

# **MICHELIN TECHNICAL DATA**

## **MATERIAL HANDLING**

*INDUSTRIAL PNEUMATIC TIRES  
RADIAL TECHNOLOGY*



**MICHELIN**



# **MICHELIN TECHNICAL DATA**

INDUSTRIAL PNEUMATIC TIRES  
RADIAL TECHNOLOGY

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# TIRE RANGE



**MICHELIN  
XZR**



**MICHELIN  
XZM**



**MICHELIN  
XZM 2+**



**MICHELIN  
X STACKER 2**



**MICHELIN  
X STACKER 3 HD**



**MICHELIN  
X STRADDLE 2**



**MICHELIN  
X TERMINAL T**



**MICHELIN  
X AGV<sup>EV</sup>**

# INTRODUCTION

The content provided in this document is intended for informal purposes only. It may not be used or relied upon for legal or statutory actions.

For technical and safety reasons, a tire should never be used beyond the limits of the technical specifications for which it has been approved. All recommendations provided in this document should be followed. Michelin is not responsible for any usage, fitting, storage, maintenance or handling actions outside of the stated recommendations.

MICHELIN® tires are designed for a specific use as defined in this catalog. Any other usage constitutes an abnormal use. However, in some circumstances, Michelin may issue a waiver which will specify the conditions and the permitted operational limits for a specific application. If a tire is to be used differently than what it is designed for, please consult your nearest Michelin Representative for further guidance. Michelin expressly denies any responsibility for any abnormal use of its tires or any use different from the tire's intended design in the absence of express written permission (derogation) from an authorized Michelin Representative.

Further, correct usage and maintenance are necessary to achieve proper performance and to maximize life. Therefore, it is recommended that users adhere to all safety and usage recommendations. However, you must note that these recommendations may be subject to more restrictive local legal and/or regulatory requirements.

Specifically, tire load and pressure tables included in this book are classified according to the various applications of machines. In the load and pressure tables, the shaded boxes indicate the normalized values. These values reflect optimal use, the best balance of performances. Again, these values are given for informational purposes only and may not be used for legal or statutory actions.

Finally, unless otherwise specified, MICHELIN® off-the-road, industrial, and compact 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 minor differences may exist between these standards.

Following publication, the information herein is subject to change in Michelin's sole discretion.



## 1 SPEED

Capable of reaching up to 50 km/h <sup>(1)</sup>

The radial technology, tread pattern and specific rubber compounds allows for higher speeds.

## 2 SAFETY

Exceptional grip for short distance braking

The radial structure and multi-block pattern provides maximal ground footprint.

## 3 ROBUSTNESS

Limit machine downtime

Radial tubeless construction to prevent punctures and damages.

## TIRE CHARACTERISTICS

## ADDITIONAL INFORMATION

### VEHICLE EQUIPMENT



The XZR tire is the solution for baggage tractors, urban machines and other high intensity forklift applications. Customers can expect an exceptional total value of ownership.

- Michelin Port Tires  
Product Manager

<sup>(1)</sup> Characteristic of the product measured with the TKPH indicator.

### LEARN MORE

ON THE WEB  
[business.michelin.co.uk](https://business.michelin.co.uk)

TESTIMONIALS  
[youtube.com/michelinearthmover](https://youtube.com/michelinearthmover)

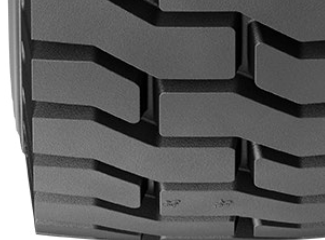
### TOOLS

BEYOND ROAD SELECTOR  
[beyond-road.selector.michelingroup.com/mh](https://beyond-road.selector.michelingroup.com/mh)

### CONTACT

Please contact your local sales representative for more information.

## TECHNICAL CHARACTERISTICS



| DESCRIPTION             | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|-------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>6.00 R9 121A5 TL</b> | 110206<br>68425 | 25<br>15.5                         | 164<br>6.5                     | 530<br>20.9                     | 241<br>9.5                             | 1605<br>63.2                           | 10<br>12.6                     | 192<br>7.6                    | 18<br>4.8          | 4.00E                           | -  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

Bar *Psi* **6 87** **8 116** **10 145**

#### Machine - use kg - lbs COUNTERBALANCED LIFT TRUCK - STEER WHEEL

|               |        |      |      |  |      |      |  |      |      |
|---------------|--------|------|------|--|------|------|--|------|------|
| <b>STATIC</b> |        | 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 |

#### Machine - use kg - lbs 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 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]  | Flap<br>[CAI]       |
|-----------------------------------|-----------------|-----------------------------|----------------------|----------------|---------------------|
|                                   | 4.00E           | 100TL9<br>[102151]          | N/A                  | 9F<br>[368957] | 125 - 9<br>[242079] |

|                          |                 |            |            |             |             |            |            |            |           |       |       |
|--------------------------|-----------------|------------|------------|-------------|-------------|------------|------------|------------|-----------|-------|-------|
| <b>6.50 R10 128A5 TL</b> | 110207<br>79365 | 25<br>15.5 | 184<br>7.2 | 578<br>22.8 | 264<br>10.4 | 1753<br>69 | 11<br>13.9 | 217<br>8.5 | 23<br>6.1 | 5.00F | 5.50F |
|--------------------------|-----------------|------------|------------|-------------|-------------|------------|------------|------------|-----------|-------|-------|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

Bar *Psi* **6 87** **8 116** **10 145**

#### Machine - use kg - lbs COUNTERBALANCED LIFT TRUCK - STEER WHEEL

|               |        |      |      |  |      |      |  |      |      |
|---------------|--------|------|------|--|------|------|--|------|------|
| <b>STATIC</b> |        | 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 |

#### Machine - use kg - lbs 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 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]   | Flap<br>[CAI]        |
|-----------------------------------|-----------------|-----------------------------|----------------------|-----------------|----------------------|
|                                   | 5.00E           | 125TL10<br>[102183]         | N/A                  | 10F<br>[007946] | 140 - 10<br>[001969] |









## 1 TREADLIFE

**Increase wear life: from +50% to +160% hours in operation <sup>(1)</sup>**  
Outstanding life performance is expected with the improved radial structure in addition to the deep and massive tread pattern.

## 2 ROBUSTNESS

**Optimize machine uptime**  
The high resistant metallic crown belt structure and innovative tread pattern provide additional sidewall protection.

## 3 PRODUCTIVITY

**Drive up to 15 km in an hour at 25 km/h <sup>(2)</sup>**  
Radial technology is usually the best alternative for operations requiring more productivity with the transport of more tons per hour.

### TIRE CHARACTERISTICS

### ADDITIONAL INFORMATION



#### VEHICLE EQUIPMENT



AND MORE

The XZM is the most durable tire in its class, with approximately 40% more life than its competitors. Its robust steel radial structure is recognized worldwide. Some of our customers are thrilled with its downtime and service value.

- Michelin Port Tires  
Product Manager

<sup>(1)</sup> Field study in real life conditions made by Michelin for 2 years 2009-2011, on 60 forklifts in Europe (UK/Germany) same tire size and same usage on existing MICHELIN XZM range vs. premium competitors.

<sup>(2)</sup> Characteristic of the product measured with the TKPH indicator. Distance per hour is directly correlated to the amount of tons transportable in an hour.

#### LEARN MORE

**ON THE WEB**  
[business.michelin.co.uk](http://business.michelin.co.uk)

**TESTIMONIALS**  
[youtube.com/michelinearthmover](https://youtube.com/michelinearthmover)

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#### CONTACT

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## TECHNICAL CHARACTERISTICS



| DESCRIPTION             | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|-------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>5.00 R8 111A5 TL</b> | 110208<br>86381 | 15<br>9.3                          | 137<br>5.4                     | 463<br>18.2                     | 212<br>8.3                             | 1407<br>55.4                           | 23<br>29                       | 164<br>6.5                    | 9<br>2.4           | 3 1/4 L                         | 3.00D<br>3.50 D  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi     | 6 87                                     |      | 8 116 |  | 10 145 |      |  |  |      |      |
|---------------------------|---------|--|------|-------|--|--------|------|--|--|------|------|
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |       |  |        |      |  |  |      |      |
| STATIC                    |         | 1230                                     | 2712 |       |  | 1420   | 3131 |  |  | 1650 | 3638 |
| 10 km/h                   | 6 mp/h  | 1060                                     | 2337 |       |  | 1230   | 2712 |  |  | 1420 | 3131 |
| 25 km/h                   | 15 mp/h | 810                                      | 1786 |       |  | 940    | 2073 |  |  | 1090 | 2403 |
| 35 km/h                   | 22 mp/h | 750                                      | 1654 |       |  | 870    | 1918 |  |  | 1010 | 2227 |
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |       |  |        |      |  |  |      |      |
| 10 km/h                   | 6 mp/h  | 1060                                     | 2337 |       |  | 1230   | 2712 |  |  | 1420 | 3131 |
| 25 km/h                   | 15 mp/h | 1060                                     | 2337 |       |  | 1230   | 2712 |  |  | 1420 | 3131 |
| 35 km/h                   | 22 mp/h | 1020                                     | 2249 |       |  | 1180   | 2602 |  |  | 1370 | 3021 |

| MOUNTING ACCESSORIES AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]    | Flap<br>[CAI]      |
|--------------------------------|-----------------|-----------------------------|----------------------|------------------|--------------------|
|                                | 3 1/4 L         | 80TL8<br>[102150]           | N/A                  | 8 CG<br>[566382] | 90 - 8<br>[894130] |

|                           |                 |           |            |             |            |              |            |            |          |       |   |
|---------------------------|-----------------|-----------|------------|-------------|------------|--------------|------------|------------|----------|-------|---|
| <b>150/75 R8 113A5 TL</b> | 110087<br>55004 | 15<br>9.3 | 151<br>5.9 | 424<br>16.7 | 194<br>7.6 | 1287<br>50.7 | 16<br>20.2 | 174<br>6.9 | 8<br>2.1 | 4.33R | - |
|---------------------------|-----------------|-----------|------------|-------------|------------|--------------|------------|------------|----------|-------|---|

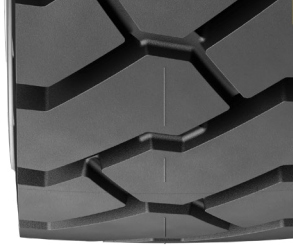
### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi     | 6 87                                     |      | 8 116 |  | 10 145 |      |  |  |      |      |
|---------------------------|---------|--|------|-------|--|--------|------|--|--|------|------|
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |       |  |        |      |  |  |      |      |
| STATIC                    |         | 1240                                     | 2734 |       |  | 1480   | 3263 |  |  | 1740 | 3837 |
| 10 km/h                   | 6 mp/h  | 1070                                     | 2359 |       |  | 1280   | 2822 |  |  | 1500 | 3308 |
| 25 km/h                   | 15 mp/h | 820                                      | 1808 |       |  | 980    | 2161 |  |  | 1150 | 2536 |
| 35 km/h                   | 22 mp/h | 760                                      | 1676 |       |  | 910    | 2007 |  |  | 1070 | 2359 |
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |       |  |        |      |  |  |      |      |
| 10 km/h                   | 6 mp/h  | 1070                                     | 2359 |       |  | 1280   | 2822 |  |  | 1500 | 3308 |
| 25 km/h                   | 15 mp/h | 1070                                     | 2359 |       |  | 1280   | 2822 |  |  | 1500 | 3308 |
| 35 km/h                   | 22 mp/h | 1030                                     | 2271 |       |  | 1230   | 2712 |  |  | 1440 | 3175 |

| MOUNTING ACCESSORIES AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]    | Flap<br>[CAI]      |
|--------------------------------|-----------------|-----------------------------|----------------------|------------------|--------------------|
|                                | 4.33R           | 110TL8<br>[613972]          | N/A                  | 8 CG<br>[566382] | 90 - 8<br>[894130] |

## TECHNICAL CHARACTERISTICS



| DESCRIPTION               | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|---------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>180/70 R8 125A5 TL</b> | 110069<br>64585 | 15<br>9.3                          | 170<br>6.7                     | 454<br>17.9                     | 205<br>8.1                             | 1371<br>54                             | 19<br>23.9                     | 196<br>7.7                    | 11<br>2.9          | 4.33R                           | -  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi     | 6  |      | 8    |      | 10   |      |
|---------------------------|---------|--|------|------|------|------|------|
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |      |      |      |      |
| STATIC                    |         | 1890                                     | 4167 | 2190 | 4829 | 2500 | 5513 |
| 10 km/h                   | 6 mp/h  | 1630                                     | 3594 | 1890 | 4167 | 2150 | 4741 |
| 25 km/h                   | 15 mp/h | 1250                                     | 2756 | 1450 | 3197 | 1650 | 3638 |
| 35 km/h                   | 22 mp/h | 1160                                     | 2558 | 1350 | 2977 | 1530 | 3374 |
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |      |      |      |      |
| 10 km/h                   | 6 mp/h  | 1630                                     | 3594 | 1890 | 4167 | 2150 | 4741 |
| 25 km/h                   | 15 mp/h | 1630                                     | 3594 | 1890 | 4167 | 2150 | 4741 |
| 35 km/h                   | 22 mp/h | 1570                                     | 3462 | 1820 | 4013 | 2070 | 4564 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]   | Flap<br>[CAI]      |
|-----------------------------------|-----------------|-----------------------------|----------------------|-----------------|--------------------|
|                                   | 4.33R           | 110TL8<br>[613972]          | N/A                  | 8 D<br>[964067] | 90 - 8<br>[894130] |

## TECHNICAL CHARACTERISTICS



| DESCRIPTION             | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|-------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>6.00 R9 121A5 TL</b> | 110204<br>50734 | 15<br>9.3                          | 164<br>6.5                     | 539<br>21.2                     | 248<br>9.8                             | 1641<br>64.6                           | 24<br>30.2                     | 192<br>7.6                    | 15<br>4            | 4.00E                           | -  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi     | 6  |      | 8 |  | 10   |      | 145 |  |      |      |
|---------------------------|---------|--|------|---|--|------|------|-----|--|------|------|
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |   |  |      |      |     |  |      |      |
| STATIC                    |         | 1590                                     | 3506 |   |  | 1890 | 4167 |     |  | 2190 | 4829 |
| 10 km/h                   | 6 mp/h  | 1970                                     | 3021 |   |  | 1630 | 3594 |     |  | 1890 | 4167 |
| 25 km/h                   | 15 mp/h | 1050                                     | 2315 |   |  | 1250 | 2756 |     |  | 1450 | 3197 |
| 35 km/h                   | 22 mp/h | 980                                      | 2161 |   |  | 1160 | 2558 |     |  | 1350 | 2977 |
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |   |  |      |      |     |  |      |      |
| 10 km/h                   | 6 mp/h  | 1370                                     | 3021 |   |  | 1630 | 3594 |     |  | 1890 | 4167 |
| 25 km/h                   | 15 mp/h | 1370                                     | 3021 |   |  | 1630 | 3594 |     |  | 1890 | 4167 |
| 35 km/h                   | 22 mp/h | 1320                                     | 2911 |   |  | 1570 | 3462 |     |  | 1820 | 4013 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]   | Flap<br>[CAI]       |
|-----------------------------------|-----------------|-----------------------------|----------------------|-----------------|---------------------|
|                                   | 4.00E           | 100TL9<br>[102151]          | N/A                  | 9 F<br>[368957] | 125 - 9<br>[242079] |

|                           |                 |           |            |           |            |              |            |            |         |       |   |
|---------------------------|-----------------|-----------|------------|-----------|------------|--------------|------------|------------|---------|-------|---|
| <b>200/75 R9 134A5 TL</b> | 110090<br>79749 | 15<br>9.3 | 208<br>8.2 | 534<br>21 | 240<br>9.4 | 1610<br>63.4 | 22<br>27.7 | 239<br>9.4 | 19<br>5 | 6.00E | - |
|---------------------------|-----------------|-----------|------------|-----------|------------|--------------|------------|------------|---------|-------|---|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi     | 6  |      | 8 |  | 10   |      | 145 |  |      |      |
|---------------------------|---------|--|------|---|--|------|------|-----|--|------|------|
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |   |  |      |      |     |  |      |      |
| STATIC                    |         | 2270                                     | 5005 |   |  | 2750 | 6064 |     |  | 3210 | 7078 |
| 10 km/h                   | 6 mp/h  | 1950                                     | 4300 |   |  | 2370 | 5226 |     |  | 2760 | 6086 |
| 25 km/h                   | 15 mp/h | 1500                                     | 3308 |   |  | 1820 | 4013 |     |  | 2120 | 4675 |
| 35 km/h                   | 22 mp/h | 1390                                     | 3065 |   |  | 1690 | 3726 |     |  | 1970 | 4344 |
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |   |  |      |      |     |  |      |      |
| 10 km/h                   | 6 mp/h  | 1950                                     | 4300 |   |  | 2370 | 5226 |     |  | 2760 | 6086 |
| 25 km/h                   | 15 mp/h | 1950                                     | 4300 |   |  | 2370 | 5226 |     |  | 2760 | 6086 |
| 35 km/h                   | 22 mp/h | 1880                                     | 4145 |   |  | 2280 | 5027 |     |  | 2650 | 5843 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]   | Flap<br>[CAI]     |
|-----------------------------------|-----------------|-----------------------------|----------------------|-----------------|-------------------|
|                                   | 6.00E           | 150TL9<br>[102182]          | N/A                  | 9 F<br>[368957] | 180-9<br>[698290] |

## TECHNICAL CHARACTERISTICS



| DESCRIPTION              | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|--------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>6.50 R10 128A5 TL</b> | 110213<br>54636 | 15<br>9.3                          | 186<br>7.3                     | 587<br>23.1                     | 270<br>10.6                            | 1786<br>70.3                           | 27<br>34                       | 217<br>8.5                    | 20<br>5.3          | 5.00F                           | 5.50F  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                               | Psi     | 6  |      | 8                           |  | 10                   |      | 145              |  |                      |      |
|-----------------------------------|---------|--|------|-----------------------------|--|----------------------|------|------------------|--|----------------------|------|
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |                             |  |                      |      |                  |  |                      |      |
| STATIC                            |         | 1930                                     | 4256 |                             |  | 2310                 | 5094 |                  |  | 2720                 | 5998 |
| 10 km/h                           | 6 mp/h  | 1660                                     | 3660 |                             |  | 1990                 | 4388 |                  |  | 2340                 | 5160 |
| 25 km/h                           | 15 mp/h | 1280                                     | 2822 |                             |  | 1530                 | 3374 |                  |  | 1800                 | 3969 |
| 35 km/h                           | 22 mp/h | 1180                                     | 2602 |                             |  | 1420                 | 3131 |                  |  | 1670                 | 3682 |
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |                             |  |                      |      |                  |  |                      |      |
| 10 km/h                           | 6 mp/h  | 1660                                     | 3660 |                             |  | 1990                 | 4388 |                  |  | 2340                 | 5160 |
| 25 km/h                           | 15 mp/h | 1660                                     | 3660 |                             |  | 1990                 | 4388 |                  |  | 2340                 | 5160 |
| 35 km/h                           | 22 mp/h | 1600                                     | 3528 |                             |  | 1910                 | 4212 |                  |  | 2250                 | 4961 |
| MOUNTING ACCESSORIES<br>AVAILABLE |         | Recommended rim                          |      | Tubeless bead seal<br>[CAI] |  | Rubber ring<br>[CAI] |      | Tube<br>[CAI]    |  | Flap<br>[CAI]        |      |
|                                   |         | 5.00F                                    |      | 125TL10<br>[102183]         |  | N/A                  |      | 10 F<br>[007946] |  | 140 - 10<br>[001969] |      |

|                            |                 |           |            |             |             |            |            |             |           |       |   |
|----------------------------|-----------------|-----------|------------|-------------|-------------|------------|------------|-------------|-----------|-------|---|
| <b>225/75 R10 142A5 TL</b> | 110089<br>59673 | 15<br>9.3 | 220<br>8.7 | 591<br>23.3 | 264<br>10.4 | 1779<br>70 | 24<br>30.2 | 259<br>10.2 | 25<br>6.6 | 6.50F | - |
|----------------------------|-----------------|-----------|------------|-------------|-------------|------------|------------|-------------|-----------|-------|---|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                               | Psi     | 6  |      | 8                           |  | 10                   |      | 145              |  |                      |      |
|-----------------------------------|---------|--|------|-----------------------------|--|----------------------|------|------------------|--|----------------------|------|
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |                             |  |                      |      |                  |  |                      |      |
| STATIC                            |         | 2800                                     | 6174 |                             |  | 3430                 | 7563 |                  |  | 4010                 | 8842 |
| 10 km/h                           | 6 mp/h  | 2410                                     | 5314 |                             |  | 2960                 | 6527 |                  |  | 3450                 | 7607 |
| 25 km/h                           | 15 mp/h | 1850                                     | 4079 |                             |  | 2270                 | 5005 |                  |  | 2650                 | 5843 |
| 35 km/h                           | 22 mp/h | 1720                                     | 3793 |                             |  | 2100                 | 4631 |                  |  | 2460                 | 5424 |
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |                             |  |                      |      |                  |  |                      |      |
| 10 km/h                           | 6 mp/h  | 2410                                     | 5314 |                             |  | 2960                 | 6527 |                  |  | 3450                 | 7607 |
| 25 km/h                           | 15 mp/h | 2410                                     | 5314 |                             |  | 2960                 | 6527 |                  |  | 3450                 | 7607 |
| 35 km/h                           | 22 mp/h | 2320                                     | 5116 |                             |  | 2840                 | 6262 |                  |  | 3320                 | 7321 |
| MOUNTING ACCESSORIES<br>AVAILABLE |         | Recommended rim                          |      | Tubeless bead seal<br>[CAI] |  | Rubber ring<br>[CAI] |      | Tube<br>[CAI]    |  | Flap<br>[CAI]        |      |
|                                   |         | 6.50F                                    |      | 165TL10<br>[102114]         |  | N/A                  |      | 10 F<br>[007946] |  | 140 - 10<br>[001969] |      |

