# MICHELIN<sup>®</sup> Truck Tire Data Book

January 2011



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If you require information for MICHELIN® products not listed in this data book, please contact your MICHELIN representative or your MICHELIN dealer.

Load and inflation industry standards are in a constant state of change. Michelin continually updates its product information to reflect these changes. Therefore, printed material may not reflect the current load and inflation information. Always refer to the tire sidewall markings for maximum load and pressure information.

Never exceed the wheel manufacturer's maximum pressure limitation.

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#### STEER/ALL-POSITION TIRES

XZA3 <sup>®</sup>
XZA®
XZA3 <sup>®</sup> Antisplash <sup>™</sup>
XZA2 <sup>®</sup> Energy
XZA®-1+
XZA®1
XZE <sup>®</sup>
$XZE2^{TM}$
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XFE wide base steer $\ldots \ldots 46$

#### DRIVE TIRES

X One® XDA® ENERGY
X One <sup>®</sup> XDN <sup>®</sup> 2
XDA®5
XDA3 <sup>®</sup> / XD2 <sup>®</sup>
XDA® ENERGY
XDN®2 / XDN®2 GRIP 49
X MultiWay XD 50
XDE <sup>®</sup> M/S 50
XDE®2+
X Works XDY <sup>®</sup>
XDY®3
XDY-2 <sup>™</sup>
XDY-EX2 <sup>™</sup>
XDY-EX <sup>™</sup>
XDS® / XDS®2 (Standard Size)
$XDS^{\circledast}2$ (19.5" Wheel)

#### TRAILER TIRES

#### SPECIALTY TIRES

XZA®4
XZY <sup>®</sup>
XZL <sup>™</sup>
$XZL^{TM}$ wide base
XZL <sup>™</sup> +62
XML <sup>TM</sup>
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X One <sup>®</sup> XZU <sup>®</sup> S Pre-Mold <sup>™</sup> Retread

#### **DRIVE POSITION**

DRIVE POSITION
XDA2 <sup>®</sup> 19/23 Pre-Mold <sup>™</sup> Retread
XDA-HT <sup>™</sup> <i>High Torgue</i> <sup>™</sup> Pre-Mold <sup>™</sup> Retread
XD4 <sup>®</sup> Pre-Mold <sup>™</sup> Retread
XDN <sup>®</sup> 2 Pre-Mold <sup>™</sup> Retread
XDN <sup>®</sup> Pre-Mold <sup>™</sup> Retread
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Mounting and Safety Instructions



## IMPORTANT: BE SURE TO READ THIS SAFETY INFORMATION.

Make sure that everyone who services tires or vehicles in your operation has read and understands these warnings. **SERIOUS INJURY OR DEATH CAN RESULT FROM FAILURE TO FOLLOW SAFETY WARNINGS.** 

No matter how well any tire is constructed, punctures, impact damage, improper inflation, improper maintenance, or service factors may cause tire failure creating a risk of property damage and serious or fatal injury. Truck operators should examine their tires frequently for snags, bulges, excessive treadwear, separations, or cuts. If such conditions appear, demount the tire and see a truck tire dealer immediately.

The US Department of Labor Occupational Safety and Health Administration (OSHA) provides regulations and

publications for safe operating procedures in the servicing of wheels. Please refer to OSHA Standard 29 CFR Part 1910.177 (Servicing Multi-Piece and Single Piece Rim Wheels). This can be found in the Section Nine, Appendix (Pages 136-138) of the MICHELIN® Truck Tire Service Manual (MWL40732).

Specifically, note that the employer shall provide a program to train all employees who service wheels in the hazards involved in servicing those wheels and the safety procedures to be followed. The employer shall ensure that no employee services any wheel unless the employee has been trained and instructed in correct procedures of servicing the type of wheel being serviced, and shall establish safe operating procedures for such service. Michelin provides the following information to further

assist employers to comply with that initiative.



Tire and wheel servicing can be dangerous and must be done only by trained personnel using proper tools and procedures. Failure to read and comply with all procedures may result in serious injury or death to you or others.

Re-inflation of any type of tire and wheel assembly that has been operated in a run-flat or underinflated condition (80% or less of recommended operating pressure) can result in serious injury or death. The tire may be damaged on the inside and can explode during inflation. The wheel parts may be worn, damaged, or dislodged and can explosively separate. Refer to RMA Tire Information Service Bulletin on potential "zipper ruptures" – TISB Volume 33, Number 3 (December 2007).

RMA (Rubber Manufacturers Association) recommends that any tire suspected of having been run underinflated and/or overloaded must remain in the safety cage, be inflated to 20 psi OVER maximum pressure marked on the sidewall, and then be inspected. Do not exceed the maximum inflation pressure for the wheel. Be sure to reduce pressure to regular operating pressure before placing back in service if the tire has been deemed serviceable.

Use of starting fluid, ether, gasoline, or any other flammable material to lubricate, seal, or seat the beads of a tubeless tire can cause the tire to explode or can cause the explosive separation of the tire and wheel assembly resulting in serious injury or death. The use of any flammable material during tire servicing is absolutely prohibited.

Any inflated tire mounted on a wheel contains explosive energy. The use of damaged, mismatched, or improperly assembled tire and wheel parts can cause the assembly to burst apart with explosive force. If you are struck by an exploding tire, wheel part, or the blast, you can be seriously injured or killed.

Re-assembly and inflation of mismatched parts can result in serious injury or death. Just because parts fit together does not mean that they belong together. Check for proper matching of all wheel parts before putting any parts together.

Mismatching tire and wheel components is dangerous. A mismatched tire and wheel assembly may explode and can result in serious injury or death. This warning applies to any combination of mismatched components and wheel combinations. Never assemble a tire and wheel unless you have positively identified and correctly matched the parts.

#### **ZIPPER RUPTURES**

A fatigue-related damage, with or without a rupture, occurs in the sidewall flex area of steel radial light and medium truck tires when it is subjected to excessive flexing or heat. This zipper rupture is a spontaneous burst of compressed gas, and the resulting rupture can range in length anywhere from 12 inches to 3 feet circumferentially around the tire. This is caused by the damage and weakening of the radial steel cables as a result of run-flat, underinflation, or overload. Eventually, the pressure becomes too great for the weakened cables to hold, and the area ruptures with tremendous force.

The RMA (Rubber Manufacturers Association) states that permanent tire damage due to underinflation and/or overloading cannot always be detected. Any tire known or suspected of having been run at less than 80% of normal recommended operating pressure and/or overloaded, could possibly have permanent structural damage (steel cord fatigue).

The RMA has issued a revised Tire Industry Service Bulletin for procedures to address zipper ruptures in certain commercial vehicle tires. The purpose of the bulletin is to describe the inspection procedures for identifying potential sidewall circumferential ruptures (also known as "zipper ruptures") on truck/bus tires and light-truck tires of steel cord radial construction. Zipper ruptures can be extremely hazardous to tire repair technicians. Careful adherence to proper repair procedures is crucial.

For more information contact RMA at info@rma.org or visit www.rma.org.

#### TIRE INSPECTION

Tire inspection should always include a thorough inspection of both sidewalls and inner liner, as this may reveal any potential damage condition that would cause the tire to become scrap. Examine the inner liner for creases, wrinkling, discoloration, or insufficient repairs, and examine the exterior for signs of bumps or undulations, as well as broken cords, any of which could be potential out of service causes. Proper OSHA regulations must be followed when putting any tire and wheel back in service. After the tire has been inflated to 20 psi in a safety cage, it should undergo another sidewall inspection for distortions, undulations, or popping noises indicating a breaking of the steel cords. If this is the case, immediately fully deflate and scrap the tire. If no damage is detected, continue to inflate to the maximum pressure marked on the sidewall. Do not exceed the maximum inflation pressure for the wheel. Any tire suspected of having been run underinflated and/or overloaded must remain in the safety cage, be inflated to 20 psi OVER maximum pressure marked on the sidewall, and then be inspected.

## PART 2: MOUNTING AND DEMOUNTING TUBELESS TIRES

In order for a tire to perform properly, it must be mounted on the correct size wheel. The following are general instructions for mounting and demounting MICHELIN® tubeless tires, including the MICHELIN® X One® tires.

Specifics for 19.5" wheels are detailed in the Mounting Tubeless Tire section (Page 5). For additional detailed instructions on mounting and demounting truck tires on particular types of wheels, refer to the instructions of the wheel manufacturer or the RMA wall charts.

## TUBELESS TIRE MOUNTING/DEMOUNTING USING A MOUNTING MACHINE

There are several tire changing machines available for the mount and demount procedure. Consult the manufacturer's user manual for the machine you are using as each operates differently. Full lubrication of the wheel and beads is still required. Inflation process requirements remain the same.

#### **DIRECTIONAL TIRES**

Truck tires featuring directional tread designs have arrows molded into the shoulder/edge of the outer ribs to indicate the intended direction of tire rotation. It is important, to maximize tire performance, that directional tires be mounted correctly on wheels to ensure that the directionality is respected when mounted on the vehicle.

For example, when mounting directional drive tires on a set of 8 wheels, use the drop centers as a reference. Four tires should be mounted with the arrows pointing to the left of the technician and four tires with the arrows pointing to the right. This ensures that when the assemblies are fitted onto the vehicle that all tires can be pointed in the desired direction of rotation.

Directional steer tires should be mounted in a similar fashion, one each direction, to ensure both are pointed forward.

Once directional tires are worn greater than 50%, there is generally no negative effect of running them in a direction opposite to the indicated direction of rotation.

Operating directional tires from new to 50% worn in the opposite direction of that indicated on the tire will result in the premature onset of irregular wear, excessive noise levels, and significantly reduced tread life.

## 1. SELECTION OF PROPER COMPONENTS AND MATERIALS

- a. All tires must be mounted on the proper wheel as indicated in the specification tables. For complete tire specifications, refer to application specific data books.
- b. Make certain that wheel is proper for the tire dimension.
- c. Always install new valve cores and metal valve caps containing plastic or rubber seals.
- d. Always replace the rubber valve stem on a 16" through 19.5" wheel.
- e. Always use a safety device such as an inflation cage or other restraining device that will constrain all wheel components during the sudden release of the contained gas of a single piece wheel. Refer to current OSHA standards for compliance. Do not bolt safety cages to the floor nor add any other restraints or accessories. Cage should be placed 3 feet from anything, including the wall. Never stand over a tire or in front of a tire when inflating. Always use a clip-on valve chuck with an in-line valve fitted with a pressure gauge or use a presettable regulator. Additionally, ensure there is a sufficient length of hose between the clip-on chuck and the in-line valve (if one is used) to allow the service technician to stand outside the trajectory zone when inflating. Trajectory zone means any potential path or route that a wheel component may travel during an explosive separation or the sudden release of the pressurized gas, or an area at which the blast from a single piece wheel may be released. The trajectory may deviate from paths that are perpendicular to the assembled position of the wheel at the time of separation or explosion. See Rubber Manufacturers Association Tire Information Service Bulletin Volume 33, Number 3 (December 2007) for more information.

## 2. TIRE AND WHEEL LUBRICATION

It is essential that an approved tire mounting lubricant be used. Preferred materials for use as bead lubricants are vegetable based and mixed with proper water ratios per manufacturer's instructions. Never use antifreeze, silicones, or petroleum-base lubricants as this will damage the rubber. Lubricants not mixed to the manufacturer's specifications may have a harmful effect on the tire and wheel.

The lubricant serves the following three purposes:

- Helps minimize the possibility of damage to the tire beads from the mounting tools.
- Helps ease the insertion of the tire onto the wheel by lubricating all contacting surfaces.
- Assists proper bead seating (tire and wheel centering) and helps to prevent eccentric mountings.

The MICHELIN product, Tiger Grease 80, MSPN 25817, is specifically formulated for commercial truck tire mounting. It can be obtained through any authorized MICHELIN Truck Tire dealer or by contacting MICHELIN Consumer Care (1-888-622-2306). For tube-type tires apply a clean lubricant to all portions of the tire bead area and the exposed portion of the flap using sufficient but sparing quantities of lubricant. Also, lubricate the entire rim surface of the wheel. Avoid using excessive amounts of lubricant, which can become trapped between the tire and tube and can result in tube damage and rapid air loss.

**<u>CAUTION</u>**: It is important that tire lubricant be clean and free of dirt, sand, metal shavings, or other hard particles. The following practice is recommended:

- a. Use a fresh supply of tire lubricant each day, drawing from a clean supply source and placing the lubricant in a clean portable container.
- b. Provide a cover for the portable container and/or other means to prevent contamination of the lubricant when not in use. For lubricants in solution, we suggest the following method that has proven to be successful in helping to minimize contamination and prevent excess lubricant from entering the tire casing: provide a special cover for the portable container that has a funnel-like device attached. The small opening of the funnel should be sized so that when a swab is inserted through the opening into the reserve of lubricant and then withdrawn, the swab is compressed, removing excess lubricant. This allows the cover to be left in place providing added protection. A mesh false bottom in the container is a further protection against contaminants. The tire should be mounted and inflated promptly before lubricant dries.

## **3. PREPARATION OF WHEELS AND TIRES**

- a. Always wear safety goggles or face shields when buffing or grinding wheels.
- b. Inspect wheel assemblies for cracks, distortion, and deformation of flanges. Using a file and/or emery cloth, smooth all burrs, welds, dents, etc. that are present on the tire side of the wheel. Inspect the condition of bolt holes on the wheels. Rim flange gauges and ball tapes are available for measuring wear and circumference of aluminum wheels.
- c. Remove rust with a wire brush and apply a rust inhibiting paint on steel wheels. The maximum paint thickness is 0.0035" on the disc face of the wheel.
- d. Remove any accumulation of rubber or grease that might be stuck to the tire, being careful not to damage it. Wipe the beads down with a dry rag.

## **MOUNTING TUBELESS**

- 1. Inspect the condition of the bolt holes on the wheels, and look for signs of fatigue. Check flanges for excessive wear by using the wheel manufacturer's flange wear indicator.
- Replace valve core, and inspect valve stem for damage and wear. Michelin recommends always replacing the valve stem and using a new valve stem grommet. Ensure valve stem is installed using the proper torque value.
   80-125 in/lbs (7-11 ft/lbs) for standard aluminum

wheels and 35-55 in/lbs (3-5 ft/lbs) for standard tubeless steel wheels. Ensure the valve core is installed using the proper torque value of 1.5 - 4 in/lbs. To prevent galvanic corrosion on aluminum wheels, lubricate the threads and O-ring of the valve stem with a non-waterbased lubricant before installation.

- 3. Apply the tire and wheel lubricant to the rim surface of the wheel and bead area of the tire. When applying lubricant to the wheel, lubricate the entire rim surface from flange to flange. The tire should be mounted and inflated before the lubricant dries.
- 4. With short ledge up, lay the tire over the wheel opposite the valve side and work it on with proper tubeless tire tools, making full use of the drop center well. Drop center wheels are typically designed with an off-set drop center to accommodate wheel width and brake clearance. This creates a "short side" and a "long side" on the wheel. (Some drop center wheels are designed with a symmetric wheel profile facilitating tire mounting from either side.) It is imperative that the tire always be mounted and dismounted only from the short side. Failure to do this will likely result in damaged tire beads that could eventually cause rapid gas loss due to casing rupture. This is particularly important on 19.5 inch RW (reduced well) aluminum wheels which, contrary to the norm, have their drop center located close to the disc side. Do not use a 19.5 x 7.50 wheel for the 305/70R19.5 tire size. All 19.5 inch tubeless wheels should be mounted from the short side. Care should be taken to ensure that any internal monitoring system molded in the tire or on the wheel is not damaged or dislodged during this service.
- Do not use any kind of hammer. Severe inner liner damage may occur resulting in sidewall separation and tire destruction. Use only proper mounting levers; DO NOT USE A DUCK BILL HAMMER.
- 6. The MICHELIN® X One® tire is designed to replace dual tires on the drive and trailer positions of tandem over the road vehicles, and the tires must be mounted on 22.5 x 14.00" size wheels. Position the tire and wheel assembly so the valve stem is facing outward, away from the vehicle.

#### INFLATION OF TUBELESS TIRES

- Lay tire/wheel assembly horizontally and inflate to no more than 5 psi to position the beads on the flanges.
   OSHA dictates no more than 5 psi outside the cage to seat the beads.
- 2. To complete the seating of the beads, place the assembly in an <u>OSHA (Occupational Safety and Health</u> <u>Administration) compliant inflation restraining device</u> <u>(i.e. safety cage)</u> and inflate to 20 psi. Check the assembly carefully for any signs of distortion or irregularities from run-flat. If run-flat is detected, scrap the tire.
- If no damage is detected, continue to inflate to the maximum pressure marked on the sidewall. RMA (Rubber Manufacturers Association) recommends that if any tire suspected of having been underinflated and/or



Re-inflation of any type of tire and wheel assembly that has been operated in a run-flat or underinflated condition (less than 80% of normal recommended operating pressure) can result in serious injury or death. The tire may be damaged on the inside and can explode during inflation. The wheel parts may be worn, damaged or dislodged and can explosively separate.

overloaded must remain in the safety cage at 20 psi over the maximum pressure marked on the sidewall. Do not exceed the maximum inflation pressure for the wheel. RMA requires that all steer sidewall tires are inflated without a valve core.

4. Ensure that the guide rib (GG Ring/mold line) is positioned concentrically to the wheel flange with no greater than 2/32" of difference found circumferentially. Check for this variation by measuring at four sidewall locations (12, 3, 6, 9 o'clock). If bead(s) did not seat, deflate tire, re-lubricate the bead seats and re-inflate. Note: As a general guide in vibration analysis, the 30/60/90 rule may apply:

**.030-.060** (1/32 to 2/32 inch) = No action is required. Limited possibility for vibration exists, and this range maximizes the ability to balance properly.

**.061-.090 (2/32 to 3/32 inch)** = Corrective action would be to perform the 3 R's, after deflating the tire.

- Rotate the tire on the wheel
- Re-lubricate the tire and wheel (ensure the wheel is very clean)
- Re-inflate ensuring your initial inflation is with the tire lying horizontal (3-5 psi max)

>.090 (>3/32 inch) = Perform 3 R's if mismount is indicated; however, when the reading is this high, it usually requires checking runout on these component parts: wheels/hubs/drums/wheel bearings.

5. After beads are properly seated, place the tire in safety cage and inflate assembly to maximum pressure rating shown on the sidewall, then reduce to operating pressure. Check valve core for leakage, then install suitable valve cap. Consider the use of inflate-thru or double seal valve caps for easier pressure maintenance.

#### **DEMOUNTING OF TUBELESS TIRES**

- 1. If still fitted on the vehicle, completely deflate the tire by removing the valve core. In the case of a dual assembly, completely deflate both tires before removing them from the vehicle (OSHA requirement). Run a wire or a pipe cleaner through the valve stem to ensure complete deflation.
- 2. With the tire assembly lying flat (after deflating the tire), break the bead seat of both beads with a bead breaking tool. Do not use hammers of any type to seat the bead. Striking a wheel assembly with a hammer of any type

can damage the tire or wheel and endanger the installer. **Use a steel duck bill hammer only as a wedge.** Do not strike the head of a hammer with another hard faced hammer – use a rubber mallet.

- 3. Apply the vegetable-based lubricant to all surfaces of the bead area of the tire.
- 4. Beginning at the valve, remove the tire from the wheel. Starting at the valve will minimize chances of damaging the valve assembly. Make certain that the rim flange with the tapered ledge that is closest to the drop center is facing up. Insert the curved ends of the tire irons

between the tire and rim flange. Step forward into the drop center and drop the bars down, lifting the tire bead over the rim flange. Hold one tire iron in position with your foot. Pull the second tire iron out and reposition it about 90 degrees from the first iron. Pull the second tire iron towards the center of the wheel. Continue to work tools around wheel until first bead is off the wheel.

5. Lift the assembly, place and rotate the tire iron to lock on the back rim flange, allow the tire to drop, and with a rocking motion remove the tire from the wheel.

## PART 3: MOUNTING AND DEMOUNTING TUBE-TYPE TIRES

A tire cannot perform properly unless it is mounted properly on the correct size wheel. The following are general instructions for demounting and mounting MICHELIN® tube-type tires. For detailed instructions on mounting and demounting truck tires on particular types of wheels, refer to the instructions of the wheel manufacturer or the RMA (Rubber Manufacturers Association) wall charts.



Do not re-inflate any tires that have been run underinflated or flat without careful inspection for damage. If run-flat damage is detected, scrap the tire. A tire is considered run-flat if it is found to be less than 80% of normal recommended operating pressure. This can result in serious injury or death. The tire may be damaged on the inside and can explode during inflation. The wheel parts may be worn, damaged or dislodged and can explosively separate.

#### 1. SELECTION OF PROPER COMPONENTS AND MATERIALS

 a. All tires must be mounted with the proper MICHELIN<sup>®</sup> tube and flap (if required) and wheel as indicated in the specification tables on Page 93 of the MICHELIN Truck Tire Service Manual (MWL40732).
 For complete tire specifications, refer to application

specific data books.b. Make certain that wheel components are properly

- b. Make certain that wheel components are properly matched and of the correct dimensions for the tire.
- c. Always fit a new MICHELIN® tube in a new mounting. Since a tube will exhibit growth in size through normal use, an old tube used in a new mounting increases the possibility of tube creasing and chafing, possibly resulting in failure.
- d. **Always install a new flap in a new mounting.** A flap, through extended use, becomes hard and brittle. After a limited time, it will develop a set to match the tire and wheel in which it is fitted. Therefore, it will not exactly match a new tire and wheel combination.

- e. Always install new valve cores and metal valve caps containing plastic or rubber seals. For tires requiring O-rings, be sure to properly install a new silicone O-ring at every tire change.
- f. Always use a safety device such as an inflation cage or other restraining device that will constrain all wheel components during an explosive separation of a multipiece wheel, or during the sudden release of the contained gas of a single piece wheel that is in compliance with OSHA (Occupational Safety and Health Administration) standards. Do not bolt restraining device to the floor. Never stand over a tire or in front of a tire when inflating. Always use a clip-on valve chuck with an in-line valve with a pressure gauge or a presettable regulator. Additionally, ensure there is a sufficient length of hose between the clip-on chuck and the in-line valve (if one is used) to allow the service technician to stand outside the trajectory path when inflating. Trajectory zone means any potential path or route that a wheel component may travel during an explosive separation, or the sudden release of the pressurized gas, or an area at which the blast from a single piece wheel may be released. The trajectory may deviate from paths that are perpendicular to the assembled position of the wheel at the time of separation or explosion.

# NEVER WELD OR APPLY HEAT TO A WHEEL ON WHICH A TIRE IS MOUNTED.

## 2. TIRE AND WHEEL LUBRICATION

It is essential that an approved tire mounting lubricant be used. Preferred materials for use as bead lubricants are vegetable based and mixed with proper water ratios per manufacturer's instructions. Never use antifreeze, silicones, or petroleum-base lubricants as this will damage the rubber. Lubricants not mixed to the manufacturer's specifications may have a harmful effect on the tire and wheel.

The lubricant serves the following three purposes:

- Helps minimize the possibility of damage to the tire beads from the mounting tools.
- Helps ease the insertion of the tire onto the wheel by lubricating all contacting surfaces.

• Assists proper bead seating (tire and wheel centering) and helps to prevent eccentric mountings.

The MICHELIN® product, Tiger Grease 80, MSPN 25817, is specifically formulated for commercial truck tire mounting. It can be obtained through any authorized MICHELIN Truck Tire dealer or by contacting MICHELIN Consumer Care (1-888-622-2306).

Apply a <u>clean lubricant</u> to all portions of the tire bead area and the exposed portion of the flap using sufficient but sparing quantities of lubricant. Also, lubricate the entire rim surface. Avoid using excessive amounts of lubricant, which can become trapped between the tire and tube and can result in tube damage and rapid gas loss.

**<u>CAUTION:</u>** It is important that tire lubricant be clean and free of dirt, sand, metal shavings, or other hard particles. The following practice is recommended:

- a. Use a fresh supply of tire lubricant each day, drawing from a clean supply source and placing the lubricant in a clean portable container.
- b. Provide a cover for the portable container and/or other means to prevent contamination of the lubricant when not in use. For lubricants in solution, we suggest the following method, which has proven to be successful in helping to minimize contamination and prevent excess lubricant from entering the tire casing: provide a special cover for the portable container that has a funnel-like device attached. The small opening of the funnel should be sized so that when a swab is inserted through the opening into the reserve of lubricant and then withdrawn, the swab is compressed, removing excess lubricant. This allows the cover to be left in place providing added protection. A mesh false bottom in the container is a further protection against contaminants. The tire should be mounted and inflated promptly before lubricant dries.

#### 3. PREPARATION OF WHEELS AND TIRES

- a. Always wear safety goggles or face shields when buffing or grinding wheels.
- b. Inspect wheel assemblies for cracks, distortion, and deformation of flanges. Using a file and/or emery cloth, smooth all burrs, welds, dents, etc. that are present on the tire side of the wheel. Inspect the condition of bolt holes on the wheels. Rim flange gauges and ball tapes are available for measuring wear and circumference of aluminum wheels.
- c. Remove rust with a wire brush and apply a rust inhibiting paint on steel wheels. The maximum paint thickness is .0035" (3.5 mils) on the disc face of the wheel.
- d. Remove any accumulation of rubber or grease stuck to the tire, being careful not to damage it. Wipe the beads down with a dry rag.

#### **DEMOUNTING TUBE-TYPE TIRE**

1. Before loosening any nuts securing the wheel assembly to the vehicle, remove the valve core and deflate

completely. If working on a dual assembly, completely deflate both tires. Run a wire or pipe cleaner through the valve stem to ensure complete deflation. This is to prevent a possible accident.

- 2. Remove the tire and wheel assembly from the vehicle and place on the floor with the side ring up.
- 3. Run a wire or pipe cleaner through the valve stem to clear the valve stem.
- 4. Apply lubricant to all surfaces of the bead area of the tire. Use the duck bill hammer, with the rubber mallet as a wedge, or a slide hammer.
- 5. For two-piece wheels, remove the side ring by pushing the tire bead down. Insert the tapered end of the rim tool into the notch and pry the side ring out of the gutter. Pry progressively around the tire until the side ring is free of the gutter.
- 6. For three-piece wheels, remove the lock ring by pushing the side rings and the tire bead down. Insert the tapered end of the rim tool into the notch near the split in the lock ring, push the tool downward, and pry the lock ring outward to remove the gutter from the base. Use the hooked end of the rim tool progressively around the tire to complete the removal, then lift off the side ring.
- 7. Turn the assembly over.
- 8. Unseat the remaining tire bead from the rim, and lift the rim from the tire.



Any inflated tire mounted on a wheel contains explosive energy. The use of damaged, mismatched or improperly assembled tire and wheel parts can cause the assembly to burst apart with explosive force. If you are struck by an exploding tire, wheel part or the blast, you can be seriously injured or killed. Do not attempt to dismount the tire while the assembly is still installed on the vehicle. Use proper tools to demount or mount wheel parts. Never use a steel hammer to seat wheel parts – use only rubber, plastic, or brass-tipped mallets. Striking a wheel assembly with a hammer of any type can damage the tire or wheel and endanger the installer. Use a steel duck bill hammer only as a wedge. Do not strike the head of a hammer with another hard-faced hammer – use a rubber mallet.

## **MOUNTING TUBE-TYPE TIRE**

- 1. Insert the proper size MICHELIN® tube into the tire and partially inflate (3 psi) to round out the tube (with larger sizes it may be necessary to use bead spreaders see Page 8 for mounting instructions).
- 2. Insert the valve through the flap valve hole. (Make sure the reinforced patch that is directly over the flap valve hole is facing outwards.) Then insert the remainder of the flap into the tire.
- 3. Check the flap wings to ensure against folding. This is

easily accomplished by placing your hand into one tire side, then the other, and then running your hand along the entire flap wing.

- 4. Inflate the tube until the flap is secured against the tire wall and the beads start to spread apart, making sure **not to exceed 3 psi.**
- 5. Apply a proper tire lubricant to both beads, exposed flap, and fully to the rim. Make sure that excess lubricant does not run down into the tire.
- 6. Lay the wheel flat on the floor with the gutter side up. Place tire, tube, and flap on the wheel, taking care to center the valve in the slot.
- 7. For two-piece wheels, place the side ring on the rim base so that the ring split is opposite the valve stem by placing the leading end (end without the notch) of the ring into the groove in the rim, and progressively walk the side ring into place. Ensure the ring is fully seated in the gutter.
- 8. For three-piece wheels, place the side ring on the rim base and stand on the ring to position it below the gutter rim base. Snap the leading end (end without the notch) of the lock ring into the gutter of the rim base, and progressively walk the lock ring into place. Ensure the ring is fully seated in the gutter.



Re-assembly and inflation of mismatched parts can result in serious injury or death. Just because parts fit together does not mean that they belong together. Check for proper matching of all wheel parts before putting any parts together. Inspect the tire and the wheel for any damage that would require them to be placed out of service.

Mismatching tire and wheel components is dangerous. A mismatched tire and wheel assembly may explode and can result in serious injury or death. This warning applies to any combination of mismatched components and wheel combinations. Never assemble a tire and wheel unless you have positively identified and correctly matched the parts.

