102	116	131			
XSNOPPLUS E2 XMHS	Cranes and Similar Specialized Machines	30 km/h 19 mph	4860 10716	5880 12965	6460 14244	7000 15435	7800 17199			
		40 km/h 25 mph	4635 10220	5610 12370	6165 13594	6675 14718	7450 16427			
		50 km/h 31 mph	4410 9724	5340 11775	5865 12932	6355 14013	7100 15656			
		60 km/h 37 mph	4190 9239	5070 11179	5565 12271	6030 13296	6720 14818			
		65 km/h 40 mph	4020 8864	4865 10727	5345 11786	5790 12767	6450 14222			
		70 km/h 43 mph	3740 8247	4525 9978	4970 10959	5385 11874	6000 13230			
		80 km/h 50 mph	3086 6805	3735 8236	4100 9041	4445 9801	4950 10915			
		90 km/h 56 mph	2620 5777	3170 6990	3480 7673	3770 8313	4200 9261			
		100 km/h 62 mph	2245 4950	2715 5987	2980 6571	3230 7122	3600 7938			

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32 ^d	Dual Spacing mm inches	Cap. l gallons				
			mm inches	mm inches	mm inches	mm inches	mm inches	mm inches	l gallons				

25" CONTINUED

385/95 R 25 Tubeless

MICHELIN® X-CRANE + 170F 682834												
			80 49.7	380 15	1365 53.7	633 24.9	4165 164	23 29		280 74	9.50/1.7 CR 10.00/1.5 11.25/1.3	See page 84 to 89

385/95 R 25 X-CRANE + TL 170E
Tubeless

MICHELIN® X-CRANE + 170E 060565 (16)												
			70 43.5	391 15.4	1365 53.7	633 24.9	4165 164	23 29		280 74	10.00/1.5	See page 84 to 89

15.5 R 25 Tubeless

MICHELIN® XTL A L2* 123415 (5)	16 9.9		397 15.6	1272 50.1	556 21.9	3795 149.4	26 32.8		245 65	12.00/1.3 12.00/1.3DC 13.00/1.4DC	See page 84 to 89
MICHELIN® XHA L3* 123008			404 15.9	1270 50	555 21.9	3789 149.2					
MICHELIN® XMINI D2 L5R* 252905			418 16.5	1336 52.6	609 24	4049 159.4					

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)								
------------	-----------------------------	--	--	--	--	--	--	--	--	--

25" CONTINUED

	Machine - Utilisation	bar	5	6	7	8	9			
		psi	73	87	102	116	131			
X-CRANE + X-CRANE	Cranes and Similar Specialized Machines	30 km/h 19 mph	4750 10474	5440 11995	6125 13506	6815 15027	7500 16538			
		40 km/h 25 mph	4370 9636	5005 11036	5635 12425	6270 13825	6900 15215			
		50 km/h 31 mph	4255 9382	4870 10738	5490 12105	6105 13462	6720 14818			
		60 km/h 37 mph	4180 9217	4785 10551	5390 11885	5995 13219	6600 14553			
		65 km/h 40 mph	4085 9007	4575 10088	5270 11620	5860 12921	6450 14222			
		70 km/h 43 mph	3990 8798	4570 10077	5145 11345	5725 12624	6300 13892			
		80 km/h 50 mph	3800 8379	4350 9592	4900 10805	5450 12017	6000 13230			
		90 km/h 56 mph	3570 7872	4090 9018	4605 10154	5120 11290	5640 12436			
		100 km/h 62 mph	3230 7122	3700 8159	4165 9184	4630 10209	5100 11246			

	Machine - Utilisation	bar	6	6.5	7	7.5	8	8.5	9	
		psi	87	94	102	109	116	123	131	
X-CRANE +	Cranes and Similar Specialized Machines	0 km/h 0 mph	14350 31642	15030 33141	15700 34619	16350 36052	16970 37419	17590 38786	18180 40087	
		2 km/h Creep 1.2 mph Creep	11650 25688	12200 26901	12740 28092	13270 29260	13780 30385	14280 31487	14760 32546	
		5 km/h 3 mph	10320 22756	10810 23836	11290 24894	11760 25931	12210 26923	12650 27893	13080 28841	
		10 km/h 6 mph	8950 19735	9370 20661	9790 21587	10200 22491	10580 23329	10970 24189	11340 25005	
		30 km/h 19 mph	6160 13583	6450 14222	6730 14840	7010 15457	7280 16052	7550 16648	7800 17199	
		40 km/h 25 mph	5870 12943	6150 13561	6420 14156	6690 14751	6940 15303	7200 15876	7440 16405	
		45 km/h 28 mph	5730 12635	6000 13230	6270 13825	6530 14399	6780 14950	7020 15479	7260 16008	
		50 km/h 31 mph	5590 12326	5850 12899	6110 13473	6370 14046	6610 14575	6850 15104	7080 15611	
		60 km/h 37 mph	5300 11687	5560 12260	5800 12789	6040 13318	6270 13825	6500 14333	6720 14818	
		70 km/h 43 mph	4735 10441	4960 10937	5180 11422	5395 11896	5600 12348	5805 12800	6000 13230	
XTL A *L2 XHA *L3 XMINE D2 *L5R	Loaders	80 km/h 50 mph	3885 8566	4065 8963	4250 9371	4425 9757	4590 10121	4760 10496	4920 10849	
		90 km/h 56 mph	3315 7310	3470 7651	3625 7993	3775 8324	3920 8644	4065 8963	4200 9261	
		100 km/h 62 mph	2840 6262	2975 6560	3110 6858	3235 7133	3360 7409	3485 7684	3600 7938	

	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5		
		psi	29	36	44	51	58	65		
XTL A *L2 XHA *L3 XMINE D2 *L5R	Loaders	Front tip.load	5900 13010	6800 14994	7700 16979	8550 18853	9300 20507	10300 22712		
		Front laden	3700 8159	4250 9371	4800 10584	5350 11797	5800 12789	6450 14222		
		Rear unladen	2950 6505	3400 7497	3850 8489	4300 9482	4650 10253	5150 11356		
XTL A *L2 XHA *L3 XMINE D2 *L5R	Graders	All axles	2325 5127	2650 5843	3000 6615					
XMINE D2 *L5R	underground mine machines	All axles	3350 7387	3850 8489	4300 9482	4800 10584	5200 11466	5800 12789		

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32 ^d	Dual Spacing mm inches	Cap. l gallons				
			mm inches	mm inches	mm inches	mm inches	mm inches	mm inches	l gallons				

25" CONTINUED

16.00 R 25 Tubeless

MICHELIN® XH D1 A E4 ** 123350	28 17.4	164 112	462 18.2	1540 60.6	704 27.7	4672 183.9	43 54.2	564 22.2	380 100	11.25/2.0 13.00/2.0	See page 84 to 89
MICHELIN® X-QUARRY E4R ** 692021	16 9.9	93 64	437 17.2	1542 60.7	707 27.8	4683 184.4	48 60.5	564 22.2	380 100		

16.00 R 25 Tubeless

MICHELIN® XMINE D2 LSR 261025	6 3.7		457 18	1530 60.2	699 27.5	4641 182.7	73 92		320 85	11.25/2.0 13.00/2.0	See page 84 to 89
---	----------	--	-----------	--------------	-------------	---------------	----------	--	-----------	------------------------	-------------------

445/80 R 25 Tubeless

MICHELIN® XGC 170E 264520	70 43.5		446 17.6	1352 53.2	625 24.6	4119 162.2	28 35.3		340 90	14.00/1.7 CR 14.00/1.5	See page 84 to 89
-------------------------------------	------------	--	-------------	--------------	-------------	---------------	------------	--	-----------	---------------------------	-------------------

445/80 R 25 Tubeless

MICHELIN® XLB 170E 757059	70 43.5		435 17.1	1356 53.4	619 24.4	4112 161.9	26 32.8		340 90	14.00/1.5 14.00/1.7 CR	See page 84 to 89
-------------------------------------	------------	--	-------------	--------------	-------------	---------------	------------	--	-----------	---------------------------	-------------------

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

25" CONTINUED

		Machine - Utilisation	bar	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
			psi	51	58	65	73	80	87	94	102	109	116
XH D1 A **E4	Transport	Standard		5000 11025	5450 12017	5900 13010	6400 14112	6850 15104	7300 16097	7550 16648	7750 17089	8000 17640	
X-QUARRY **EAR	Quarry transport	30 km/h 19 mph	5300 11687	5800 12789	6300 13892	6800 14994	7300 16097	7800 17199					
		Machine - Utilisation	bar	2	3	4	5	6	7				
			psi	29	44	58	73	87	102				
XMINE D2 LSR	Loaders	Front tip.load	7650 16868	9850 21719	12000 26460	14200 31311	16300 35942	18550 40903					
		Front laden	4500 9923	5800 12789	7050 15545	8350 18412	9600 21168	10900 24035					
		Rear unladen	3600 7938	4650 10253	5650 12458	6700 14774	7700 16979	8700 19184					
XMINE D2 LSR	underground mine machines	All axles	4050 8930	5200 11466	6350 14002	7500 16538	8650 19073	9800 21609					

		Machine - Utilisation	bar	5	6	7							
			psi	73	87	102							
XGC	Cranes and Similar Specialized Machines	30 km/h 19 mph	5650 12458	6750 14884	7800 17199								
		40 km/h 25 mph	5400 11907	6450 14222	7450 16427								
		50 km/h 31 mph	5150 11356	6150 13561	7100 15656								
		60 km/h 37 mph	5565 12271	6030 13296	6720 14818								
		65 km/h 40 mph	4650 10253	5550 12238	6450 14222								
		70 km/h 43 mph	4350 9592	5200 11466	6000 13230								
		80 km/h 50 mph	3600 7938	4250 9371	4950 10915								
		90 km/h 56 mph	3050 6725	3650 8048	4200 9261								
		100 km/h 62 mph	2650 5843	3150 6946	3600 7938								

		Machine - Utilisation	bar	2	3	4	5	6	7				
			psi	29	44	58	73	87	102				
XL B	Cranes and Similar Specialized Machines	30 km/h 19 mph	2725 6009	3650 8048	4600 10143	5650 12458	6750 14884	7800 17199					
		40 km/h 25 mph	2600 5733	3475 7662	4400 9702	5400 11907	6450 14222	7450 16427					
		50 km/h 31 mph	2475 5457	3300 7277	4150 9151	5150 11356	6150 13561	7100 15656					
		60 km/h 37 mph	2365 5215	3150 6946	3975 8765	5565 12271	6030 13296	6720 14818					
		65 km/h 40 mph	2250 4961	3000 6615	3800 8379	4650 10253	5550 12238	6450 14222					
		70 km/h 43 mph	2100 4631	2800 6174	3550 7828	4350 9592	5200 11466	6000 13230					
		80 km/h 50 mph	1725 3804	2300 5072	2900 6395	3600 7938	4250 9371	4950 10915					
		90 km/h 56 mph	1475 3252	1975 4355	2500 5513	3050 6725	3650 8048	4200 9261					
		100 km/h 62 mph	1250 2756	1675 3693	2150 4741	2650 5843	3150 6946	3600 7938					

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e	D	R'	RC	Tread depth	Dual Spacing	Cap.				
			mm	mm	mm	mm	mm	mm	l				

25" CONTINUED

445/95 R 25 Tubeless

MICHELIN® XSNOPPLUS E2 177E 123857	70 43.5		447 17.6	1486 58.5	687 27	4528 178.3	25 31.5	513 20.2	380 100	11.00/1.7 CR 11.25/2	See page 84 to 89
---	------------	--	-------------	--------------	-----------	---------------	------------	-------------	------------	---------------------------------	-------------------

445/95 R 25 Tubeless

MICHELIN® X-CRANE + 174F 738428	80 49.7		442 17.4	1485 58.5	693 27.3	4542 178.8	25 31.5		380 100	11.00/1.7 CR 11.25/2 DC 635x280 CR	See page 84 to 89
--	------------	--	-------------	--------------	-------------	---------------	------------	--	------------	---	-------------------

445/95 R 25 Tubeless

MICHELIN® XL B 177E 282741	70 43.5		422 16.6	1484 58.4	680 26.8	4506 177.4	29 36.5		350 92	11.00/1.7 CR 11.25/2	See page 84 to 89
---	------------	--	-------------	--------------	-------------	---------------	------------	--	-----------	---------------------------------	-------------------

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identifi-cation code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)								
------------	------------------------------	--	--	--	--	--	--	--	--	--

25" CONTINUED

	Machine - Utilisation	bar	5	6	7	8	9			
		psi	73	87	102	116	131			
XSNOPPLUS E2	Cranes and Similar Specialized Machines	30 km/h 19 mph	5850 12899	6750 14884	7650 16868	8600 18963	9500 20948			
		40 km/h 25 mph	5600 12348	6450 14222	7300 16097	8200 18081	9050 19955			
		50 km/h 31 mph	5300 11687	6150 13561	6950 15325	7800 17199	8600 18963			
		65 km/h 40 mph	4850 10694	5600 12348	6350 14002	7150 15766	7800 17199			
		70 km/h 43 mph	4500 9923	5200 11466	5900 13010	6600 14553	7300 16097			
		80 km/h 50 mph	3700 8159	4250 9371	4850 10694	5400 11907	6000 13230			
		90 km/h 56 mph	3150 6946	3650 8048	4150 9151	4600 10143	5100 11246			
		100 km/h 62 mph	2700 5954	3120 6880	3550 7828	3950 8710	4400 9702			

	Machine - Utilisation	bar	5	6	7	8	9			
		psi	73	87	102	116	131			
X-CRANE +	Cranes and Similar Specialized Machines	30 km/h 19 mph	5340 11775	6095 13439	6850 15104	7615 16791	8375 18467			
		40 km/h 25 mph	4910 10827	5605 12359	6300 13892	7005 15446	7705 16990			
		50 km/h 31 mph	4780 10540	5460 12039	6140 13539	6820 15038	7505 16549			
		65 km/h 40 mph	4590 10121	5240 11554	5890 12987	6545 14432	7205 15887			
		70 km/h 43 mph	4485 9889	5120 11290	5755 12690	6395 14101	7035 15512			
		80 km/h 50 mph	4270 9415	4875 10749	5480 12083	6090 13428	6700 14774			
		90 km/h 56 mph	4015 8853	4580 10099	5150 11356	5725 12624	6300 13892			
		100 km/h 62 mph	3775 8324	4305 9493	4840 10672	5380 11863	5920 13054			

	Machine - Utilisation	bar	2	3	4	5	6	7	8	9
		psi	29	44	58	73	87	102	116	131
XL B	Cranes and Similar Specialized Machines	30 km/h 19 mph	2925 6450	4100 9041	5000 11025	5850 12899	6750 14884	7650 16868	8600 18963	9500 20948
		40 km/h 25 mph	2800 6174	3900 8600	4775 10529	5600 12348	6450 14222	7300 16097	8200 18081	9050 19955
		50 km/h 31 mph	2650 5843	3725 8214	4550 10033	5300 11687	6150 13561	6950 15325	7800 17199	8600 18963
		65 km/h 40 mph	2400 5292	3375 7442	4125 9096	4850 10694	5600 12348	6350 14002	7150 15766	7800 17199
		70 km/h 43 mph	2250 4961	3150 6946	3850 8489	4500 9923	5200 11466	5900 13010	6600 14553	7300 16097
		80 km/h 50 mph	1850 4079	2600 5733	3150 6946	3700 8159	4250 9371	4850 10694	5400 11907	6000 13230
		90 km/h 56 mph	1575 3473	2200 4851	2700 5954	3150 6946	3650 8048	4150 9151	4600 10143	5100 11246
		100 km/h 62 mph	1350 2977	1900 4190	2300 5072	2700 5954	3120 6880	3550 7828	3950 8710	4400 9702

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32 ^d	Dual Spacing mm inches	Cap. l gallons				
			mm inches	inches	inches	inches	mm inches	mm inches	l gallons				

25" CONTINUED

17.5 R 25 Tubeless

MICHELIN® XSNOPLUS L2T+TC 123871	16 9.9		448 17.6	1342 52.8	576 22.7	3977 156.6	28 35.3	333 88	14.00/1.5 14.00/1.5 DC 13.00/1.4 DC 14.00/1.3 DC	See page 84 to 89
MICHELIN® XTL A L2* 123425 (5)			459 18.1	1337 52.6	574 22.6	3964 156.1		332 88	14.00/1.3 DC 14.00/1.5 14.00/1.5 DC	
MICHELIN® XHA L3* 123009			448 17.6	1340 52.8	580 22.8	3984 156.9		328 87	14.00/1.5 14.00/1.5 DC 13.00/1.4 DC	
MICHELIN® XHA2 L3*176A2 717546			459 18.1	1342 52.8	583 23	3995 157.3		325 11.5	14.00/1.5 14.00/1.5 DC 13.00/1.4 DC	
MICHELIN® XK A L3** 263251			481 18.9	1346 53	600 23.6	4045 159.3	25 31.5	300 79	14.00/1.5	
MICHELIN® XLD2 A L5T* 123317			454 17.9	1406 55.4	619 24.4	4206 165.6	63 79.4	305 81	14.00/1.5	
MICHELIN® XMINI D2 L5** 009071			480 18.9	1402 55.2	641 25.2	4254 167.5	65 81.9	285 75	14.00/1.5	
MICHELIN® XSM D2+ L5S ** 218365			456 18	1397 55		4246 167.2	78 98.3	272 72	14.00/1.5	

18.00 R 25 Tubeless

MICHELIN® XS E7 276450 (9)			492 19.4	1600 63	722 28.4	4831 190.2	21 26.5	641 25.2	532 141	13.00/2.5 15.00/2.5	See page 84 to 89
---	--	--	-------------	------------	-------------	---------------	------------	-------------	------------	------------------------	-------------------

18.00 R 25 Tubeless

MICHELIN® XHD1 A E4** 123031	22 13.7	163 112	525 20.7	1665 65.6	760 29.9	5050 198.8	47 59.2	598 23.5	500 132	13.00/2.5 15.00/2.5	See page 84 to 89
MICHELIN® XHD1 B E4** 123021	30 18.6	222 152							495 131		
MICHELIN® XHD1 A E4** 270680	18 11.2	133 91	530 20.9	1668 65.7	764 30.1	5064 199.4			587 23.1	513 136	
MICHELIN® XHDT A E4 199475	23 14.3	170 116	587 23.1	513 136							
MICHELIN® XHDT B E4 714571	30 18.6	222 152	496 19.5	1621 63.8	732 28.8	4896 192.8			587 23.1	513 136	

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

25" CONTINUED

	Machine - Utilisation	bar	2	2.5	3	3.5	4.25	4.5	5	5.5	6	6.5
		psi	29	36	44	51	62	65	73	80	87	94
XSNOPPLUS *TG L2T XTL A *L2 XHA *L3 XLD D2 A *L5T	Loader	Front tip.load	7300 16097	8150 17971	9100 20066	10000 22050	11350 25027	11750 25909				
		Front laden	4550 10033	5100 11246	5700 12569	6250 13781	7100 15656	7350 16207				
		Rear unladen	3650 8048	4100 9041	4550 10033	5000 11025	5700 12569	5900 13010				
XKA **L3 XHA2 *L3	Loader	Front tip.load	7300 16097	8150 17971	9100 20066	10000 22050	11350 25027	11750 25909	12700 28004	13600 29988		
		Front laden	4550 10033	5100 11246	5700 12569	6250 13781	7100 15656	7350 16207	7925 17475	8500 18743		
		Rear unladen	3650 8048	4100 9041	4550 10033	5000 11025	5700 12569	5900 13010	6350 14002	6800 14994		
XMINE D2 **L5 XSM D2+ **L5S	Loader	Front tip.load			7540 16626	8650 19073	10000 22050	10400 22932	11360 25049	12000 26460	12800 28224	13600 29988
		Front laden			4750 10474	5450 12017	6250 13781	6500 14333	7100 15656	7500 16538	8000 17640	8500 18743
		Rear unladen			3800 8379	4360 9614	5000 11025	5200 11466	5680 12524	6000 13230	6400 14112	6800 14994
XSNOPPLUS *TG L2T XTL A *L2 XHA *L3 XHA2 *L3 XLD D2 A *L5T	Graders	All axles	2800 6174	3250 7166	3650 8048							
XKA **L3 XLD D2 A *L5T	Underground Transport Machine	All axles			4250 9371	4750 10474	5600 12348	5800 12789	6300 13892	6700 14774		
XMINE D2 **L5	Underground Transport Machine	All axles			4250 9371	4750 10474	5600 12348	5800 12789	6300 13892	6700 14774	7100 15656	7500 16538

	Machine - Utilisation	bar	1	1.5	2	2.5	3	3.5	4	4.5	5	6
		psi	15	22	29	36	44	51	58	65	73	87
XS E7	Desert conditions 65 km/h max.	Road in single			3250 7166	3900 8600	4500 9923	5050 11135	5600 12348	6250 13781	6850 15104	8000 17640
		Road in twin			2925 6450	3510 7740	4050 8930	4545 10022	5040 11113	5625 12403	6165 13594	7200 15876
		Track in single			3250 7166	4050 8930	4950 10915	5750 12679	6600 14553			
		Track in twin			2925 6450	3645 8037	4455 9823	5175 11411	5940 13098			
		Sand in single	3600 7938	5050 11135	6350 14002							
		Sand in twin	3240 7144	4545 10022	5715 12602							
	Machine - Utilisation	bar	4	4.25	4.5	5	6	7	7.5			
		psi	58	62	65	73	87	102	109			
XH D1 A **E4 XH D1 B **E4 XK D1 A **E4 XHDT A E4 XHDT B E4	Transport	Standard	6800 14994	7100 15656	7400 16317	8000 17640	9250 20396	9850 21719	10150 22381			

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32 ^d	Dual Spacing mm inches	Cap. l gallons				
			mm inches	mm inches	mm inches	mm inches	mm inches	mm inches	l gallons				

25" CONTINUED

18.00 R 25 Tubeless

MICHELIN® XMINI D2 LS ** 391927	6 3.7		536 21.1	1656 65.2	736 29	4971 195.7	82 103.3		460 122	13.00/2.5 15.00/2.5	See page 84 to 89
MICHELIN® XSM D2+ LSS ** 686348	4 2.5		507 20	1655 65.2	743 29.3	4988 196.4	96 120.9		440 116		
MICHELIN® XSM D2+ LC LSS ** 694482	6 3.7		509 20	1612 63.5	723 28.5	4856 191.2	78 98.3		437 115		

18.00 R 25 Tubeless

MICHELIN® XVC E2 186E 123491 (8, 9)	50 31.1	284 195	496 19.5	1622 63.9	743 29.3	4925 193.9	26 32.8	641 25.2	563 149	13.00/2.5 15.00/2.5	See page 84 to 89
--	------------	------------	-------------	--------------	-------------	---------------	------------	-------------	------------	------------------------	-------------------

505/95 R 25 Tubeless

MICHELIN® XVC 183E 565628 (9)	50 31.1	284 195	498 19.6	1610 63.4	743 29.3	4902 193	26 32.8	576 152	10.0/2.0 13.00/2.5 15.00/2.5	See page 84 to 89
--	------------	------------	-------------	--------------	-------------	-------------	------------	------------	------------------------------------	-------------------

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

25" CONTINUED

	Machine - Utilisation	bar	3	4	4.5	5	5.5	6	7	7.5	8	8.25
		psi	44	58	65	73	80	87	102	109	116	120
XMIN D2 **L5 XSM D2+ **L5S XSM D2+ LC L5S**	Loader	Front tip.load		15725 34674	17000 37485	18530 40859	20060 44232	21250 46856	23800 52479	25500 56228	26450 58322	27200 59976
		Front laden		9250 20396	10000 22050	10900 24035	11800 26019	12500 27563	14000 30870	15000 33075	15550 34288	16000 35280
		Rear unladen		7400 16317	8000 17640	8720 19228	9450 20837	10000 22050	11200 24696	12000 26460	12450 27452	12800 28224
XMINE D2 **L5	Underground Transport Machine	All axles	6700 14774	8250 18191	9000 19845	9750 21499	10600 23373	11200 24696	12500 27563	13200 29106	14000 30870	14200 31311

	Machine - Utilisation	bar	2	3	4	5	6	7	7.5	8	9	
		psi	29	44	58	73	87	102	109	116	131	
XVC E2	Cranes and Similar Specialized Machines	30 km/h 19 mph	3700 8159	5200 11466	6300 13892	7400 16317	8650 19073	9900 21830	10500 23153	11100 23153	12400 24476	27342
		40 km/h 25 mph	3525 7773	4950 10915	6000 13230	7050 15545	8250 18191	9400 20727	10000 22050	10600 22373	11800 23373	26019
		50 km/h 31 mph	3375 7442	4725 10419	5700 12569	6750 14884	7850 17309	8950 19735	9525 21003	10100 21221	11200 22271	24696
		65 km/h 40 mph	3050 6725	4275 9426	5200 11466	6100 13451	7100 15656	8150 17971	8650 19073	9150 20176	10200 20176	22491
		70 km/h 43 mph	2850 6284	4000 8820	4850 10694	5700 12569	6650 14663	7600 16758	8075 17805	8550 18853	9500 20948	
		80 km/h 50 mph	2325 5127	3275 7221	3975 8765	4675 10308	5450 12017	6250 13781	6625 14608	7000 15435	7800 17199	
		90 km/h 56 mph	2000 4410	2800 6174	3400 7497	4000 8820	4650 10253	5300 11687	5650 12458	6000 13230	6650 14663	
		100 km/h 62 mph	1700 3749	2400 5292	2900 6395	3400 7497	4000 8820	4550 10033	4750 10474	5150 11356	5700 12569	

	Machine - Utilisation	bar	5	6	7	8	9					
		psi	73	87	102	116	131					
XVC	Cranes and Similar Specialized Machines	30 km/h 19 mph	6435 14189	7670 16912	8905 19636	10140 22359	11375 25082					
		40 km/h 25 mph	6140 13539	7315 16130	8495 18731	9670 21322	10850 23924					
		50 km/h 31 mph	5840 12877	6960 15347	8085 17827	9205 20297	10325 22767					
		60 km/h 37 mph	5545 12227	6610 14575	7670 16912	8730 19250	9800 21609					
		65 km/h 40 mph	5245 11565	6255 13792	7260 16008	8270 18235	9275 20451					
		70 km/h 43 mph	4950 10915	5900 13010	6850 15104	7800 17199	8750 19294					
		80 km/h 50 mph	4060 8952	4840 10672	5615 12381	6390 14090	7175 15821					
		90 km/h 56 mph	3465 7640	4130 9107	4795 10573	5460 12039	6125 13506					
		100 km/h 62 mph	2970 6549	3540 7806	4110 9063	4680 10319	5250 11576					

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm inches	Dual Spacing mm inches	Cap. l gallons				
			mm inches	inches	inches	inches	32 ^d	inches	gallons				

25" CONTINUED

20.5 R 25 Tubeless

MICHELIN® XADN EST ** 177B 123407	28 17.4	164 112	528 20.8	1490 58.7	667 26.3	4485 176.6	36 45.4		474 125	17.00/2.0	See page 84 to 89
---	------------	------------	-------------	--------------	-------------	---------------	------------	--	------------	-----------	-------------------

20.5 R 25 Tubeless

MICHELIN® XSNOPPLUS L2T* 123795	16 9.9	1486 58.5	534 21	1471 57.9	632 24.9	4362 171.7	31 39.1	500 132	489 129	485 128	17.00/2.0 17.00/1.7	See page 84 to 89
MICHELIN® XTL A L2* 123435 (5)			532 20.9	1480 58.3	637 25.1	4391 172.9						
MICHELIN® XHA2 L3 *186A2 899613			528 20.8		644 25.4	4420 174						
MICHELIN® XK A L3** 263460			560 22		655 25.8	4447 175.1						
MICHELIN® XLD D2 A L5T* 123325			534 21	1530 60.2	674 26.5	4578 180.2						
MICHELIN® XMINED2 LS** 353968			562 22.1	1535 60.4	701 27.6	4656 183.3						
MICHELIN® XLDN L3* 944959			525 20.7	1483 58.4	640 25.2	4405 173.4						

525/80 R 25 Tubeless

MICHELIN® X-CRANE + 176F 086926	80 49.7		528 20.8	1482 58.3	682 26.9	4508 177.5	28 35.3		500 132	17.00/2.0 17.00/1.7 CR	See page 84 to 89
---	------------	--	-------------	--------------	-------------	---------------	------------	--	------------	---------------------------	-------------------

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

25" CONTINUED

	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.25	4.5		
		psi	29	36	44	51	58	62	65		
XADN **E3T	Articulated dumpers	Standard	4750 10474	5250 11576	5750 12679	6250 13781	6800 14994	7050 15545	7300 16097		

	Machine - Utilisation	bar	2	2.5	3	3.5	4.25	4.5	5	5.5	6	6.5
		psi	29	36	44	51	62	65	73	80	87	94
XSNOPLUS *L2T XTL A *L2 XHA2 *L3 XLD D2 A *L5T XLDN L3*	Loader	Front tip.load	10000 22050	11150 24586	12300 27122	13450 29657	15200 33516	15850 34949				
		Front laden	6250 13781	7000 15435	7700 16979	8400 18522	9500 20948	9900 21830				
		Rear unladen	5000 11025	5600 12348	6150 13561	6700 14774	7600 16758	7900 17420				
XKA **L3	Loader	Front tip.load	10000 22050	11150 24586	12300 27122	13450 29657	15200 33516	15850 34949	17130 37772	18400 40572		
		Front laden	6250 13781	7000 15435	7700 16979	8400 18522	9500 20948	9900 21830	10700 23594	11500 25358		
		Rear unladen	5000 11025	5600 12348	6150 13561	6700 14774	7600 16758	7900 17420	8550 18853	9180 20242		
XMINE D2 **L5	Loader	Front tip.load			10080 22226	11360 25049	13440 29635	14000 30870	15200 33516	16000 35280	17440 38455	18400 40572
		Front laden			6300 13892	7100 15656	8400 18522	8750 19294	9500 20948	10000 22050	10900 24035	11500 25358
		Rear unladen			5040 11113	5680 12524	6700 14774	7000 15435	7600 16758	8000 17640	8720 19228	9200 20286
XSNOPLUS *L2T XTL A *L2 XHA2 *L3 XLD D2 A *L5T	Graders	All axles	3600 7938	4125 9096	4625 10198							
XKA **L3 XLD D2 A *L5T	Underground Transport Machine	All axles			5600 12348	6300 13892	7300 16097	7750 17089	8250 18191	9000 19845		
XMINE D2 **L5	Underground Transport Machine	All axles			5600 12348	6300 13892	7300 16097	7750 17089	8250 18191	9000 19845	9500 20948	10000 22050

	Machine - Utilisation	bar	5	6	7							
		psi	73	87	102							
X-CRANE +	Cranes and Similar Specialized Machines	30 km/h 19 mph	6700 14774	7700 16979	8900 19625							
		40 km/h 25 mph	6150 13561	7100 15656	8200 18081							
		50 km/h 31 mph	6000 13230	6900 15215	8000 17640							
		60 km/h 37 mph	5900 13010	6800 14994	7850 17309							
		65 km/h 40 mph	5750 12679	6650 14663	7650 16868							
		70 km/h 43 mph	5650 12458	6500 14333	7500 16538							
		80 km/h 50 mph	5350 11797	6150 13561	7100 15656							
		90 km/h 56 mph	5050 11135	5800 12789	6700 14774							
		100 km/h 62 mph	4550 10033	5250 11576	6050 13340							

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e	D	R'	RC	Tread depth	Dual Spacing	Cap.				
			mm	mm	mm	mm	mm	mm	l				
			inches	inches	inches	inches	32 ^d	inches	gallons				

25" CONTINUED

525/80 R 25 Tubeless

MICHELIN® XL B 179E 758060	70 43.5		513 20.2	1486 58.5	678 26.7	4505 177.4	24 30.2		478 126	17.00/2.0 17.00/1.7 CR	See page 84 to 89
---	------------	--	-------------	--------------	-------------	---------------	------------	--	------------	---------------------------	-------------------

21.00 R 25 Tubeless

MICHELIN® XS E7 276670 (9)			558 22	1750 68.9	767 30.2	5226 205.7	19 23.9		700 185	15.00/3.0	See page 84 to 89
---	--	--	-----------	--------------	-------------	---------------	------------	--	------------	-----------	-------------------

21.00 R 25 Tubeless

MICHELIN® XKA L3** 270850	14 8.7		609 24	1768 69.6	800 31.5	5343 210.4	33 41.6		700 185	15.00/3.0 17.00/3.0	See page 84 to 89
--	-----------	--	-----------	--------------	-------------	---------------	------------	--	------------	------------------------	-------------------

21.00 R 25 Tubeless

MICHELIN® XKA L3** 270850	14 8.7		609 24	1768 69.6	800 31.5	5343 210.4	33 41.6		700 185	15.00/3.0 17.00/3.0	See page 84 to 89
--	-----------	--	-----------	--------------	-------------	---------------	------------	--	------------	------------------------	-------------------

550/65 R 25 Tubeless

MICHELIN® XLD 65 L3T+ 123570	16 9.9		549 21.6	1400 55.1	600 23.6	4147 163.3	32 40.3		450 119	17.00/2.0 17.00/1.7	See page 84 to 89
---	-----------	--	-------------	--------------	-------------	---------------	------------	--	------------	------------------------	-------------------

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

25" CONTINUED

	Machine - Utilisation	bar	2	3	4	5	6	7	8	9	10		
		psi	29	44	58	73	87	102	116	130	145		
XL B	Cranes and Similar Specialized Machines	30 km/h 19 mph	3700 8159	4950 10915	6200 13671	7500 16538	8800 19404	10100 22271					
		40 km/h 25 mph	3525 7773	4700 10364	5900 13010	7150 15766	8350 18412	9600 21168					
		50 km/h 31 mph	3375 7442	4475 9867	5600 12348	6800 14994	7950 17530	9150 20176					
		65 km/h 40 mph	3050 6725	4075 8985	5100 11246	6150 13561	7200 15876	8300 18302					
		70 km/h 43 mph	2850 6284	3800 8379	4750 10474	5750 12679	6750 14884	7750 17089					
		80 km/h 50 mph	2325 5127	3125 6891	3900 8600	4725 10419	5550 12238	6350 14002					
		90 km/h 56 mph	2000 4410	2650 5843	3350 7387	4050 8930	4750 10474	5450 12017					
		100 km/h 62 mph	1700 3749	2275 5016	2850 6284	3450 7607	4050 8930	4650 10253					
XS E7	Desert conditions 65 km/h max.	Machine - Utilisation	bar	1	1.5	2	2.5	3	3.5	4	4.5		
			psi	15	22	29	36	44	51	58	65		
		Road in single	2500 5513	3050 6725	3750 8269	4500 9923	5250 11576	6000 13230	6650 14663	7350 16207	8050 17750	9500 20948	
		Road in twin	2250 4961	2745 6053	3375 7442	4050 8930	4725 10419	5400 11907	6435 14189	6615 14586	7245 15975	8550 18853	
		Track in single	2750 6064	3750 8269	4750 10474	5800 12789	6800 14994	7800 17199					
		Track in twin	2475 5457	3375 7442	4275 9426	5220 11510	6120 13495	7020 15479					
		Sand in single	4250 9371	6000 13230	7600 16758								
		Sand in twin	3825 8434	5400 11907	6840 15082								
XKA **L3	Transport	Standard	Machine - Utilisation	bar	4	4.5	5	5.5	6	6.5	7	7.5	8
				psi	58	65	73	80	87	94	102	109	116
XKA **L3		All axles	8350 18412	9100 20066	9850 21719	10600 23373	11400 25137	12150 26791	12550 27673	12925 28500	13300 29327		
			Machine - Utilisation	bar	2	3	4	5	6	7	8	9	10
XLD 65 *L3T	Loaders	All axles		psi	29	44	58	73	87	102	116		
			Front tip.load	7850 17309	8575 18908	9300 20507	10700 23594	11440 25225	12150 26791	13600 29988	14320 31576	15040 33163	16480 36338
XLD 65 *L3T	Loaders	All axles	Front laden	4900 10805	5350 11797	5800 12789	6700 14774	7150 15766	7600 16758	8500 18743	8950 19735	9400 20727	10300 22712
			Rear unladen	3925 8655	4290 9459	4650 10253	5350 11797	5720 12613	6075 13395	6800 14994	7165 15799	7525 16593	8250 18191
XLD 65 *L3T	Graders	All axles	2940 6483	3210 7078	3480 7673	4020 8864	4290 9459	4560 10055	5100 11246				

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm inches	Dual Spacing mm inches	Cap. l gallons				
			mm inches	inches	inches	inches	32 ^d	inches	gallons				