## TECHNICAL CHARACTERISTICS



| DESCRIPTION              | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|--------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>7.00 R12 136A5 TL</b> | 110195<br>71359 | 15<br>9.3                          | 196<br>7.7                     | 671<br>26.4                     | 309<br>12.2                            | 2043<br>80.4                           | 28<br>35.3                     | 230<br>9.1                    | 24<br>6.3          | 5.00S                           | -  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

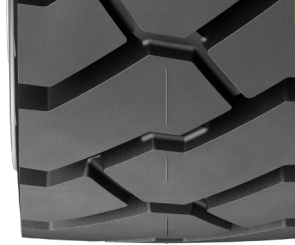
| Bar                               | Psi     | 6  |      | 8                           |  | 10                   |      | 145              |  |                      |      |
|-----------------------------------|---------|--|------|-----------------------------|--|----------------------|------|------------------|--|----------------------|------|
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |                             |  |                      |      |                  |  |                      |      |
| STATIC                            |         | 2320                                     | 5116 |                             |  | 2750                 | 6064 |                  |  | 3390                 | 7475 |
| 10 km/h                           | 6 mp/h  | 1990                                     | 4388 |                             |  | 2370                 | 5226 |                  |  | 2920                 | 6439 |
| 25 km/h                           | 15 mp/h | 1530                                     | 3374 |                             |  | 1820                 | 4013 |                  |  | 2240                 | 4939 |
| 35 km/h                           | 22 mp/h | 1420                                     | 3131 |                             |  | 1690                 | 3726 |                  |  | 2080                 | 4586 |
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |                             |  |                      |      |                  |  |                      |      |
| 10 km/h                           | 6 mp/h  | 1990                                     | 4388 |                             |  | 2370                 | 5226 |                  |  | 2920                 | 6439 |
| 25 km/h                           | 15 mp/h | 1990                                     | 4388 |                             |  | 2370                 | 5226 |                  |  | 2920                 | 6439 |
| 35 km/h                           | 22 mp/h | 1920                                     | 4234 |                             |  | 2280                 | 5027 |                  |  | 2800                 | 6174 |
| MOUNTING ACCESSORIES<br>AVAILABLE |         | Recommended rim                          |      | Tubeless bead seal<br>[CAI] |  | Rubber ring<br>[CAI] |      | Tube<br>[CAI]    |  | Flap<br>[CAI]        |      |
|                                   |         | 5.00S                                    |      | 125TL12<br>[522788]         |  | N/A                  |      | 12 H<br>[625614] |  | 135 - 12<br>[190171] |      |

|                            |                 |           |           |             |           |              |          |             |           |       |   |
|----------------------------|-----------------|-----------|-----------|-------------|-----------|--------------|----------|-------------|-----------|-------|---|
| <b>250/60 R12 145A5 TL</b> | 358151<br>07263 | 15<br>9.3 | 254<br>10 | 616<br>24.3 | 280<br>11 | 1865<br>73.4 | 27<br>34 | 293<br>11.5 | 30<br>7.9 | 8.00G | - |
|----------------------------|-----------------|-----------|-----------|-------------|-----------|--------------|----------|-------------|-----------|-------|---|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                               | Psi     | 6  |      | 8                           |  | 10                   |      | 145             |  |                      |       |
|-----------------------------------|---------|--|------|-----------------------------|--|----------------------|------|-----------------|--|----------------------|-------|
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |                             |  |                      |      |                 |  |                      |       |
| STATIC                            |         | 3060                                     | 6747 |                             |  | 3700                 | 8159 |                 |  | 4380                 | 9658  |
| 10 km/h                           | 6 mp/h  | 2640                                     | 5821 |                             |  | 3190                 | 7034 |                 |  | 3770                 | 8313  |
| 25 km/h                           | 15 mp/h | 2030                                     | 4476 |                             |  | 2450                 | 5402 |                 |  | 2900                 | 6395  |
| 35 km/h                           | 22 mp/h | 1880                                     | 4145 |                             |  | 2270                 | 5005 |                 |  | 2690                 | 5931  |
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |                             |  |                      |      |                 |  |                      |       |
| 10 km/h                           | 6 mp/h  | 2640                                     | 5821 |                             |  | 3930                 | 8666 |                 |  | 4620                 | 10187 |
| 25 km/h                           | 15 mp/h | 2640                                     | 5821 |                             |  | 3930                 | 8666 |                 |  | 4620                 | 10187 |
| 35 km/h                           | 22 mp/h | 2540                                     | 5601 |                             |  | 3780                 | 8335 |                 |  | 4440                 | 9790  |
| MOUNTING ACCESSORIES<br>AVAILABLE |         | Recommended rim                          |      | Tubeless bead seal<br>[CAI] |  | Rubber ring<br>[CAI] |      | Tube<br>[CAI]   |  | Flap<br>[CAI]        |       |
|                                   |         | 8.00G                                    |      | 200TL12<br>[787198]         |  | N/A                  |      | 12H<br>[625614] |  | 210 - 12<br>[030440] |       |

## TECHNICAL CHARACTERISTICS



| DESCRIPTION  | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in]      | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal]    | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|--|-----------------|------------------------------------|-------------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|-----------------------|---------------------------------|--|
| <b>250/75 R12 152A5 TL</b>                                 | 110108<br>51744 | 15<br>9.3                          | 256<br>10.1                         | 688<br>27.1                     | 311<br>12.2                            | 2078<br>81.8                           | 28<br>35.3                     | 294<br>11.6                   | 38<br>10              | 8.00G                           | -  |
| <b>LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED</b> |                 |                                    |                                     |                                 |  |  |                                |                               |                       |                                 |  |
| <b>Bar Psi</b>   |                 | <b>6 87</b>                        |                                     |                                 | <b>8 116</b>                           |  |                                | <b>10 145</b>                 |                       |                                 |  |
| <b>Machine - use<br/>kg - lbs</b>                          |                 |                                    |                                     |                                 |  |  |                                |                               |                       |                                 |  |
| <b>COUNTERBALANCED LIFT TRUCK - STEER WHEEL</b>            |                 |                                    |                                     |                                 |  |  |                                |                               |                       |                                 |  |
| <b>STATIC</b>  |                 | <b>3730</b>                        | <b>8225</b>                         |                                 |  | <b>4570</b>                            | <b>10077</b>                   |                               |                       | <b>5370</b>                     | <b>11841</b>   |
| <b>10 km/h</b>   | <i>6 mp/h</i>   | <b>3220</b>                        | <b>7100</b>                         |                                 |  | <b>3930</b>                            | <b>8666</b>                    |                               |                       | <b>4620</b>                     | <b>10187</b>   |
| <b>25 km/h</b>   | <i>15 mp/h</i>  | <b>2470</b>                        | <b>5446</b>                         |                                 |  | <b>3020</b>                            | <b>6659</b>                    |                               |                       | <b>3550</b>                     | <b>7828</b>  |
| <b>35 km/h</b>   | <i>22 mp/h</i>  | <b>2290</b>                        | <b>5049</b>                         |                                 |  | <b>2800</b>                            | <b>6174</b>                    |                               |                       | <b>3290</b>                     | <b>7254</b>  |
| <b>Machine - use<br/>kg - lbs</b>                          |                 |                                    |                                     |                                 |  |  |                                |                               |                       |                                 |  |
| <b>COUNTERBALANCED LIFT TRUCK - LOAD WHEEL</b>             |                 |                                    |                                     |                                 |  |  |                                |                               |                       |                                 |  |
| <b>10 km/h</b>   | <i>6 mp/h</i>   | <b>3220</b>                        | <b>7100</b>                         |                                 |  | <b>3930</b>                            | <b>8666</b>                    |                               |                       | <b>4620</b>                     | <b>10187</b>   |
| <b>25 km/h</b>   | <i>15 mp/h</i>  | <b>3220</b>                        | <b>7100</b>                         |                                 |  | <b>3930</b>                            | <b>8666</b>                    |                               |                       | <b>4620</b>                     | <b>10187</b>   |
| <b>35 km/h</b>   | <i>22 mp/h</i>  | <b>3090</b>                        | <b>6813</b>                         |                                 |  | <b>3780</b>                            | <b>8335</b>                    |                               |                       | <b>4440</b>                     | <b>9790</b>  |
| <b>MOUNTING ACCESSORIES<br/>AVAILABLE</b>                  |                 | <b>Recommended rim</b>             | <b>Tubeless bead seal<br/>[CAI]</b> |                                 | <b>Rubber ring<br/>[CAI]</b>           |  | <b>Tube<br/>[CAI]</b>          |                               | <b>Flap<br/>[CAI]</b> |                                 |  |
|  |                 | 8.00G                              | 200TL12<br>[787198]                 |                                 | N/A                                    |  | 12 KD<br>[188148]              |                               | 210 - 12<br>[030440]  |                                 |  |



## TECHNICAL CHARACTERISTICS



| DESCRIPTION              | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|--------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>7.00 R15 143A5 TL</b> | 110211<br>85869 | 15<br>9.3                          | 196<br>7.7                     | 733<br>28.9                     | 337<br>13.3                            | 2230<br>87.8                           | 28<br>35.3                     | 235<br>9.3                    | 30<br>7.9          | 5.5                             | 6.0  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi     | 6  |      | 8 |  | 10   |      | 145 |  |      |      |
|---------------------------|---------|--|------|---|--|------|------|-----|--|------|------|
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |   |  |      |      |     |  |      |      |
| STATIC                    |         | 3075                                     | 6780 |   |  | 3600 | 7938 |     |  | 4090 | 9018 |
| 10 km/h                   | 6 mp/h  | 2665                                     | 5876 |   |  | 3120 | 6880 |     |  | 3540 | 7806 |
| 25 km/h                   | 15 mp/h | 2050                                     | 4520 |   |  | 2400 | 5292 |     |  | 2725 | 6009 |
| 35 km/h                   | 22 mp/h | 1895                                     | 4178 |   |  | 2220 | 4895 |     |  | 2520 | 5557 |
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |   |  |      |      |     |  |      |      |
| 10 km/h                   | 6 mp/h  | 2665                                     | 5876 |   |  | 3120 | 6880 |     |  | 3540 | 7806 |
| 25 km/h                   | 15 mp/h | 2665                                     | 5876 |   |  | 3120 | 6880 |     |  | 3540 | 7806 |
| 35 km/h                   | 22 mp/h | 2560                                     | 5645 |   |  | 3000 | 6615 |     |  | 3405 | 7508 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]                     | Flap<br>[CAI]        |
|-----------------------------------|-----------------|-----------------------------|----------------------|-----------------------------------|----------------------|
|                                   | 5.5             | 140TL15<br>[454346]         | N/A                  | 7.00 - 15 / 7.50 - 15<br>[812339] | 180 - 15<br>[670236] |

|                          |                 |           |            |             |             |              |            |           |          |     |     |
|--------------------------|-----------------|-----------|------------|-------------|-------------|--------------|------------|-----------|----------|-----|-----|
| <b>7.50 R15 146A5 TL</b> | 110214<br>62488 | 15<br>9.3 | 212<br>8.3 | 771<br>30.4 | 357<br>14.1 | 2352<br>92.6 | 30<br>37.8 | 254<br>10 | 38<br>10 | 6.0 | 6.5 |
|--------------------------|-----------------|-----------|------------|-------------|-------------|--------------|------------|-----------|----------|-----|-----|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi     | 6  |      | 8 |  | 10   |      | 145 |  |      |      |
|---------------------------|---------|--|------|---|--|------|------|-----|--|------|------|
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |   |  |      |      |     |  |      |      |
| STATIC                    |         | 3300                                     | 7277 |   |  | 3930 | 8666 |     |  | 4530 | 9989 |
| 10 km/h                   | 6 mp/h  | 2840                                     | 6262 |   |  | 3380 | 7453 |     |  | 3900 | 8600 |
| 25 km/h                   | 15 mp/h | 2180                                     | 4807 |   |  | 2600 | 5733 |     |  | 3000 | 6615 |
| 35 km/h                   | 22 mp/h | 2020                                     | 4454 |   |  | 2410 | 5314 |     |  | 2780 | 6130 |
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |   |  |      |      |     |  |      |      |
| 10 km/h                   | 6 mp/h  | 2840                                     | 6262 |   |  | 3380 | 7453 |     |  | 3900 | 8600 |
| 25 km/h                   | 15 mp/h | 2840                                     | 6262 |   |  | 3380 | 7453 |     |  | 3900 | 8600 |
| 35 km/h                   | 22 mp/h | 2730                                     | 6020 |   |  | 3250 | 7166 |     |  | 3750 | 8269 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]                     | Flap<br>[CAI]        |
|-----------------------------------|-----------------|-----------------------------|----------------------|-----------------------------------|----------------------|
|                                   | 6.0             | 150TL15<br>[702507]         | N/A                  | 7.00 - 15 / 7.50 - 15<br>[812339] | 180 - 15<br>[670236] |

## TECHNICAL CHARACTERISTICS



| DESCRIPTION              | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|--------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>8.25 R15 153A5 TL</b> | 110218<br>56370 | 15<br>9.3                          | 240<br>9.4                     | 835<br>32.9                     | 385<br>15.2                            | 2543<br>100.1                          | 33<br>41.6                     | 280<br>11                     | 46<br>12.2         | 6.5                             | 7.0<br>7.5   |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi     | 6  |      | 8 |  | 10   |       | 145 |  |      |       |
|---------------------------|---------|--|------|---|--|------|-------|-----|--|------|-------|
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |   |  |      |       |     |  |      |       |
| STATIC                    |         | 4010                                     | 8842 |   |  | 4760 | 10496 |     |  | 5520 | 12172 |
| 10 km/h                   | 6 mp/h  | 3450                                     | 7607 |   |  | 4100 | 9041  |     |  | 4750 | 10474 |
| 25 km/h                   | 15 mp/h | 2650                                     | 5843 |   |  | 3150 | 6946  |     |  | 3650 | 8048  |
| 35 km/h                   | 22 mp/h | 2460                                     | 5424 |   |  | 2920 | 6439  |     |  | 3380 | 7453  |
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |   |  |      |       |     |  |      |       |
| 10 km/h                   | 6 mp/h  | 3450                                     | 7607 |   |  | 4100 | 9041  |     |  | 4750 | 10474 |
| 25 km/h                   | 15 mp/h | 3450                                     | 7607 |   |  | 4100 | 9041  |     |  | 4750 | 10474 |
| 35 km/h                   | 22 mp/h | 3320                                     | 7321 |   |  | 3940 | 8688  |     |  | 4570 | 10077 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]         | Flap<br>[CAI]        |
|-----------------------------------|-----------------|-----------------------------|----------------------|-----------------------|----------------------|
|                                   | 6.5             | 165TL15<br>[575769]         | N/A                  | 8.25 - 15<br>[694949] | 180 - 15<br>[670236] |

|                            |                 |           |            |             |             |              |            |             |         |     |   |
|----------------------------|-----------------|-----------|------------|-------------|-------------|--------------|------------|-------------|---------|-----|---|
| <b>225/75 R15 149A5 TL</b> | 110079<br>55324 | 15<br>9.3 | 225<br>8.9 | 708<br>27.9 | 322<br>12.7 | 2144<br>84.4 | 25<br>31.5 | 259<br>10.2 | 34<br>9 | 7.0 | - |
|----------------------------|-----------------|-----------|------------|-------------|-------------|--------------|------------|-------------|---------|-----|---|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi     | 6  |      | 8 |  | 10   |      | 145 |  |      |       |
|---------------------------|---------|--|------|---|--|------|------|-----|--|------|-------|
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |   |  |      |      |     |  |      |       |
| STATIC                    |         | 3480                                     | 7673 |   |  | 4230 | 9327 |     |  | 4910 | 10827 |
| 10 km/h                   | 6 mp/h  | 2990                                     | 6593 |   |  | 3640 | 8026 |     |  | 4230 | 9327  |
| 25 km/h                   | 15 mp/h | 2300                                     | 5072 |   |  | 2800 | 6174 |     |  | 3250 | 7166  |
| 35 km/h                   | 22 mp/h | 2130                                     | 4697 |   |  | 2590 | 5711 |     |  | 3010 | 6637  |
| Machine - use<br>kg - lbs |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |   |  |      |      |     |  |      |       |
| 10 km/h                   | 6 mp/h  | 2990                                     | 6593 |   |  | 3640 | 8026 |     |  | 4230 | 9327  |
| 25 km/h                   | 15 mp/h | 2990                                     | 6593 |   |  | 3640 | 8026 |     |  | 4230 | 9327  |
| 35 km/h                   | 22 mp/h | 2880                                     | 6350 |   |  | 3500 | 7718 |     |  | 4070 | 8974  |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]                     | Flap<br>[CAI]        |
|-----------------------------------|-----------------|-----------------------------|----------------------|-----------------------------------|----------------------|
|                                   | 7.0             | 175TL15<br>[260511]         | N/A                  | 7.00 - 15 / 7.50 - 15<br>[812339] | 180 - 15<br>[670236] |

## TECHNICAL CHARACTERISTICS



| DESCRIPTION                | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|----------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>250/70 R15 153A5 TL</b> | 110075<br>50988 | 15<br>9.3                          | 250<br>9.8                     | 736<br>29                       | 333<br>13.1                            | 2224<br>87.6                           | 28<br>35.3                     | 288<br>11.3                   | 39<br>10.3         | 7.5                             | 7.0  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                               | Psi     | 6  |      | 8                           |  | 10                   |       | 145                               |  |                      |       |
|-----------------------------------|---------|--|------|-----------------------------|--|----------------------|-------|-----------------------------------|--|----------------------|-------|
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |      |                             |  |                      |       |                                   |  |                      |       |
| STATIC                            |         | 3780                                     | 8335 |                             |  | 4670                 | 10297 |                                   |  | 5520                 | 12172 |
| 10 km/h                           | 6 mp/h  | 3250                                     | 7166 |                             |  | 4020                 | 8864  |                                   |  | 4750                 | 10474 |
| 25 km/h                           | 15 mp/h | 2500                                     | 5513 |                             |  | 3090                 | 6813  |                                   |  | 3650                 | 8048  |
| 35 km/h                           | 22 mp/h | 2320                                     | 5116 |                             |  | 2860                 | 6306  |                                   |  | 3380                 | 7453  |
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |      |                             |  |                      |       |                                   |  |                      |       |
| 10 km/h                           | 6 mp/h  | 3250                                     | 7166 |                             |  | 4020                 | 8864  |                                   |  | 4750                 | 10474 |
| 25 km/h                           | 15 mp/h | 3250                                     | 7166 |                             |  | 4020                 | 8864  |                                   |  | 4750                 | 10474 |
| 35 km/h                           | 22 mp/h | 3130                                     | 6902 |                             |  | 3870                 | 8533  |                                   |  | 4570                 | 10077 |
| MOUNTING ACCESSORIES<br>AVAILABLE |         | Recommended rim                          |      | Tubeless bead seal<br>[CAI] |  | Rubber ring<br>[CAI] |       | Tube<br>[CAI]                     |  | Flap<br>[CAI]        |       |
|                                   |         | 7.5                                      |      | 190TL15<br>[464164]         |  | N/A                  |       | 7.00 - 15 / 7.50 - 15<br>[812339] |  | 180 - 15<br>[670236] |       |

|                            |                 |           |             |           |             |              |            |             |            |     |   |
|----------------------------|-----------------|-----------|-------------|-----------|-------------|--------------|------------|-------------|------------|-----|---|
| <b>315/70 R15 165A5 TL</b> | 110109<br>85047 | 15<br>9.3 | 321<br>12.6 | 839<br>33 | 373<br>14.7 | 2520<br>99.2 | 35<br>44.1 | 369<br>14.5 | 74<br>19.6 | 8.0 | - |
|----------------------------|-----------------|-----------|-------------|-----------|-------------|--------------|------------|-------------|------------|-----|---|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                               | Psi     | 6  |       | 8                           |  | 10                   |       | 145                   |  |                      |       |
|-----------------------------------|---------|--|-------|-----------------------------|--|----------------------|-------|-----------------------|--|----------------------|-------|
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |       |                             |  |                      |       |                       |  |                      |       |
| STATIC                            |         | 5370                                     | 11841 |                             |  | 6570                 | 14487 |                       |  | 7780                 | 17155 |
| 10 km/h                           | 6 mp/h  | 4620                                     | 10187 |                             |  | 5660                 | 12480 |                       |  | 6700                 | 14774 |
| 25 km/h                           | 15 mp/h | 3550                                     | 7828  |                             |  | 4350                 | 9592  |                       |  | 5150                 | 11356 |
| 35 km/h                           | 22 mp/h | 3290                                     | 7254  |                             |  | 4030                 | 8886  |                       |  | 4770                 | 10518 |
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |       |                             |  |                      |       |                       |  |                      |       |
| 10 km/h                           | 6 mp/h  | 4620                                     | 10187 |                             |  | 5660                 | 12480 |                       |  | 6700                 | 14774 |
| 25 km/h                           | 15 mp/h | 4620                                     | 10187 |                             |  | 5660                 | 12480 |                       |  | 6700                 | 14774 |
| 35 km/h                           | 22 mp/h | 4440                                     | 9790  |                             |  | 5440                 | 11995 |                       |  | 6440                 | 14200 |
| MOUNTING ACCESSORIES<br>AVAILABLE |         | Recommended rim                          |       | Tubeless bead seal<br>[CAI] |  | Rubber ring<br>[CAI] |       | Tube<br>[CAI]         |  | Flap<br>[CAI]        |       |
|                                   |         | 8.0                                      |       | 200TL15<br>[609679]         |  | N/A                  |       | 8.25 - 15<br>[694949] |  | 260 - 15<br>[751612] |       |