# MOUNTING OF TUBE-TYPE TIRES USING MANUAL SPREADERS

- 1. Follow Steps 1 through 3 of the "Mounting of Tube-Type Tires." However, before inserting the flap into the tire, position two bead spreaders in the following manner:
  - a. Place the first at a 90° angle to the valve. (Flap is positioned between the spreader and the tube.)
  - b. Place the second directly opposite the first.
  - c. Spread the beads and insert the flap.
  - d. Close the beads, remove spreaders.
- 2. Follow Steps 4 through 8 of the "Mounting of Tube-Type Tires."

# MOUNTING OF TUBE-TYPE TIRES USING AUTOMATIC SPREADERS

- 1. Spread the tire beads.
- 2. Inflate the tube to approximately 3 psi.
- 3. Insert the tube into the tire.
- 4. Insert the valve through the flap valve hole.(As mentioned, the flap reinforced valve area must face outwards.) Insert the remainder of the flap into the tire.
- 5. Close the beads.
- 6. Apply a proper tire lubricant to the inside and outside surfaces of both beads and to that portion of the flap that appears between the beads. **Make sure that excess lubricant does not run down into the tire.**
- 7. Follow Steps 4 through 8 of the "Mounting of Tube-Type Tires."

## INFLATION OF TUBE-TYPE TIRES

- An inflation line with an extension (30" minimum), in-line gauge, and a clip-on valve chuck should be used for inflation. Remove valve core and lay the assembly flat on the ground. Using an approved restraining device, inflate partially to seat beads to no more than 3 psi. While the tire is still in the restraining device, make sure all wheel components are centered and locked properly. If not, the tire must be deflated, broken down, relubricated and reinflated. Do not attempt to seat the lock ring by means of a hammer.
- 2. Deflate the tire by removing the inflation line. This is to allow the tube to relax, thus, eliminating any wrinkles or uneven stretching that may have occurred during primary inflation.
- 3. With the valve core still removed, place the dual and wheel assembly into an approved safety cage or other approved restraining device meeting OSHA (Occupational Safety and Health Administration) standards, and reinflate the tire to the pressure shown on the sidewall in order to ensure proper bead seating. Then adjust the tire to the proper operating pressure. Never stand over a tire or in front of a tire when inflating. Always use a clip-on valve chuck with an in-line valve with a pressure gauge or a presettable regulator and a sufficient length of hose between the clip-on chuck and in-line valve (if one is used) to allow the employee to stand outside the trajectory path when inflating. RMA (Rubber Manufacturers Association) requires that all steel sidewall radial tires are inflated without a valve core.
- 4. Reinspect the assembly for proper positioning and seating of all components.
- 5. Check for leaks, and install a suitable valve cap.



Do not re-inflate any tires that have been run under-inflated or flat without careful inspection for damage. If run-flat damage is detected, scrap the tire. A tire is considered run-flat if it is found to be less than 80% of normal recommended operating pressure.



## **MICHELIN® RV TIRE REFERENCE CHART**

SIZE	Load Range	Tread	Specifications Page Number	Catalog Number	Tread Depth	Ma	x. Load and I	Pressure Sin	gle	м	ax. Load and	Pressure Di	ıal
	Kaliye		rage Nulliber	Number	32nds	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
LT215/85R16	E	XPS RIB®	21	39510	15	2680	80	1215	550	2470	80	1120	550
LT225/75R16	E	XPS RIB®	21	08404	14	2680	80	1215	550	2470	80	1120	550
LT235/85R16	E	XPS RIB®	21	13080	15	3042	80	1380	550	2778	80	1260	550
LT245/75R16	E	XPS RIB®	21	26848	15	3042	80	1380	550	2778	80	1260	550
10R17.5	G	XZA®	41	05008	16	4805	115	2180	790	4540	115	2060	790
8R19.5	F	XZA®	41	60893	16	3525	110	1600	760	3305	110	1500	760
	F	XRV®	11	58916	13	3640	95	1650	660	3415	95	1550	660
225/70R19.5	F	XZE®	39	81473	17	3640	95	1650	660	3415	95	1550	660
	G	XZE®	39	91043	17	3970	110	1800	760	3750	110	1700	760
	F	XRV®	11	67140	14	4080	95	1850	660	3860	95	1750	660
245/70R19.5	G	XZE®	39	66338	18	4540	110	2060	760	4300	110	1950	760
	н	XZE®	39	75997	18	4940	120	2240	830	4675	120	2120	830
9R22.5	F	XZE®	39	75473	18	4540	105	2060	720	4300	105	1950	720
400000	F	XZE®	39	79883	21	5205	100	2360	690	4940	100	2240	690
10R22.5	G	XZE®	39	99141	21	5675	115	2575	790	5355	115	2430	790
	G	XZA3®	36	73162	19	6175	105	2800	720	5840	105	2650	720
	G	XZE2	40	78390	22	6175	105	2800	720	5840	105	2650	720
11R22.5	н	XZA3®	36	47488	19	6610	120	3000	830	6005	120	2725	830
	н	XZE2™	40	67042	22	6610	120	3000	830	6005	120	2725	830
12R22.5	н	XZE® *	39	85335	22	7390	120	3350	830	6780	120	3075	830
	G	XRV®	11	87511	16	5205	110	2360	760	4805	110	2180	760
235/80R22.5	G	XZE®	39	68749	19	5205	110	2360	760	4805	110	2180	760
255/70R22.5	н	XZE® €	39	61737	18	5510	120	2500	830	5070	120	2300	830
	G	XRV®	11	59634	16	5205	110	2360	760	4805	110	2180	760
255/80R22.5	G	XZE®	39	94390	20	5205	110	2360	760	4805	110	2180	760
	J	XZA2® ENERGY	38	90059	18	6940	130	3150	900	6395	120	2900	830
275/70R22.5	J	XZE2+	40	78395	19	6940	130	3150	900	6395	120	2900	830
	G	XZA3®	36	73146	19	6175	110	2800	760	5675	110	2575	760
	G	XZE2™	40	55895	22	6175	110	2800	760	5675	110	2575	760
275/80R22.5	н	XZA3®	36	69192	19	7160	120	3250	830	6610	120	3000	830
	н	XZA3® ANTISPLASH	37	08819	19	7160	120	3250	830	6610	120	3000	830
	н	XZE™	39	01637	22	7160	120	3250	830	6610	120	3000	830
	н	XZA2® ENERGY	38	76807	16	7830	120	3550	830	6940	120	3150	830
295/80R22.5	н	XZE2+	40	81993	20	7830	120	3550	830	6940	120	3150	830
305/70R22.5	L	XRV®	11	93499	16	7830	120	3550	830	6940	120	3150	830
245/06	L	XZA2 <sup>®</sup> ENERGY	38	76184	17	9090	130	4125	900	8270	130	3750	900
315/80R22.5	L	XZA®1	39	47056	18	9090	130	4125	900	8270	130	3750	900
365/70R22.5	L	XZA®	37	71842	19	10500	125	4750	860	_	_	_	_
	G	XZA3®	36	73181	19	6610	105	3000	720	6005	105	2725	720
11R24.5	G	XZE2™	40	91867	22	6610	105	3000	720	6005	105	2725	720
	н	XZE2™	40	88507	22	7160	120	3250	830	6610	120	3000	830
	G	XZA3®	36	73173	19	6175	110	2800	760	5675	110	2575	760
275/80R24.5	G	XZE2 <sup>™</sup>	40	75519	22	6175	110	2800	760	5675	110	2575	760
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 $\ensuremath{\mathfrak{B}}$  With chip and cut resistant tread compound.

#### XRV® **HIGHWAY & REGIONAL APPLICATIONS**

#### All-position radial designed specifically for exceptional performance on recreational vehicles and motorhomes

- Wide, "see-through" grooves promote drainage efficiency to help improve traction on wet surfaces
- Multi-siping helps deliver dependable grip and long, even wear
- Enlarged sidewall characters makes load/pressure information easier to read, facilitating proper use and maintenance
- Stable tread with cool running compound engineered to reduce squirm and lower heat for improved handling and durability

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Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac	ded lius	Ove Diam			Overall Width (‡) Approved Wheels (Measuring wheel		Wheels Spacing		Min. Dual Spacing (‡)		Revs Per Mile	Single				Max. Load and Pressure Dual				
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	mm		psi	kg.	kPa	lbs.	psi	kg.	kPa			
225/70R19.5 (1)	F	58916	13	75	14.9	379	32.0	813	8.7	222	6.00, 6.75	9.7	246	648	3640	95	1650	660	3415	95	1550	660			
245/70R19.5 (1)	F	67140	14	75	15.5	393	33.3	846	9.6	245	6.75, 7.50	10.7	272	625	4080	95	1850	660	3860	95	1750	660			
235/80R22.5 (1)	G	87511	16	75	17.4	443	37.1	942	9.2	233	6.75, 7.50	10.3	262	556	4675	110	2120	760	4410	110	2000	760			
255/80R22.5 <sup>(1)</sup>	G	59634	16	75	17.9	456	38.2	972	9.9	251	7.50, 8.25	11.2	284	541	5205	110	2360	760	4805	110	2180	760			
305/70R22.5 (2)	L	93499	16	75	18.1	460	39.1	994	12.3	312	9.00, 8.25	13.5	343	531	7830	120	3550	830	6940	120	3150	830			

(1, 2) Tread design as indicated above the tire picture.

Note: Wheel listed first is the measuring wheel.

(\*) Exceeding the lawful speed limit is neither recommended nor endorsed.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.

Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

For RV use only, Michelin displays tire loads **per axle end** in the load and inflation tables, as we recommend weighing each axle end separately and using the heaviest end weight to determine the axle's cold inflation tire pressure. For control of your RV, it is critical the tire pressures be the same across an axle, while NEVER exceeding the maximum pressure limit stamped on the wheels.

To select the proper load and inflation table, locate your tire size in the following pages, then match your tire's sidewall markings to the table with the same sidewall markings. If your tire's sidewall markings do not match any table listed, please contact your Michelin dealer for the applicable load and inflation table.

Industry load and inflation standards are in a constant state of change, and Michelin continually updates its product information to reflect these changes. Printed material may not reflect the latest load and inflation standards.

In the load and inflation tables, SINGLE means an axle with one tire mounted on each end, while DUAL means an axle with two tires mounted on each end. In an RV application, the loads indicated represent the total weight of an axle end. When one axle end weighs more than the other, use the heaviest of the two end weights to determine the unique tire pressure for all tires on the axle. The maximum cold pressure for each axle may vary, depending on their weights. These tables are applicable for all RV axles, whether or not they are power-driven.

WHEEL DIAMETER	PSI	35	40	45	50	55	60	65	70	75	80		MAXIMUM LOAD AND
16"	kPa	250	280	310	350	380	410	450	480	520	550	'	PRESSURE ON SIDEWALL
	LBS SINGLE	1495	1640	1785	1940	2050	2180	2335	2430	2550	2680	S	2680 LBS AT 80 PSI
LT215/85R16 LRE	LBS DUAL	2720	2980	3250	3530	3730	3970	4300	4420	4640	4940	D	2470 LBS AT 80 PSI
XPS RIB	KG SINGLE	695	745	810	880	930	990	1060	1100	1155	1215	S	1215 KG AT 550 kPa
	KG DUAL	1260	1350	1475	1600	1690	1800	1950	2005	2105	2240	D	1120 KG AT 550 kPa
	LBS SINGLE	1500	1650	1790	1940	2060	2190	2335	2440	2560	2680	S	2680 LBS AT 80 PSI
LT225/75R16 LRE	LBS DUAL	2730	3000	3260	3530	3750	3990	4300	4440	4660	4940	D	2470 LBS AT 80 PSI
XPS RIB	KG SINGLE	700	750	813	880	935	995	1060	1108	1160	1215	S	1215 KG AT 550 kPa
	KG DUAL	1270	1360	1480	1600	1700	1810	1950	2015	2115	2240	D	1120 KG AT 550 kPa
	LBS SINGLE	1700	1870	2030	2205	2335	2485	2625	2765	2905	3042	S	3042 LBS AT 80 PSI
LT235/85R16 LRE	LBS DUAL	3090	3400	3690	4010	4250	4520	4760	5030	5290	5556	D	2778 LBS AT 80 PSI
XPS RIB	KG SINGLE	790	850	920	1000	1060	1130	1190	1255	1320	1380	S	1380 KG AT 550 kPa
	KG DUAL	1440	1545	1675	1820	1930	2050	2160	2280	2400	2520	D	1260 KG AT 550 kPa
	LBS SINGLE	1700	1865	2030	2205	2335	2480	2625	2765	2900	3042	S	3042 LBS AT 80 PSI
LT245/75R16 LRE	LBS DUAL	3090	3390	3690	4010	4250	4510	4763	5030	5280	5556	D	2778 LBS AT 80 PSI
XPS RIB	KG SINGLE	790	845	920	1000	1060	1125	1190	1255	1315	1380	S	1380 KG AT 550 kPa
	KG DUAL	1440	1540	1675	1820	1930	2045	2160	2280	2395	2520	D	1260 KG AT 550 kPa

WHEEL DIAMETER	PSI	85	90	95	100	105	110	115	120	125		MAXIMUM LOAD AND
17.5"	kPa	590	620	660	690	720	760	790	830	860		PRESSURE ON SIDEWALL
	LBS SINGLE	3860	4005	4150	4300	4470	4640	4805			S	4805 LBS AT 115 PSI
10R17.5 LRG	LBS DUAL	7280	7570	7860	8160	8470	8780	9080			D	4540 LBS AT 115 PSI
XZA	KG SINGLE	1750	1820	1890	1950	2030	2110	2180			S	2180 KG AT 790 kPa
	KG DUAL	3300	3440	3580	3700	3840	3980	4120			D	2060 KG AT 790 kPa

In the load and inflation tables, SINGLE means an axle with one tire mounted on each end, while DUAL means an axle with two tires mounted on each end. In an RV application, the loads indicated represent the total weight of an axle end. When one axle end weighs more than the other, use the heaviest of the two end weights to determine the unique tire pressure for all tires on the axle. The maximum cold pressure for each axle may vary, depending on their weights. These tables are applicable for all RV axles, whether or not they are power-driven.

WHEEL DIAMETER	PSI	65	70	75	80	85	90	95	100	105	110	115	120		MAXIMUM LOAD AND
19.5"	kPa	450	480	520	550	590	620	660	690	720	760	790	830		PRESSURE ON SIDEWALL
	LBS SINGLE		2540	2680	2835	2955	3075	3195	3305	3415	3525			S	3525 LBS AT 110 PSI
8R19.5 LRF	LBS DUAL		4920	5140	5360	5570	5780	6000	6200	6400	6610			D	3305 LBS AT 110 PSI
XZA	KG SINGLE		1150	1220	1285	1340	1400	1450	1500	1550	1600			S	1600 KG AT 760 kPa
	KG DUAL		2240	2340	2430	2520	2620	2720	2820	2920	3000			D	1500 KG AT 760 kPa
	LBS SINGLE	2755	2895	3040	3195	3315	3450	3640						S	3640 LBS AT 95 PSI
225/70R19.5 LRF	LBS DUAL	5200	5440	5720	6000	6230	6490	6830						D	3415 LBS AT 95 PSI
XRV, XZE	KG SINGLE	1250	1310	1380	1450	1500	1570	1650						S	1650 KG AT 660 kPa
	KG DUAL	2360	2460	2600	2720	2820	2940	3100						D	1550 KG AT 660 kPa
	LBS SINGLE	2755	2895	3040	3195	3315	3450	3640	3715	3845	3970			S	3970 LBS AT 110 PSI
225/70R19.5 LRG	LBS DUAL	5200	5440	5720	6000	6230	6490	6830	6980	7230	7500			D	3750 LBS AT 110 PSI
XZE	KG SINGLE	1250	1310	1380	1450	1500	1570	1650	1690	1740	1800			S	1800 KG AT 760 kPa
	KG DUAL	2360	2460	2600	2720	2820	2940	3100	3160	3280	3400			D	1700 KG AT 760 kPa
	LBS SINGLE				3640	3740	3890	4080						S	4080 LBS AT 95 PSI
245/70R19.5 LRF	LBS DUAL				6830	7030	7310	7720						D	3860 LBS AT 95 PSI
XRV	KG SINGLE				1650	1700	1770	1850						S	1850 LBS AT 660 kPa
	KG DUAL				3100	3180	3320	3500						D	1750 LBS AT 660 kPa
	LBS SINGLE				3640	3740	3890	4080	4190	4335	4540			S	4540 LBS AT 110 PSI
245/70R19.5 LRG	LBS DUAL				6830	7030	7310	7720	7880	8150	8600			D	4300 LBS AT 110 PSI
XZE	KG SINGLE				1650	1700	1770	1850	1900	1970	2060			S	2060 KG AT 760 kPa
	KG DUAL				3100	3180	3320	3500	3580	3700	3900			D	1950 KG AT 760 kPa
	LBS SINGLE			3390	3570	3750	3925	4100	4270	4440	4610	4775	4940	S	4940 LBS AT 120 PSI
245/70R19.5 LRH	LBS DUAL			6420	6760	7100	7430	7760	8080	8400	8720	9040	9350	D	4675 LBS AT 120 PSI
XZE	KG SINGLE			1540	1620	1700	1780	1860	1935	2015	2090	2165	2240	S	2240 KG AT 830 kPa
	KG DUAL			2910	3065	3220	3370	3520	3665	3810	3955	4100	4240	D	2120 KG AT 830 kPa

In the load and inflation tables, SINGLE means an axle with one tire mounted on each end, while DUAL means an axle with two tires mounted on each end. In an RV application, the loads indicated represent the total weight of an axle end. When one axle end weighs more than the other, use the heaviest of the two end weights to determine the unique tire pressure for all tires on the axle. The maximum cold pressure for each axle may vary, depending on their weights. These tables are applicable for all RV axles, whether or not they are power-driven.

WHEEL DIAMETER	PSI	70	75	80	85	90	95	100	105	110	115	120	125	130		MAXIMUM LOAD AND
22.5"	kPa	480	520	550	590	620	660	690	720	760	790	830	850	900	1	PRESSURE ON SIDEWALL
	LBS SINGLE	3370	3560	3730	3890	4080	4235	4390	4540						S	4550 LBS AT 105 PSI
9R22.5 LRF	LBS DUAL	6540	6820	7100	7380	7720	8010	8300	8600						D	4300 LBS AT 105 PSI
XZE	KG SINGLE	1530	1615	1690	1760	1850	1920	1990	2060						S	2060 KG AT 720 kPa
	KG DUAL	2960	3100	3220	3340	3500	3640	3780	3900						D	1950 KG AT 720 kPa
	LBS SINGLE	4080	4280	4480	4675	4850	5025	5205							S	5205 LBS AT 100 PSI
10R22.5 LRF	LBS DUAL	7720	8090	8460	8820	9170	9520	9880							D	4940 LBS AT 100 PSI
XZE	KG SINGLE	1850	1940	2030	2120	2200	2280	2360							S	2360 KG AT 690 kPa
	KG DUAL	3500	3660	3820	4000	4160	4320	4480							D	2240 KG AT 690 kPa
	LBS SINGLE	4080	4280	4480	4685	4850	5025	5205	5360	5515	5675				S	5675 LBS AT 115 PSI
10R22.5 LRG	LBS DUAL	7720	8090	8460	8820	9170	9520	9880	10150	10420	10710				D	5355 LBS AT 115 PSI
XZE	KG SINGLE	1850	1940	22030	2120	2200	2280	2360	2430	2500	2575				S	2575 KG AT 790 kPa
	KG DUAL	3500	3660	3820	4000	4160	4320	4480	4600	4720	4860				D	2430 KG AT 790 kPa
44022 5 105	LBS SINGLE	4530	4770	4990	5220	5510	5730	5950	6175						S	6175 LBS AT 105 PSI
11R22.5 LRG	LBS DUAL	8760	9160	9520	9900	10410	10830	11250	11680						D	5840 LBS AT 105 PSI
XZA3, XZE2	KG SINGLE	2050	2160	2260	2370	2500	2600	2700	2800						S	2800 KG AT 720 kPa
	KG DUAL	3980	4160	4320	4500	4720	4920	5120	5300						D	2650 KG AT 720 kPa
11R22.5 LRH	LBS SINGLE		4770	4990	5220	5510	5730	5950	6175	6320	6465	6610			S	6610 LBS AT 120 PSI
TIKZZ.5 LKH	LBS DUAL		9160	9520	9900	10410	10830	11250	11680	11790	11900	12010			D	6005 LBS AT 120 PSI
XZA3, XZE2	KG SINGLE		2160	2260	2370	2500	2600	2700	2800	2870	2940	3000			S	3000 KG AT 830 kPa
	KG DUAL		4160	4320	4500	4720	4920	5120	5300	5360	5420	5450			D	2725 KG AT 830 kPa
12R22.5 LRH	LBS SINGLE		5200	5450	5690	6005	6205	6405	6610	6870	7130	7390			S	7390 LBS AT 120 PSI
IZRZZ.J LKH	LBS DUAL		9980	10380	10780	11350	11570	11790	12010	12530	13050	13560			D	6780 LBS AT 120 PSI
XZE	KG SINGLE		2360	2470	2580	2725	2820	2910	3000	3120	3240	3350			S	3350 KG AT 830 kPa
	KG DUAL		4520	4700	4880	5150	5260	5360	5450	5680	5920	6150			D	3075 KG AT 830 kPa
235/80R22.5 LRG	LBS SINGLE	3255	3440	3625	3805	3980	4160	4330	4505	4675					S	4675 LBS AT 110 PSI
255/60R22.5 ERG	LBS DUAL	6140	6490	6840	7180	7510	7840	8170	8500	8820					D	4410 LBS AT 110 PSI
XRV, XZE	KG SINGLE	1475	1560	1645	1725	1805	1885	1965	2045	2120					S	2120 KG AT 760 kPa
	KG DUAL	2785	2945	3105	3255	3405	3555	3705	3855	4000	5400	5540			D	2000 KG AT 760 kPa
255/70R22.5 LRH	LBS SINGLE			4190	4370	4550	4675	4895	5065	5205	5400	5510			S	5510 LBS AT 120 PSI
	LBS DUAL			7940	8220	8550	8820	8910	9220	9350	9830	10140			D	5070 LBS AT 120 PSI
XZE 🕏	KG SINGLE			1900	1980	2060	2120	2220	2300	2360	2450	2500			S	2500 KG AT 830 kPa
	KG DUAL	2075	4070	3600	3720	3880	4000	4040	4180	4240	4460	4600			D	2300 KG AT 830 kPa
255/80R22.5 LRG	LBS SINGLE	3875	4070	4300	4440	4620	4805	4975	5150	5205					S	5205 LBS AT 110 PSI
		7050	7410	7720	8080	8410	8820	9050	9370	9610					D	4805 LBS AT 110 PSI
XRV, XZE	KG SINGLE	1760	1850	1950	2010	2100	2180	2260	2340	2360					S	2360 KG AT 760 kPa
		3200	3360	3500	3660	3820 5170	4000	4100 5625	4260 5850	4360	6290	6510	6730	6940	D	2180 KG AT 760 kPa 6940 LBS AT 130 PSI
275/70R22.5 LRJ	LBS SINGLE				4940		5400	11050	11490	6070 11930		6510 12790	0730	0940	S	
XZA2 ENERGY,	KG SINGLE				9710 2250	10160 2340	10610 2460	2550	2640	2750	12360 2840		3040	3150	D S	6395 LBS AT 120 PSI
XZE2+	KG SINGLE							2550 5000		5400		2950	5040	5150		3150 KG AT 900 kPa
	LBS SINGLE	4500	4725	4940	4420 5155	4600 5370	4820 5510	5000	5180 5980	6175	5580	5800			D S	2900 KG AT 830 kPa 6175 LBS AT 110 PSI
275/80R22.5 LRG	LBS SINGLE	4500 8190	8600	9080	9380	9770			10880							
							10140	10520		11350					D	5675 LBS AT 110 PSI
XZA3, XZE2	KG SINGLE	2040	2140	2240	2340	2440	2500	2620	2710	2800					S	2800 KG AT 760 kPa
	KG DUAL	3720	3900	4120	4260	4440	4600	4780	4940	5150					D	2575 KG AT 760 kPa

\* With chip and cut resistant tread compound.

More Wheel Diameter 22.5" continues on the next page.

In the load and inflation tables, SINGLE means an axle with one tire mounted on each end, while DUAL means an axle with two tires mounted on each end. In an RV application, the loads indicated represent the total weight of an axle end. When one axle end weighs more than the other, use the heaviest of the two end weights to determine the unique tire pressure for all tires on the axle. The maximum cold pressure for each axle may vary, depending on their weights. These tables are applicable for all RV axles, whether or not they are power-driven.

WHEEL DIAMETER	PSI	70	75	80	85	90	95	100	105	110	115	120	125	130		MAXIMUM LOAD AND
22.5"	kPa	480	520	550	590	620	660	690	720	760	790	830	860	900	P	PRESSURE ON SIDEWALL
275/80R22.5 LRH	LBS SINGLE		4915	5175	5435	5690	5940	6190	6435	6680	6920	7160			S	7160 LBS AT 120 PSI
	LBS DUAL		9080	9560	10030	10500	10970	11430	11880	12330	12780	13220			D	6610 LBS AT 120 PSI
XZE, XZA3,	KG SINGLE		2230	2345	2465	2580	2695	2810	2920	3030	3140	3250			S	3250 KG AT 830 kPa
XZA3 ANTISPLASH	KG DUAL		4120	4335	4550	4765	4975	5185	5390	5595	5795	6000			D	3000 KG AT 830 kPa
295/80R22.5 LRH	LBS SINGLE		5375	5660	5940	6220	6495	6770	7040	7300	7570	7830			S	7830 LBS AT 120 PSI
	LBS DUAL		9530	10030	10530	11030	11510	12000	12470	12950	13420	13880			D	6940 LBS AT 120 PSI
XZA2 ENERGY,	KG SINGLE		2440	2565	2695	2820	2945	3070	3195	3310	3435	3550			S	3550 KG AT 830 kPa
XZE2	KG DUAL		4325	4550	4775	5005	5220	5445	5655	5875	6085	6300			D	3150 KG AT 830 kPa
	LBS SINGLE		5375	5660	5940	6220	6495	6770	7040	7300	7570	7830			S	7830 LBS AT 120 PSI
305/70R22.5 LRL	LBS DUAL		9530	10030	10530	11030	11510	12000	12470	12950	13420	13880			D	6940 LBS AT 120 PSI
XRV	KG SINGLE		2440	2550	2700	2810	2960	3060	3170	3310	3410	3550			S	3550 KG AT 830 kPa
	KG DUAL		4340	4540	4800	4980	5240	5440	5620	5880	6060	6300			D	3150 KG AT 830 kPa
315/80R22.5 LRL	LBS SINGLE				6415	6670	6940	7190	7440	7610	7920	8270	8810	9090	S	9090 LBS AT 130 PSI
	LBS DUAL				11680	12140	12790	13090	13540	13880	14420	15220	16020	16540	D	8270 LBS AT 130 PSI
XZA1, XZA2 ENERGY	KG SINGLE				2910	3030	3150	3260	3370	3450	3590	3750	3980	4125	S	4125 KG AT 900 kPa
AZAZ ENERGI	KG DUAL				5300	5500	5800	5940	6140	6300	6540	6900	7240	7500	D	3750 KG AT 900 kPa
365/70R22.5 LRL	LBS SINGLE			7350	7710	8070	8430	8780	9130	9480	9820	10200	10500		S	10500 LBS AT 125 PSI
XZA	KG SINGLE			3335	3495	3660	3825	3985	4140	4300	4455	4625	4750		S	4750 KG AT 860 kPa

WHEEL DIAMETER	PSI	70	75	80	85	90	95	100	105	110	115	120		MAXIMUM LOAD AND
24.5"	kPa	480	520	550	590	620	660	690	720	760	790	830		PRESSURE ON SIDEWALL
	LBS SINGLE	4820	5070	5310	5550	5840	6095	6350	6610				S	6610 LBS AT 105 PSI
11R24.5 LRG	LBS DUAL	9320	9740	10140	10520	11020	11350	11680	12010				D	6005 LBS AT 105 PSI
XZA3, XZE2	KG SINGLE	2190	2300	2410	2520	2650	2770	2890	3000				S	3000 KG AT 720 kPa
	KG DUAL	4220	4420	4600	4780	5000	5160	5320	5450				D	2725 KG AT 720 kPa
	LBS SINGLE		5070	5310	5550	5840	6095	6350	6610	6790	6970	7160	S	7160 LBS AT 120 PSI
11R24.5 LRH	LBS DUAL		9740	10140	10520	11020	11350	11680	12010	12410	12810	13220	D	6610 LBS AT 120 PSI
XZE2	KG SINGLE		2300	2410	2520	2650	2770	2890	3000	3080	3160	3250	S	3250 KG AT 830 kPa
	KG DUAL		4420	4600	4780	5000	5160	5320	5450	5640	5820	6000	D	3000 KG AT 830 kPa
	LBS SINGLE	4545	4770	4940	5210	5420	5675	5835	6040	6175			S	6175 LBS AT 110 PSI
275/80R24.5 LRG	LBS DUAL	8270	8680	9080	9480	9860	10410	10620	10990	11350			D	5675 LBS AT 110 PSI
XZA3, XZE2	KG SINGLE	2060	2160	2240	2360	2460	2575	2650	2740	2800			S	2800 KG AT 760 kPa
	KG DUAL	3740	3940	4120	4300	4480	4720	4820	4980	5150			D	2575 KG AT 760 kPa





# Commercial Light Truck Tires

## **MICHELIN® COMMERCIAL LIGHT TRUCK TIRE REFERENCE CHART**



## **MICHELIN® COMMERCIAL LIGHT TRUCK TIRE REFERENCE CHART**

Size	Tread Name	Load Range	Load Index	Speed Rating	Catalog Number	Tread Depth	Wheel Range	Ма		ad And Pres ngle	sure	Ма		id And Press Jual	sure
		(1)	muex	Katiliy	Number	32nds		lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
	LTX <sup>®</sup> A/T2	E	115/112	R	03321	17	5.5" - 7.0"	2680	80	1215	550	2470	80	1120	550
LT215/85R16	LTX <sup>®</sup> M/S2	E	115/112	R	02397	14	5.5" - 7.0"	2680	80	1215	550	2470	80	1120	550
E1215/051(10	XPS RIB®	E	115/112	Q	39510	15	5.5" - 7.0"	2680	80	1215	550	2470	80	1120	550
	XPS TRACTION	E	115/112	Q	35260	17	5.5" - 7.0"	2680	80	1215	550	2470	80	1120	550
	LTX <sup>®</sup> A/T2	E	115/112	R	33371	17	6.0" - 7.0"	2680	80	1215	550	2470	80	1120	550
LT225/75R16	LTX® M/S	E	115/112	R	25516	15	6.0" - 7.0"	2680	80	1215	550	2470	80	1120	550
	XPS RIB®	E	115/112	Q	08404	14	6.0" - 7.0"	2680	80	1215	550	2470	80	1120	550
	LTX® A/T2	E	120/116	R	03287	17	6.0" - 7.5"	3042	80	1380	550	2778	80	1260	550
LT235/85R16	LTX <sup>®</sup> M/S2	E	120/116	R	27679	14	6.0" - 7.0"	3042	80	1380	550	2778	80	1260	550
L1233/03K10	XPS RIB®	E	120/116	Q	13080	15	6.0" - 7.0"	3042	80	1380	550	2778	80	1260	550
	XPS TRACTION	E	120/116	Q	36496	15	6.0" - 7.0"	3042	80	1380	550	2778	80	1260	550
	LTX® A/T2	E	120/116	R	38953	17	6.5" - 8.0"	3042	80	1380	550	2778	80	1260	550
LT245/75R16	LTX <sup>®</sup> M/S	E	120/116	R	22606	15	6.5" - 7.5"	3042	80	1380	550	2778	80	1260	550
	XPS RIB®	E	120/116	Q	26848	14	6.5" - 8.0"	3042	80	1380	550	2778	80	1260	550
LT265/75R16	LTX <sup>®</sup> A/T2	E	123/120	R	26117	17	7.0" - 8.0"	3415	80	1550	550	3085	80	1400	550
LI205/75K10	LTX <sup>®</sup> M/S2	E	123/120	R	23388	14	7.0" - 8.0"	3415	80	1550	550	3085	80	1400	550
LT235/80R17	LTX <sup>®</sup> M/S2	E	120/117	R	14157	14	6.0" - 7.5"	3085	80	1400	550	2835	80	1285	550
LT245/70R17	LTX® A/S	E	119/116	R	90771	15	6.5" - 7.5"	3000	80	1360	550	2755	80	1250	550
L1243/70117	LTX <sup>®</sup> M/S2	E	119/116	R	00644	14	6.5" - 8.0"	3000	80	1360	550	2755	80	1250	550
LT245/75R17	LTX <sup>®</sup> M/S2	E	121/118	R	31733	14	6.0" - 7.5"	3195	80	1450	550	2910	80	1320	550
LT265/70R17	LTX <sup>®</sup> A/S	E	121/118	R	83116	15	7.0" - 8.5"	3195	80	1450	550	2910	80	1320	550
LI203/70K17	LTX® M/S2	E	121/118	R	14221	14	7.0" - 8.5"	3195	80	1450	550	2910	80	1320	550

(1) A letter entry indicates the load range(s) in which Michelin markets a particular tread design and size.