25" CONTINUED

23.5 R 25 Tubeless

MICHELIN® XADIN+ E3 **185B 295773	28 17.4	207 142	602 23.7	1598 62.9	721 28.4	4824 189.9	38 47.9		702 185	19.50/2.5	See page 84 to 89
MICHELIN® XADIN E3T **185B 123417 (8)	28 17.4		601 23.7	1612 63.5	719 28.3	4846 190.8	38 47.9		654 173		
MICHELIN® XTRA DEFEND E4 **185B 923499 (7)	26 16.2	192 132	615 24.2	1628 64.1	731 29	4906 193	54 68		658 174		
MICHELIN® X-SUPER TERRAIN+ E4 **185B 002583			607 23.9	1614 63.5	725 28.5	4864 191.5	51 64.3		652 172		
MICHELIN® X-SUPER TERRAIN AD E4T **185B 769360			603 23.7	1623 63.9	728 28.7	4890 192.5			650 172		

23.5 R 25 Tubeless

MICHELIN® XSNOPPLUS L2T* 460452	16 9.9		603 23.7	1610 63.4	687 27	4761 187.4	34 42.8		670 177	19.50/2.5	See page 84 to 89
MICHELIN® XTL A L2* 123445 (5)			596 23.5	1614 63.5	686 27	4766 187.6			680 180		
MICHELIN® XHA2 L3*195A2 139147			599 23.6	1612 63.5	690 27.2	4773 187.9	36 45.4		672 178		
MICHELIN® XKA L3** 263670 (12)			632 24.9	1611 63.4	702 27.6	4802 189.1	30 37.8		635 168		
MICHELIN® XLD D2 A L5T* 123326	10 6.2		612 24.1	1662 65.4	722 28.4	4947 194.8	77 97		600 159		
MICHELIN® XMINI D2 L5** 199408			637 25.1	1656 65.2	751 29.6	5009 197.2	83 104.6		590 156		
MICHELIN® XMINI D2 L5R* 266931 (8)					707 27.8	4898 192.8					
MICHELIN® XLDN L3* 387171	16 9.9		600 23.6	1609 63.3	682 26.9	4748 186.9	34 42.8		660 174		

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identifi-cation code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)										
------------	------------------------------	--	--	--	--	--	--	--	--	--	--	--

25" CONTINUED

	Machine - Utilisation	bar	2	2.5	3	3.5	3.75	4	4.5	5	5.5	
		psi	29	36	44	51	54	58	65	73	80	
XADN **E3 X-SUPER TERRAIN AD **E4T XTRA DEFEND **E4	Articulated dumpers	Standard	5650 12458	6380 14068	7100 15656	7800 17199	8175 18026	8550 18853	9250 20396	9950 21940	10350 22822	
XADN+ **E3 X-SUPER TERRAIN+ **E4	Articulated dumpers	Standard	4930 10871	5650 12458	6380 14068	7100 15656	7450 16427	7800 17199	8550 18853	9250 20396		
XSNOPPLUS *L2T XTLA *L2 XHA2 *L3 XLD D2 A *L5T XMINE D2 *L5R XLDN *L3	Loader	Front tip.load	12950 28555	14550 32083	16250 35831	17850 39359	19450 42887					
		Front laden	8100 17861	9100 20066	10150 22381	11150 24586	12150 26791					
		Rear unladen	6500 14333	7300 16097	8100 17861	8900 19625	9700 21389					
	Loader	Front tip.load	12950 28555	14550 32083	16250 35831	17850 39359	19450 42887	21350 47077	22230 49017	23200 51156		
		Front laden	8100 17861	9100 20066	10150 22381	11150 24586	12150 26791	13350 29437	13900 30650	14500 31973		
		Rear unladen	6500 14333	7300 16097	8100 17861	8900 19625	9700 21389	10700 23594	11160 24608	11600 25578		
XMINE D2 **L5	Loader	Front tip.load			13200 29106	14800 32634	16480 36338	17920 39514	19440 42865	20560 45335	21760 47981	23200 51156
		Front laden			8250 18191	9250 20396	10300 22712	11200 24696	12150 26791	12850 28334	13600 29988	14500 31973
		Rear unladen			6600 14553	7400 16317	8240 18169	8960 19757	9720 21433	10280 22667	10880 23990	11600 25578
XSNOPPLUS *L2T XTL A *L2 XHA2 *L3 XLD D2 A *L5T	Graders	All axles	4875 10749	5425 11962	6000 13230							
XXKA **L3 XLD D2 A *L5T XMINE D2 *L5R	Underground Transport Machine	All axles			7300 16097	8250 18191	9000 19845	9750 21499	10600 23373	11500 25358		
XMINE D2 **L5	Underground Transport Machine	All axles			7300 16097	8250 18191	9000 19845	9750 21499	10600 23373	11500 25358	12150 26791	12850 28334

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32 ^d	Dual Spacing mm inches	Cap. l gallons				
			mm inches	inches	inches	inches	mm inches	inches	gallons				

25" CONTINUED

23.5 R 25 Tubeless

MICHELIN® XL B E2 188E 123474	70 43.5		598 23.5	1619 63.7	738 29.1	4905 193.1	27 34		700 185	19.50/2.5	See page 84 to 89
---	------------	--	-------------	--------------	-------------	---------------	----------	--	------------	-----------	-------------------

600/65 R 25 Tubeless

MICHELIN® XLD 65 L3T* 063799	16 9.9		622 24.5	1429 56.3	617 24.3	4246 167.2	34 42.8		484 128	17.00/1.7 17.00/2.0 19.50/2.5	See page 84 to 89
--	-----------	--	-------------	--------------	-------------	---------------	------------	--	------------	-------------------------------------	-------------------

650/65 R 25 Tubeless

MICHELIN® XAD 65-1 SUPER E3T **180B 840573	28 17.4	179 123	630 24.8	1494 58.8	669 26.3	4498 177.1	40 50.4		595 157	19.50/2.5 22.00/3.0	See page 84 to 89
--	------------	------------	-------------	--------------	-------------	---------------	------------	--	------------	------------------------	-------------------

650/65 R 25 Tubeless

MICHELIN® XLD 65 L3T* 123820	16 9.9		634 25	1498 59	637 25.1	4425 174.2	37 46.6		596 157	19.50/2.5	See page 84 to 89
--	-----------	--	-----------	------------	-------------	---------------	------------	--	------------	-----------	-------------------

26.5 R 25 Tubeless

MICHELIN® XADN+ E3 **193B 154324	28 17.4	258 177	687 27	1726 68	773 30.4	5196 204.6	41 51.7		908 240		
MICHELIN® XADN E3T **193B 123427 (8)	28 17.4		675 26.6	1728 68	769 30.3	5190 204.3	41 51.7		900 238	22.00/3.0 IF 22.00/3.0	See page 84 to 89
MICHELIN® X-SUPER TERRAIN+ E4 **193B 039476	24 14.9	221 151	691 27.2	1749 68.9	783 30.8	5266 207.3	54 68		862 228		

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

25" CONTINUED

	Machine - Utilisation	bar	2	3	4	5	6	7	8	9	10
		psi	29	44	58	73	87	102	116	144	158
XLB E2	Cranes and Similar Specialized Machines	30 km/h 19 mph	4750 10474	6350 14002	7950 17530	9600 21168	11300 24917	13000 28665			
		40 km/h 25 mph	4550 10033	6050 13340	7550 16648	9200 20286	10800 23814	12400 27342			
		50 km/h 31 mph	4325 9537	5750 12679	7200 15876	8750 19294	10300 22712	11800 26019			
		65 km/h 40 mph	3925 8655	5200 11466	6550 14443	7900 17420	9300 20507	10700 23594			
		70 km/h 43 mph	3660 8070	4880 10760	6100 13451	7400 16317	8700 19184	10000 22050			
		80 km/h 50 mph	3000 6615	4000 8820	5000 11025	6050 13340	7150 15766	8200 18081			
		90 km/h 56 mph	2550 5623	3425 7552	4250 9371	5200 11466	6100 13451	7000 15435			
		100 km/h 62 mph	2100 4631	2925 6450	3650 8048	4400 9702	5200 11466	6000 13230			
XLD 65 *L3T	Loaders	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5	5	6
		Front tip.load	9040 19933	10680 23549	12320 27166	13960 30782	15600 34398	17160 37838	18720 41278		
		Front laden	5650 12458	6675 14718	7700 16979	8725 19239	9750 21499	10725 23649	11700 25799		
	Rear unladen	4520 9967	5340 11775	6160 13583	6980 15391	7800 17199	8580 18919	9360 20639			
XLD 65 *L3T	Graders	All axles	3390 7475	4005 8831	4600 10143						
XAD 65-1 **SUPER E3T	Articulated dumpers	Machine - Utilisation	bar	2.5	3	3.5	4	4.5	5	6	7
		Standard	5450 12017	6300 13892	7150 15766	8000 17640					
			bar	2	2.5	3	3.5	4	4.5	5	6
XLD 65 *L3T	Loaders	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5	5	6
		Front tip.load	10800 23814	12700 28004	14600 32193	16500 36383	18400 40572	20300 44762	22200 48951		
		Front laden	6700 14774	7900 17420	9100 20066	10300 22712	11500 25358	12700 28004	13900 30650		
	Rear unladen	5400 11907	6350 14002	7300 16097	8250 18191	9200 20286	10150 22381	11100 24476			
XLD 65 *L3T	Graders	All axles	4100 9041	4800 10584	5500 12128	6200 13671	6900 15215	7600 16758	8300 18302		
XADN **E3T	Articulated dumpers	Machine - Utilisation	bar	2	2.5	3	3.25	3.5	4	4.5	5
		Standard	6500 14333	7500 16538	8500 18743	9000 19845	9500 20948	10500 23153	11500 25358		
XADN+ **E3 X-SUPER TERRAIN+ **E4	Articulated dumpers	Standard			6500 14333	7500 16538	8000 17640	8500 18743	9500 20948	10500 23153	11500 25358

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm inches	Dual Spacing mm inches	Cap. l gallons				
			mm inches	inches	inches	inches	32 ^d	inches	gallons				

25" CONTINUED

26.5 R 25 Tubeless

MICHELIN® XHA2 L3** 209A2 893825	16 9.9		678 26.7	1732 68.2	740 29.1	5125 201.8	41 51.7		879 232	22.00/3.0 IF 22.00/3.0	See page 84 to 89		
MICHELIN® XK A L3** 273360 (8, 12)	14 8.7		714 28.1	1734 68.3	763 30	5186 204.2	35 44.1		855 226				
MICHELIN® XSM DN L3S 123022 (9)	10 6.2		724 28.5	1726 68	770 30.3	5189 204.3	48 60.5		890 235				
MICHELIN® XLD D1 A L4R* 123495	14 8.7		690 27.2	1803 71	780 30.7	5360 211	53 66.8		947 250				
MICHELIN® XLD D2 A L5T* 123094	10 6.2		687 27	1800 70.9	778 30.6	5348 210.6	87 109.6		825 218				
MICHELIN® XMINE D2 L5** 164572	6 3.7		718 28.3	1795 70.7	807 31.8	5413 213.1	91 114.6		812 215				
MICHELIN® XMINE D2 L5R* 273400 (8)				1794 70.6	751 29.6	5269 207.4			820 217				
MICHELIN® XSM D2+ L5S** 995669	4 2.5		692 27.2	1790 70.5	806 31.7	5400 212.6	102 128.5		771 204				

26.5 R 25 Tubeless

MICHELIN® XSM DN+ L3S*** 569259	10 6.2		704 27.7	1727 68	770 30.3	5192 204.4	44 55.4		836 221	22.00/3.0 IF 22.00/3.0	See page 84 to 89
---	-----------	--	-------------	------------	-------------	---------------	------------	--	------------	---------------------------	-------------------

26.5 R 25 Tubeless

MICHELIN® XTL E4***L4 *** 214A2 039149	14 8.7 if load per tire ≤ 18.5 t		180 123	687 27	1722 67.8	755 29.7	5143 202.5		789 208	22.00/3.0 22.00/3.0 IF	See page 84 to 89
MICHELIN® XTL E4*** 321951	12 7.5 if load per tire > 18.5 t							54 68			
						763 30	5164 203.3			817 216	

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identifi-cation code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	------------------------------	--	--	--	--	--	--	--	--	--	--

25" CONTINUED

	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
		psi	29	36	44	51	58	65	73	80	87	94
XSM DN L3S XLD D1A *L4R XLD D2 A *L5T XMINE D2 *L5R	Loader	Front tip.load	13000 28665	14400 31752	17000 37485	19050 42005	21000 46305	22600 49833	24300 53582	25900 57110		
		Front laden	9300 20507	10300 22712	12150 26791	13600 29988	15000 33075	16150 35611	17350 38257	18500 40793		
		Rear unladen	7450 16427	8250 18191	9700 21389	10900 24035	12000 26460	12900 28445	13900 30650	14800 32634		
XHA2 **L3	Loader	Front tip.load	13000 28665	14400 31752	17000 37485	19050 42005	21000 46305	22600 49833	24300 53582	25900 57110		
		Front laden	9300 20507	10300 22712	12150 26791	13600 29988	15000 33075	16150 35611	17350 38257	18500 40793		
		Rear unladen	7450 16427	8250 18191	9700 21389	10900 24035	12000 26460	12900 28445	13900 30650	14800 32634		
XKA **L3 XMINE D2 **L5 XSM D2+ **L5S	Loader	Front tip.load			14420 31796	16100 35501	17990 39668	19600 43218	21000 46305	22400 49392	23800 52479	25900 57110
		Front laden			10300 22712	11500 25358	12850 28334	14000 30870	15000 33075	16000 35280	17000 37485	18500 40793
		Rear unladen			8240 18169	9200 20286	10280 22667	11200 24696	12000 26460	12800 28224	13600 29988	14800 32634
XHA2 **L3	Graders	All axles	5400 11907	6400 14112	7500 16538							
XSM DN L3S XLD D1A *L4R XLD D2 A *L5T XMINE D2 *L5R	Underground Transport Machine	All axles			9000 19845	10300 22712	11200 24696	12500 27563	13200 29106	14500 31973		
XKA **L3 XMINE D2 **L5	Underground Transport Machine	All axles			9000 19845	10300 22712	11200 24696	12500 27563	13200 29106	14500 31973	15500 34178	16500 36383
	Machine - Utilisation	bar	3	4	4.5	5	5.5	6	6.5	7	7.5	8
		psi	44	58	65	73	80	87	94	102	109	116
XSM DN+ ***L3S	Loader	Front tip.load	12750 28114	16700 36824	17750 39139	19600 43218	21100 46526	22750 50164	24250 53471	25950 57220	27750 61189	29680 65444
		Front laden	10300 22712	12850 28334	14000 30870	15000 33075	16000 35280	17000 37485	18500 40793	19500 42998	20600 45423	21200 46746
		Rear unladen	9100 20066	10600 23373	11450 25247	12300 27122	13100 28886	13800 30429	14650 32303	15400 33957	16200 35721	16850 37154
	Machine - Utilisation	bar	3	4	4.5	5	5.5	6	6.5	7	7.5	8
		psi	44	58	65	73	80	87	94	102	109	116
XTXL E4 ****L4***	Loader load per tire ≤ 18.5 t	Front tip.load	14420 31796	17990 39668	19600 43218	21000 46305	22400 49392	23800 52479	25900 57110			
		Front laden	10300 22712	12850 28334	14000 30870	15000 33075	16000 35280	17000 37485	18500 40793			
		Rear unladen	8240 18169	10280 22667	11200 24696	12000 26460	12800 28224	13600 29988	14800 32634			
XTXL E4 ****L4***	Loader load per tire > 18.5 t	Front tip.load								27300 60197	28840 63592	29680 65444
		Front laden								19500 42998	20600 45423	21200 46746
		Rear unladen								15600 34398	16480 36338	16960 37397
XTXL E4 ****L4*** XTXL ****E4	Underground Transport Machine	All axles	9000 19845	11200 24696	12500 27563	13200 29106	14500 31973	15500 34178	16500 36383	17000 37485	18000 39690	19000 41895

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32 ^d	Dual Spacing mm inches	Cap. l gallons				
			mm inches	inches	inches	inches	mm inches	inches	gallons				

25" CONTINUED

26.5 R 25 Tubeless

MICHELIN® XL B E2 195E 123484	70 43.5		670 26.4	1752 69	800 31.5	5313 209.2	30 37.8		860 227	22.00/3.0	See page 84 to 89
---	------------	--	-------------	------------	-------------	---------------	------------	--	------------	-----------	-------------------

29.5 R 25 Tubeless

MICHELIN® XADIN+ E3 **200B 597428	28 17.4	314 215	767 30.2	1858 73.1	826 32.5	5578 219.6	44 55.4		1221 323	25.00/3.5	See page 84 to 89
MICHELIN® X-SUPER TERRAIN+ E4 **200B 973483	22 13.7	246 169	769 30.3	1869 73.6	836 32.9	5625 221.5	60 75.6		1152 304		

29.5 R 25 Tubeless

MICHELIN® XHA2 L3 **216A2 961307	16 9.9	14 8.7	747 29.4	1860 73.2	795 31.3	5504 216.7	43 54.2	1177 311	1145 303	1171 309	25.00/3.5	See page 84 to 89
MICHELIN® XKA L3 ** 273560 (8, 12)			793 31.2	1862 73.3	802 31.6	5525 217.5	38 47.9					
MICHELIN® XLD D1 A L4R * 123741			769 30.3	1906 75	821 32.3	5656 222.7	58 73.1					
MICHELIN® XLD D2 A L5T * 123278	10 6.2		762 30	1900 74.8		5645 222.2	95 119.7					
MICHELIN® XMIN D2 L5 ** 221069			804 31.7	1903 74.9	850 33.5	5725 225.4	99 124.7					
MICHELIN® XMIN D2 L5R 273527 (8)	6 3.7			1900 74.8	838 33	5688 223.9	100 126					

29.5 R 25 Tubeless

MICHELIN® XS SAND E7 **196E 458236 (9)			747 29.4	1820 71.7	796 31.3	5431 213.8	22 27.7		1200 317	25.00/3.5	See page 84 to 89
---	--	--	-------------	--------------	-------------	---------------	------------	--	-------------	-----------	-------------------

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

25" CONTINUED

	Machine - Utilisation	bar	2	3	4	5	6	7	8	9	10
		psi	29	44	58	73	87	102	117	132	147
XL B E2	Cranes and Similar Specialized Machines	30 km/h 19 mph	5850 12899	7800 17199	9750 21499	11800 26019	13800 30429	15800 34839			
		40 km/h 25 mph	5600 12348	7450 16427	9300 20507	11200 24696	13100 28886	15100 33296			
		50 km/h 31 mph	5300 11687	7100 15656	8850 19514	10700 23594	12500 27563	14300 31532			
		65 km/h 40 mph	4825 10639	6400 14112	8050 17750	9700 21389	11300 24917	13000 28665			
		70 km/h 43 mph	4500 9923	6000 13230	7500 16538	9050 19955	10600 23373	12150 26791			
		80 km/h 50 mph	3700 8159	4925 10860	6150 13561	7400 16317	8700 19184	9950 21940			
		90 km/h 56 mph	3150 6946	4200 9261	5250 11576	6350 14002	7400 16317	8400 18522			
		100 km/h 62 mph	2700 5954	3600 7938	4500 9923	5450 12017	6350 14002	7300 16097			
	Machine - Utilisation	bar	2.5	3	3.25	3.5	4	4.5	5	6	7
		psi	36	44	47	51	58	65	73	80	87
XADN+ **E3 X-SUPER TERRAIN+ **E4	Articulated dumpers	Standard	7800 17199	9050 19955	9675 21333	10300 22712	11500 25358	12750 28114	14000 30870		
	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5	5	5.5	6
		psi	29	36	44	51	58	65	73	80	87
XLD D1 A + L4R XLD D2 A + L5T XMINE D2 L5R	Loader	Front tip.load	15600 34398	17200 37926	20450 45092	22800 50274	25200 55566	27250 60086	29350 64717	31350 69127	
		Front laden	11150 24586	12300 27122	14600 32193	16300 35942	18000 39690	19450 42887	20950 46195	22400 49392	
		Rear unladen	8900 19625	9850 21719	11700 25799	13050 28775	14400 31752	15550 34288	16750 36934	17900 39470	
XHA2 **L3 XKA **L3	Loader	Front tip.load	15600 34398	17200 37926	20450 45092	22800 50274	25200 55566	27250 60086	29350 64717	31350 69127	
		Front laden	11150 24586	12300 27122	14600 32193	16300 35942	18000 39690	19450 42887	20950 46195	22400 49392	
		Rear unladen	8900 19625	9850 21719	11700 25799	13050 28775	14400 31752	15550 34288	16750 36934	17900 39470	
XMINE D2 **L5	Loader	Front tip.load			17500 38588	19600 43218	21700 47849	23800 52479	25200 55566	27300 60197	28840 63592
		Front laden			12500 27563	14000 30870	15500 34178	17000 37485	18000 39690	19500 42998	20600 45423
		Rear unladen			10000 22050	11200 24696	12400 27342	13600 29988	14400 31752	15600 34398	16480 36338
XKA **L3 XLD D1 A + L4R XLD D2 A + L5T XMINE D2 L5R	Underground Transport Machine	All axles			10900 24035	12150 26791	13600 29988	15000 33075	16000 35280	17500 38588	
XMINE D2 **L5	Underground Transport Machine	All axles			10900 24035	12150 26791	13600 29988	15000 33075	16000 35280	17500 38588	18500 40793
	Machine - Utilisation	bar	2	2.3	2.5	2.7	2.9	3.3	3.7	4.1	4.5
		psi	29	33	36	39	42	48	54	60	65
XS SAND **E7	Desert conditions 65 km/h max	Road in single							11000 24255	12000 26460	13000 28665
		Track in single							11000 24255	12000 26460	13000 28665
		Sand in single	11000 24255	12000 26460	12500 27563	13000 28665	14000 30870				

CHARACTERISTICS OF MICHELIN® EARTHTOWNER TIRES

COMMERCIAL DESCRIPTION	Max. dist./ hour km Miles	TKPH TMPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e	D	R'	RC	Tread depth	Dual Spacing	Cap.				
			mm	mm	mm	mm	mm	mm	l				
Types CAI (Part Number)			inches	inches	inches	inches	32 rd	inches	gallons				

25" CONTINUED

29.5 R 25 Tubeless

MICHELIN® XADN E E3V **200E 123703 (9)	50 31.1	560 384	743 29.3	1850 72.8	817 32.2	5541 218.1	44 55.4		1180 312		
MICHELIN® XS SAND ET**196E 458236 (9)			747 29.4	1820 71.7	796 31.3	5431 213.8	22 27.7		1200 317		25.00/3.5
MICHELIN® XTRA DEFEND E4 **200B 940473 (7)	22 13.7	246 169	773 30.4	1862 73.3	826 33	5586 220	65 82		1142 302		See page 84 to 89

29.5 R 25 Tubeless

750/65 R 25 Tubeless

MICHELIN® XAD 65-1 SUPER E3T **190B 123895	28 17.4	237 162	738 29.1	1599 63	701 27.6	4777 188.1	43 54.2		810 214	22.00/3.0 24.00/3.0 25.00/3.0	See page 84 to 89
--	------------	------------	-------------	------------	-------------	---------------	------------	--	------------	-------------------------------------	-------------------

750/65 R 25 Tubeless

MICHELIN® XL D 65 L3T* 123940	16 9.9		747 29.4	1591 62.6	683 26.9	4714 185.6	41 51.7		788 208	22.00/3.0 24.00/3.0	See page 84 to 89
---	-----------	--	-------------	--------------	-------------	---------------	------------	--	------------	------------------------	-------------------

29"

26.5 R 29 Tubeless

MICHELIN® XK A L3** 273860 (8, 9)	14 8.7		712 28	1840 72.4	801 31.5	5478 215.7	35 44.1		855 226	22.00/3.0 24.00/3.0	See page 84 to 89
MICHELIN® XSM DN L3S* 123661 (9)	10 6.2		726 28.6	1830 72	811 31.9	5488 216.1	40 50.4		937 248		

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

25" CONTINUED

	Machine - Utilisation	bar	2	2.5	3	3.25	3.5	4	4.5	5	5.5
		psi	29	36	44	47	51	58	65	73	80
XADN E **E3V XS SAND **E7 XTRA DEFEND **E4	Articulated dumpers	Standard	7800 17199	9050 19955	10300 22712	10900 24035	11500 25358	12750 28114	14000 30870		
XADN E **E3V XS SAND **E7	Articulated dumpers	70 km/h 43 mph			7800 17199	8575 18908	9350 20617	10900 24035	11500 25358	12750 28114	14000 30870

	Machine - Utilisation	bar	3	4	4.5	5	5.5	6	6.5	7	7.5	8
		psi	44	58	65	73	80	87	94	102	109	116
XTXL E4 ****L4 ***	Loader load per tire ≤ 22.4 t	Front tip.load	17500 38588	21700 47849	23800 52479	25200 55566	27300 60197	28840 63592	31360 69149			
		Front laden	12500 27563	15500 34178	17000 37485	18000 39690	19500 42998	20600 45423	22400 49392			
		Rear unladen	10000 22050	12400 27342	13600 29988	14400 31752	15600 34398	16480 36338	17920 39514			
XTXL E4 ****L4 ***	Loader load per tire > 22.4 t	Front tip.load								33040 72853	34020 75014	36050 79490
		Front laden								23600 52038	24300 53582	25750 56779
		Rear unladen								18880 41630	19440 42865	20600 45423
XTL E4 ****L4 *** XTXL ****E4	Underground Transport Machine	All axles	10900 24035	13600 29988	15000 33075	16000 35280	17500 38588	18500 40793	19500 42998	20600 45423	21800 48069	23000 50715

	Machine - Utilisation	bar	2.5	3	3.25	3.5	4					
		psi	36	44	47	51	58					
XAD 65-1 **SUPER E3T	Articulated dumpers	Standard	7350 16207	8400 18522	8950 19735	9500 20948	10600 23373					
XLD 65 *L3T	Loaders	Machine - Utilisation	bar	2	2.5	3	3.25	3.5	4	4.5	5	5.5
		psi	29	36	44	47	51	58	65	73	80	
		Front tip.load	11750 25909	13600 29988	15450 34067	16375 36107	17300 38147	19150 42226	21000 46305	22850 50384	24700 54464	
XLD 65 *L3T	Loaders	Front laden	8400 18522	9720 21433	11040 24343	11700 25799	12360 27254	13680 30164	15000 33075	16320 35986	17640 38896	
		Rear unladen	6725 14829	7775 17144	8825 19459	9365 20650	9900 21830	10950 24145	12000 26460	13050 26460	14100 28775	14100 31091
XLD 65 *L3T	Graders	All axles	5040 11113	5830 12855	6620 14597	7020 15479	7420 16361	8210 18103				

	Machine - Utilisation	bar	4	4.25	4.5	5	5.25	5.5	5.75	6	6.25	6.5
		psi	58	62	65	73	76	80	83	87	91	94
XKA **L3 XSM DN *L3S	Loader	Front tip.load	19040 41983	19600 43218	21000 46305	22400 49392	23100 50936	24500 54023	25200 55566	25900 57110	26600 58653	27300 60197
		Front laden	13600 29988	14000 30870	15000 33075	16000 35280	16500 36383	17500 38588	18000 39690	18500 40793	19000 41895	19500 42998
		Rear unladen	10880 23990	11200 24696	12000 26460	12800 28224	13200 29106	14000 30870	14400 31752	14800 32634	15200 33516	15600 34398
XKA **L3 XSM DN *L3S	Underground Transport Machine	All axles	12150 26791	12500 27563	13200 29106	14500 31973	15000 33075	15500 34178	16000 35280	16500 36383	17000 37485	17500 38588

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32 ^d	Dual Spacing mm inches	Cap. l gallons				
			mm inches	inches	inches	inches	mm inches	inches	gallons				

29" CONTINUED

26.5 R 29 Tubeless

MICHELIN® XSM DN+ L3S *** 317097	10 6.2		698 27.5	1830 72	820 32.3	5510 216.9	44 55.4		926 245	22.00/3.0 24.00/3.0	See page 84 to 89
--	-----------	--	-------------	------------	-------------	---------------	------------	--	------------	------------------------	-------------------

29.5 R 29 Tubeless

MICHELIN® XTS EST ** 708648	29 18	348 238	765 30.1	1963 77.3	869 34.2	5884 231.7	43 54.2		1300 343	24.00/3.5 25.00/3.5	See page 84 to 89
---------------------------------------	----------	------------	-------------	--------------	-------------	---------------	------------	--	-------------	------------------------	-------------------

29.5 R 29 Tubeless

MICHELIN® XK AL3 ** 274110	14 8.7		793 31.2	1961 77.2	844 33.2	5819 229.1	38 47.9		1260 333		
MICHELIN® XMINE D2 LS ** 965209		6 3.7	794 31.3	2005 78.9	896 35.3	6032 237.5		100 126	981 259		
MICHELIN® XMINE D2 LSR 274050 (8)			796 31.3	2001 78.8	878 34.6	5980 235.4			990 262	24.00/3.5 25.00/3.5	See page 84 to 89
MICHELIN® XSM D2+ LSS ** 358035	4 2.5		770 30.3	1994 78.5	893 35.2	6003 236.3	112 141.1		1123 297		

29.5 R 29 Tubeless

MICHELIN® XLD D2 A LST * 123279	10 6.2		772 30.4	2004 78.9	864 34	5949 234.2	95 119.7		985 260	24.00/3.5 25.00/3.5	See page 84 to 89
---	-----------	--	-------------	--------------	-----------	---------------	-------------	--	------------	------------------------	-------------------

29.5 R 29 Tubeless

MICHELIN® XTL E4 **** 512305		220 151	775 30.5	1928 75.9	855 33.7	5783 227.7	63 79.4		1139 301	24.00/3.5 25.00/3.5	See page 84 to 89
--	--	------------	-------------	--------------	-------------	---------------	------------	--	-------------	------------------------	-------------------

775/65 R 29 Tubeless

MICHELIN® XAD 65-1 SUPER E3T ** 195B 510085	28 17.4	272 186	785 30.9	1759 69.3	779 30.7	5272 207.6	45 56.7		1050 277	24.00/3.0 24.00/3.5 25.00/3.5	See page 84 to 89
---	------------	------------	-------------	--------------	-------------	---------------	------------	--	-------------	-------------------------------------	-------------------

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

29" CONTINUED

	Machine - Utilisation	bar	5	5.5	6	6.5	6.75	7	7.25	7.5	7.75	8
		psi	73	80	87	94	98	102	105	109	112	116
XSM DN+ ***L3S	Loader	Front tip.load	22400 49392	24500 54023	25900 57110	27300 60197	28000 61740	28840 63592	29680 65444	30520 67297	31360 69149	32200 71001
		Front laden	16000 35280	17500 38588	18500 40793	19500 42998	20000 44100	20600 45423	21200 46746	21800 48069	22400 49392	23000 50715
		Rear unladen	12800 28224	14000 30870	14800 32634	15600 34398	16000 35280	16480 36338	16960 37397	17440 38455	17920 39514	18400 40572
XTS **E3T	Transport	Standard	bar	2	2.5	3	3.5	4	4.25	4.5	5	5.5
			psi	29	36	44	51	58	62	65	73	80
XK A **L3 XMINE D2 **L5 XSM D2+ **L5S	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
		psi	29	36	44	51	58	65	73	80	87	94
		Front tip.load	18350 40462	20600 45423	22800 50274	25050 55235	27300 60197	30150 66481	33050 72875	35300 77837		
XMINE D2 L5R	Loader	Front laden	13100 28886	14700 32414	16300 35942	17900 39470	19500 42998	21550 47518	23600 52038	25200 55566		
		Rear unladen	10500 23153	11750 25909	13050 28775	14350 31642	15600 34398	17250 38036	18900 41675	21150 46636		
		Front tip.load			18480 40748	21000 46305	23100 50936	25200 55566	27300 60197	28840 63592	31360 69149	
Loader	Front laden				13200 29106	15000 33075	16500 36383	18000 39690	19500 42998	20600 45423	22400 49392	
					10560 23285	12000 26460	13200 29106	14400 31752	15600 34398	16480 36338	17920 39514	18880 41630
		Rear unladen										
XMINE D2 L5R	Underground Transport Machine	All axles			11800 26019	13200 29106	14500 31973	16000 35280	17000 37485	18500 40793		
XK A **L3 XMINE D2 **L5	Underground Transport Machine	All axles			11800 26019	13200 29106	14500 31973	16000 35280	17000 37485	18500 40793	19500 42998	20600 45423
	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5	5	5.25	5.5	6
		psi	29	36	44	51	58	65	73	76	80	87
XLD D2 A *L5T	Loader	Front tip.load	18350 40462	20600 45423	22800 50274	25050 55235	27300 60197	30150 66481	33050 72875	34150 75301	35300 77837	
		Front laden	13100 28886	14700 32414	16300 35942	17900 39470	19500 42998	21550 47518	23600 52038	24450 53912	25200 55566	
		Rear unladen	10500 23153	11750 25909	13050 28775	14350 31642	15600 34398	17250 38036	18900 41675	10560 23285	21150 46636	
XLD D2 A *L5T	Graders	All axles	7100 15656	8500 18743	9750 21499	10900 24035	12150 26791	13200 29106	14500 31973	15000 33075		
	Machine - Utilisation	bar	3	4	4.5	5	5.5	6	6.5	7	7.5	8
		psi	44	58	65	73	80	87	94	102	109	116
XTL ****E4	Underground Transport Machine	All axles	11800 26019	14500 31973	16000 35280	17000 37485	18500 40793	19500 42998	20600 45423	21800 48069	23000 50715	24300 53582
	Machine - Utilisation	bar	2	2.5	3	3.5	4					
		psi	29	36	44	51	58					
XAD 65-1 **SUPER E3T	Articulated dumpers	Standard	6900 15215	8100 17861	9350 20617	10700 23594	12150 26791					

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm inches	Dual Spacing mm inches	Cap. l gallons				
			mm inches	inches	inches	inches	32 ^d	inches	gallons				

29" CONTINUED

775/65 R 29 XHA2 L3 TL * 206A2

Tubeless

MICHELIN® XHA2 L3*206A2 992646 (7)	16 9.9		786 30.9	1732 68.2	748 28	5149 203	47 59.2		1008 266	24.00/3.5 24.00/3.0 25.00/3.5	See page 84 to 89
---	-----------	--	-------------	--------------	-----------	-------------	------------	--	-------------	-------------------------------------	-------------------

800/65 R 29 Tubeless

MICHELIN® XLD 65 L3T* 123059	16 9.9		793 31.2	1818 71.6	790 31.1	5412 213.1	48 60.5		1093 289	24.00/3.5 27.00/3.0	See page 84 to 89
--	-----------	--	-------------	--------------	-------------	---------------	------------	--	-------------	------------------------	-------------------

33.25 R 29 Tubeless

MICHELIN® XTS E3T** 871916	29 18	429 294	873 34.4	2068 81.4	923 36.3	6218 244.8	51 64.3		1640 433	27.00/3.5	See page 84 to 89
--------------------------------------	----------	------------	-------------	--------------	-------------	---------------	------------	--	-------------	-----------	-------------------

875/65 R 29 Tubeless

MICHELIN® XAD 65-1 SUPER E3T **203B 086953	28 17.4	347 238	883 34.8	1881 74.1	822 32.4	5613 221	51 64.3		1376 364	27.00/3.0 27.00/3.5 28.00/3.5	See page 84 to 89
--	------------	------------	-------------	--------------	-------------	-------------	------------	--	-------------	-------------------------------------	-------------------

875/65 R 29 Tubeless

MICHELIN® XHA2 L3*214A2 936624	16 9.9		882 34.7	1870 73.6	797 31.4	5528 217.6	49 61.7		1354 358	27.00/3.0 27.00/3.5 28.00/3.5	See page 84 to 89
--	-----------	--	-------------	--------------	-------------	---------------	------------	--	-------------	-------------------------------------	-------------------

800/80 R 29 X-SUPER TERRAIN+ E4 TL ** 206B Tubeless

MICHELIN® X-SUPER TERRAIN+ E4 **206B 952451	26 13.7	353 206	805 31.7	2002 78.8	888 35	6005 236.4	67 84.4		1315 347	25.00/3.5 27.00/3.5	See page 84 to 89
---	------------	------------	-------------	--------------	-----------	---------------	------------	--	-------------	------------------------	-------------------

33"