## TECHNICAL CHARACTERISTICS

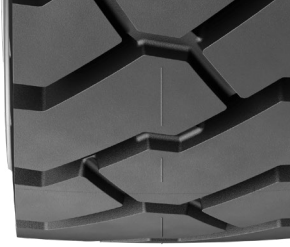


| DESCRIPTION                | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|----------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>355/65 R15 170A5 TL</b> | 003789<br>81758 | 15<br>9.3                          | 355<br>14                      | 842<br>33.1                     | 376<br>14.8                            | 2532<br>99.7                           | 35<br>44.1                     | 408<br>16.1                   | 83<br>21.9         | 9.75                            | -  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                                       | Psi                    | 6  |       | 8                                   |       | 10                           |       |                       |  |                       |  |
|---|------------------------|--|-------|-------------------------------------|-------|------------------------------|-------|-----------------------|--|-----------------------|--|
|   |                        | 87                                       |       | 116                                 |       | 145                          |       |                       |  |                       |  |
| Machine - use<br>kg - lbs                 |                        | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |       |                                     |       |                              |       |                       |  |                       |  |
| <b>STATIC</b>                             |                        | 6190                                     | 13649 | 7630                                | 16824 | 9060                         | 19977 |                       |  |                       |  |
| <b>10 km/h</b>                            | 6 mp/h                 | 5330                                     | 11753 | 6565                                | 14476 | 7800                         | 17199 |                       |  |                       |  |
| <b>25 km/h</b>                            | 15 mp/h                | 4100                                     | 9041  | 5050                                | 11135 | 6000                         | 13230 |                       |  |                       |  |
| <b>35 km/h</b>                            | 22 mp/h                | 3800                                     | 8379  | 4670                                | 10297 | 5550                         | 12238 |                       |  |                       |  |
| Machine - use<br>kg - lbs                 |                        | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |       |                                     |       |                              |       |                       |  |                       |  |
| <b>10 km/h</b>                            | 6 mp/h                 | 5330                                     | 11753 | 6565                                | 14476 | 7800                         | 17199 |                       |  |                       |  |
| <b>25 km/h</b>                            | 15 mp/h                | 5330                                     | 11753 | 6565                                | 14476 | 7800                         | 17199 |                       |  |                       |  |
| <b>35 km/h</b>                            | 22 mp/h                | 5130                                     | 11312 | 6310                                | 13914 | 7500                         | 16538 |                       |  |                       |  |
| <b>MOUNTING ACCESSORIES<br/>AVAILABLE</b> | <b>Recommended rim</b> | 9.75                                     |       | <b>Tubeless bead seal<br/>[CAI]</b> |       | <b>Rubber ring<br/>[CAI]</b> |       | <b>Tube<br/>[CAI]</b> |  | <b>Flap<br/>[CAI]</b> |  |
|   |                        | 9.75                                     |       | 250TL15<br>[026320]                 |       | N/A                          |       | N/A                   |  | N/A                   |  |

## TECHNICAL CHARACTERISTICS



| DESCRIPTION              | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><br>See end of document<br>for more options |
|--------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>9.00 R20 160A5 TL</b> | 110185<br>87259 | 15<br>9.3                          | 271<br>10.7                    | 1033<br>40.7                    | 481<br>18.9                            | 3157<br>124.3                          | 33<br>41.6                     | 325<br>12.8                   | 99<br>26.2         | 7.0                             | 6.5, 7.0T, 7.33V,<br>7.5, B6.5, B7.5,<br>B7.0                                    |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

Bar Psi 6 87 8 116 10 145

#### Machine - use kg - lbs COUNTERBALANCED LIFT TRUCK - STEER WHEEL

| STATIC          | 4840 | 10672 | 5800 | 12789 | 6800 | 14994 |
|-----------------|------|-------|------|-------|------|-------|
| 10 km/h 6 mp/h  | 4160 | 9173  | 5000 | 11025 | 5850 | 12899 |
| 25 km/h 15 mp/h | 3200 | 7056  | 3840 | 8467  | 4500 | 9923  |
| 35 km/h 22 mp/h | 2970 | 6549  | 3560 | 7850  | 4170 | 9195  |
| 40 km/h 25 mp/h | 2850 | 6284  | 3420 | 7541  | 4010 | 8842  |

#### Machine - use kg - lbs COUNTERBALANCED LIFT TRUCK - LOAD WHEEL

|                 |      |      |      |       |      |       |
|-----------------|------|------|------|-------|------|-------|
| 10 km/h 6 mp/h  | 4160 | 9173 | 5000 | 11025 | 5850 | 12899 |
| 25 km/h 15 mp/h | 4160 | 9173 | 5000 | 11025 | 5850 | 12899 |
| 35 km/h 22 mp/h | 4000 | 8820 | 4800 | 10584 | 5620 | 12392 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]         | Flap<br>[CAI]        |
|-----------------------------------|-----------------|-----------------------------|----------------------|-----------------------|----------------------|
|                                   | 7.0             | 175TL20<br>[102087]         | A20<br>[553004]      | 8.25 - 20<br>[437622] | 185 - 20<br>[907771] |

|                           |                 |           |             |            |             |               |            |             |             |     |  |
|---------------------------|-----------------|-----------|-------------|------------|-------------|---------------|------------|-------------|-------------|-----|--|
| <b>10.00 R20 166A5 TL</b> | 110014<br>42890 | 15<br>9.3 | 295<br>11.6 | 1068<br>42 | 495<br>19.5 | 3257<br>128.2 | 35<br>44.1 | 354<br>13.9 | 117<br>30.9 | 7.5 | 7.0, 7.0T, 7.33V,<br>8.0, 8.00V, 8.0V,<br>B7.0, B7.5, B8.0 |
|---------------------------|-----------------|-----------|-------------|------------|-------------|---------------|------------|-------------|-------------|-----|--|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

Bar Psi 6 87 8 116 10 145

#### Machine - use kg - lbs COUNTERBALANCED LIFT TRUCK - STEER WHEEL

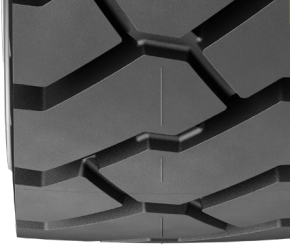
| STATIC          | 5740 | 12657 | 6850 | 15104 | 8010 | 17662 |
|-----------------|------|-------|------|-------|------|-------|
| 10 km/h 6 mp/h  | 4940 | 10893 | 5890 | 12987 | 6890 | 15192 |
| 25 km/h 15 mp/h | 3800 | 8379  | 4530 | 9989  | 5300 | 11687 |
| 35 km/h 22 mp/h | 3520 | 7762  | 4200 | 9261  | 4910 | 10827 |
| 40 km/h 25 mp/h | 3390 | 7475  | 4040 | 8908  | 4720 | 10408 |

#### Machine - use kg - lbs COUNTERBALANCED LIFT TRUCK - LOAD WHEEL

|                 |      |       |      |       |      |       |
|-----------------|------|-------|------|-------|------|-------|
| 10 km/h 6 mp/h  | 4940 | 10893 | 5890 | 12987 | 6890 | 15192 |
| 25 km/h 15 mp/h | 4940 | 10893 | 5890 | 12987 | 6890 | 15192 |
| 35 km/h 22 mp/h | 4750 | 10474 | 5660 | 12480 | 6630 | 14619 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI]         | Flap<br>[CAI]        |
|-----------------------------------|-----------------|-----------------------------|----------------------|-----------------------|----------------------|
|                                   | 7.5             | 190TL20<br>[102083]         | A20<br>[553004]      | 9.00 - 20<br>[052341] | 200 - 20<br>[299014] |

## TECHNICAL CHARACTERISTICS



| DESCRIPTION               | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><i>See end of document<br/>for more options</i> |
|---------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>11.00 R20 169A5 TL</b> | 110189<br>74767 | 15<br>9.3                          | 294<br>11.6                    | 1092<br>43                      | 504<br>19.8                            | 3325<br>130.9                          | 38<br>47.9                     | 353<br>13.9                   | 124<br>32.8        | 8.0                             | 7.33V, 7.5,<br>8.00V, 8.0V, 8.5,<br>8.50V, 8.5V,<br>B7.5, B8.0, B8.5                 |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

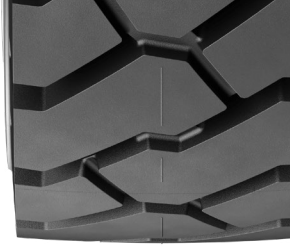
| Bar                               | Psi     | 6 87                                     |                             |  |                      | 8 116 |                        |  |                      | 10 145 |       |
|-----------------------------------|---------|--|-----------------------------|--|----------------------|-------|------------------------|--|----------------------|--------|-------|
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |                             |  |                      |       |                        |  |                      |        |       |
| STATIC                            |         | 6260                                     | 13803                       |  |                      | 7510  | 16560                  |  |                      | 8760   | 19316 |
| 10 km/h                           | 6 mp/h  | 5390                                     | 11885                       |  |                      | 6470  | 14266                  |  |                      | 7540   | 16626 |
| 25 km/h                           | 15 mp/h | 4140                                     | 9129                        |  |                      | 4970  | 10959                  |  |                      | 5800   | 12789 |
| 35 km/h                           | 22 mp/h | 3830                                     | 8445                        |  |                      | 4600  | 10143                  |  |                      | 5370   | 11841 |
| 40 km/h                           | 25 mp/h | 3690                                     | 8136                        |  |                      | 4430  | 9768                   |  |                      | 5170   | 11400 |
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |                             |  |                      |       |                        |  |                      |        |       |
| 10 km/h                           | 6 mp/h  | 5390                                     | 11885                       |  |                      | 6470  | 14266                  |  |                      | 7540   | 16626 |
| 25 km/h                           | 15 mp/h | 5390                                     | 11885                       |  |                      | 6470  | 14266                  |  |                      | 7540   | 16626 |
| 35 km/h                           | 22 mp/h | 5180                                     | 11422                       |  |                      | 6220  | 13715                  |  |                      | 7250   | 15986 |
| MOUNTING ACCESSORIES<br>AVAILABLE |         | Recommended rim                          | Tubeless bead seal<br>[CAI] |  | Rubber ring<br>[CAI] |       | Tube<br>[CAI]          |  | Flap<br>[CAI]        |        |       |
|                                   |         | 8.0                                      | 200TL20<br>[102085]         |  | A20<br>[553004]      |       | 10.00 - 20<br>[300462] |  | 200 - 20<br>[299014] |        |       |

|                           |                 |           |             |              |             |               |            |             |             |     |                                       |
|---------------------------|-----------------|-----------|-------------|--------------|-------------|---------------|------------|-------------|-------------|-----|---------------------------------------|
| <b>12.00 R20 176A5 TL</b> | 110082<br>78891 | 15<br>9.3 | 324<br>12.8 | 1136<br>44.7 | 522<br>20.6 | 3453<br>135.9 | 40<br>50.4 | 389<br>15.3 | 184<br>48.6 | 8.5 | 8.0, 8.50V, 8.5V,<br>9.0, 9.00V, B8.5 |
|---------------------------|-----------------|-----------|-------------|--------------|-------------|---------------|------------|-------------|-------------|-----|---------------------------------------|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                               | Psi     | 6 87                                     |                             |  |                      | 8 116 |                                     |  |                      | 10 145 |       |
|-----------------------------------|---------|--|-----------------------------|--|----------------------|-------|-------------------------------------|--|----------------------|--------|-------|
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |                             |  |                      |       |                                     |  |                      |        |       |
| STATIC                            |         | 7710                                     | 17001                       |  |                      | 9220  | 20330                               |  |                      | 10730  | 23660 |
| 10 km/h                           | 6 mp/h  | 6630                                     | 14619                       |  |                      | 7930  | 17486                               |  |                      | 9230   | 20352 |
| 25 km/h                           | 15 mp/h | 5100                                     | 11246                       |  |                      | 6100  | 13451                               |  |                      | 7100   | 15656 |
| 35 km/h                           | 22 mp/h | 4720                                     | 10408                       |  |                      | 5650  | 12458                               |  |                      | 6570   | 14487 |
| 40 km/h                           | 25 mp/h | 4540                                     | 10011                       |  |                      | 5430  | 11973                               |  |                      | 6320   | 13936 |
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |                             |  |                      |       |                                     |  |                      |        |       |
| 10 km/h                           | 6 mp/h  | 6630                                     | 14619                       |  |                      | 7930  | 17486                               |  |                      | 9230   | 20352 |
| 25 km/h                           | 15 mp/h | 6630                                     | 14619                       |  |                      | 7930  | 17486                               |  |                      | 9230   | 20352 |
| 35 km/h                           | 22 mp/h | 6380                                     | 14068                       |  |                      | 7630  | 16824                               |  |                      | 8880   | 19580 |
| MOUNTING ACCESSORIES<br>AVAILABLE |         | Recommended rim                          | Tubeless bead seal<br>[CAI] |  | Rubber ring<br>[CAI] |       | Tube<br>[CAI]                       |  | Flap<br>[CAI]        |        |       |
|                                   |         | 8.5                                      | 215TL20<br>[102086]         |  | A20<br>[553004]      |       | 11.00 - 20 / 12.00 - 20<br>[179572] |  | 200 - 20<br>[299014] |        |       |

## TECHNICAL CHARACTERISTICS



| DESCRIPTION               | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|---------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>12.00 R24 178A5 TL</b> | 110296<br>42105 | 15<br>9.3                          | 325<br>12.8                    | 1238<br>48.7                    | 570<br>22.4                            | 3766<br>148.3                          | 40<br>50.4                     | 390<br>15.4                   | 208<br>55          | 8.5                             | 8.50V, 9.0,<br>9.00V, B8.5   |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

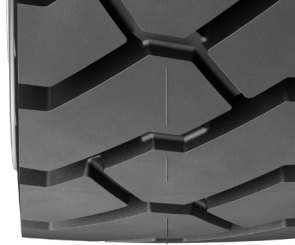
| Bar                               | Psi     | 6  |                             | 8                       |                        | 10                   |       | 145 |  |       |       |
|-----------------------------------|---------|--|-----------------------------|-------------------------|------------------------|----------------------|-------|-----|--|-------|-------|
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |                             |                         |                        |                      |       |     |  |       |       |
| STATIC                            |         | 7710                                     | 17001                       |                         |                        | 9520                 | 20992 |     |  | 11330 | 24983 |
| 10 km/h                           | 6 mp/h  | 6630                                     | 14619                       |                         |                        | 8190                 | 18059 |     |  | 9750  | 21499 |
| 25 km/h                           | 15 mp/h | 5100                                     | 11246                       |                         |                        | 6300                 | 13892 |     |  | 7500  | 16538 |
| 35 km/h                           | 22 mp/h | 4720                                     | 10408                       |                         |                        | 5830                 | 12855 |     |  | 6940  | 15303 |
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |                             |                         |                        |                      |       |     |  |       |       |
| 10 km/h                           | 6 mp/h  | 6630                                     | 14619                       |                         |                        | 8190                 | 18059 |     |  | 9750  | 21499 |
| 25 km/h                           | 15 mp/h | 6630                                     | 14619                       |                         |                        | 8190                 | 18059 |     |  | 9750  | 21499 |
| 35 km/h                           | 22 mp/h | 6380                                     | 14068                       |                         |                        | 7880                 | 17375 |     |  | 9380  | 20683 |
| MOUNTING ACCESSORIES<br>AVAILABLE |         | Recommended rim                          | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI]    | Tube<br>[CAI]          | Flap<br>[CAI]        |       |     |  |       |       |
|                                   |         | 8.5                                      | N/A                         | G25 (R1237)<br>[553012] | 12.00 - 24<br>[128293] | 250 - 24<br>[025752] |       |     |  |       |       |

|                           |                 |           |             |              |             |               |            |             |             |      |                    |
|---------------------------|-----------------|-----------|-------------|--------------|-------------|---------------|------------|-------------|-------------|------|--------------------|
| <b>14.00 R24 193A5 TL</b> | 084179<br>93269 | 15<br>9.3 | 383<br>15.1 | 1416<br>55.7 | 641<br>25.2 | 4280<br>168.5 | 63<br>79.4 | 460<br>18.1 | 247<br>65.3 | 10.0 | 10.00W,<br>10.00WA |
|---------------------------|-----------------|-----------|-------------|--------------|-------------|---------------|------------|-------------|-------------|------|--------------------|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                               | Psi     | 6  |                             | 8                         |                        | 10                   |       | 145 |  |       |       |
|-----------------------------------|---------|--|-----------------------------|---------------------------|------------------------|----------------------|-------|-----|--|-------|-------|
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |                             |                           |                        |                      |       |     |  |       |       |
| STATIC                            |         | 12540                                    | 27651                       |                           |                        | 15100                | 33296 |     |  | 17370 | 38301 |
| 10 km/h                           | 6 mp/h  | 10790                                    | 23792                       |                           |                        | 13000                | 28665 |     |  | 14950 | 32965 |
| 25 km/h                           | 15 mp/h | 8300                                     | 18302                       |                           |                        | 10000                | 22050 |     |  | 11500 | 25358 |
| Machine - use<br>kg - lbs         |         | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |                             |                           |                        |                      |       |     |  |       |       |
| 10 km/h                           | 6 mp/h  | 10790                                    | 23792                       |                           |                        | 13000                | 28665 |     |  | 14950 | 32965 |
| 25 km/h                           | 15 mp/h | 10790                                    | 23792                       |                           |                        | 13000                | 28665 |     |  | 14950 | 32965 |
| MOUNTING ACCESSORIES<br>AVAILABLE |         | Recommended rim                          | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI]      | Tube<br>[CAI]          | Flap<br>[CAI]        |       |     |  |       |       |
|                                   |         | 10.0                                     | N/A                         | OR 3-25 SULLA<br>[553200] | 14.00 - 24<br>[320195] | 250 - 24<br>[025752] |       |     |  |       |       |

## TECHNICAL CHARACTERISTICS



| DESCRIPTION               | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|---------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>16.00 R25 200A5 TL</b> | 123781<br>61590 | 15<br>9.3                          | 443<br>17.4                    | 1531<br>60.3                    | 695<br>27.4                            | 4634<br>182.4                          | 71<br>89.4                     | 532<br>20.9                   | 326<br>86.1        | 11.25/2.0                       | 13.00/2.0  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                               | Psi             | 6  |       | 8                    |       | 10                        |       |               |  |
|-----------------------------------|-----------------|--|-------|----------------------|-------|---------------------------|-------|---------------|--|
|                                   |                 | 87                                       |       | 116                  |       | 145                       |       |               |  |
| Machine - use<br>kg - lbs         |                 | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |       |                      |       |                           |       |               |  |
| STATIC                            |                 | 15600                                    | 34398 | 18225                | 40186 | 21000                     | 46305 |               |  |
| 10 km/h                           | 6 mp/h          | 13520                                    | 29812 | 15800                | 34839 | 18200                     | 40131 |               |  |
| 25 km/h                           | 15 mp/h         | 10400                                    | 22932 | 12150                | 26791 | 14000                     | 30870 |               |  |
| Machine - use<br>kg - lbs         |                 | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |       |                      |       |                           |       |               |  |
| 10 km/h                           | 6 mp/h          | 13520                                    | 29812 | 15800                | 34839 | 18200                     | 40131 |               |  |
| 25 km/h                           | 15 mp/h         | 13520                                    | 29812 | 15800                | 34839 | 18200                     | 40131 |               |  |
| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI]              |       | Rubber ring<br>[CAI] |       | Tube<br>[CAI]             |       | Flap<br>[CAI] |  |
|                                   |                 | 11.25/2.0                                |       | N/A                  |       | OR 3-25 SULLA<br>[553200] |       | N/A           |  |





# MICHELIN XZM 2+



## 1 TREADLIFE

### 15% longer service life <sup>(1)</sup>

The combination of massive tread pattern with a low abrasion rubber compound optimizes wear resistance and provides longer tire life.