## LIGHT TRUCK TIRE WARRANTY STANDARD LIMITED WARRANTY WHAT'S COVERED

All MICHELIN<sup>®</sup> Light Truck Tires have a Standard Manufacturer's Limited Warranty, which covers defects in workmanship and materials for the life of the original usable tread, or for 6 years from date of purchase, whichever occurs first. See Tire Dealer for details.

The owner's manual/limited warranty booklet also includes an additional limited warranty for tread life or mileage.

## **NOTES AND WARNING**

- **NOTE:** All comparisons are between MICHELIN tires within this category.
- Sizes listed do not include P-metric and floatation dimensions. For full range of products refer to "MICHELIN® Data Book" No. MDL41080.
- (2) Exceeding the lawful speed limit is neither recommended nor endorsed.
- (3) Tire section widths and overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.



**DANGER:** Never mount a 16" diameter tire on a 16.5" wheel.

(4) Range of approved wheel widths. For specific wheel profiles and measuring wheel, refer to "MICHELIN® Data Book" No. MDL41080.

**WARNING:** Serious or fatal injury may result from tire failure due to underinflation/overinflation/overloading. To ensure correct pressure and vehicle load, refer to vehicle owner's manual or tire information placard in the vehicle. Serious injury or death may result from explosion of tire/wheel assembly due to improper mounting. Only tire professionals should mount tires, and they should never inflate beyond 40 psi to seat the beads. See Tire Dealer for proper mounting. Before mixing types of tires in any configuration on any vehicle, be sure to check the vehicle owner's manual for recommendations.

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligation.

# MICHELIN® LTX® A/S tires offer exceptional fuel efficiency<sup>(3)</sup> and a lasting tread life

- EnergySaver Construction provides a fuel-efficient<sup>(3)</sup> tire shape and tread compounds that help reduce unnecessary friction when the tire rolls
- MaxTouch Construction<sup>™</sup> features a unique contact patch shape that evenly distributes the forces of acceleration, braking, and cornering
- Three-steel-belt in load provides incredible durability and strength to handle loads up to 13,500 lbs<sup>(2)</sup>



Size (1)	Load Range	Catalog Number	Tread Depth	Ove	rall Wid	th <sup>(1)</sup>	Load/ Speed	Ove Dian	erall neter	Wheel Width Range <sup>(1)</sup>	Min. Spa		Revs Per Mile			re Load gle			Max. Ti Di	re Load ual	
	5		32nds	in	mm	wheel	Rating	in	mm		in	mm	(at 45 mph)	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
LT245/70R17	E	90771	15	9.5	241	7.5"	119/116/R	30.6	777	6.5" - 7.5"	11.5	293	675	3000	80	1360	550	2755	80	1250	550
LT265/70R17	E	83116	15	10.4	264	8.0"	121/118/R	31.4	798	7.0" - 8.5"	12.4	316	657	3195	80	1450	550	2910	80	1320	550

(1) See Warranty, Notes and Warning on Page 18.

(2) Using four LT265/75R16/E tires inflated at 80 psi.

(3) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

#### LTX<sup>®</sup> M/S COMMERCIAL TIRE – ALL-SEASON

## MICHELIN<sup>®</sup> LTX<sup>®</sup> M/S tires offer long tread life and true all-season traction capabilities

- Straight sipes help deliver optimal grip in almost any kind of weather
- Three-steel-belt in load provides incredible durability and strength to handle loads up to 13,500 lbs<sup>(2)</sup>
- MaxTouch Construction<sup>™</sup> features a unique contact patch shape that evenly distributes the forces of acceleration, braking, and cornering



Size (1)	Load Range	Catalog Number	Tread Depth	Ove	rall Wid	th <sup>(1)</sup>	Load/ Speed Rating	Ove Diam		Wheel Width Range <sup>(1)</sup>	Min. Spa	cing	Revs Per Mile			re Load gle			Max. Ti Dı	re Load Ial	
	-		32nds	in	mm	wheel	Katiliy	in	mm		in	mm	(at 45 mph)	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
LT225/75R16	E	25516	15	8.8	224	6.0"	115/112/R	29.4	747	6.0" - 7.0"	10.2	259	709	2680	80	1215	550	2470	80	1120	550
LT245/75R16	E	22606	15	9.8	249	7.0"	120/116/R	30.7	780	6.5" - 7.5"	11.3	288	681	3042	80	1380	550	2778	80	1260	550

(1) See Warranty, Notes and Warning on Page 18. (2) Using four LT265/75R16/E tires inflated at 80 psi.

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.

Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

## LTX<sup>®</sup> M/S2

#### MICHELIN<sup>®</sup> LTX<sup>®</sup> M/S2 tires offer an exceptional combination of enhanced performances in wet and snow traction, as well as durability

- New silica tread compounds and better lateral water evacuation to help you stop shorter
- Better snow traction than the legendary MICHELIN® LTX® M/S tire. Greater density of full-depth 3D Active Sipes allow 8% more biting edges than the MICHELIN® LTX® M/S tire
- The new 3D Active Sipes and optimized contact patch of MaxTouch Construction<sup>™</sup> combine to deliver more miles



Size (1)	Load Range	Catalog Number	Tread Depth	Ove	rall Wid	th <sup>(1)</sup>	Load/ Speed	Ove Diam	erall neter	Wheel Width Range <sup>(1)</sup>	Min. Spa		Revs Per Mile			re Load gle				re Load Jal	
			32nds	in	mm	wheel	Rating	in	mm	1	in	mm	(at 45 mph)	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
LT215/85R16	E	02397	14	8.5	216	6.0"	115/112/R	30.4	772	5.5" - 7.0"	9.9	251	684	2680	80	1215	550	2470	80	1120	550
LT235/85R16	E	27679	14	9.3	236	6.5"	120/116/R	31.7	805	6.0" - 7.5"	10.8	274	656	3042	80	1380	550	2778	80	1260	550
LT265/75R16	E	23388	14	10.5	267	7.5"	123/120R	31.7	805	7.0" - 8.0"	12.4	315	657	3415	80	1550	550	3085	80	1400	550
LT235/80R17	E	14157	14	9.3	236	6.5"	120/117R	31.8	808	6.0" - 7.5"	10.8	273	654	3085	80	1400	550	2835	80	1285	550
LT245/70R17	E	00644	14	9.8	249	7.0"	119/116R	30.6	776	6.5" - 8.0"	11.3	288	681	3000	80	1360	550	2755	80	1250	550
LT245/75R17	E	31733	14	9.8	249	7.0"	121/118R	31.5	800	6.0" - 7.5"	11.3	288	660	3195	80	1450	550	2910	80	1320	550
LT265/70R17	E	14221	14	10.7	272	8.0"	121/118R	31.7	804	7.0" - 8.5"	12.4	316	657	3195	80	1450	550	2910	80	1320	550

(1) See Warranty, Notes and Warning on Page 18.

LTX<sup>®</sup> A/T2 COMMERCIAL TIRE – OFF-ROAD TRACTION, ON-ROAD COMFORT

#### MICHELIN<sup>®</sup> LTX<sup>®</sup> A/T2 tires provide excellent off-road traction and durability with uncompromising on-road comfort and handling

- Superior Off-Road Traction MICHELIN Biting Edges<sup>™</sup> notched blocks in the tread pattern - dig into nearly any surface for better off-road traction on dirt, mud, gravel, and wet grass
- MICHELIN® Comfort Control Technology uses computer-optimized design and precision manufacturing to offer greatly reduced vibrations and road noise
- The optimized contact patch shape, provided by MaxTouch Construction<sup>™</sup>, helps deliver exceptionally long tire life under the toughest conditions



Size (1)	Load Range	Catalog Number	Tread Depth	Ove	rall Wid	th <sup>(1)</sup>	Load/ Speed	Ove Dian	erall neter	Wheel Width Range <sup>(1)</sup>	Min. Spa	Dual cing	Revs Per Mile			re Load Igle				re Load ual	
			32nds	in	mm	wheel	Rating	in	mm		in	mm	(at 45 mph)	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
LT215/85R16	E	03321	17	8.5	216	6.0"	115/112/R	30.4	772	5.5" - 7.0"	10.3	262	684	2680	80	1215	550	2470	80	1120	550
LT225/75R16	E	33371	17	8.8	223	6.0"	115/112/R	29.3	744	6.0" - 7.0"	10.2	259	710	2680	80	1215	550	2470	80	1120	550
LT235/85R16	E	03287	17	9.3	236	6.5"	120/116/R	31.7	806	6.0" - 7.5"	10.8	273	656	3042	80	1380	550	2778	80	1260	550
LT245/75R16	E	38953	17	9.8	248	7.0"	120/116/R	30.5	774	6.5" - 8.0"	11.3	288	683	3042	80	1380	550	2778	80	1260	550
LT265/75R16	E	26117	17	10.5	267	7.5"	123/120/R	31.7	804	7.0" - 8.0"	12.4	315	657	3415	80	1550	550	3085	80	1400	550

(1) See Warranty, Notes and Warning on Page 18.

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.

#### **MICHELIN® XPS Rib® tires offer long wear life with steel** casing strength and retreadability

- Tread compounds specifically developed for commercial applications help tires last longer so your business dollars go farther
- Added strength and the ability to retread are just two advantages of steel casing - a feature that keeps trucks where they belong: on the job



Size (1)	Load Range	Catalog Number	Tread Depth	Ove	rall Wid	th <sup>(1)</sup>	Load/ Speed Rating		erall neter	Wheel Width Range <sup>(1)</sup>		Dual cing	Revs Per Mile			re Load gle			Max. Ti Dເ	re Load ual	
			32nds	in	mm	wheel	катіпд	in	mm	1	in	mm	(at 45 mph)	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
LT215/85R16	E	39510	15	8.6	218	6.0"	115/112/Q	30.7	780	5.5" - 7.0"	9.9	251	681	2680	80	1215	550	2470	80	1120	550
LT225/75R16	E	08404	14	8.7	221	6.0"	115/112/Q	29.4	747	6.0" - 7.0"	10.2	259	706	2680	80	1215	550	2470	80	1120	550
LT235/85R16	E	13080	15	9.7	246	7.0"	120/116/Q	32.0	813	6.0" - 7.0"	11.0	279	655	3042	80	1380	550	2778	80	1260	550
LT245/75R16	E	26848	14	9.6	244	7.0"	120/116/Q	30.6	777	6.5" - 8.0"	11.3	288	676	3042	80	1380	550	2778	80	1260	550

(1) See Warranty, Notes and Warning on Page 18.

## XPS TRACTION

#### **COMMERCIAL TIRE – OFF-ROAD CONFIDENCE**

681

655

2680

3042 80 1380

80 1215 550 2470 80

550 2778 1120 550

80 1260 550

#### **MICHELIN® XPS Traction tires offer extreme off-road traction** with steel casing puncture resistance and retreadability

- An aggressive tread design and anti-chip compound help provide the off-road traction needed on gravel and rocky terrain
- Added strength and the ability to retread are just two advantages of steel casing — a feature that keeps trucks where they belong: on the job

Overall Width (1)

in mm

8.8 224 6.0"

wheel



LT235/85R16	E	36496	15	9.6	244	6.5"
(1) See Warrant	y, Note	s and W	arning	on Pag	e 18.	

Catalog

Numbe

35260

Load

Range

Е

Size (1)

LT215/85R16

Tread Depth

32nds

17

Overall Diameter

in

30.7

32.0

mm

780

813

5.5" - 7.0"

6.0" - 7.0"

9.9 251

10.8 273

Load/

Speed Rating

115/112/Q

120/116/Q

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.

Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

## MICHELIN INFLATION CHARTS FOR LIGHT TRUCK TIRES

To select the proper load and inflation table, locate your tire size in the following pages, then match your tire's sidewall markings to the table with the same sidewall markings. If your tire's sidewall markings do not match any table listed, please contact your MICHELIN<sup>®</sup> dealer for the applicable load and inflation table.

Industry load and inflation standards are in a constant state of change, and Michelin continually updates its product information to reflect these changes. Printed material may not reflect the latest load and inflation standards.

#### NOTE: Never exceed the wheel manufacturer's maximum pressure limitation.

S = Single configuration, or 2 tires per axle. D = Dual configuration, or 4 tires per axle. Loads are indicated per axle.

WHEEL DIAMETER	PSI	35	40	45	50	55	60	65	70	75	80		IAX LOAD & PRESSURE
16"	kPa	250	280	310	350	380	410	450	480	520	550	1	ON SIDEWALL
LT215/85R16 LRE	LBS SINGLE	2990	3280	3570	3880	4100	4360	4670	4860	5100	5360	S	2680 LBS AT 80 PSI
LTX A/T2, LTX M/S2,	LBS DUAL	5440	5960	6500	7060	7460	7940	8600	8840	9280	9880	D	2470 LBS AT 80 PSI
XPS RIB,	KG SINGLE	1990	1488	1619	1760	1860	1978	2120	2205	2313	2430	S	1215 KG AT 550 KPA
XPS TRACTION	KG DUAL	2520	2703	2948	3200	3384	3602	3900	4010	4209	4480	D	1120 KG AT 550 KPA
LT225/75R16 LRE	LBS SINGLE	3000	3300	3580	3880	4120	4380	4670	4880	5120	5360	S	2680 LBS AT 80 PSI
	LBS DUAL	5460	6000	6520	7060	7500	7980	8600	8880	9320	9880	D	2470 LBS AT 80 PSI
LTX A/T2, LTX M/S,	KG SINGLE	1400	1500	1625	1760	1870	1990	2120	2215	2320	2430	S	1215 KG AT 550 KPA
XPS RIB	KG DUAL	2540	2720	2960	3200	3400	3620	3900	4030	4230	4480	D	1120 KG AT 550 KPA
LT235/85R16 LRE	LBS SINGLE	3400	3740	4060	4410	4670	4970	5246	5530	5810	6084	S	3042 LBS AT 80 PSI
LTX A/T2, LTX M/S2,	LBS DUAL	6180	6800	7380	8024	8500	9040	9524	10060	10580	11112	D	2778 LBS AT 80 PSI
XPS RIB,	KG SINGLE	1580	1696	1842	2000	2118	2254	2380	2508	2635	2760	S	1380 KG AT 550 KPA
XPS TRACTION	KG DUAL	2880	3084	3348	3640	3856	4100	4320	4563	4799	5040	D	1260 KG AT 550 KPA
LT245/75R16 LRE	LBS SINGLE	3400	3730	4060	4410	4670	4960	5250	5530	5800	6084	S	3042 LBS AT 80 PSI
	LBS DUAL	6180	6780	7380	8024	8500	9020	9525	10060	10560	11112	D	2778 LBS AT 80 PSI
LTX A/T2, LTX M/S,	KG SINGLE	1580	1690	1840	2000	2120	2250	2380	2510	2630	2760	S	1380 KG AT 550 KPA
XPS RIB	KG DUAL	2880	33075	3350	3640	3855	4090	4320	4560	4790	5040	D	1260 KG AT 550 KPA
	LBS SINGLE	3820	4200	4560	4940	5250	5580	6000	6210	6520	6830	S	3415 LBS AT 80 PSI
LT265/75R16 LRE	LBS DUAL	6960	7640	8300	9080	9560	10160	11020	11300	11860	12340	D	3085 LBS AT 80 PSI
LTX A/T2, LTX M/S2	KG SINGLE	1780	1905	2070	2240	2380	2530	2720	2815	2960	3100	S	1550 KG AT 550 KPA
	KG DUAL	3240	3465	3765	4120	4340	4610	5000	5125	5380	5600	D	1400 KG AT 550 KPA

WHEEL DIAMETER	PSI	35	40	45	50	55	60	65	70	75	80		AX LOAD & PRESSURE
17"	kPa	250	280	310	350	380	410	450	480	520	550	1	ON SIDEWALL
	LBS SINGLE	3450	3790	4110	4540	4740	5030	5360	5610	5880	6170	S	3085 LBS AT 80 PSI
LT235/80R17 LRE	LBS DUAL	6280	6900	7480	8160	8620	9160	9880	10220	10700	11340	D	2835 LBS AT 80 PSI
LTX M/S2	KG SINGLE	1600	1720	1865	2060	2150	2281	2430	2545	2670	2800	S	1400 KG AT 550 KPA
	KG DUAL	2920	3130	3390	3700	3910	4155	4480	4635	4855	5140	D	1285 KG AT 550 KPA
	LBS SINGLE	3380	3710	4020	4410	4630	4920	5200	5480	5750	6000	S	3000 LBS AT 80 PSI
LT245/70R17 LRE	LBS DUAL	6160	6760	7320	7940	8420	8960	9340	9980	10460	11020	D	2755 LBS AT 80 PSI
LTX A/S	KG SINGLE	1570	1685	1825	2000	2100	2230	2360	2485	2610	2720	S	1360 KG AT 550 KPA
	KG DUAL	2860	3065	3320	3600	3820	4065	4240	4525	4745	5000	D	1250 KG AT 550 KPA
	LBS SINGLE	3540	3890	4220	4540	4860	5160	5510	5750	6040	6170	S	3195 LBS AT 80 PSI
LT245/75R17 LRE	LBS DUAL	6440	7080	7680	8160	8840	9400	10140	10460	11000	11340	D	2910 LBS AT 80 PSI
LTX M/S2	KG SINGLE	1650	1765	1915	2060	2205	2340	2500	2608	2740	2900	S	1450 KG AT 550 KPA
	KG DUAL	3000	3210	3485	3700	4010	4265	4600	4745	4990	5280	D	1320 KG AT 550 KPA
	LBS SINGLE	3780	4150	4510	4940	5190	5520	5820	6010	6200	6390	S	3195 LBS AT 80 PSI
LT265/70R17 LRE	LBS DUAL	6880	7560	8200	9080	9440	10040	10720	10940	11280	11640	D	2910 LBS AT 80 PSI
LTX A/S, LTX M/S2	KG SINGLE	1760	1880	2044	2240	2360	2500	2640	2730	2800	2900	S	1450 KG AT 550 KPA
	KG DUAL	3200	3440	3720	4120	4280	4560	4860	4960	5120	5280	D	1320 KG AT 550 KPA

# Truck Tires

10

## **TREAD PATTERN DESIGNATIONS**

Michelin uses specific numbers or letters to identify different types of tread patterns or casing construction.



For example:

MICHELIN® Radial	X = MICHELIN® Radial
Prefix	X One®=Wide Single Tire Replacing 2 Traditional DualsX COACH=Highway CoachX MULTIWAY=RegionalX WORKS=On/Off Road
Position	<ul> <li>D = Drive</li> <li>T = Trailer</li> <li>Z = All Position</li> <li>F = Front (Steer)</li> </ul>
Application	<ul> <li>A = Highway Applications</li> <li>E = Regional Applications</li> <li>U = Urban</li> <li>Y = 80% On-Road Use, 20% Off-Road Use</li> <li>L = 80% Off-Road Use, 20% On-Road Use</li> </ul>
Index	<ul> <li>Anti-chip / Cut-resistant Compound</li> <li>HT = High Torque</li> <li>ENERGY = Fuel Efficient</li> <li>M/S = Mud and Snow</li> <li>S = Severe Service</li> </ul>

## TIRE APPLICATIONS

The specific tread design used should only be considered after the vehicle type and user vocation has been examined.

There are several categories of tire service applications:



## **PRODUCT SEGMENTATION**

	MICHELIN SEGMENTS	VOCATIONS					
Α	Long Haul	Truckload Carrier					
		• Public Utilities					
		School Bus					
		Food Distribution					
E	Regional	Petroleum Delivery					
		Courier and Delivery Service					
		Manufacturing					
		Auto Carriers					
U	Urban	• Urban Buses					
	Orban	Sanitation and Refuse					
Y	On/Off Road	Construction and Mining					
	Off Road	• Forestry and Logging					
Ľ	UT KOdu	• Oil Field					



## **MICHELIN® TRUCK TIRE REFERENCE CHART STEER / ALL-POSITION TIRES**



\* Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary. \*\* 7/7/3 Manufacturer's Limited Casing Warranty: 700,000 miles, 7 years, or 3 retreads for MICHELIN® XZA3®, XZA3® Antisplash™, XDA3®, and XDA® Energy tires only. See limited warranty for details.

"No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels." US Code of Federal Regulations: Title 49, Transportation; Part 393.75. Exceeding the legal speed limit is neither recommended nor endorsed.

## **MICHELIN® TRUCK TIRE REFERENCE CHART STEER / ALL-POSITION TIRES**



\* Exceeding the legal speed limit is neither recommended nor endorsed.

LH - Long Haul, R - Regional, O/O - On/Off Road, U - Urban

## **MICHELIN® TRUCK TIRE REFERENCE CHART STEER / ALL-POSITION TIRES**

R

0/0

U



- Dual compound tread rubber helps ensure cool operating temperatures and helps keep tire wear rate low Deep, wide channels help provide
- excellent water evacuation throughout the life of the tire
- Lateral siping enhance traction and braking

0/0

U

R

\* "No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels." US Code of Federal Regulations: Title 49, Transportation; Part 393.75. Exceeding the legal speed limit is neither recommended nor endorsed. LH – Long Haul, R – Regional, O/O – On/Off Road, U – Urban

## **MICHELIN® TRUCK TIRE REFERENCE CHART**

## **DRIVE TIRES**



\* Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

\*\* 7/7/3 Manufacturer's Limited Casing Warranty: 700,000 miles, 7 years, or 3 retreads for MICHELIN® XZA3®, XZA3® Antisplash™, XDA3®, and XDA® Energy tires only. See limited warranty for details.

Exceeding the legal speed limit is neither recommended nor endorsed. LH – Long Haul, R – Regional, O/O – On/Off Road, U – Urban

## **MICHELIN® TRUCK TIRE REFERENCE CHART**

## **DRIVE TIRES**



Exceeding the legal speed limit is neither recommended nor endorsed. LH – Long Haul, R – Regional, O/O – On/Off Road, U – Urban

0/0

U

 Outstanding traction on wet and slippery surfaces from over 700 3D *Matrix*<sup>™</sup> sipes
 Optimized for stone rejection with variable angled groove walls and groove bottom protectors
 19.5" sizes

18/32nds original tread depth
Non-directional tread

R

LH

**Truck Tires** 

## **MICHELIN® TRUCK TIRE REFERENCE CHART**

## **TRAILER TIRES**



\* Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary. Exceeding the legal speed limit is neither recommended nor endorsed.