18.00 R 33 Tubeless

MICHELIN® XVC E2** 271325 (9)	50 31.1	436 299	496 19.5	1820 71.7	822 32.4	5486 216	26 32.8		640 169		
MICHELIN® X-HAUL E4P** 205207	30 18.6	262 179	495 19.5	1860 73.2	856 33.7	5657 222.7	49 61.7		624 24.6	605 160	13.00/2.5
MICHELIN® XDT 44 E4T** 123723	18 11.2	157 108		494 19.4	1868 73.5	885 34.8		54 68			
MICHELIN® XDT B E4T** 123733	30 18.6	262 179				5745 226.2					
MICHELIN® X-QUARRY S E4R** 873291	19 11.8	166 114	511 20.1	1864 73.4	867 34.1	5693 224.1		62 78.1	600 159		
MICHELIN® X-TRACTION E4T** 397431	25 15.5	218 149	493 19.4	1868 73.5	848 33.4	5652 222.5			661 175		

See page 84 to 89

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Ident-ification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	------------------------------	--	--	--	--	--	--	--	--	--	--

29" CONTINUED

	Machine - Utilisation	bar	3	3.5	4	4.25	4.5	4.75	5	5.25	
		psi	44	51	58	62	65	69	73	76	
XHA2 L3*	Loaders	Front tip.load	16800 37044	18850 41564	19600 43218	23100 50936	23800 52479				
		Front laden	12000 26460	13450 29657	14000 30870	16500 36383	17000 37485				
		Rear unladen	9600 21168	10750 23704	11200 24696	13200 29106	13600 29988				

	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.25	4.5	5	5.5
		psi	29	36	44	51	58	62	65	73	80
XLD 65 *L3T	Loaders	Front tip.load	14150 31201	16500 36383	18900 41675	21300 46967	23650 52148	24500 54023	26050 57440	28400 62622	30800 67914
		Front laden	10100 22271	11800 26019	13500 29768	15200 33516	16900 37265	17500 38588	18600 41013	20300 44762	22000 48510
		Rear unladen	8100 17861	9450 20837	10800 23814	12150 26791	13500 29768	14000 30870	14900 32855	16250 35831	17600 38808

	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.25	4.5	5	5.5	
		psi	29	36	44	51	58	62	65	73	80	
XTS **E3T	Transport	Standard	9500 20948	11000 24255	12500 27563	14000 30870	15500 34178	16300 35942	17000 37485	18500 40793	19250 42446	20000 44100

	Machine - Utilisation	bar	2	2.5	3	3.5	4				
		psi	29	36	44	51	58				
XAD 65-1 **SUPER E3T	Articulated dumpers	Standard	9100 20066	10800 23814	12500 27563	14100 31091	15500 34178				

	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.25	4.5	4.75	
		psi	29	36	44	51	58	62	65	69	
XHA2 *L3	Loaders	Front tip.load	12600 27783	15750 34729	18900 41675	22050 48620	25200 55566	26556 58556	28118 62000	29680 65444	
		Front laden	9000 19845	11250 24806	13500 29768	15750 34729	18000 39690	18968 41824	20084 44285	21200 46746	
		Rear unladen	7200 15876	9000 19845	10800 23814	12600 27783	14400 31752	15175 33461	16067 35428	16960 37397	

	Machine - Utilisation	bar	3	3.25	3.5	3.74	4	4.25	4.5	4.75		
		psi	44	47	51	54	58	62	65	69	76	
X-SUPER TERRAIN+ **E4	Articulated dumpers	Standard	12500 27563	13200 29106	14000 30870	14700 32414	15500 34178	16300 35942	17000 37485	17800 39249	18500 40793	19000 41895

	Machine - Utilisation	bar	4	4.5	5	5.5	6	6.5	7	7.5	
		psi	58	65	73	80	87	94	102	109	
XVC **E2 X-HAUL **E4P XDT A4 **E4T XDT B **E4T X-QUARRY S **E4R X-TRACTION **E4T	Transport	Standard	7950 17530	8700 19184	9400 20727	10150 22381	10900 24035	11270 24850	11650 25688	12000 26460	

CHARACTERISTICS OF MICHELIN® EARTHMOVER TIRES

COMMERCIAL DESCRIPTION	Max. dist./ hour km Miles	TKPH TMPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e	D	R'	RC	Tread depth	Dual Spacing	Cap.				
			mm	mm	mm	mm	mm	mm	l				
Types CAI (Part Number)			inches	inches	inches	inches	32 rd	inches	gallons				

33" CONTINUED

21.00 R 33 Tubeless

MICHELIN® X-HAUL S E4P ** 612785	25 15.5	280 192	550 21.7	1966 77.4	895 35.2	5955 234.4	53 66.8	697 27.4	820 217	15.00/3.0	See page 84 to 89
MICHELIN® X-TRACTION E4T ** 067981			572 22.5	2007 79	907 35.7	6064 238.7	71 89.4		851 225		

35/65 R 33 Tubeless

MICHELIN® XR DN A L3* 283500 (9)	16 9.9		911 35.9	2010 79.1	877 34.5	5993 235.9	38 47.9	1555 411		
MICHELIN® XSM DN L3S 123052	10 6.2		918 36.1	2012 79.2		6052 238.3	44 55.4			
MICHELIN® XLD D1A L4R ** 143231	14 8.7		923 36.3	2056 80.9	899 35.4	6135 241.5	60 75.6		1550 410	
MICHELIN® XLD D2 L5** 592188	10 6.2		926 36.5	2060 81.1	902 35.5	6150 242.1	97 122.2		1457 385	28.00/3.5
MICHELIN® XMINE D2 L5** 944666	6 3.7		921 36.3	2051 80.7		6169 242.9	93 117.2		1338 353	
MICHELIN® XSM D2+ L5S ** 980846	4 2.5			2050 80.7	916 36.1	6166 242.8	97 122.2		1350 357	

35/65 R 33 Tubeless

MICHELIN® XTXL E4 **** L4 *** 229A2 845075	14 8.7 if load per tire ≤ 28.0 t	250 171	907 35.7	2026 79.8	887 34.9	6048 238.1	60 75.6	1474 389	28.00/3.5	See page 84 to 89
MICHELIN® XTXL E4 **** 970355	10 6.2 if load per tire > 28.0 t									
MICHELIN® XTXL S E4 **** 771025 (9)		320 219			893 35.2	6063 238.7		1546 408		

35"

21.00 R 35 Tubeless

MICHELIN® XDT A4 E4T ** 123921	18 11.2	209 143		576 22.7	2062 81.2	937 36.9	6242 245.7	61 76.9		900 238		15.00/3.0 17.00/3.0	See page 84 to 89
MICHELIN® XDT B E4T ** 123881	30 18.6	348 238											
MICHELIN® X-QUARRY S E4R ** 765959	19 11.8	220 151	599 23.6	2068 81.4	934 36.8	6245 245.9	67 84.4	703 27.7	952 252				

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

33" CONTINUED

	Machine - Utilisation	bar	4	4.5	5	5.5	6	6.5	7		
		psi	58	65	73	80	87	94	102		
X-HAULS **E4P X-TRACTION **E4T	Transport	Standard	9315 20540	10250 22601	11185 24663	12125 26736	13065 28808	14000 30870	14470 31906		

	Machine - Utilisation	bar	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
		psi	29	36	44	51	58	65	73	80	87	94
XRDNA 1+L3 XSM DN L3S	Loader	Front laden	13750 30319	14850 32744	16100 35501	17700 39029	19000 41895	21200 46746	23000 50715	24150 53251	25300 55787	
		Rear unladen	10990 24233	11870 26173	12870 28378	14170 31245	15200 33516	16950 37375	18400 40572	19300 42557	20250 44651	
XLD D1 A **L4R XLD D2 **L5 XMINE D2 L5** XSM D2+ **L5S	Loader	Front laden			16100 35501	17700 39029	19000 41895	21200 46746	23000 50715	24300 53582	25750 56779	28000 61740
		Rear unladen			12900 28445	14200 31311	15200 33516	16950 37375	18400 40572	19450 42887	20600 45423	22400 49392
XSM DN L3S	Underground Transport Machine	All axles			13600 29988	15500 34178	17000 37485	18500 40793	20000 44100	21800 48069	23000 50715	
XLD D1 A **L4R XLD D2 **L5 XMINE D2 L5**	Underground Transport Machine	All axles			13600 29988	15500 34178	17000 37485	18500 40793	20000 44100	21800 48069	23000 50715	24300 53582

	Machine - Utilisation	bar	3	4	4.5	5	5.5	6	6.5	7	7.5	8
		psi	44	58	65	73	80	87	94	102	109	116
XTXL E4****L4***	Loader load per tire ≤ 28 t	Front laden	16100 35501	19000 41895	21200 46746	23000 50715	24300 53582	25750 56779	28000 61740			
		Rear unladen	12900 28445	15200 33516	16950 37375	18400 40572	19450 42887	20600 45423	22400 49392			
XTXL E4****L4***	Loader load per tire > 28 t	Front laden								30000 66150	31500 69458	32500 71663
		Rear unladen								24000 52920	25200 55566	26000 57330
XTXL E4****L4*** XTXL ****E4 XTXL S ****E4	Underground Transport Machine	All axles				20000 44100	21200 46746	23000 50715	24300 53582	25750 56779	27250 60086	29000 63945

	Machine - Utilisation	bar	4.5	5	5.5	6	6.5	7				
		psi	65	73	80	87	94	102				
XDT A4 **E4T XDT B **E4T X-QUARRY S **E4R	Transport	Standard	11450 25247	12450 27452	13500 29768	14500 31973	15000 33075	15500 34178				

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH T MPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm inches	Dual Spacing mm inches	Cap. l gallons				
			mm inches	mm inches	mm inches	mm inches	mm inches	mm inches	l gallons				

35" CONTINUED

24.00 R 35 Tubeless

MICHELIN® XVC E2 ** 271650 (9)	50 37.1	740 507	668 26.3	2118 83.4	947 37.3	6372 250.9	30 37.8		1264 334		
MICHELIN® X-HAUL E4T ** 087693	24 14.9	355 243	645 25.4	2155 84.8	995 39.2	6562 258.3	60 75.6				
MICHELIN® XDT B E4T ** 123931	30 18.6	444 304							825 32.5		
MICHELIN® XDT A E4T ** 123941	22 13.7	326 223	652 25.7	2162 85.1	978 38.5	6533 257.2	68 85.7		1150 304	15.00/3.5 17.00/3.5	
MICHELIN® XDT A4 E4T ** 123951	18 11.2	266 182									
MICHELIN® X-QUARRY S E4R ** 412539	19 11.8	281 192	659 25.9	2156 84.9	976 38.4	6517 256.6	70 88.2		1157 306		

See page 84 to 89

24.00 R 35 Tubeless

MICHELIN® X-TRACTION SC E4T ** 622698	22 13.7	326 223	676 26.6	2187 86.1	982 38.7	6592 259.5	77 97	825 32.5	1223 323	15.00/3.5 17.00/3.5	
---	------------	------------	-------------	--------------	-------------	---------------	----------	-------------	-------------	------------------------	--

See page 84 to 89

24.00 R 35 Tubeless

MICHELIN® XTRA LOAD GRIP B *** 302244	34 21 load per tire ≤ 18.5 t		503 345								
	31 19.3 load per tire > 18.5 t			666 26.2	2163 85.2	976 38.4	6531 257.1	73 92	795 31.3		
MICHELIN® XTRA LOAD GRIP A4 *** 559900	22 14 load per tire ≤ 18.5 t		320 219								
	20 12.4 load per tire > 18.5 t										
MICHELIN® XTRA LOAD PROTECT B *** 488798	34 21 load per tire ≤ 18.5 t		503 345								
	31 19.3 load per tire > 18.5 t			670 26.4	2162 85.1	978 38.5	6533 257.2	70 88.2	795 31.3		
MICHELIN® XTRA LOAD PROTECT A4 *** 3888190	22 14 load per tire ≤ 18.5 t		320 219								
	20 12.4 load per tire > 18.5 t										

See page 84 to 89

29.5 R 35 Tubeless

MICHELIN® XTS EST ** 631225	29 18	371 254	777 30.6	2116 83.3	943 37.1	6539 257.4	45 56.7		1494 395	25.00/3.5 27.00/3.5	
---------------------------------------	----------	------------	-------------	--------------	-------------	---------------	------------	--	-------------	------------------------	--

See page 84 to 89

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

35" CONTINUED

	Machine - Utilisation	bar	4.5	5	5.5	6	6.5	7	7.5	8	
		psi	65	73	80	87	94	102	109	116	
XVC **E2 X-HAUL **E4P XDT B **E4T XDT A **E4T XDT A4 **E4T X-QUARRY S **E4R	Transport	Standard	13950 30760	15050 33185	16300 35942	17350 38257	18500 40793	19050 42005	19625 43273	20200 44541	
X-TRACTION SC **E4T	Transport	Standard	13950 30760	15050 33185	16300 35942	17350 38257	18500 40793	19050 42005			
XTRA LOAD GRIP B XTRA LOAD GRIP A4	Machine - Utilisation	bar	4.5	5	5.5	6	6.5	7	7.25	7.5	7.75
	Transport load per tire ≤ 18.5 t	Standard	13950 30760	15050 33185	16300 35942	17350 38257	18500 40793				
	Transport load per tire > 18.5 t	Standard						19500 42998	20000 44100	20500 45203	21000 46305
XTRA LOAD PROTECT B XTRA LOAD PROTECT A4	Transport load per tire ≤ 18.5 t	Standard	13950 30760	15050 33185	16300 35942	17350 38257	18500 40793				
	Transport load per tire > 18.5 t	Standard						19500 42998	20000 44100	20500 45203	21000 46305
XTS **E3T	Machine - Utilisation	bar	3.5	3.75	4	4.25	4.5	5	5.5		
	Transport	Standard	13200 29106	13900 30650	14600 32193	15300 33737	16000 35280	17400 38367	18100 39911		

CHARACTERISTICS OF MICHELIN® EARTHMOVER TIRES

COMMERCIAL DESCRIPTION	Max. dist./ hour km Miles	TKPH TMPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e	D	R'	RC	Tread depth	Dual Spacing	Cap.				
			mm	mm	mm	mm	mm	mm	l				
Types CAI (Part Number)			inches	inches	inches	inches	32 rd	inches	gallons				

35" CONTINUED

37.25 R 35 Tubeless

MICHELIN® XRS B E4R ** 123673	22 13.7	415 284	947 37.3	2364 93.1	1063 41.9	7127 280.6	53 66.8		2250 594	29.00/3.5 31.00/4.0	See page 84 to 89
MICHELIN® XTS EST ** 540244	29 18	540 370	956 37.6	2370 93.3	1070 42.1	7157 281.8	59 74.3		2400 634		

39"

37.5 R 39 Tubeless

MICHELIN® XRS E4R ** 856011	22 13.7	453 310	976 38.4	2517 99.1	1130 44.5	7583 298.5	56 70.6		2624 693	32.00/4.5	See page 84 to 89
---	-------------------	-------------------	--------------------	---------------------	---------------------	----------------------	-------------------	--	--------------------	------------------	-------------------

40.5/75 R 39 Tubeless

MICHELIN® XMS B E3R ** 379296	33 20.5	766 525	998 39.3	2588 101.9	1151 45.3	7770 305.9	51 64.3		2940 777	32.00/4.5	See page 84 to 89
---	-------------------	-------------------	--------------------	----------------------	---------------------	----------------------	-------------------	--	--------------------	------------------	-------------------

45/65 R 39 Tubeless

MICHELIN® XLD D2 L5**242A2 519947	10 6.2		1102 43.4	2580 101.6	1116 43.9	7668 301.9	115 144.9		2760 729	32.00/4.5 36.00/4.5	See page 84 to 89
MICHELIN® XMINE D2 L5**242A2 785703	6 3.7		1099 43.3	2583 101.7	1132 44.6	7715 303.7	116 146.1		2712 717		

45"

45/65 R 45 Tubeless

MICHELIN® XLD D1 L4 **244A2 733149	14 8.7		1130 44.5	2703 106.4	1180 46.5	8062 317.4	71 89.4	3330 880		
MICHELIN® XLD D2 L5 **244A2 871341	10 6.2		1147 45.2				115 144.9		3020 798	36.00/4.5
MICHELIN® XMINI D2 L5 **244A2 651716	6 3.7		1159 45.6	2699 106.3	1193 47	8087 318.4	116 146.1			See page 84 to 89

49"

24.00 R 49 Tubeless

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

35" CONTINUED

	Machine - Utilisation	bar psi	3.75 54	4 58	4.25 62	4.5 65	5 73	5.5 80	6 87	6.5 94	
XRS B **E4R	Transport	Standard	17950 39580	18500 40793	19350 42667	20200 44541	21900 48290	23600 52038	24450 53912	25300 55787	
XTS **E3T	Transport	Standard	17950 39580	18500 40793	19350 42667	20200 44541	21900 48290	23600 52038	24450 53912	25300 55787	

39"

	Machine - Utilisation	bar psi	3 44	3.5 51	4 58	4.25 62	4.5 65	5 73	5.5 80	6 87	
XRS **E4R	Transport	Standard	18100 39911	20000 44100	21900 48290	22900 50495	23850 52589	25750 56779	26700 58874	27650 60968	

	Machine - Utilisation	bar psi	3 44	3.5 51	4 58	4.25 62	4.5 65	5 73	5.5 80	6 87	
XMS B **E3R	Transport	Standard	20200 44541	22400 49392	24600 54243	25700 56669	26800 59094	29000 63945	30100 66371	31200 68796	

	Machine - Utilisation	bar psi	3 44	3.5 51	4 58	4.25 62	4.5 65	5 73	5.5 80	6 87	6.5 94
XLD D2 **L5 XMINE D2 **L5	Loader	Front laden	26500 58433	30000 66150	33500 73868	36500 80483	40000 88200	42500 93713	45000 99225	47500 104738	
		Rear unladen	21200 46746	24000 52920	26800 59094	29200 64386	32000 70560	34000 74970	36000 79380	38000 83790	

45"

	Machine - Utilisation	bar psi	4 58	4.5 65	5 73	5.5 80	6 87	6.5 94			
XLD D1 **L4 XLD D2 **L5 XMINE D2 **L5	Loader	Front laden	35500 78278	38750 85444	42500 93713	45000 99225	47500 104738	51500 113558			
		Rear unladen	28400 62622	31000 68355	34000 74970	36000 79380	38000 83790	41200 90846			

49"

	Machine - Utilisation	bar psi	3.5 51	4 58	4.5 65	5 73	5.5 80	6 87	6.5 94	7 102	7.5 109	8 116
XDR B **E4R XDR B4 **E4R	Transport	Standard	13900 30650	15250 33626	16550 36493	17850 39359	19200 42336	20500 45203	21800 48069	22450 49502	23100 50936	23350 51487

CHARACTERISTICS OF MICHELIN® EARTHTOWNER TIRES

COMMERCIAL DESCRIPTION Types CAI (Part Number)	Max. dist./ hour km Miles	TKPH TMPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e	D	R'	RC	Tread depth	Dual Spacing	Cap.				
			mm	mm	mm	mm	mm	mm	l				
			inches	inches	inches	inches	32 rd	inches	gallons				

49" CONTINUED

27.00 R 49 Tubeless

51"

30.00 R 51 Tubeless

See page 84 to 89

33.00 R 51 Tubeless

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identifi-cation code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	------------------------------	--	--	--	--	--	--	--	--	--	--

49" CONTINUED

	Machine - Utilisation	Standard	bar	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
			psi	51	58	65	73	80	87	94	102	109	116
XV C **E2 XDT B **E4T X-TRACTION RD B **E4T X-TRACTION RD B4 **E4T X-TRACTION RD A4 **E4T X-TRACTION S RD B **E3T XDR B4 **E4R XDR2 B **E4R XDR2 B4 **E4R XDR2 A **E4R	Transport	Standard	16850 37154	18550 40903	20300 44762	22050 48620	24000 52920	25500 56228	27250 60086	28100 61961	29000 63945	29850 65819	

51"

	Machine - Utilisation	Standard	bar	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
			psi	51	58	65	73	80	87	94	102	109	116
XDR B **E4R XDR B4 **E4R	Transport	Standard	22100 48731	24350 53692	26650 58763	28950 63835	31200 68796	33500 73868	34650 76403	35800 78939			

	Machine - Utilisation	Standard	bar	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
			psi	51	58	65	73	80	87	94	102	109	116
XDC C4 **E3W XDT B **E4T XDT A **E4T XDR C4 **E4R XDR2 C4 **E4R XDR2 B **E4R XDR2 B4 **E4R XDR2 MB4 **E4R	Transport	Standard	25550 56338	28200 62181	30800 67914	33450 73757	36600 80703	38750 85444	40100 88421	41400 91287			

CHARACTERISTICS OF MICHELIN® EARTHTOWNER TIRES

COMMERCIAL DESCRIPTION Types CAI (Part Number)	Max. dist./ hour km Miles	TKPH TMPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e	D	R'	RC	Tread depth	Dual Spacing	Cap.				
			mm	mm	mm	mm	mm	mm	l				
			inches	inches	inches	inches	32 rd	inches	gallons				

51" CONTINUED

36.00 R 51 Tubeless

See page 84 to 89

50/65 R 51 Tubeless

MICHELIN® X-MI-N-E D2 HR LSR ** 523260	6 3.7		1273 50.1	3073 121	1366 53.8	9227 365.3	116 146.1		4463 1179	40.00/4.5	See page 84 to 89
MICHELIN® X-MI-N-E D2 LC LSR ** 508706	10 6.2										
MICHELIN® X-MI-N-E D2 SR LSR ** 970863	6 3.7										

See page 84 to 89

57"

37.00 R 57 Tubeless

See page 84 to 89

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Ident-ification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	------------------------------	--	--	--	--	--	--	--	--	--	--

51" CONTINUED

	Machine - Utilisation	bar	3.5	4	4.5	5	5.5	6	6.5	7	7.5
		psi	51	58	65	73	80	87	94	102	109
XDC B **E3V XDC C4 **E3V XDR B **E4R XDR B4 **E4R	Transport	Standard	30450 67142	33600 74088	36800 81144	39950 88090	43100 95036	46250 101981	47850 105509	49400 108927	51000 112455

	Machine - Utilisation	bar	4	4.5	5	5.5	6	6.35			
		psi	58	65	73	80	87	92			
XMINE D2 HR **LSR XMINE D2 SR **LSR XMINE D2 LC **LSR	Loaders	Front laden	46500 102533	50500 111353	54500 120173	58500 128993	62500 137813	65000 143325			
		Rear unladen	37200 82026	40400 89082	43600 96138	46800 103194	50000 110290	52000 114660			

	Machine - Utilisation	bar	4	4.5	5	5.5	6	6.5	7	7.5	
		psi	58	65	73	80	87	94	102	109	
XDM B4 **E4T XDR C **E4R XDR2 C **E4R XDR2 C4 **E4R XDR2 B **E4R XDR2 B4 **E4R XDR2 MB4 **E4R	Transport	Standard	38550 85003	42200 93051	45800 100989	49400 108927	53000 116865	54850 120944	56650 124913	58450 128882	

CHARACTERISTICS OF MICHELIN® EARTHMOVER TIRES

COMMERCIAL DESCRIPTION Types CAI (Part Number)	Max. dist./ hour km Miles	TKPH TMPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e	D	R'	RC	Tread depth	Dual Spacing	Cap.				
			mm	mm	mm	mm	mm	mm	l				
			inches	inches	inches	inches	32 rd	inches	gallons				

57" CONTINUED

40.00 R 57 Tubeless

See page 84 to 89

50/80 R 57 Tubeless

See page 84 to 89

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identifi-cation code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	------------------------------	--	--	--	--	--	--	--	--	--	--

57" CONTINUED

	Machine - Utilisation	Standard	bar	4	4.5	5	5.5	6	6.5	7	
			psi	58	65	73	80	87	94	102	
XDC C4 ** E3V XDC B ** E3V XDC B4 ** E3V XDR C ** E4R XDR C4 ** E4R XDR B ** E4R XDR+ C4 ** E4R XDR+ B ** E4R XDR+ B4 ** E4R XDR2 C ** E4R XDR2 C4 ** E4R XDR2 B ** E4R XDR2 B4 ** E4R XDR2 MC4 ** E4R XDR2 MB4 ** E4R XDR3 MB ** E4R XDR3 MB4 ** E4R XDR3 MC ** E4R XDR3 MC4 ** E4R	Transport	Standard	43650 96248	47750 105289	51850 114329	55950 123370	60000 132300	62050 136820	64100 141341		

	Machine - Utilisation	Standard	bar	5	5.5	6	6.5	7			
			psi	73	80	87	94	102			
XDR C4 ** E4R XDR B ** E4R XDR B4 ** E4R	Transport	Standard	63000 138915	68000 149940	73000 160965	75500 166478	78000 171990				

CHARACTERISTICS OF MICHELIN® EARTHMOVER TIRES

COMMERCIAL DESCRIPTION Types CAI (Part Number)	Max. dist./ hour km <i>Miles</i>	TKPH <i>TMPH</i> (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e	D	R'	RC	Tread depth	Dual Spacing	Cap.				
			mm	mm	mm	mm	mm	mm	l				
			inches	inches	inches	inches	32 rd	inches	gallons				

57" CONTINUED

50/80 R 57 Tubeless

MICHELIN® XDR C4 E4R ** 929814	26 16.2	1394 955		1253 49.3	3625 142.7	1577 62.1	10798 425.1	94 118.4	1536 60.5	6420 1696	32.00/6.0 [4.8]	See page 84 to 89
MICHELIN® XDR B4 E4R ** 966177	24 14.9	1286 881									32.00/6.0 [5.2]	
MICHELIN® XDR B4 E4R ** 310787	20 12.4	1072 734									34.00/6.0	

50/80 R 57 Tubeless

MICHELIN® XDR250 C E4R ** 195241	30 18.6	1608 1101									
MICHELIN® XDR250 C4 E4R ** 253293	27 16.8	1447 991	1204 47.4	3610 142.1	1586 62.4	10791 424.8	94 118.4	1420 55.9	6150 1625	29.00/6.0 [5.7] 29.00/6.0 [5.2]	
MICHELIN® XDR250 B E4R ** 274589	24 14.9	1286 881								32.00/6.0 [5.2] 32.00/6.0 [4.8]	
MICHELIN® XDR250 B4 E4R ** 371742	20 12.4	1072 734									See page 84 to 89

50/90 R 57 Tubeless

55/80 R 57 Tubeless

MICHELIN® X-MINE D2 LC LSR * 594400	10 6.2										
MICHELIN® X-MINE D2 SR LSR * 635563	6 3.7		1430 56.3	3740 147.2	1636 64.4	11161 439.4	119 149.9			7967 2705	42.00/5.0 44.00/5.0
MICHELIN® X-MINE D2 HR LSR * 817367											See page 84 to 89

60/80 R 57 Tubeless

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identification code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	-----------------------------	--	--	--	--	--	--	--	--	--	--

57" CONTINUED

	Machine - Utilisation	bar	5	5.5	6	6.5	7				
		psi	73	80	87	94	102				
XDR C4 ** E4R XDR B ** E4R XDR B4 ** E4R	Transport	Standard	57820 127493	62410 137614	67000 147735	69290 152784	71590 157856				

	Machine - Utilisation	bar	5	5.5	6	6.5	7	7.5	8		
		psi	73	80	87	94	102	109	116		
XDR250 C ** E4R XDR250 C4 ** E4R XDR250 B ** E4R XDR250 B4 ** E4R	Transport	Standard	55000 121275	59000 130095	63000 138915	67000 147735	69000 152145	71000 156555	73000 160965		

	Machine - Utilisation	bar	4	4.5	5	5.5	6	6.5	7	7.5	
		psi	58	65	73	80	87	94	102	109	
XDR C4 ** E4R XDR B ** E4R XDR B4 ** E4R	Transport	Standard	52850 116534	57800 127449	62750 138364	67700 149279	72650 160193	75320 166081	78000 171990	80660 177855	

	Machine - Utilisation	bar	4	4.5	5	5.5	6	6.5	7		
		psi	58	65	73	80	87	94	102		
XMINE D2 LC * LSR XMINE D2 SR * LSR XMINE D2 HR * LSR	Loaders	Front laden	75000 165375	80000 176400	85000 187425	90000 198450	95000 209475	100000 220500	105000 231525		
		Rear unladen	60000 132300	64000 141120	68000 149940	72000 158760	76000 167580	80000 176400	84000 185220		

	Machine - Utilisation	bar	4	4.5	5	5.5	6	6.5	7		
		psi	58	65	73	80	87	94	102		
XMINE D2 SR * LSR XMINE D2 HR * LSR	Loaders	Front laden	75000 165375	83000 183015	91000 200655	99000 218295	107000 235935	115000 253575	123000 271215		
		Rear unladen	60000 132300	66400 146412	72800 160524	79200 174636	85600 188748	92000 202860	98400 216972		

CHARACTERISTICS OF MICHELIN® EARTMOVER TIRES

COMMERCIAL DESCRIPTION Types CAL (Part Number)	Max. dist./ hour km Miles	TKPH TPMPH (1)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim Approved Rims (3) - (4)	Fitment and accessories (rim, seal, flap, tube...) (4)		
			Michelin® dimensions										
			e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32 ^d	Dual Spacing mm inches	Cap. l gallons				
			mm inches	inches	inches	inches	mm inches	inches	gallons				

63"

53/80 R 63 Tubeless

MICHELIN® XDR C4 E4R ** 632032 (8)	28 17.4	1837 1258	1342 52.8	3776 148.7	1638 64.5	11234 442.3	105 132.3	7650 2021	36.00/5.0 [5] 36.00/5.0 [5.5]	See page 84 to 89
MICHELIN® XDR B E4R ** 026549 (8)	24 14.9	1574 1078								
MICHELIN® XDR2 C4 E4R ** 782508 (8)	28 17.4	1837 1258								
MICHELIN® XDR2 B E4R ** 077134	24 14.9	1574 1078								
MICHELIN® XDR2 B4 E4R ** 227848	20 12.4	1312 899								
MICHELIN® XDR2 MC4 E4R ** 038101 (9)	28 17.4	1837 1258								
MICHELIN® XDR2 MB4 E4R ** 820930 (9)	20 12.4	1312 899								

53/80 R 63 Tubeless

MICHELIN® XDR C4 E4R ** 632032 (8)	28 17.4	1837 1258	1362 53.6	3776 148.7	1638 64.5	11234 442.3	105 132.3	7650 2021	38.00/5.0 [5] 38.00/5.0 [5.5]	See page 84 to 89
MICHELIN® XDR B E4R ** 026549 (8)	24 14.9	1574 1078								
MICHELIN® XDR2 C4 E4R ** 782508 (8)	28 17.4	1837 1258								
MICHELIN® XDR2 B E4R ** 077134	24 14.9	1574 1078								
MICHELIN® XDR2 B4 E4R ** 227848	20 12.4	1312 899								
MICHELIN® XDR2 MC4 E4R ** 038101 (9)	28 17.4	1837 1258								
MICHELIN® XDR2 MB4 E4R ** 820930 (9)	20 12.4	1312 899								

53/80 R 63 Tubeless

MICHELIN® XDR3 MC4 E4R ** 709804	30 18.6	1980 1356	1380 54.3					7822 2067	36.00/5.0 [5.5] 36.00/5.0 [5] 38.00/5.0 [5.5] 38.00/5.0 [5]	See page 84 to 89
MICHELIN® XDR3 MC4 E4R ** 031154	28 17.4	1848 1266								
MICHELIN® XDR3 MB4 E4R ** 302446	24 14.9	1584 1085								
MICHELIN® XDR3 MB4 E4R ** 176236	20 12.4	1320 904								

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identifi-cation code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	------------------------------	--	--	--	--	--	--	--	--	--	--

63"		Machine - Utilisation	bar	4	4.5	5	5.5	6	6.5	6.8	7	
	psi		58	65	73	80	87	94	99	102		
XDR C4 **E4R XDR B **E4R XDR2 C4 **E4R XDR2 B **E4R XDR2 B4 **E4R XDR2 MC4 **E4R XDR2 MB4 **E4R	Transport	Standard	59660 131550	65240 143854	70830 156180	76410 168484	82000 180810	84270 185815	85630 188814	86530 190799		
		Machine - Utilisation	bar	4	4.5	5	5.5	6	6.5	6.8	7	
			psi	58	65	73	80	87	94	99	102	
XDR C4 **E4R XDR B **E4R XDR2 C4 **E4R XDR2 B **E4R XDR2 B4 **E4R XDR2 MC4 **E4R XDR2 MB4 **E4R	Transport	Standard	59660 131550	65240 143854	70830 156180	76410 168484	82000 180810	85010 187447	86820 191438	88030 194106		
		Machine - Utilisation	bar	4.5	5	5.25	5.5	5.75	6	6.25	6.5	6.75
			psi	65	73	76	80	83	87	91	94	98
XDR3 MC **E4R XDR3 MC4 **E4R XDR3 MB **E4R XDR3 MB4 **E4R	Transport	Standard	67000 147735	71000 156555	75000 165375	77500 170888	80000 176400	82500 181913	83750 184669	85010 187447	86820 191438	88275 194646

TIRE LOAD IN KG/LB - TIRE PRESSURE IN BAR/PSI

Tread type	Identifi-cation code (11)	Explanations on how to choose the tire and to determine the inflation pressures Refer to explanations and methods allowing to determine the inflation pressure (10)									
------------	------------------------------	--	--	--	--	--	--	--	--	--	--

63" CONTINUED

	Machine - Utilisation	bar	5	5.5	6	6.5	6.7				
		psi	73	80	87	94	97				
XDR S B E3 ** XDR S C4 ** E3 XDR C4 ** E4R XDR B ** E4R XDR B4 ** E4R XDR2 C4 ** E4R XDR2 MC4 ** E4R XDR2 B ** E4R XDR2 B4 ** E4R	Transport	Standard	82920 182839	89460 197259	96000 211680	98900 218075	100000 220500				

	Machine - Utilisation	bar	6	6.5	6.8						
		psi	87	94	99						
XDR S C4 ** E3 XDR S B ** E3 XDR2 S C4 ** E3 XDR2 S B ** E3 XDR B ** E4R XDR B4 ** E4R XDR2 C4 ** E4R XDR2 MC4 ** E4R XDR2 B ** E4R XDR2 B4 ** E4R	Transport	Standard	100000 220500	102100 225131	104000 229320						

NOTES

COMPONENTS USED WITH MICHELIN® EARTMOVER TIRES**84**

APPROVED RIMS FOR MICHELIN® EARTMOVER TIRES	84
TUBES AND FLAPS FOR MICHELIN® EARTMOVER TIRES	90
SEALING RINGS FOR MICHELIN® EARTMOVER TIRES	92
VALVES AND ASSOCIATED ACCESSORIES FOR MICHELIN® EARTMOVER TIRES	93



COMPONENTS USED WITH MICHELIN® EARTMOVER TIRES

APPROVED RIMS FOR MICHELIN EARTMOVER TIRES

Check that the rim load capacity meets or exceeds that of the tire.