## 2 ROBUSTNESS

### Maximize machine uptime with high resistance to impact and puncture

The IND5 technology improves the tire structure and offers additional sidewall protection.

## 3 PRODUCTIVITY

### Drive up to 10 km in an hour at 25 km/h <sup>(2)</sup>

Radial technology is usually the best alternative for operations requiring more productivity with the transport of more tons per hour.

## TIRE CHARACTERISTICS



## ADDITIONAL INFORMATION

### VEHICLE EQUIPMENT



The XZM2+ range has been developed to offer more robustness and to maximize productivity. It remains a highly versatile solution for reach stacker, offering an extended wear life for operations.

- Michelin Port Tires  
Product Manager

<sup>(1)</sup> Compared with the same sized Michelin XZM tire under normal use.

<sup>(2)</sup> Characteristic of the product measured with the TKPH indicator. Distance per hour is directly correlated to the amount of tons transportable in an hour.

### LEARN MORE

ON THE WEB  
[business.michelin.co.uk](https://business.michelin.co.uk)

TESTIMONIALS  
[youtube.com/michelinearthmover](https://youtube.com/michelinearthmover)

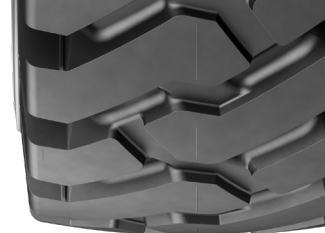
### TOOLS

BEYOND ROAD SELECTOR  
[beyond-road.selector.michelingroup.com/mh](https://beyond-road.selector.michelingroup.com/mh)

### CONTACT

Please contact your local sales representative for more information.

## TECHNICAL CHARACTERISTICS



| DESCRIPTION                      | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|----------------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>18.00 R25 XZM2+A 207A5 TL</b> | 578448<br>98640 | 10<br>6.2                          | 503<br>19.8                    | 1668<br>65.7                    | 751<br>29.6                            | 5032<br>198.1                          | 78<br>98.3                     | 612<br>24.1                   | 470<br>124.2       | 13.00/2.5                       | 15.00/2.5  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

Bar *Psi* 6 87 8 116 10 145

Machine - use  
kg - lbs

MECHANICAL HANDLING, CYCLIC SERVICE: Side loaders and forklift trucks steer axle

|                   |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|
| <b>STATIC</b>     | 18380 | 40528 | 22280 | 49127 | 26250 | 57881 |
| 10 km/h<br>6 mph  | 15930 | 35126 | 19180 | 42292 | 22750 | 50164 |
| 25 km/h<br>15 mph | 12250 | 27011 | 14750 | 32524 | 17500 | 38588 |

Machine - use  
kg - lbs

MECHANICAL HANDLING, CYCLIC SERVICE: Forklift trucks drive axle

|                   |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|
| 10 km/h<br>6 mph  | 15930 | 35126 | 19180 | 42292 | 22750 | 50164 |
| 25 km/h<br>15 mph | 15930 | 35126 | 19180 | 42292 | 22750 | 50164 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI]      | Tube<br>[CAI]      | Flap<br>[CAI] |
|-----------------------------------|-----------------|-----------------------------|---------------------------|--------------------|---------------|
|                                   | 13.00/2.5       | N/A                         | OR 3-25 SULLA<br>[553200] | 25 WAM<br>[944085] | 16-24/25      |

|                                 |                 |           |             |              |             |               |            |             |              |           |   |
|---------------------------------|-----------------|-----------|-------------|--------------|-------------|---------------|------------|-------------|--------------|-----------|---|
| <b>18.00 R33 XZM2+ 214A5 TL</b> | 305696<br>98655 | 10<br>6.2 | 503<br>19.8 | 1841<br>72.5 | 826<br>32.5 | 5547<br>218.4 | 78<br>98.3 | 604<br>23.8 | 520<br>137.4 | 13.00/2.5 | - |
|---------------------------------|-----------------|-----------|-------------|--------------|-------------|---------------|------------|-------------|--------------|-----------|---|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

Bar *Psi* 6 87 8 116 10 145

Machine - use  
kg - lbs

COUNTERBALANCED LIFT TRUCK - STEER WHEEL

|                   |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|
| <b>STATIC</b>     | 22500 | 49613 | 27000 | 59535 | 31800 | 70119 |
| 10 km/h<br>6 mph  | 19500 | 42998 | 23400 | 51597 | 27560 | 60770 |
| 25 km/h<br>15 mph | 15000 | 33075 | 18000 | 39690 | 21200 | 46746 |

Machine - use  
kg - lbs

COUNTERBALANCED LIFT TRUCK - LOAD WHEEL

|                   |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|
| 10 km/h<br>6 mph  | 19500 | 42998 | 23400 | 51597 | 27560 | 60770 |
| 25 km/h<br>15 mph | 19500 | 42998 | 23400 | 51597 | 27560 | 60770 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI] | Flap<br>[CAI] |
|-----------------------------------|-----------------|-----------------------------|----------------------|---------------|---------------|
|                                   | 13.00/2.5       | N/A                         | OR 3-33<br>[553203]  | N/A           | N/A           |

# MICHELIN X STACKER 2



## 1 TREADLIFE

**7% more wear life <sup>(1)</sup>**  
The unique Michelin Dual Compound delivers longer lasting tires.

## 2 ROBUSTNESS

**Excellent wheel interface**  
Introduction of new Michelin B<sup>2</sup>@ technology.

## 3 PRODUCTIVITY

**Drive up to 7 km in an hour at 25 km/h <sup>(2)</sup>**  
Radial technology is usually the best alternative for operations requiring more productivity with the transport of more tons per hour.

## TIRE CHARACTERISTICS



## ADDITIONAL INFORMATION

### VEHICLE EQUIPMENT



The X STACKER 2 delivers impressive hourly performance. This smooth IND5 radial tire offers extra life especially for stacking operations. It provides exceptional robustness and remarkable resistance to aggression.

- Michelin Port Tires  
Product Manager

<sup>(1)</sup> Compared to Michelin X STACKER 18.00R25 tire based on field service evaluation, 2013-2014, in customer port sites; same size and usages.

<sup>(2)</sup> Compared to Michelin X STACKER 18.00R25 tire. Characteristic of the product measured with the TKPH indicator. Distance per hour is directly correlated to the amount of tons transportable in an hour.

### LEARN MORE

**ON THE WEB**  
[business.michelin.co.uk](http://business.michelin.co.uk)

**TESTIMONIALS**  
[youtube.com/michelinearthmover](http://youtube.com/michelinearthmover)

### TOOLS

**BEYOND ROAD SELECTOR**  
[beyond-road.selector.michelingroup.com/mh](http://beyond-road.selector.michelingroup.com/mh)

### CONTACT

Please contact your local sales representative for more information.

# MICHELIN X STACKER 2

## TECHNICAL CHARACTERISTICS

| DESCRIPTION               | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><i>See end of document<br/>for more options</i> |
|---------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>18.00 R25 207A5 TL</b> | 101475<br>26910 | 7<br>4.3                           | 501<br>19.7                    | 1656<br>65.2                    | 750<br>29.5                            | 5006<br>197.1                          | 72<br>90.7                     | 612<br>24.1                   | 465<br>122.9       | 13.00/2.5                       | 15.00/2.5  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi                                      | 6     |       | 8     |       | 10    |       |
|---------------------------|--|-------|-------|-------|-------|-------|-------|
|                           |  | 87    |       | 116   |       | 145   |       |
| Machine - use<br>kg - lbs | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |       |       |       |       |       |       |
| <b>STATIC</b>             |  | 18380 | 40528 | 22280 | 49127 | 26250 | 57881 |
| <b>10 km/h</b> 6 mph      |  | 15930 | 35126 | 19180 | 42292 | 22750 | 50164 |
| <b>25 km/h</b> 15 mph     |  | 12250 | 27011 | 14750 | 32524 | 17500 | 38588 |
| Machine - use<br>kg - lbs | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL  |       |       |       |       |       |       |
| <b>10 km/h</b> 6 mph      |  | 15930 | 35126 | 19180 | 42292 | 22750 | 50164 |
| <b>25 km/h</b> 15 mph     |  | 15930 | 35126 | 19180 | 42292 | 22750 | 50164 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI]      | Tube<br>[CAI]      | Flap<br>[CAI] |
|-----------------------------------|-----------------|-----------------------------|---------------------------|--------------------|---------------|
|                                   | 13.00/2.5       | N/A                         | OR 3-25 SULLA<br>[553200] | 25 WAM<br>[944085] | 16-24/25      |

# MICHELIN X STACKER 3 HD



## 1 ROBUSTNESS

Extra service life in heavy duty conditions <sup>(1)</sup>

Radial structure optimized to endure heavy duty cycles.

## 2 PRODUCTIVITY

Drive up to 12 km in an hour at 25 km/h <sup>(2)</sup>

Radial technology is usually the best alternative for operations requiring more productivity with the transport of more tons per hour.

## 3 TREADLIFE

Reduce downtime with reliable wear life projection <sup>(3)</sup>

Tread wear indicator is now optimized to secure wear life projection and allows to plan the maintenance accordingly.

## TIRE CHARACTERISTICS



## ADDITIONAL INFORMATION

### VEHICLE EQUIPMENTS



Port operators with wide fleets of several reach stackers often operate under tough conditions of load and speed to meet their productivity challenges. Their concern is unexpected machine downtime and they are specifically looking for tires that can help meet these challenges.

- Michelin Port Tires  
Product Manager

<sup>(1)</sup> Compared to XZM2+ and XZM2+A that may be removed with 40% rubber remaining under severe condition. X STACKER 3 HD removed after being 100% worn, resulting in up to 30% extra life time. Data based on quality records, obtained from port operators, between 2017 and 2022.

<sup>(2)</sup> Compared to MICHELIN® 18.00R25 XZM2+ and X STACKER 2 : respective max distance of 10 and 7 km in one hour at 25 km/h max speed. Distance per hour is directly correlated to the amount of tons transportable in an hour.

<sup>(3)</sup> Compared to MICHELIN® 18.00R25 XZM2+/XZM2+A and X STACKER 2 LC. Field study in real life conditions made by Michelin during 7 years in a representative panel of operating terminals in Australia, Europe and Middle East; same size and usages.

### LEARN MORE

ON THE WEB  
[business.michelin.co.uk](https://business.michelin.co.uk)

### TESTIMONIALS

[youtube.com/michelinearthmover](https://youtube.com/michelinearthmover)

### TOOLS

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[beyond-road.selector.michelingroup.com/mh](https://beyond-road.selector.michelingroup.com/mh)

### CONTACT

Please contact your local sales representative for more information.

# MICHELIN X STACKER 3 HD



## TECHNICAL CHARACTERISTICS

| DESCRIPTION                | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|----------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>18.00 R 25 207A5 TL</b> | 397347<br>07703 | 12<br>7.5                          | 503<br>19.8                    | 1659<br>65.3                    | 740<br>29.1                            | 4986<br>196.3                          | 53<br>66.8                     | 600<br>23.6                   | 489<br>129.2       | 13.00/2.5                       | 15.00/2.5  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

Bar Psi 6 87 8 116 10 145

| Machine - use<br>kg - lbs | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |              |  |              |              |  |              |              |
|---------------------------|--|--------------|--|--------------|--------------|--|--------------|--------------|
| <b>STATIC</b>             | <b>18380</b>                             | <b>40528</b> |  | <b>22280</b> | <b>49127</b> |  | <b>26250</b> | <b>57881</b> |
| <b>10 km/h</b> 6 mph      | 15930                                    | 35126        |  | 19180        | 42292        |  | 22750        | 50164        |
| <b>25 km/h</b> 15 mph     | 12250                                    | 27011        |  | 14750        | 32524        |  | 17500        | 38588        |

| Machine - use<br>kg - lbs | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL |       |  |       |       |  |       |       |
|---------------------------|---|-------|--|-------|-------|--|-------|-------|
| <b>10 km/h</b> 6 mph      | 15930                                   | 35126 |  | 19180 | 42292 |  | 22750 | 50164 |
| <b>25 km/h</b> 15 mph     | 15930                                   | 35126 |  | 19180 | 42292 |  | 22750 | 50164 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI]      | Tube<br>[CAI]      | Flap<br>[CAI] |
|-----------------------------------|-----------------|-----------------------------|---------------------------|--------------------|---------------|
|                                   | 13.00/2.5       | N/A                         | OR 3-25 SULLA<br>[553200] | 25 WAM<br>[944085] | 16-24/25      |

|                            |                |           |             |              |             |               |          |             |             |           |  |
|----------------------------|----------------|-----------|-------------|--------------|-------------|---------------|----------|-------------|-------------|-----------|--|
| <b>18.00 R 33 214A5 TL</b> | 530318<br>7703 | 12<br>7.5 | 487<br>19.2 | 1850<br>72.8 | 828<br>32.6 | 5568<br>219.2 | 66<br>83 | 604<br>23.8 | 506<br>17.9 | 13.00/2.5 |  |
|----------------------------|----------------|-----------|-------------|--------------|-------------|---------------|----------|-------------|-------------|-----------|--|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

Bar Psi 6 87 8 116 10 145

| Machine - use<br>kg - lbs | COUNTERBALANCED LIFT TRUCK - STEER WHEEL |              |  |              |              |  |              |              |
|---------------------------|--|--------------|--|--------------|--------------|--|--------------|--------------|
| <b>STATIC</b>             | <b>22500</b>                             | <b>49613</b> |  | <b>27000</b> | <b>59535</b> |  | <b>31800</b> | <b>70119</b> |
| <b>10 km/h</b> 6 mph      | 19500                                    | 42998        |  | 23400        | 51597        |  | 27560        | 60770        |
| <b>25 km/h</b> 15 mph     | 15000                                    | 33075        |  | 18000        | 39690        |  | 21200        | 46746        |

| Machine - use<br>kg - lbs | COUNTERBALANCED LIFT TRUCK - LOAD WHEEL |       |  |       |       |  |       |       |
|---------------------------|---|-------|--|-------|-------|--|-------|-------|
| <b>10 km/h</b> 6 mph      | 19500                                   | 42998 |  | 23400 | 51597 |  | 27560 | 60770 |
| <b>25 km/h</b> 15 mph     | 19500                                   | 42998 |  | 23400 | 51597 |  | 27560 | 60770 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI] | Flap<br>[CAI] |
|-----------------------------------|-----------------|-----------------------------|----------------------|---------------|---------------|
|                                   | 13.00/2.5       | N/A                         | OR 3-33<br>[553203]  | N/A           | N/A           |

# MICHELIN X STRADDLE 2



## 1 TREADLIFE

**15% more wear life <sup>(1)</sup>**  
The massive tread design with 8% more rubber insure the longest tire life.

## 2 LOAD CAPACITY

**Carry up to 18 tons per tire <sup>(2)</sup>**  
Due to an addition of 20% tire inner air volume.

## 3 PRODUCTIVITY

**Drive up to 15 km in an hour at 25 km/h <sup>(3)</sup>**  
Radial technology is usually the best alternative for operations requiring more productivity with the transport of more tons per hour.

## TIRE CHARACTERISTICS

## ADDITIONAL INFORMATION



### VEHICLE EQUIPMENT



X STRADDLE 2 offers extended life with heavy load and high speed. Some terminals have confirmed reduced tire maintenance.

- Michelin Port Tires  
Product Manager

<sup>(1)</sup> Compared to MICHELIN X STRADDLE 480/95R25, average performance by port site, between 2008-2012. Projected improvement in tire life based on field performance in customer port sites of the MICHELIN X STRADDLE 2 450/95R25 compared to the MICHELIN X STRADDLE 16.00R25, that included individual design improvements incorporated into the MICHELIN X STRADDLE 2 480/95R25.

<sup>(2)</sup> At the nominal pressure of 10 bars and carry 17 Tons from 22km/h to 25km/h. The addition of tire inner volume is compared to MICHELIN X STRADDLE 16.00R25 and MICHELIN X STRADDLE 2 450/95R25 tires.

<sup>(3)</sup> Compared to MICHELIN X STRADDLE 480/95R25: max distance of 12 kilometers in one hour and 30 mi/h max speed. Characteristic of the product measured with the TKPH indicator. Distance per hour is directly correlated to the amount of tons transportable in an hour.

### LEARN MORE

**ON THE WEB**  
[business.michelin.co.uk](https://business.michelin.co.uk)

**TESTIMONIALS**  
[youtube.com/michelinearthmover](https://youtube.com/michelinearthmover)

### TOOLS

**BEYOND ROAD SELECTOR**  
[beyond-road.selector.michelingroup.com/mh](https://beyond-road.selector.michelingroup.com/mh)

### CONTACT

Please contact your local sales representative for more information.



# MICHELIN X STRADDLE 2

## TECHNICAL CHARACTERISTICS



| DESCRIPTION                | CAI<br>[MSPN]   | Max. dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><i>See end of document<br/>for more options</i> |
|----------------------------|-----------------|-------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>450/95 R25 202A7 TL</b> | 278967<br>38706 | 15<br>9.3                           | 422<br>16.6                    | 1510<br>59.4                    | 670<br>26.4                            | 4530<br>178.3                          | 50<br>63                       | -<br>-                        | 342<br>90.4        | 11.25/2.0                       | 13.00/2.0  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                               | Psi              | 6 87  |                             | 8 116 |                           | 10 145 |               |  |               |       |       |
|-----------------------------------|------------------|-------|-----------------------------|-------|---------------------------|--------|---------------|--|---------------|-------|-------|
| Machine - use<br>kg - lbs         | STRADDLE CARRIER |       |                             |       |                           |        |               |  |               |       |       |
| 22 km/h<br>14 mph                 |                  | 10630 | 23439                       |       |                           | 13150  | 28996         |  |               | 15750 | 34729 |
| 25 km/h<br>16 mph                 |                  | 10125 | 22326                       |       |                           | 12525  | 27618         |  |               | 15000 | 33075 |
| 35 km/h<br>22 mph                 |                  | 9370  | 20661                       |       |                           | 11590  | 25556         |  |               | 13875 | 30594 |
| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim  |       | Tubeless bead seal<br>[CAI] |       | Rubber ring<br>[CAI]      |        | Tube<br>[CAI] |  | Flap<br>[CAI] |       |       |
|                                   | 11.25/2.0        |       | N/A                         |       | OR 3-25 SULLA<br>[553200] |        | N/A           |  | N/A           |       |       |

|                            |                 |           |             |              |           |               |          |             |              |           |                 |
|----------------------------|-----------------|-----------|-------------|--------------|-----------|---------------|----------|-------------|--------------|-----------|-----------------|
| <b>480/95 R25 206A7 TL</b> | 653072<br>07011 | 15<br>9.3 | 467<br>18.4 | 1553<br>61.1 | 687<br>27 | 4655<br>183.3 | 50<br>63 | 580<br>22.8 | 410<br>108.3 | 13.00/2.5 | 11.25/2.0 [1.7] |
|----------------------------|-----------------|-----------|-------------|--------------|-----------|---------------|----------|-------------|--------------|-----------|-----------------|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                               | Psi              | 6 87  |                             | 8 116 |                           | 10 145 |               |  |               |       |       |
|-----------------------------------|------------------|-------|-----------------------------|-------|---------------------------|--------|---------------|--|---------------|-------|-------|
| Machine - use<br>kg - lbs         | STRADDLE CARRIER |       |                             |       |                           |        |               |  |               |       |       |
| 22 km/h<br>14 mph                 |                  | 11970 | 26394                       |       |                           | 14900  | 32855         |  |               | 17850 | 39359 |
| 25 km/h<br>16 mph                 |                  | 11400 | 25137                       |       |                           | 14200  | 31311         |  |               | 17000 | 37485 |
| 35 km/h<br>22 mph                 |                  | 10545 | 23252                       |       |                           | 13135  | 28963         |  |               | 15725 | 34674 |
| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim  |       | Tubeless bead seal<br>[CAI] |       | Rubber ring<br>[CAI]      |        | Tube<br>[CAI] |  | Flap<br>[CAI] |       |       |
|                                   | 13.00/2.5        |       | N/A                         |       | OR 3-25 SULLA<br>[553200] |        | N/A           |  | N/A           |       |       |

|                               |                 |           |             |              |           |               |          |             |              |           |                 |
|-------------------------------|-----------------|-----------|-------------|--------------|-----------|---------------|----------|-------------|--------------|-----------|-----------------|
| <b>480/95 R25 206A7 TL CC</b> | 723367<br>07011 | 15<br>9.3 | 467<br>18.4 | 1553<br>61.1 | 687<br>27 | 4655<br>183.3 | 50<br>63 | 580<br>22.8 | 410<br>108.3 | 13.00/2.5 | 11.25/2.0 [1.7] |
|-------------------------------|-----------------|-----------|-------------|--------------|-----------|---------------|----------|-------------|--------------|-----------|-----------------|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                               | Psi                              | 6 87  |                             | 8 116 |                           | 10 145 |               |  |               |       |       |
|-----------------------------------|----------------------------------|-------|-----------------------------|-------|---------------------------|--------|---------------|--|---------------|-------|-------|
| Machine - use<br>kg - lbs         | STRADDLE CARRIER (INTENSE USAGE) |       |                             |       |                           |        |               |  |               |       |       |
| 22 km/h<br>14 mph                 |                                  | 11970 | 26394                       |       |                           | 14900  | 32855         |  |               | 17850 | 39359 |
| 25 km/h<br>16 mph                 |                                  | 11400 | 25137                       |       |                           | 14200  | 31311         |  |               | 17000 | 37485 |
| 35 km/h<br>22 mph                 |                                  | 10545 | 23252                       |       |                           | 13135  | 28963         |  |               | 15725 | 34674 |
| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim                  |       | Tubeless bead seal<br>[CAI] |       | Rubber ring<br>[CAI]      |        | Tube<br>[CAI] |  | Flap<br>[CAI] |       |       |
|                                   | 13.00/2.5                        |       | N/A                         |       | OR 3-25 SULLA<br>[553200] |        | N/A           |  | N/A           |       |       |

# MICHELIN X TERMINAL T



## 1 VERSATILITY

### Simplify your operations

Equip all terminal tractors and trailers with the same size and tread.