LH - Long Haul, R - Regional, O/O - On/Off Road, U - Urban

## MICHELIN® TRUCK TIRE REFERENCE CHART SPECIAL APPLICATION TIRES



- \* Exceeding the legal speed limit is neither recommended nor endorsed.
- LH Long Haul, R Regional, O/O On/Off Road, U Urban

## PRODUCT AVAILABILITY

LONG HAUL												
SIZE	LOAD RANGE	TREAD NAME	CATALOG NUMBER	TREAD DEPTH 32ND	AWP	WHEEL F	POSITION DRIVE	TRAILER	DIREC- TIONAL	RV USE	COMMENTS	
10.00R15	J	XTA	70667	14								
215/75R17.5	J	XTA	82636	15								
245/70R17.5	J	XTA2 ENERGY	78370	13								
225/70R19.5	F	XRV	58916	13								
245/70R19.5	F	XRV	67140	14								
265/70R19.5	J	XTA2 ENERGY	83728	15				-				
445/45R19.5	Μ	XTA2 ENERGY (wb)	69910	18								
	G	XD4	87033	30			-					
	G	XDA3	96666	26			-					
	G	XDA5	73154	30			-					
	G	XDN2	72805	27								
11R22.5	G	XT-1	02078	12								
	G	XZA-1+	06032	18								
	G	XZA3	73162	19								
	Н	XDN2	64321	27								
	Н	XZA3	47488	19								
12R22.5	Н	XDN2	51753	27			•					
235/80R22.5	G	XRV	87511	16								
255/70R22.5	Н	XD2	74493	25			•					
255/80R22.5	G	XRV	59634	16								
275/70R22.5	J	XZA2 ENERGY	90059	18								
	G	XD4	82292	30								
	G	XDA ENERGY	42564	26								
	G	XDA3	73095	26								
	G	XDA5	76747	30			-					
	G	XDN2	63465	27			-					
275/80R22.5	G	XT-1	19518	12								
275/00122.5	G	XTA ENERGY	73176	13				-				
	G	XZA-1+	18678	18								
	G	XZA3	73146	19	-							
	H	XZA3	69192	19	-				-			
	H	XZA3 XZA3 ANTISPLASH	08819	19	-				-			
295/60R22.5	J	XZA2 ENERGY	33215	16	-					-		
293/00122.3	H	XZA2 ENERGY	76807	16	-					-		
295/80R22.5	J	X Coach XZ	28798	10	-					-		
305/70R22.5	L	XRV	93499	16	-							
303/70822.3	L	XDN2 GRIP	04355	28	-					-		
315/80R22.5	L	XZA1	47056	18			-		-			
515/00122.5	L	XZA1 XZA2 ENERGY	76184	17								
		X One XDA ENERGY	21881	24	-					-		
	L			24				<u> </u>				
445/50R22.5	L	X One XDN2	36587 49694	13			-	<u> </u>				
455/55R22.5	L	X One XTA X One XTE	59070	13			-		┝──┤			
								-				
	L	X One XDA ENERGY	57105	24								
	L	X One XDN2 X One XTE⊛	31535	27							A Cut & chin resistant two-days	
11R24.5	L		30574	16			-				€ Cut & chip resistant tread compound	
	G	XDA5	73177	30				<u> </u>	──┤			
	G	XDN2	87459	27				<u> </u>	<u>                                     </u>			
	G	XT-1	22754	12					<u>                                     </u>			
	G	XZA-1+	10274	18				<u> </u>	<u> </u>			
	G	XZA3	73181	19				<u> </u>	-			
	Н	XDA3	71551	26			-	<u> </u>				
	Н	XDA5	03713	30			•	<u> </u>				
275/80R24.5	Н	XDN2	87129	27			-					
	G	XDA3	68934	26								
	G	XDA5	73166	30			-					
	G	XDN2	75684	27								
	G	XT-1	29684	12								
	G	XZA-1+	30968	18								
			72472	19								
305/75R24.5	G	XZA3 XDA5	73173 30987	30	-				-			
## PRODUCT AVAILABILITY

					REC	GIOI	NAL				
SIZE	LOAD RANGE	TREAD NAME	CATALOG NUMBER	TREAD DEPTH 32ND	AWP	WHEEL P STEER	OSITION DRIVE	TRAILER	DIREC- TIONAL	RV USE	COMMENTS
10R17.5	G	XZA	05008	16	•					•	
215/75R17.5	G	XZE2	19502	16							
235/75R17.5	J	XTE2	01963	15							
8R19.5	F	XZA	60893	16							
	F	XDS2	91423	18							
225/70040 5	F	XZE	81473	17							
225/70R19.5	G	XDS2	00691	18							
	G	XZE	91043	17							
	G	XZE	66338	18							
245/70R19.5	Н	XDS2	05797	19							
	Н	XZE	75997	18							
265/70R19.5	G	XDE2+	95319	20					•		
205//0619.5	G	XZE2+	46194	17							
	Н	XDE2+	79456	21							
285/70R19.5	Н	XZA	13346	16							
205//0619.5	Н	XZE2+	68419	18							
	J	XTE2	37840	18							
305/70R19.5	J	XZA	50505	18							
10.00R20	Н	XZE2	01889	18							
9R22.5	F	XZE	75473	18						•	
	F	XZE	79883	21							
10R22.5	G	XDE M/S	87357	23							
	G	XZE	99141	21						•	
	G	XDE M/S	73493	26			•				
	G	XTE	21307	16				•			
	G	XZE2	78390	22							
11R22.5	Н	XDE2+	37332	25							
	Н	XDE M/S ⊛	73927	28							€ Cut & chip resistant tread compound
	Н	XDS2	05359	26					-		
	Н	XZE2	67042	22							
12R22.5	Н	XDS	62208	26					•		
	Н	XZE ⊛	85335	22							❀ Cut & chip resistant tread compound
235/80R22.5	G	XZE	68749	19							
255/70R22.5	Н	XZE ⊛	61737	18							❀ Cut & chip resistant tread compound
255/80R22.5	G	XZE	94390	20						-	
275/70R22.5	J	XZE2+	78395	19							
	G	XDE M/S	61426	26							
	G	XTE	17706	16							
275/80R22.5	G	XZE2	55895	22							
	Н	XZE	01637	22							
	Н	XDE2+	36993	28							
295/60R22.5	J	X MULTIWAY XD	06376	23					•	•	
295/80R22.5	H	XZE2+	81993	20							
365/70R22.5	L	XZA	71842	19							
	G	XDE M/S	51273	26				_			
	G	XTE	07025	16						_	
11R24.5	G	XZE2	91867	22			_				
	Н	XDE M/S ⊛	46695	28							❀ Cut & chip resistant tread compound
	Н	XDS2	06613	25						_	
	Н	XZE2	88507	22				_		•	
275/80R24.5	G	XTE	33965	16	-					-	
205/75024 5	G	XZE2	75519	22	•						
305/75R24.5	J	XZE2	67251	22							

## PRODUCT AVAILABILITY

		ON / OFF	ROA	DA	ND	SP	ECI/	ALT'	ΥΤΙ	RES	5
SIZE	LOAD	TREAD NAME	CATALOG	TREAD DEPTH			OSITION	1	DIREC-	RV	COMMENTS
225/05246	RANGE		NUMBER	32ND	AWP	STEER	DRIVE	TRAILER	TIONAL	USE	
325/85R16	D	XML	37984	21							
G20 (14.00R20)	M	XZA4	70870	18							
14.00R20	M	XZL	59177	29							
16.00R20	M	XZL	06306	34							
	G	XML	99131	30							
395/85R20	J	XZL	54331	33							
	J	XZL+	94675	26							
475/80R20	J	XML	80341	30							
24R20.5	н	XS	23002	21							
24R21	н	XZL	76025	31							
	G	XZY3	84455	24							
	Н	X WORKS XDY	89725	30							Coming 3rd quarter 2011
11R22.5	н	XDY-2	77416	30							
	н	XDY3	97079	31							
	н	XZY3	80927	24							
12R22.5	н	XZY3	47947	24							
275/70R22.5	J	XTY2	42407	21				-			
245/00022	L	XDY3	40302	31							
315/80R22.5	L	XZY3	40200	23							
205/65022.5	J	XZY3 (wb)	53779	22							
385/65R22.5	L	XFE (wb) (Steer)	36991	21							
	L	XFE (wb) (Steer)	11829	21							
425/65R22.5	L	XZL (wb)	53254	26							
	L	XZY3 (wb)	40321	23							
	L	XZL (wb)	84103	27							
445/65R22.5	L	XZY3 (wb)	83691	23							
	M	XFE (wb) (Steer)	10805	21							
455/55R22.5	M	X One XZY3	11629	23							
	н	XZY	29163	23							
12.00R24	J	XDL	30049	38							
	G	XZY3	47945	24							
	Н	XDY-2	76789	30							
	H	X WORKS XDY	90022	30							Coming 3rd quarter 2011
11R24.5	H	XDY3	47962	31							
	H	XDY-EX2	23274	32							Coming 3rd quarter 2011
	Н	XDY-EX	46268	32							5 1 1 1 2 3 1 1
	н	XZY3	79250	24							
	н	X WORKS XDY	90148	30							Coming 3rd quarter 2011
12R24.5	н	XDY3	47966	31							
	н	XZY3	47951	24							
		AE13	ונפיד	24							

### PRODUCT AVAILABILITY

					JRB	AN					
SIZE	LOAD	TREAD NAME	CATALOG	TREAD DEPTH		WHEEL P	OSITION		DIREC-	RV	COMMENTS
JILL	RANGE		NUMBER	32ND	AWP	STEER	DRIVE	TRAILER	TIONAL	USE	COMMENTS
11R22.5	Н	XZU3	32873	25							
12R22.5	J	XZU2	43714	24							
275/70R22.5	J	XZU2	57317	21							
305/70R22.5	L	XZU2	95623	22							
305/85R22.5	J	XZU3	56332	26							
315/80R22.5	L	XZU S2	77510	23	•						
313/80R22.3	L	XZU S	90902	23	•						
425/65R22.5	L	XZU S wb	03785	23	•						
455/55R22.5	М	X One XZU S	28513	23	•						
305/75R24.5	J	XZU3	60143	22							

#### XZA3<sup>®</sup> **HIGHWAY APPLICATIONS**

#### Exceptional, fuel-efficient<sup>(2)</sup> radial that delivers our longest original tread life in steer service

- Directional miniature sipes in the groove walls help defend against the onset of irregular wear and contribute to long original tread life (directional to half life)
- 19/32nds of Michelin's latest Advanced Technology<sup>™</sup> compound helps deliver • exceptional fuel efficiency<sup>(2)</sup> and long tread life for more miles
- Enhanced shoulder rib is 80% wider than the MICHELIN® XZA2® tire for improved • shoulder wear
- Wide, flat tread optimizes footprint shape for improved handling and response in • line haul service
- 7 Year / 700,000 Mile / 3-Retread Manufacturer's Limited Casing Warranty<sup>(3)</sup>

	7 XEAD 300 000 MULE
- Maan	7 YEAR 700,000-MILE
year 3-RE	TREAD LIMITED WARRANTY (3)



Directional tread

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac			erall neter	Overal (:	l Width ‡)	Approved Wheels (Measuring wheel	Min. Spaci	Dual ng (‡)	Revs Per Mile	Max		nd Pres gle	sure	Max.		and Pres Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5 <sup>(1)</sup>	G	73162	19	75	19.3	489	41.3	1048	11.1	282	8.25, 7.50	12.5	318	502	6175	105	2800	720	5840	105	2650	720
11R22.5 <sup>(1)</sup>	Н	47488	19	75	19.1	485	41.3	1049	11.2	284	8.25, 7.50	12.5	318	503	6610	120	3000	830	6005	120	2725	830
275/80R22.5 <sup>(1)</sup>	G	73146	19	75	18.6	473	40.1	1018	10.9	277	8.25, 7.50	12.2	311	518	6175	110	2800	760	5675	110	2575	760
275/80R22.5 <sup>(1)</sup>	Н	69192	19	75	18.7	474	40.1	1018	10.9	278	8.25, 7.50	12.2	311	518	7160	120	3250	830	6610	120	3000	830
11R24.5 <sup>(1)</sup>	G	73181	19	75	20.2	513	43.3	1099	11.1	282	8.25, 7.50	12.5	318	479	6610	105	3000	720	6005	105	2725	720
275/80R24.5 <sup>(1)</sup>	G	73173	19	75	19.3	491	41.3	1048	10.7	272	8.25, 7.50	12.2	311	501	6175	110	2800	760	5675	110	2575	760

(1) Directional tread design.

 (2) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.
(3) 7/7/3 Manufacturer's Limited Casing Warranty: 700,000 miles, 7 years, or 3 retreads for MICHELIN® XZA3®, XZA3® Antisplash™, XDA3®, and XDA® Energy tires only. See limited warranty for details.

(\*) Exceeding the lawful speed limit is neither recommended nor endorsed.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.

### XZA<sup>®</sup> HIGHWAY APPLICATIONS

# Fuel-efficient<sup>(1)</sup>, all-position radial designed for long life in highway steer axle service

- Advanced Technology<sup>™</sup> compounding helps reduce rolling resistance promoting low fuel consumption<sup>(1)</sup> in balance with mileage, durability and casing endurance
- Over 7,000 trapezoidal micro sipes on groove edges help break water surface tension to promote traction on wet and slippery surfaces
- Original shoulder groove design offers enhanced resistance to uneven shoulder wear



Directional tread

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	Radius	Overall I	Diameter	Overall	Width (‡)	Approved Wheel	Revs Per Mile	Ma		nd Pressur gle	e
			32nds	mph	in.	mm	in.	mm	in.	mm			lbs.	psi	kg.	kPa
365/70R22.5	L	71842	19	75	19.6	497	42.5	1080	14.3	363	10.50	490	10500	125	4750	860

(1) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

#### XZA3® Antisplash

#### HIGHWAY APPLICATIONS

#### Fuel-efficient<sup>(1)</sup>, all-position radial optimized for splash reduction in steer axle service, helping to improve visibility for oncoming and overtaking motorists

- Unique Antisplash<sup>™</sup> feature reduces splash trajectory height by more than 50%
- Directional miniature sipes in the groove walls help defend against the onset of irregular wear and contribute to long original tread life (directional to half life)
- 19/32nds of Michelin's latest Advanced Technology<sup>™</sup> compound helps deliver exceptional fuel efficiency<sup>(1)</sup> and long tread life for more miles
- Enhanced shoulder rib is 80% wider than the MICHELIN® XZA2® tire for improved shoulder wear
- Wide, flat tread optimizes footprint shape for improved handling and response in line haul service
- 7 Year / 700,000 Mile / 3-Retread Manufacturer's Limited Casing Warranty<sup>(3)</sup>

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rad			erall neter	Overal (‡	l Width ‡)	Approved Wheels (Measuring wheel	Min. Spaci		Revs Per Mile	Max.		nd Press gle	sure	Max.	. Load a Du	nd Press Ial	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
275/80R22.5 <sup>(2)</sup>	Н	08819	19	75	18.7	474	40.1	1018	10.9	278	8.25, 7.50	12.2	311	517	7160	120	3250	830	6610	120	3000	830

(1) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

(2) Directional tread design.

(3) 7/7/3 Manufacturer's Limited Casing Warranty: 700,000 miles, 7 years, or 3 retreads for MICHELIN® XZA3®, XZA3® Antisplash™, XDA3®, and XDA® Energy tires only. See limited warranty for details.

Note: Wheel listed first is the measuring wheel.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.

Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

Steer / All-position Tires

<sup>(\*)</sup> Exceeding the lawful speed limit is neither recommended nor endorsed.

#### Fuel-efficient<sup>(3)</sup>, all-position radial designed for long life in highway steer axle service<sup>(6)</sup>

- Unique intermediate rib design helps combat the onset of irregular wear in highway service
- Exceptional handling and responsiveness through optimized shoulder design
- Traction and lateral control offered by miniature sipes and variable groove angles
- The 295/60R22.5 is an ultra-low profile and a full 4" shorter than the 275/80R22.5 with over 1,100 lbs of additional carrying capacity in single fitment



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac			erall neter	Overal (‡	l Width ‡)	Approved Wheels (Measuring wheel	Snaci	Dual ng (‡)	Revs Per	Max.		and Pres gle	sure	Max		ind Pres Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	Mile	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
275/70R22.5 <sup>(1)</sup>	J	90059	18	75	17.6	448	38.0	966	10.9	277	7.50, 8.25	11.9	303	545	6940	130	3150	900	6395	120	2900	830
295/60R22.5 <sup>(2)</sup>	J	33215	16	65	16.7	424	36.1	918	11.4	290	9.00 (4)	13.0	329	575	7390	130	3350	900	6780	130	3075	900
295/80R22.5 <sup>(1)</sup>	Н	76807	16	75	19.1	486	41.3	1048	11.8	299	9.00, 8.25	13.2	335	503	7830	120	3550	830	6940	120	3150	830
315/80R22.5 <sup>(1)</sup>	L	76184	17	75	19.5	496	42.3	1074	12.5	318	9.00, 8.25 (5)	13.8	351	492	9090	130	4125	900	8270	130	3750	900

(1, 2) Tread design as indicated above the tire picture.

(3) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

(4) For further instructions on proper usage of the 295/60R22.5, see Page 95.

(5) For use with 8.25 x 22.5 wheels, see Page 93.

(6) "No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels." US Code of Federal Regulations: Title 49, Transportation; Part 393.75.

#### XZA<sup>®</sup>-1+ HIGHWAY APPLICATIONS

# All-position radial optimized for steer axles in highway and limited regional service

- The "original" shoulder decoupling groove helps resist irregular wear in slow wear rate applications
- Miniature groove wall sipes help inhibit the onset of irregular wear while helping to improve traction on wet surfaces



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac			erall neter		l Width ‡)	Approved Wheels (Measuring wheel	Spaci	Dual ng (‡)	Revs Per Mile	Max		nd Pres gle	sure	Max	. Load a Di	ind Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5	G	06032	18	75	19.3	489	41.3	1049	11.1	281	8.25, 7.50	12.5	318	501	6175	105	2800	720	5840	105	2650	720
275/80R22.5	G	18678	18	75	18.7	474	40.1	1019	10.9	276	8.25, 7.50	12.2	311	516	6175	110	2800	760	5675	110	2575	760
11R24.5	G	10274	18	75	20.2	513	43.3	1099	11.1	282	8.25, 7.50	12.5	318	479	6610	105	3000	720	6005	105	2725	720
275/80R24.5	G	30968	18	75	19.3	489	41.3	1049	10.7	271	8.25, 7.50	12.2	311	501	6175	110	2800	760	5675	110	2575	760

Note: Wheel listed first is the measuring wheel.

(†) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

- (\*) Exceeding the lawful speed limit is neither recommended nor endorsed.
- (‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
- MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.
- Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

Steer / All-position Tires

### XZA<sup>®</sup>1 HIGHWAY APPLICATIONS

# Even-wearing, all-position tire optimized for heavy axle loads in highway and limited regional service<sup>(1)</sup>

- Miniature sipes in groove walls and variable groove angles help reduce irregular wear and improve overall performance
- Full-width elastic protector ply helps protect the working plies from bruising and penetrations
- Flat crown radius helps enhance wear and treadlife



Size	Load Range	Catalog Number		Max. Speed (*)	Loa Rac	ded lius	Ove Dian		Overal (:	l Width ‡)	Approved Wheels (Measuring wheel	Min. Spaci		Revs Per Mile	Max.		nd Press gle	sure	Max	. Load a Dı	ind Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
315/80R22.5	L	47056	18	75	19.6	499	42.5	1079	12.5	317	9.00, 8.25 <sup>(2)</sup>	13.8	351	489	9090	130	4125	900	8270	130	3750	900

(1) "No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels." US Code of Federal Regulations: Title 49, Transportation; Part 393.75. (2) For use with 8.25 x 22.5 wheels, see Page 93.

#### 

#### Exceptional all-position radial with extra-wide, extra-deep tread designed to help deliver our best wear in high scrub applications

- Beefy, buttressed shoulders help resist tearing and accelerated wear in high scrub applications
- Extra strong curb guards help protect sidewalls against most impacts and abrasions for long casing life
- Groove bottom protectors help deliver additional defense against stone drilling
- Application specific high scrub compound (chip and cut resistance in LRH versions with ∗ designation) make the MICHELIN<sup>®</sup> XZE<sup>®</sup> tire our longest wearing regional steer tire
- Deep, wide tread and optimized footprint shape help deliver long, even tread wear

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac			erall neter		l Width ‡)	Approved Wheels (Measuring wheel	Min. Spaci	Dual ng (‡)	Revs Per	Max		nd Pres gle	sure	Max	. Load a Du	nd Press Ial	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	Mile	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
225/70R19.5	F	81473	17	75	14.9	378	32.2	819	8.9	227	6.00, 6.75	9.7	246	646	3640	95	1650	660	3415	95	1550	660
225/70R19.5	G	91043	17	75	14.9	378	32.2	819	8.9	227	6.00, 6.75	9.7	246	646	3970	110	1800	760	3750	110	1700	760
245/70R19.5	G	66338	18	75	15.6	395	33.6	853	9.7	247	6.75, 7.50	10.7	272	619	4540	110	2060	760	4300	110	1950	760
245/70R19.5	Н	75997	18	75	15.6	396	33.6	853	9.7	247	6.75, 7.50	10.7	272	619	4940	120	2240	830	4675	120	2120	830
9R22.5	F	75473	18	75	17.8	452	38.2	970	8.9	226	6.00, 6.75, 7.50	10	254	543	4540	105	2060	720	4300	105	1950	720
10R22.5	F	79883	21	75	18.7	475	40.1	1018	10.2	259	6.75, 7.50, 8.25	11.1	282	517	5205	100	2360	690	4940	100	2240	690
10R22.5	G	99141	21	75	18.7	475	40.1	1018	10.2	259	6.75, 7.50, 8.25	11.1	282	517	5675	115	2575	790	5355	115	2430	790
12R22.5 🛞	Н	85335	22	75	19.8	503	42.6	1082	11.4	290	8.25, 9.00	13.2	335	486	7390	120	3350	830	6780	120	3075	830
235/80R22.5	G	68749	19	75	17.4	443	37.4	949	9.3	236	6.75, 7.50	10.3	262	555	4675	110	2120	760	4410	110	2000	760
255/70R22.5 🛞	Н	61737	18	75	17.2	437	36.7	932	10.2	260	8.25, 7.50	11.6	295	563	5510	120	2500	830	5070	120	2300	830
255/80R22.5	G	94390	20	75	17.9	455	38.5	979	10	254	7.50, 8.25	11.3	287	538	5205	110	2360	760	4805	110	2180	760
275/80R22.5	Н	01637	22	75	18.7	475	40.2	1022	11.1	282	8.25, 7.50	12.2	311	516	7160	120	3250	830	6610	120	3000	830

 $\ensuremath{\circledast}$  With chip and cut resistant tread compound.

Note: Wheel listed first is the measuring wheel.

(\*) Exceeding the lawful speed limit is neither recommended nor endorsed.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

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#### XZE2™

#### Exceptional regional, all-position radial with extra-wide, extra-deep tread designed to help deliver our best wear in high scrub applications

- Enhanced application specific compound to promote resistance to aggression and longer tread life
- 6% wider tread for improved wear and handling<sup>(1)</sup>
- *Matrix*<sup>™</sup> Siping technology and micro sipes protect against irregular wear
- Zig-zag grooves and sipes help increase traction in new and worn tire conditions
- North American design



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rad	ded lius		erall neter	Overal (‡		Approved Wheels (Measuring wheel	Min. Spaci		Revs Per Mile	Max.		nd Press gle	sure	Max		nd Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5	G	78390	22	75	19.3	491	41.3	1050	11.2	285	8.25, 7.50	12.5	318	501	6175	105	2800	720	5840	105	2650	720
11R22.5	Н	67042	22	75	19.2	488	41.4	1051	11.3	286	8.25, 7.50	12.5	318	501	6610	120	3000	830	6005	120	2725	830
275/80R22.5	G	55895	22	75	18.6	473	40.2	1021	11.1	282	8.25, 7.50	12.2	311	517	6175	110	2800	760	5675	110	2575	760
11R24.5	G	91867	22	75	20.3	516	43.5	1104	11.1	281	8.25, 7.50	12.5	318	476	6610	105	3000	720	6005	105	2725	720
11R24.5	Н	88507	22	75	20.3	516	43.5	1104	11.1	281	8.25, 7.50	12.5	318	476	7160	120	3250	830	6610	120	3000	830
275/80R24.5	G	75519	22	75	19.3	490	41.3	1050	10.8	274	8.25, 7.50	12.2	311	501	6175	110	2800	760	5675	110	2575	760

(1) When compared to the MICHELIN<sup>®</sup> XZE<sup>®</sup> tire.

#### XZE<sup>®</sup>2 / XZE<sup>®</sup>2+ HIGHWAY & REGIONAL APPLICATIONS

# All-position radial optimized for steer axles in regional and limited highway service

- Buttressed shoulder helps resist wear in high scrub applications
- Full depth sipes offer enhanced traction throughout the usable tire life
- Full-width protector ply helps protect the working plies from bruises and penetrations
- European design



| Load<br>Range | Catalog<br>Number                             | Tread<br>Depth                                                                                                                                       | Max.<br>Speed<br>(*)                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                 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|               | Range<br>design<br>G<br>H<br>J<br>G<br>H<br>J | Range     Number       design:     19502       G     19502       H     01889       J     67251       G     46194       H     68419       J     78395 | Load<br>Range     Catalog<br>Number     Depth<br>32nds       design     19502     16       H     01889     18       J     67251     22       G     46194     17       H     68419     18       J     78395     19 | Load<br>Range     Catalog<br>Number     Iread<br>Det<br>Per<br>32nds     Speed<br>Det<br>32nds       design     32nds     mph       design     180     75       H     01889     18     65       J     67251     22     65       H     64194     17     75       H     68419     18     75       J     78395     19     75 | Load<br>Range     Catalog<br>Number     Ifted<br>Depth     Speed<br>Speed<br>(mathef{speed})     Catalog<br>Rac       design     32nds     mph     in.       design     180     mph     in.       design     16     75     14.1       H     01889     18     65     19.5       J     67251     22     65     19.8       H     68419     17     75     15.8       H     68419     18     75     16.2       J     78395     19     75     17.6 | Load<br>Range     Catalog<br>Number     Tread<br>Depth     Speed<br>(*)     Loade<br>Radius       design     32nds     mph     in.     mm       design     19502     16     75     14.1     357       H     01889     18     65     19.5     488       J     67251     22     65     19.8     504       H     04194     17     75     15.8     402       H     68419     18     75     16.2     412       J     78395     19     75     17.6     448 | Load<br>Range     Catalog<br>Number     Tread<br>Depth     Speed<br>(*)     Loadew<br>Radius     Dian<br>Dian       design     32nds     mph     in.     mm     in.       design     19502     16     75     14.1     357     30.5       H     01889     18     65     19.5     488     41.3       J     67251     22     65     19.8     504     42.7       G     46194     17     75     15.8     402     34.3       H     68419     18     75     16.2     412     35.2       J     78395     19     75     17.6     448     38.0 | Load<br>Range     Catalog<br>Number     Tread<br>Depth     Speed<br>(*)     Loadeu<br>Radius     Doameter<br>Diameter       32nds     mph     in.     mm     in.     mm       design     32nds     mph     in.     mm     in.     mm       design     19502     16     75     14.1     357     30.5     774       H     01889     18     65     19.5     488     41.3     1049       J     67251     22     65     19.8     504     42.7     1084       H     01889     17     75     15.8     402     34.3     870       H     68419     18     75     16.2     412     35.2     895       J     78395     19     75     17.6     448     38.0     966 | Load<br>Range     Catalog<br>Number     Tread<br>opth     Speed<br>(*)     Loadead<br>Radius     Overal<br>Badius     Overal<br>Diametric     Overal<br>(*)       design     32nds     mph     in.     mm     in.     in.     mm     in.     in.     in.     in.     mm     in.     in. </td <td>Load<br/>Range     Catalog<br/>Number     Ifead<br/>(*)     Speed<br/>(*)     Loadeu<br/>Radius     Overait<br/>Diametric<br/>Radius     Overait<br/>Diametric     Overait     Overait<td>Load<br/>Range     Catalog<br/>Number     Tread<br/>Opent     Speed<br/>(*)     Loadeu<br/>Radius     Overall<br/>Diametr     Overall<br/>(*)     Overall (*)     Overall (*)<td>Load<br/>Range     Catalog<br/>Number     Tread<br/>(*)     Speed<br/>(*)     Loaded<br/>Radius     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    Catalog<br/>Number     Tread<br/>(*)     Speed<br/>(*)     Loaded<br/>Radius     Overall<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>(*)     Overall<br/>Volta     Overall Volta     Overall Vol</td><td>Load<br/>Range     Catalog<br/>f(*)     Tead<br/>(*)     Speed<br/>(*)     Loaded<br/>Radius     Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>(*)     Overall<br/>(*)     Overall<br/>(*)</td><td>Load<br/>Range     Catalog<br/>(w)     Tread<br/>(*)     Speed<br/>(*)     Loader<br/>Radius     Diameter     Overall<br/>(*)     <t< td=""><td>Load Range     Catalog Number     Ifted speed (*)     Loader Radius     Diameter     Overall planeter     Overall with with states (*)     With bias (*)</td><td>Load Range     Catalog Number     Tread (*)     Coveral point     Overal point (*)     Overal point (*)     Wheels (*)     Min. Dual point (*)</td><td>Load Range     Catalog Number     Tread (*)     Coveral model     Overal with or (*)     Wine is (*)     Min. base (max load and result)     Min. base (max load and result)     Min. base (max load and result)       32nds     mph     in.     mm     in.     mm     mm     ised first.)     in     mm     ibs.     per Mile     ibs.     ibs.</td><td>Load Range     Catalog Number     Tread (*)     Coveral mode (*)     Overal were mode (*)     Overal were mode (*)     Wheels (*)     Mill: Utal (*)     Mill:</td><td>Load Range     Catalog Number     Tread (*)     Speed (*)     Load and (*)     Diversity (*)     Overality (*)     Wheels (*)     Mile Spacing (*)<td>Load Range     Catalog Number     Tread (*)     Coveral Mature     Overal (*)     Overal (*)     Overal (*)     Wheels (*)     Mill. Ual Mature     New Spacing (*)     New Spac</td></td></t<></td></td></td> | Load<br>Range     Catalog<br>Number     Ifead<br>(*)     Speed<br>(*)     Loadeu<br>Radius     Overait<br>Diametric<br>Radius     Overait<br>Diametric     Overait     Overait <td>Load<br/>Range     Catalog<br/>Number     Tread<br/>Opent     Speed<br/>(*)     Loadeu<br/>Radius     Overall<br/>Diametr     Overall<br/>(*)     Overall (*)     Overall (*)<td>Load<br/>Range     Catalog<br/>Number     Tread<br/>(*)     Speed<br/>(*)     Loaded<br/>Radius     Overall<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric</td><td>Load<br/>Range     Catalog<br/>Number     Tread<br/>(*)     Speed<br/>(*)     Loaded<br/>Radius     Overall<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>(*)     Overall<br/>Volta     Overall Volta     Overall Vol</td><td>Load<br/>Range     Catalog<br/>f(*)     Tead<br/>(*)     Speed<br/>(*)     Loaded<br/>Radius     Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>(*)     Overall<br/>(*)     Overall<br/>(*)</td><td>Load<br/>Range     Catalog<br/>(w)     Tread<br/>(*)     Speed<br/>(*)     Loader<br/>Radius     Diameter     Overall<br/>(*)     <t< td=""><td>Load Range     Catalog Number     Ifted speed (*)     Loader Radius     Diameter     Overall planeter     Overall with with states (*)     With bias (*)</td><td>Load Range     Catalog Number     Tread (*)     Coveral point     Overal point (*)     Overal point (*)     Wheels (*)     Min. Dual point (*)</td><td>Load Range     Catalog Number     Tread (*)     Coveral model     Overal with or (*)     Wine is (*)     Min. base (max load and result)     Min. base (max load and result)     Min. base (max load and result)       32nds     mph     in.     mm     in.     mm     mm     ised first.)     in     mm     ibs.     per Mile     ibs.     ibs.</td><td>Load Range     Catalog Number     Tread (*)     Coveral mode (*)     Overal were mode (*)     Overal were mode (*)     Wheels (*)     Mill: Utal (*)     Mill:</td><td>Load Range     Catalog Number     Tread (*)     Speed (*)     Load and (*)     Diversity (*)     Overality (*)     Wheels (*)     Mile Spacing (*)<td>Load Range     Catalog Number     Tread (*)     Coveral Mature     Overal (*)     Overal (*)     Overal (*)     Wheels (*)     Mill. Ual Mature     New Spacing (*)     New Spac</td></td></t<></td></td> | Load<br>Range     Catalog<br>Number     Tread<br>Opent     Speed<br>(*)     Loadeu<br>Radius     Overall<br>Diametr     Overall<br>(*)     Overall (*)     Overall (*) <td>Load<br/>Range     Catalog<br/>Number     Tread<br/>(*)     Speed<br/>(*)     Loaded<br/>Radius     Overall<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric</td> <td>Load<br/>Range     Catalog<br/>Number     Tread<br/>(*)     Speed<br/>(*)     Loaded<br/>Radius     Overall<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>(*)     Overall<br/>Volta     Overall Volta     Overall Vol</td> <td>Load<br/>Range     Catalog<br/>f(*)     Tead<br/>(*)     Speed<br/>(*)     Loaded<br/>Radius     Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>Diametric<br/>(*)     Overall<br/>(*)     Overall<br/>(*)</td> <td>Load<br/>Range     Catalog<br/>(w)     Tread<br/>(*)     Speed<br/>(*)     Loader<br/>Radius     Diameter     Overall<br/>(*)     <t< td=""><td>Load Range     Catalog Number     Ifted speed (*)     Loader Radius     Diameter     Overall planeter     Overall with with states (*)     With bias (*)</td><td>Load Range     Catalog Number     Tread (*)     Coveral point     Overal point (*)     Overal point (*)     Wheels (*)     Min. Dual point (*)</td><td>Load Range     Catalog Number     Tread (*)     Coveral model     Overal with or (*)     Wine is (*)     Min. base (max load and result)     Min. base (max load and result)     Min. base (max load and result)       32nds     mph     in.     mm     in.     mm     mm     ised first.)     in     mm     ibs.     per Mile     ibs.     ibs.</td><td>Load Range     Catalog Number     Tread (*)     Coveral mode (*)     Overal were mode (*)     Overal were mode (*)     Wheels (*)     Mill: Utal (*)     Mill:</td><td>Load Range     Catalog Number     Tread (*)     Speed (*)     Load and (*)     Diversity (*)     Overality (*)     Wheels (*)     Mile Spacing (*)<td>Load Range     Catalog Number     Tread (*)     Coveral Mature     Overal (*)     Overal (*)     Overal (*)     Wheels (*)     Mill. Ual Mature     New Spacing (*)     New Spac</td></td></t<></td> | Load<br>Range     Catalog<br>Number     Tread<br>(*)     Speed<br>(*)     Loaded<br>Radius     Overall<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric | Load<br>Range     Catalog<br>Number     Tread<br>(*)     Speed<br>(*)     Loaded<br>Radius     Overall<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>(*)     Overall<br>Volta     Overall Volta     Overall Vol | Load<br>Range     Catalog<br>f(*)     Tead<br>(*)     Speed<br>(*)     Loaded<br>Radius     Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>Diametric<br>(*)     Overall<br>(*)     Overall<br>(*) | Load<br>Range     Catalog<br>(w)     Tread<br>(*)     Speed<br>(*)     Loader<br>Radius     Diameter     Overall<br>(*)     Overall<br>(*) <t< td=""><td>Load Range     Catalog Number     Ifted speed (*)     Loader Radius     Diameter     Overall planeter     Overall with with states (*)     With bias (*)</td><td>Load Range     Catalog Number     Tread (*)     Coveral point     Overal point (*)     Overal point (*)     Wheels (*)     Min. Dual point (*)</td><td>Load Range     Catalog Number     Tread (*)     Coveral model     Overal with or (*)     Wine is (*)     Min. base (max load and result)     Min. base (max load and result)     Min. base (max load and result)       32nds     mph     in.     mm     in.     mm     mm     ised first.)     in     mm     ibs.     per Mile     ibs.     ibs.</td><td>Load Range     Catalog Number     Tread (*)     Coveral mode (*)     Overal were mode (*)     Overal were mode (*)     Wheels (*)     Mill: Utal (*)     Mill:</td><td>Load Range     Catalog Number     Tread (*)     Speed (*)     Load and (*)     Diversity (*)     Overality (*)     Wheels (*)     Mile Spacing (*)<td>Load Range     Catalog Number     Tread (*)     Coveral Mature     Overal (*)     Overal (*)     Overal (*)     Wheels (*)     Mill. Ual Mature     New Spacing (*)     New Spac</td></td></t<> | Load Range     Catalog Number     Ifted speed (*)     Loader Radius     Diameter     Overall planeter     Overall with with states (*)     With bias (*) | Load Range     Catalog Number     Tread (*)     Coveral point     Overal point (*)     Overal point (*)     Wheels (*)     Min. Dual point (*) | Load Range     Catalog Number     Tread (*)     Coveral model     Overal with or (*)     Wine is (*)     Min. base (max load and result)     Min. base (max load and result)     Min. base (max load and result)       32nds     mph     in.     mm     in.     mm     mm     ised first.)     in     mm     ibs.     per Mile     ibs.     ibs. | Load Range     Catalog Number     Tread (*)     Coveral mode (*)     Overal were mode (*)     Overal were mode (*)     Wheels (*)     Mill: Utal (*)     Mill: | Load Range     Catalog Number     Tread (*)     Speed (*)     Load and (*)     Diversity (*)     Overality (*)     Wheels (*)     Mile Spacing (*) <td>Load Range     Catalog Number     Tread (*)     Coveral Mature     Overal (*)     Overal (*)     Overal (*)     Wheels (*)     Mill. Ual Mature     New Spacing (*)     New Spac</td> | Load Range     Catalog Number     Tread (*)     Coveral Mature     Overal (*)     Overal (*)     Overal (*)     Wheels (*)     Mill. Ual Mature     New Spacing (*)     New Spac |