RIM TYPES	RIM DESIGN.	F MM INCHES	H (13) MM INCHES	D (13B) MM INCHES	RIM R/A ^(*)	TIRE SIZES	SEAL	TL	TT	
FLAT BASE RIMS 	15 - 6.00 S	152.4 6.0	33.3 1.3	387,0	381,0	A	7.50 R 15	none		
	20 - 7.33 V	186.2 7.3	44 1.7	511,2	508,0	A	9.00 R 20 XMINE D2	Tyran (A 20)	NA	2
	20 - 8.00 V	203.2 8.0	44 1.7			A	E 20 (13/80 R 20) Pil XLC		NA	2
	20 - 8.50 V	215.9 8.5	44 1.7			A	E 20 (13/80 R 20) Pil XLC		NA	2
	20 - 9.00 V	228.6 9.0	44 1.7			A	12.00 R 20 XMINE D2		NA	2
	20 - 10.00 V	254 10.0	44 1.7			A	E 20 (13/80 R 20) Pil XLC		NA	2
	20 - 10.00 W	254 10.0	51 2.0			A	12.00 R 20 XMINE D2		NA	2
	20 - 11.25	286 11.3	51 2.0	511,0	609,6	A	E 20 P (13/80 R 20)		NA	2
	21 - 18.00	457.2 18.0	38 1.5			R	16.00 R 20 XZL		2	2
						A	14.00 R 20 XMINE D2		2	2
15° TAPER DROP CENTRE RIMS (DC - DROP CENTRE) 	24 - 7.33 V	186.2 7.3	44 1.7	612,8	609,6	A	12.00 R 24 ***	none		
	24 - 8.00 V	203.2 8.0	44 1.7			A	12.00 R 24 XMINED2	G25	2	2
	24 - 8.50 V	216 8.5	44 1.7			A	12.00 R 24 ***	none		
	24 - 9.00 V	228.6 9.0	44 1.7			A	12.00 R 24 XMINED2	G25	2	2
	24 - 9.00 V	228.6 9.0	44 1.7			A	12.00 R 24 ***	none		
	24 - 10.00 W	254 10.0	51 2.0			A	14.00 R 24 ***	none		
						A	15.00 R 24 Pil	none		
						A	14.00 R 24 ***	none	2	2
						A	15.00 R 24 Pil	none	2	2
						A	385/95 R 24	none	2	2
5° TAPER DROP CENTRE RIMS (DC - DROP CENTRE) 	20.5 x 16.00	406.5 16.0	12.7 0.5	614,4	635,0	R	525/65 R 20.5	none		
	20.5 x 18.00	457 18.0	12.7 0.5			R	24 R 20.5			
	24 x 9.00/1.5	228 9.0	38 1.5			A	14.00 R 24 * TG			
	25 x 12.00/1.3	305 12.0	33 1.3			A	15.5 R 25 * L2 - L3			
	25 x 13.00/1.4	330 13.0	36 1.4			A	15.5 R 25 * L2 - L3			
	25 x 14.00/1.3	355 14.0	33 1.3			A	17.5 R 25 * L2 - L3			
5° TAPER SEMI DROP CENTRE RIMS (SDC - SEMI DROP CENTRE) 	25 x 14.00/1.5	355 14.0	38 1.5	614,4	614,4	A	17.5 R 25 * L2 - L3	Heupo (OR 2-25)		
	635 x 280 CR	280 11.0	43 1.7			A	445/95 R 25 XCRANE +			
	24 - 8.00 TG SDC	203 8.0	35.5 1.4				13.00 R 24 * TG			
	24 - 10.00 VA SDC	254 10.0	43 1.7			R	14.00 R 24 * TG			

** R = recommended - A = Allowed

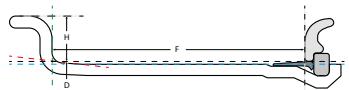
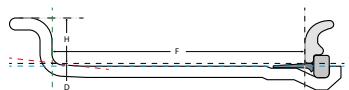


see note page 24 about TG tire fitment

COMPONENTS USED WITH MICHELIN® EARTMOVER TIRES

APPROVED RIMS FOR MICHELIN EARTMOVER TIRES

Check that the rim load capacity meets or exceeds that of the tire.

RIM TYPES	RIM DESIGN.	F MM INCHES	H (13) MM INCHES	D (13B) MM INCHES		RIM R/A ^(*)	TIRE SIZES	SEAL	TL	TT
5° TAPER BEAD SEAT RIMS  (removable bead seat, split)	15 - B 6.5	165.1 6.5	38.1 1.5	385,8		A A	7.50 R 15 8.25 R 15	none		
	15 - 10.50	267 10.5	38 1.5	385,8		R A	14.5 R 15 350/65 R 15			
	20 - B 6.5	165.1 6.5	38.1 1.5	512,8		A	9.00 R 20	Tyran (A 20)		
	20 - B 7.0	177.8 7.0	38.1 1.5	512,8		A	9.00 R 20 XMINE D2		NA	2
	20 - B 7.5	190.5 7.5	43.2 1.7	512,8		A	9.00 R 20 XMINE D2		NA	2
	20 - B 8.0	203.2 8.0	43.2 1.7	512,8		A	E-20 (13/80 R 20) Pil XLC		NA	2
	20 - B 8.5	216 8.5	45.7 1.8	512,8		A	E-20 (13/80 R 20) Pil XLC		NA	2
				512,8		A	12.00 R 20			
				512,8		A	E-20 (13/80 R 20) Pil XLC		NA	2
5° TAPER BEAD SEAT RIMS (ADVANCED RIM)  (removable bead seat, split)	15 - 5.5	139.7 5.5	30.5 1.2	387,4		A	7.50 R 15	none		
	15 - 6.0	152.4 6.0	33 1.3	387,4		R A	7.50 R 15 8.25 R 15			
	15 - 6.5	165.1 6.5	35.6 1.4	387,4		A R	7.50 R 15 8.25 R 15			
	15 - 7.0	177.8 7.0	38 1.5	387,4		A A	10.00 R 15 8.25 R 15			
	15 - 7.5	190.5 7.5	40.6 1.6	387,4		R	10.00 R 15			
	15 - 11.0	267 10.5	38 1.5	387,4		A	14.5 R 15			
	15 - 11.00 BD	267 10.5	36 1.4	387,4		A	14.5 R 15			
	15 - 11.50	267 10.5	38 1.5	387,4		A	14.5 R 15			
				387,4		R	350/65 R 15			
				387,4		R	400/80 R 15			
	20 - 6.5	165.1 6.5	35.6 1.4	514,4		A	9.00 R 20 XMINED2	Tyran (A 20)	NA	2
	20 - 7.0	177.8 7.0	38 1.5	514,4		R	9.00 R 20 XMINED2		NA	2
	20 - 7.0 T	177.8 7.0	38.1 1.5	514,4		A	9.00 R 20 XMINED2		NA	2
	20 - 7.5	190.5 7.5	40.6 1.6	514,4		A	9.00 R 20 XMINED2		NA	2
	20 - 8.0	203.2 8.0	43.2 1.7	514,4		A	E 20 P (13/80 R 20)			
	20 - 8.0 V	203.0 8.0	44.4 1.7	514,4		A	12.00 R 20 XMINED2		NA	2
	20 - 8.5	215.9 8.5	45.7 1.8	514,4		A	E 20 (13/80 R 20) Pil XLC		NA	2
	20 - 8.5 V	216 8.5	44.4 1.7	514,4		R	12.00 R 20 XMINED2		NA	2
	20 - 9.0	228.6 9.0	48.3 1.9	514,4		A	E 20 (13/80 R 20) Pil XLC		NA	2
	20 - 10.0	254 10.0	50.8 2.0	514,4		A	12.00 R 20 XMINED2		NA	2
				514,4		R	E 20 (13/80 R 20) Pil XLC		NA	2
				514,4		A	14.00 R 20 XMINED2		NA	2
				514,4		R	14.00 R 20 XMINED2		NA	0
	24 - 7.5	190.5 7.5	40,5 1.6	615,6		A	12.00 R 24 XMINED2	G25	2	2
	24 - 8.0	203.2 8.0	43.2 1.7	615,6		A	12.00 R 24 XSMD2		2	2
	24 - 8.5	215.9 8.5	45.7 1.8	615,6		A	12.00 R 24 XKA***		2	2
	24 - 9.0	228.6 9.0	48.3 1.9	615,6		A	12.00 R 24 ***		none	
	24 - 10.0	254 10.0	50.8 2.0	615,6		A	12.00 R 24 XMINED2		NA	2
				615,6		A	14.00 R 24 non TG		G25	NA 0
				615,6		A	15.00 R 24 Pil		G25	NA 0
				615,6		R	14.00 R 24 non TG		NA 0	
				615,6		R	15.00 R 24 Pil		G25	NA 0
				615,6		R	385/95 R 24		NA 0	

** R = recommended - A = Allowed

COMPONENTS USED WITH MICHELIN® EARTMOVER TIRES

APPROVED RIMS FOR MICHELIN EARTMOVER TIRES

Check that the rim load capacity meets or exceeds that of the tire.

RIM TYPES	RIM DESIGN.	F MM INCHES	H ⁽¹⁵⁾ MM INCHES	D ^(15B) MM INCHES	RIM R/A ^(*)	TIRE SIZES	SEAL	TL	TT
5° TAPER BEAD SEAT RIMS (3 PIECES)	24 - 11.25/1.3	286 11.3	33 1.3	616,0	A	385/95 R 24 XCRANE	G25	NA	0
	25 - 10.00/1.5	254 10.0	38 1.5		R	14.00 R 25 385/95 R 25	Heupo (OR 2-25)		
	25 - 11.25/1.3	286 11.3	33 1.3		A	14.00 R 25 385/95 R 25			
	25 - 11.25/2.0 IF ^(*)	284 11.2	51 2.0		A	14.00 R 25 16.00 R 25 445/95 R 2	Sulla (OR 3-25)		
	25 - 12.00/1.3	305 12.0	33 1.3		R	15.5 R 25 385/95 R 25	Heupo (OR 2-25)		
	25 - 13.00/2.5 IF ^(*)	330 13.0	63.5 2.5		R	18.00 R 25 505/85 R 25	Sulla (OR 3-25)		
	25 - 14.00/1.3	356	33		R	445/80 R 25	Heupo (OR 2-25)		
		14.0	1.3		R	17.5 R 25 445/80 R 25			
	25 - 14.00/1.5	355 14.0	38 1.5		R	21.00 R 25	Sulla (OR 3-25)		
	25 - 15.00/3.0 IF ^(*)	381 15.0	76 3.0		R	20.5 R 25 * 550/65 R 25	Heupo (OR 2-25)		
	25 - 17.00/1.7	432 17.0	43 1.7		A	600/65R25 XLD65			
	25 - 17.00/2.0 IF ^(*)	432 17.0	51 2.0		R	20.5 R 25			
					A	525/80 R 25 550/65 R 25			
	25 - 19.50/2.5 IF ^(*)	495 19.5	63.5 2.5		A	600/65R25 XLD65			
	25 - 22.00/3.0 IF ^(*)	559 22.0	76 3.0		R	23.5 R 25	Sulla (OR 3-25)		
	25 - 25.00/3.5 IF ^(*)	635 25.0	89 3.5		R	600/65 R 25 650/65 R 25 660/65 R 25			
"CR" RIMS 3 PIECE FOR CRANES	25 - 9.50/1.7 CR	241 9.5	43 1.7		A	14.00 R 25			
	25 - 11.00/1.7 CR	279 11.0	43 1.7		A	385/95 R 25			
	25 - 14.00/1.7 CR	355 14.0	43 1.7		A	16.00 R 25	Sulla (OR 3-25)		
	25 - 17.00/1.7 CR	432 17.0	43 1.7		A	445/95 R 25			
5° TAPER BEAD SEAT RIMS (5 PIECES)	25 - 10.00/2.0	254 10.0	51 2.0		A	17.5 R 25			
	25 - 11.25/2.0	284 11.2	51 2.0		A	445/80 R 25			
	25 - 13.00/2.0	330 13.0	51 2.0		A	20.5 R 25			
					A	525/80 R 25			
					A	505/85 R 25			
					A	14.00 R 25			
					R	16.00 R 25	Sulla (OR 3-25)		
					A	445/95 R 25			
					A	16.00 R 25			

** R = recommended - A = Allowed

(*) New wheels have additional marking "IF".

The IF flanges feature an Integrated Flange, suited for radial tires.

The width of the flange is larger.

COMPONENTS USED WITH MICHELIN® EARTMOVER TIRES

APPROVED RIMS FOR MICHELIN EARTMOVER TIRES

Check that the rim load capacity meets or exceeds that of the tire.

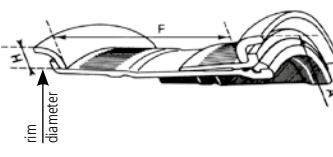
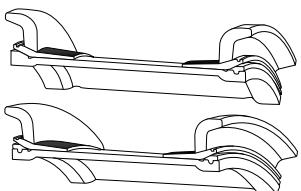
RIM TYPES	RIM DESIGN.	F MM INCHES	H ⁽¹³⁾ MM INCHES	D ^(13B) MM INCHES	RIM R/A ^(*)	TIRE SIZES	SEAL	TL	TT
5° TAPER BEAD SEAT RIMS (5 PIECES)	25 - 13.00/2.5	330 13.0	63.5 2.5	635	R	18.00 R 25	Sulla (OR 3-25)		
	25 - 15.00/2.5	381 15.0	63.5 2.5		R	505/85 R 25			
	25 - 15.00/3.0	381 15.0	76 3.0		A	18.00 R 25			
	25 - 17.00/2.0	432 17.0	51 2.0		A	505/85 R 25			
	25 - 17.00/3.0	432 17.0	76 3.0		R	21.00 R 25			
	25 - 19.50/2.0	495 19.5	51 2.0		R	20.5 R 25			
	25 - 19.50/2.5	495 19.5	63.5 2.5		A	525/80 R 25			
	25 - 20.00/2.0	508 20.0	51 2.0		R	550/65 R 25			
	25 - 22.00/3.0	559 22.0	76 3.0		A	600/65R25 XLD65			
	25 - 24.00/3.0	610 24.0	76 3.0		A	21.00 R 25			
	25 - 25.00/3.0	635 25.0	76 3.0		A	25/26 R 25			
	25 - 25.00/3.5	635 25.0	89 3.5		R	23.5 R 25			
	25 - 27.00/3.5	687 27.0	89 3.5		R	600/65 R 25			
	29 - 22.00/3.0	559 22.0	76 3.0	737	R	650/65 R 25	Sulky (OR 3-29)		
	29 - 24.00/3.0	610 24.0	76 3.0		A	660/65 R 25			
	29 - 24.00/3.5	610 24.0	89 3.5		R	750/65 R 25			
	29 - 25.00/3.5	635 25.0	89 3.5		A	750/65 R 25			
	29 - 27.00/3.0	687 27.0	76 3.0		R	29.5 R 29			
	29 - 27.00/3.5	686 27.0	89 3.5		A	800/65 R 29			
					R	800/65 R 29			

** R = recommended - A = Allowed

COMPONENTS USED WITH MICHELIN® EARTMOVER TIRES

APPROVED RIMS FOR MICHELIN EARTMOVER TIRES

Check that the rim load capacity meets or exceeds that of the tire.

RIM TYPES	RIM DESIGN.	F MM INCHES	H ⁽¹⁵⁾ MM INCHES	D ^(15B) MM INCHES	RIM R/A ^(*)	TIRE SIZES	SEAL	TL	TT
5° TAPER BEAD SEAT RIMS (5 PIECES) 	33 - 13.00/2.5	330 13.0	63.5 2.5	838		18.00 R 33	Strix (OR 3-33)		
	33 - 15.00/3.0	381.0 15	76.2 3.0		R	21.00 R 33			
	33 - 28.00/4.0	711 28.0	101.5 4.0		A	33.5 R 33			
	33 - 28.00/3.5	711 28.0	89 3.5		A	35/65 R 33			
	33 - 32.00/4.5	813 32.0	114.5 4.5		R	37.5 R 33			
	35 - 15.00/3.0	381 15.0	76 3.0		R	21.00 R 35			
35 - 17.00/3.0 35 - 17.00/3.5 35 - 25.00/3.5 35 - 27.00/3.5 35 - 29.00/3.5 35 - 31.00/4.0	432 17.0	76 3.0	889	A	21.00 R 35	Stras (OR 3-35)			
	432 17.0	89 3.5			21.00 R 35				
	432 17.0	89 3.5			24.00 R 35				
	635 25.0	89 3.5			29.5 R 35				
	686 27.0	89 3.5			33.25 R 35				
	737 29.0	89 3.5			29.5 R 35				
	787 31.0	101.5 4.0			33.25 R 35				
	813 32.0	114.5 4.5			37.25 R 35				
39 - 32.00/4.5	39 - 32.00/4.5	813 32.0	114.5 4.5	991	R	37.5 R 39	Fuodi (OR 3-39)		
					R	40.5/75 R 39			
					A	45/65 R 39			
45 - 36.00/4.5	45 - 36.00/4.5	914 36.0	114.5 4.5	1143	R	45/65 R 39	Réf. 1580 (OR 3-45)		
					R	45/65 R 45			
5° TAPER BEAD SEAT RIMS (5 PIECES) 	49 - 17.00/3.5	432 17.0	89 3.5	1245	R	24.00 R 49	Heyco (OR 3-49)		
	49 - 19.50/4.0	495 19.5	101.5 4.0		R	27.00 R 49			
	51 - 22.00/4.5	559 22.0	114.5 4.5	1295	R	30.00 R 51	Réf. 1479 (OR 4-51)		
	51 - 24.00/5.0	610 24.0	127 5.0		R	33.00 R 51			
	51 - 26.00/5.0	660 26.0	127 5.0		R	36.00 R 51			

** R = recommended - A = Allowed

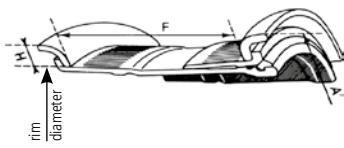
COMPONENTS USED WITH MICHELIN® EARTMOVER TIRES

APPROVED RIMS FOR MICHELIN EARTMOVER TIRES

Check that the rim load capacity meets or exceeds that of the tire.

RIM TYPES	RIM DESIGN.	F	H (13)	D (13B)	RIM R/A ^(*)	TIRE SIZES	SEAL	
		MM INCHES	MM INCHES	MM INCHES			TL	TT
5° TAPER BEAD SEAT RIMS (FROM 6 TO 8 PIECES)	57 - 27.00/6.0	686 27.0	152 6.0	1448	R	37.00 R 57	Réf. 1481 (OR 4-57)	
	57 - 29.00/6.0	736 29.0	152 6.0		R	40.00 R 57		
	57 - 32.00/5.0	813 32.0	127 5.0		A	37.00 R 57		
	57 - 32.00/6.0	813 32.0	152 6.0		A	50/80 R 57 XDR250		
	57 - 32.00/6.5	813 32.0	165 6.5		A	40.00 R 57		
	57 - 34.00/6.0	863 34.0	152 6.0		A	40.00 R 57		
	57 - 42.00/5.0	1067 42.0	127 5.0		R	50/80 R 57 XDR250		
	57 - 44.00/5.0	1117 44.0	127 5.0		A	50/80 R 57 XDR		
	57 - 47.00/5.0	1194 47.0	127 5.0		A	50/90 R 57		
	63 - 36.00/5.0	914 36.0	127 5.0		A	55/80 R 57		
	63 - 38.00/5.0	965 38.0	127 5.0		A	55/80 R 57		
	63 - 41.00/5.0	1041 41.0	127 5.0		A	56/80 R 57		
	63 - 44.00/5.0[6.0]	1117 44.0	127 5.0		A	60/80 R 57		
				1600	A	53/80 R 63	Réf. 2053 (OR 4-63)	
					A	53/80 R 63		
					A	55/80 R 63		
					A	56/80 R 63		
					A	59/80 R 63		

** R = recommended - A = Allowed



TUBES AND FLAPS FOR MICHELIN® EARTMOVER TIRES

RIM DIAMETER	FITS TIRE SIZES	TUBE REFERENCE	TUBE VALVE OFFSET	VALVE REFERENCE	VALVE TYPE (#)	TUBE + VALVE CAI	FLAP REFERENCE	FLAP CAI	FLAP HOLE OFFSET
15"	7.50 R 15	15/16 J	0	570	SC	101106	15 x 6.00 (8)	511268	
	8.25 R 15	15 K	0	1156	SC	101128	15 x 6.00 E (a)	843437	0
	10.00 R 15	15 P	0	582	TC	510204	15 x 7.50 (8)	084220	
20"	9.00 R 20	20M	0	1157	SC	101153	20 x 7.50 E (a)	320222	0
	E 20 Pilote	20 P	0	1158	SC	101173	20 x 8.50 (8)	111005	
	12.00 R 20	20 Q	0	1158	SC	101192	20 x 8.50 E (a)	162318	0
	14.00 R 20	20 Q	0	1158	SC	101192	20x10.00 (8)	004489	
	16.00 R 20	20 V	0	576	SC	511937	20x10.00 E	622293	0
20.5"	525/65 R 20.5	19.5/20.5 UD	75	1964	DR	101280	-	-	
	24 R 20.5	20.5 WAMD	100	1837 (TRJ650)	SC	101331	-	-	
21"	24 R 21	21 WAM	0	1837 (TRJ650)	SC	101333	17-20 (8)	551436	
24"	12.00 R 24	24 Q	0	582	TC	101196	24/25 x 8.50 (8)	001444	
	14.00 R 24 TG on DC and SDC rims 13.00 R24 TG on DC and SDC rims	KLEBER 703	127	TR 218A	DR	171114	24/25 x 8.50 E (a)	018130	0
	M703	127	27015			13-24 DR (8)	102902		
	14.00 R 24 TG on DC and SDC rims	24 TD	35	577	SC			101244	
24/25"	14.00 R 24 on flat base rims	24/25 T	0	752	SC	514503	13.00/14.00-24 METAL INSERT GOODTIRE	395189	0
	15.00 R 24						(except 11.25 rim)		
	385/95 R 24						13.00/14.00-24 METAL INSERT GOODTIRE	395189	0
	385/95 R 24						24/25 x 8.50 (8)	001444	
	14.00 R 25						24/25 x 8.50 E	018130	
	13.00 R 25								
	14.00 R 24 on flat base rims	24/25 T AM	0	1837 (TRJ650)	SC	101781	13.00/14.00-24 METAL INSERT GOODTIRE	395189	0
	15.00 R 24						(except 11.25 rim)		
	14.00 R 25						13.00/14.00-24 METAL INSERT GOODTIRE	395189	
	17.5 R 25						16-24/25 (8)	551608	
25"	445/80 R 25	24/25 V AM	0	1837 (TRJ650)	SC	101811	14-24/25 (8)	551604	
	16.00 R 25						17-24/25 (8)	551610	
	445/95 R 25								
	20.5 R 25								
	16.00 R 24* on SDC rims	24/25 VD	35	577	SC	101299	13-24 DR (8)	102902	
	15.5 R 25	25 S AM	0	1837 (TRJ650)	SC	101771	15-24/25 (8)	551606	
	18.00 R 25	25 W AM	0	1837 (TRJ650)	SC	101871	16-24/25 (8)	551608	
	23.5 R 25	25 YB AM	0	1837 (TRJ650)	SC	101346	18-24/25 (8)	551612	
29"	21.00 R 25						17-24/25 (8)	551610	
	26.5 R 25						18-24/25 (8)	551612	
	29.5 R 25						18-24/25 (8)	102610	
	26.5 R 29	29 W AM	0	1837 (TRJ650)	SC	101823	19-29 (8)	102620	
	29.5 R 29 33.25 R 29	29 YE AM1 (8)		1837 (TRJ650)	SC	101803			
33"	18.00 R 33	33 VF AM (8)		1837 (TRJ650)	SC	101321	16-33 (8)	551760	
	33.5 R 33	33/35 YE AM (8)		1837 (TRJ650)	SC	101833	20-33 (8)	551770	
35"	24.00 R 35						16-35 (8)	551800	
	29.5 R 35								
	33.25 R 35						20-35 (8)	551808	
	37.25 R 35								

(#) DR = straight valve, SC = single bend valve, DC = double bend valve, TC = triple bend valve, see on following pages the part 'valves and associated accessories'.

EXPLANATIONS ON THE TUBE MARKINGS

example1: **24/25 V AM**

example2: **25 YB AM**

The first two numbers indicate the bead seat (rim) diameter of the tire into which the tube can be fitted (in the first example, the tube may be fitted in 24 and 25 inch tires. In the second example, the tube may be fitted only in 25 inch tires).

The first letter corresponds to the section width of the tube (internal width of the tire).

This ranges from A to Z, with A being the smallest, and Z the largest (in the examples above, V and Y indicate that the tubes are designed for fitting into tires of relatively large section width).

Sometimes, a second letter provides additional information (example 2) B, E, F and H indicate intermediate widths.

The third and fourth letters are an indication of the valve type.

AM indicates that the tube is fitted with an American valve base: R1946 (TRA SP4000) and a valve stem R1837 (TRJ 650).

D would indicate that the valve is offset. T would indicate a tractor tube fitted with an air-water valve, type TR 218A.

Explanation on valves and valve bases are given on subsequent pages.

EXPLANATIONS ON THE FLAP MARKINGS

example1: **14-24/25**

The first number indicates the total width of the flap when laid flat (includes height of edges), expressed in either mm or in inches.

In the example above, the width of the flap is 14 inches.

The second number indicates the rim diameter, or the tire bead seat (rim) diameter in inches, with which the flap is to be used.

In this example, the flap may be used with 24 and 25 inch tires.

Additional letters may be used to provide supplementary information.

For example, the significance of different letters is as follows: L - the edges are tapered, B - the flap has a reinforcing boss around the valve hole, S - the flap is reinforced, D - offset hole valve.

example2: **20 x 8.50 E**

The first number indicates the tire seat diameter, expressed in inches, with which the flap is to be used.

In this example, the flap may be used with 20 inch tires.

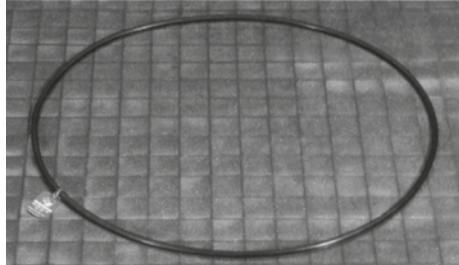
The second number indicates the overall width of the flap (width + height), in inches.

In this example, the overall width of the flap is 8.50 inches.

Letters correspond to the last generation of flaps.

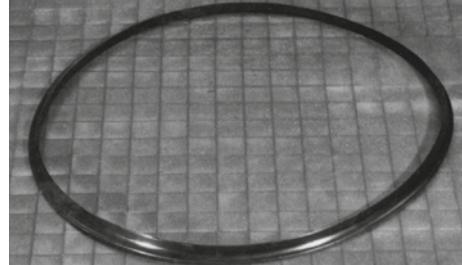
SEALS FOR MICHELIN® EARTMOVER TIRES

NAME	DESIGNATION	REFERENCE	CAI	TYPE	REMARKS
-	OR 6.8 - 21	R 1506	553 213	O-ring	
HEUPO	OR 2 - 25	R 1438	553 201	O-ring	for fitting 25 inch rim in 3 pieces non IF or for 24 inch rim 10,00 VA
SULLA	OR 3 - 25	R 1437	553 200	O-ring	for fitting 25 inch rim in 3 pieces IF, or in 3 pieces CR for cranes, or in 5 pieces or in 24 inch rim 10.00WA
SULKY	OR 3 - 29	R 1439	553 202	O-ring	for 29" rim
STRIX	OR 3 - 33	R 1440	553 203	O-ring	for 33" rim
STRAS	OR 3 - 35	R 1441	553 204	O-ring	for 35" rim
FUODI	OR 3 - 39	R 1069	553 206	O-ring	for 39" rim
-	OR 3 - 45	R 1580	553 214	O-ring	for 45" rim
HEYCO	OR 3 - 49	R 1442	553 205	O-ring	for 49" rim
-	OR 4 - 51	R 1479	553 210	O-ring	for 51" rim
-	OR 4 - 57	R 1481	553 211	O-ring	for 57" rim
-	OR 4 - 63	R 2053	553 056	O-ring	for 63" rim
TYRAN	A20	R 1443	553 004	Corner seal	for 20" rim
LEMMERZ	-	3886-6	800 098	Corner seal	for fitting TG tires on 24" SDC rims
-	B 24/25	R 1528	553 021	Corner seal	
ICERU	G 25	R 1237	553 012	Corner seal	especially for mounting of the 12.00R24 XMINE D2

SEALS DESCRIPTION**O-RING**

Explanation of the sealing ring's naming process:

- OR: Abbreviation of O Ring
- The first number is the section diameter of the seal:
- integer number: value expressed in 1/8 of inch (3 = 3/8)
- decimal number: value expressed in mm (6.6 = 6,6 mm)
- The second number is the nominal bead seat diameter, expressed in inches.

CORNER SEAL

Explanation of the corner seal's naming process:

- The letter indicates the profile of the seal
- The number is the nominal rim diameter, in inches.

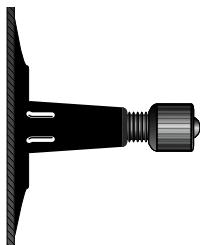
NOTE:

APPROVAL FOR USE OF CORNER SEALS MUST BE OBTAINED FROM MICHELIN®.

VALVES AND ASSOCIATED ACCESSORIES FOR MICHELIN® EARTHMOVER TIRES

In all cases, the valve cap is essential because it helps maintain the cleanliness of the mechanism and ensures air tightness of the valve.

CAR TUBE TYPE STRAIGHT VALVE



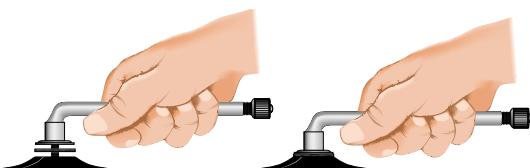
VALVE MARKINGS

The valve is circular and is marked in accordance with ETRTO standards, starting at the top of the valve, and in the following order:

- NAME (or trademark) of the valve manufacturer and his reference number.
- ETRTO reference number.

Michelin® code	ETRTO code	Valve code	Valve hole ø in mm
611	V2-01-2	TR 15	16
746	V2-01-1	TR 13	11.5

FITTING A UNIVERSAL VALVE ON A MICHELIN® TUBE WITH A VALVE BASE



- 1 - Position the sealing ring on the valve. The sealing ring must be clean and dry.
- 2 - Hand tighten the valve until it just touches the sealing ring.
- 3 - Tighten the valve for a further two turns.
- 4 - To orientate the valve in the desired position, tighten further.

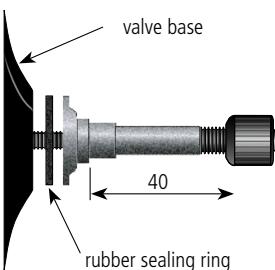


IMPORTANT: never unscrew the valve to the desired position.

Note: Do not exceed the tightening guidelines given above.
Do not forget to replace the valve cap to prevent dirt ingress and to ensure air tightness.

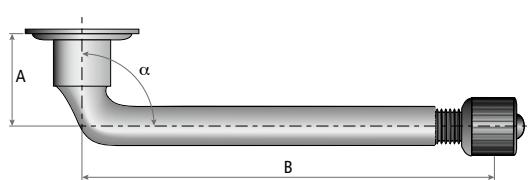
SMALL TRUCK UNIVERSAL STRAIGHT VALVE

Fitted to Michelin® tubes for the occasional equipment Tube-Type on 5° and 15° non U taper drop centre rim.



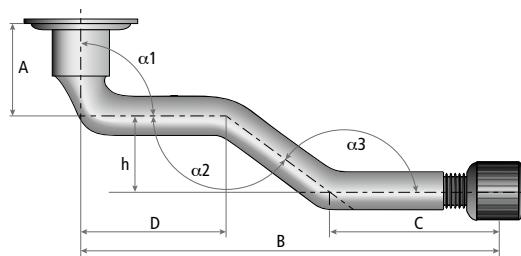
Michelin® code	ETRTO code	Valve hole ø in mm	A	
			mm	inches
1964	/	9.7	40	1.57

TRUCK TYPE UNIVERSAL SINGLE BEND VALVE



Michelin® code	ETRTO code	A		B		α°
		mm	pouces	mm	inches	
570	V3-02-2	22.5	0.89	43	1.69	120
576	V3-02-3	33	1.30	44.5	1.75	95
577	V3-02-4	39.5	1.56	44.5	1.75	110
752	V3-02-17	20.5	0.81	156.5	6.16	90
1158	V3-02-14	20.5	0.81	138.5	5.45	94

TRUCK TYPE UNIVERSAL TRIPLE BEND VALVE

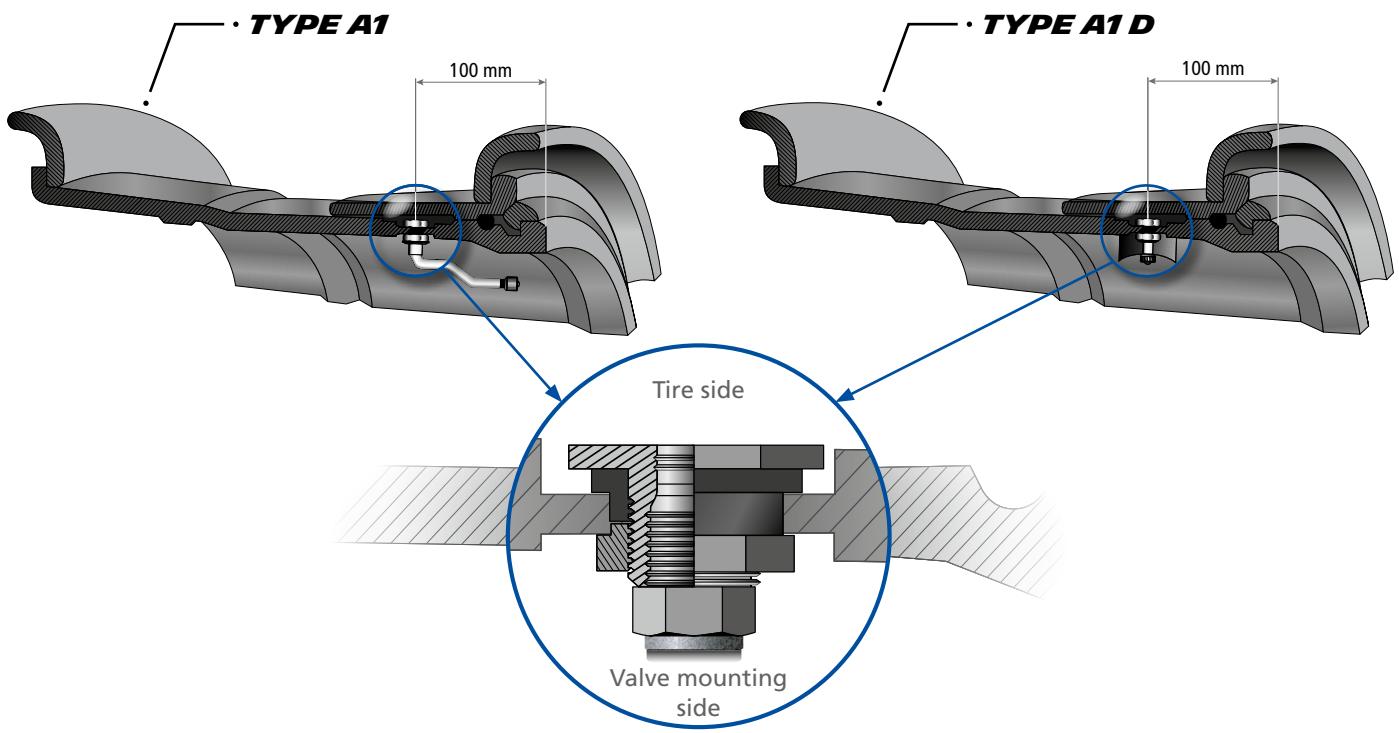


Michelin® code	ETRTO code	$\alpha 1^\circ$		$\alpha 2^\circ$		$\alpha 3^\circ$	
		mm	inches	mm	inches	mm	inches
582	V3-06-5	90	3.54	139	5.45	139	5.45

Michelin® code	ETRTO code	A		B		C		D	
		mm	inches	mm	inches	mm	inches	mm	inches
582	V3-06-5	20.5	0.81	131	5.16	49	1.93	62.5	2.46

TYPES OF TUBELESS EARTHMOVER VALVES

VALVE TYPE A1

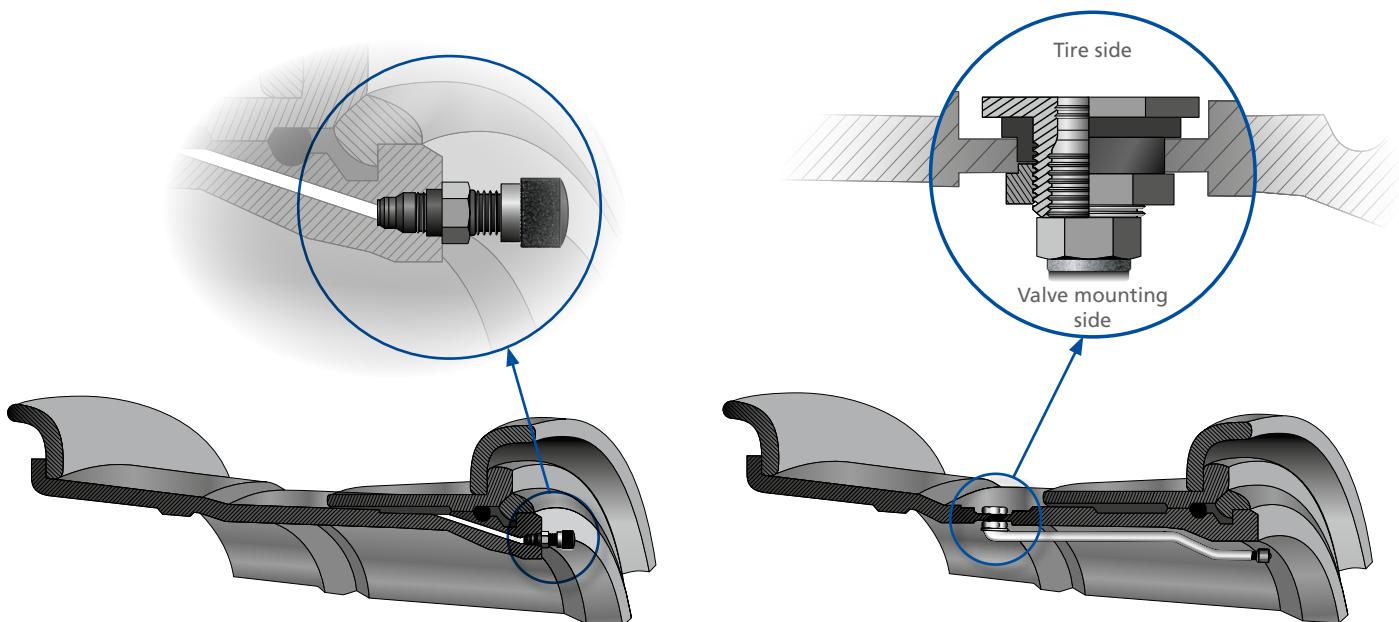


VALVE COMBINATION TYPE A4

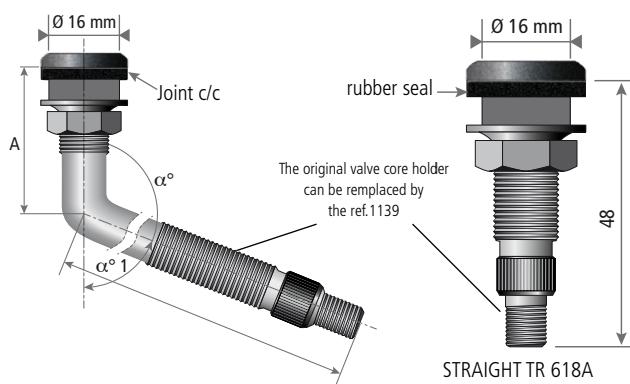
Comprised of two TYPE A1 valves, both set at 100 mm from the rim edge, to enable water filling.