## 2 PRODUCTIVITY

### Minimize downtime

Tubeless tire with steel radial structure. This construction provides high puncture resistance.

## 3 SAFETY

### High level of grip for an excellent performance on wet ground

Radial structure with optimized tread pattern for enhanced ground contact (additional antistatic properties).

## TIRE CHARACTERISTICS



## ADDITIONAL INFORMATION

### VEHICLE EQUIPMENT



The X TERMINAL T is the leading solution in combining exceptional puncture resistance with outstanding long life.

- Michelin Port Tires  
Product Manager

### LEARN MORE

ON THE WEB  
[business.michelin.co.uk](https://business.michelin.co.uk)

TESTIMONIALS  
[youtube.com/michelinearthmover](https://youtube.com/michelinearthmover)

### TOOLS

BEYOND ROAD SELECTOR  
[beyond-road.selector.michelingroup.com/mh](https://beyond-road.selector.michelingroup.com/mh)

### CONTACT

Please contact your local sales representative for more information.

# MICHELIN X TERMINAL T



## TECHNICAL CHARACTERISTICS

| DESCRIPTION                  | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|------------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>280/75 R22.5 168A8 TL</b> | 004371<br>33193 | 20<br>12.4                         | 279<br>11                      | 995<br>39.2                     | 447<br>17.6                            | 3000<br>118.1                          | 31<br>39.1                     | 326<br>12.8                   | 85<br>22.5         | 8.25                            | -  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi    |                  |       |  |  | 8    | 116   |  |  |      | 10    | 145 |  |
|---------------------------|--------|------------------|-------|--|--|------|-------|--|--|------|-------|-----|--|
| Machine - use<br>kg - lbs |        | TERMINAL TRACTOR |       |  |  |      |       |  |  |      |       |     |  |
| <b>STATIC</b>             |        | 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 |     |  |
| 35 km/h                   | 22 mph | 4200             | 9261  |  |  | 5300 | 11687 |  |  | 6300 | 13892 |     |  |
| 40 km/h                   | 25 mph | 3750             | 8269  |  |  | 4675 | 10308 |  |  | 5600 | 12348 |     |  |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI] | Flap<br>[CAI] |
|-----------------------------------|-----------------|-----------------------------|----------------------|---------------|---------------|
|                                   | 8.25            | N/A                         | N/A                  | N/A           | N/A           |

|                              |                 |            |             |              |           |               |            |           |             |     |   |
|------------------------------|-----------------|------------|-------------|--------------|-----------|---------------|------------|-----------|-------------|-----|---|
| <b>310/80 R22.5 175A8 TL</b> | 278144<br>03379 | 20<br>12.4 | 307<br>12.1 | 1084<br>42.7 | 483<br>19 | 3257<br>128.2 | 30<br>37.8 | 355<br>14 | 116<br>30.6 | 9.0 | - |
|------------------------------|-----------------|------------|-------------|--------------|-----------|---------------|------------|-----------|-------------|-----|---|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi    |                  |       |  |  | 8    | 116   |  |  |       | 10    | 145 |  |
|---------------------------|--------|------------------|-------|--|--|------|-------|--|--|-------|-------|-----|--|
| Machine - use<br>kg - lbs |        | TERMINAL TRACTOR |       |  |  |      |       |  |  |       |       |     |  |
| <b>STATIC</b>             |        | 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 |     |  |
| 35 km/h                   | 22 mph | 5080             | 11201 |  |  | 6420 | 14156 |  |  | 7760  | 17111 |     |  |
| 40 km/h                   | 25 mph | 4450             | 9812  |  |  | 5675 | 12513 |  |  | 6900  | 15215 |     |  |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI] | Flap<br>[CAI] |
|-----------------------------------|-----------------|-----------------------------|----------------------|---------------|---------------|
|                                   | 9.0             | N/A                         | N/A                  | N/A           | N/A           |

|                                  |                 |            |             |              |           |               |            |           |             |     |   |
|----------------------------------|-----------------|------------|-------------|--------------|-----------|---------------|------------|-----------|-------------|-----|---|
| <b>310/80 R22.5 175A8 TL MEC</b> | 508353<br>03379 | 20<br>12.4 | 307<br>12.1 | 1084<br>42.7 | 483<br>19 | 3257<br>128.2 | 30<br>37.8 | 355<br>14 | 116<br>30.6 | 9.0 | - |
|----------------------------------|-----------------|------------|-------------|--------------|-----------|---------------|------------|-----------|-------------|-----|---|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

| Bar                       | Psi    |                                  |       |  |  | 8    | 116   |  |  |       | 10    | 145 |  |
|---------------------------|--------|----------------------------------|-------|--|--|------|-------|--|--|-------|-------|-----|--|
| Machine - use<br>kg - lbs |        | TERMINAL TRACTOR (INTENSE USAGE) |       |  |  |      |       |  |  |       |       |     |  |
| <b>STATIC</b>             |        | 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 |     |  |
| 35 km/h                   | 22 mph | 5080                             | 11201 |  |  | 6420 | 14156 |  |  | 7760  | 17111 |     |  |
| 40 km/h                   | 25 mph | 4450                             | 9812  |  |  | 5675 | 12513 |  |  | 6900  | 15215 |     |  |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI] | Tube<br>[CAI] | Flap<br>[CAI] |
|-----------------------------------|-----------------|-----------------------------|----------------------|---------------|---------------|
|                                   | 9.0             | N/A                         | N/A                  | N/A           | N/A           |



## 1 ROBUSTNESS

### Optimize machine uptime

New generation of radial tire, developed to ensure maximal reliability on automated machines.

## 2 TREADLIFE

### Improve service life <sup>(1)</sup>

Smooth pattern designed with specific rubber compound for an optimized tire life.

## 3 ENERGY EFFICIENCY

### Get up to 40% reduction in rolling resistance <sup>(2)</sup>

Specifically designed radial structure with low resistance overall rubber compounds.

## TIRE CHARACTERISTICS



## ADDITIONAL INFORMATION

### VEHICLE EQUIPMENT



Energy efficiency and productivity are key points for port operation competitiveness. Advanced automated systems and electrification of ports are answering this demand. This calls for tires capable of smooth and continuous operations with the lowest energy consumption possible and an outstanding wear life. Our new X AGV<sup>EV</sup> tires fully support these challenges.

- Michelin Port Tires  
Product Manager

<sup>(1)</sup> Expect to be in operations over 20,000 hours / 4 years under standard operation. Tire tested in real conditions, port of Rotterdam, from 2020 to 2021.

<sup>(2)</sup> Compared to premium BIAS and Radial tires on AGV market. Rolling resistance measured in Michelin Center, in Ladoux, from 2020 to 2021.

### LEARN MORE

ON THE WEB  
[business.michelin.co.uk](https://business.michelin.co.uk)

TESTIMONIALS  
[youtube.com/michelinearthmover](https://youtube.com/michelinearthmover)

### TOOLS

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[beyond-road.selector.michelingroup.com/mh](https://beyond-road.selector.michelingroup.com/mh)

### CONTACT

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## TECHNICAL CHARACTERISTICS

| DESCRIPTION             | CAI<br>[MSPN]   | Max.dist./<br>hour<br>km<br>[mile] | Section<br>width<br>mm<br>[in] | Outer<br>diameter<br>mm<br>[in] | Static<br>load<br>radius<br>mm<br>[in] | Rolling<br>circumference<br>mm<br>[in] | Tread<br>depth<br>mm<br>[32rd] | Dual<br>spacing<br>mm<br>[in] | Cap<br>liter [gal] | Measuring<br>recommended<br>rim | Other approved<br>rims<br>mm [in]<br><small>See end of document<br/>for more options</small> |
|-------------------------|-----------------|------------------------------------|--------------------------------|---------------------------------|--|--|--------------------------------|-------------------------------|--------------------|---------------------------------|--|
| <b>18.00 R 25 207A5</b> | 677019<br>26910 | 14<br>8.7                          | 506<br>19.9                    | 1656<br>65.2                    | 750<br>29                              | 5006<br>197                            | 40<br>50                       | 612<br>24.1                   | 534<br>141.2       | 13.00/2.5                       | 15.00/2.5  |

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

Bar Psi 6 87 8 116 10 145

Machine - use  
kg - lbs

#### CONTAINER TRANSPORTER PLATFORMS (AGV) - RATED LOAD

|                       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|
| <b>STATIC</b>         | 18380 | 40528 | 22280 | 49127 | 26250 | 57881 |
| <b>10 km/h</b> 6 mph  | 15930 | 35126 | 19180 | 42292 | 22750 | 50164 |
| <b>25 km/h</b> 15 mph | 12250 | 27011 | 14750 | 32524 | 17500 | 38588 |

Machine - use  
kg - lbs

#### CONTAINER TRANSPORTER PLATFORM (AGV) - MAX CYCLIC LOAD

|                       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|
| <b>10 km/h</b> 6 mph  | 18380 | 40528 | 22280 | 49127 | 26250 | 57881 |
| <b>25 km/h</b> 15 mph | 15930 | 35126 | 19180 | 42292 | 22750 | 50164 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI]      | Tube<br>[CAI]      | Flap<br>[CAI] |
|-----------------------------------|-----------------|-----------------------------|---------------------------|--------------------|---------------|
|                                   | 13.00/2.5       | N/A                         | OR 3-25 SULLA<br>[553200] | 25 WAM<br>[944085] | 16-24/25      |

### 21.00 R 25 213A5

|                 |           |           |              |           |             |          |             |              |           |   |
|-----------------|-----------|-----------|--------------|-----------|-------------|----------|-------------|--------------|-----------|---|
| 043270<br>24573 | 14<br>8.7 | 559<br>22 | 1744<br>68.7 | 750<br>29 | 5006<br>197 | 40<br>50 | 742<br>29.2 | 686<br>181.2 | 15.00/3.0 | - |
|-----------------|-----------|-----------|--------------|-----------|-------------|----------|-------------|--------------|-----------|---|

### LOAD CAPACITY BASED ON INFLATION PRESSURE AND SPEED

Bar Psi 6 87 8 116 10 145

Machine - use  
kg - lbs

#### CONTAINER TRANSPORTER PLATFORMS (AGV) - RATED LOAD

|                       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|
| <b>STATIC</b>         | 21000 | 46305 | 24800 | 54684 | 30900 | 68135 |
| <b>10 km/h</b> 6 mph  | 19000 | 41895 | 22000 | 48510 | 26780 | 59050 |
| <b>25 km/h</b> 15 mph | 14000 | 30870 | 17400 | 38367 | 20600 | 45423 |

Machine - use  
kg - lbs

#### CONTAINER TRANSPORTER PLATFORM (AGV) - MAX CYCLIC LOAD

|                       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|
| <b>10 km/h</b> 6 mph  | 19000 | 41895 | 22000 | 48510 | 26780 | 59050 |
| <b>25 km/h</b> 15 mph | 19000 | 41895 | 22000 | 48510 | 26780 | 59050 |

| MOUNTING ACCESSORIES<br>AVAILABLE | Recommended rim | Tubeless bead seal<br>[CAI] | Rubber ring<br>[CAI]      | Tube<br>[CAI] | Flap<br>[CAI] |
|-----------------------------------|-----------------|-----------------------------|---------------------------|---------------|---------------|
|                                   | 15.00/3.0       | N/A                         | OR 3-25 SULLA<br>[553200] | N/A           | N/A           |



## **SPECIFIC APPLICATIONS**

Please note that 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. When the electrical resistance measured according to ISO 16292 or WDK 110 standards is lower than  $10^6$  Ohms, then the tire is called 'dissipative' and its sidewall features the following symbol.



## **PERFORMANCE**

Any and all tire performance claims or comparisons contained herein are for informational purposes only to aid in the selection of a tire and **do not** constitute any form of performance guarantee or warranty. Individual results may vary. Such information may not be used as a basis for any performance guarantee or warranty claim.

# MICHELIN TECHNICAL DATA

INDUSTRIAL PNEUMATIC TIRES  
RADIAL TECHNOLOGY

## TECHNICAL INFORMATION

### TIRE CONSTRUCTION

|                                     |         |
|-------------------------------------|---------|
| DIAGONAL OR BIAS TIRES CONSTRUCTION | PAGE 41 |
| RADIAL TIRES CONSTRUCTION           | PAGE 42 |
| SOLID TIRES CONSTRUCTION            | PAGE 43 |

### GENERAL INFORMATION

|   |         |
|---|---------|
| DIFFERENT TIRE SERIES                             | PAGE 44 |
| DIFFERENT TIRE SIZE DESIGNATIONS                  | PAGE 44 |
| TIRE MARKING                                      | PAGE 45 |
| LOAD INDEX AND SPEED SYMBOL                       | PAGE 46 |
| READING GUIDE FOR PRESSURE, LOAD AND USAGE TABLES | PAGE 46 |

### LOAD CAPACITY FUNCTION OF SPEED FOR VARIOUS APPLICATIONS

|                |         |
|----------------|---------|
| CYCLIC SERVICE | PAGE 47 |
|----------------|---------|

### ADVICE AND RECOMMENDATIONS ON THE USE OF MANUFACTURING TIRES

|                         |         |
|-------------------------|---------|
| INSERTS AND SOLID FILLS | PAGE 48 |
| NITROGEN INFLATION      | PAGE 48 |

### OTHER RADIAL TIRES USED FOR MECHANICAL HANDLING

|                  |         |
|------------------|---------|
| CONDITION OF USE | PAGE 49 |
|------------------|---------|

### TUBELESS BEAD SEAL

|  |         |
|--|---------|
| MICHELIN TUBELESS BEAD SEAL 8" TO 20" RIMS | PAGE 50 |
| SIZE MARKING                               | PAGE 51 |
| APPROVED RIMS                              | PAGE 52 |
| APPROVED RIMS FOR MANUFACTURING            | PAGE 53 |
| FLAP + TUBE SOLUTION                       | PAGE 54 |
| CORNER SEAL AND O-RING SOLUTION            | PAGE 55 |
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| TRUCK-TYPE VALVE                           | PAGE 57 |
| TYPES OF TUBELESS EARTHMOVER VALVES        | PAGE 58 |
| EARTHMOVER TUBELESS VALVE                  | PAGE 59 |

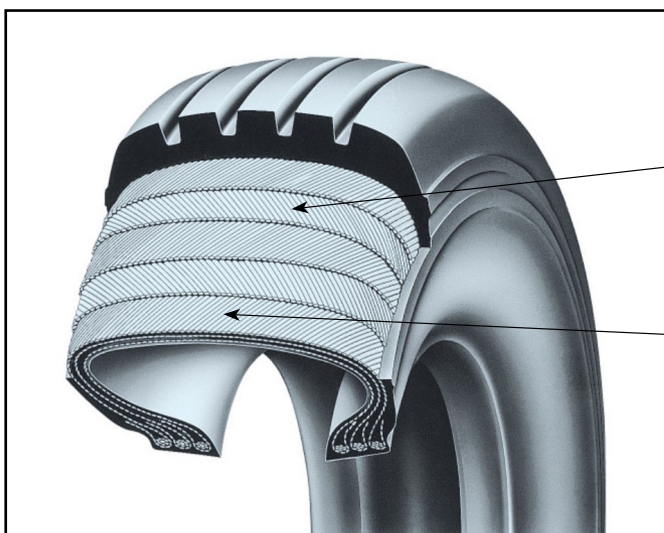
### APPROXIMATE LOOSE MATERIAL DENSITIES

|  |         |
|--|---------|
| UNITS OF MEASURE AND CONVERSION TABLES | PAGE 60 |
|--|---------|



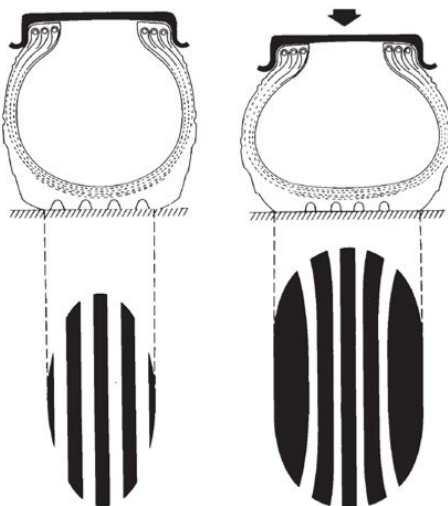
# TIRE CONSTRUCTION

## DIAGONAL OR BIAS TIRES CONSTRUCTION



Crown and sidewalls functions are not differentiated

The casing is made of several textile plies positioned in a crisscross manner



### GOOD TO KNOW

Important heat buildup



Reduced productivity  
(Low transport distance)

Parasite frictions with the ground  
High distortion of the tire footprint



**Low wear performance**

# TIRE CONSTRUCTION

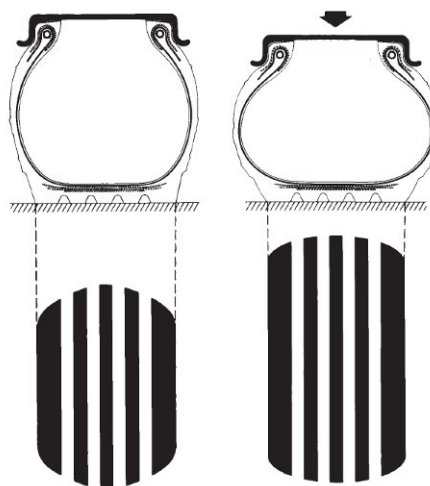
## RADIAL TIRES CONSTRUCTION



The crown belt is made of several working and protecting steel plies.

The casing is made of steel with a double protection at the sidewall.

**CROWN AND  
SIDEWALLS  
ARE WORKING  
SEPARATELY**



### GOOD TO KNOW

Low heat buildup



Extended productivity  
(Long transport distance)

Even frictions with the ground



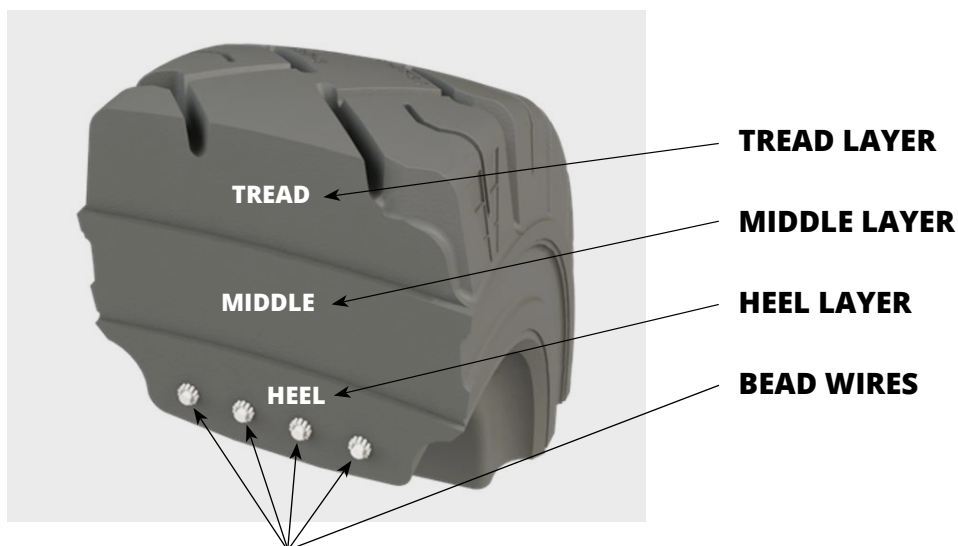
Low distortion of the footprint



**Improved wear performance**

# TIRE CONSTRUCTION

## SOLID TIRES CONSTRUCTION



## 2 DIFFERENT TIRE FITMENTS / MODELS:

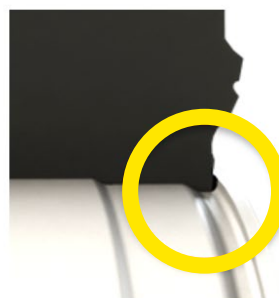
### STANDARD HEEL

Need all rim component to be fitted.  
(Flange, lockring, bead seat band)



### QUICK HEEL

The tire profile self locks in the rim hub.  
No need of further rim components.