(1, 2) Tread design as indicated above the tire pictures.

(3) Please refer to the Tubes and Flaps Table on Page 86.

(4) Tread design not shown.

Note: Wheel listed first is the measuring wheel.

(\*) Exceeding the lawful speed limit is neither recommended nor endorsed.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.

#### XZA®

#### **HIGHWAY & REGIONAL APPLICATIONS**

#### All-position radial with proven versatility

- Massive shoulders and application specific compound help resist scrub and abrasion, promoting extended tread life
- Zig-zag groove design for true all-position use

											A CAR		Nue 0 0 0					いってい		•		and the Victor Restor in the Rest line
Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)		ded lius		erall neter		l Width ‡)	Approved Wheels (Measuring wheel	Snaci	Dual ng (‡)	Revs Per	Max		and Pres Igle	sure	Max		ind Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	Mile	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
10R17.5 <sup>(1)</sup>	G	05008	16	65	15.6	397	33.9	861	9.5	241	6.75, 7.50	11.1	282	615	4805	115	2180	790	4540	115	2060	790
8R19.5 <sup>(1)</sup>	F	60893	16	75	15.6	395	33.6	854	8.1	206	5.25, 6.00	8.8	224	616	3525	110	1600	760	3305	110	1500	760
305/70R19.5 <sup>(2)</sup>	J	50505	18	75	16.7	424	36.3	922	11.8	300	8.25, 9.00	13.1	334	575	6940	120	3150	830	6395	120	2900	830

1

2 - 305/70R19.5

(1, 2) Tread design as indicated above the tire picture.

#### X ONE<sup>®</sup> XZY<sup>®</sup>3 **ON/OFF ROAD APPLICATIONS**

#### **MICHELIN®** all-position radial innovation designed for significant weight and fuel savings<sup>(1)</sup> in on/off road operat

- · Long tread life and outstanding chip and cut resistance in on/off road service with 23/32nds original tread depth of application specific compound
- Flat, stable contact area for long, even wear provided by Michelin's Infini-Coil Technology<sup>™</sup>, featuring a 1/4 mile of steel cable to help eliminate casing growth
- Enhanced protection against stone drilling from variable pitch groove walls and groove bottom protectors in center grooves
- · Great bead durability and resistance to heat from reinforced bead package featuring a wide metallic chafer

l	ons		
)	Approved Wheel	Revs Per Mile	Max. Load and Pressure Single

												1.000	1600 I		AN IN MICH	1 ADDING SUB
Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	Radius	Overall [	Diameter	Overall \	Width (‡)	Approved Wheel	Revs Per Mile		Max. Load a Sin	and Pressur Igle	9
	-		32nds	mph	in.	mm	in.	mm	in.	mm			lbs.	psi	kg.	kPa
455/55R22.5	М	11629	23	75	19.4	492	41.9	1065	17.8	452	14.00 (2)	496	11700	130	5300	900

(1) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary. (2) For use on 13" wheel, see Page 93.

Note: Wheel listed first is the measuring wheel.

- (\*) Exceeding the lawful speed limit is neither recommended nor endorsed.
- (‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
- MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.

#### **ON/OFF ROAD APPLICATIONS**

#### All-position radial designed for exceptional wear and traction in mixed on/off road service

- 24/32nd tread depth for long life (315/80R22.5 has 23/32nd's)
- +11% increase in tread volume for increased mileage and improved durability, +5% in tread width, +4% in tread depth, +2% in net contact area<sup>(3)</sup>
- New tread compound formulation offers excellent protection against aggression, chipping and scaling
- Maximized soft soil and mud traction throughout the tire life as ribs and shoulder edges retain their aggressive notches
- Rounded bead toe for easy mount and demount as well as help in reducing bead damage
- Extra-robust four steel belt construction for excellent retreadability (315/80R22.5 has three steel belts)



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac			erall neter	Overal (:		Approved Wheels (Measuring wheel	Min. Spaci		Revs Per Mile	Max		nd Pres gle	sure	Max.		and Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5 <sup>(1)</sup>	G	84455	24	65	19.6	498	41.8	1061	11.3	288	8.25, 7.50	12.5	318	496	6175	105	2800	720	5840	105	2650	720
11R22.5 <sup>(1)</sup>	Н	80927	24	65	19.6	498	41.8	1061	11.3	288	8.25, 7.50	12.5	318	496	6610	120	3000	830	6005	120	2725	830
12R22.5 <sup>(1)</sup>	Н	47947	24	65	20.1	509	42.9	1089	11.4	290	8.25, 9.00	13.2	335	483	7390	120	3350	830	6780	120	3075	830
315/80R22.5 <sup>(2)</sup>	L	40200	23	65	19.8	502	42.9	1088	12.5	318	9.00, 8.25 <sup>(4)</sup>	13.8	351	486	9090	130	4125	900	8270	130	3750	900
11R24.5 <sup>(1)</sup>	G	47945	24	65	20.5	520	43.7	1110	11.3	288	8.25, 7.50	12.5	318	473	6610	105	3000	720	6005	105	2725	720
11R24.5 <sup>(1)</sup>	Н	79250	24	65	20.5	520	43.7	1111	11.4	289	8.25, 7.50	12.5	318	473	7160	120	3250	830	6610	120	3000	830
12R24.5 <sup>(1)</sup>	Н	47951	24	65	21.0	533	44.9	1140	11.5	291	8.25, 9.00	13.2	335	461	7830	120	3550	830	7160	120	3250	830

(1, 2) Tread design as indicated above the tire picture.

(3) When compared to MICHELIN® XZY-2<sup>™</sup> tire.

(4) For use with 8.25 x 22.5 wheels, see Page 93.

#### XZY<sup>®</sup>3 wide base ON/OFF ROAD APPLICATIONS

# Exceptional all-position wide base radial designed for heavy front axle service in mixed service applications

- Improved traction in soft soil and mud promoted by aggressive new tread design<sup>(1)</sup>
- Improved floatation offered by wider tread (almost 1 inch wider than MICHELIN® XZY® Wide Base tire)
- Great resistance to shocks, bruising and penetrations fostered by new four-belt design featuring full-width elastic protector ply
- Added sidewall and shoulder protection from thicker rubber and new aggressive shoulder design
- Improved wet traction throughout the tread life cultivated by deep, wide circumferential grooves and minimized bridging between tread elements



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	Radius	Overall I	Diameter	Overall \	Vidth (‡)	Approved Wheels (Measuring wheel listed first.)	Revs Per Mile	Ma		nd Pressu gle	re
	-		32nds	mph	in.	mm	in.	mm	in.	mm	listeu liist.)	whie	lbs.	psi	kg.	kPa
385/65R22.5	J	53779	22	65	19.6	499	42.4	1078	14.9	379	11.75, 12.25	491	9370	120	4250	830
425/65R22.5	L	40321	23	65	20.6	524	44.7	1137	16.6	421	13.00, 12.25	465	11400	120	5150	830
445/65R22.5	L	83691	23	65	21.1	536	45.8	1164	17.8	451	14.00, 13.00	455	12800	130	5800	900

(1) When compared to the MICHELIN® XZY® Wide Base tire.

Note: Wheel listed first is the measuring wheel.

(+) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.

<sup>(\*)</sup> Exceeding the lawful speed limit is neither recommended nor endorsed.

#### 

# Michelin's all-position radial innovation designed for significant weight and fuel savings<sup>(1)</sup> in urban regional operations

- Long tread life and outstanding scrub resistance in urban/regional service with 23/32nd original tread depth of application specific compound
- Flat, stable contact area for long, even wear provide by Michelin's Infini-Coil Technology™, featuring a 1/4 mile of steel cable to help eliminate casing growth
- Enhanced protection against stone drilling from variable pitch groove walls and groove bottom protectors in all grooves
- Great bead durability and resistance to heat from reinforced bead package featuring a wide metallic chafer



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	Radius	Overall [	Diameter	Overall	Width (‡)	Approved Wheel	Revs Per Mile	Ma		nd Pressur gle	e
			32nds	mph	in.	mm	in.	mm	in.	mm			lbs.	psi	kg.	kPa
455/55R22.5	М	28513	23	75	19.4	492	41.9	1065	17.8	452	14.00	496	11700	130	5300	900

(1) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

#### XZU<sup>®</sup>S2 URBAN APPLICATIONS

#### Next generation all-position tire with high carrying capacity designed for exceptional treadlife in high scrub urban applications such as waste vehicles

- Up to 20% increase in removal mileage<sup>(1)</sup> due to new 4-rib tread design
- Improved retreadability<sup>(1)</sup> due to a more robust tread design
- Increased resistance<sup>(1)</sup> to high brake temperatures common in urban stop/start service due to updated bead design

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac			erall neter	Overal (‡		Approved Wheel	Min. Spaci		Revs Per Mile	Max.		nd Press gle	sure	Max.	Load a Du	ind Pres Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm		in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
315/80R22.5	L	77510	23	65	19.7	501	42.8	1087	12.5	318	9.00	13.8	351	486	10000	130	4235	900	8270	130	3750	900

(1) When compared with MICHELIN® XZU®S tire.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

Steer / All-position Tires

<sup>(\*)</sup> Exceeding the lawful speed limit is neither recommended nor endorsed.

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Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

### XZU<sup>®</sup>S URBAN APPLICATIONS

#### All-position radial with high carrying capacity designed for exceptional treadlife in high scrub urban applications such as waste vehicles

- Significant increase in treadlife from tread volume, and application specific compounds for scrub resistance<sup>(1)</sup>
- 65 mph\* rating using multiple tread compounds to promote optimized scrub resistance and reduced operating temperatures in the crown area
- Bead design changes help resistance to high brake temperatures common in urban stop/start service
- Fostered reduced mounting and dismounting damage with Michelin's rounded bead toe design
- Improved traction on wet surfaces with wider tread contact area and new  $\mathsf{compounds}^{\scriptscriptstyle(1)}$



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac	ded lius		erall neter	Overal (‡		Approved Wheels (Measuring wheel	Snaci	Dual ng (‡)	Revs Per Mile	Max.		nd Press gle	sure	Max.	Load a Du	ind Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
315/80R22.5	L	90902	23	65	19.8	502	42.9	1089	12.5	318	9.00, 8.25 <sup>(2)</sup>	13.8	351	486	10000	130	4535	900	8270	130	3750	900

(1) When compared to the 315/80R22.5 MICHELIN® XZY-2<sup>m</sup> S tire.

(2) For use with 8.25 x 22.5 wheels, see Page 93.

#### XZU<sup>®</sup>S wide base URBAN APPLICATIONS

#### All-position radial with high carrying capacity designed for exceptional tread life in high scrub urban applications, such as waste vehicles

- Significant increase in tread life with new scrub-resistant, applicationspecific tread compounds and increased tread volume
- 65 mph\* rating with optimized scrub resistance and reduced operating temperatures in the crown area
- Fosters reduced mounting and dismounting damages with Michelin's rounded bead toe design



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	Radius	Overall I	Diameter	Overall \	Nidth (‡)	Approved Wheels (Measuring wheel listed first.)	Revs Per Mile	Ma		ind Pressur gle	e
			32nds	mph	in.	mm	in.	mm	in.	mm	iisteu iiist.)		lbs.	psi	kg.	kPa
425/65R22.5	L	03785	23	65	20.6	524	44.7	1137	16.6	421	13.00, 12.25	465	11400	120	5150	830

Note: Wheel listed first is the measuring wheel.

- (\*) Exceeding the lawful speed limit is neither recommended nor endorsed.
- (‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in rim width. Minimum dual spacing should be adjusted accordingly.
- MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.
- Please consult rim manufacturer's load and inflation limits. Never exceed rim manufacturer's limits without permission of component manufacturer.

#### All-wheel-position radial for urban operations involving frequent stopping and starting<sup>(5)</sup>

- Significant increase in mileage with deeper, wider tread and application specific compounds
- Exceptional traction on wet and slippery surfaces through *Matrix*<sup>™</sup> Siping technology<sup>(4)</sup>
- Outstanding resistance to high scrub applications from large solid shoulder
- Reduced damage from mount/dismount with Michelin's rounded bead toe design(4)
- Extended retreadability with extra robust casing design and special elongated metallic chaffer in bead
- Extra thick sidewalls with depth indicators resist the curb scrub in urban service and allow for timely tire rotation ensuring maximum casing utilization<sup>(4)</sup>



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rad			erall neter	Overal (‡	l Width ‡)	Approved Wheels (Measuring wheel	Snaci	Dual ng (‡)	Revs Per	Max.	. Load a Sin	nd Press gle	sure	Max	. Load a Du	nd Pres Jal	sure
	5		32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	Mile	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5 <sup>(1)</sup>	Н	32873	25	62	19.5	494	41.9	1065	10.8	275	7.50, 8.25	12.2	311	499	6940	120	3150	830	6395	120	2900	830
305/85R22.5 <sup>(2)</sup>	J	56332	26	65	20.0	508	43.0	1093	11.6	294	8.25, 9.00	13.2	335	482	7830	120	3550	830	7160	120	3250	830
305/75R24.5 <sup>(3)</sup>	J	60143	22	65	19.9	504	42.7	1084	11.6	294	8.25	13.1	334	486	8270	120	3750	830	7160	120	3250	830

(1, 2, 3) Tread design as indicated above the tire picture.

(4) Does not apply to 305/75R24.5.

(5) "No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels." US Code of Federal Regulations: Title 49, Transportation; Part 393.75.

### XZU<sup>®</sup>2 URBAN APPLICATIONS

#### All-wheel-position radial optimized for urban operations involving frequent stopping and starting, e.g., transit buses, delivery vehicles and sanitation trucks

- Built-up sidewall protectors provide protection against most curb damage
- Sidewall wear indicators promote timely tire rotation for long casing life and enhanced retreadability
- Thick undertread with regrooving depth indicators allows efficient regrooving for extended original tread life<sup>(1)</sup>
- Wide, deep circumferential grooves and full-depth sipes help promote excellent traction throughout the life of the tire

vs	Max. Load and Pressure	Max. Load and Pressure
r	Single	Dual

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac	ded lius		erall neter	Overal (‡		Approved Wheels (Measuring wheel	Min. Spacii		Revs Per	Max.		nd Press gle	sure	Max.	Load a Du	nd Press Ial	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	Mile	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
12R22.5	J	43714	24	62	19.9	506	42.9	1089	11.4	289	8.25, 9.00	13.2	335	485	7830	120	3550	830	6940	120	3150	830
275/70R22.5	J	57317	21	62	17.6	448	38.0	966	11.3	288	7.50, 8.25	11.9	303	545	6940	130	3150	900	6395	120	2900	830
305/70R22.5	L	95623	22	65	18.3	465	39.4	1001	11.9	303	8.25, 9.00	13.5	343	526	7830	120	3550	830	6940	120	3150	830

(1) "No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels." US Code of Federal Regulations: Title 49, Transportation; Part 393.75. See Page 99 for regrooving instructions.

Note: Wheel listed first is the measuring wheel.

(\*) Exceeding the lawful speed limit is neither recommended nor endorsed.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

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Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

Steer / All-position Tires

### **X COACH XZ** LONG HAUL APPLICATIONS

# The new, all-position, long haul charter bus tire designed for mileage, safety and comfort " $^{\!(\!0\!)}$

- New tread design helps deliver up to 15% higher mileage by 2/32nds deeper tread depth and a 0.4" wider tread, while maintaining superior performance<sup>(2)</sup>
- Central zig-zag tread grooves help deliver improved grip for a shorter braking distance on wet or icy roads<sup>(2)</sup>
- Lined profile and closed shoulder help deliver a quieter ride<sup>(2)</sup>



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rad		Ove Dian	erall neter	Overal (‡	l Width ‡)	Approved Wheels (Measuring wheel	Min. Spaci	Dual ng (‡)	Revs Per Mile	Max.	Load a Sin	nd Press gle	sure	Max.	Load a Du	nd Press Jal	ure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
295/80R22.5	J	28798	19	75	19.2	488	41.3	1050	12.0	306	9.00, 8.25	13.3	338	500	7830	123	3550	850	6940	123	3150	850

(1) "No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels." US Code of Federal Regulations: Title 49, Transportation; Part 393.75. (2) When compared to the MICHELIN® XZA2® Energy tire.

#### **XFE** wide base steer HIGHWAY & REGIONAL APPLICATIONS

#### Wide base radial designed to deliver high mileage and a smooth quiet ride on heavy steer axle fitments in both regional and highway service

- Dual compound tread rubber helps ensure cool operating temperatures, while abrasion-resistant rubber compound helps keep tire wear rate low
- Deep, wide channels help provide excellent water evacuation throughout the life of the tire
- Lateral siping along rib edges help enhance traction and braking in adverse weather conditions
- Robust crown design with four-steel belt package



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	Radius	Overall I	Diameter	Overall \	Nidth (‡)	Approved Wheels (Measuring wheel listed first.)	Revs Per Mile			nd Pressu gle	re
			32nds	mph	in.	mm	in.	mm	in.	mm	iisteu iiist.)		lbs.	psi	kg.	kPa
385/65R22.5	L	36991	21	65	19.6	499	42.2	1072	14.9	379	11.75, 12.25	492	9920	130	4500	900
425/65R22.5	L	11829	21	65	20.6	522	44.5	1130	16.6	421	13.00, 12.25	468	11400	120	5150	825
445/65R22.5	М	10805	21	65	21.0	534	45.6	1158	17.8	451	14.00, 13.00	457	12800	130	5800	900

- Note: Wheel listed first is the measuring wheel.
- (\*) Exceeding the lawful speed limit is neither recommended nor endorsed.
- (‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
- MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.
- Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

Steer / All-position Tires

### X ONE® XDA® ENERGY

#### **HIGHWAY APPLICATIONS**

# The most fuel efficient<sup>(1)</sup> drive tire available for North American long haul trucks

- Engineered to replace duals
- Innovative belt design and Advanced Technology<sup>™</sup> compounds deliver industry leading fuel-efficiency<sup>(1)</sup> and long tread life
- Features Infini-Coil Technology<sup>™</sup>, incorporating a 1/4 mile of steel cable to help eliminate casing growth
- *Matrix*<sup>™</sup> Siping technology helps provide exceptional traction on dry and slippery surfaces. The 3D *Matrix*<sup>™</sup> sipes lock together for the stability normally associated with solid tread blocks.
- Directional tread design



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	in. mm 18.5 471		Diameter	Overall \	Vidth (‡)	Approved Wheel	Revs Per Mile	1		nd Pressure gle	2
			32nds	mph	in.	mm	in.	mm	in.	mm			lbs.	psi	kg.	kPa
445/50R22.5 <sup>(2)</sup>	L	21881	24	75	18.5	471	40.1	1019	17.2	436	14.00	518	10200	120	4625	830
455/55R22.5 <sup>(2)</sup>	L	57105	24	75	19.3	490	41.8	1062	17.6	448	14.00	498	11000	120	5000	830

(1) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary. (2) Directional tread design.

### XONE<sup>®</sup> XDN<sup>®</sup>2 HIGHWAY & REGIONAL APPLICATIONS

# Michelin's longest-wearing, best traction X One<sup>®</sup> drive tire for highway and regional operations

- Engineered to replace duals
- Weight savings of approximately 371 lb. per tractor, when compared to the MICHELIN<sup>®</sup> XDN<sup>®</sup>2 tire
- Multiple tread compounds to keep the casing cooler and optimize retreadability
- Infini-Coil Technology<sup>™</sup> incorporates 1/4 mile of steel cable to stabilize the footprint and minimize casing growth
- Extra wide tread width for excellent stability and long wearlife
- Open shoulder design helps provide exceptional traction on dry, wet and snow covered surfaces



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	Radius	Overall [	Diameter	Overall \	Width (‡)	Approved Wheel	Revs Per Mile	n	Max. Load a Sin		2
			32nds	mph	in.	mm	in.	mm	in.	mm			lbs.	psi	kg.	kPa
445/50R22.5	L	36587	27	75	18.7	474	40.4	1026	17.1	435	14.00	515	10200	120	4625	830
455/55R22.5	L	31535	27	75	19.5	495	42.3	1076	17.6	446	14.00	492	11000	120	5000	830

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<sup>(\*)</sup> Exceeding the lawful speed limit is neither recommended nor endorsed.

<sup>(‡)</sup> Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

#### Our longest wearing long haul drive tire featuring regenerating tread features that deliver excellent traction late in life

- Extra wide tread width for excellent stability and long wearlife
- Regenerating tread features from MICHELIN® Durable Technologies for excellent ٠ traction throughout the life of the tire
- Matrix<sup>™</sup> Siping technology helps provide exceptional traction on dry and slippery surfaces. The 3D *Matrix*<sup>™</sup> sipes lock together for the stability normally associated with solid tread blocks
- Full 30/32nds tread depth helps provide unmatched original treadlife
- Strong, solid shoulders give excellent stability and handling



2

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rad			erall neter	Overal (‡	l Width ‡)	Approved Wheels (Measuring wheel	Min. Spaci		Revs Per Mile	Max.		nd Pres gle	sure	Max		nd Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5	G	73154	30	75	19.5	495	41.7	1058	11.3	287	8.25, 7.50	12.5	318	497	6175	105	2800	720	5840	105	2650	720
275/80R22.5	G	76747	30	75	19.0	483	40.6	1031	11.1	281	8.25, 7.50	12.2	311	510	6175	110	2800	760	5675	110	2575	760
11R24.5	G	73177	30	75	20.5	521	43.8	1112	11.2	284	8.25, 7.50	12.5	318	472	6610	105	3000	720	6005	105	2725	720
11R24.5	Н	03713	30	75	20.6	523	43.8	1113	11.3	286	8.25, 7.50	12.5	318	471	7160	120	3250	830	6610	120	3000	830
275/80R24.5	G	73166	30	75	19.7	499	41.8	1062	10.8	273	8.25, 7.50	12.2	311	494	6175	110	2800	760	5675	110	2575	760
305/75R24.5	J	30987	30	75	20.1	510	43.3	1100	11.5	293	8.25, 9.00	13.5	343	480	8270	120	3750	830	7160	120	3250	830

### XDA3<sup>®</sup> / XD2<sup>®</sup>

### **HIGHWAY APPLICATIONS**

#### Fuel-efficient<sup>(3)</sup>, standard drive tire that helps deliver long, even tread wear and a smooth guiet ride

- Our newest compound formulation combines low rolling resistance<sup>(3)</sup> with long original treadlife
- Alternating groove wall angles help resist stone retention and improve traction throughout the life of the tire
- · Wide circumferential grooves quickly evacuate water
- 7 Year / 700,000 Mile / 3-Retread Manufacturer's Limited Casing Warranty<sup>(4)</sup>



1 - 255/70R22.5 XD2

year	7 YEAR 700,000-MILE 3-RETREAD LIMITED WARRANTY (4)

-1

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Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)		ded dius		erall neter	Overal (‡	l Width ‡)	Approved Wheels (Measuring wheel	Snaci	Dual ng (‡)	Revs Per Mile	Max		nd Press gle	sure	Max	. Load a Dı	ind Press Jal	sure
	-		32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5 <sup>(2)</sup>	G	96666	26	75	19.5	496	41.9	1063	11.1	283	8.25, 7.50	12.5	318	495	6175	105	2800	720	5840	105	2650	720
255/70R22.5 <sup>(1)</sup>	н	74493	25	75	17.4	442	37.2	944	10.2	258	8.25, 7.50	11.6	295	558	5510	120	2500	830	5070	120	2300	830
275/80R22.5 <sup>(2)</sup>	G	73095	26	75	18.8	478	40.5	1028	10.9	278	8.25, 7.50	12.2	311	513	6175	110	2800	760	5675	110	2575	760
11R24.5 <sup>(2)</sup>	G	71551	26	75	20.5	521	43.8	1113	11.1	283	8.25, 7.50	12.5	318	473	6610	105	3000	720	6005	105	2725	720
275/80R24.5 <sup>(2)</sup>	G	68934	26	75	19.5	496	41.9	1063	10.7	271	8.25, 7.50	12.2	311	495	6175	110	2800	760	5675	110	2575	760

(1, 2) Tread design as indicated above the tire picture.