VALVE TYPE A2

VALVE TYPE A3



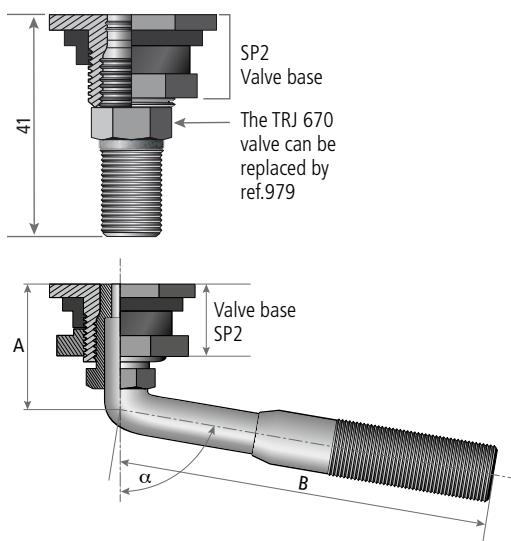
AIR AND WATER TUBELESS VALVES, AMERICAN TRA STANDARD



TRA code	ETRTO designation	A		B		α°
		mm	inches	mm	inches	
TR 618 A	V5-01-1	47.5	1.87	-	-	-
TR 621 A	V5-02-1	39	1.54	76	2.99	115°
TR 622 A	V5-02-2	44.5	1.75	117	4.61	90°
TR 623 A	V5-02-3	39	1.54	57	2.24	115°

Valves for 15.7 mm (0.6 inch) diameter hole

EARTMOVER TUBELESS VALVE (AMERICAN TRA STANDARD)

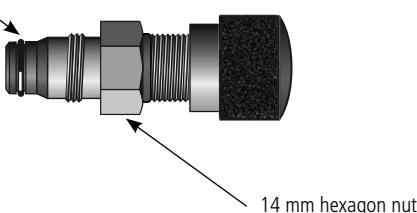


Michelin® code	TRA code	ETRTO designation	A		B		α°
			mm	inches	mm	inches	
R 1837	TRJ 650	V5-04-1	27	1.08	79	3.12	100°
	TRJ 651	V5-04-2	32	1.27	119	4.69	90°
	TRJ 652		27	1.08	140	5.5	94°
	TRJ 653		27	1.08	63	2.5	100°
	TRJ 654		27	1.08	79	3.12	120°
	TRJ 655		27	1.08	79	3.12	106°
	TRJ 656		67	2.62	94	3.69	90°
	TRJ 657		27	1.08	102	4	100°
	TRJ 658		27	1.08	140	5.5	100°
	TRJ 659		48	1.89	89	3.5	90°
	TRJ 660		48	1.89	222	8.75	90°
	TRJ 669		27	1.08	64	2.5	90°
R 979	TRJ 670		41	1.63	-	-	-

Valves used on an American valve base SP2 [20.5 mm (0.8 inch) diameter hole] and also on AM tubes.

STRAIGHT LARGE BORE VALVES

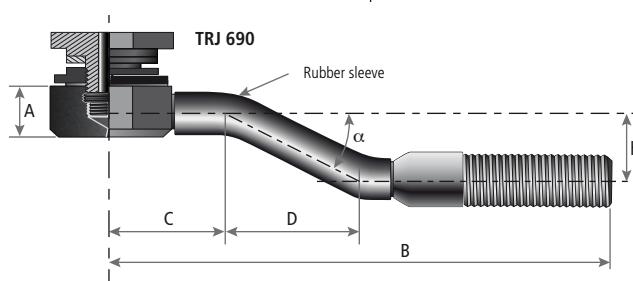
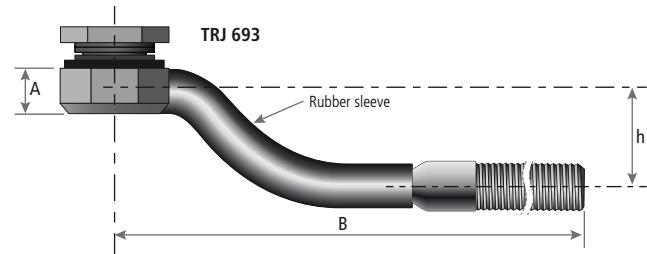
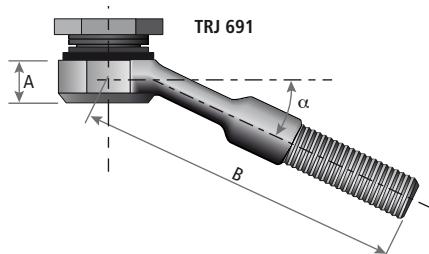
Ref. 979

n° 5 O-ring
Ref. 4012
to lubricate

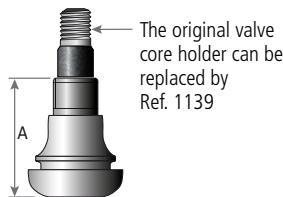
Used with Type A2 rim contour or with SP2 base (may also replace TRJ 670).

SINGLE PIECE VALVES (20,5 mm valve hole)

TRA code	A		B		C		D		H		α°
	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	
TRJ 690	16	0.63	119	4.69	32	1.26	27	1.06	14	0.55	28
TRJ 691	16	0.63	84	3.31							18
TRJ 693	16	0.63	127	5.00					25	0.98	



AIR AND WATER TUBELESS STRAIGHT RUBBER VALVES



A mm/inches	Designation
35 1.38	35 GSW 15.7

Valves for 15.7 mm (0.6 inch) diameter hole



Caution ! Don't use
this valve with pressures
higher than 4,5 bar.

VALVE BASE

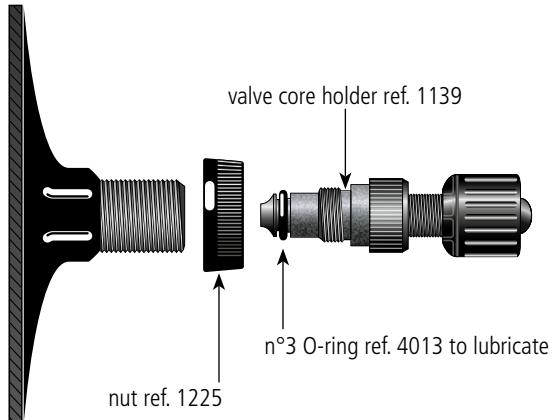
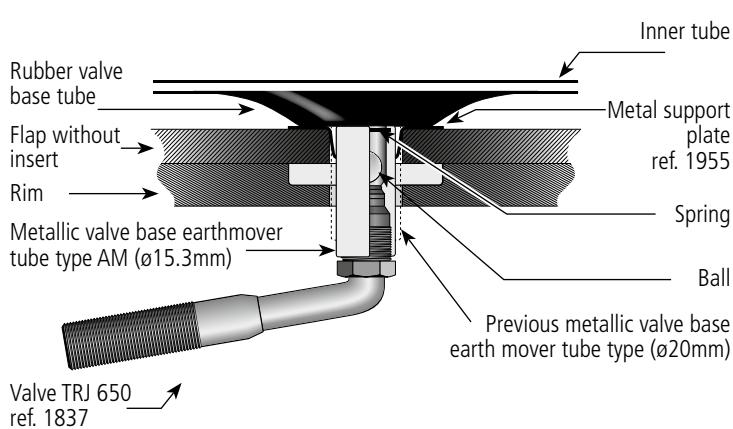
CURRENT VALVACE

(mounting with tube)

AIR AND WATER AGRICULTURAL TYPE VALVE BASE

Allows tire to be water filled.

Valve with core holder 1139 and plastic nut ref. 1225



ref. 1224 code TR 218A

COMPONENTS USED WITH MICHELIN® EARTMOVER TIRES**84**

APPROVED RIMS FOR MICHELIN® EARTMOVER TIRES	84
TUBES AND FLAPS FOR MICHELIN® EARTMOVER TIRES	90
SEALING RINGS FOR MICHELIN® EARTMOVER TIRES	92
VALVES AND ASSOCIATED ACCESSORIES FOR MICHELIN® EARTMOVER TIRES	93

HELP WITH THE USE OF EARTMOVER TIRES**98**

MICHELIN® EARTMOVER TIRES FOR TRANSPORT MACHINES.....	98
MICHELIN® EARTMOVER TIRES FOR MOBILE CRANES, SPECIAL APPLICATIONS, RAPID INTERVENTION VEHICLES (CIVIL AND MILITARY)	99
MICHELIN® EARTMOVER TIRES USED IN DESERT AND SIMILAR CONDITIONS	99
MICHELIN® EARTMOVER TIRES FOR WORKING MACHINES SURFACE LOADERS IN REHANDLING, PRODUCTION, EXTRACTION AND FACE WORK	100
MICHELIN® EARTMOVER TIRES FOR WORKING MACHINES: DOZERS	101
MICHELIN® EARTMOVER TIRES FOR WORKING MACHINES: GRADERS.....	101
MICHELIN® EARTMOVER TIRES FOR COMPACTORS	102
MICHELIN® EARTMOVER TIRES FOR ROADBUILDING MACHINERY (PLANERS, STABILIZER MIXERS, PAVERS)	102
MICHELIN® EARTMOVER TIRES FOR UNDERGROUND MACHINES.....	103

TIRES FOR TRANSPORT MACHINES: TKPH (T MPH) METHOD**104**

FACTORS TO BE CONSIDERED WHEN SELECTING THE MOST APPROPRIATE TIRE:	104
--	-----

MICHELIN® EARTMOVER TIRES FOR TRANSPORT MACHINES**107****K COEFFICIENT CALCULATED AND USED FOR THE TKPH (T MPH) METHOD****MICHELIN® EARTMOVER TIRES FOR SPECIFIC USES****108**

HELP WITH THE USE OF EARTMOVER TIRES

MICHELIN® EARTMOVER TIRES FOR TRANSPORT MACHINES**DETERMINING INFLATION PRESSURES**

- **determine** the maximum load on each tire by weighing.

This is the only way that tire pressures can be set accurately for optimum performance.

If it is not possible to weigh the machine, determine the maximum load per tire on each axle by calculation or by using the machine manufacturer's data.

The following data needs to be established:

- The Gross Vehicle Weight (total machine weight in the laden condition).
- The percentage load distribution by axle.

- **calculate** the load per axle, then determine the tire weight by dividing the axle load by the number of tires per axle.
- **use** the tables "Tire loads and pressures" for TRANSPORT in the earthmover data book.

This method applies to the following machine tires:

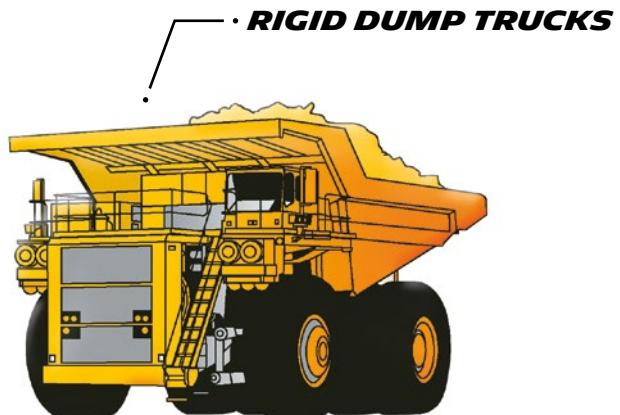
Rigid Dump Trucks

Articulated Dump Trucks

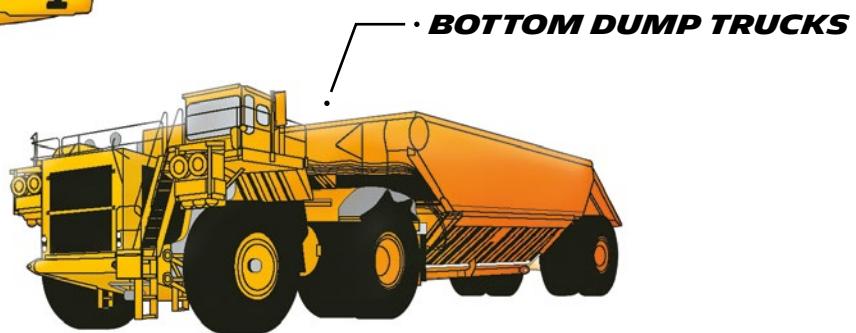
Bottom Dump Trucks

Motor Scrapers

Site Dump Trucks



• **ARTICULATED DUMP TRUCKS**



• **MOTOR SCRAPERS**



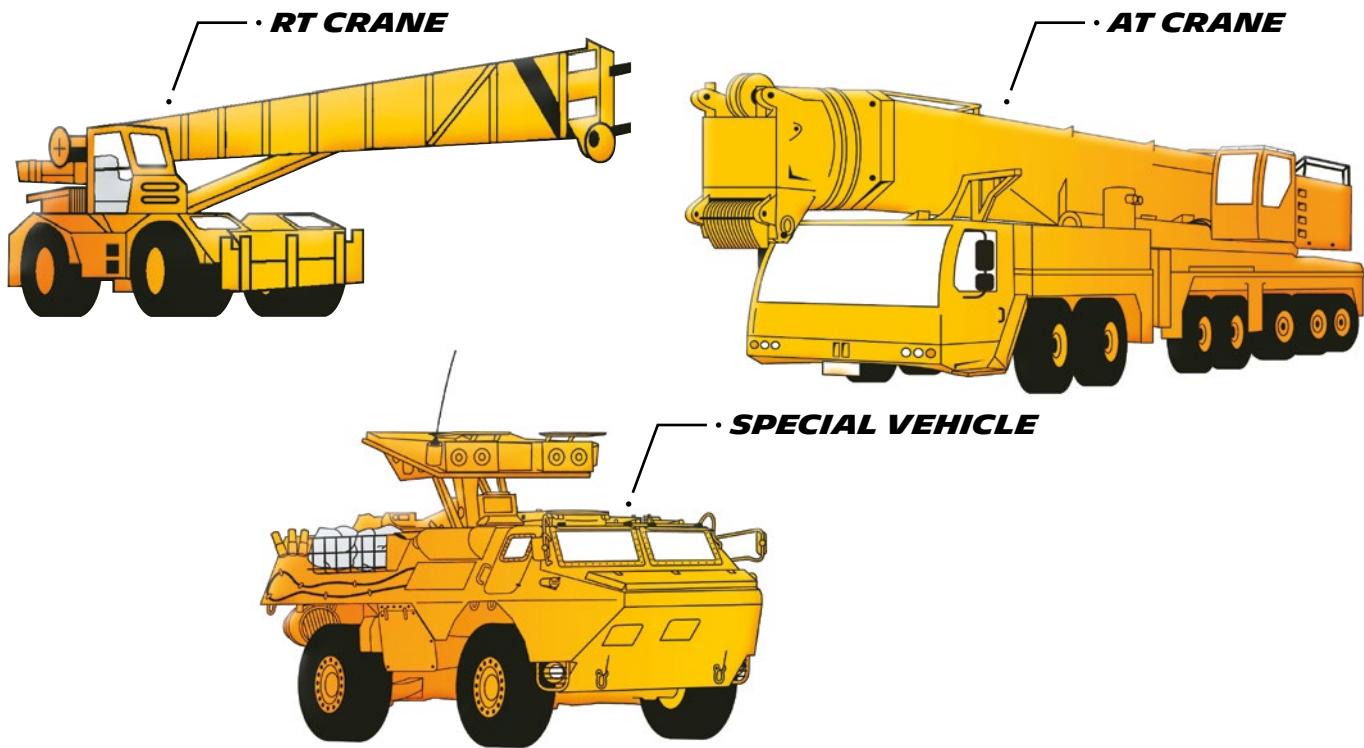
• **SITE DUMP TRUCKS**



**MICHELIN® EARTMOVER TIRES FOR MOBILE CRANES,
SPECIAL APPLICATIONS, RAPID INTERVENTION VEHICLES
(CIVIL AND MILITARY)**

DETERMINING INFLATION PRESSURES

- **determine** the maximum load on each tire by weighing
 - by using the machine manufacturer's data, or
 - by weighing each axle.
- **calculate** the load per tire (in the case of a crane, divide the total weight by the number of axles, and divide by the number of tire per axle).
- **use** the tables "Tire loads and pressures" for CRANES to determine the tire pressures.
- In the case of use of tires on special machines, please consult MICHELIN®.



MICHELIN® EARTMOVER TIRES USED IN DESERT AND SIMILAR CONDITIONS

These tires are used on machines that are operated in special conditions, such as sand, desert regions, etc.

Two speed limits are applied to the tires according to the type of work.

- A limit for use on sand and hard track.
- A higher limit for road use with no particular problem of grip or accidental damage.

INFLATION PRESSURES

For a given load, the inflation pressure depends on the rolling condition

- Road
- Track
- Sand

Refer to the table load / pressure corresponding to the selected type of driving.

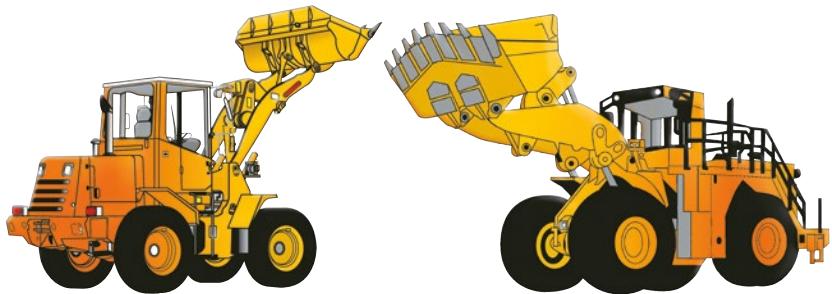
After using "sand" pressures, they must be adjusted to the correct pressure for subsequent conditions of use (road or track).

MICHELIN® EARTHMOVER TIRES FOR WORKING MACHINES SURFACE LOADERS IN REHANDLING, PRODUCTION, EXTRACTION AND FACE WORK

BASE PRESSURES

The base pressures designate the necessary pressure for the load carried.

There are two ways to determine the base pressures of a loader.



BY WEIGHING THE MACHINE AXLES

- **determine** the maximum load on each tire by weighing.
- **use** the tables "Tire loads and pressures" for LOADERS from the technical data book.
"Front laden": for the laden front axle. (bucket full)
"Rear unladen": for the unladen rear axle. (bucket empty)

BY CALCULATION, USING THE MACHINE MANUFACTURER'S DATA

- **determine** the maximum load on each tire from the axle loads (bucket empty / full) data by the Manufacturer.
- **use** the tables "Tire loads and pressures" for LOADERS from the technical data book.
"Front laden": for the laden front axle. (bucket full)
"Rear unladen": for the unladen rear axle. (bucket empty)

When the axle loads are not available, it is possible to determine in an approximate way the inflation pressures from the method below.

This method is applicable to loaders equipped with tire sizes less than 35/65 R 33

Front Axle

When the machine is loading with the bucket penetrating into the material, the loader is often at the point of tipping. It is in this state that the front tires are most heavily laden.

The load on the front axle is equal to the total unladen weight of the machine + the tipping load. (tipping load is shown in the machine manufacturer's data).

- **use** the tables "Tire loads and pressures" for LOADERS in the earthmover data book under the heading 'Front Tip. Load' (front tipping load).

Rear Axle (bucket empty)

Take 60% of the unladen weight of the machine (to have a margin of safety).

- **use** the tables "Tire loads and pressures" for LOADERS in the earthmover data book

ADJUSTMENTS OF THE BASE PRESSURE

To improve stability, the following adjustments are possible:

Front axle, for a given load, it is possible to increase tire pressure by 1 bar compared to the pressure determined by the methods presented above.

On the rear axle, it is recommended to use a pressure of 70% of the recommended value for the front axle.

These adjustments shall be made within the limits shown on page 25.

Important

During long road trips (delivery, transfer from one site to another), special precautions are necessary.

For more information, please consult your Michelin® representative.

MICHELIN® EARTHMOVER TIRES FOR WORKING MACHINES: DOZERS**HOW TO CALCULATE INFLATION PRESSURES**

Depending on the type of work, tires on a dozer are subjected to different types of loading.

- the load on the Front Axle is at the maximum when loading (pushing) a scraper.
- the load on the Rear axle is at the maximum when dozing or while stockpiling.

From a practical point of view, the maximum load on either of the two axles is approximately equal to 2/3 of the machine weight.



- **Using this method** to determine the load on each tire

- **Use** the tables "Tire loads and pressures" for LOADERS for the Rear unladen.

MICHELIN® EARTHMOVER TIRES FOR WORKING MACHINES: GRADERS**HOW TO CALCULATE INFLATION PRESSURES**

As a general rule, the minimal inflation pressure recommendation must never be lower than 2 bar (29 psi)

- **weigh the machine** to find out the load on each axle or use the loads given by the machine manufacturer.
- **use** the tables "Tire loads and pressure" for GRADERS.

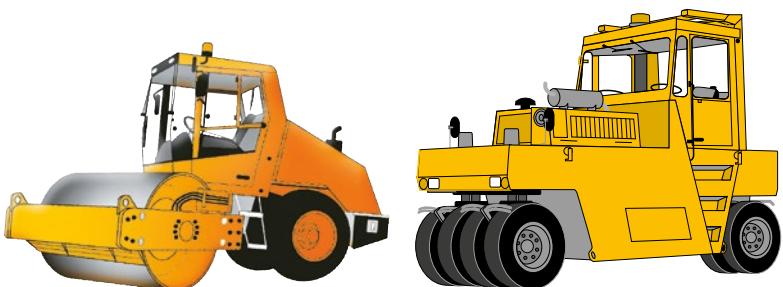
For special work (example: sloping embankments), the inflation pressure should never be lower than 2.5 bar (36 psi).



MICHELIN® EARTHMOVER TIRES FOR COMPACTORS**XLC TIRES**

The tire and the working pressure depend on the material to be compacted, the type of work to be carried out and the operating speed.

Please refer to the information and operating guidelines supplied by the machine manufacturer and use the tables "Tire loads and pressures" for COMPACTORS from the earthmover technical data book.

**MICHELIN® EARTHMOVER TIRES FOR ROADBUILDING MACHINERY
(PLANERS, STABILIZER MIXERS, PAVERS)**

There are no tires made specifically for this type of machinery.

Tires should be chosen according to their average speed capabilities in relation to those of the machine and their load capacity.

All these machines operate at 2 speeds: a "transport" or "travelling" speed and a "work" speed.

Once the load per tire has been determined, refer to the load/pressure table which corresponds best to the speed at which the selected tire is to be used.

**When we determine the tire pressure in these two cases we always apply the highest pressure.
This is often the transport pressure.**

HOW CALCULATE THE LOAD PER TIRE

If the load per axle is not known (no machine manufacturer's information available and no possibility of a physical weighing), follow the instructions below.

TRAVELLING MACHINES:

For cold Planers and Stabiliser Mixers: load per axle on pneumatic tires = 50% of machine weight.

For Pavers: load per axle on pneumatic tires = 80% of machine weight / number of axles.

LOADED/WORKING MACHINES:

For cold Planers and Stabiliser Mixers: load per axle = 50% of machine weight + payload.

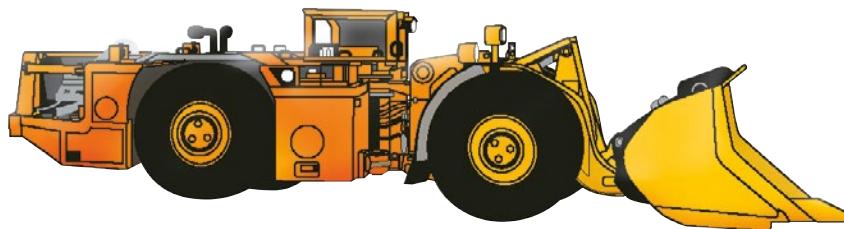
For Pavers: load per axle on pneumatic tires = 30% machine weight+ maximum load of the container bin / number of axles.

MICHELIN® EARTHMOVER TIRES FOR UNDERGROUND MACHINES**HOW TO CALCULATE INFLATION PRESSURES****TRANSPORT MACHINES**

- **determine** the maximum load on each tire of each axle, with the machine loaded
 - by calculation, using the machine manufacturer's data, or
 - by weighing each tire position with the machine loaded.
- **use** the tables "Tire loads and pressures" for MINE TRANSPORT.

**LOADERS**

Apply the methods used for surface loaders (see the previous pages Chapter Michelin® earthmover tires for working machines: surface loaders).



TIRES FOR TRANSPORT MACHINES: TKPH (TMPH) METHOD

FACTORS TO BE CONSIDERED WHEN SELECTING THE MOST APPROPRIATE TIRE:



CHOOSING THE IDEAL TIRE

This will depend on:
 - the fitment possibilities offered by the machine manufacturer,
 - the service conditions on the site.
 Factors such as load, speed, surface conditions, etc. must be considered.

TIRE BEHAVIOUR

- how are the tires wearing?
- what are the main reasons for removing a tire from service?
- are there sidewall or tread problems?

PROBLEMS THAT MAY ARISE

- how does the machine / tire combination behave? (for example, traction).

• THE MACHINE

- the tire sizes,
- the loads the tires have to carry (laden and unladen).

• THE SITE

- type of surface, condition and profile of haul-roads,
- type and condition of loading and tipping areas.

• MACHINE OPERATION ON THE SITE

- length of the cycle (laden trip / unladen trip),
- maximum number of cycles during a working period or shift,
- duration of the working period or shift.

TKPH (TMPH) definition:

The TKPH (Ton Kilometre Per Hour) or TMPH (Ton Mile Per Hour) is an expression of the working capacity of a tire.

The TKPH (TMPH) is a function of the maximum allowed internal operating temperature of a tire.

TIRE TKPH OR TIRE TMPH

A tire's TKPH (TMPH) depends on its design and varies according to size and type.

TKPH (TMPH) values are given along with other Michelin® tire characteristics.

It is a function of load and the number of kilometres (miles)

covered per hour at an ambient temperature of 38° C (100° F). The formula to convert a TKPH rating to a TMPH rating is:

$$\text{TMPH} = \text{TKPH} \times 0,685$$

TKPH calculation is based on the "short ton" which corresponds to 2000 lbs or 907 kg.

BASIC SITE TKPH OR TMPH

This value reflects the specific requirements of a site and can be obtained by using the following formula:

$$\text{Basic site TKPH (basic site TMPH)} = Q_m \times V_m$$

where Q_m = average load per tire

V_m = average cycle speed, in km (or miles) per hour

AVERAGE LOAD PER TIRE (QM)

Average load per tire (Q_m):

$$Q_m = \frac{Q_c + Q_v}{2}$$



where Q_c = is the load per tire in ton (TKPH),
or in short ton (TMPH), on a laden vehicle.

Q_v = is the load per tire in ton (TKPH),
or in short ton (TMPH), on an unladen vehicle.

The Q_m calculation should theoretically be made for each tire. However, in practice, specific tire loads are not normally available and therefore this leads to the assumption that each tire on the same axle carries an equal load. When calculating the average load per tire on the front and the rear axles, the greatest value of Q_m shall be used in TKPH (TMPH) calculation.

In most cases, on two-axle dump trucks, the distribution of the total load of the loaded vehicle (unladen weight + payload) corresponds to 33.3 % on the front axle (single tires) and 66.7 % on the rear axle (twinned tires).

When unladen, the front axle is almost always the heaviest. Thus, the maximum Q_m , will nearly always be on the front axle.

Caution: ensure that load distribution Front/Rear is even

Of course, the analysis of the site (or at least, the collected information), weighings and machine characteristics, will provide the information to define and check the load per tire.

THE NUMBER OF KM (OR NUMBER OF MILES) COVERED ON THE REFERENCE CYCLE



This is obtained by using the relationship:

$$Vm = \frac{L}{H}$$


where L = is the cycle length in kilometres (TKPH), or in miles (TMPH).

The reference cycle must be the one with the highest average speed.

H = is the duration of cycle in hour.

REAL SITE TKPH OR REAL SITE TMPH

The $Qm \times Vm$ formula is used to calculate the basic site TKPH (or TMPH).

To obtain the real site TKPH (or TMPH), two more factors must be taken into account:

- the length of cycles exceeding 5 kilometres (or 3 miles)
- the ambient temperature.

CYCLE LENGTH - K1 COEFFICIENT

For cycle lengths exceeding 5 kilometers (or 3 miles) apply to the basic site TKPH (or basic site TMPH) the K1 coefficient, the values of which are given on following pages.

SITE AMBIENT TEMPERATURE (TA) - K2 COEFFICIENT

The standard ambient temperature is 38°C (100° F). For a given speed, a site temperature higher than 38°C increases the real site TKPH (or TMPH). Conversely, a temperature lower than 38° C decreases the real site TKPH (or TMPH).

The K2 coefficient

where Vm is the reference cycle average speed on the site in km/h for TKPH and in mph for TMPH,
TA is the ambient temperature, in °C for TKPH and in °F for TMPH

TR is the reference temperature (38° C for TKPH and 100° F for TMPH)

Is to apply to the basic site TKPH (basic site TMPH). Its calculation depends on whether the ambient temperature of the basic site is above or below 38°C (100°F)

if $TA < 38^{\circ}\text{C}$ (100° F)

$$K2 = \frac{1}{1 - [0,25^* \times (TA - TR)]} \quad \text{Vm}$$


(*: use 0.086 instead of 0.25 when calculating basic site TMPH)

If $TA > 38^{\circ}\text{C}$ (100° F)

$$K2 = \frac{1}{1 - [0,40^* \times (TA - TR)]} \quad \text{Vm}$$


(*: use 0.138 instead of 0.40 when calculating basic site TMPH)

The ambient temperature of the site (TA) to be taken into account is "the maximum temperature in the shade" during the hottest period.

For temperatures TA greater than 15° C (59° F), use the K2 coefficients shown on the following pages.

For temperatures TA lower than 15° C (59° F), use the K2 coefficients shown in the shaded area of the table on the following pages.

To sum up, for the real site TKPH (TMPH) calculation, proceed as follows:

- calculate the basic site TKPH (TMPH).
- calculate the correct for cycle length exceeding 5 kilometres (3 miles) by applying the K1 coefficient.
- calculate the correct for ambient temperatures not equal to 38° C (100° F) by applying the K2 coefficient.

Real site TKPH (or TMPH) = Basic site TKPH (or basic site TMPH) x K1 x K2

COMPARISON OF THE TIRE TKPH (TMPH) AND REAL SITE TKPH (TMPH)

On the basis that the choice of tread pattern is made to meet the needs of traction, protection and speed there are 2 possibilities:

- a) the tire's TKPH (TMPH) is greater than the real site TKPH (TMPH): the tire is suitable for the application.
- b) the tire's TKPH (TMPH) is below the real site TKPH (TMPH): the tire is not suitable for the application.

In case b:

- Check if another tread pattern or type may be used.
- See if a modification of operating conditions is possible. (reduction of load and/or reduction of speed, reduced number of cycles in the same time period, etc.).

**MICHELIN® EARTMOVER TIRES FOR TRANSPORT MACHINES
K COEFFICIENT CALCULATED AND USED FOR THE TKPH (TMPH) METHOD**

K1 COEFFICIENTS

L (km)	L (ml)	K1												
			11	6.8	1.13	21	13	1.19	31	19.3	1.21	41	25.5	1.23
			12	7.4	1.14	22	13.7	1.19	32	19.9	1.21	42	26.1	1.23
			13	8	1.15	23	14.3	1.20	33	20.5	1.22	43	26.7	1.23
			14	8.7	1.16	24	14.9	1.20	34	21.1	1.22	44	27.3	1.23
5	3.1	1.00	15	9.3	1.16	25	15.5	1.20	35	21.7	1.22	45	28	1.23
6	3.7	1.04	16	9.9	1.17	26	16.2	1.20	36	22.4	1.22	46	28.6	1.23
7	4.3	1.06	17	10.6	1.17	27	16.8	1.21	37	23	1.22	47	29.2	1.23
8	5	1.09	18	11.2	1.18	28	17.4	1.21	38	23.6	1.22	48	29.8	1.23
9	5.6	1.10	19	11.8	1.18	29	18	1.21	39	24.2	1.22	49	30.4	1.23
10	6.2	1.12	20	12.4	1.19	30	18.6	1.21	40	25	1.22	50	31	1.23

L = Cycle length in kilometres and in miles.

K2 COEFFICIENTS

Vm Km (miles)	Ambient temperature														
	15 °C 59 °F	17,5 °C 63,5 °F	20 °C 68 °F	22,5 °C 72,5 °F	25 °C 77 °F	27,5 °C 81,5 °F	30 °C 86 °F	32,5 °C 90,5 °F	35 °C 95 °F	37,5 °C 99,5 °F	40 °C 104 °F	42,5 °C 108,5 °F	45 °C 113 °F	47,5 °C 117,5 °F	50 °C 122 °F
10 (6)	0,635	0,661	0,690	0,721	0,755	0,792	0,833	0,879	0,930	0,988	1,087	1,220	1,389	1,613	1,923
12 (7)	0,676	0,701	0,727	0,756	0,787	0,821	0,857	0,897	0,941	0,990	1,071	1,176	1,304	1,463	1,667
14 (9)	0,709	0,732	0,757	0,783	0,812	0,842	0,875	0,911	0,949	0,991	1,061	1,148	1,250	1,373	1,522
16 (10)	0,736	0,757	0,780	0,805	0,831	0,859	0,889	0,921	0,955	0,992	1,053	1,127	1,212	1,311	1,429
18 (11)	0,758	0,778	0,800	0,823	0,847	0,873	0,900	0,929	0,960	0,993	1,047	1,111	1,184	1,268	1,364
20 (12,5)	0,777	0,796	0,816	0,838	0,860	0,884	0,909	0,936	0,964	0,994	1,042	1,099	1,163	1,235	1,316
21 (13)	0,785	0,804	0,824	0,844	0,866	0,889	0,913	0,939	0,966	0,994	1,040	1,094	1,154	1,221	1,296
22 (14)	0,793	0,811	0,830	0,850	0,871	0,893	0,917	0,941	0,967	0,994	1,038	1,089	1,146	1,209	1,279
24 (15)	0,807	0,824	0,842	0,861	0,881	0,901	0,923	0,946	0,970	0,995	1,034	1,081	1,132	1,188	1,250
26 (16)	0,819	0,835	0,852	0,870	0,889	0,908	0,929	0,950	0,972	0,995	1,032	1,074	1,121	1,171	1,226
28 (17)	0,830	0,845	0,862	0,878	0,896	0,914	0,933	0,953	0,974	0,996	1,029	1,069	1,111	1,157	1,207
30 (19)	0,839	0,854	0,870	0,886	0,902	0,920	0,938	0,956	0,976	0,996	1,027	1,064	1,103	1,145	1,190
32 (20)	0,848	0,862	0,877	0,892	0,908	0,924	0,941	0,959	0,977	0,996	1,026	1,060	1,096	1,135	1,176
34 (21)	0,855	0,869	0,883	0,898	0,913	0,928	0,944	0,961	0,978	0,996	1,024	1,056	1,090	1,126	1,164
36 (22)	0,862	0,875	0,889	0,903	0,917	0,932	0,947	0,963	0,980	0,997	1,023	1,053	1,084	1,118	1,154
38 (24)	0,869	0,881	0,894	0,907	0,921	0,935	0,950	0,965	0,981	0,997	1,022	1,050	1,080	1,111	1,145
40 (25)	0,874	0,886	0,899	0,912	0,925	0,938	0,952	0,967	0,982	0,997	1,020	1,047	1,075	1,105	1,136
42 (26)	0,880	0,891	0,903	0,916	0,928	0,941	0,955	0,968	0,982	0,997	1,019	1,045	1,071	1,099	1,129
44 (27)	0,884	0,896	0,907	0,919	0,931	0,944	0,957	0,970	0,983	0,997	1,019	1,043	1,068	1,095	1,122
46 (28)	0,889	0,900	0,911	0,922	0,934	0,946	0,958	0,971	0,984	0,997	1,018	1,041	1,065	1,090	1,117
48 (29)	0,893	0,904	0,914	0,925	0,937	0,948	0,960	0,972	0,985	0,997	1,017	1,039	1,062	1,086	1,111
50 (31)	0,897	0,907	0,917	0,928	0,939	0,950	0,962	0,973	0,985	0,998	1,016	1,037	1,059	1,082	1,106

Vm = number of km (miles) covered per hour.