## GOOD TO KNOW

High heat buildup



Low intensity  
(Limited transport distance)

Reduced tire footprint



Low wear performance (h/mm)

No inflation pressure



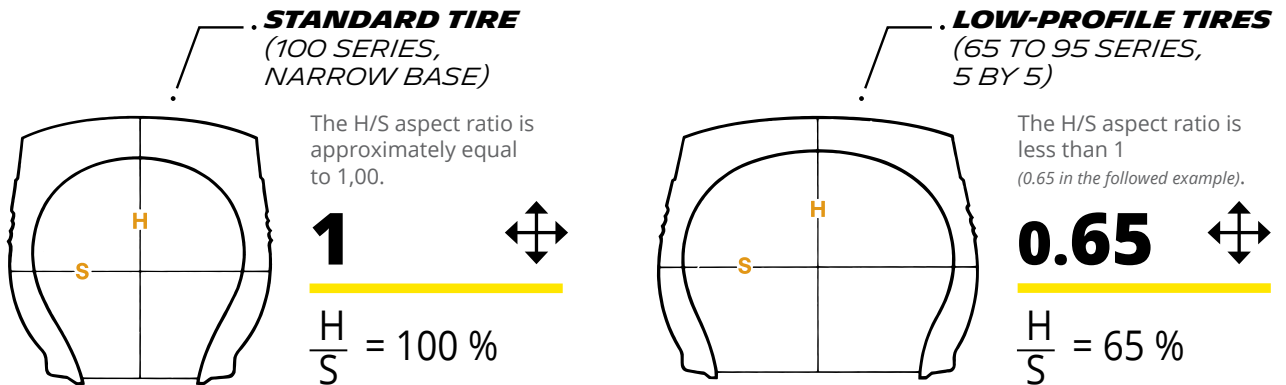
Maintenance free product

# GENERAL INFORMATION

## THE DIFFERENT TIRE SERIES

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

**H** = standard section height **S** = standard section width



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


| RIM DIAMETER   | TIRE TECHNOLOGY / SIZE EQUIVALENT MARKINGS |                         |             | SIZE DETAILS |      |      |              |              |     |        |
|----------------|--|-------------------------|-------------|--------------|------|------|--------------|--------------|-----|--------|
|                | SOLID                                      | BIAS                    | RADIAL      | OD           | SW   |      | ASPECT RATIO | RIM DIAMETER | LI  | SI     |
|                |  |                         |             | (in)         | (in) | (mm) | (H/S)        | (in)         |     | (ETRT) |
| 4              | 4.80 - 4                                   | 4.00 - 4                |             |              | 4    |      |              | 4            |     |        |
| 8              | 4.80 - 8                                   | 4.00 - 8                |             |              | 4    |      |              | 8            |     |        |
|                | 5.70 - 8                                   | 5.00 - 8                | 5.00 R 8    |              | 5    |      |              | 8            | 111 | AS     |
|                | 15 x 4.5 - 8                               | 125/75 - 8              |             | 15           | 4.5  | 125  | 75           | 8            |     |        |
|                | 16 x 6 - 8                                 | 150/75 - 8              | 150/75 R 8  | 16           | 6    | 150  | 75           | 8            | 113 | AS     |
| 9              | 18 x 7 - 8                                 | 180/70 - 8              | 180/70 R 8  | 18           | 7    | 180  | 70           | 8            | 125 | AS     |
|                | 6.90 - 9                                   | 6.00 - 9 (6.90 - 9)     | 6.00 R 9    |              | 6    |      |              | 9            | 134 | AS     |
| 10             | 21 x 8 - 9                                 | 200/75 - 9              | 200/75 R 9  | 21           | 8    | 200  | 75           | 9            | 121 | AS     |
|                |  | 6.50 - 10               | 6.50 R 10   |              | 6.5  |      |              | 10           | 128 | AS     |
| 12             | 23 x 9 - 10                                | 225/75 - 10             | 225/75 R 10 | 23           | 9    | 225  | 75           | 10           | 142 | AS     |
|                |  | 7.00 - 12               | 7.00 R 12   |              | 7    |      |              | 12           | 136 | AS     |
|                | 23 x 10 - 12                               | 250/60 - 12             | 250/60 R 12 | 23           | 10   | 250  | 60           | 12           |     |        |
| 15             | 27 x 10 - 12                               | 250/75 - 12             | 250/75 R 12 | 27           | 10   | 250  | 75           | 12           | 152 | AS     |
|                |  | 7.00 - 15               | 7.00 R 15   |              | 7    |      |              | 15           | 143 | AS     |
|                |  | 7.50 - 15               | 7.50 R 15   |              | 7.5  |      |              | 15           | 146 | AS     |
|                | 28 x 9 - 15                                | 225/75 - 15 (8.15 - 15) | 225/75 R 15 | 28           | 9    | 225  | 75           | 15           | 149 | AS     |
|                |  | 8.25 - 15               | 8.25 R 15   |              | 8.25 |      |              | 15           | 153 | AS     |
|                |  | 250/70 - 15 (250 - 15)  | 250/70 R 15 |              | 10   | 250  | 70           | 15           | 153 | AS     |
|                |  | 315/70 - 15 (300 - 15)  | 315/70 R 15 |              | 10   | 315  | 70           | 15           | 165 | AS     |
| 28 x 12.5 - 15 | 355/45 - 15                                |                         | 28          | 12.5         | 355  | 45   | 15           |              |     |        |
| 32 x 12.1 - 15 |  | 355/65 R 15             | 32          | 12.1         | 355  | 65   | 15           | 175          | AS  |        |

OD: Outer Diameter    S/SW: Section Width    H/HS: Section High    LI: Load Index    SI: Speed Index    PR: Ply Rating

# TIRE MARKING



*For special conditions usage, please consult us.*

|   |   |
|---|---|
| MICHELIN®   | Manufacturer                                    |
| 15  | Nominal section width in inches                 |
| 25  | Tire aspect ratio (H/S = 0,65)                  |
| R   | Radial construction                             |
| STABIL'X  | Old name of the family being deleted            |
| XZM   | XZM range name                                  |
| 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            |

## FOR MORE DETAILS CONCERNING:

Choice of tire, use of tire, fitting, operation pressure and storage and maintenance, consult **USE AND MAINTENANCE GUIDE FOR MICHELIN EARTHMOVER TIRES.**



## 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 | LOAD INDEX | LOAD IN KG | LOAD INDEX | LOAD IN KG | LOAD INDEX | LOAD IN KG | LOAD INDEX | LOAD IN KG | 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 corresponds 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 defined as **mechanical handling, cyclic service**.

# LOAD CAPACITY FUNCTION OF SPEED

FOR VARIOUS APPLICATIONS\*

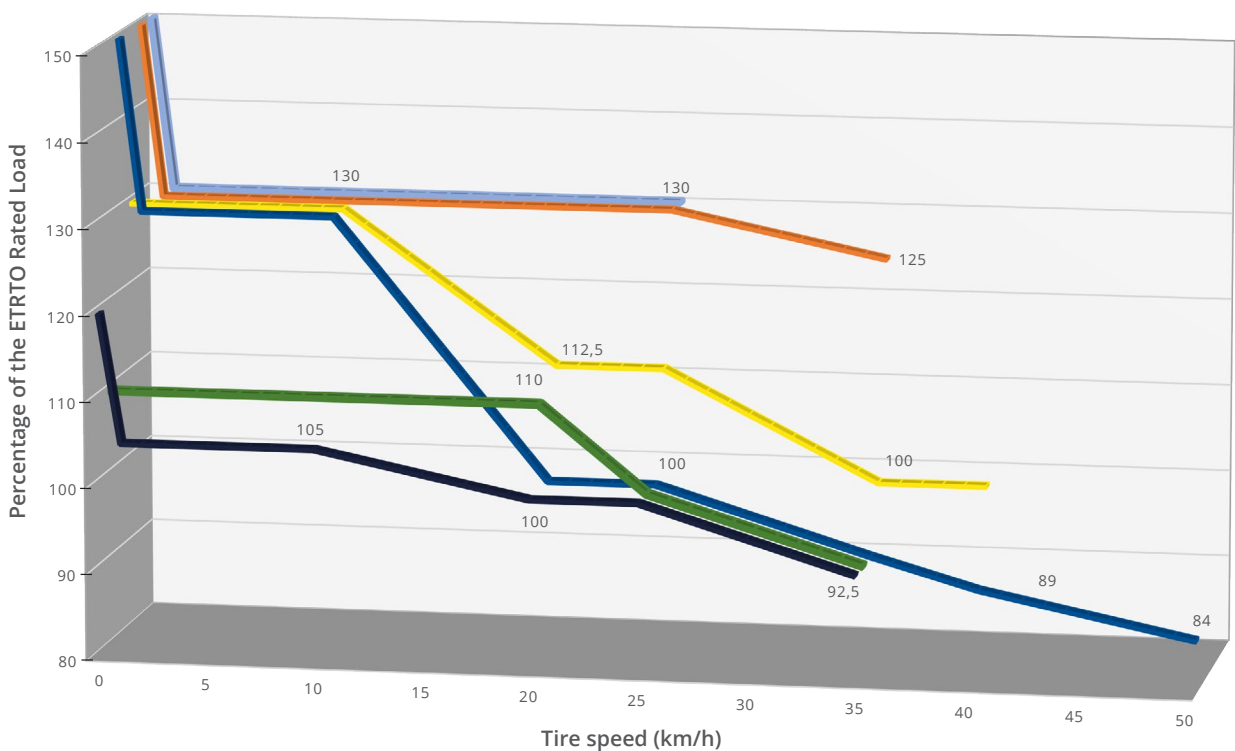
## CYCLIC SERVICE

**CYCLIC SERVICE** covers usages where tires are not used continuously at their rated speed and load. Vehicle usually operate one way loaded and one way empty (e.g. Forklifts, Terminal Tractors, Straddle Carriers, ...).

All axles of the vehicle may not be submitted to the same load, and this is the reason why an extra 30% load capacity can be authorized on the front axles (load wheels) of counter balanced forklift trucks when the rear axles (steering wheels) holding the counterweight permanently will be limited to the 105% its rated load only.

The following graphic describes those of the main usage in material handling.

Counter Balanced Forklift truck prevail for all counter-balanced vehicle (e.g. Empty Container Handler, Top Lift Full Container Handler, Reach Stacker, ...)



Load wheels  
Steer wheels  
Counter balanced forklift truck



Straddle carrier



Terminal tractor and trailer



AGV



Towbarless aircraft tractor load wheels  
Slag pot carrier load wheels

In case where the maximal load, speed, distance in an hour may be exceeded with specific machine/usages, please contact your Michelin representative to apply for a specific usage authorization request.

\* ETRTO 2023 reference

# ADVICE AND RECOMMENDATIONS

## ON THE USE OF INDUSTRIAL TIRES

### NITROGEN INFLATION

#### INTRODUCTION

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

#### WHEN SHOULD NITROGEN INFLATION BE RECOMMENDED ?

Nitrogen, an inert and stable gas with a larger molecule, diffuses more slowly than oxygen through rubber, limiting the risk of oxidation of different parts of the tire (rubber, cables, etc.). It also slows the loss of inflation pressure.

**Nitrogen inflation is recommended 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, etc.)
- 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.

#### **CAUTION:**

**Nitrogen inflation equipment should only be used by properly trained individuals. A properly functioning regulator must always be used and all manufacturer's instructions followed. Failure to do so can lead to personal injury.**

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 liters.

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



# OTHER RADIAL TIRES

USED FOR MECHANICAL HANDLING

## INSERTS AND SOLID FILLS

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

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

*Their implementation requires qualified personnel.*

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

For more details, consult our website [pro.michelin.com](http://pro.michelin.com) OR YOUR MICHELIN REPRESENTATIVE.



## CONDITION OF USE

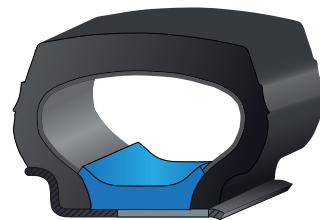
The range of MICHELIN® industrial tires has been specifically designed to equip industrial machines. The sizes are specific to these machines and their work; the loads and speeds correspond to standardized figures.

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 Representative for these uses.

# TUBELESS BEAD SEAL



## MICHELIN TUBELESS BEAD SEAL 8" TO 20" RIMS

| RIM & TIRE SIZES    |                     |            |          |           | TBS (TUBELESS BEAD SEAL) |               |                 |             |
|---------------------|---------------------|------------|----------|-----------|--------------------------|---------------|-----------------|-------------|
| RIM DIAM.<br>(INCH) | RIM WIDTH<br>(INCH) | TIRE SIZE  | RANGE    | TIRE CAI  | DESCRIPTION              | VALVE<br>TYPE | PLASTIC<br>PLUG | TBS SET CAI |
| 8                   | 3 1/4 I             | 5.00 R 8   | XZM      | 110208    | 80 TL 8                  | R 2160        | -               | 102150      |
|                     | 3.00 D              | 5.00 R 8   | XZM      | 110208    | 80 TL 8                  | R 2160        | -               | 102150      |
|                     | 4.33 R              | 150/75 R 8 | XZM      | 110087    | 110 TL 8                 | R 2102        | -               | 613972      |
|                     | 4.33 R              | 180/80R8   | XZM      | 110069    | 110 TL 8                 | R 2102        | -               | 613972      |
| 9                   | 4.00 E              | 6.00R9     | XZM, XZR | 110204    | 100 TL 9                 | R 2160        | -               | 102151      |
|                     | 6.00 E              | 200/75R9   | XZM      | 110090    | 150 TL 9                 | R 2102        | R 2110          | 102182      |
| 10                  | 5.00 F              | 6.50R10    | XZM, XZR | 110213    | 125 TL 10                | R 2102        | -               | 102183      |
|                     | 6.50 F              | 225/75R10  | XZM      | 110089    | 165 TL 10                | R 2102        | R 2110          | 102184      |
| 12                  | 5.00 S              | 7.00R12    | XZM, XZR | 110195    | 125 TL 12                | R 2161        | -               | 522788      |
|                     | 8.00 G              | 250/60R12  | XZM      | 358151    | 200 TL 12                | R 2102        | R 2110          | 787198      |
|                     | 8.00 G              | 250/75R12  | XZM      | 110108    | 200 TL 12                | R 2102        | R 2110          | 787198      |
| 15                  | 5.5                 | 7.00R15    | XZM      | 110211    | 140 TL 15                | R 2102        | -               | 454346      |
|                     | 6.0                 | 7.00R15    | XZM      | 110211    | 150 TL 15                | R 2102        | R 2110          | 702507      |
|                     | 6.0                 | 7.50R15    | XZM      | 110214    | 150 TL 15                | R 2102        | R 2110          | 702507      |
|                     | 6.5                 | 7.50R15    | XZM      | 110214    | 165 TL 15                | R 2102        | R 2110          | 575769      |
|                     | 6.5                 | 8.25R15    | XZM      | 110218    | 165 TL 15                | R 2102        | R 2110          | 575769      |
|                     | 7.0                 | 8.25R15    | XZM      | 110218    | 175 TL 15                | R 2102        | R 2110          | 260511      |
|                     | 7.0                 | 225/75R15  | XZM      | 110079    | 175 TL 15                | R 2102        | R 2110          | 260511      |
|                     | 7.0                 | 250/70R15  | XZM      | 110075    | 175 TL 15                | R 2102        | R 2110          | 260511      |
|                     | 7.5                 | 250/70R15  | XZM      | 110075    | 190 TL 15                | R 2102        | R 2110          | 464164      |
|                     | 8.0                 | 315/70R15  | XZM      | 110109    | 200 TL 15                | R 2102        | R 2110          | 609679      |
| 9.75                | 355/65R15           | XZM        | 003789   | 250 TL 15 | R 2102                   | R 2110        | 26320           |             |
| 20                  | 7.0                 | 9.00R20    | XZM      | 110185    | 175 TL 20                | R 2102        | R 2110          | 102087      |
|                     | 7.5                 | 9.00R20    | XZM      | 110185    | 190 TL 20                | R 2102        | R 2110          | 102083      |
|                     | 7.0                 | 10.00R20   | XZM      | 110014    | 175 TL 20                | R 2102        | R 2110          | 102087      |
|                     | 7.5                 | 10.00R20   | XZM      | 110014    | 190 TL 20                | R 2102        | R 2110          | 102083      |
|                     | 8.0                 | 10.00R20   | XZM      | 110014    | 200 TL 20                | R 2102        | R 2110          | 102085      |
|                     | 7.5                 | 11.00R20   | XZM      | 110189    | 190 TL 20                | R 2102        | R 2110          | 102083      |
|                     | 8.0                 | 11.00R20   | XZM      | 110189    | 200 TL 20                | R 2102        | R 2110          | 102085      |
|                     | 8.5                 | 11.00R20   | XZM      | 110189    | 215 TL 20                | R 2102        | R 2110          | 102086      |
|                     | 8.0                 | 12.00R20   | XZM      | 110082    | 200 TL 20                | R 2102        | R 2110          | 102085      |
|                     | 8.5                 | 12.00R20   | XZM      | 110082    | 215 TL 20                | R 2102        | R 2110          | 102086      |

### 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")**

# TUBELESS BEAD SEAL - SIZE MARKING

## EXAMPLE OF MARKING:

110 TL 8 (for 4.33R - 8 rim)

110 → Width of TBS in mm

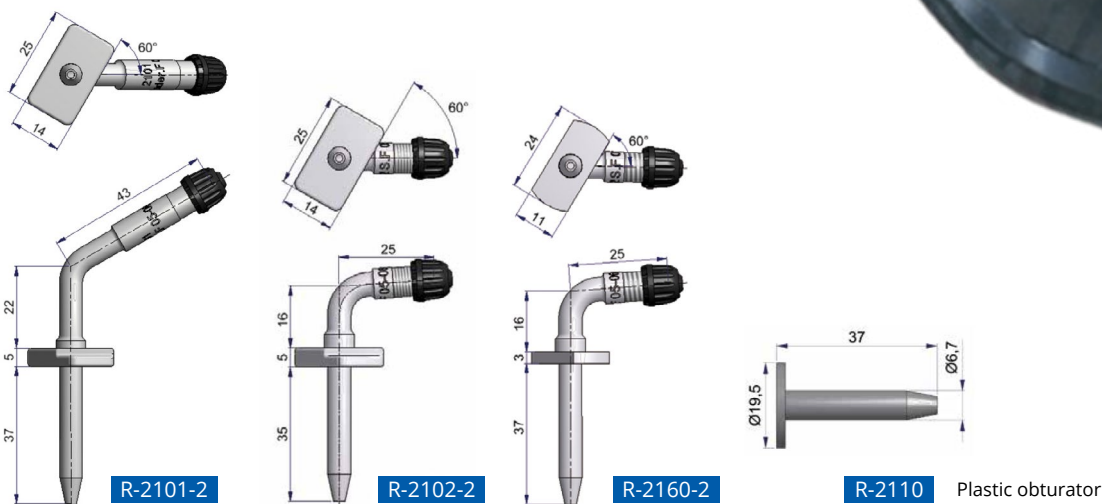
TL → Tubeless

8 → Rim diameter in inch

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 TBS.

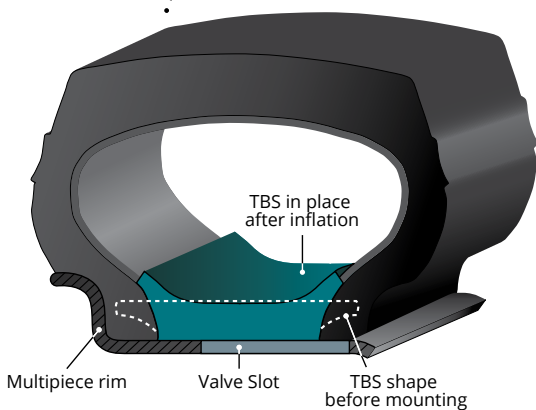
3 different valves exist for TBS when only R2160 and R2102 are provided as standard with the TBS.

TBS wider than 145 mm offer two positions for the valve to accommodate the rim configuration; for those TBS, a specific plug (R2110) is provided to close the unused valve hole.