(1) MICHELIN® XD2® tread design.

(4) 7/7/3 Manufacturer's Limited Casing Warranty: 700,000 miles, 7 years, or 3 retreads for MICHELIN® XZA3®, XZA3® Antisplash<sup>™</sup>, XDA3®, and XDA® Energy tires only. See limited warranty for details.

Note: Wheel listed first is the measuring wheel.

(\*) Exceeding the lawful speed limit is neither recommended nor endorsed.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

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### XDA<sup>®</sup> ENERGY HIGHWAY APPLICATIONS

# Ground-breaking, fuel-efficient<sup>(1)</sup>, ultra-low profile drive axle radial truck tire especially designed for long even wear, good traction, and a quiet ride for long-haul 6x4s

- Latest Advanced Technology<sup>™</sup> tread compounds for outstanding fuel efficiency<sup>(1)</sup>
- Alternating groove wall angles help resist stone retention and improve traction throughout the life of the tire
- Wide circumferential grooves quickly evacuate water
- 7 Year / 700,000 Mile / 3-Retread Manufacturer's Limited Casing Warranty<sup>(2)</sup>

**Year** 700,000-MILE 3-RETREAD LIMITED WARRANTY (2)

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac	ded lius	Ove Dian	erall neter	Overal (:		Approved Wheels (Measuring wheel	Min. Spaci		Revs Per Mile	Max.		nd Press gle	sure	Max.	Load a Du	and Press ual	sure
	-		32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
275/80R22.5	G	42564	26	75	18.9	481	40.5	1028	10.9	278	8.25, 7.50	12.2	311	511	6175	110	2800	760	5675	110	2575	760

(1) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

(2) 7/7/3 Manufacturer's Limited Casing Warranty: 700,000 miles, 7 years, or 3 retreads for MICHELIN® XZA3®, XZA3® Antisplash™, XDA3®, and XDA® Energy tires only. See limited warranty for details.

### XDNº2 / XDNº2 GRIP

#### **HIGHWAY & REGIONAL APPLICATIONS**

# All weather premium drive tire optimized for exceptional traction and mileage

- Matrix<sup>™</sup> Siping technology helps provide exceptional traction on dry and slippery surfaces. Over 1,300 biting edges combine to help provide excellent levels of traction while the 3 dimensional Matrix<sup>™</sup> sipes lock together for the stability normally associated with solid tread blocks
- Extra wide tread helps provide stability while helping to improve handling and mileage
- Full 27/32nds tread depth helps provide long original tread life (MICHELIN® XDN®2 Grip tire has 28/32nds original tread depth)
- Wide, open shoulder grooves help deliver additional traction balanced with tread life



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Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac	ded dius	Ove Dian	erall neter	Overal (:	l Width ¢)	Approved Wheels (Measuring wheel	Spaci	Dual ng (‡)	Revs Per Mile	Max		nd Pres gle	sure	Max		and Press ual	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5 <sup>(1)</sup>	G	72805	27	75	19.5	495	41.7	1060	11.2	284	8.25, 7.50	12.5	318	496	6175	105	2800	720	5840	105	2650	720
11R22.5 <sup>(1)</sup>	Н	64321	27	75	19.5	495	41.7	1060	11.2	284	8.25, 7.50	12.5	318	496	6610	120	3000	830	6005	120	2725	830
12R22.5 <sup>(1)</sup>	Н	51753	27	75	20.0	508	42.9	1089	11.3	287	8.25, 9.00	13.2	335	483	7390	120	3350	830	6780	120	3075	830
275/80R22.5 <sup>(1)</sup>	G	63465	27	75	18.9	481	40.6	1030	11.0	279	8.25, 7.50	12.2	311	511	6175	110	2800	760	5675	110	2575	760
315/80R22.5 <sup>(2)</sup>	L	04355	28	75	20.0	507	43.1	1094	12.5	317	9.00, 8.25 <sup>(3)</sup>	13.8	351	486	9090	130	4125	900	8270	130	3750	900
11R24.5 <sup>(1)</sup>	G	87459	27	75	20.4	519	43.7	1111	11.2	284	8.25, 7.50	12.5	318	473	6610	105	3000	720	6005	105	2725	720
11R24.5 <sup>(1)</sup>	Н	87129	27	75	20.5	522	43.8	1112	11.2	284	8.25, 7.50	12.5	318	473	7160	120	3250	830	6610	120	3000	830
275/80R24.5 <sup>(1)</sup>	G	75684	27	75	19.6	497	41.8	1061	10.6	270	8.25, 7.50	12.2	311	495	6175	110	2800	760	5675	110	2575	760

(1) MICHELIN® XDN®2 tread design (non-directional).

(2) MICHELIN® XDN®2 Grip tread design (directional).

(3) For use with 8.25 x 22.5 wheels, see Page 93.

Note: Wheel listed first is the measuring wheel.

(\*) Exceeding the lawful speed limit is neither recommended nor endorsed.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

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### X MultiWay XD

#### **HIGHWAY & REGIONAL APPLICATIONS**

#### The versatile, all-season drive tire for all types of roads

- Excellent durability due to a new damage-resistant rubber and a new directional tread pattern that reduces stone retention
- Up to 19% more grip on wet and slippery roads and improved braking distance after 2/3 worn<sup>(1)</sup>, due to double wave and raindrop sipe technologies
- Up to 30% increased mileage<sup>(1)</sup> from a deeper, wider tread with MICHELIN<sup>®</sup> Durable Technologies



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rad		Ove Dian	erall neter	Overal (:		Approved Wheels (Measuring wheel	Min. Spaci	Dual ng (‡)	Revs Per Mile	Max.		nd Press gle	sure	Max.		ind Press Jal	sure
	-		32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
295/60R22.5	J	06376	23	68	16.9	430	36.5	927	11.4	289	9.00, 9.75 <sup>(2)</sup>	13.0	330	569	7390	130	3350	900	6780	130	3075	900

(1) When compared to the MICHELIN® XDE®2+ tire.

(2) For further instructions on proper usage of the 295/60R22.5, see Page 95.

#### **XDE<sup>®</sup> M/S** REGIONAL APPLICATIONS

# Open shoulder drive axle radial engineered for excellent mileage and traction across a wide range of applications

- Aggressive open shoulder design with deep tapered lateral grooves help provide outstanding year round traction and excellent water and mud dispersion
- Application specific compounds help resist the effects of scrubbing in standard LRG sizes. LRH sizes with a  $\circledast$  designation feature for chip and cut resistant compound.
- Full depth sipes help provide additional traction on wet and slippery surfaces in LRG sizes
- Offset shoulder blocks for excellent traction in mud and soft soil conditions



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac	ded lius		erall neter	Overal (:		Approved Wheels (Measuring wheel		Dual ng (‡)	Revs Per Mile	Max		and Press Igle	sure	Max.		and Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
10R22.5	G	87357	23	75	18.8	477	40.2	1022	10.2	259	6.75, 7.50, 8.25	11.1	282	515	5675	115	2575	790	5355	115	2430	790
11R22.5	G	73493	26	75	19.4	492	41.6	1057	11.2	285	8.25, 7.50	12.5	318	498	6175	105	2800	720	5840	105	2650	720
11R22.5 🛞	н	73927	28	75	19.4	493	41.7	1060	11.2	285	8.25, 7.50	12.5	318	497	6610	120	3000	830	6005	120	2725	830
275/80R22.5	G	61426	26	75	18.7	476	40.5	1028	11.1	282	8.25, 7.50	12.2	311	513	6175	110	2800	760	5675	110	2575	760
11R24.5	G	51273	26	75	20.4	518	43.8	1112	11.1	281	8.25, 7.50	12.5	318	475	6610	105	3000	720	6005	105	2725	720
11R24.5 ®	н	46695	28	75	20.4	519	43.9	1115	11.1	281	8.25, 7.50	12.5	318	474	7160	120	3250	830	6610	120	3000	830

With chip and cut resistant tread compound.

- Note: Wheel listed first is the measuring wheel.
- (\*) Exceeding the lawful speed limit is neither recommended nor endorsed.
- (‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.

Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

**Truck Tires** 

#### **XDE<sup>®</sup>2+** REGIONAL APPLICATIONS

# Open shoulder drive axle radial designed for regional/highway service (directional tread)

- Tread block design featuring five longitudinal sipes for optimized grip and traction
- · New damage resistant rubber compound for improved removal mileage
- Tread designed to minimize irregular wear
- Directional tread pattern to minimize stone retention



Directional tread

Directional tread

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac	ded lius	Ove Diam		Overal (	l Width ‡)	Approved Wheels (Measuring wheel	Min. Spaci	Dual ng (‡)	Revs Per Mile	Max		and Press Igle	sure	Max.	Load a Du	ind Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
265/70R19.5 <sup>(1)</sup>	G	95319	20	75	15.9	404	34.4	875	10.3	262	7.50, 6.75, 8.25	11.6	295	605	5510	110	2500	760	5205	110	2360	760
285/70R19.5 <sup>(1)</sup>	Н	79456	21	75	16.3	414	35.4	899	10.8	274	7.50, 8.25, 9.00	12.2	311	587	6395	120	2900	830	6005	120	2725	830
11R22.5 <sup>(1)</sup>	Н	37332	25	75	19.4	492	41.8	1061	10.5	266	7.50, 8.25	11.9	301	497	6940	120	3150	830	6395	120	2900	830
275/80R22.5 <sup>(1)</sup>	Н	36993	28	75	19.0	482	40.8	1036	11.0	280	7.50, 8.25	12.5	317	509	7160	120	3250	830	6610	120	3000	830

(1) Directional tread design.

#### X Works XDY<sup>®</sup> ON/OFF ROAD APPLICATIONS

# Next generation on/off road drive tire optimized for exceptional traction and wear in mixed and severe on/off road service

- Improved durability<sup>(1)</sup> due to a more robust center region of the tread
- 10% improved removal mileage<sup>(1)</sup> due to the wider tread width
- More efficient mud evacuation<sup>(1)</sup> due to directional tread
- Excellent protection from shocks, snags and impacts due to extra-thick sidewall

																1		1				
Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac	ded lius		erall neter		l Width ‡)	Approved Wheels (Measuring wheel	Snaci	Dual ng (‡)	Revs Per Mile	Max.		nd Press gle	sure	Max.	. Load a Du	nd Press Jal	sure
	-		32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5 <sup>(2)</sup>	Н	89725	30	65	19.7	499	41.9	1065	11.3	287	8.25, 7.50	12.5	318	493	6610	120	3000	830	6005	120	2725	830
11R24.5 <sup>(2)</sup>	н	90022	30	65	20.7	525	44.0	1118	11.3	288	8.25, 7.50	12.5	318	469	7160	120	3250	830	6610	120	3000	830
12R24.5 <sup>(2)</sup>	н	90148	30	65	21.2	538	45.3	1151	11.4	290	8.25, 9.00	13.2	335	457	7830	120	3550	830	7160	120	3250	830

(1) When compared to the MICHELIN® XDY®3 tire.

(2) Coming 3rd Quarter 2011, preliminary specs.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.

Note: Wheel listed first is the measuring wheel.

<sup>(\*)</sup> Exceeding the lawful speed limit is neither recommended nor endorsed.

#### XDY®3

#### **ON/OFF ROAD APPLICATIONS**

# On/off road drive tire optimized for exceptional traction and wear in mixed and severe on/off road service

- Long original tread life offered from 31/32nds tread depth
- 12% increase in tread volume for increased mileage and durability, + 5% tread width<sup>(3)</sup>, + 3% tread depth<sup>(3)</sup>
- Maximized traction in soft soil and mud through massive, open lateral shoulder grooves
- Extra robust four-belt crown package with extra wide working plies helps deliver exceptional casing life<sup>(4)</sup>



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac			erall neter	Overal (‡	l Width ‡)	Approved Wheels (Measuring wheel	Snaci	Dual ng (‡)	Revs Per Mile	Max.		nd Press gle	sure	Max.		nd Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5 <sup>(1)</sup>	Н	97079	31	65	19.8	503	42.2	1072	11.3	287	8.25, 7.50	12.5	318	490	6610	120	3000	830	6005	120	2725	830
315/80R22.5 (2, 4)	L	40302	31	65	20.0	508	43.3	1099	12.5	318	9.00, 8.25 <sup>(4)</sup>	13.8	351	480	9090	130	4125	900	8270	130	3750	900
11R24.5 <sup>(1)</sup>	Н	47962	31	65	20.8	528	44.4	1127	11.3	287	8.25, 7.50	12.5	318	467	7160	120	3250	830	6610	120	3000	830
12R24.5 <sup>(1)</sup>	Н	47966	31	65	21.3	542	45.6	1157	11.3	287	8.25, 9.00	13.2	335	454	7830	120	3550	830	7160	120	3250	830

(1, 2) Tread design as indicated above the tire picture.

(3) When compared to the MICHELIN<sup>®</sup> XDY-2<sup>™</sup> tire.

(4) The 315/80R22.5 has a directional tread design with three belt construction. For use with 8.25 x 22.5 wheels, see Page 93.

#### **XDY-2**<sup>™</sup> ON/OFF ROAD APPLICATIONS

# Aggressive radial truck tire designed for on/off service in severe conditions

- Rugged directional tread with application specific compounds helps provide outstanding self-cleaning capability combined with resistance to aggressions
- Deep lateral shoulder grooves aid water and mud dispersion to help enhance traction
- Extra robust four-belt crown package with extra wide working plies help deliver exceptional casing life
- Extra thick sidewalls, designed to increase protection from shocks, snags and impacts
- Full-width elastic protector ply and extra thick rubber under the tread help protect the working plies from shocks, bruises and impacts



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rad			erall neter	Overal (:	l Width ‡)	Approved Wheels (Measuring wheel	Min. Spaci		Revs Per Mile	Max.		nd Press gle	sure	Max.		ind Pres Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5 <sup>(1)</sup>	Н	77416	30	65	19.7	500	42.1	1069	11.0	279	8.25, 7.50	12.5	318	493	6610	120	3000	830	6005	120	2725	830
11R24.5 <sup>(1)</sup>	Н	76789	30	65	20.6	524	44.1	1120	11.0	279	8.25, 7.50	12.5	318	469	7160	120	3250	830	6610	120	3000	830

(1) Directional tread design.

Note: Wheel listed first is the measuring wheel.

- (\*) Exceeding the lawful speed limit is neither recommended nor endorsed.
- (‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
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- Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

**Drive Tires** 

#### XDY-EX2™ **ON/OFF ROAD APPLICATIONS**

#### Our most aggressive drive axle tire designed for commercial vehicles operating in extreme conditions where maximum traction is the priority

- Improved off-road and mud traction due to a more aggressive tread redesign with more void area<sup>(2)</sup>
- Excellent crown durability and retreadability due to significantly reduced stone retention
- Excellent protection from shocks, snags and impacts due to extra-thick sidewall



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rad		Ove Dian		Overal (:	l Width ‡)	Approved Wheels (Measuring wheel	Min. Spaci	Dual ng (‡)	Revs Per Mile	Max.		nd Press gle	sure	Max.	Load a Du	nd Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R24.5 <sup>(1)</sup>	Н	23274	32	65	20.8	528	44.3	1126	11.3	286	8.25, 7.50	12.5	318	466	7160	120	3250	830	6610	120	3000	830

(1) Coming 3rd Quarter 2011, preliminary specs. (2) When compared to the MICHELIN<sup>®</sup> XDY-EX<sup>™</sup>.

(3) Preliminary photograph.

**XDY-EX**<sup>™</sup>

#### **ON/OFF ROAD APPLICATIONS**

#### Aggressive drive axle radial designed for vehicles operating in extreme conditions where maximized traction is the priority

- 32/32nds original tread depth of rugged chip and cut resistant compound. MICHELIN® Co-Ex technology keeps the crown package cool for a long casing life
- Massive isolated tread blocks with wide tapered grooves help maximize deep snow and mud traction while helping to minimize stone retention
- Extra robust four-belt crown package with extra wide working plies helps deliver exceptional casing life
- Extra thick sidewalls, designed to increase protection from shocks, snags and impacts
- Full-width elastic protector ply and extra thick rubber under the tread help protect the working plies from shocks, bruises and impacts

Nax. Load and Pressure	Max. Load and Pressure

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Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac	ded lius		erall neter	Overal (:	l Width ‡)	Approved Wheels (Measuring wheel	Snaci	Dual ng (‡)	Revs Per Mile	Max.		nd Press gle	sure	Max	. Load a Dເ	nd Pres Ial	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R24.5	Н	46268	32	65	20.6	524	44.4	1127	11.4	288	8.25, 7.50	12.5	318	468	7160	120	3250	830	6610	120	3000	830

Note: Wheel listed first is the measuring wheel.

- (\*) Exceeding the lawful speed limit is neither recommended nor endorsed.
- (‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
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Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

**Fruck Tires** 

#### **REGIONAL & ON/OFF ROAD APPLICATIONS**

#### Drive axle radial for year-round traction and optimized for severe winter conditions

- Rugged, directional tread design helps boost snow and ice traction and helps reduce heel/toe wear typically associated with open shoulder designs
- MICHELIN<sup>®</sup> Durable Technology 3D *Matrix*<sup>™</sup> Siping helps provide exceptional traction on dry and slippery surfaces<sup>(1)</sup>
- Over 450 full-depth, zig-zag sipes interlock to enhance block stability under torque while providing extra bite, especially in deep snow
- Extra-robust, four-belt crown package with extra-wide working plies help deliver exceptional casing life
- Full-width, elastic protector ply and extra-thick rubber under the tread help protect • the working plies from shocks, bruises and impacts
- Application-specific compound designed to provide maximum snow traction



(1) Only MICHELIN® XDS®2 standard sizes carry the MICHELIN® Durable Technology logo.

(2) Directional tread design

(3) Tread design is slightly different from the picture.

#### **XDS<sup>®</sup>2** (19.5" Wheel) **REGIONAL & ON/OFF ROAD APPLICATIONS**

#### The drive axle radial for year-round traction, optimized for winter conditions and limited all-position service

- Outstanding traction on wet and slippery surfaces from over 700 3D Matrix<sup>™</sup> sipes
- Optimized for stone rejection with variable angled groove walls and ٠ groove bottom protectors
- Traction in demanding surface conditions from open shoulder design
- Protection from impacts through robust curb guard features and sidewall scallops
- Self-cleaning tread pattern through zig-zag groove angles and wide, open shoulder grooves



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)		ded lius	Ove Diam		Overall (1	:)	Approved Wheels (Measuring wheel	Min. Spacii		Revs Per Mile	Max.	Load a Sin	nd Press gle	ure	Max.	Load a Du	nd Press Ial	sure
	-		32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
225/70R19.5	F	91423	18	75	15.2	386	32.4	824	9.2	234	6.75, 6.00	10.0	254	638	3640	95	1650	660	3415	95	1550	660
225/70R19.5	G	00691	18	75	15.2	386	32.4	824	9.2	234	6.75, 6.00	10.0	254	637	3970	110	1800	760	3750	110	1700	760
245/70R19.5	Н	05797	19	75	15.6	395	33.6	854	9.7	247	6.75, 7.50	10.7	272	615	4940	120	2240	830	4675	120	2120	830

Note: Wheel listed first is the measuring wheel.

(\*) Exceeding the lawful speed limit is neither recommended nor endorsed.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

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Directional tread

#### X ONE® XTA® **HIGHWAY APPLICATIONS**

#### The MICHELIN® trailer axle innovation that helps deliver exceptional fuel efficiency<sup>(1)</sup> and significant weight savings in long haul operations

- Engineered to replace duals on long haul trailer axle fitments
- Advanced Technology<sup>™</sup> compounds offer remarkable fuel savings<sup>(1)</sup> • balanced with wet traction, mileage and even wear
- Four unique decoupling ribs help provide excellent resistance to irregular wear
- Features Infini-Coil Technology<sup>™</sup>, incorporating 1/4 mile of steel cable to help eliminate casing growth and ensure a consistent footprint



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	Radius	Overall I	Diameter	Overall \	Vidth (‡)	Approved Wheel	Revs Per Mile	I		nd Pressure gle	•
			32nds	mph	in.	mm	in.	mm	in.	mm			lbs.	psi	kg.	kPa
445/50R22.5 <sup>(2)</sup>	L	49694	13	75	18.2	463	39.5	1003	17.1	435	14.00	527	10200	120	4625	830

(1) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary. (2) Equivalent overall diameter to Michelin 275/80R22.5 trailer tire offering.

#### X ONE® XTE® **HIGHWAY & REGIONAL APPLICATIONS**

#### The MICHELIN® trailer axle innovation that helps deliver exceptional weight savings and significant fuel efficiency in highway and regional operations

- Engineered to replace duals on highway and regional trailer axle fitments
- compounds offer remarkable resistance to scrub balanced with wet traction or mileage
- Unique nine rib design helps deliver stability and excellent resistance to uneven wear
- Features Infini-Coil Technology<sup>™</sup>, incorporating 1/4 mile of steel cable to help eliminate casing growth and ensure a consistent footprint

)	Approved	Revs	Max. Load and Pressure
(1)			

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Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	l Radius	Overall I	Diameter	Overall \	Width (‡)	Approved Wheel	Revs Per Mile	ı		ind Pressure gle	5
			32nds	mph	in.	mm	in.	mm	in.	mm			lbs.	psi	kg.	kPa
445/50R22.5 <sup>(2)</sup>	L	59070	16	75	18.3	464	39.7	1008	17.1	435	14.00	525	10200	120	4625	830
455/55R22.5 🛞 (3)	L	30574	16	75	19.2	488	41.7	1059	17.6	448	14.00	499	11000	120	5000	830

With chip and cut resistant tread compound.

(1) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

(2) Equivalent overall diameter to Michelin 275/80R22.5 trailer tire offering.

(3) Equivalent overall diameter to Michelin 11R22.5 or 275/80R24.5 trailer tire offering.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

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Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

**Frailer Tires** 

<sup>(\*)</sup> Exceeding the lawful speed limit is neither recommended nor endorsed.

#### XT-1<sup>®</sup> HIGHWAY APPLICATIONS

# Fuel-efficient<sup>(1)</sup>, standard trailer tire that helps deliver long, even tread wear in long haul service

- Standardized casing dimensions help ensure interchangeability with MICHELIN® long haul steer and drive casings for efficient casing management
- Curb guard ribs help provide added defense against injuries from curbing
- Unique shoulder groove design helps provide excellent resistance to uneven shoulder wear
- Four see-through circumferential grooves aid water evacuation for good wet weather performance



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac	ded lius	Ove Dian	erall neter	Overal (‡		Approved Wheels (Measuring wheel	Snaci	Dual ng (‡)	Revs Per Mile	Max.	Load a Sin	nd Press gle	sure	Max	. Load a Du	nd Press Ial	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5	G	02078	12	75	19.1	485	40.8	1036	11.2	285	8.25, 7.50	12.5	318	501	6175	105	2800	720	5840	105	2650	720
275/80R22.5	G	19518	12	75	18.4	467	39.7	1008	11.1	281	8.25, 7.50	12.2	311	524	6175	110	2800	760	5675	110	2575	760
11R24.5	G	22754	12	75	20.0	508	43.0	1092	11.1	283	8.25, 7.50	12.5	318	483	6610	105	3000	720	6005	105	2725	720
275/80R24.5	G	29684	12	75	19.1	485	40.8	1036	10.8	274	8.25, 7.50	12.2	311	507	6175	110	2800	760	5675	110	2575	760

(1) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

#### XTA<sup>®</sup> HIGHWAY & REGIONAL APPLICATIONS

# The highway trailer radial optimized for low bed, high cube trailers operations

- Application specific compound
- Significant groove angles to help resist stone retention drilling



sure

kPa lbs.

830 6395 120 2900 830

830 4540 120 2060 830

Max. Load and Pressure

Dual

kPa

psi kg.

Ś																			
	Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)		ded dius		erall neter	Overal (:	l Width ‡)	Approved Wheels (Measuring wheel	Snaci	Dual ng (‡)	Revs Per Mile	Max.	. Load a Sin	nd Press gle	5
				32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	ĺ
	10.00R15 <sup>(1)</sup>	J	70667	14	55	16.5	419	36.0	914	10.6	269	7.50, 7.00	12.5	318	579	6940	120	3150	ĺ
	215/75R17.5	J	82636	15	62	14.1	359	30.7	779	8.7	221	6.00, 6.75	9.4	239	679	4805	120	2180	ĺ

(1) Please refer to the Tubes and Flaps Table on Page 86.

Note: Wheel listed first is the measuring wheel.

(\*) Exceeding the lawful speed limit is neither recommended nor endorsed.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

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### XTA® ENERGY

# Most fuel-efficient $^{\!(1)}$ and quiet, standard trailer tire for long haul service

- Latest Advanced Technology<sup>™</sup> tread compounds for outstanding fuel efficiency<sup>(1)</sup>
- 13/32nds tread depth to help resist irregular wear
- Four see-through circumferential grooves aid water evacuation for excellent wet weather performance



2 - 265/70R19.5

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rad		Ove Dian	erall neter	Overal (:	l Width ‡)	Approved Wheels (Measuring wheel	Min. Spaci		Revs Per Mile	Max.	Load a Sin	nd Press gle	sure	Max.	. Load a Di	nd Press Jal	ure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
275/80R22.5	G	73176	13	75	18.4	467	39.6	1007	11.0	280	8.25, 7.50	12.2	311	524	6175	110	2800	760	5675	110	2575	760

1

(1) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

### XTA<sup>®</sup>2 ENERGY HIGHWAY APPLICATIONS

#### Fuel-efficient<sup>(4)</sup>, small diameter trailer tire that helps deliver long, even tread wear in high cube highway service

- Advanced Technology<sup>™</sup> compounds formulated to help provide low rolling resistance<sup>(4)</sup> and cool operating temperatures
- See-through circumferential grooves promote efficient water evacuation for good wet braking and traction throughout the life
- Improved retreadability from a stronger, more curable crown package (compared to the MICHELIN® Energy XTA® tire)
- The 445/45R19.5 is an ultra low-profile, wide base tire optimized to replace duals

												9		1 1		1.5		100			1	I EN
Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac		Ove Dian	erall neter		l Width ‡)	Approved Wheels (Measuring wheel	Min. Spaci	Dual ng (‡)	Revs Per Mile	Max.		and Pres gle	sure	Max		ind Press Jal	sure
	-		32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
245/70R17.5 <sup>(1)</sup>	J	78370	13	62	14.2	361	31.2	792	9.5	241	6.75, 7.50	10.6	270	670	6005	125	2725	860	5675	125	2575	860
265/70R19.5 <sup>(2)</sup>	J	83728	15	62	15.7	400	34.1	865	10.4	265	7.50, 6.75, 8.25	11.6	295	612	6005	120	2725	830	5675	120	2575	830
445/45R19.5 <sup>(3)</sup>	М	69910	18	62	16.3	414	35.7	906	17.1	434	14.00	_	_	585	9920	130	4500	900	—	_	_	—

(1, 2) Tread design as indicated above the tire pictures.

(3) Tread design not shown.

(4) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

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Note: Wheel listed first is the measuring wheel.

<sup>(\*)</sup> Exceeding the lawful speed limit is neither recommended nor endorsed.