Interpolation is allowed between the temperatures shown in the column headings.

MICHELIN® EARTMOVER TIRES FOR SPECIFIC USES

1°) Firstly, if the dimension exists for your machine and your use, you must use it (example: Mechanical handling tires for handling use; heavy truck tires for construction use or for builder use, ...)

2°) For all other cases, you must contact your Michelin® representative.

**APPROXIMATE LOOSE MATERIAL DENSITIES (t/m³)**

MATERIAL	DENSITY	MATERIAL	DENSITY
Alkaline potash	1.3 to 1.5	Copper ore	1.6
Anthracite	0.9 to 1.1	Iron ore	2.4 to 3.3
Clay (dry)	1 to 1.1	Pyrites	2.6
Clay (moist)	1.2 to 1.3	Earth dry	1.2 to 1.5
Clay (wet)	1.3 to 1.4	Earth moist	1.3 to 1.4
Bauxite	1.5	Earth wet	1.4 to 1.5
Mud	1.8	Overburden	1.7 to 1.8
Limestone	1.5 to 1.6	75% rock - 25% earth	1.9 to 2
Coal	0.7	50% rock - 50% earth	1.7 to 1.8
Quick-lime	0.9 to 1.3	25% rock - 75% earth	1.6
Slaked lime	1.1 to 1.3		
Chalk	1.8 to 2.6	Sand dry	1.5
Granite	1.6 to 1.7	Sand moist	1.9
Sandstone	1.6	Gravel dry	1.7 to 1.8
Crushed gypsum	1.6	Gravel moist	2
Marl clay	2.2		

CONTENT

TECHNICAL DATA INDUSTRIAL, PORT AND INTERMODAL TIRES

► <i>TIRE CONSTRUCTION</i>	112
► <i>GENERAL INFORMATION</i>	113
► <i>MICHELIN® RADIAL TIRES FOR MATERIAL HANDLING</i>	116
► <i>ADVICE AND RECOMMENDATIONS ON THE USE OF MICHELIN® INDUSTRIAL TIRES</i>	117
► <i>MAX. TIRE LOADS IN KG AND IN LB</i>	118
► <i>OTHER MICHELIN® RADIAL TIRES USED FOR MECHANICAL HANDLING</i>	130
► <i>COMPONENTS USED WITH INDUSTRIAL AND HANDLING TIRES</i>	132
► <i>UNITS OF MEASUREMENT AND CONVERSION TABLES</i>	145

INDUSTRIAL TIRES

Unless otherwise specified, MICHELIN® industrial tires comply with internationally accepted standards that are established by TRA (Tire and Rim Association), ETRTO (European Tyre and Rim Technical Organisation), JATMA (Japan Automobile Tyre Manufacturers Association), and/or ISO (International Standards Organisation).

Among other things, the standards encompass load capacity, inflation pressure, overall diameter, overall width, and related valves and rims.

Some differences may exist between these standards.

In such case, Michelin refers to the most appropriate.

Michelin's range of industrial tires covers most vehicles and service or operating conditions. If a tire is to be used differently than what it is designed for, please consult your nearest Michelin representative for advice.

MICHELIN® tires are designed for a specific use as specified in this catalog.

Any other use constitutes an abnormal use.

However, in some cases, Michelin may waive that which will specify the conditions and the permitted use of derogatory terms and limits.

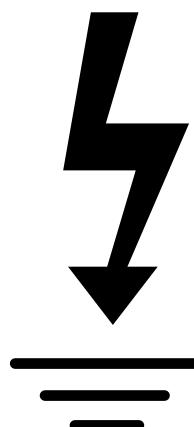
Michelin disclaims any responsibility for any abnormal use of its tires or absence of any express written permission derogatory.

Tires for mechanical handling equipment used in areas where there is a high risk of fire or explosion, such as the chemical and petrochemical industries, must meet certain standards concerning their electrical resistivity.

These requirements are indicated in the operating norms.

Conforming tires are known as "Antistatic Class 1."

ALL MICHELIN® INDUSTRIAL TIRES are compliant with ISO 16392 and WDK 110 standards and are marked with the following symbol moulded into the sidewall.



All the information given in this brochure is subject to changes that may occur after publication.
These values are given for information purposes only and may not be used for legal or statutory actions.

Edition N° 18 - 2017

Latest version is available on www.michelinearthmover.com

CONTENTS

TIRE CONSTRUCTION

112

THE SOLID TIRE (SOLID RUBBER TIRE, PNEUMATIC SHAPED SOLID, PPS)	112
---	-----

GENERAL INFORMATION

113

THE DIFFERENT TIRE FAMILIES	113
THE DIFFERENT TIRE SIZE DESIGNATIONS	113
TIRE MARKING	114
LOAD INDEX AND SPEED SYMBOL	115
READING GUIDE FOR PRESSURE, LOAD AND USAGE TABLES	115

MICHELIN® RADIAL TIRES FOR MATERIAL HANDLING

116

CYCLIC SERVICE	116
----------------------	-----

ADVICE AND RECOMMENDATIONS

ON THE USE OF MICHELIN® INDUSTRIAL TIRES

117

INSERTS AND FILL SOLIDS	117
NITROGEN INFLATION	117

MAX. TIRE LOADS IN KG AND IN LB

118

OTHER MICHELIN® RADIAL TIRES USED FOR MECHANICAL HANDLING

128

CONDITIONS OF USE	130
-------------------------	-----

COMPONENTS USED WITH INDUSTRIAL AND HANDLING TIRES

132

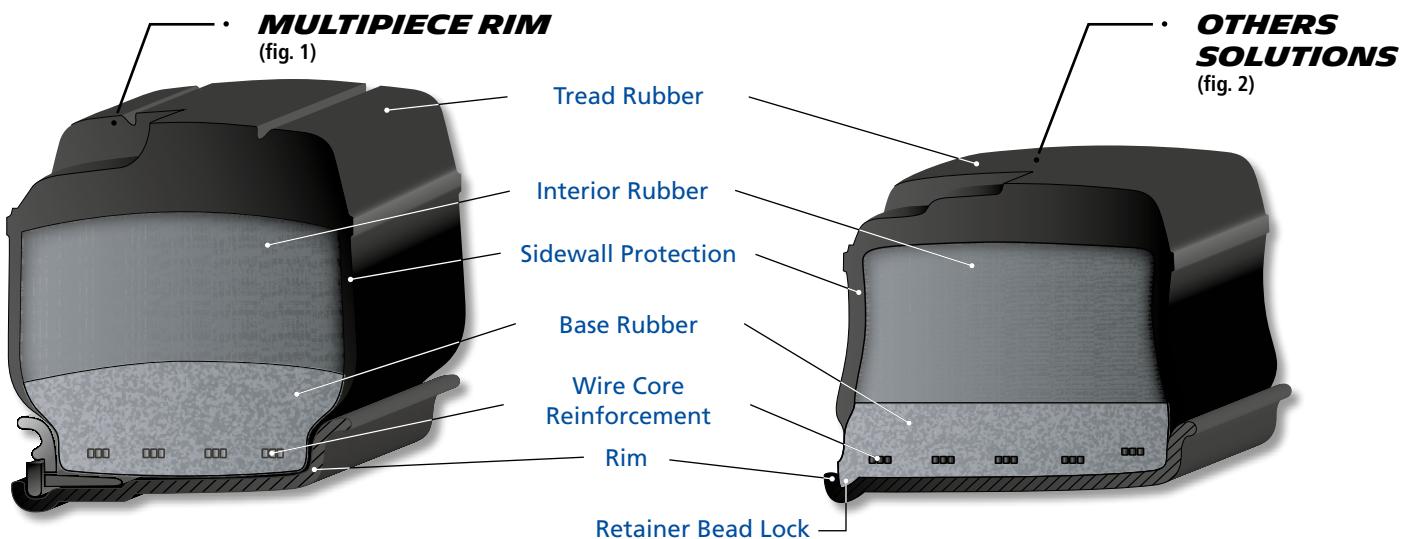
TUBELESS BEAD SEAL	132
APPROVED RIMS FOR INDUSTRIAL TIRES	134
TUBES AND FLAPS FOR HANDLING TIRES	137
SEALS FOR HANDLING TIRES AND RIMS	138
VALVES AND ASSOCIATED ACCESSORIES FOR INDUSTRIAL AND HANDLING TIRES AND RIMS	139

UNITS OF MEASUREMENT AND CONVERSION TABLES

145

TIRE CONSTRUCTION

THE SOLID TIRE (SOLID RUBBER TIRE, PNEUMATIC SHAPED SOLID, PPS)



The whole tire is made of rubber. It is generally composed of at least three different rubber compounds.

According to the type of wheel, the construction of the tire can

- Look like a pneumatic tire, but can be fitted to a multipiece rim (*fig. 1*)
- Enable so that once in place, it will auto-lock automatically (*fig. 2*). An extension to its base (called the 'retainer bead') is positioned in the rim groove normally provided for receiving the locking ring.

Removable parts of the wheel then not being provided make it more difficult retrofitting other pneumatic solutions.

Disadvantages:

- Often high rolling resistance / influence on the fuel consumption
- Severe thermal degradation with intensive use
- Low life
- Special fitting equipment needed
- Poor load and machine protection from shocks and vibrations
- Poor comfort level
- High purchase price
- Little traction / low adherence

Advantages:

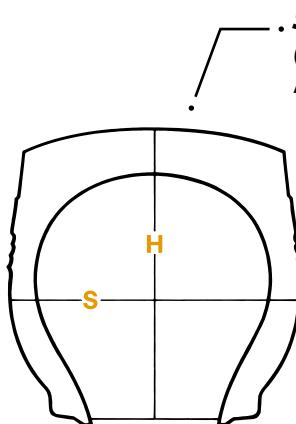
- Puncture-proof tire
- Practically maintenance free
- Stability

GENERAL INFORMATION

THE DIFFERENT TIRE FAMILIES

There are different tire families categorised by the aspect ratio H/S:
(the ratio in % between the sidewall height and the tire width).

H = standard section height (see page <?>) - **S = standard section width** (see page <?>)



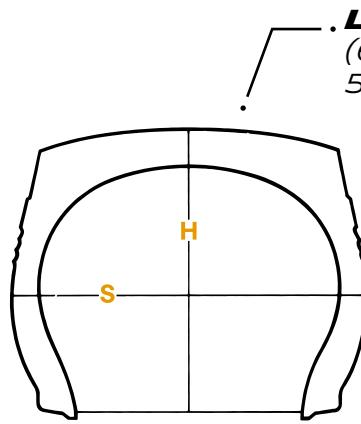
STANDARD TIRE
(100 SERIES,
NARROW BASE)

The H/S aspect ratio is
approximately equal
to 1,00.

1



$$\frac{H}{S} = 100 \%$$



LOW PROFILE TIRES
(65 TO 95 SERIES,
5 BY 5)

The H/S aspect ratio is
less than 1
(0,65 in the followed example).

0,65



$$\frac{H}{S} = 65 \%$$

The section width, given in inches, is a whole number
e.g.: 12.00 R 20
or the section width, given in inches, is a whole number
followed by a fraction.
e.g.: 8.25 R 15

The aspect ratio is not indicated in the size designation.

The nominal section width is expressed as a measurement in
millimeters followed by the aspect ratio 65 to 95
(65 in the example).
e.g.: 355/65 R 15

THE DIFFERENT TIRE SIZE DESIGNATIONS

EQUIVALENT MARKINGS					EXPLANATION								
Ø of rim (inches)	BIAS MARKING		RADIAL MARKING	METRIC TIRE SIZE DESIGNATION	RADIAL MARKING	Ø ext. (inch)	section width (inches)	section width (mm)	aspect ratio H/S	Ø of rim (inches)	load index	speed symbol	Ply rating (bias tire)
4	4.80 - 4	4.00 - 4				4.00				4			
8	4.80 - 8	4.00 - 8				4.00				8			
	5.70 - 8	5.00 - 8	5.00 R 8			5.00				8	111	A5	10 PR
	15 x 4 - 8			125 / 75 - 8		15	x 4,5	125	/ 75	8			16 PR
	16 x 6 - 8			150 / 75 - 8	150/75 R 8	16	x 6	150	/ 75	8	113	A5	16 PR
	18 x 7 - 8	18 x 7		180 / 70 - 8	180/70 R 8	18	x 7	180	/ 70	8	125	A5	16 PR
9	21 x 8 - 9			200 / 75 - 9	200/75 R 9	21	x 8	200	/ 75	9	134	A5	16 PR
	6.90 - 9	6.00 - 9	6.00 R 9			6.00				9	121	A5	12 PR
10		6.50 - 10	6.50 R 10			6.50				10	128	A5	14 PR
	23 x 9 - 10			225 / 75 - 10	225/75 R 10	23	x 9	225	/ 75	10	142	A5	20 PR
12		7.00 - 12	7.00 R 12			7.00				12	136	A5	16 PR
	23 x 10 - 12			250 / 60 - 12		23	x 10	250	/ 60	12			18 PR
	27 x 10 - 12			250 / 75 - 12	250/75 R 12	27	x 10	250	/ 75	12	152	A5	20 PR
15		7.00 - 15	7.00 R 15			7.00				15	143	A5	16 PR
		7.50 - 15	7.50 R 15			7.50				15	146	A5	16 PR
	28 x 9 - 15	8.15 - 15		225 / 75 - 15	225/75 R 15	28	x 9	225	/ 75	15	149	A5	16 PR
		8.25 - 15	8.25 R 15	250 - 15	250 / 70 - 15	250/70 R 15		250	/ 70	15	153	A5	18 PR
				300 - 15	315 / 70 - 15	315/70 R 15		315	/ 70	15	165	A5	22 PR
				355 / 65 - 15	355/65 R 15			355	/ 65	15	175	A5	28 PR

TIRE MARKING



For special conditions usage, please consult us.

	Position of wear indicator.
MICHELIN®	Manufacturer.
355	Nominal section width in mm (S = 355 mm).
65	Tire aspect ratio (H/S = 0,65).
R	Radial construction.
15	Nominal diameter of rim to which tire should be fitted (15 inches).
STABIL'X	Old name of the 'family' being deleted.
XZM	XZM range name.
Tubeless	Tire with no tube.
170	Load Index.
A5	Speed Symbol: 25 km/h.
CYCLIC	Cyclic use (see explanation on following pages).
Radial X	Indication of tire structure.
	Electrical conductivity tire class 1.

NOTES

LOAD INDEX AND SPEED SYMBOL

Industrial and handling tires bear a Load Index and a Speed Symbol.

The **LOAD INDEX** is a numerical code from international standard tires, which indicates the reference load capacity.

LOAD INDEX	LOAD IN KG												
100	800	120	1400	140	2500	160	4500	180	8000	200	14000		
101	825	121	1450	141	2575	161	4625	181	8250	201	14500		
102	850	122	1500	142	2650	162	4750	182	8500	202	15000		
103	875	123	1550	143	2725	163	4875	183	8750	203	15500		
104	900	124	1600	144	2800	164	5000	184	9000	204	16000		
105	925	125	1650	145	2900	165	5150	185	9250	205	16500		
106	950	126	1700	146	3000	166	5300	186	9500	206	17000		
107	975	127	1750	147	3075	167	5450	187	9750	207	17500		
108	1000	128	1800	148	3150	168	5600	188	10000	208	18000		
109	1030	129	1850	149	3250	169	5800	189	10300	209	18500		
110	1060	130	1900	150	3350	170	6000	190	10600	210	19000		
111	1090	131	1950	151	3450	171	6150	191	10900	211	19500		
112	1120	132	2000	152	3550	172	6300	192	11200	212	20000		
113	1150	133	2060	153	3650	173	6500	193	11500	213	20600		
114	1180	134	2120	154	3750	174	6700	194	11800	214	21200		
115	1215	135	2180	155	3875	175	6900	195	12150	215	21800		
116	1250	136	2240	156	4000	176	7100	196	12500	216	22400		
117	1285	137	2300	157	4125	177	7300	197	12850	217	23000		
118	1320	138	2360	158	4250	178	7500	198	13200	218	23600		
119	1360	139	2430	159	4375	179	7750	199	13600	219	24300		

The reference load is that corresponding to the load index of the designation.

The **SPEED SYMBOL** is a numerical code from international standard tires, which indicates the maximum speed at which the tire can carry a load corresponding to its load index, under specified conditions.

SPEED SYMBOL	A1	A2	A3	A4	A5	A6	A7	A8	B	C	D	E	F	G	J	K	L
Speed (km/h)	5	10	15	20	25	30	35	40	50	60	65	70	80	90	100	110	120

READING GUIDE FOR PRESSURE, LOAD AND USAGE TABLES

The shaded box of load / pressure tables is the value defined by the industry standards.

Up to this limit, the tire works in an optimal zone leading to a better balance of performance.

The use of MICHELIN® tires outside the specification of load / pressure / use tables must be validated by your Michelin representative.

The MICHELIN® radial tires used in Mechanical Handling and presented in this document are designed for a cyclic service: this is the use we define as **mechanical handling, cyclic service**.

MICHELIN® RADIAL TIRES FOR MATERIAL HANDLING

CYCLIC SERVICE

The **CYCLIC SERVICE** covers applications where tires are not used continually at the load indicated by the load index and at the speed indicated by the speed symbol. They usually operate one way loaded and one way empty (typically forklift truck, straddle carrier and terminal tractors. *This list is not exhaustive*).

In addition, in the case of counterbalance forklift trucks, the steering wheels (rear axles) are at maximum load when the machine is empty, and the drive wheels (front axles) at maximum load when the machine is laden. In the latter cases the front axle called "**Counterbalanced lift truck - load carrying**

wheel", the tire is rated to carry up to 130% of the reference load.

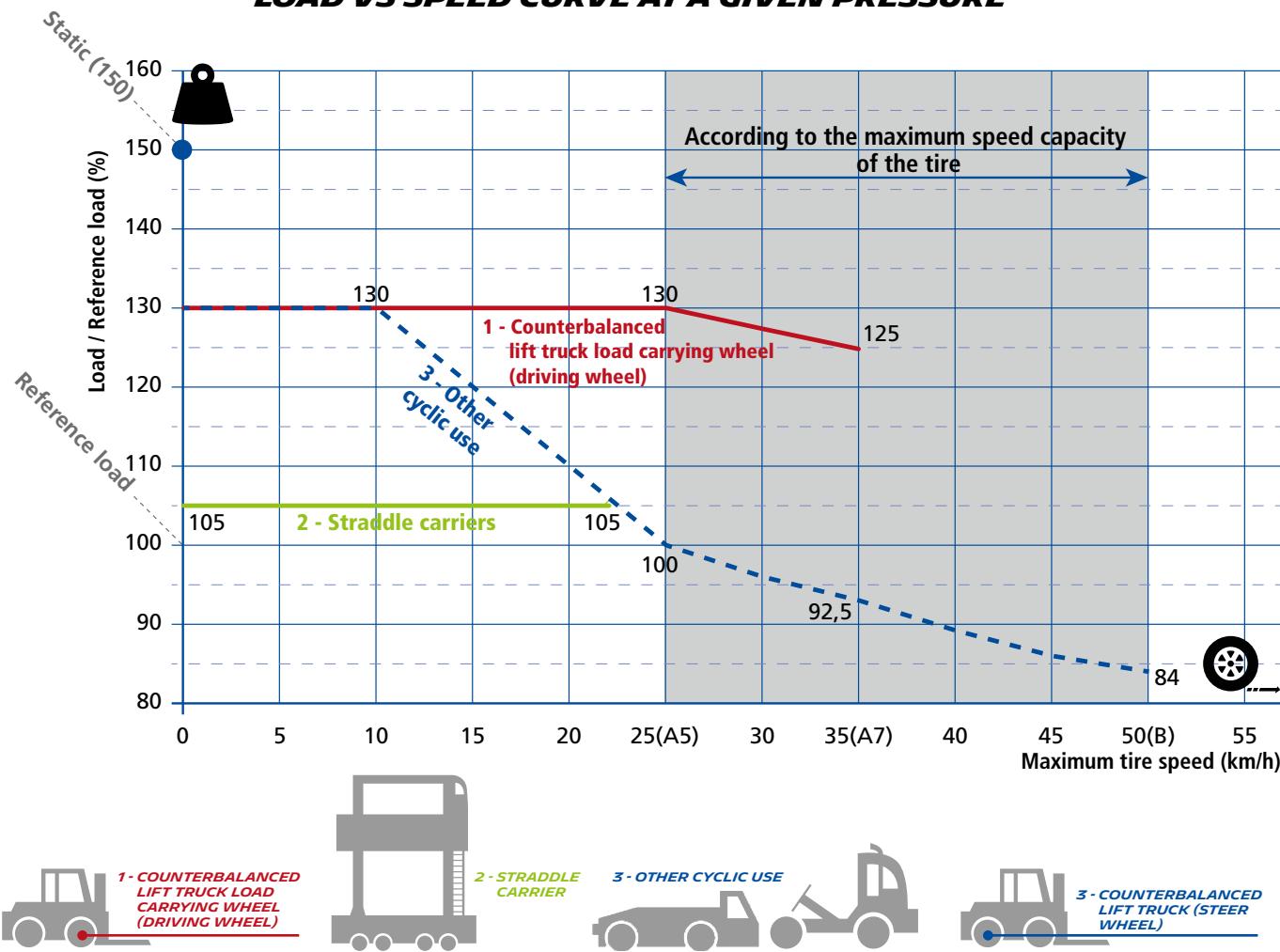
The Counterbalanced lift truck (steer wheel) "falls under the 'other cyclic use."

It is not possible for a tire to operate carrying more than 130% of the reference load. For **Straddle carrier** use, this maximum limit is 105%.

Below this limit, the load table provides information on the evolution of the load according to the maximum speed of the vehicle, for a given pressure.

The graph below shows the basic design of these tables.

LOAD VS SPEED CURVE AT A GIVEN PRESSURE



It is imperative:

- Not to exceed the maximum speed of the tire (marked on the tire and / or specified in this document).
- Not to exceed the permitted maximum distances in one hour indicated in the tables presented in this document.
- At the time of fitting, it is vital to check the markings, in order to make sure that the tire is suitable for operation at the maximum allowed vehicle speed and load.

In the case where the maximum speed of the machine exceeds the tire Speed Symbol, it is necessary to consult your local Michelin representative. In the case of acceptance, the load capacity of the tire will be reduced.

ADVICE AND RECOMMENDATIONS ON THE USE OF MICHELIN® INDUSTRIAL TIRES

INSERTS AND SOLID FILLS

Inserts and solid fills are sometimes used in lieu of air or nitrogen. This technique is adapted for specific uses.



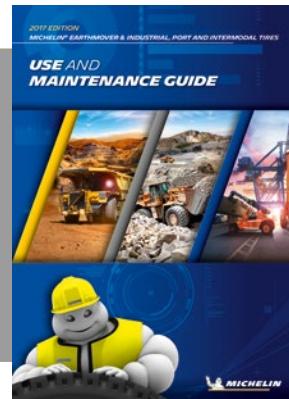
The preceding information is extracted from the USE AND MAINTENANCE GUIDE FOR MICHELIN® EARTMOVER TIRES.

For more details, consult our website
www.michelinearthmover.com

OR FROM YOUR MICHELIN REPRESENTATIVE.

Some performance are reduced (lower operating speed) and the comfort of the driver of the machine downgraded significantly.

Their implementation requires qualified personnel.



NITROGEN INFLATION

INTRODUCTION

Under most circumstances, air inflation is suitable for our tires and allows them to work in the best conditions.

WHEN SHOULD NITROGEN INFLATION BE RECOMMENDED ?

Nitrogen is a non-combustible inert gas. Inflating tires with nitrogen enhances security against the risk of inflammation.

Nitrogen, inert and stable gas, with a larger molecule, diffuses more slowly than oxygen through rubber, limiting considerably the risk of oxidation of different parts of the tire (rubber, cables...) and the steel components.

Nitrogen inflation is recommended for reasons of safety when working under the following conditions:

- areas where there is a risk of explosion.
- working with or in areas involving high-temperature liquids (e.g., foundries, glass works, etc.)
- working in areas where there is a risk of electrical discharge (close to high tension cables...)
- working where overheating of a tire has been caused by:
 - intensive driving (speed, distance, intensity of the cycles)
 - excessive overheating of a mechanical unit (transmission or brakes for example)

Nitrogen inflation is a well-adapted solution for use with mechanical handling equipment.

EQUIPMENT NECESSARY

To install an effective inflation system, Michelin recommends:

- 2 gas bottles of compressed nitrogen
- 1 nitrogen regulator
- an inflation tool in compliance with local regulations.

ATTENTION:

Inflation with nitrogen must be undertaken by a person who has been trained to use it.
Never use a nitrogen bottle without the appropriate regulator,
and always follow safety guidelines.

SUPPLIERS: Contact your local specialist in compressed gases.

VOLUME OF NITROGEN NECESSARY TO INFLATE A TIRE

The quantity of nitrogen necessary to inflate a tire is proportional to its internal volume and the inflation pressure required.

The volumes of the industrial tires are shown in the following tables (characteristics of MICHELIN® Industrial Tires).

Example: 250 /70 R 15 XZM TL

Interior volume is 39 litres.

For a pressure of 10 bars, the quantity of nitrogen needed is: $39 \times 10 = 390$ litres.

MAX. TIRE LOADS IN KG AND IN LB

COMMERCIAL DESCRIPTION	Max. dist. / hour km Miles	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim TBS (4) Approved Rims (2) - (3) O-Ring (5) CAI	Tubeless	Tube Type Tube Ref. Flap (5) CAI	Max. speed (km/h)	PRESSURE (Bar / PSI)						
		Michelin® dimensions											6,0	8,0	10,0				
		e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32nd	Dual spacing mm inches	Cap. l gallons					87	116	145				
		mm inches	mm inches	mm inches	mm inches	mm 32nd	mm inches	l gallons					87	116	145				

8"

5.00 R 8 Tubeless

MICHELIN® XZM 111AS 110208 (10)	15 9.3	137 5.4	463 18.2	213 8.4	1407 55.4	23 29	164 6.5	9 2	3.00D 3 1/4 I 3.50 D	8 CG		Mechanical handling, cyclic service			
												Static	1230 2712	1420 3131	1650 3638
												≤ 10 km/h ≤ 6 mph	1060 2337	1230 2712	1420 3131
												25 km/h 15 mph	810 1786	940 2073	1090 2403
												35 km/h 22 mph	750 1654	870 1918	1010 2227
Counterbalanced Lift Truck - load wheel															
												≤ 10 km/h ≤ 6 mph	1060 2337	1230 2712	1420 3131
												25 km/h 15 mph	1060 2337	1230 2712	1420 3131
												35 km/h 22 mph	1020 2249	1180 2602	1370 3021

150/75 R 8 Tubeless

MICHELIN® XZM 113AS 110087 (10)	15 9.3	151 5.9	424 16.7	194 7.6	1287 50.7	16 20.2	174 6.9	8 2	4.33 R	8 CG		Mechanical handling, cyclic service			
												Static	1240 2734	1480 3263	1740 3837
												≤ 10 km/h ≤ 6 mph	1070 2359	1280 2822	1500 3308
												25 km/h 15 mph	820 1808	980 2161	1150 2536
												35 km/h 22 mph	760 1676	910 2007	1070 2359
Counterbalanced Lift Truck - load wheel															
												≤ 10 km/h ≤ 6 mph	1070 2359	1280 2822	1500 3308
												25 km/h 15 mph	1070 2359	1280 2822	1500 3308
												35 km/h 22 mph	1030 2271	1230 2712	1440 3175

180/70 R 8 Tubeless

MICHELIN® XZM 125AS 110069 (10)	15 9.3	170 6.7	454 17.9	205 8.1	1371 54	19 23.9	196 7.7	11 3	4.33 R	8 D		Mechanical handling, cyclic service			
												Static	1890 4167	2190 4829	2500 5513
												≤ 10 km/h ≤ 6 mph	1630 3594	1890 4167	2150 4741
												25 km/h 15 mph	1250 2756	1450 3197	1650 3638
												35 km/h 22 mph	1160 2558	1350 2977	1530 3374
Counterbalanced Lift Truck - load wheel															
												≤ 10 km/h ≤ 6 mph	1630 3594	1890 4167	2150 4741
												25 km/h 15 mph	1630 3594	1890 4167	2150 4741
												35 km/h 22 mph	1570 3462	1820 4013	2070 4564

MAX. TIRE LOADS IN KG AND IN LB

COMMERCIAL DESCRIPTION	Max. dist. / hour Types CAI (Part Number)	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim	Tubeless TBS (4) O-Ring (5) CAI	Tube Type Tube Ref. Flap (5)	Max. speed (km/h)	PRESSURE (Bar / PSI)						
		Michelin® dimensions											6,0	8,0	10,0				
		e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32nd	Dual spacing mm inches	Cap. l gallons					Approved Rims (2) - (3)	CAI	Flap (5)	87	116	145	
		mm inches	mm inches	mm inches	mm inches	mm 32nd	mm inches	l gallons					87	116	145	87	116	145	

9"

6.00 R 9 Tubeless

MICHELIN® XZR 121A5 110206	25 15.5	164 6.5	530 20.9	241 9.5	1605 63.2	10 12.6	192 7.6	18 5	4.00E	9 F	110-9 LD (8) 110-9 LDE	Mechanical handling, cyclic service			
												Static	1590 3506	1890 4167	2190 4829
												≤ 10 km/h ≤ 6 mph	1370 3021	1630 3594	1890 4167
												25 km/h 15 mph	1050 2315	1250 2756	1450 3197
												35 km/h 22 mph	980 2161	1160 2558	1350 2977
												40 km/h 25 mph	940 2073	1120 2470	1300 2867
												50 km/h 31 mph	890 1962	1050 2315	1220 2690
												Counterbalanced Lift Truck - load wheel			
												≤ 10 km/h ≤ 6 mph	1370 3021	1630 3594	1890 4167
												25 km/h 15 mph	1370 3021	1630 3594	1890 4167
												35 km/h 22 mph	1320 2911	1570 3462	1820 4013

6.00 R 9 Tubeless

MICHELIN® XZM 121A5 110204 (10)	15 9.3	164 6.5	539 21.2	249 9.8	1641 64.6	24 30.2	192 7.6	15 4	4.00E	9 F	110-9 LD (8) 110-9 LDE	Mechanical handling, cyclic service			
												Static	1590 3506	1890 4167	2190 4829
												≤ 10 km/h ≤ 6 mph	1370 3021	1630 3594	1890 4167
												25 km/h 15 mph	1050 2315	1250 2756	1450 3197
												35 km/h 22 mph	980 2161	1160 2558	1350 2977
												Counterbalanced Lift Truck - load wheel			
												≤ 10 km/h ≤ 6 mph	1370 3021	1630 3594	1890 4167
												25 km/h 15 mph	1370 3021	1630 3594	1890 4167
												35 km/h 22 mph	1320 2911	1570 3462	1820 4013

200/75 R 9 Tubeless

MICHELIN® XZM 134A5 110090 (10)	15 9.3	208 8.2	534 21	240 9.4	1610 63.4	22 27.7	239 9.4	19 5	6.00E	9 F	180-9 (8)	Mechanical handling, cyclic service			
												Static	2270 5005	2750 6064	3210 7078
												≤ 10 km/h ≤ 6 mph	1950 4300	2370 5226	2760 6086
												25 km/h 15 mph	1500 3308	1820 4013	2120 4675
												35 km/h 22 mph	1390 3065	1690 3726	1970 4344
												Counterbalanced Lift Truck - load wheel			
												≤ 10 km/h ≤ 6 mph	1950 4300	2370 5226	2760 6086
												25 km/h 15 mph	1950 4300	2370 5226	2760 6086
												35 km/h 22 mph	1880 4145	2280 5027	2650 5843

MAX. TIRE LOADS IN KG AND IN LB

COMMERCIAL DESCRIPTION	Max. dist. / hour km Miles	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim TBS (4) Approved Rims (2) - (3) O-Ring (5) CAI	Tubeless	Tube Type Tube Ref. Flap (5)	Max. speed (km/h)	PRESSURE (Bar / PSI)							
		Michelin® dimensions												6,0	8,0	10,0				
		e mm inches	D mm inches	R' mm inches	RC	Tread depth mm inches	Dual spacing mm 32rd	Cap. l inches gallons					87	116	145					
		mm inches	mm inches	mm inches	inches	mm inches	mm 32rd	inches gallons					87	116	145					

10"

6.50 R 10 Tubeless

MICHELIN® XZR 128A5 110207	25 15.5	184 7.2	578 22.8	264 10.4	1753 69	11 13.9	217 8.5	23 6	5.00F 5.50F	10 F		Mechanical handling, cyclic service			
												Static	1930 4256	2310 5094	2720 5998
												≤ 10 km/h ≤ 6 mph	1660 3660	1990 4388	2340 5160
												25 km/h 15 mph	1280 2822	1530 3374	1800 3969
												35 km/h 22 mph	1180 2602	1420 3131	1670 3682
												40 km/h 25 mph	1140 2514	1360 2999	1610 3550
												50 km/h 31 mph	1080 2381	1290 2844	1520 3352
Counterbalanced Lift Truck - load wheel															
												≤ 10 km/h ≤ 6 mph	1660 3660	1990 4388	2340 5160
												25 km/h 15 mph	1660 3660	1990 4388	2340 5160
												35 km/h 22 mph	1600 3528	1910 4212	2250 4961

6.50 R 10 Tubeless

MICHELIN® XZM 128A5 110213 (10)	15 9.3	186 7.3	587 23.1	271 10.7	1786 70.3	27 34	217 8.5	20 5	5.00F 5.50F	10 F		Mechanical handling, cyclic service			
												Static	1930 4256	2310 5094	2720 5998
												≤ 10 km/h ≤ 6 mph	1660 3660	1990 4388	2340 5160
												25 km/h 15 mph	1280 2822	1530 3374	1800 3969
												35 km/h 22 mph	1180 2602	1420 3131	1670 3682
Counterbalanced Lift Truck - load wheel															
												≤ 10 km/h ≤ 6 mph	1660 3660	1990 4388	2340 5160
												25 km/h 15 mph	1660 3660	1990 4388	2340 5160
												35 km/h 22 mph	1600 3528	1910 4212	2250 4961

225/75 R 10 Tubeless

MICHELIN® XZM 142A5 110089 (10)	15 9.3	220 8.7	591 23.3	265 10.4	1779 70	24 30.2	259 10.2	25 7	6.50F	10 F		Mechanical handling, cyclic service			
												Static	2800 6174	3430 7563	4010 8842
												≤ 10 km/h ≤ 6 mph	2410 5314	2960 6527	3450 7607
												25 km/h 15 mph	1850 4079	2270 5005	2650 5843
												35 km/h 22 mph	1720 3793	2100 4631	2460 5424
Counterbalanced Lift Truck - load wheel															
												≤ 10 km/h ≤ 6 mph	2410 5314	2960 6527	3450 7607
												25 km/h 15 mph	2410 5314	2960 6527	3450 7607
												35 km/h 22 mph	2320 5116	2840 6262	3320 7321