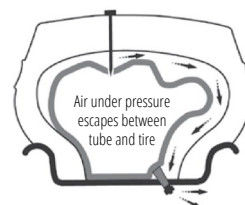


Valve holes

### CROSS SECTION OF A FITTED TBS

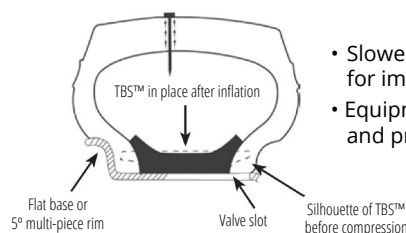


### TUBETYPE SYSTEM



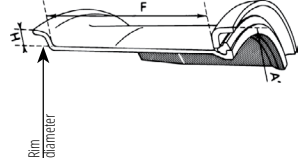
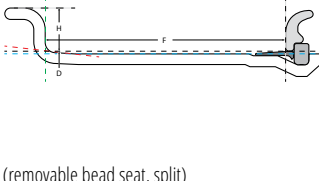
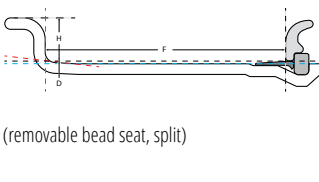
- Rapid deflations
- Risk for load or equipment damages
- Instant production stops

### TUBELESS BEAD SEAL™



- Slower air loss delays need for immediate attention
- Equipment is still mobile and productive

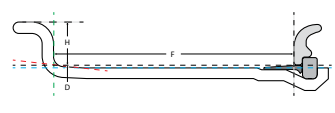
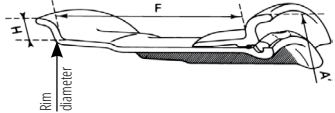
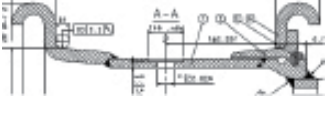
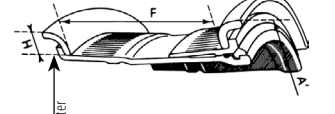
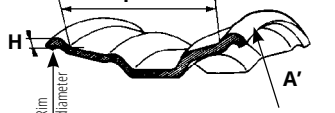
# APPROVED RIMS

| RIM TYPES  | RIM DESIGN.                   | F            |                                   | D            |              | RIM R/A <sup>(**)</sup> | TIRE SIZES     | SEAL                      |    |   |
|--|-------------------------------|--------------|-----------------------------------|--------------|--------------|-------------------------|----------------|---------------------------|----|---|
|  |                               | MM<br>INCHES | H <sup>(13)</sup><br>MM<br>INCHES | MM<br>INCHES | MM<br>INCHES |                         |                | TL                        | TT |   |
| <b>FLAT-BASE RIMS</b><br>   | 8 - 4.33 R                    | 110<br>4.3   | 28,5<br>1.1                       | 209,2        | 202,4        | R                       | 180/70 R 8     | None                      |    |   |
|  | 15 - 6.00 S                   | 152,4<br>6.0 | 33,3<br>1.3                       | 387,0        | 381,0        | R                       | 7.50 R 15      | None                      |    |   |
|  | 20 - 7.33 V                   | 186<br>7.3   | 44<br>1.7                         | 511,2        | 508,0        | A                       | 9.00 R 20 XZM  | R 1443<br>Tyran<br>(A 20) | 2  | 2 |
|  |                               |              |                                   |              |              | A                       | 10.00 R 20 XZM |                           | 2  | 2 |
|  |                               |              |                                   |              |              | A                       | 11.00 R 20 XZM |                           | 2  | 2 |
|  | 20 - 8.00 V                   | 203<br>8.0   | 44<br>1.7                         | 511,2        | 508,0        | A                       | 10.00 R 20 XZM | R 1443<br>Tyran<br>(A 20) | 2  | 2 |
|  |                               |              |                                   |              |              | A                       | 11.00 R 20 XZM |                           | 2  | 2 |
|  | 20 - 8.50 V                   | 216<br>8.5   | 44<br>1.7                         | 511,2        | 508,0        | A                       | 12.00 R 20 XZM | R 1443<br>Tyran<br>(A 20) | 2  | 2 |
|  | 20 - 9.00 V                   | 228,5<br>9.0 | 44<br>1.7                         | 511,2        | 508,0        | A                       | 12.00 R 20 XZM | R 1443<br>Tyran<br>(A 20) | 2  | 2 |
|  | 24 - 8.50 V                   | 216<br>8.5   | 44<br>1.7                         | 612,8        | 609,6        | A                       | 12.00 R 24 XZM | G25                       | 2  | 2 |
|  | 24 - 9.00 V                   | 228,5<br>9.0 | 44<br>1.7                         |              |              | A                       | 12.00 R 24 XZM | G25                       | 2  | 2 |
| 24 - 10.00 W   | 254<br>10.0                   | 51<br>2.0    | 612,8                             | 609,6        | A            | 14.00 R 24 XZM          |                |                           |    |   |
| <b>5° TAPER BEAD 2-SEAT RIMS</b><br><br>(removable bead seat, split)                 | 20 - B 6.5                    | 165<br>6.5   | 38<br>1.5                         | 512,8        | 512,8        | A                       | 9.00 R 20 XZM  | R 1443<br>Tyran<br>(A 20) | NA | 2 |
|  | 20 - B 7.0                    | 178<br>7.0   | 38<br>1.5                         |              |              | A                       | 9.00 R 20 XZM  |                           | NA | 2 |
|  | 20 - B 7.5                    | 190,5<br>7.5 | 43<br>1.7                         |              |              | A                       | 10.00 R 20 XZM |                           | NA | 2 |
|  |                               |              |                                   |              |              | A                       | 9.00 R 20 XZM  |                           | NA | 2 |
|  | 20 - B 8.0                    | 203<br>8.0   | 43<br>1.7                         |              |              | A                       | 10.00 R 20 XZM |                           | NA | 2 |
|  |                               |              |                                   |              |              | A                       | 11.00 R 20 XZM |                           | NA | 2 |
|  | 20 - B 8.5                    | 216<br>8.5   | 45,5<br>1.8                       |              |              | A                       | 11.00 R 20 XZM |                           | NA | 2 |
|  | 24 - B 8.5                    | 216<br>8.5   | 45,5<br>1.8                       |              |              | A                       | 12.00 R 20     |                           | NA | 2 |
| <b>5° TAPER BEAD 2-SEAT RIMS (ADVANCED RIM)</b><br><br>(removable bead seat, split) | 8 - 3.00 D                    | 76<br>3.0    | 18<br>0.7                         | 202,4        | 202,4        | A                       | 5.00 R 8       | None                      |    |   |
|  | 8 - 3 1/4 I (divided rim)     | 82,5<br>3.2  | 16<br>0.6                         |              |              | R                       | 5.00 R 8       |                           |    |   |
|  | 8 - 5.00 F                    | 127<br>5.0   | 22,5<br>0.9                       | 202,4        | 202,4        | R                       | 180/70 R 8     |                           |    |   |
|  | 9 - 4.00 E                    | 101,5<br>4.0 | 20<br>0.8                         | 227,8        | 227,8        | R                       | 6.00 R 9       |                           |    |   |
|  | 10 - 5.00 F                   | 127<br>5.0   | 22,5<br>0.9                       | 253,2        | 253,2        | R                       | 6.50 R 10      |                           |    |   |
|  |                               |              |                                   |              |              | A                       | 6.50 R 10      |                           |    |   |
|  | 10 - 6.50 F                   | 165<br>6.5   | 22,5<br>0.9                       | 253,2        | 253,2        | R                       | 225/75 R 10    |                           |    |   |
|  | 12 - 5.00 S (and divided rim) | 127<br>5.0   | 31,5<br>1.2                       | 308,8        | 308,8        | R                       | 7.00 R 12      |                           |    |   |
|  | 12 - 8.00 G                   | 203<br>8.0   | 28<br>1.1                         | 304,0        | 304,0        | R                       | 250/75 R 12    |                           |    |   |
|  | 15 - 5.5                      | 139,5<br>5.5 | 30,5<br>1.2                       | 387,4        | 387,0        | R                       | 7.00 R 15      |                           |    |   |
|  | 15 - 6.0                      | 152,5<br>6.0 | 33<br>1.3                         |              |              | A                       | 7.00 R 15      |                           |    |   |
|  |                               |              |                                   | R            | 7.50 R 15    |                         |                |                           |    |   |
|  | 15 - 6.5                      | 165<br>6.5   | 35,5<br>1.4                       | 387,4        | 387,0        | A                       | 7.50 R 15      |                           |    |   |
|  |                               |              |                                   |              |              | R                       | 8.25 R 15      |                           |    |   |
|  | 15 - 7.0                      | 178<br>7.0   | 38<br>1.5                         | 387,4        | 387,0        | R                       | 225/75 R 15    |                           |    |   |
| A  |                               |              |                                   |              |              | 8.25 R 15               |                |                           |    |   |
| 15 - 7.5   | 190,5<br>7.5                  | 40,5<br>1.6  | 387,4                             | 387,0        | A            | 250/70 R 15             | None           |                           |    |   |
|  |                               |              |                                   |              | R            | 250/70 R 15             |                |                           |    |   |
| 15 - 8.0   | 203<br>8.0                    | 43<br>1.7    | 387,4                             | 387,0        | R            | 315/70 R 15             |                |                           |    |   |
| 15 - 9.75  | 247,5<br>9.7                  | 38<br>1.5    | 387,4                             | 387,0        | R            | 355/65 R 15             |                |                           |    |   |

\*\* R = Recommended - A = Allowed

\*See page 57 for footnotes.

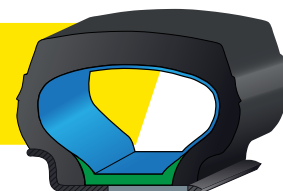
# APPROVED RIMS FOR MANUFACTURING

| RIM TYPES  | RIM DESIGN.                      | F     |        | H <sup>(13)</sup> |            | D <sup>(13B)</sup> |  | RIM R/A <sup>(**)</sup> | TIRE SIZES        | SEAL               |    |   |
|--|----------------------------------|-------|--------|-------------------|------------|--------------------|--|-------------------------|-------------------|--------------------|----|---|
|  |                                  | MM    | INCHES | MM                | INCHES     | MM                 | INCHES                                 |                         |                   | TL                 | TT |   |
| <b>5° TAPER BEAD 2-SEAT RIMS</b><br><b>(ADVANCED RIM)</b><br><br>(removable bead seat, split)   | 20 - 6.5                         | 165   | 6.5    | 35,5              | 1.4        | 514,4              | 514,0                                  | 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 |
|  |                                  |       |        |                   | A          |                    |  | 10.00 R 20 XZM          | None              | NA                 | 0  |   |
|  | 20 - 7.0 T                       | 177,8 | 7.0    | 38,1              | 1.5        |                    |  | R                       | 9.00 R 20 XZM     | None               | NA | 0 |
|  |                                  |       |        |                   | R          |                    |  | 10.00 R20 XZM           | None              | NA                 | 0  |   |
|  | 20 - 7.5                         | 190,5 | 7.5    | 40,5              | 1.6        |                    |  | A                       | 9.00 R 20         | None               | NA | 0 |
|  |                                  |       |        |                   | R          |                    |  | 10.00 R 20              | None              | NA                 | 0  |   |
|  |                                  |       |        |                   | A          |                    |  | 11.00 R 20              | None              | NA                 | 0  |   |
|  |                                  |       |        |                   | A          |                    |  | 10.00 R 20              | None              | NA                 | 0  |   |
|  | 20 - 8.0                         | 203   | 8.0    | 43                | 1.7        |                    |  | R                       | 11.00 R 20        | None               | NA | 0 |
|  |                                  |       |        |                   | A          |                    |  | 12.00 R 20              | None              | NA                 | 0  |   |
|  | 20 - 8.0 V                       | 203   | 8.00   | 27,5              | 1.1        |                    |  | R                       | 10.00 R 20 XZM    | None               | NA | 2 |
|  |                                  |       |        |                   | R          |                    |  | 11.00 R 20              | None              |                    |    |   |
|  | 20 - 8.5                         | 216   | 8.5    | 45,5              | 1.8        |                    |  | A                       | 11.00 R 20 XZM    | None               | NA | 0 |
|  |                                  |       |        |                   | 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                                   |                         |                   |                    |    |   |
|  |                                  |       |        | R                 | 12.00 R 20 | None               |  |                         |                   |                    |    |   |
| 20 - 9.0   | 228,5                            | 9.0   | 48,5   | 1.9               | A          | 12.00 R 20 XZM     | None                                   | NA                      | 0                 |                    |    |   |
| 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                 |                    |    |   |
| <b>5° TAPER BEAD-SEAT RIMS</b><br><b>(3 PIECES)</b><br><br>(* New wheels have additional marking "IF."<br>The IF flanges feature an Integrated Flange, suited for Radial tires.<br>The width of the flange is larger. | 24 - 10.00 WA                    | 254   | 10.0   | 51                | 2.0        | 614,4              |  | R                       | 14.00 R 24 XZM    | Sulla<br>(OR 3-25) | 1  | 0 |
|  | 25 - 11.25/2.0 IF <sup>(*)</sup> | 284   | 11,2   | 51                | 2,0        | 635,0              |  | R                       | 16.00 R 25        | Sulla<br>(OR 3-25) |    |   |
|  | 25 - 13.00/2.5 IF <sup>(*)</sup> | 330   | 13.0   | 63,5              | 2,5        |                    | R                                      | 18.00 R 25              |                   |                    |    |   |
| <b>TAPER BEAD-SEAT RIMS</b><br><b>(3 PIECES)</b><br>  | 24 - 10.00 WA                    | 254   | 10.0   | 51                | 2.0        | 614,4              |  |                         | 14.00 R 24 XZM    | Sulla<br>(OR 3-25) |    |   |
| <b>5° TAPER BEAD-SEAT RIMS</b><br><b>(5 PIECES)</b><br>   | 25 - 11.25/2.0IN                 | 284   | 11.2   | 51                | 2.0        | 635,0              |  | R                       | 16.00 R 25        | Sulla<br>(OR 3-25) |    |   |
|  | 25 - 13.00/2.0IN                 | 330   | 13.0   | 51                | 2.0        |                    | A                                      | 16.00 R 25              |                   |                    |    |   |
|  | 25 - 13.00/2.5IN                 | 330   | 13.0   | 63,5              | 2.5        |                    | R                                      | 18.00 R 25              |                   |                    |    |   |
|  |                                  |       |        |                   | R          |                    | 480/95 R 25                            |                         |                   |                    |    |   |
|  | 25 - 15.00/2.5IN                 | 381   | 15.0   | 63,5              | 2.5        | A                  | 18.00 R 25                             |                         |                   |                    |    |   |
|  | 33 - 13.00/2.5IN                 | 330   | 13.0   | 63,5              | 2.5        | 838,2              |  | R                       | 18.00 R 33        | Strix<br>(OR 3-33) |    |   |
| <b>15° TAPER DROP-CENTER RIMS</b><br>   | 22.5 x 8.25                      | 209,5 | 8.25   | 12.7              | 0.5        | 571,5              |  | A                       | 280/75 R 22.5 XTT | None               |    |   |
|  |                                  |       |        |                   | R          |                    | 310/80 R 22.5 XTT<br>(except AIM Zone) |                         |                   |                    |    |   |
|  | 22.5 x 9.00                      | 228.6 | 9.00   | 12.7              | 0.5        |                    |  | R                       | 310/80 R 22.5     |                    |    |   |

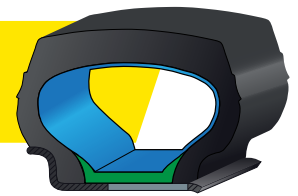
\*\* R = Recommended - A = Allowed

\*See page <-> for footnotes.

# FLAP + TUBE SOLUTION



| RIM & TIRE SIZE     |                     |            | FLAPS    |             | TUBES                   |                         |                        |                     |
|---------------------|---------------------|------------|----------|-------------|-------------------------|-------------------------|------------------------|---------------------|
| RIM DIAM.<br>(INCH) | RIM WIDTH<br>(INCH) | TIRE SIZE  | CAI      | DESCRIPTION | CAI                     | DESCRIPTION             | VALVE TYPE<br>Michelin | VALVE TYPE<br>ETRTO |
| 8                   | 3 1/4 I             | 5.00 R 8   | 894130   | 90 - 8      | 566382                  | 8CG                     | 570                    | V3-02-2             |
|                     | 3.00 D              | 5.00 R 8   | 894130   | 90 - 8      | 566382                  | 8CG                     | 570                    | V3-02-2             |
|                     | 3.50 D              | 5.00 R 8   | 894130   | 90 - 8      | 566382                  | 8CG                     | 570                    | V3-02-2             |
|                     | 4.33 R              | 150/75 R 8 | 894130   | 90 - 8      | 566382                  | 8CG                     | 570                    | V3-02-2             |
|                     | 4.33 R              | 180/80R8   | 894130   | 90 - 8      | 964067                  | 8D                      | 570                    | V3-02-2             |
| 9                   | 4.00 E              | 6.00R9     | 242079   | 125 - 9     | 368957                  | 9F                      | 570                    | V3-02-2             |
|                     | 6.00 E              | 200/75R9   | 698290   | 180 - 9     | 368957                  | 9F                      | 570                    | V3-02-2             |
| 10                  | 5.00 F              | 6.50R10    | 001969   | 140 - 10    | 007946                  | 10F                     | 1012                   | V3-02-23            |
|                     | 5.50 F              | 6.50R10    | 001969   | 140 - 10    | 007946                  | 10F                     | 1012                   | V3-02-23            |
|                     | 6.50 F              | 225/75R10  | 001969   | 140 - 10    | 007946                  | 10F                     | 1012                   | V3-02-23            |
| 12                  | 5.00 S              | 7.00R12    | 190171   | 135 - 12    | 625614                  | 12H                     | 578                    | V3-04-1             |
|                     | 8.00 G              | 250/60R12  | 030440   | 210 - 12    | 625614                  | 12H                     | 578                    | V3-04-1             |
|                     | 8.00 G              | 250/75R12  | 030440   | 210 - 12    | 188148                  | 12KD                    | 578                    | V3-04-1             |
| 15                  | 5,5                 | 7.00R15    | 670236   | 180 - 15    | 812339                  | 7.00 - 15 / 7.50 - 15   | 570                    | V3-02-2             |
|                     | 6,0                 | 7.00R15    | 670236   | 180 - 15    | 812339                  | 7.00 - 15 / 7.50 - 15   | 570                    | V3-02-2             |
|                     | 6,0                 | 7.50R15    | 670236   | 180 - 15    | 812339                  | 7.00 - 15 / 7.50 - 15   | 570                    | V3-02-2             |
|                     | 6,5                 | 7.50R15    | 670236   | 180 - 15    | 812339                  | 7.00 - 15 / 7.50 - 15   | 570                    | V3-02-2             |
|                     | 6,5                 | 8.25R15    | 670236   | 180 - 15    | 694949                  | 8.25 - 15               | 1188                   | V3-02-7             |
|                     | 6,5                 | 8.25R15    | 670236   | 180 - 15    | 298844                  | 8.25 - 15               | 1221                   | V3-05-1             |
|                     | 7,0                 | 225/75R15  | 230862   | 180 - 15 HD | 812339                  | 7.00 - 15 / 7.50 - 15   | 570                    | V3-02-2             |
|                     | 7,0                 | 250/70R15  | 230862   | 180 - 15 HD | 812339                  | 7.00 - 15 / 7.50 - 15   | 570                    | V3-02-2             |
|                     | 7,0                 | 8.25R15    | 670236   | 180 - 15    | 694949                  | 8.25 - 15               | 1188                   | V3-02-7             |
|                     | 7,0                 | 8.25R15    | 670236   | 180 - 15    | 298844                  | 8.25 - 15               | 1221                   | V3-05-1             |
|                     | 7,5                 | 250/70R15  | 230862   | 180 - 15 HD | 812339                  | 7.00 - 15 / 7.50 - 15   | 570                    | V3-02-2             |
| 8,0                 | 315/70R15           | 751612     | 260 - 15 | 694949      | 8.25 - 15               | 1188                    | V3-02-7                |                     |
| 9,75                | 355/65R15           | See TBS    |          |             |                         |                         |                        |                     |
| 20                  | 6,5                 | 9.00R20    | 907771   | 185 - 20    | 437622                  | 8.25 - 20               | 1158                   | V3-02-14            |
|                     | 7,0                 | 10.00R20   | 907771   | 185 - 20    | 052341                  | 9.00 - 20               | 1158                   | V3-02-14            |
|                     | 7,0                 | 9.00R20    | 907771   | 185 - 20    | 437622                  | 8.25 - 20               | 1158                   | V3-02-14            |
|                     | 7,5                 | 10.00R20   | 299014   | 200 - 20    | 052341                  | 9.00 - 20               | 1158                   | V3-02-14            |
|                     | 7,5                 | 11.00R20   | 299014   | 200 - 20    | 300462                  | 10.00 - 20              | 1158                   | V3-02-14            |
|                     | 7,5                 | 9.00R20    | 299014   | 200 - 20    | 437622                  | 8.25 - 20               | 1158                   | V3-02-14            |
|                     | 8,0                 | 10.00R20   | 299014   | 200 - 20    | 052341                  | 9.00 - 20               | 1158                   | V3-02-14            |
|                     | 8,0                 | 11.00R20   | 299014   | 200 - 20    | 300462                  | 10.00 - 20              | 1158                   | V3-02-14            |
|                     | 8,0                 | 12.00R20   | 299014   | 200 - 20    | 179572                  | 11.00 - 20 / 12.00 - 20 | 1158                   | V3-02-14            |
|                     | 8,0                 | 12.00R20   | 299014   | 200 - 20    | 024382                  | 11.00 - 20 / 12.00 - 20 | 1188                   | V3-02-7             |
|                     | 8,0                 | 12.00R20   | 299014   | 200 - 20    | 678384                  | 11.00 - 20 / 12.00 - 20 | 1021                   | V3-02-10            |
|                     | 8,5                 | 11.00R20   | 299014   | 200 - 20    | 300462                  | 10.00 - 20              | 1158                   | V3-02-14            |
|                     | 8,5                 | 12.00R20   | 299014   | 200 - 20    | 179572                  | 11.00 - 20 / 12.00 - 20 | 1158                   | V3-02-14            |
|                     | 8,5                 | 12.00R20   | 299014   | 200 - 20    | 024382                  | 11.00 - 20 / 12.00 - 20 | 1188                   | V3-02-7             |
|                     | 8,5                 | 12.00R20   | 299014   | 200 - 20    | 678384                  | 11.00 - 20 / 12.00 - 20 | 1021                   | V3-02-10            |
|                     | 7.33 V              | 10.00R20   | 299014   | 200 - 20    | 052341                  | 9.00 - 20               | 1158                   | V3-02-14            |
|                     | 7.33 V              | 11.00R20   | 299014   | 200 - 20    | 300462                  | 10.00 - 20              | 1158                   | V3-02-14            |
|                     | 7.33 V              | 9.00R20    | 299014   | 200 - 20    | 437622                  | 8.25 - 20               | 1158                   | V3-02-14            |
| 9,00                | 12.00R20            | 299014     | 200 - 20 | 179572      | 11.00 - 20 / 12.00 - 20 | 1158                    | V3-02-14               |                     |
| 9,00                | 12.00R20            | 299014     | 200 - 20 | 024382      | 11.00 - 20 / 12.00 - 20 | 1188                    | V3-02-7                |                     |
| 9,00                | 12.00R20            | 299014     | 200 - 20 | 678384      | 11.00 - 20 / 12.00 - 20 | 1021                    | V3-02-10               |                     |
| 24                  | 8,5                 | 12.00R24   | 025752   | 250 - 24    | 862045                  | 12.00 - 24              | 582                    | V3-06-5             |
|                     | 9,0                 | 12.00R24   | 025752   | 250 - 24    | 862045                  | 12.00 - 24              | 582                    | V3-06-5             |
|                     | 10,0                | 14.00R24   | 025752   | 250 - 24    | 734626                  | 14.00 - 24              | 752                    | V3-02-17            |
| 25                  | 11.25/2.0           | 16.00R25   |          |             |                         |                         |                        |                     |
|                     | 11.25/2.0           | 450/95R25  |          |             |                         |                         |                        |                     |
|                     | 13.00/2.0           | 16.00R25   |          |             |                         |                         |                        |                     |
|                     | 13.00/2.0           | 450/95R25  |          |             |                         |                         |                        |                     |
|                     | 13.00/2.5           | 18.00R25   |          |             | 944085                  | 25W AM                  | 1837                   | V5-04-1             |
|                     | 13.00/2.5           | 480/95R25  |          |             | 944085                  | 25W AM                  | 1837                   | V5-04-1             |
| 33                  | 15.00/2.5           | 18.00R25   |          |             | 944085                  | 25W AM                  | 1837                   | V5-04-1             |
|                     | 13.00/2.5           | 18.00R33   |          |             |                         |                         |                        |                     |