<sup>(‡)</sup> Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

# Robust trailer radial designed to withstand the demands of high scrub and spread axle service

- Long tread life from 16/32nds of application specific compounds
- Smooth, even wear in high scrub service from beefy, solid shoulders and trailer optimized design
- Protection from impacts and curbing promoted by sidewall scallops and curb guard features
- Standardized casing dimensions help ensure interchangeability with MICHELIN<sup>®</sup> long haul steer and drive casings for efficient casing management



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac			erall neter	Overal (‡	l Width ‡)	Approved Wheels (Measuring wheel	Min. Spaci	Dual ng (‡)	Revs Per Mile	Max		nd Press gle	sure	Max	Load a Du	nd Press Ial	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wife	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5	G	21307	16	75	19.1	484	41.0	1041	11.3	288	8.25, 7.50	12.5	318	506	6175	105	2800	720	5840	105	2650	720
275/80R22.5	G	17706	16	75	18.6	472	39.8	1012	11.0	280	8.25, 7.50	12.2	311	520	6175	110	2800	760	5675	110	2575	760
11R24.5	G	07025	16	75	20.0	509	43.0	1093	11.3	286	8.25, 7.50	12.5	318	482	6610	105	3000	720	6005	105	2725	720
275/80R24.5	G	33965	16	75	19.2	488	41.1	1043	10.7	272	8.25, 7.50	12.2	311	504	6175	110	2800	760	5675	110	2575	760

#### XTE2<sup>®</sup> HIGHWAY & REGIONAL APPLICATIONS

#### Robust small diameter trailer tire designed to withstand the demands of high scrub and spread axle service on low platform and specialty trailers

- Dual compound rubber helps ensure cool operating temperatures while upper tread abrasion resistance helps keep wear rates low
- Deep, wide channels help provide excellent water evacuation throughout the life of the tire
- Lateral siping along rib edges help enhance traction and braking in adverse weather conditions
- Robust crown design with 5 steel belt package



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac	ded lius	Ove Dian	erall neter	Overal (:	l Width ‡)	Approved Wheels (Measuring wheel	Snaci	Dual ng (‡)	Revs Per Mile	Max.		nd Press gle	sure	Max.	Load a Du	nd Pres Ial	sure
	-		32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
235/75R17.5	J	01963	15	62	14.3	363	31.3	796	9.5	241	6.75, 7.50	10.3	262	668	6005	125	2725	860	5675	125	2575	860
285/70R19.5	J	37840	18	62	16.1	409	35.2	894	11.2	285	8.25, 9.00	12.7	323	594	7390	130	3350	900	6940	130	3150	900

- Note: Wheel listed first is the measuring wheel.
- (\*) Exceeding the lawful speed limit is neither recommended nor endorsed.
- (‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
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- Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

**Trailer Tires** 

#### XTY<sup>®</sup>2 **ON/OFF ROAD APPLICATIONS**

#### Low profile radial designed for rugged, mixed trailer service

- Compound for chip and cut resistance to help resist the abusive conditions of on/off road applications
- Four steel belt construction helps deliver extra casing protection and added stability
- Extra wide protector ply extends under all major grooves and helps protect the • working plies from most bruising and penetrations



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac			erall neter	Overal (:	l Width ‡)	Approved Wheels (Measuring wheel	Spaci	Dual ng (‡)	Revs Per Mile	Max.		nd Pres gle	sure	Max		and Press Jal	sure
	-		32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
275/70R22.5	J	42407	21	62	17.7	450	38.2	970	10.9	276	7.50, 8.25	11.9	303	544	6940	120	3150	830	6395	120	2900	830

Note: Wheel listed first is the measuring wheel. (\*) Exceeding the lawful speed limit is neither recommended nor endorsed. (‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

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#### **REGIONAL APPLICATIONS**

# High capacity tube type all-position tire designed for heavy axle applications such as mobile cranes

- Five deep circumferential grooves for excellent water evacuation and wet traction
- Full-width working plies help provide a flat footprint for exceptional stability
- Extra high load carrying capacity for the tough requirements of special applications
- Maximum speed 50 mph\*



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rad		Ove Diam		Overal (:	l Width ‡)	Approved Wheel	Min. Spaci		Revs Per Mile	Max.		nd Press gle	sure	Max.	Load a	and Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm		in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
G20 (14.00R20) <sup>(1)</sup>	М	70870	18	50	22.4	568	48.8	1239	15.0	380	10.00	16.8	426	428	11000	115	5000	790	10200	115	4625	790

(1) Please refer to the Tubes and Flaps Table on Page 86.

#### **ON/OFF ROAD APPLICATIONS**

#### All-position radial for on/off road service

- Offset block shoulder design promotes soft soil mobility
- Application specific compound to help resist aggressions from chipping and cutting
- Zig-zag groove angles help resist stone retention and drilling



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac			erall neter	Overal (:	l Width ‡)	Approved Wheel	Min. Spaci		Revs Per Mile	Max.		nd Press gle	sure	Max.		ind Press Jal	ure
			32nds	mph	in.	mm	in.	mm	in.	mm		in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
12.00R24 <sup>(1)</sup>	Н	29163	23	65	22.4	568	48.1	1222	12.3	313	8.50	14.1	358	431	8820	110	4000	760	8050	110	3650	760

(1) Please refer to the Tubes and Flaps Table on Page 86.

- (‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
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XZY®

<sup>(\*)</sup> Exceeding the lawful speed limit is neither recommended nor endorsed.

#### All-terrain, all-position radial for special service such as Emergency Response vehicles

- Self-cleaning, open shoulder tread design features offset elements to help enhance traction and floatation capabilities on varied terrains including snow, sand, mud and highway
- Non-directional design for versatility
- Full-width steel belts and elastic protector ply help provide added casing protection against most off road hazards
- Tubeless construction compatible with Automated Tire Inflation System (ATIS) and bead locks



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac		Ove Diam	erall neter	Overal (:	l Width ‡)	Approved Wheels (Measuring wheel		Dual ng (‡)	Revs Per Mile	Max.		and Press Igle	sure	Max	. Load a Du	ind Press Jal	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
14.00R20 <sup>(1)</sup>	М	59177	29	55	22.8	578	49.5	1258	15.1	384	10.00V	17.1	434	421	11000	110	5000	760	9920	110	4500	760
16.00R20 <sup>(1)</sup>	М	06306	34	55	23.9	607	52.9	1343	17.2	438	10.00W, 10.00V, 10.00	19.5	495	397	14540	110	6595	760				
395/85R20 <sup>(1)</sup>	J	54331	33	55	21.3	542	46.8	1189	15.3	388	10.00V			447	12300	120	5600	830				
24R21	Н	76025	31	55	24.8	631	54.6	1388	23.9	608	18.00			383	15700	85	7100	590				

(1) May be used with tube; please refer to the Tubes and Flaps Table on Page 86.

#### XZL<sup>™</sup> wide base ON/OF

#### **ON/OFF ROAD APPLICATIONS**

# All-position wide base radial designed for optimized on/off road traction

- Self-cleaning, open-shoulder tread design features offset elements to help enhance traction and floatation capabilities
- Stable block design helps ensure a consistent footprint, even in free rolling positions, to help deliver smooth even wear and a quiet ride
- Deep, application specific compounds help provide resistance to aggressions and abrasion common in off road service
- Full-width steel belts and elastic protector ply help protect the casing against shocks, bruising and penetrations
- Conventional 22.5" commercial sizes



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	Radius	Overall I	Diameter	Overall V	Nidth (‡)	Approved Wheels (Measuring wheel listed first.)	Revs Per Mile	Ma		ınd Pressur gle	re
	-		32nds	mph	in.	mm	in.	mm	in.	mm	listeu liist.)		lbs.	psi	kg.	kPa
425/65R22.5	L	53254	26	60	20.6	524	44.8	1139	16.6	421	13.00, 12.25	467	11400	120	5150	830
445/65R22.5	L	84103	27	60	21.2	538	46.0	1168	17.6	448	14.00, 13.00	453	12300	120	5600	830

Note: Wheel listed first is the measuring wheel.

- (\*) Exceeding the lawful speed limit is neither recommended nor endorsed.
- (‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

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#### XZL+<sup>™</sup> OFF ROAD APPLICATIONS

# All-terrain, all-position radial for special service in extremely demanding applications

- Self-cleaning, open shoulder tread design features offset elements to help enhance traction and floatation capabilities on varied terrains including snow, sand, mud and highway
- Non-directional design for versatility
- Tread pattern designed for cooler operation and robust performance
- Tubeless construction compatible with Automated Tire Inflation System (ATIS) and bead locks



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	Radius	Overall [	Diameter	Overall \	Vidth (‡)	Approved Wheels (Measuring wheel listed first.)	Revs Per Mile		ax. Load a Sin	nd Pressur gle	'e
			32nds	mph	in.	mm	in.	mm	in.	mm	iisteu iiist.)		lbs.	psi	kg.	kPa
395/85R20 <sup>(1)</sup>	J	94675	26	55	21.1	537	46.3	1176	15.4	391	10.00W, 10.00, 10.00V	451	12300	120	5600	830

(1) May be used with tube; please refer to the Tubes and Flaps Table on Page 86.

#### XML<sup>™</sup> ON/OFF ROAD APPLICATIONS

#### All-terrain, all-position radial optimized for softsoil/mud mobility

- All-terrain non-directional computer enhanced tread design delivers exceptional soft soil mobility, through enhanced self-cleaning capabilities
- Full-width belt protection and elastic protector ply helps protect the casing from bruising and penetrations
- Offset shoulder designed for increased traction in soft soil
- Radial casing design optimized to operate at lower pressures to offer exceptional mobility and enhanced enveloping capabilities to resist impacts



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded	Radius	Overall [	Diameter	Overall \	Vidth (‡)	Approved Wheels (Measuring wheel listed first.)	Revs Per Mile	Ma		and Pressu gle	re
			32nds	mph	in.	mm	in.	mm	in.		listeu liist.)		lbs.	psi	kg.	kPa
325/85R16	D	37984	21	62	17.7	450	38.7	984	12.9	327	9.00	540	5070	70	2300	480
395/85R20 <sup>(1)</sup>	G	99131	30	60	21.3	541	46.7	1187	15.4	390	10.0W, 10.00, 10.00V	448	10200	100	4625	690
475/80R20 <sup>(1)</sup>	J	80341	30	55	22.9	582	50.1	1272	18.9	480	14.00V, 14.00	417	11700	90	5300	620

(1) May be used with tube; please refer to the Tubes and Flaps Table on Page 86.

Note: Wheel listed first is the measuring wheel.

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

<sup>(\*)</sup> Exceeding the lawful speed limit is neither recommended nor endorsed.

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Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

#### High capacity tube-type drive tire designed for mostly off road application such as logging and mining

- Open shoulder design for enhanced self-cleaning capability and soft soil mobility
- Massive tread elements offer exceptional resistance to cuts and penetrations
- Application specific compound helps resist cutting, chipping and chunking common in severe off road service
- Maximum speed 50 mph\*

20% Highway / 80% Off road



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loa Rac			erall neter	Overal (:	l Width ‡)	Approved Wheels (Measuring wheel	Snaci	Dual ing (‡)	Revs Per Mile	Max.		nd Press gle	sure	Max.	Load a Du	nd Press Ial	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wine	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
12.00R24 <sup>(1)</sup>	J	30049	38	50	23.1	586	49.4	1255	12.7	323	8.50, 8.00	14.1	358	422	9370	120	4250	830	8540	120	3875	830

(1) Please refer to the Tubes and Flaps Table on Page 86.

XS™

#### **EMERGENCY, CRASH, RESCUE VEHICLE**

#### Soft soil, all-position radial for special service such as Emergency Response vehicles

• Tread design optimized to minimize sandy surface disturbance

Tread Depth

32nds

21

Speed (\*)

mph

50

Efficient grip with exceptional floatation capabilities



- Note: Wheel listed first is the measuring wheel.
- (\*) Exceeding the lawful speed limit is neither recommended nor endorsed.

Catalog Number

23002

Load

Range

Н

Size

24R20.5

(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

Loaded Radius

mm

620

in.

24.4

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**Overall Diameter** 

mm

1374

in.

23.7

in.

54.1

To select the proper load and inflation table, locate your tire size in the following pages, then match your tire's sidewall markings to the table with the same sidewall markings. If your tire's sidewall markings do not match any table listed, please contact your Michelin dealer for the applicable load and inflation table.

Industry load and inflation standards are in a constant state of change, and Michelin continually updates its product information to reflect these changes. Printed material may not reflect the latest load and inflation standards.

#### NOTE: Never exceed the wheel manufacturer's maximum pressure limitation.

S = Single configuration, or 2 tires per axle. D = Dual configuration, or 4 tires per axle. Loads are indicated per axle.

WHEEL DIAMETER	PSI	75	80	85	90	95	100	105	110	115	120		MAXIMUM LOAD AND
15"	kPa	520	550	590	620	660	690	720	760	790	830	F	PRESSURE ON SIDEWALL
	LBS SINGLE	9530	10030	10530	11030	11510	12000	12470	12950	13420	13880	S	6940 LBS AT 120 PSI
10.00R15 LRJ	LBS DUAL	17560	18500	19420	20320	21220	22100	22980	23860	24720	25580	D	6395 LBS AT 120 PSI
ХТА	KG SINGLE	4320	4550	4780	5000	5220	5440	5660	5870	6090	6300	S	3150 KG AT 830 kPa
	KG DUAL	7970	8390	8810	9220	9630	10020	10420	10820	11210	11600	D	2900 KG AT 830 kPa

WHEEL DIAMETER	PSI	25	30	35	40	45	50	55	60	65	70		MAXIMUM LOAD AND
16"	kPa	170	210	45	50	310	340	380	410	450	480	'	PRESSURE ON SIDEWALL
325/85R16 LRD	LBS SINGLE	4450	5150	5820	6480	7120	7750	8360	8960	9560	10140	S	5070 LBS AT 70 PSI
XML	KG SINGLE	2020	2340	2640	2940	3230	3520	3790	4060	4340	4600	S	2300 KG AT 480 kPa

WHEEL DIAMETER	PSI	65	70	75	80	85	90	95	100	105	110	115	120	125	,	MAXIMUM LOAD AND
17.5"	kPa	450	480	520	550	590	620	660	690	720	760	790	830	860	PF	RESSURE ON SIDEWALL
	LBS SINGLE					7720	8010	8300	8600	8940	9280	9610			S	4805 LBS AT 115 PSI
10R17.5 LRG	LBS DUAL					14560	15140	15720	16320	16940	17560	18160			D	4540 LBS AT 115 PSI
XZA	KG SINGLE					3500	3640	3780	3900	4060	4220	4360			S	2180 KG AT 790 kPa
	KG DUAL					6600	6880	7160	7400	7680	7960	8240			D	2060 KG AT 790 kPa
	LBS SINGLE	5310	5640	5960	6270	6590	6890	7200	7500						S	3750 LBS AT 100 PSI
215/75R17.5 LRG	LBS DUAL	9980	10600	11200	11800	12380	12960	13540	14100						D	3525 LBS AT 100 PSI
XTE2	KG SINGLE	2410	2560	2700	2840	2990	3130	3270	3400						S	1700 KG AT 690 kPa
	KG DUAL	4530	4810	5080	5350	5620	5880	6140	6400						D	1600 KG AT 690 kPa
	LBS SINGLE			6600	6950	7290	7630	7970	8310	8640	8960	9290	9610		S	4805 LBS AT 120 PSI
215/75R17.5 LRJ	LBS DUAL			12460	13120	13780	14420	15060	15700	16320	16940	17560	18160		D	4540 LBS AT 120 PSI
ХТА	KG SINGLE			2990	3150	3310	3460	3620	3770	3920	4060	4210	4360		S	2180 KG AT 830 kPa
	KG DUAL			5650	5950	6250	6540	6830	7120	7400	7680	7970	8240		D	2060 KG AT 830 kPa
235/75R17.5 LRJ	LBS SINGLE				8400	8820	9230	9640	10050	10450	10840	11240	11620	12010	S	6005 LBS AT 125 PSI
	LBS DUAL				15880	16680	17460	18220	18980	19740	20500	21240	21980	22700	D	5675 LBS AT 125 PSI
XTE2	KG SINGLE				3810	4000	4190	4370	4560	4740	4920	5100	5270	5450	S	2725 KG AT 860 kPa
	KG DUAL				7200	7570	7920	8260	8610	8950	9300	9630	9970	10300	D	2575 KG AT 860 kPa
	LBS SINGLE				8400	8820	9230	9640	10050	10450	10840	11240	11620	12010	S	6005 LBS AT 125 PSI
245/70R17.5 LRJ	LBS DUAL				15880	16680	17460	18220	18980	19740	20500	21240	21980	22700	D	5675 LBS AT 125 PSI
XTA2 ENERGY	KG SINGLE				3810	4000	4190	4370	4560	4740	4920	5100	5270	5450	S	2725 KG AT 860 kPa
	KG DUAL				7200	7570	7920	8260	8610	8950	9300	9630	9970	10300	D	2575 KG AT 860 kPa

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#### NOTE: Never exceed the wheel manufacturer's maximum pressure limitation.

S = Single configuration, or 2 tires per axle. D = Dual configuration, or 4 tires per axle. Loads are indicated per axle.

WHEEL DIAMETER	PSI	65	70	75	80	85	90	95	100	105	110	115	120		MAXIMUM LOAD AND
19.5"	kPa	450	480	520	550	590	620	660	690	720	760	790	830	1	PRESSURE ON SIDEWALL
	LBS SINGLE		5080	5360	5670	5910	6150	6390	6610	6830	7050			s	3525 LBS AT 110 PSI
8R19.5 LRF	LBS DUAL		9840	10280	10720	11140	11560	12000	12400	12800	13220			D	3305 LBS AT 110 PSI
XZA	KG SINGLE		2300	2440	2570	2680	2800	2900	3000	3100	3200			s	1600 KG AT 760 kPa
	KG DUAL		4480	4680	4860	5040	5240	5440	5640	5840	6000			D	1500 KG AT 760 kPa
	LBS SINGLE	5510	5790	6080	6390	6630	6900	7280						S	3640 LBS AT 95 PSI
225/70R19.5 LRF	LBS DUAL	10400	10880	11440	12000	12460	12980	13660						D	3415 LBS AT 95 PSI
XDS2, XZE	KG SINGLE	2500	2620	2760	2900	3000	3140	3300						S	1650 KG AT 660 kPa
	KG DUAL	4720	4920	5200	5440	5640	5880	6200						D	1550 KG AT 660 kPa
	LBS SINGLE	5510	5790	6080	6390	6630	6900	7280	7430	7690	7940			S	3970 LBS AT 110 PSI
225/70R19.5 LRG	LBS DUAL	10400	10880	11440	12000	12460	12980	13660	13960	14460	15000			D	3750 LBS AT 110 PSI
XDS2, XZE	KG SINGLE	2500	2620	2760	2900	3000	3140	3300	3380	3480	3600			S	1800 KG AT 760 kPa
-	KG DUAL	4720	4920	5200	5440	5640	5880	6200	6320	6560	6800			D	1700 KG AT 760 kPa
	LBS SINGLE				7280	7480	7780	8160						S	4080 LBS AT 95 PSI
245/70R19.5 LRF	LBS DUAL				13660	14060	14620	15440						D	3860 LBS AT 95 PSI
XZE	KG SINGLE				3300	3400	3540	3700						S	1850 KG AT 660 kPa
	KG DUAL				6200	6360	6640	7000						D	1750 KG AT 660 kPa
	LBS SINGLE				7280	7480	7780	8160	8380	8670	9080			S	4540 LBS AT 110 PSI
245/70R19.5 LRG	LBS DUAL				13660	14060	14620	15440	15760	16300	17200			D	4300 LBS AT 110 PSI
XZE	KG SINGLE				3300	3400	3540	3700	3800	3940	4120			S	2060 KG AT 760 kPa
	KG DUAL				6200	6360	6640	7000	7160	7400	7800			D	1950 KG AT 760 kPa
	LBS SINGLE			6780	7140	7500	7850	8200	8540	8880	9220	9550	9880	S	4940 LBS AT 120 PSI
245/70R19.5 LRH	LBS DUAL			12840	13520	14200	14860	15520	16160	16800	17440	18080	18700	D	4675 LBS AT 120 PSI
XDS2, XZE	KG SINGLE			3080	3240	3400	3560	3720	3870	4030	4180	4330	4480	S	2240 KG AT 830 kPa
	KG DUAL			5820	6130	6440	6740	7040	7330	7620	7910	8200	8480	D	2120 KG AT 830 kPa
	LBS SINGLE	7230	7680	8110	8540	8970	9390	9800	10210	10620	11020			S	5510 LBS AT 110 PSI
265/70R19.5 LRG	LBS DUAL	13660	14500	15320	16140	16940	17740	18520	19300	20060	20820			D	5205 LBS AT 110 PSI
XDE2+, XZE2+	KG SINGLE	3280	3480	3680	3870	4070	4260	4450	4630	4820	5000			S	2500 KG AT 760 kPa
	KG DUAL	6200	6580	6950	7320	7680	8050	8400	8750	9100	9440			D	2360 KG AT 760 kPa
265/20040 5 1 51	LBS SINGLE			8250	8680	9110	9540	9960	10380	10790	11200	11610	12010	S	6005 LBS AT 120 PSI
265/70R19.5 LRJ	LBS DUAL			15580	16420	17220	18040	18840	19620	20400	21180	21940	22700	D	5675 LBS AT 120 PSI
XTA2 ENERGY	KG SINGLE			3740	3940	4130	4330	4520	4710	4890	5080	5270	5450	S	2725 KG AT 830 kPa
	KG DUAL			7070	7450	7810	8180	8550	8900	9250	9610	9950	10300	D	2575 KG AT 830 kPa
285/70R19.5 LRH	LBS SINGLE			8780	9250	9710	10160	10610	11050	11490	11930	12360	12790	S	6395 LBS AT 120 PSI
	LBS DUAL			16500	17360	18220	19080	19920	20760	21580	22400	23220	24020	D	6005 LBS AT 120 PSI
XZA, XDE2+, XZE2+	KG SINGLE			3980	4200	4400	4610	4810	5010	5210	5410	5610	5800	S	2900 KG AT 830 kPa
72LZT	KG DUAL			7480	7870	8260	8650	9040	9420	9790	10160	10530	10900	D	2725 KG AT 830 kPa

More Wheel Diameter 19.5" continues on the next page.

To select the proper load and inflation table, locate your tire size in the following pages, then match your tire's sidewall markings to the table with the same sidewall markings. If your tire's sidewall markings do not match any table listed, please contact your Michelin dealer for the applicable load and inflation table.

Industry load and inflation standards are in a constant state of change, and Michelin continually updates its product information to reflect these changes. Printed material may not reflect the latest load and inflation standards.

#### NOTE: Never exceed the wheel manufacturer's maximum pressure limitation.

S = Single configuration, or 2 tires per axle. D = Dual configuration, or 4 tires per axle. Loads are indicated per axle.

WHEEL DIAMETER	PSI	65	70	75	80	85	90	95	100	105	110	115	120	125	130		MAXIMUM LOAD AND
19.5"	kPa	450	480	520	550	590	620	660	690	720	760	790	830	860	900	Р	RESSURE ON SIDEWALL
	LBS SINGLE					10520	11010	11500	11980	12460	12930	13400	13860	14320	14780	S	7390 LBS AT 130 PSI
285/70R19.5 LRJ	LBS DUAL					19760	20680	21600	22500	23400	24280	25160	26040	26920	27760	D	6940 LBS AT 130 PSI
XTE2	KG SINGLE					4770	4990	5220	5430	5650	5860	6080	6290	6500	6700	S	3350 KG AT 900 kPa
	KG DUAL					8960	9380	9800	10210	10610	11010	11410	11810	12210	12600	D	3150 KG AT 900 kPa
	LBS SINGLE			9530	10030	10530	11030	11510	12000	12470	12950	13420	13880			S	6940 LBS AT 120 PSI
305/70R19.5 LRJ	LBS DUAL			17560	18500	19420	20320	21220	22100	22980	23860	24720	25580			D	6395 LBS AT 120 PSI
XZA	KG SINGLE			4320	4550	4780	5000	5220	5440	5660	5870	6090	6300			S	3150 KG AT 830 kPa
	KG DUAL			7970	8390	8810	9220	9630	10020	10420	10820	11210	11600			D	2900 KG AT 830 kPa
445/45R19.5 LRM	LBS SINGLE					14120	14780	15440	16080	16720	17360	17980	18600	19220	19840	S	9920 LBS AT 130 PSI
XTA2 ENERGY	KG SINGLE					6400	6700	7000	7290	7580	7870	8160	8440	8720	9000	S	4500 KG AT 900 kPa

WHEEL DIAMETER	PSI	65	70	75	80	85	90	95	100	105	110	115	120		MAXIMUM LOAD AND
20"	kPa	450	480	520	550	590	620	660	690	720	760	790	830	F	PRESSURE ON SIDEWALL
	LBS SINGLE		9120	9630	10140	10650	11150	11640	12130	12610	13090	13560		S	6780 LBS AT 115 PSI
10.00R20 LRH	LBS DUAL		16140	17060	17960	18860	19740	20620	21480	22340	23180	24020		D	6005 LBS AT 115 PSI
XZE2	KG SINGLE		4140	4370	4600	4830	5060	5280	5500	5720	5940	6150		S	3075 KG AT 790 kPa
	KG DUAL		7320	7740	8150	8550	8950	9350	9740	10130	10510	10900		D	2725 KG AT 790 kPa
G20 (14.00R20)	LBS SINGLE		15660	16500	17200	18180	18920	19660	20400	20940	21480	22000		S	11000 LBS AT 115 PSI
LRM	LBS DUAL		28640	30120	31600	33080	34560	36040	37480	38600	39720	40800		D	10200 LBS AT 115 PSI
N744	KG SINGLE		7100	7480	7860	8250	8580	8920	9250	9500	9760	10000		S	5000 KG AT 790 kPa
XZA4	KG DUAL		13000	13680	14360	15000	15680	16360	17000	29520	18040	18500		D	4625 KG AT 790 kPa
	LBS SINGLE	14440	15320	16200	17060	17900	18740	19560	20400	21200	22000			S	11000 LBS AT 110 PSI
14.00R20 LRM	LBS DUAL	26040	27640	29200	30760	32280	33800	35280	36760	38240	39680			D	9920 LBS AT 110 PSI
XZL	KG SINGLE	6550	6950	7350	7740	8120	8500	8870	9250	9620	10000			S	5000 KG AT 760 kPa
	KG DUAL	11810	12540	13240	13950	14640	15330	16000	16670	17350	18000			D	4500 KG AT 760 kPa
16.00R20 LRM	LBS SINGLE	19100	20200	21400	22600	23600	24800	25800	27000	28000	29080			s	12300 LBS AT 125 PSI
XZL	KG SINGLE	8660	9160	9710	10250	10700	11250	11700	12250	12700	13190			s	5600 KG AT 860 kPa
395/85R20 LRG	LBS SINGLE				16820	17560	18280	18740						s	9370 LBS AT 95 PSI
XML, XZL	KG SINGLE				7640	7960	8280	8500						s	4250 KG AT 660 kPa
395/85R20 LRJ	LBS SINGLE			16900	17780	18660	19540	20400	21200	22200	23000	23800	24600	s	12300 LBS AT 125 PSI
XZL, XZL+	KG SINGLE			7670	8060	8460	8860	9250	9620	10070	10430	10800	11200	s	5600 KG AT 860 kPa

To select the proper load and inflation table, locate your tire size in the following pages, then match your tire's sidewall markings to the table with the same sidewall markings. If your tire's sidewall markings do not match any table listed, please contact your Michelin dealer for the applicable load and inflation table.

Industry load and inflation standards are in a constant state of change, and Michelin continually updates its product information to reflect these changes. Printed material may not reflect the latest load and inflation standards.

#### NOTE: Never exceed the wheel manufacturer's maximum pressure limitation.

S = Single configuration, or 2 tires per axle. D = Dual configuration, or 4 tires per axle. Loads are indicated per axle.

WHEEL DIAMETER	PSI	45	50	55	60	65	70	75	80	85	90		MAXIMUM LOAD AND
20"	kPa	310	340	380	410	450	480	520	550	590	620	ŀ	PRESSURE ON SIDEWALL
475/80R20 LRJ	LBS SINGLE	13440	14620	15780	16920	18040	19140	20200	21200	22400	23400	s	12300 LBS AT 125 PSI
XML	KG SINGLE	6100	6630	7160	7670	8180	8680	9160	9620	10160	10600	s	5600 KG AT 860 kPa

WHEEL DIAMETER	PSI	40	45	50	55	60	65	70	75	80	85		MAXIMUM LOAD AND
20.5"	kPa	280	310	340	380	410	450	480	520	550	590		PRESSURE ON SIDEWALL
24R20.5 LRH	LBS SINGLE	17180	18880	20600	22200	23800	25400	26800	28400	30000	31400	s	15700 LBS AT 85 PSI
xs	KG SINGLE	7790	8560	9340	10070	10800	11520	12160	12880	13610	14200	s	7100 KG AT 590 kPa

WHEEL DIAMETER	PSI	40	45	50	55	60	65	70	75	80	85		MAXIMUM LOAD AND
21"	kPa	280	310	340	380	410	450	480	520	550	590		PRESSURE ON SIDEWALL
24R21 LRH	LBS SINGLE	17180	18880	20600	22200	23800	25400	26800	28400	30000	31400	s	15700 LBS AT 85 PSI
XZL	KG SINGLE	7790	8560	9340	10070	10800	11520	12160	12880	13610	14200	s	7100 KG AT 590 kPa

To select the proper load and inflation table, locate your tire size in the following pages, then match your tire's sidewall markings to the table with the same sidewall markings. If your tire's sidewall markings do not match any table listed, please contact your Michelin dealer for the applicable load and inflation table.

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#### NOTE: Never exceed the wheel manufacturer's maximum pressure limitation.

S = Single configuration, or 2 tires per axle. D = Dual configuration, or 4 tires per axle. Loads are indicated per axle.