MAX. TIRE LOADS IN KG AND IN LB

COMMERCIAL DESCRIPTION	Max. dist. / hour km Miles	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim	Tubeless TBS (4) O-Ring (5) CAI	Tube Type Tube Ref. Flap (5)	Max. speed (km/h)	PRESSURE (Bar / PSi)							
		Michelin® dimensions												6,0	8,0	10,0				
		e mm inches	D mm inches	R' mm inches	RC mm inches	Tread depth mm 32nd	Dual spacing mm inches	Cap. l gallons					Approved Rims (2) - (3) CAI							
		mm inches	mm inches	mm inches	mm inches	mm 32nd	mm inches	l gallons					87	116	145					

12"

7.00 R 12 Tubeless

MICHELIN® XZR 136A5 110210	25 15.5	193 7.6	661 26	302 11.9	2006 79	11 13.9	230 9.1	32 8	5.005	12 H 125-12 LD (8) 125-12 LDE	Mechanical handling, cyclic service			
											Static	2320 5116	2750 6064	3390 7475
											≤ 10 km/h	1990	2370	2920
											≤ 6 mph	4388	5226	6439
											25 km/h	1530	1820	2240
											15 mph	3374	4013	4939
											35 km/h	1420	1690	2080
											22 mph	3131	3726	4586
											40 km/h	1370	1620	2000
											25 mph	3021	3572	4410
											50 km/h	1290	1530	1890
											31 mph	2844	3374	4167
											Counterbalanced Lift Truck - load wheel			
											≤ 10 km/h	1990	2370	2920
											≤ 6 mph	4388	5226	6439
											25 km/h	1530	1820	2240
											15 mph	4388	5226	6439
											35 km/h	1920	2280	2800
											22 mph	4234	5027	6174

7.00 R 12 Tubeless

MICHELIN® XZM 136A5 110195 (10)	15 9.3	196 7.7	671 26.4	310 12.2	2043 80.4	28 35.3	230 9.1	24 6	5.005	12 H 125-12 LD (8) 125-12 LDE	Mechanical handling, cyclic service			
											Static	2320 5116	2750 6064	3390 7475
											≤ 10 km/h	1990	2370	2920
											≤ 6 mph	4388	5226	6439
											25 km/h	1530	1820	2240
											15 mph	3374	4013	4939
											35 km/h	1420	1690	2080
											22 mph	3131	3726	4586
											Counterbalanced Lift Truck - load wheel			
											≤ 10 km/h	1990	2370	2920
											≤ 6 mph	4388	5226	6439
											25 km/h	1530	1820	2240
											15 mph	4388	5226	6439
											35 km/h	1920	2280	2800
											22 mph	4234	5027	6174

25/60 R 12 Tubeless

MICHELIN® XZM 145A5 358151 (7)	15 9.3	254 10	616 24.3	280 11	1865 73.4	27 34	30 8	8.00G			Mechanical handling, cyclic service			
											Static	3060 6747	3700 8159	4380 9658
											≤ 10 km/h	2640	3190	3770
											≤ 6 mph	5821	7034	8313
											25 km/h	2030	2450	2900
											15 mph	4476	5402	6395
											35 km/h	1880	2270	2690
											22 mph	4145	5005	5931
											Counterbalanced Lift Truck - load wheel			
											≤ 10 km/h	2640	3190	3770
											≤ 6 mph	5821	7034	8313
											25 km/h	2640	3190	3770
											15 mph	5821	7034	8313
											35 km/h	2540	3070	3630
											22 mph	5601	6769	8004

MAX. TIRE LOADS IN KG AND IN LB

COMMERCIAL DESCRIPTION	Max. dist. / hour km Miles	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim TBS (4) Approved Rims (2) - (3) O-Ring (5) CAI	Tubeless Tube Ref. Flap (5)	Tube Type	Max. speed (km/h)	PRESSURE (Bar / PSI)						
		Michelin® dimensions												6,0	8,0	10,0			
		e	D	R'	RC	Tread depth	Dual spacing	Cap.	mm	mm	mm	mm	mm	inches	inches	inches	32rd	inches	gallons
		mm	mm	mm	mm	mm	mm	l	inches	inches	inches	inches	inches	inches	inches	32rd	inches	gallons	

12"

250/75 R 12 Tubeless

MICHELIN® XZM 152A5 110108 (10)	15 9.3	256 10.1	688 27.1	311 12.2	2078 81.8	28 35.3	294 11.6	38 10	8.00G	12 KD 9-12 D (8)		Mechanical handling, cyclic service			
												Static	3730 8225	4570 10077	5370 11841
												≤ 10 km/h ≤ 6 mph	3220 7100	3930 8666	4620 10187
												25 km/h 15 mph	2470 5446	3020 6559	3550 7828
												35 km/h 22 mph	2290 5049	2800 6174	3290 7254
												Counterbalanced Lift Truck - load wheel			
												≤ 10 km/h ≤ 6 mph	3220 7100	3930 8666	4620 10187
												25 km/h 15 mph	3220 7100	3930 8666	4620 10187
												35 km/h 22 mph	3090 6813	3780 8335	4440 9790

15"

7.00 R 15 Tubeless

MICHELIN® XZM 143A5 110211 (10)	15 9.3	196 7.7	733 28.9	337 13.3	2230 87.8	28 35.3	235 9.3	30 8	5.5 6.0	15/16 F 15x6.00 (8) 15x6.00 E (a)		Mechanical handling, cyclic service			
												Static	3075 6780	3600 7938	4090 9018
												≤ 10 km/h ≤ 6 mph	2665 5876	3120 6880	3540 7806
												25 km/h 15 mph	2050 4520	2400 5292	2725 6009
												35 km/h 22 mph	1895 4178	2220 4895	2520 5557
												Counterbalanced Lift Truck - load wheel			
												≤ 10 km/h ≤ 6 mph	2665 5876	3120 6880	3540 7806
												25 km/h 15 mph	2665 5876	3120 6880	3540 7806
												35 km/h 22 mph	2560 5645	3000 6615	3405 7508

7.50 R 15 Tubeless

MICHELIN® XZM 146A5 110214 (10)	15 9.3	212 8.3	771 30.4	358 14.1	2352 92.6	30 37.8	254 10	38 10	6.0 6.5	15/16 J 15x6.00 (8) 15x6.00 E (a)		Mechanical handling, cyclic service			
												Static	3300 7277	3930 8666	4530 9989
												≤ 10 km/h ≤ 6 mph	2840 6262	3380 7453	3900 8600
												25 km/h 15 mph	2180 4807	2600 5733	3000 6615
												35 km/h 22 mph	2020 4454	2410 5314	2780 6130
												Counterbalanced Lift Truck - load wheel			
												≤ 10 km/h ≤ 6 mph	2840 6262	3380 7453	3900 8600
												25 km/h 15 mph	2840 6262	3380 7453	3900 8600
												35 km/h 22 mph	2730 6020	3250 7166	3750 8269

MAX. TIRE LOADS IN KG AND IN LB

COMMERCIAL DESCRIPTION Types CAI (Part Number)	Max. dist. / hour km Miles	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim TBS (4) O-Ring (5) CAI	Tubeless Tube Type Tube Ref. Flap (5)	Max. speed (km/h)	PRESSURE (Bar / PSI)					
		Michelin® dimensions										6,0	8,0	10,0			
		e mm inches	D mm inches	R' mm inches	RC	Tread depth mm 32nd	Dual spacing mm inches	Cap. l gallons				87	116	145			
		mm inches	mm inches	mm inches	inches	32nd	inches	gallons									

15"

8.25 R 15 Tubeless

MICHELIN® XZM 153AS 110218 (10)	15 9.3	240 9.4	835 32.9	386 15.2	2543 100.1	33 41.6	280 71	46 72	6.5 7.0 7.5	15 K 15x7.50 (8) 15x6.00 (8) 15x6.00 E (a) 15x7.50 E (a)	15x7.50 (8) 15x6.00 (8) 15x6.00 E (a) 15x7.50 E (a)	Mechanical handling, cyclic service			
												Static	4010 8842	4760 10496	5520 12172
												≤ 10 km/h ≤ 6 mph	3450 7607	4100 9041	4750 10474
												25 km/h 15 mph	2650 5843	3150 6946	3650 8048
												35 km/h 22 mph	2460 5424	2920 6439	3380 7453
												Counterbalanced Lift Truck - load wheel			
												≤ 10 km/h ≤ 6 mph	3450 7607	4100 9041	4750 10474
												25 km/h 15 mph	3450 7607	4100 9041	4750 10474
												35 km/h 22 mph	3320 7321	3940 8688	4570 10077
												Counterbalanced Lift Truck - load wheel			

225/75 R 15 Tubeless

MICHELIN® XZM 149AS 110079 (10)	15 9.3	225 8.9	708 27.9	322 12.7	2144 84.4	25 31.5	259 10.2	34 9	7.0	15/16 F 15x7.50 (8) 15x7.50 E (a)	15/16 F 15x7.50 (8) 15x7.50 E (a)	Mechanical handling, cyclic service			
												Static	3480 7673	4230 9327	4910 10827
												≤ 10 km/h ≤ 6 mph	2990 6593	3640 8026	4230 9327
												25 km/h 15 mph	2300 5072	2800 6174	3250 7166
												35 km/h 22 mph	2130 4697	2590 5711	3010 6637
												Counterbalanced Lift Truck - load wheel			
												≤ 10 km/h ≤ 6 mph	2990 6593	3640 8026	4230 9327
												25 km/h 15 mph	2990 6593	3640 8026	4230 9327
												35 km/h 22 mph	2880 6350	3500 7718	4070 8974
												Counterbalanced Lift Truck - load wheel			

250/70 R 15 Tubeless

MICHELIN® XZM 153AS 110075 (10)	15 9.3	250 9.8	736 29	333 13.1	2224 87.6	28 35.3	288 11.3	39 10	7.0 7.5	15/16 J 15x7.50 (8) 15x7.50 E (a)	15/16 J 15x7.50 (8) 15x7.50 E (a)	Mechanical handling, cyclic service			
												Static	3780 8335	4670 10297	5520 12172
												≤ 10 km/h ≤ 6 mph	3250 7166	4020 8864	4750 10474
												25 km/h 15 mph	2500 5513	3090 6813	3650 8048
												35 km/h 22 mph	2320 5116	2860 6306	3380 7453
												Counterbalanced Lift Truck - load wheel			
												≤ 10 km/h ≤ 6 mph	3250 7166	4020 8864	4750 10474
												25 km/h 15 mph	3250 7166	4020 8864	4750 10474
												35 km/h 22 mph	3130 6902	3870 8533	4570 10077
												Counterbalanced Lift Truck - load wheel			

MAX. TIRE LOADS IN KG AND IN LB

COMMERCIAL DESCRIPTION	Max. dist. / hour km <i>Miles</i>	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim TBS (4) Approved Rims (2) - (3) O-Ring (5) CAI	Tubeless Tube Ref. Flap (5)	Tube Type Tube Ref. Flap (5)	Max. speed (km/h)	PRESSURE (Bar / PSI)							
		Michelin® dimensions												6,0	8,0	10,0				
		e mm inches	D mm inches	R' mm inches	RC	Tread depth mm inches	Dual spacing mm 32rd	Cap. l inches					87	116	145					
		mm inches	mm inches	mm inches	mm inches	mm inches	mm 32rd	l gallons					87	116	145					

15"

315/70 R 15 Tubeless

MICHELIN® XZM 165A5 110109 (10)	15 9.3	321 12.6	839 33	374 14.7	2520 99.2	35 44.1	369 14.5	74 20	8.0	15 P		Mechanical handling, cyclic service			
												Static	5370 11841	6570 14487	7780 17155
												≤ 10 km/h ≤ 6 mph	4620 10187	5660 12480	6700 14774
												25 km/h 15 mph	3550 7828	4350 9592	5150 11356
												35 km/h 22 mph	3290 7254	4030 8886	4770 10518
												Counterbalanced Lift Truck - load wheel			
												≤ 10 km/h ≤ 6 mph	4620 10187	5660 12480	6700 14774
												25 km/h 15 mph	4620 10187	5660 12480	6700 14774
												35 km/h 22 mph	4440 9790	5440 11995	6440 14200

355/65 R 15 Tubeless

MICHELIN® XZM 170A5 003789 (10)	15 9.3	355 14	842 33.1	376 14.8	2532 99.7	35 44.1	408 16.1	83 22	9.75			Mechanical handling, cyclic service			
												Static	6190 13649	7630 16824	9060 19977
												≤ 10 km/h ≤ 6 mph	5330 11753	6565 14476	7800 17199
												25 km/h 15 mph	4100 9041	5050 11135	6000 13230
												35 km/h 22 mph	3800 8379	4670 10297	5550 12238
												Counterbalanced Lift Truck - load wheel			
												≤ 10 km/h ≤ 6 mph	5330 11753	6565 14476	7800 17199
												25 km/h 15 mph	5330 11753	6565 14476	7800 17199
												35 km/h 22 mph	5130 11312	6310 13914	7500 16538

20"

9.00 R 20 Tubeless

MICHELIN® XZM 160A5 110185 (11)	15 9.3	271 10.7	1033 40.7	482 19	3157 124.3	33 41.6	325 12.8	99 26	7.0 6.5 - 7.5 7.0T - B 6.5 B 7.0 - B 7.5 7.33V	AE (4)	20 M	Mechanical handling, cyclic service			
												Static	4840 10672	5800 12789	6800 14994
												≤ 10 km/h ≤ 6 mph	4160 9173	5000 11025	5850 12899
												25 km/h 15 mph	3200 7056	3840 8467	4500 9923
												35 km/h 22 mph	2970 6549	3560 7850	4170 9195
												40 km/h 25 mph	2850 6284	3420 7541	4010 8842
												Counterbalanced Lift Truck - load wheel			
												≤ 10 km/h ≤ 6 mph	4160 9173	5000 11025	5850 12899
												25 km/h 15 mph	4160 9173	5000 11025	5850 12899
												35 km/h 22 mph	4000 8820	4800 10584	5620 12392

MAX. TIRE LOADS IN KG AND IN LB

COMMERCIAL DESCRIPTION	Max. dist. / hour km Miles	DIMENSIONAL CHARACTERISTICS (2)						Measuring Recommended Rim TBS (4) Approved Rims (2) - (3)	Tubeless Tube Ref. Flap (5) O-Ring (5) CAI	Max. speed (km/h)	PRESSURE (Bar / PSI)					
		Michelin® dimensions									6,0	8,0	10,0			
		e	D	R'	RC	Tread depth	Dual spacing				mm	mm	mm			
		mm	mm	mm	mm	mm	mm				inches	inches	inches			

20"

10.00 R 20 Tubeless

MICHELIN® XZM 166A5 110014 (11)	15 9.3	295 11.6	1068 42	495 19.5	3257 128.2	35 44.1	354 13.9	117 31	<u>7.5</u> 7.0 - 8.0 7.0T - 8.0V B 7.0 - B 7.5 B 8.0 - 8.00V	20 Q AE (4) 20x8.50 E (a)	Mechanical handling, cyclic service	Mechanical handling, cyclic service			
											Static	5740 12657	6850 15104	8010 17662	
											≤ 10 km/h ≤ 6 mph	4940 10893	5890 12987	6890 15192	
											25 km/h 15 mph	3800 8379	4530 9989	5300 11687	
											35 km/h 22 mph	3520 7762	4200 9261	4910 10827	
											40 km/h 25 mph	3390 7475	4040 8908	4720 10408	
											Counterbalanced Lift Truck - load wheel				
											≤ 10 km/h ≤ 6 mph	4940 10893	5890 12987	6890 15192	
											25 km/h 15 mph	4940 10893	5890 12987	6890 15192	
											35 km/h 22 mph	4750 10474	5660 12480	6630 14619	

11.00 R 20 Tubeless

MICHELIN® XZM 169A5 110189 (11)	15 9.3	294 11.6	1092 43	504 19.8	3325 130.9	38 47.9	353 13.9	124 33	<u>8.0</u> 7.5 - 8.0V 8.5 - 8.5V B 7.5 - B 8.0 7.33V - 8.00V 8.50V	20 P AE (4) 20x8.50 E (a)	Mechanical handling, cyclic service	Mechanical handling, cyclic service			
											Static	6260 13803	7510 16560	8760 19316	
											≤ 10 km/h ≤ 6 mph	5390 11885	6470 14266	7540 16626	
											25 km/h 15 mph	4140 9129	4970 10959	5800 12789	
											35 km/h 22 mph	3830 8445	4600 10143	5370 11841	
											40 km/h 25 mph	3690 8136	4430 9768	5170 11400	
											Counterbalanced Lift Truck - load wheel				
											≤ 10 km/h ≤ 6 mph	5390 11885	6470 14266	7540 16626	
											25 km/h 15 mph	5390 11885	6470 14266	7540 16626	
											35 km/h 22 mph	5180 11422	6220 13715	7250 15986	

12.00 R 20 Tubeless

MICHELIN® XZM 176A5 110082 (11)	15 9.3	324 12.8	1136 44.7	522 20.6	3453 135.9	40 50.4	389 15.3	184 49	<u>8.5</u> 8.0 9.0 B 8.5 8.5V 8.50V 9.00V	20 Q AE (4) 20x8.50 E (a)	Mechanical handling, cyclic service	Mechanical handling, cyclic service			
											Static	7710 17001	9220 20330	10730 23660	
											≤ 10 km/h ≤ 6 mph	6630 14619	7930 17486	9230 20352	
											25 km/h 15 mph	5100 11246	6100 13451	7100 15656	
											35 km/h 22 mph	4720 10408	5650 12458	6570 14487	
											40 km/h 25 mph	4540 10011	5430 11973	6320 13936	
											Counterbalanced Lift Truck - load wheel				
											≤ 10 km/h ≤ 6 mph	6630 14619	7930 17486	9230 20352	
											25 km/h 15 mph	6630 14619	7930 17486	9230 20352	
											35 km/h 22 mph	6380 14068	7630 16824	8880 19580	

MAX. TIRE LOADS IN KG AND IN LB

COMMERCIAL DESCRIPTION	Max. dist. / hour km Miles	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim TBS (4) Approved Rims (2) - (3) O-Ring (5) CAI	Tubeless	Tube Type Tube Ref. Flap (5)	Max. speed (km/h)	PRESSURE (Bar / PSI)					
		Michelin® dimensions											6,0	8,0	10,0			
		e	D	R'	RC	Tread depth	Dual spacing	Cap.	mm	mm	mm	mm	inches	inches	inches	32nd	inches	gallons
		mm	mm	mm	mm	mm	mm	mm	inches	inches	inches	inches	inches	inches	inches	32nd	inches	gallons

22.5"

280/75 R 22.5 Tubeless

MICHELIN® X-TERMINAL T 168A8 004371 (12)	20 12.4	279 11	995 39.2	447 17.6	3000 118.1	31 39.1	326 12.8	85 22	<u>8.25</u>	NA	NA	Terminal tractor			
												Static	5350 11797	6900 15215	8450 18632
												5 km/h 3 mph	5060 11157	6450 14222	7840 17287
												10 km/h 6 mph	4370 9636	5800 12789	7280 16052
												25 km/h 15 mph	4200 9261	5300 11687	6300 13892
												40 km/h 25 mph	3750 8269	4675 10308	5600 12348

310/80 R 22.5 Tubeless

MICHELIN® X-TERMINAL T 175A8 278144 (12)	20 12.4	307 12.1	1084 42.7	483 19	3257 128.2	30 37.8	355 14	116 31	<u>9.0</u>	NA	NA	Terminal tractor			
												Static	6890 15192	8655 19084	10420 22976
												5 km/h 3 mph	6160 13583	7910 17442	9660 21300
												10 km/h 6 mph	5930 13076	7450 16427	8970 19779
												25 km/h 15 mph	5080 11201	6420 14156	7760 17111
												40 km/h 25 mph	4450 9812	5675 12513	6900 15215

24"

12.00 R 24 Tubeless

MICHELIN® XZM 178A5 110296 (10)	15 9.3	325 12.8	1238 48.7	570 22.4	3766 148.3	40 50.4	390 15.4	208 55	<u>8.5</u>	NA	24 Q	Mechanical handling, cyclic service			
												Static	7710 17001	9520 20992	11330 24983
												≤ 10 km/h ≤ 6 mph	6630 14619	8190 18059	9750 21499
												25 km/h 15 mph	5100 11246	6300 13892	7500 16538
												35 km/h 22 mph	4720 10408	5830 12855	6940 15303
Counterbalanced Lift Truck - load wheel												≤ 10 km/h ≤ 6 mph	6630 14619	8190 18059	9750 21499
												25 km/h 15 mph	6630 14619	8190 18059	9750 21499
												35 km/h 22 mph	6380 14068	7880 17375	9380 20683

14.00 R 24 Tubeless

MICHELIN® XZM 193A5 084179 (9,15)	15 9.3	383 15.1	1416 55.7	641 25.2	4280 168.5	63 79.4	460 18.1	247 65	<u>10.0</u>	NA	24/25 T	Mechanical handling, cyclic service			
												Static	12540 27651	15100 33296	17370 38301
												≤ 10 km/h ≤ 6 mph	10790 23792	13000 28665	14950 32965
												25 km/h 15 mph	8300 18302	10000 22050	11500 25358
Counterbalanced Lift Truck - load wheel												≤ 10 km/h ≤ 6 mph	10790 23792	13000 28665	14950 32965
												25 km/h 15 mph	10790 23792	13000 28665	14950 32965

MAX. TIRE LOADS IN KG AND IN LB

COMMERCIAL DESCRIPTION	Max. dist. / hour km Miles	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim	Tubeless TBS (4) O-Ring (5) CAI	Tube Type Tube Ref. Flap (5)	Max. speed (km/h)	PRESSURE (Bar / PSI)						
		Michelin® dimensions											6,0	8,0	10,0				
		e	D	R'	RC	Tread depth	Dual spacing	Cap.					Approved Rims (2) - (3)	CAI	Flap (5)				
		mm	mm	mm	mm	mm	mm	l					inches	inches	inches	32rd	inches	gallons	

25"

16.00 R 25 Tubeless

MICHELIN® XZM 200A5 123781 (15)	15 9.3	443 17.4	1531 60.3	696 27.4	4634 182.4	71 89.4	532 20.9	326 86	11.25/2.0 13.00/2.0	OR 3-25 SULLA 553200	24/25 VAM 14-24/25 (8)	Mechanical handling, cyclic service			
												Static	15600 34398	18225 40186	21000 46305
												≤ 10 km/h	13520	15800	18200
												≤ 6 mph	29812	34839	40131
												25 km/h	10400	12150	14000
												15 mph	22932	26791	30870
												Counterbalanced lift Truck - load wheel			
												≤ 10 km/h	13520	15800	18200
												≤ 6 mph	29812	34839	40131
												25 km/h	13520	15800	18200
												15 mph	29812	34839	40131

450/95 R 25 Tubeless

MICHELIN® X-STRADDLE 2 202A7 278967 (17)	15 9.3	422 16.6	1510 59.4	670 26.4	4530 178.3	50 63	342 90	11.25/2.0 13.00/2.0	OR 3-25 SULLA 553200	25 WAM 14-24/25 (8)	Straddle carrier			
											22 km/h 14 mph	10630 23439	13150 28996	15750 34729
											25 km/h 15 mph	10125 22326	12525 27618	15000 33075
											35 km/h 22 mph	9370 20661	11590 25556	13875 30594

16.00 R 25 Tubeless

MICHELIN® X-STRADDLE 200A5 788305 (8,16)	12 7.5	431 17	1510 59.4	672 26.5	4535 178.5	49 61.7	535 21.1	342 90	11.25/2.0 13.00/2.0	OR 3-25 SULLA 553200	25 WAM 14-24/25 (8)	Port handling			
											22 km/h 14 mph	9900 21830	12300 27122	14700 32414	
											25 km/h 15 mph	9440 20815	11720 25843	14000 30870	
											30 km/h 19 mph	9085 20032	11280 24872	13475 29712	

480/95 R 25 Tubeless

MICHELIN® X-STRADDLE 206A5 237120 (16)	12 7.5	477 18.8	1553 61.1	687 27	4655 183.3	50 63	585 23	400 106	13.00/2.5 11.25/2.0 [1.7]	OR 3-25 SULLA 553200	25 WAM 16-24/25 (8)	Straddle carrier			
											22 km/h 14 mph	11970 26394	14900 32855	17850 39359	
											25 km/h 15 mph	11400 25137	14200 31311	17000 37485	
											30 km/h 19 mph	10975 24200	13670 30142	16355 36063	

480/95 R 25 Tubeless

MICHELIN® X-STRADDLE 206A7 653072 (17)	15 9.3	467 18.4	1553 61.1	687 27	4655 183.3	50 63	580 22.8	410 108	13.00/2.5 11.25/2.0 [1.7]	OR 3-25 SULLA 553200	25 WAM 16-24/25 (8)	Straddle carrier			
											22 km/h 14 mph	11970 26394	14900 32855	17850 39359	
											25 km/h 15 mph	11400 25137	14200 31311	17000 37485	
											35 km/h 22 mph	10545 23252	13135 28963	15725 34674	

18.00 R 25 Tubeless

MICHELIN® XZM2+ 207A5 230783 (14)	10 6.2	503 19.8	1668 65.7	751 29.6	5032 198.1	78 98.3	612 24.1	470 124	15.00/2.5 13.00/2.5	OR 3-25 SULLA 553200	25 WAM 16-24/25 (8)	Mechanical handling, cyclic service			
											Static	18380 40528	22280 49127	26250 57881	
											≤ 10 km/h	15930	19180	22750	
											≤ 6 mph	35126	42292	50164	
											25 km/h	12250	14750	17500	
											15 mph	27011	32524	38588	
											Counterbalanced Lift Truck - load wheel				
											≤ 10 km/h	15930	19180	22750	
											≤ 6 mph	35126	42292	50164	
											25 km/h	15930	19180	22750	
											15 mph	35126	42292	50164	

MAX. TIRE LOADS IN KG AND IN LB

COMMERCIAL DESCRIPTION	Max. dist. / hour km Miles	DIMENSIONAL CHARACTERISTICS (2)							Measuring Recommended Rim TBS (4) Approved Rims (2) - (3) O-Ring (5) CAI	Tubeless	Tube Type Tube Ref. Flap (5)	Max. speed (km/h)	PRESSURE (Bar / PSI)							
		Michelin® dimensions												6,0	8,0	10,0				
		e mm inches	D mm inches	R' mm inches	RC	Tread depth mm inches	Dual spacing mm 32rd	Cap. l inches gallons					87	116	145					
		Types CAI (Part Number)	101475 (20)	501 19.7	1656 65.2	750 29.5	5006 197.1	72 90.7	612 24.1	465 123	13.00/2.5	OR 3-25 SULLA 553200	25 WAM	18380 40528	22280 49127	26250 57881				
MICHELIN® X STACKER 2 207AS 101475 (20)	7 4.3													≤ 10 km/h	15930 35126	19180 42292	22750 50164			
														≤ 6 mp/h	15930 35126	19180 42292	22750 50164			
														25 km/h	12250 27011	14750 32524	17500 38588			
														15 mph	15930 35126	19180 42292	22750 50164			
														Counterbalanced Lift Truck - load wheel						
														≤ 10 km/h	15930 35126	19180 42292	22750 50164			
														≤ 6 mp/h	15930 35126	19180 42292	22750 50164			
														25 km/h	15930 35126	19180 42292	22750 50164			
														15 mph	15930 35126	19180 42292	22750 50164			

25"

18.00 R 25 Tubeless

MICHELIN® X STACKER 2 207AS 101475 (20)	7 4.3	501 19.7	1656 65.2	750 29.5	5006 197.1	72 90.7	612 24.1	465 123	13.00/2.5	OR 3-25 SULLA 553200	25 WAM	Mechanical handling, cyclic service					
												Static	18380 40528	22280 49127	26250 57881		
												≤ 10 km/h	15930 35126	19180 42292	22750 50164		
												≤ 6 mp/h	15930 35126	19180 42292	22750 50164		
Counterbalanced Lift Truck - load wheel																	
														≤ 10 km/h	15930 35126	19180 42292	22750 50164
														≤ 6 mp/h	15930 35126	19180 42292	22750 50164
														25 km/h	15930 35126	19180 42292	22750 50164
														15 mph	15930 35126	19180 42292	22750 50164

33"

18.00 R 33 Tubeless

MICHELIN® XZM2+ 214AS 305696 (14)	10 6.2	503 19.8	1841 72.5	826 32.5	5547 218.4	78 98.3	604 23.8	520 137	13.00/2.5	OR 3-33 553203	33 VFAM	Mechanical handling, cyclic service					
												Static	22500 49613	27000 59535	31800 70119		
												≤ 10 km/h	19500 42998	23400 51597	27560 60770		
												≤ 6 mp/h	19500 42998	23400 51597	27560 60770		
Counterbalanced Lift Truck - load wheel																	
														≤ 10 km/h	19500 42998	23400 51597	27560 60770
														≤ 6 mp/h	19500 42998	23400 51597	27560 60770
														25 km/h	19500 42998	23400 51597	27560 60770
														15 mph	19500 42998	23400 51597	27560 60770

NOTES

**OTHER MICHELIN® RADIAL TIRES
USED FOR MECHANICAL HANDLING****CONDITIONS OF USE**

The range of Michelin® industrial tires has been specifically designed to equip industrial machines. The sizes are specific to these machines and their work; the loads and speeds correspond to standardised figures.

Each time tires need to be fitted to mechanical handling equipment, the following rules should be followed:

- 1°) When the tire size exists in the industrial tire range, the industrial tire must be used.
- 2°) When size does not exist in the industrial tire range, it may be necessary to consult other tire ranges (Agriculture, Truck or Earthmover), whose characteristics are compatible.

In all cases contact your Michelin® representative who will be able to guide you on the best solution. Technical validation will be provided by Michelin® for these uses.

**COMPONENTS USED
WITH INDUSTRIAL AND HANDLING TIRES**

TUBELESS BEAD SEAL

132

APPROVED RIMS FOR INDUSTRIAL TIRES

134

TUBES AND FLAPS FOR HANDLING TIRES

136

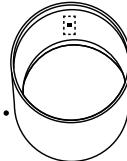
SEALS FOR HANDLING TIRES AND RIMS

137

VALVES (#) AND ASSOCIATED ACCESSORIES FOR INDUSTRIAL

AND HANDLING TIRES AND RIMS

138

TUBELESS BEAD SEAL**TUBELESS
BEAD SEAL****DEFINITION**

The TBS is a special device allowing the fitment of tubeless tires as tubeless on tube-type rims. It consists of a ring of special rubber, which is placed inside the tire, and fits between the tire beads. It ensures the airtightness of the wheel and tire assembly.

Valves and plug can be ordered separately, if required.

RANGE (for fitment with XZM TL up to and including 20")

CAUTION ! The choice of TBS depends on the wheel rim (#) width.

RIM DIAMETER (INCHES)	CORRESPONDING SIZES	WIDTH RIM (#)	DESCRIPTIONS			
			BEAD SEAL	VALVE	PLASTIC PLUG	CAI (TBS + valve + plug)
8	5.00 R 8 TL	3 1/4 I 3.00 D	80 TL 8	R 2160	-	102150
	150 / 75 R 8	4.33 R	110 TL 8	R 2102	-	613972
	180 / 70 R 8 TL	4.33 R	110 TL 8		-	613972
9	6.00 R 9 TL	4.00 E	100 TL 9	R 2160	-	102151
	200 / 75 R 9	6.00 E	150 TL 9	R 2102	-	102182
10	6.50 R 10 TL	5.00 F	125 TL 10	R 2102	-	102183
	225 / 75 R 10 TL	6.50 F	165 TL 10		R 2110	102184
12	7.00 R 12 TL	5.00 S	125 TL 12	R 2102	-	522788
	250 / 75 R 12 TL	8.00 G	200 TL 12		R 2110	787198
15	7.00 R 15 TL	5.5	140 TL 15	R 2102	-	454346
	7.00 R 15 TL • 7.50 R 15 TL	6.0	150 TL 15			702507
	7.50 R 15 TL • 8.25 R 15 TL	6.5	165 TL 15			575769
	8.25 R 15 TL • 225/75 R 15 TL • 250/70 R 15 TL	7.0	175 TL 15			260511
	250 / 70 R 15 TL	7.5	190 TL 15			464164
	315 / 70 R 15 TL	8.0	200 TL 15			609679
	355 / 65 R 15 TL	9.75	250 TL 15			026320
20	9.00 R 20 TL • 10.00 R 20 TL	7.0	175 TL 20	R 2102		102087
	9.00 R 20 TL • 10.00 R 20 TL • 11.00 R 20 TL	7.5	190 TL 20			102083
	10.00 R 20 TL • 11.00 R 20 TL • 12.00 R 20 TL	8.0	200 TL 20			102085
	11.00 R 20 TL • 12.00 R 20 TL	8.5	215 TL 20			102086

SIZE MARKINGS

Example of marking:

110 TL 8 (for 4.33R - 8 rim).

110: indicates the width of the TBS in mm

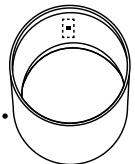
TL for a tubeless tire

8 indicates the rim diameter in inches

The choice of TBS depends on the width of the rim on which the tire is to be fitted.

The allowed rim width(s) are indicated on each tubeless bead seal.

TUBELESS BEAD SEAL



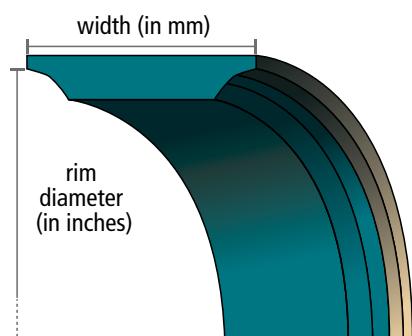
TBS fitted on wheels with width less than 6 inches have a chimney where the valve will be positioned.

TBS for wheels with width greater than or equal to 6 inches have two chimneys; one central and the other offset to allow correct positioning

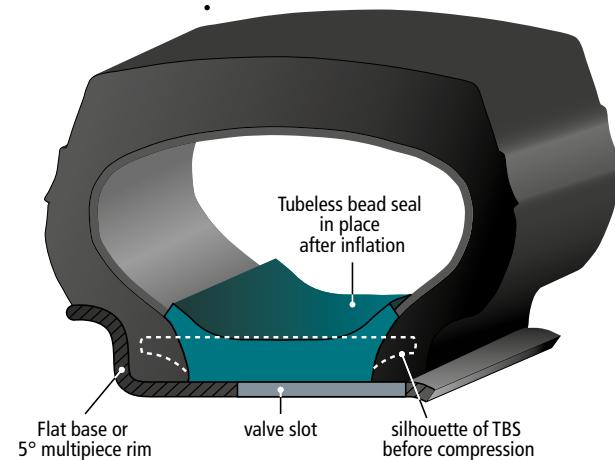
relative to the valve sleeve. The chimney which is not used by the valve, is sealed with a plastic plug (supplied with the TBS).