## CORNER SEAL SOLUTION FOR SMALL INDUSTRY ON 20" RIMS

| RIM Ø (INCHES) | RIM WIDTH (INCHES) | TIRE SIZE  | DESCRIPTION | MICHELIN REF. | CAI    | PACKAGING |
|----------------|--------------------|------------|-------------|---------------|--------|-----------|
| 20             | 7.33V - 8.00V      | 9.00 R 20  | A 20 TYRAN  | R 1443        | 553004 | 30        |
|                | 8.50V - 9.00V      | 10.00 R 20 |             |               |        |           |
|                | B6.5 - B7.0        | 11.00 R 20 |             |               |        |           |
|                | 7.0T - B7.5        | 12.00 R 20 |             |               |        |           |
|                | B8.0 - 8.0V        |            |             |               |        |           |
|                | B8.5 - 8.5V        |            |             |               |        |           |

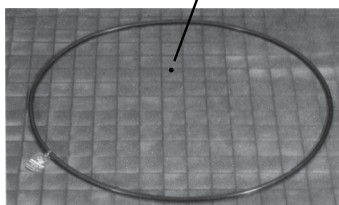
## O-RINGS SOLUTION

| RIM Ø (INCHES) | Ø WIDTH RIM RECOMMENDED (INCHES) | TIRE SIZE   | DESCRIPTION   | MICHELIN REF. | CAI    | PACKAGING |
|----------------|----------------------------------|-------------|---------------|---------------|--------|-----------|
| 24             | 10.00W                           | 14.00 R 24  | OR 3-25 SULLA | R1437         | 553200 | 20        |
|                | 10.00WA                          |             |               |               |        |           |
|                | 10.0                             |             |               |               |        |           |
| 25             | 11.25/2.0                        | 16.00 R 25  |               |               |        |           |
|                | 13.00/2.0                        | 450/95 R 25 |               |               |        |           |
|                | 11.25/2.0                        | 480/95 R 25 |               |               |        |           |
|                | 13.00/2.5                        | 18.00 R 25  |               |               |        |           |
|                | 13.00/2.5                        |             |               |               |        |           |
|                | 15.00/2.5                        |             |               |               |        |           |

| 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

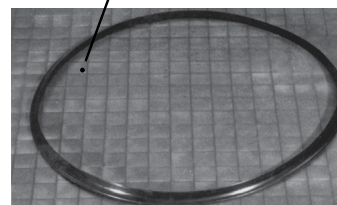
The first number is the section diameter of the seal:

- 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:

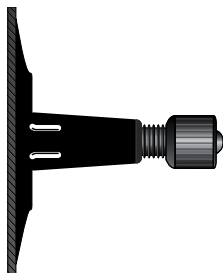
Approval for use of corner seals **MUST BE** obtained from Michelin.

# VALVE AND ASSOCIATED ACCESSORIES

## FOR MANUFACTURING AND WAREHOUSING 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

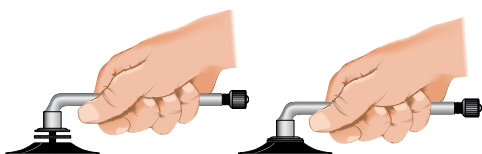


### VALVE MARKINGS

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



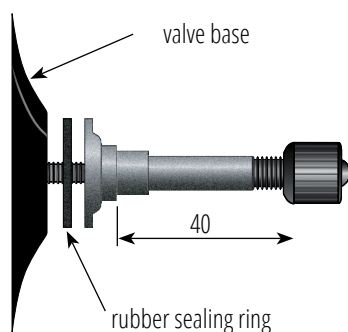
- 1 - Position the sealing ring on the valve.  
The sealing ring must be clean and dry.
- 2 - Hand tighten the valve until it just touches the sealing ring.
- 3 - Tighten the valve for a further two turns.
- 4 - To orientate the valve in the desired position, tighten further.



**IMPORTANT: never unscrew the valve to the desired position.**

### SMALL TRUCK UNIVERSAL STRAIGHT VALVE

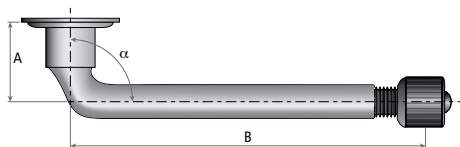
Fitted to MICHELIN® tubes for the occasional equipment Tube-Type on 5° and 15° non-U-taper, drop center rim.





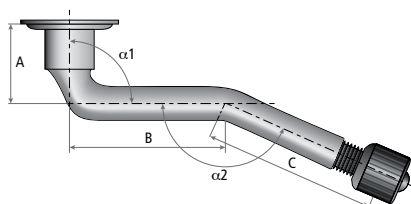
# TRUCK-TYPE VALVE

## TRUCK-TYPE, UNIVERSAL SINGLE-BEND VALVE



| Michelin code | ETRTO Designation | A    |        | B     |        | $\alpha^\circ$ |
|---------------|-------------------|------|--------|-------|--------|----------------|
|               |                   | 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             |

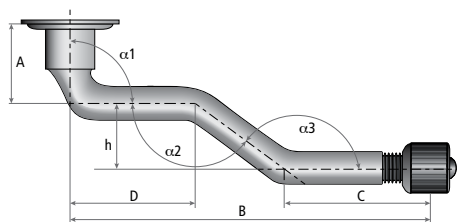
## TRUCK-TYPE, UNIVERSAL DOUBLE-BEND VALVE



| Michelin code | ETRTO Designation | $\alpha1^\circ$ | $\alpha2^\circ$ |
|---------------|-------------------|-----------------|-----------------|
| 578           | V3-04-1           | 90              | 140             |

| 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

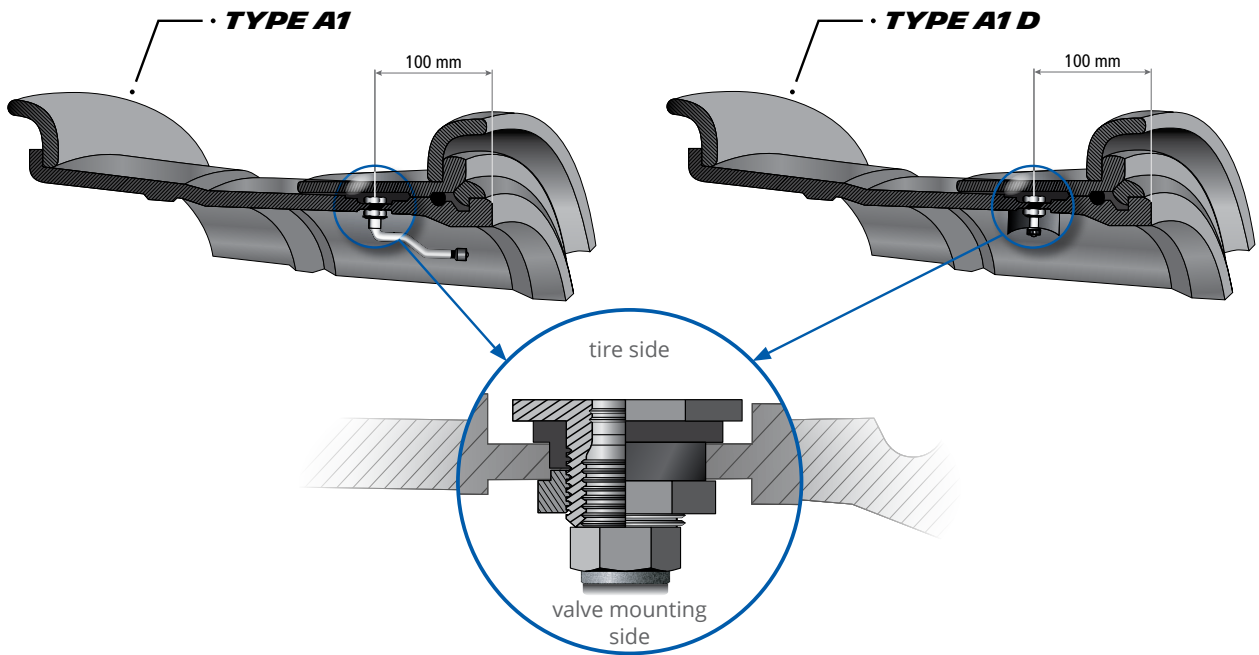


| Michelin code | ETRTO Designation | $\alpha1^\circ$ | $\alpha2^\circ$ | $\alpha3^\circ$ |
|---------------|-------------------|-----------------|-----------------|-----------------|
| 582           | V3-06-5           | 90              | 139             | 139             |

| A    |        | B   |        | C  |        | D    |        |
|------|--------|-----|--------|----|--------|------|--------|
| mm   | inches | mm  | inches | mm | inches | mm   | inches |
| 20,5 | 0.81   | 131 | 5.16   | 49 | 1.93   | 62,5 | 2.46   |

# TYPES OF TUBELESS EARTHMOVER VALVES

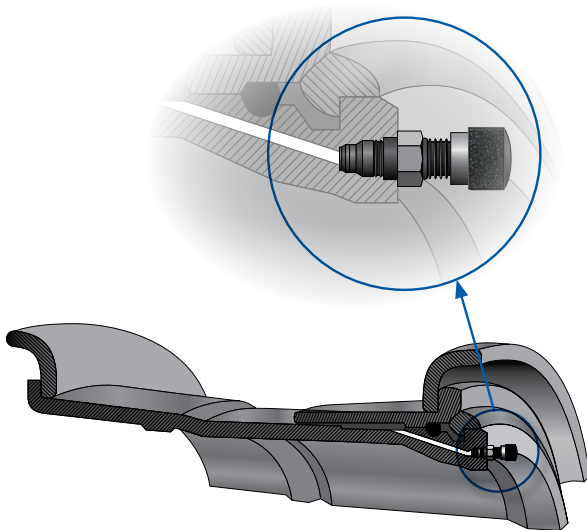
## TYPE A1 VALVE



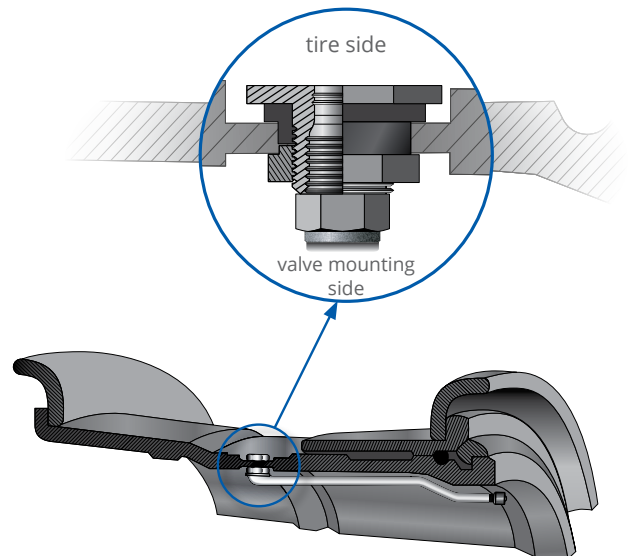
### VALVE COMBINATION TYPE A4

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

## VALVE TYPE A2

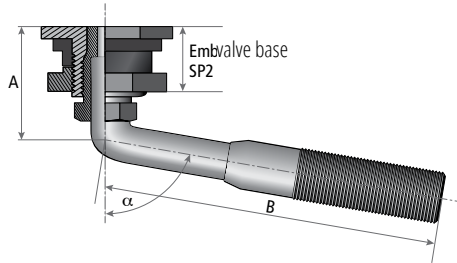


## VALVE TYPE A3



# EARTHMOVER TUBELESS VALVE

(AMERICAN, TRA STANDARD)



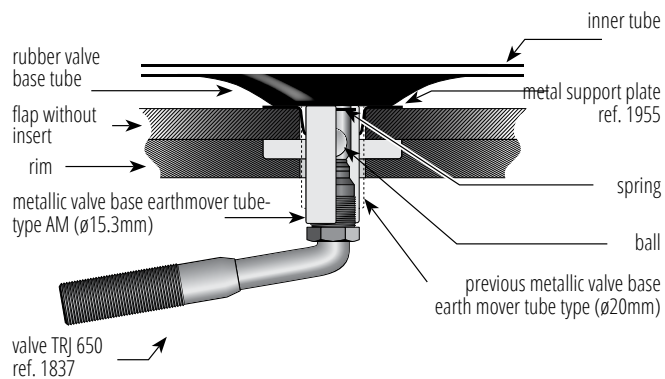
| Michelin code | TRA code | ETRTO Designation | A  |        | B  |        | $\alpha^\circ$ |
|---------------|----------|-------------------|----|--------|----|--------|----------------|
|               |          |                   | mm | inches | mm | inches |                |
| R 1837        | TRJ 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

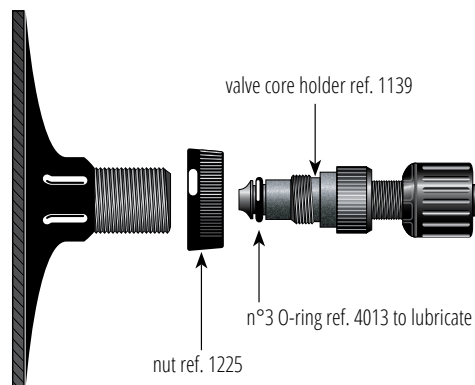
### ACTUAL VALVE

(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

# 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 |
|---------------------------|--------------|------------------------|----------------------|----------------------------|------------------------|--------------|
| <b>TORQUE</b>             |              |                        |                      |                            |                        |              |
| pound-foot                | lb ft        | <b>x 0.1383</b>        | = m kg               | kilogramme metre           | <b>x 7.233</b>         | = lb ft      |
| kilogramme metre          | m kg         | <b>x 9.81</b>          | = m N                | Newton metre               | <b>x 0.102</b>         | = m kg       |
| <b>LENGTH</b>             |              |                        |                      |                            |                        |              |
| inch                      | in           | <b>x 0.0254</b>        | = m                  | metre                      | <b>x 39.37</b>         | = in         |
| foot                      | ft           | <b>x 0.3048</b>        | = m                  | metre                      | <b>x 3.281</b>         | = ft         |
| yard                      | yd           | <b>x 0.9144</b>        | = m                  | metre                      | <b>x 1.0936</b>        | = yd         |
| mile                      | mi           | <b>x 1.6093</b>        | = km                 | kilometre                  | <b>x 0.6214</b>        | = mi         |
| <b>LOAD</b>               |              |                        |                      |                            |                        |              |
| pound                     | lb           | <b>x 0.4536</b>        | = kg                 | kilogramme                 | <b>x 2.205</b>         | = lb         |
| long ton (G.B.) 2240 lb   | lg ton       | <b>x 1.016</b>         | = t                  | metric tonne               | <b>x 0.984</b>         | = lg ton     |
| short ton (U.S.) 2000 lb  | sh ton       | <b>x 0.907</b>         | = t                  | metric tonne               | <b>x 1.103</b>         | = sh ton     |
| <b>DENSITY</b>            |              |                        |                      |                            |                        |              |
| pound per cubic foot      | lb/cu ft     | <b>x 16.0184</b>       | = kg/m <sup>3</sup>  | kilogramme/m <sup>3</sup>  | <b>x 0.625</b>         | = lb/cu ft   |
| pound per cubic yard      | lb/cu yd     | <b>x 0.5933</b>        | = kg/m <sup>3</sup>  | kilogramme/m <sup>3</sup>  | <b>x 1.686</b>         | = lb/cu yd   |
| <b>PRESSURE</b>           |              |                        |                      |                            |                        |              |
| kilo-pascal               | kPa          | <b>x 0.01</b>          | = bar                | bar                        | <b>x 100</b>           | = kPa        |
| atmosphere (at sea level) | atm          | <b>x 0.986</b>         | = bar                | bar                        | <b>x 1.014</b>         | = atm        |
| pound per square inch     | P.S.I.       | <b>x 0.0703</b>        | = kg/cm <sup>2</sup> | kilogramme/cm <sup>2</sup> | <b>x 14.22</b>         | = P.S.I.     |
| pound per square inch     | P.S.I.       | <b>x 0.069</b>         | = bar                | bar                        | <b>x 14.513</b>        | = P.S.I.     |
| pound per square inch     | P.S.I.       | <b>x 0.068</b>         | = atm                | atmosphere                 | <b>x 14.7</b>          | = P.S.I.     |
| pound per square inch     | P.S.I.       | <b>x 6.895</b>         | = kPa                | kilo Pascal                | <b>x 0.145</b>         | = P.S.I.     |
| <b>POWER</b>              |              |                        |                      |                            |                        |              |
| french horse power        | C.V.         | <b>x 0.7355</b>        | = KW                 | kilowatt                   | <b>x 1.36</b>          | = C.V.       |
| horse power               | H.P.         | <b>x 0.7457</b>        | = KW                 | kilowatt                   | <b>x 1.34</b>          | = H.P.       |
| french horse power        | C.V.         | <b>x 0.98</b>          | = H.P.               | horse power                | <b>x 1.014</b>         | = C.V.       |
| <b>VOLUME/CAPACITY</b>    |              |                        |                      |                            |                        |              |
| cubic foot                | cu ft        | <b>x 0.02832</b>       | = m <sup>3</sup>     | cubic metre                | <b>x 35.31</b>         | = cu ft      |
| cubic yard                | cu yd        | <b>x 0.7646</b>        | = m <sup>3</sup>     | cubic metre                | <b>x 1.308</b>         | = cu yd      |
| gallon (U.S.)             | gal          | <b>x 3.7854</b>        | = l                  | liter                      | <b>x 0.2642</b>        | = gal        |
| <b>TEMPERATURE</b>        |              |                        |                      |                            |                        |              |
| degree fahrenheit         | °F           | <b>- 32 et x (5/9)</b> | = °C                 | degree Celsius             | <b>x (9/5) et + 32</b> | = °F         |



# **2023 MATERIAL HANDLING**

*INDUSTRIAL PNEUMATIC TIRES  
RADIAL TECHNOLOGY*

#### **HEADQUARTERS**

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