PRINCIPLE

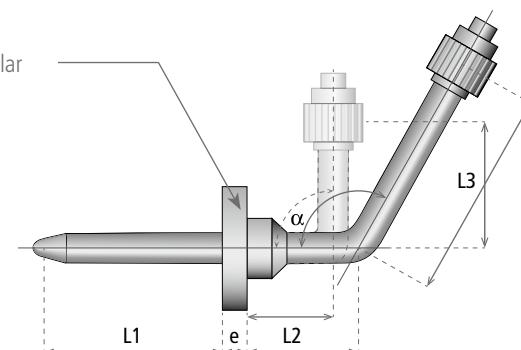
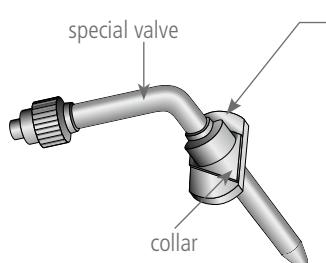
CROSS SECTION OF A TBS



CROSS SECTION OF A FITTED TBS



SPECIAL COLLARED VALVE



Valves for TBS	Ref.	CAI	α	L1	L2	L3	e	collar
Small valve, small collar	R2160	564220	94°	37 mm	18 mm	25 mm	3 mm	11 x 24 mm
Small valve, standard collar	R2102	563008	94°	37 mm	16 mm	25 mm	5 mm	14 x 25 mm
Large valve, standard collar	R2161	158244	94°	36,5 mm	11 mm	55 mm	5 mm	14 x 25 mm

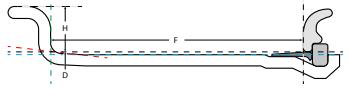
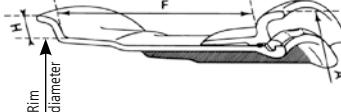
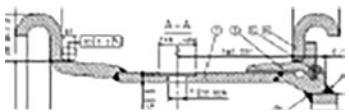
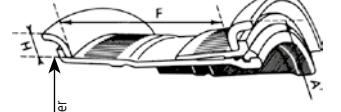
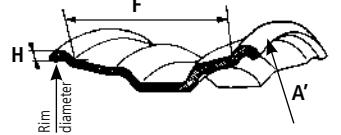
Plug	Ref.	CAI
	R2110	579048

APPROVED RIMS FOR INDUSTRIAL TIRES

RIM TYPES	RIM DESIGN.	F	H (13)	D (13B)	RIM R/A^(*)	TIRE SIZES	SEAL		
		MM INCHES	MM INCHES	MM INCHES			TL	TT	
FLAT BASE RIMS									
	8 - 4.33 R	110 4,3	28,5 1,1	209,2	202,4	R	180/70 R 8		
	15 - 6.00 S	152,4 6,0	33,3 1,3	387,0	381,0	R	7.50 R 15	none	
	20 - 7.33 V	186 7,3	44 1,7			A	9.00 R 20 XZM	R 1443 Tyran (A 20)	2 2
	20 - 8.00 V	203 8,0	44 1,7			A	10.00 R 20 XZM		2 2
	20 - 8.50 V	216 8,5	44 1,7			A	11.00 R 20 XZM		2 2
	20 - 9.00 V	228,5 9,0	44 1,7			A	11.00 R 20 XZM		2 2
						A	12.00 R 20 XZM		2 2
	24 - 8.50 V	216 8,5	44 1,7			A	12.00 R 24 XZM		G25 2 2
	24 - 9.00 V	228,5 9,0	44 1,7			A	12.00 R 24 XZM		G25 2 2
	24 - 10.00 W	254 10,0	51 2,0			A	14.00 R 24 XZM		
5° TAPER BEAD 2 SEATS RIMS									
	20 - B 6.5	165 6,5	38 1,5			A	9.00 R 20 XZM	R 1443 Tyran (A 20)	NA 2
	20 - B 7.0	178 7,0	38 1,5			A	9.00 R 20 XZM		NA 2
	20 - B 7.5	190,5 7,5	43 1,7			A	10.00 R 20 XZM		NA 2
	20 - B 8.0	203 8,0	43 1,7			A	9.00 R 20 XZM		NA 2
	20 - B 8.5	216 8,5	45,5 1,8			A	10.00 R 20 XZM		NA 2
	24 - B 8.5	216 8,5	45,5 1,8			A	11.00 R 20 XZM		NA 2
						A	12.00 R 20		NA 2
						A	12.00 R 24		
5° TAPER BEAD 2 SEATS RIMS (ADVANCED RIM)									
	8 - 3.00 D	76 3,0	18 0,7			A	5.00 R 8	none	
	8 - 3 1/4 I (Divided rim)	82,5 3,2	16 0,6			R	5.00 R 8		
	8 - 5.00 F	127 5,0	22,5 0,9			R	180/70 R 8		
	9 - 4.00 E	101,5 4,0	20 0,8			R	6.00 R 9		
	10 - 5.00 F	127 5,0	22,5 0,9			R	6.50 R 10		
	10 - 5.50 F	140 5,5	22,5 0,9			A	6.50 R 10		
	10 - 6.50 F	165 6,5	22,5 0,9			R	225/75 R 10		
	12 - 5.00 S (and divided rim)	127 5,0	31,5 1,2			R	7.00 R 12		
	12 - 8.00 G	203 8,0	28 1,1			R	250/75 R 12		
	15 - 5.5	139,5 5,5	30,5 1,2			R	7.00 R 15		
	15 - 6.0	152,5 6,0	33 1,3			A	7.00 R 15	none	
	15 - 6.5	165 6,5	35,5 1,4			R	7.50 R 15		
						A	7.50 R 15		
						R	8.25 R 15		
	15 - 7.0	178 7,0	38 1,5			R	225/75 R 15		
						A	8.25 R 15		
	15 - 7.5	190,5 7,5	40,5 1,6			A	250/70 R 15		
	15 - 8.0	203 8,0	43 1,7			R	315/70 R 15		
	15 - 9.75	247,5 9,7	38 1,5			R	355/65 R 15		

** R = recommended - A = Allowed

APPROVED RIMS FOR INDUSTRIAL TIRES

RIM TYPES	RIM DESIGN.	F	H (13)	D (13B) MM INCHES	RIM R/A^(*)	TIRE SIZES	SEAL		
		MM INCHES	MM INCHES				TL	TT	
5° TAPER BEAD 2 SEATS RIMS (ADVANCED RIM)  (removable bead seat, split)	20 - 6.5	165 6,5	35,5 1,4	514,4	A	9.00 R 20 XZM	none	NA	0
	20 - 7.0	178 7,0	38 1,5		R	9.00 R 20 XZM	none	NA	0
	20 - 7.0 T	177,8 7,0	38,1 1,5		A	10.00 R 20 XZM	none	NA	0
	20 - 7.5	190,5 7,5	40,5 1,6		R	9.00 R 20 XZM	none	NA	0
	20 - 8.0	203 8,0	43 1,7		R	10.00 R 20 XZM	none	NA	0
	20 - 8.0 V	203 8,00	27,5 1,1		A	11.00 R 20	none	NA	0
	20 - 8.5	216 8,5	45,5 1,8		R	12.00 R 20 XZM	none	NA	0
	20 - 8.5 V	216 8,5	44,4 1,7		R	11.00 R 20	none		
	20 - 9.0	228,5 9,0	48,5 1,9		R	12.00 R 20	none		
	24 - 8.5	216 8,5	45,5 1,8		A	12.00 R 24XZM	G25	NA	2
	24 - 9.0	228,5 9,0	48,5 1,9		A	12.00 R 24 XZM	G25	NA	2
	24 - 10.0	254 10,0	50,8 2,0		R	14.00 R 24 XZM	none	NA	0
5° TAPER BEAD SEAT RIMS (3 PIECES) 	24 - 10.00 WA	254 10,0	51 2,0	614,4	R	14.00 R 24 XZM	Sulla (OR 3-25)	1	0
	25 - 11.25/2.0 IF ^(*)	284 11,2	51 2,0		R	16.00 R 25	Sulla (OR 3-25)		
	25 - 13.00/2.5 IF ^(*)	330 13,0	63,5 2,5		R	18.00 R 25	Sulla (OR 3-25)		
5° TAPER BEAD SEAT RIMS 	24 - 10.00 WA	254 10,0	51 2,0	614,4		14.00 R 24 XZM	Sulla (OR 3-25)		
5° TAPER BEAD SEAT RIMS (5 PIECES) 	25 - 11.25/2.0	284 11,2	51 2,0	635,0	R	16.00 R 25	Sulla (OR 3-25)		
	25 - 13.00/2.0	330 13,0	51 2,0		A	16.00 R 25	Sulla (OR 3-25)		
	25 - 13.00/2.5	330 13,0	63,5 2,5		R	18.00 R 25			
	25 - 15.00/2.5	381 15,0	63,5 2,5		R	480/95 R 25			
	33 - 13.00/2.5	330 13,0	63,5 2,5		A	18.00 R 25			
15° TAPER DROP CENTER RIMS 	22.5 x 8.25	209,5 8,25	12,7 0,5	571,5	A	280/75 R 22.5 XTT			
					R	310/80 R 22.5 XTT (except AIM Zone)			
					R	310/80 R 22.5	none		

** R = recommended - A = Allowed

TUBES AND FLAPS FOR HANDLING TIRES

RIM DIAMETER	FITS TIRE SIZES	TUBE REFERENCE	VALVE REFERENCE	VALVE TYPE (#)	TUBE + VALVE CAI	FLAP REFERENCE	FLAP CAI
8"	5.00 R 8 (5.70 R 8)	8 CG	570	SC	101013	83-8 LE	102500 437837
	150/75 R 8 (16 x 6 R 8)					5-8 (8)	102530
	180 / 70 R 8 (18 x 7 R 8)	8 D	570	SC	101022		
9"	6..00 R 9 (6.90 R 9)	9 F	570	SC	101040	110-9 LDE	102660 387950
	200/75 R 9 (21 x 8 R 9)					180-9 (8)	552101
10"	6.50 R 10	10 F	1012	SC	101049	150-10 LDE	102670 299713
	225/75 R 10 (23 x 9 R 10)					7-10 (8)	551007
12"	7.00 R 12	12 H	578	DC	101078	125-12 LDE	102680 243961
	250 / 75 R 12 (27 x 10 R 12)	12 KD	578	DC	101123	9-12D (8)	102720
15"	7.00 R 15	15/16 F	570	SC	101071	15 x 6.00 E (a)	511268 843437
	225 / 75 R 15 (28 x 9 R 15)					15 x 7.50 E (a)	084220 904287
	7.50 R 15	15/16 J	570	SC	101106	15 x 6.00 E	511268 843437
	250/70 R 15 (250 R 15)					15 x 7.50 E (a)	084220 904287
	8.25 R 15	15 K	1156	SC	101128	15 x 6.00 E	511268 843437
	315/70 R 15 (300 R 15)					15 x 7.50 E (a)	084220 904287
20"	9.00 R 20	20 M	1157	SC	101153	20 x 7.50 E (a)	818874
	10.00 R 20	20 N	1158	SC	101161		320222
	11.00 R 20	20 P	1158	SC	101173	20 x 8.50 E (a)	111005
	12.00 R 20	20 Q	1158	SC	101192		162318
24"	12.00 R 24	24 Q	582	TC	101196	24/25 x 8.50 E (a)	001444 018130
	14.00 R 24	24/25 T	752	SC	514503		551601
25"	16.00 R 25	25 VAM	1837 (TRJ650)	SC	101871	14-24/25 (8)	551604
	18.00 R 25					16-24/25 (8)	551608
33"	18.00 R 33	33 VFAM	1837 (TRJ650)	SC	101321	16 - 33 (8)	551760

(#) DR = straight valve, SC = single bend valve, DC = double bend valve, TC = triple bend valve, see pages 138 & 139.

TUBE MARKINGS

example: 1: 24/25 T

2: 25 W AM

The first two numbers indicate the bead seat (rim) diameter of the tire into which the tube can be fitted. (in the first example, the tube may be fitted in 24 and 25 inch tires. In the second example, the tube may be fitted only in 25 inch tires.)

The first letter corresponds to the section width of the tube (internal width of the tire), this ranges from A to Z, with A being the smallest (in the examples above, T and W indicate that the tubes are designed for fitting into tires of relatively large section width). Sometimes, a second letter provides additional information:

B, E, F and H which indicate intermediate widths. The third and fourth letters are an indication of the valve type.

AM indicates that the tube is fitted with an American valve base, R1946 (TRA SP4000) and a valve stem R1837 (TRJ 650).

D would indicate that the valve is offset. T would indicate a tractor tube fitted with an air-water valve, ex. type TR 218A.

Explanation on valves and valve bases are given on subsequent pages.

FLAP MARKINGS

Flaps which contain the letter "D" in their description have an offset valve hole (e.g.: 125 - 12 LD). Check before fitting centering or offset of the valve hole on the rim. In the absence of any specification, provided the flap is the one mentioned in bold in the table of characteristics of the size.

example 1: 83-8 LE

The first number indicates the profil width of the flap expressed in mm.

In this example, the profile width of the flap is 83 mm. The second number indicates the tire seat diameter expressed in inches, with which the flap is be used. In this example, the flap may be used with 8-inch tires. The L letter indicates that the edges are tapered. Letters correspond to the last generation of flaps.

example 2: 20 x 8.50 E

The first number indicates the tire seat diameter, expressed in inches, with which the flap is to be used. In this example, the flap may be used with 20-inch tires. The second number indicates the overall width of the flap (width + height), in inches.

In this example, the overall width of the flap is 8.50 inches. Letters correspond to the last generation of flaps.

example 3: 16-24/25

The first number indicates the total width of the flap (includes height of edges), expressed in either mm or in inches.

In the example above, the width of the flap is 16 inches. The second number indicates the rim diameter, or the tire bead seat (rim) diameter in inches, with which the flap is to be used. In this example, the flap may be used with 24 - and 25 - inch tires.

Additional letters may be used to provide supplementary information.

For example, the significance of different letters is as follows:

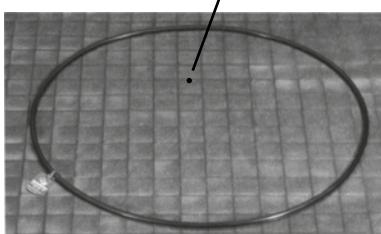
L - the edges are tapered, B - the flap has a reinforcing boss around the valve position, S - the flap is reinforced, D - offset hole for valve.

SEALS FOR HANDLING TIRES AND RIMS

NAME	DESIGNATION	REFERENCE	C.A.I.	TYPE	REMARKS
Tyran	A 20	R 1443	553 004	Corner seal	for 20" tires
Heupo	OR 2 - 25	R 1438	553 201	o-ring	for 25" rim (3 pieces not IF) or for 24" rim 10.00VA
Sulla	OR 3 - 25	R 1437	553 200	o-ring	for 25" rim (3 pieces IF or 5 pieces) or for 24" 10.00WA
Strix	OR 3 - 33	R 1440	553 203	o-ring	for 33" rim

SEAL DESCRIPTION

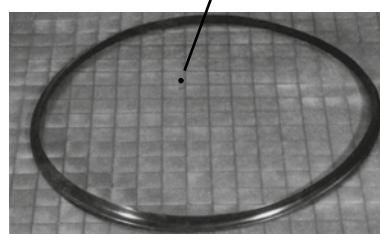
• O-RING



Explanation of the sealing ring designation
The first number is the section diameter of the seal:
OR: Abbreviation of O-Ring

- imperial number: value expressed in 1/8 of inch (3 = 3/8)
 - decimal number: value expressed in mm (6.6 = 6,6 mm)
- The second number is the nominal bead seat diameter, expressed in inches.

• CORNER SEAL



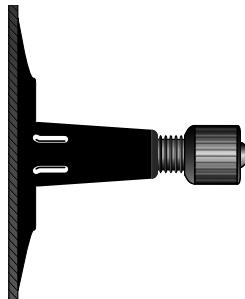
Explanation of the corner seal designation
The letter indicates the profile of the seal.
The number is the nominal rim diameter, in inches.

Note:

Approval for use of corner seals MUST BE obtained from Michelin.

**VALVES AND ASSOCIATED ACCESSORIES FOR INDUSTRIAL
AND HANDLING TIRES AND RIMS**

In all cases, the valve cap is essential because it helps maintain the cleanliness of the mechanism and ensure air tightness of the valve.

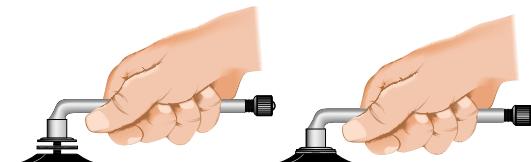
CAR TUBE TYPE STRAIGHT VALVE


Michelin® code	ETRTO code	Valve code	Valve hole Ø in mm
611	V2-01-2	TR 15	16
746	V2-01-1	TR 13	11.5

VALVE MARKINGS

The valve is circular and is marked in accordance with ETRTO standards, starting at the top of the valve, and in the following order:

- NAME (or trademark) of the valve manufacturer and his reference number.
- ETRTO reference number.

**FITTING A UNIVERSAL VALVE ON A MICHELIN® TUBE
WITH A VALVE BASE**


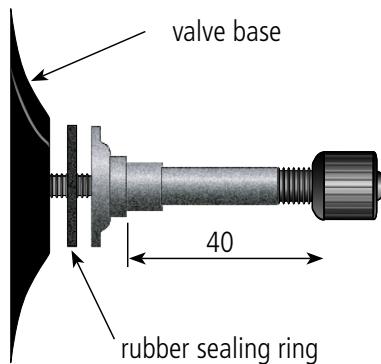
- 1 - Position the sealing ring on the valve.
The sealing ring must be clean and dry.
- 2 - Hand tighten the valve until it just touches the sealing ring.
- 3 - Tighten the valve for a further two turns.
- 4 - To orientate the valve in the desired position, tighten further.



IMPORTANT: never unscrew the valve to the desired position.

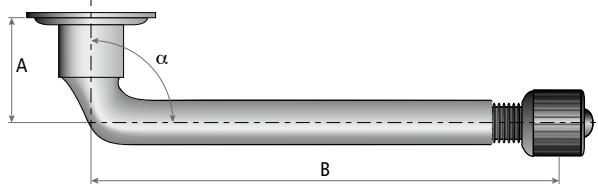
SMALL TRUCK UNIVERSAL STRAIGHT VALVE

Fitted to Michelin® tubes for the occasional equipment Tube-Type on 5° and 15° non U taper drop centre rim.



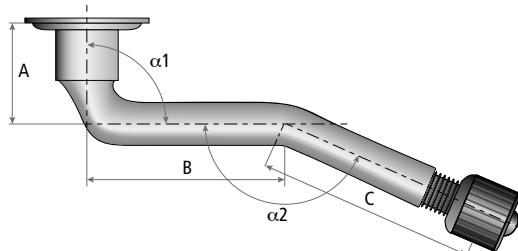
Michelin® code	ETRTO Designation	Valve hole Ø in mm	A	
			mm	inches
1964	/	9.7	40	1.57

TRUCK TYPE UNIVERSAL SINGLE BEND VALVE



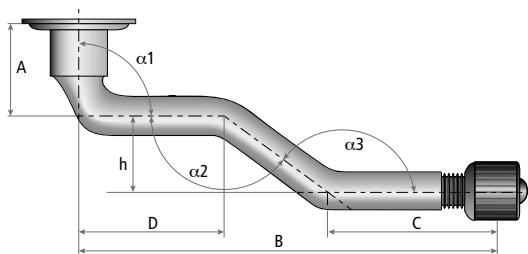
Michelin® code	ETRTO Designation	A		B		α°
		mm	inches	mm	inches	
570	V3-02-2	22.5	0.89	43	1.69	120
576	V3-02-3	33	1.30	44.5	1.75	95
752	V3-02-17	20.5	0.81	156.5	6.16	90
1012	V3-02-23	30	1,18	65	2,56	90
1021	V3-02-10	20,5	0,81	115	4,53	94
1156	V3-02-9	20,5	0,81	99,5	3,92	94
1157	V3-02-12	20,5	0,81	132	5,20	94
1158	V3-02-14	20,5	0,81	138,5	5,45	94

TRUCK TYPE UNIVERSAL DOUBLE BEND VALVE

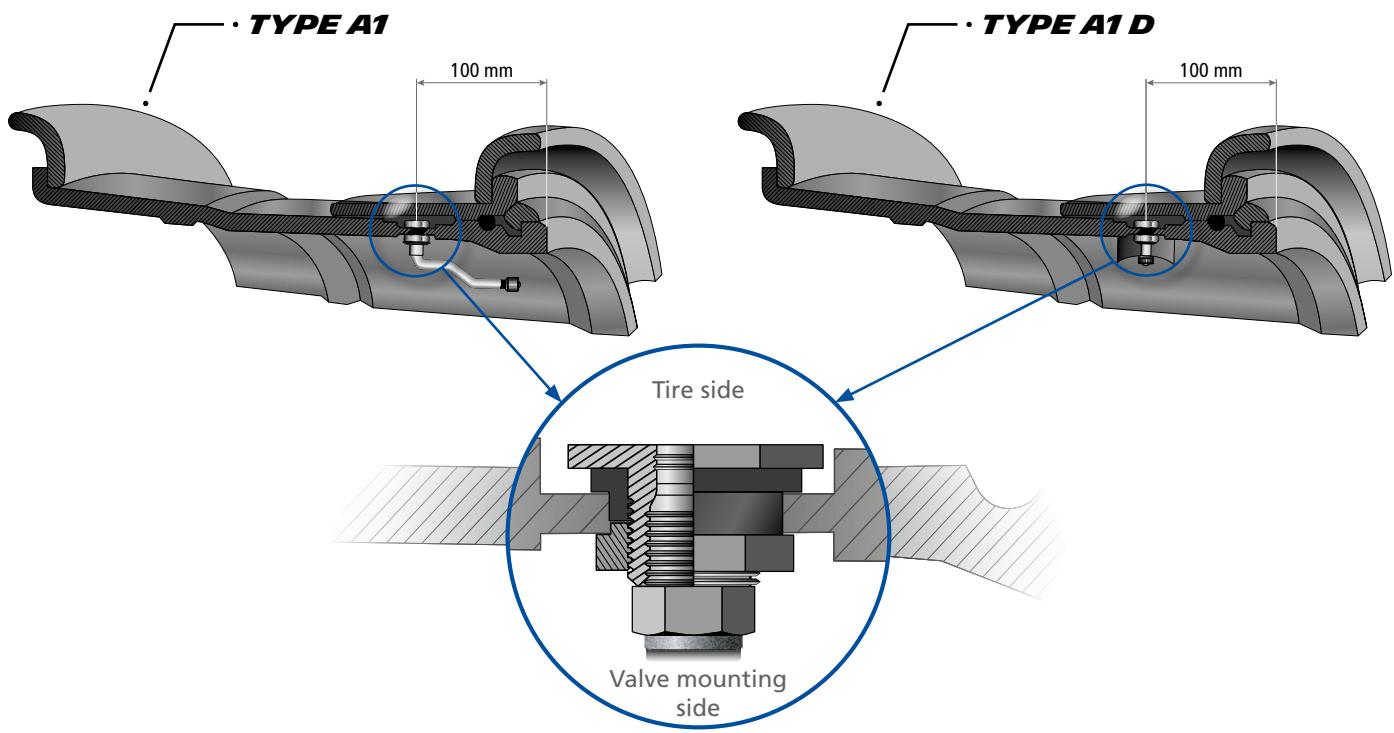


Michelin® code	ETRTO Designation	$\alpha 1^\circ$		$\alpha 2^\circ$			
		mm	inches	mm	inches	mm	inches
578	V3-04-1	90	3,54	140	5,51		
		A	B	C			
		mm	inches	mm	inches	mm	inches
		20,5	0,81	32	1,26	37	1,46

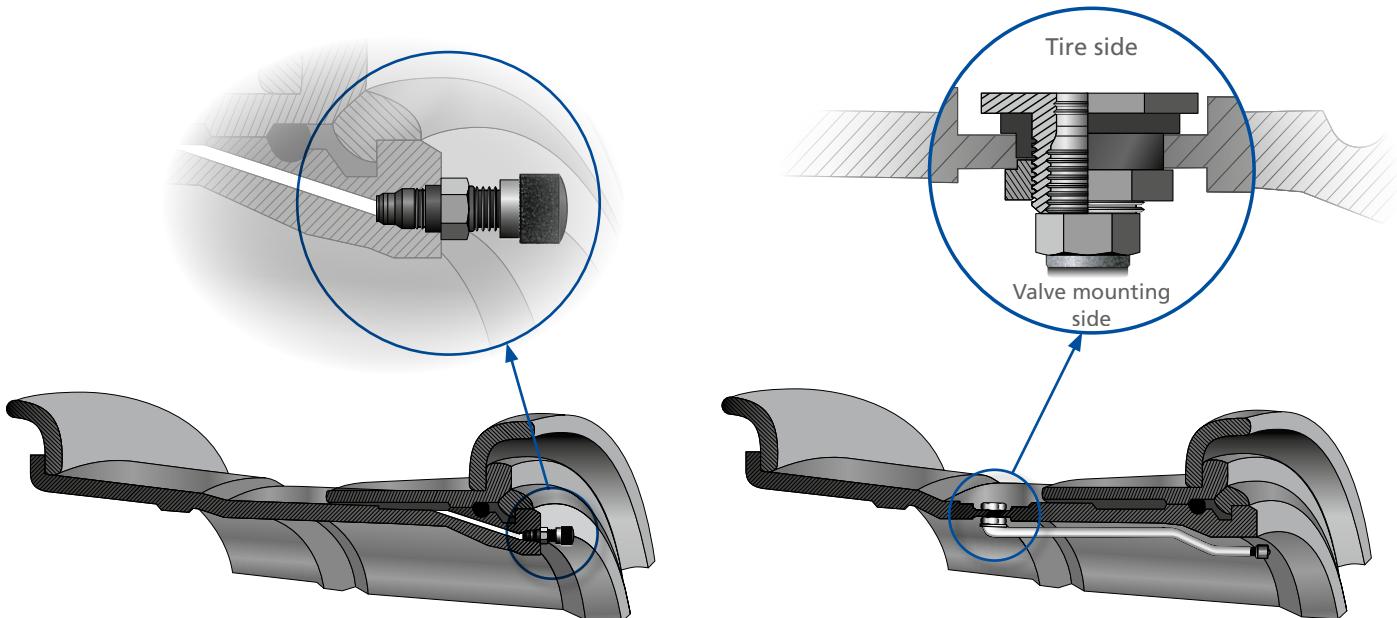
TRUCK TYPE UNIVERSAL TRIPLE BEND VALVE



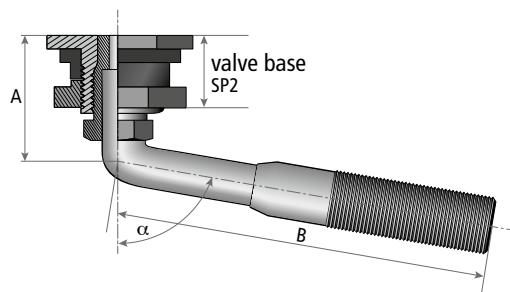
Michelin® code	ETRTO Designation	$\alpha 1^\circ$		$\alpha 2^\circ$		$\alpha 3^\circ$	
		mm	inches	mm	inches	mm	inches
582	V3-06-5	90	3,54	139	5,46	139	5,46
		A	B	C	D		
		mm	inches	mm	inches	mm	inches
		20,5	0,81	131	5,16	49	1,93
						62,5	2,46

TYPES OF TUBELESS EARTMOVER VALVES
A1 TYPE VALVE

VALVACE A4 TYPE

Comprised of two A1 TYPE valves, both set at 100 mm from the rim edge, to enable water filling.

VALVACE A2 TYPE
VALVACE A3 TYPE


EARTMOVER TUBELESS VALVE (AMERICAN, TRA STANDARD)



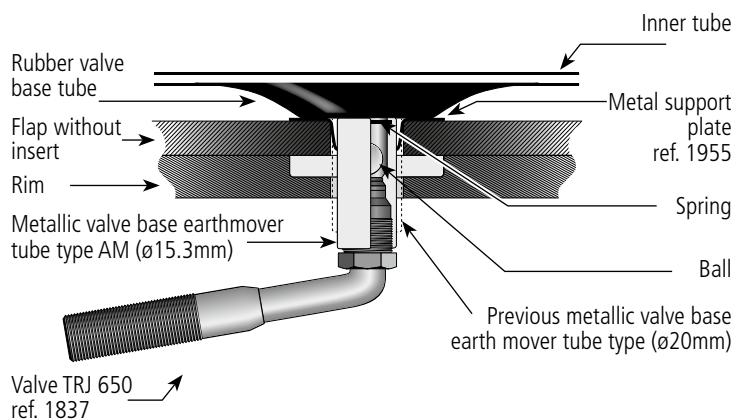
Michelin® code	TRA code	ETRTO Designation	A	B			
			mm	inches	mm	inches	
R 1837	TRJ 650	V5-04-1	27	1.08	79	3.12	100°

Valves used on a SP2 American valve base [20.5 mm (0.8 inch) diameter hole] and also on AM tubes.

VALVE BASE

ACTUAL VALVE

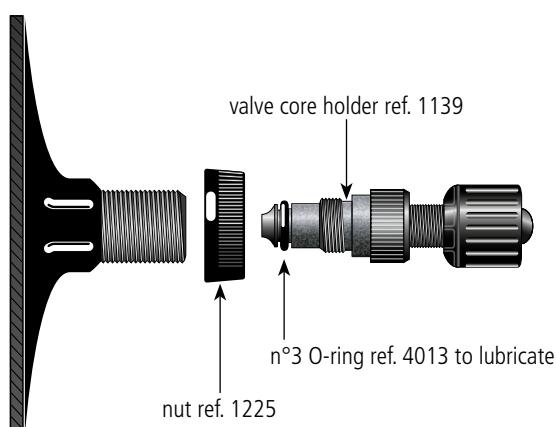
(mounting with tube)



AIR AND WATER AGRICULTURAL TYPE VALVE BASE

Allows tire to be water filled.

Valve with core holder 1139 and plastic nut ref. 1225



ref. 1224 code TR 218A

1/ see page **19 & 104** explanation about TKPH (T MPH)

2/ see page **12** explanation of the different characteristics

3/ explanation about rim size marking

example: 44.00/5.0 [6.0]
 the 1st value indicates rim width in inch)
 (in this example: 44 inches)
 the 2nd value indicates the height of the rim flange
 (in this example: 5 inches)
 the 3rd value indicates the width of the rim flange
 (in this example: 6 inches)

4/ see page **83** information and explanation about components used with Michelin earthmover tires

5/ increase pressure by 0,5 bar on the loader front axle

6/ see page **24** and in the EARTMOVER TIRE USE AND MAINTENANCE GUIDE BY MICHELIN explanation about TG rim

7/ tire under development or currently subject to an ETRTO experimental standard

8/ manufacture is discontinued (commercial description highlighted to attract attention)

9/ special order only (commercial description highlighted to attract attention)
 Consult your local Michelin representative

10/ see pages . **12,24, to 25 & 98 to 108** explanation of the various tables of load according to the use and to the tire position and how to determine pressures
*It is imperative to follow the explanation given
 Not following these instructions may impact tire performance*

11/ see page **17** standardized usage codes

12/ never exceed 6 bar

13/ The removable flange must be continuous along its circumference, with no opening
 * The flange must be continuous in full-circumference, not open or split
 ** The «H» is on the tire side, the G of the norm is on the external part and until the rim bore

13B/ Diameter: Left column, fixed side; right column, removable side.

15/ Use seal if necessary, see on rim pages 84 and further

16/ For Japan market only

2/ see page **12 & 114** explanation of the different characteristics

3/ see pages **134 & 135** rim characteristics

4/ see pages **132 & 133** Tubeless Bead Seal characteristics

5/ see pages **136 & 137** Tube, flap and O-ring characteristics

7/ tire under development

8/ to be discontinued

CAUTION

9/ the 24-10.00 VA rim is not allowed with the 14.00 R 24 XZM 193A5 tire

10/ all machines fitted with XZM tires to 12.00 R 24 must not exceed 15 km in one hour, and peak speed is limited to 35 km/h

11/ all machines fitted with 20" XZM tires must not exceed 15 km in one hour, and peak speed is limited to: 35 km/h peak speed for Forklift truck
 40 km/h peak speed for Terminal tractors and RORO tractors

12/ terminal tractors fitted with X TERMINAL-T tires must not exceed 20 km in one hour in cyclic use, and peak speed is limited to 40 km/h

13/ The removable flange must be continuous along its circumference, with no opening

13B/ Diameter: Left column, fixed side; right column, removable side.

14/ all machines fitted with XZM2 and XZM2+ tires must not exceed 10 km in one hour in cyclic use, and peak speed is limited to 25 km/h

15/ all machines fitted with XZM tires > 12.00 R 24 must not exceed 15 km in one hour and are limited to 25 km/h peak speed

16/ straddle carriers fitted with X-STRADDLE tires must not exceed 12 km in one hour, and peak speed is limited to 30 km/h

17/ straddle carriers fitted with X-STRADDLE2 tires must not exceed 15 km in one hour, and peak speed is limited to 35 km/h

18/ all machines fitted with X-STACKER tires must not exceed 5 km in one hour in cyclic use and are limited to 25 km/h peak speed

19/ 450/95 R 25 X-STRADDLE 2 tire replace the 16.00 R 25 X-STRADDLE 2 tire

20/ all machines fitted with X-STACKER 2 tires must not exceed 7 km in one hour in cyclic use and are limited to 25 km/h peak speed

(a) with reinforcement plate

All Michelin® industrial tubeless tires marked "MAY BE USED WITH A TUBE" can be fitted with tube and flap.

All values shown in these tables are maxima, and should not be exceeded.

APPROXIMATE LOOSE MATERIAL DENSITIES UNITS OF MEASURE AND CONVERSION TABLES

UNITS OF MEASURE AND CONVERSION TABLES

MEASUREMENT	ABBREVIATION	CONVERSION FACTOR	ABBREVIATION	MEASUREMENT	CONVERSION FACTOR	ABBREVIATION
TORQUE						
pound-foot	lb ft	x 0.1383	= m kg	kilogamme metre	x 7.233	= lb ft
kilogamme metre	m kg	x 9.81	= m N	Newton metre	x 0.102	= m kg
LENGTH						
inch	in	x 0.0254	= m	metre	x 39.37	= in
foot	ft	x 0.3048	= m	metre	x 3.281	= ft
yard	yd	x 0.9144	= m	metre	x 1.0936	= yd
mile	ml	x 1.6093	= km	kilometre	x 0.6214	= ml
LOAD						
pound	lb	x 0.4536	= kg	kilogramme	x 2.205	= lb
long ton (G.B.) 2240 lb	lg ton	x 1.016	= t	metric tonne	x 0.984	= lg ton
short ton (U.S.) 2000 lb	sh ton	x 0.907	= t	metric tonne	x 1.103	= sh ton
DENSITY						
pound per cubic foot	lb/cu ft	x 16.0184	= kg/m³	kilogramme/m³	x 0.625	= lb/cu ft
pound per cubic yard	lb/cu yd	x 0.5933	= kg/m³	kilogramme/m³	x 1.686	= lb/cu yd
PRESSURE						
kilo-pascal	kPa	x 0.01	= bar	bar	x 100	= kPa
atmosphere (at sea level)	atm	x 0.986	= bar	bar	x 1.014	= atm
pound per square inch	P.S.I.	x 0.0703	= kg/cm²	kilogramme/cm²	x 14.22	= P.S.I.
pound per square inch	P.S.I.	x 0.069	= bar	bar	x 14.513	= P.S.I.
pound per square inch	P.S.I.	x 0.068	= atm	atmosphere	x 14.7	= P.S.I.
pound per square inch	P.S.I.	x 6.895	= kPa	kilo Pascal	x 0.145	= P.S.I.
POWER						
french horse power	C.V.	x 0.7355	= KW	kilowatt	x 1.36	= C.V.
horse power	H.P.	x 0.7457	= KW	kilowatt	x 1.34	= H.P.
french horse power	C.V.	x 0.98	= H.P.	horse power	x 1.014	= C.V.
VOLUME/CAPACITY						
cubic foot	cu ft	x 0.02832	= m³	cubic metre	x 35.31	= cu ft
cubic yard	cu yd	x 0.7646	= m³	cubic metre	x 1.308	= cu yd
gallon (U.S.)	gal	x 3.7854	= l	liter	x 0.2642	= gal
TEMPERATURE						
degree fahrenheit	°F	- 32 et x (5/9)	= °C	degree Celsius	x (9/5) et + 32	= °F

YOUR **CONTACTS**



MICHELIN

Europe

Manufacture Française
des Pneumatiques Michelin
23, place des Carmes-Déchaux
63040 Clermont-Ferrand Cedex 09
France
Tel. : + 33 4 73 32 20 00

North America

Michelin North America, Inc.
One Parkway South
PO Box 19001
Greenville, SC 29602
USA
Tel: + 1 864 458 5000

Africa/India/ Middle East

Michelin AIM FZE
JAFZA LOB 14, 5th floor
P.O.Box 263034
Jebel Ali Free Zone
Dubai, UAE
Tel: + 971 4 8078111

China

MICHELIN (China) Investment
Co. Ltd.
Dawning Center
Tower B (East Tower, 16th floor)
500 Hongbaoshi Road
Shanghai 201103
RP China
Tel: + 86 (21) 22 19 08 88

Eastern Europe

MICHELIN - MOSCOW
Smolnaya street
24D (2nd floor)
125445 Moscow
Russia
Tel: +7 495 258 09 26

South America

Sociedad Michelin
de Participações
Industrial e Commercial Ltda
Avenida das Americas - Bloco 4
Barra Da Tijuca
Río de Janeiro (RJ)
CEP 22640-100
Brasil
Tel: + 55 (21) 36 21 46 46

South East Asia/ New Zealand/ Australia

MICHELIN Australia Pty Ltd
51-57 Fennell Street
Port Melbourne
(Victoria 3207)
Australia
Tel: + 61 3 86 71 10 01

Korea / Japan

MICHELIN (China) Investment
Co. Ltd.
Dawning Center
Tower B (East Tower, 16th floor)
500 Hongbaoshi Road
Shanghai 201103
RP China
Tel: + 86 (21) 22 19 08 88



For more information about our products, maintenance
and safety advice, or to find your nearest dealer, visit

www.michelinearthmover.com