WHEEL DIAMETER	PSI	70	75	80	85	90	95	100	105	110	115	120		MAXIMUM LOAD AND
22.5"	kPa	480	520	550	590	620	660	690	720	760	790	830	F	PRESSURE ON SIDEWALL
	LBS SINGLE	6740	7120	7460	7780	8160	8470	8780	9080				S	4540 LBS AT 105 PSI
9R22.5 LRF	LBS DUAL	13080	13640	14200	14760	15440	16020	16600	17200				D	4300 LBS AT 105 PSI
XZE	KG SINGLE	3060	3230	3380	3520	3700	3840	3980	4120				S	2060 KG AT 720 kPa
l	KG DUAL	5920	6200	6440	6680	7000	7280	7560	7800				D	1950 KG AT 720 kPa
	LBS SINGLE	8160	8560	8960	9350	9700	10050	10410					S	5205 LBS AT 100 PSI
10R22.5 LRF	LBS DUAL	15440	16180	16920	17640	18340	19040	19760					D	4940 LBS AT 100 PSI
XZE	KG SINGLE	3700	3880	4060	4240	4400	4560	4720					S	2360 KG AT 690 kPa
	KG DUAL	7000	7320	7640	8000	8320	8640	8960					D	2240 KG AT 690 kPa
	LBS SINGLE	8160	8560	8960	9350	9700	10050	10410	10720	11030	11350		S	5675 LBS AT 115 PSI
10R22.5 LRG	LBS DUAL	15440	16180	16920	17640	18340	19040	19760	20300	20840	21420		D	5355 LBS AT 115 PSI
XDE M/S, XZE	KG SINGLE	3700	3880	4060	4240	4400	4560	4720	4860	5000	5150		S	2575 KG AT 790 kPa
	KG DUAL	7000	7320	7640	8000	8320	8640	8960	9200	9440	9720		D	2430 KG AT 790 kPa
11R22.5 LRG	LBS SINGLE	9060	9540	9980	10440	11020	11460	11900	12350				s	6175 LBS AT 105 PSI
XD4, XDA3, XDA5, XDE M/S,	LBS DUAL	17520	18320	19040	19800	20820	21660	22500	23360				D	5840 LBS AT 105 PSI
XDN2, XT-1, XTE,	KG SINGLE	4100	4320	4520	4740	5000	5200	5400	5600				s	2800 KG AT 720 kPa
XZA-1+, XZA3, XZE2, XZY3	KG DUAL	7960	8320	8640	9000	9440	9840	10240	10600				D	2650 KG AT 720 kPa
11R22.5 LRH	LBS SINGLE		9540	9980	10440	11020	11460	11900	12350	12640	12930	13220	s	6610 LBS AT 120 PSI
X Works XDY XDE M/S ⊛,	LBS DUAL		18320	19040	19800	20820	21660	22500	23360	23580	23800	24020	D	6005 LBS AT 120 PSI
XDN2, XDS2, XDY-2, XDY3, XZA3, XZE2,	KG SINGLE		4320	4520	4740	5000	5200	5400	5600	5740	5880	6000	s	3000 KG AT 830 kPa
XZY3	KG DUAL		8320	8640	9000	9440	9840	10240	10600	10720	10840	10900	D	2725 KG AT 830 kPa
11R22.5 LRH	LBS SINGLE		9530	10030	10530	11030	11510	12000	12470	12950	13420	13880	S	6940 LBS AT 120 PSI
	LBS DUAL		17560	18500	19420	20320	21220	22100	22980	23860	24720	25580	D	6395 LBS AT 120 PSI
XZU 3, XDE2+	KG SINGLE		4320	4550	4780	5000	5220	5440	5660	5870	6090	6300	S	3150 KG AT 830 kPa
	KG DUAL		7970	8390	8810	9220	9630	10020	10420	10820	11210	11600	D	2900 KG AT 830 kPa
12R22.5 LRH	LBS SINGLE		10400	10900	11380	12010	12410	12810	13220	13740	14260	14780	S	7390 LBS AT 120 PSI
	LBS DUAL		19960	20760	21560	22700	23140	23580	24020	25060	26100	27120	D	6780 LBS AT 120 PSI
XDS, XDN2,	KG SINGLE		4720	4940	5160	5450	5640	5820	6000	6240	6480	6700	S	3350 KG AT 830 kPa
XZE ⊛, XZY3	KG DUAL		9040	9400	9760	10300	10520	10720	10900	11360	11840	12300	D	3075 KG AT 830 kPa
12R22.5 LRJ	LBS SINGLE		10750	11320	11880	12440	12990	13540	14080	14600	15140	15660	S	7830 LBS AT 120 PSI
	LBS DUAL		19060	20060	21060	22060	23020	24000	24940	25900	26840	27760	D	6940 LBS AT 120 PSI
XZU2	KG SINGLE		4880	5130	5390	5640	5890	6140	6390	6620	6870	7100	S	3550 KG AT 830 kPa
	KG DUAL		8650	9100	9550	10010	10440	10890	11310	11750	12170	12600	D	3150 KG AT 830 kPa

 $\ensuremath{\mathfrak{B}}$  With chip and cut resistant tread compound.

More Wheel Diameter 22.5" continues on the next page.

To select the proper load and inflation table, locate your tire size in the following pages, then match your tire's sidewall markings to the table with the same sidewall markings. If your tire's sidewall markings do not match any table listed, please contact your Michelin dealer for the applicable load and inflation table.

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#### NOTE: Never exceed the wheel manufacturer's maximum pressure limitation.

S = Single configuration, or 2 tires per axle. D = Dual configuration, or 4 tires per axle. Loads are indicated per axle.

WHEEL DIAMETER	PSI	70	75	80	85	90	95	100	105	110	115	120	125	130		MAXIMUM LOAD AND	
22.5"	kPa	480	520	550	590	620	660	690	720	760	790	830	860	900	F	PRESSURE ON SIDEWALL	
	LBS SINGLE	6510	6880	7250	7610	7960	8320	8660	9010	9350					S	4675 LBS AT 110 PSI	
235/80R22.5 LRG	LBS DUAL	12280	12980	13680	14360	15020	15680	16340	17000	17640					D	4410 LBS AT 110 PSI	
XZE	KG SINGLE	2950	3120	3290	3450	3610	3770	3930	4090	4240					S	2120 KG AT 760 kPa	
	KG DUAL	5570	5890	6210	6510	6810	7110	7410	7710	8000					D	2000 KG AT 760 kPa	
	LBS SINGLE			8380	8740	9100	9350	9790	10130	10410	10800	11020			S	5510 LBS AT 120 PSI	
255/70R22.5 LRH	LBS DUAL			15880	16440	17100	17640	17820	18440	18700	19660	20280			D	5070 LBS AT 120 PSI	
XD2, XZE 🛞	KG SINGLE			3800	3960	4120	4240	4440	4600	4720	4900	5000			S	2500 KG AT 830 kPa	
	KG DUAL			7200	7440	7760	8000	8080	8360	8480	8920	9200			D	2300 KG AT 830 kPa	
255/80R22.5 LRG	LBS SINGLE	7750	8140	8600	8880	9240	9610	9950	10300	10410					S	5205 LBS AT 110 PSI	
	LBS DUAL	14100	14820	15440	16160	16820	17640	18100	18740	19220					D	4805 LBS AT 110 PSI	
XDE M/S, XZE	KG SINGLE	3520	3700	3900	4020	4200	4360	4520	4680	4720					S	2360 KG AT 760 kPa	
	KG DUAL	6400	6720	7000	7320	7640	8000	8200	8520	8720					D	2180 KG AT 760 kPa	
	LBS SINGLE		9530	10030	10530	11030	11510	12000	12470	12950	13420	13880			S	6940 LBS AT 120 PSI	
275/70R22.5 LRJ	LBS DUAL		17560	18500	19420	20320	21220	22100	22980	23860	24720	25580			D	6395 LBS AT 120 PSI	
XTY2	KG SINGLE		4340	4540	4800	4980	5240	5440	5620	5880	6060	6300			S	3150 KG AT 830 kPa	
	KG DUAL		7960	8360	8840	9200	9640	10000	10360	10800	11160	11600			D	2900 KG AT 830 kPa	
275/70R22.5 LRJ	LBS SINGLE				9880	10340	10800	11250	11700	12140	12580	13020	13460	13880	S	6940 LBS AT 130 PSI	
	LBS DUAL				19420	20320	21220	22100	22980	23860	24720	25580			D	6395 LBS AT 120 PSI	
XZA2 ENERGY,	KG SINGLE				4480	4690	4900	5100	5310	5510	5710	5910	6110	6300	S	3150 KG AT 900 kPa	
XZE2+, XZU2	KG DUAL				8810	9220	9630	10020	10420	10820	11210	11600			D	2900 KG AT 830 kPa	
275/80R22.5 LRG	LBS SINGLE	9000	9450	9880	10310	10740	11020	11560	11960	12350					s	6175 LBS AT 110 PSI	
XDA ENERGY, XDA3, XDA5, XDE M/S, XDE2+	LBS DUAL	16380	17200	18160	18760	19540	20280	21040	21760	22700					D	5675 LBS AT 110 PSI	
XDN2, XTA ENERGY, XT-1, XTE,	KG SINGLE	4080	4280	4480	4680	4880	5000	5240	5420	5600					s	2800 KG AT 760 kPa	
XZA-1+, XZA3, XZE2	KG DUAL	7440	7800	8240	8520	8880	9200	9560	9880	10300					D	2575 KG AT 760 kPa	
275/80R22.5 LRH	LBS SINGLE		9830	10350	10870	11380	11880	12380	12870	13360	13840	14320			S	7160 LBS AT 120 PSI	
	LBS DUAL		18160	19120	20060	21000	21940	22860	23760	24660	25560	26440			D	6610 LBS AT 120 PSI	
XDE2+, XZA3, XZA3 Antisplash,	KG SINGLE		4480	4680	4940	5140	5420	5600	5800	6060	6240	6500			S	3250 KG AT 830 kPa	
XZE	KG DUAL		8240	8640	9120	9520	10000	10360	10720	11200	11520	12000			D	3000 KG AT 830 kPa	

€ With chip and cut resistant tread compound.

More Wheel Diameter 22.5" continues on the next page.
### MICHELIN INFLATION CHARTS FOR TRUCK TIRES

To select the proper load and inflation table, locate your tire size in the following pages, then match your tire's sidewall markings to the table with the same sidewall markings. If your tire's sidewall markings do not match any table listed, please contact your Michelin dealer for the applicable load and inflation table.

Industry load and inflation standards are in a constant state of change, and Michelin continually updates its product information to reflect these changes. Printed material may not reflect the latest load and inflation standards.

#### NOTE: Never exceed the wheel manufacturer's maximum pressure limitation.

#### S = Single configuration, or 2 tires per axle. D = Dual configuration, or 4 tires per axle. Loads are indicated per axle.

WHEEL DIAMETER	PSI	75	80	85	90	95	100	105	110	115	120	123	125	130		MAXIMUM LOAD AND
22.5"	kPa	520	550	590	620	660	690	720	760	790	830	850	860	900		PRESSURE ON SIDEWALL
295/60R22.5 LRJ	LBS SINGLE			10520	11010	11500	11980	12460	12930	13400	13860		14320	14780	S	7390 LBS AT 130 PSI
255/00R22.5 ER5	LBS DUAL			19300	20200	21100	21980	22860	23720	24580	25440		26280	27120	D	6780 LBS AT 130 PSI
X MultiWay XD,	KG SINGLE			4770	4990	5220	5430	5650	5860	6080	6290		6460	6700	S	3350 KG AT 900 kPa
XZA2 ENERGY	KG DUAL			8750	9160	9570	9970	10370	10760	11150	11540		11880	12300	D	3075 KG AT 900 kPa
295/80R22.5 LRH	LBS SINGLE	10750	11320	11880	12440	12990	13540	14080	14600	15140	15660				S	7830 LBS AT 120 PSI
255/00R22.5 ERIT	LBS DUAL	19060	20060	21060	22060	23020	24000	24940	25900	26840	27760				D	6940 LBS AT 120 PSI
XZA2 ENERGY,	KG SINGLE	4880	5130	5390	5640	5890	6140	6390	6620	6870	7100				S	3550 KG AT 830 kPa
XZE2+	KG DUAL	8650	9100	9550	10010	10440	10890	11310	11750	12170	12600				D	3150 KG AT 830 kPa
	LBS SINGLE	10750	11320	11880	12440	12990	13540	14080	14600	15140	15660	15660			S	7830 LBS AT 123 PSI
295/80R22.5 LRJ	LBS DUAL	19060	20060	21060	22060	23020	24000	24940	25900	26840	27760	27760			D	6940 LBS AT 123 PSI
X Coach XZ	KG SINGLE	4880	5130	5390	5640	5890	6140	6390	6620	6870	7100	7100			S	3550 KG AT 850 kPa
	KG DUAL	8650	9100	9550	10010	10440	10890	11310	11750	12170	12600	12600			D	3150 KG AT 850 kPa
	LBS SINGLE	10750	11320	11880	12440	12990	13540	14080	14600	15140	15660				S	7830 LBS AT 120 PSI
305/70R22.5 LRL	LBS DUAL	19060	20060	21060	22060	23020	24000	24940	25900	26840	27760				D	6940 LBS AT 120 PSI
XZU2	KG SINGLE	4880	5130	5390	5640	5890	6140	6390	6620	6870	7100				S	3550 KG AT 830 kPa
	KG DUAL	8650	9100	9550	10010	10440	10890	11310	11750	12170	12600				D	3150 KG AT 830 kPa
	LBS SINGLE		11680	12200	12700	13220	13660	14140	14780	15140	15660				S	7830 LBS AT 120 PSI
305/85R22.5 LRJ	LBS DUAL		21420	22200	23120	24020	24860	25740	27120	27680	28640				D	7160 LBS AT 120 PSI
XZU 3	KG SINGLE		5300	5540	5760	6000	6200	6420	6700	6820	7100				S	3550 KG AT 830 kPa
	KG DUAL		9720	10080	10480	10900	11280	11680	12300	12480	13000				D	3250 KG AT 830 kPa
315/80R22.5 LRL	LBS SINGLE			12830	13340	13880	14380	14880	15220	15840	16540		17620	18180	S	9090 LBS AT 130 PSI
XDN2 GRIP,	LBS DUAL			23360	24280	25580	26180	27080	27760	28840	30440		32040	33080	D	8270 LBS AT 130 PSI
XDY3, XZA1,	KG SINGLE			5820	6060	6300	6520	6740	6900	7180	7500		7960	8250	s	4125 KG AT 900 kPa
XZA2 ENERGY, XZY3	KG DUAL			10600	11000	11600	11880	12280	12600	13080	13800		14480	15000	D	3750 KG AT 900 kPa
	LBS SINGLE			14240	14900	15560	16220	16860	17500	18140	18760		19380	20000	s	10000 LBS AT 130 PSI
315/80R22.5 LRL	LBS DUAL			23540	24640	25740	26800	27880	28960	30000	31040		32040	33080	D	8270 LBS AT 130 PSI
XZU S, XZU S2	KG SINGLE			6460	6760	7060	7360	7650	7940	8230	8510		8790	9070	S	4535 KG AT 900 kPa
	KG DUAL			10680	11180	11680	12160	12650	13140	13610	14080		14530	15000	D	3750 KG AT 900 kPa
365/70R22.5 LRL	LBS SINGLE		14700	15420	16140	16860	17560	18260	18960	19640	20400		21000		s	10500 LBS AT 125 PSI
XZA	KG SINGLE		6670	6990	7320	7650	7970	8280	8600	8910	9240		9500		s	4750 KG AT 860 kPa

More Wheel Diameter 22.5" continues on the next page.

### MICHELIN INFLATION CHARTS FOR TRUCK TIRES

To select the proper load and inflation table, locate your tire size in the following pages, then match your tire's sidewall markings to the table with the same sidewall markings. If your tire's sidewall markings do not match any table listed, please contact your Michelin dealer for the applicable load and inflation table.

Industry load and inflation standards are in a constant state of change, and Michelin continually updates its product information to reflect these changes. Printed material may not reflect the latest load and inflation standards.

#### NOTE: Never exceed the wheel manufacturer's maximum pressure limitation.

S = Single configuration, or 2 tires per axle. D = Dual configuration, or 4 tires per axle. Loads are indicated per axle.

WHEEL DIAMETER	PSI	75	80	85	90	95	100	105	110	115	120	120	125	130		MAXIMUM LOAD AND
22.5"	kPa	520	550	590	620	660	690	720	760	790	825	830	860	900		PRESSURE ON SIDEWALL
385/65R22.5 LRJ	LBS SINGLE	13440	13880	14700	15300	16100	16460	17020	17640	18100	18740				s	9370 LBS AT 120 PSI
ХZҮЗ	KG SINGLE	6120	6300	6700	6940	7300	7480	7700	8000	8200	8500				s	4250 KG AT 830 kPa
385/65R22.5 LRL	LBS SINGLE			14120	14780	15440	16080	16720	17360	17980	18600		19220	19840	s	9920 LBS AT 130 PSI
XFE	KG SINGLE			6400	6700	7000	7290	7580	7870	8160	8440		8720	9000	s	4500 KG AT 900 kPa
425/65R22.5 LRL	LBS SINGLE	15660	16480	17300	18120	18920	19700	20400	21200	22000		22800			s	11400 LBS AT 120 PSI
XZL, XZU S, XZY3	KG SINGLE	7100	7480	7850	8220	8580	8940	9250	9620	9980		10300			s	5150 KG AT 830 kPa
425/65R22.5 LRL	LBS SINGLE	15660	16480	17300	18120	18920	19700	20400	21200	22000	22800				s	11400 LBS AT 120 PSI
XFE	KG SINGLE	7080	7420	7850	8220	8580	8940	9250	9620	9980	10300				s	5150 KG AT 825 kPa
445/50R22.5 LRL X One XDA Energy,	LBS SINGLE	13880	14620	15360	16060	16780	17480	18180	18740	19560		20400			s	10200 LBS AT 120 PSI
X One XDN2, X One XTA, X One XTE	KG SINGLE	6300	6640	6960	7280	7620	7940	8240	8500	8860		9250			s	4625 KG AT 830 kPa
445/65R22.5 LRL	LBS SINGLE	17320	18180	18960	19740	20400	21200	22000	22800	23400		24600			s	12300 LBS AT 120 PSI
XZL	KG SINGLE	7900	8250	8640	8940	9250	9640	9920	10300	10580		11200			s	5600 KG AT 830 kPa
445/65R22.5 LRL	LBS SINGLE			18220	19080	19920	20800	21600	22400	23200		24000	24800	25600	S	12800 LBS AT 130 PSI
ХХҮЗ	KG SINGLE			8260	8650	9040	9430	9800	10160	10520		10890	11180	11600	s	5800 KG AT 900 kPa
445/65R22.5 LRM	LBS SINGLE			18220	19080	19920	20800	21600	22400	23200		24000	24800	25600	s	12800 LBS AT 130 PSI
XFE	KG SINGLE			8260	8650	9040	9430	9800	10160	10520		10890	11180	11600	s	5800 KG AT 900 kPa
455/55R22.5 LRL	LBS SINGLE	15000	15800	16580	17360	18120	18880	19640	20400	21200		22000			s	11000 LBS AT 120 PSI
X One XDA Energy, X One XDN2, X One XTE ⊛	KG SINGLE	6800	7160	7520	7880	8220	8560	8900	9250	9580		10000			s	5000 KG AT 830 kPa
455/55R22.5 LRM	LBS SINGLE			16580	17360	18120	18880	19640	20400	21200		22000	22600	23400	s	11700 LBS AT 130 PSI
X One XZU S, X One XZY3	KG SINGLE			7520	7880	8220	8560	8900	9250	9580		10000	10240	10600	s	5300 KG AT 900 kPa

❀ With chip and cut resistant tread compound.

### MICHELIN INFLATION CHARTS FOR TRUCK TIRES

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Industry load and inflation standards are in a constant state of change, and Michelin continually updates its product information to reflect these changes. Printed material may not reflect the latest load and inflation standards.

#### NOTE: Never exceed the wheel manufacturer's maximum pressure limitation.

#### S = Single configuration, or 2 tires per axle. D = Dual configuration, or 4 tires per axle. Loads are indicated per axle.

WHEEL DIAMETER	PSI	70	75	80	85	90	95	100	105	110	115	120		MAXIMUM LOAD AND
24"	kPa	480	520	550	590	620	660	690	720	760	790	830		PRESSURE ON SIDEWALL
	LBS SINGLE	12660	13320	13960	14560	15160	16100	16620	17140	17640			S	8820 LBS AT 110 PSI
12.00R24 LRH	LBS DUAL	24480	25560	26600	27640	28640	29560	30440	31320	32200			D	8050 LBS AT 110 PSI
XZY	KG SINGLE	5740	6040	6340	6600	6880	7300	7540	7780	8000			S	4000 KG AT 760 kPa
	KG DUAL	11120	11440	12080	12560	13000	13400	13800	14200	14600			D	3650 KG AT 760 kPa
	LBS SINGLE		13320	13960	14560	15160	16100	16620	17140	17640	18200	18740	S	9370 LBS AT 120 PSI
12.00R24 LRJ	LBS DUAL		25560	26600	27640	28640	29560	30440	31320	32200	33200	34160	D	8540 LBS AT 120 PSI
XDL	KG SINGLE		6040	6340	6600	6880	7300	7540	7780	8000	8260	8500	S	4250 KG AT 830 kPa
	KG DUAL		11440	12080	12560	13000	13400	13800	14200	14600	15040	15500	D	3875 KG AT 830 kPa

WHEEL DIAMETER	PSI	70	75	80	85	90	95	100	105	110	115	120		MAXIMUM LOAD AND
24.5"	kPa	480	520	550	590	620	660	690	720	760	790	830	ĺ	PRESSURE ON SIDEWALL
11R24.5 LRG	LBS SINGLE	9640	10140	10620	11100	11680	12190	12700	13220				s	6610 LBS AT 105 PSI
XDA3, XDA5, XDE M/S, XDN2,	LBS DUAL	18640	19480	20280	21040	22040	22700	23360	24020				D	6005 LBS AT 105 PSI
XT-1, XTE, XZA-1+, XZA3,	KG SINGLE	4380	4600	4820	5040	5300	5540	5780	6000				s	3000 KG AT 720 kPa
XZE2, XZY3	KG DUAL	8440	8840	9200	9560	10000	10320	10640	10900				D	2725 KG AT 720 kPa
11R24.5 LRH	LBS SINGLE		10140	10620	11100	11680	12190	12700	13220	13580	13940	14320	s	7160 LBS AT 120 PSI
X Works XDY, XDA5, XDE M/S⊛,	LBS DUAL		19480	20280	21040	22040	22700	23360	24020	24820	25620	26440	D	6610 LBS AT 120 PSI
XDN2, XDS2, XDY-2, XDY3,	KG SINGLE		4600	4820	5040	5300	5540	5780	6000	6160	6320	6500	s	3250 KG AT 830 kPa
XDY-EX, XDY-EX2, XZE2, XZY3	KG DUAL		8840	9200	9560	10000	10320	10640	10900	11280	11640	12000	D	3000 KG AT 830 kPa
12R24.5 LRH	LBS SINGLE		11040	11580	12080	12790	13300	13820	14320	14760	15200	15660	S	7830 LBS AT 120 PSI
	LBS DUAL		21200	22080	22920	23360	24380	25400	26440	27160	27880	28640	D	7160 LBS AT 120 PSI
X Works XDY,	KG SINGLE		5000	5260	5480	5800	6040	6280	6500	6700	6900	7100	S	3550 KG AT 830 kPa
XDY3, XZY3	KG DUAL		9600	10000	10400	10600	11080	11560	12000	12320	12640	13000	D	3250 KG AT 830 kPa
275/80R24.5 LRG	LBS SINGLE	9090	9540	9880	10420	10840	11350	11670	12080	12350			S	6175 LBS AT 110 PSI
XDA3, XDA5,	LBS DUAL	16540	17360	18160	18960	19720	20820	21240	21980	22700			D	5675 LBS AT 110 PSI
XDN2, XT-1, XTE, XZA-1+,	KG SINGLE	4120	4320	4480	4720	4920	5150	5300	5480	5600			s	2800 KG AT 760 kPa
XZA3, XZE2	KG DUAL	7480	7880	8240	8600	8960	9440	9640	9960	10300			D	2575 KG AT 760 kPa
305/75R24.5 LRJ	LBS SINGLE		11360	11960	12550	13140	13720	14300	14860	15420	15980	16540	S	8270 LBS AT 120 PSI
	LBS DUAL		19660	20700	21740	22760	23760	24760	25740	26720	27680	28640	D	7160 LBS AT 120 PSI
XDA5, XZE2, XZU 3	KG SINGLE		5150	5420	5690	5960	6220	6490	6740	6990	7250	7500	S	3750 KG AT 830 kPa
ALU 3	KG DUAL		8920	9390	9860	10320	10780	11230	11680	12120	12560	13000	D	3250 KG AT 830 kPa

❀ With chip and cut resistant tread compound.



### **MICHELIN® RETREADS QUICK REFERENCE TREAD GUIDE**

Product Availability (Tread Depth in Shaded Boxes)

#### **STANDARD SIZES**

Tread Size	140	150	160	170	180	190	200	210	2	20	230	240	250	260	270	280
Size \ # DIE			162\#4	168\#5	177\#6	194\#7	203\#8	211\#8.5N	219\#9	225\#9.5	232\#10	238\#10.5	252\#12			
Spread Axle Sizes (1)						185/225	195/235	205/245	215	/255	225/265	245/285				
XDA2 <sup>®</sup> 23 AT*								23	23	23	23					
XDA2 <sup>®</sup> 19 AT*									19	19						
XDA-HT™ <i>High P</i> orque							28	28	28	28	28	28	2828	28		
XDA®														25		
XD4®								28	2	8	28					
XDN®2									2	.7	27	27				
XDN®								26	2	:6	26		25			
XDHT <sup>® (2)</sup>					19	23	23	23	23	23	23					
XDC <sup>®</sup> LL								14	1	4						
XDC <sup>®</sup> 22						22	22	22	22	22						
XDC <sup>®</sup> 18									18	18						
XM+S4®				21	21	21	21	21	21	21						
XDE <sup>®</sup> M/S				18	18	20	20	22	2	2	22	26	26			
XDS®								25	2	:5	25		25			
XDU®S									3	2	32	32	32		32	
XDY®							26	26	26	26	26	26 32	32			
XDY-1™								30	30	30	30	30				
XZA <sup>® (2)</sup>	13	13	13	13	13	15	15	15	15	15		20				
XZE <sup>® (2)</sup>				16	18	18	18	18	18	18						
XZE2™												20	20	20		
XZE <sup>®</sup> SA						18	18	18	1	8	18	18				
XZU®S									2	6	26	26	26		26	
XZY®							18	18	18	18	18	18	20			
XZY-1™								20	20	20	20	20	26			
XZY-2™								26	2	:6	26	26	26			
XT-1® AT* (2)							12	12	12	12						
XTA®-1 (2)						11	11	11	11	11		11				
XTA®												16		16		
XTY <sup>®</sup> SA							22	22	22							

### WIDE BASE AND MICHELIN® X ONE® RETREAD SIZES

Tread Size	290/345 <sup>(1)</sup>	320/365 <sup>(1)</sup>	350/395 <sup>(1)</sup>	375/425 <sup>(1)</sup>	380	385/435 <sup>(1)</sup>	390	390/430 <sup>(1)</sup>	400
XTE2 <sup>®</sup> Wide Base	20								
XZA <sup>®</sup> Wide Base	19	19	19						
XZH <sup>™</sup> Wide Base			20						
XZL <sup>™</sup> Wide Base			30						
XZY <sup>®</sup> Wide Base		20							
X One® XDA®					24		24		
X One® XDA-HT™							26		26
X One® XTA®				13					
X One <sup>®</sup> XTE <sup>®</sup>				16		16			
X One® XZU®S								23	

For up-to-date product information please visit www.michelintruck.com \* AT designated Advanced Technology<sup>™</sup> compounds for fuel savings. (1) Tread widths with two measurements have wings. The first number is tread base width in mm. The second number is the overall width, wing tip to tip. (2) Available siped. Consult Michelin Retread Technologies dealers for availability. Federal Motor Carrier Safety Regulations, 9 C.F.R. § 395.75 (d), specify that "no bus shall be operated with regrooved, recapped or retreaded tires on the front wheels."

### **CUSTOM MOLD™ TREAD GUIDE**

Size	245/70R19.5	11R22.5	11R24.5	275/80R22.5	275/80R24.5	425/65R22.5	445/50R22.5
XDA2 <sup>®</sup> 23 AT*	-	23	23	23	23	-	-
XD4®	-	-	-	28	28	-	-
XDN®	-	25	-	-	-	-	-
XDHT <sup>®</sup>	-	23	23	23	23	-	-
XDS®	-	25	25	-	-	-	-
XZA®	-	15	15	15	15	-	-
XZE®	18	18	18	18	18	-	-
XT-1® AT	-	12	12	12	12	-	-
XTA®-1	-	11	11	11	11	-	-
XZY <sup>®</sup> Wide Base	-	-	-	-	-	20	-
X One® XTA®	-	-	-	-	-	-	13
X One <sup>®</sup> XTE <sup>®</sup>	-	-	-	-	-	-	16

\* AT designated Advanced Technology™ compounds for fuel savings. Please contact your local MICHELIN representative or MRT franchise locations for size and tread design availability.

### **CASING FITMENT GUIDE**

THIS DOCUMENT IS DESIGNED FOR USE AS A SALES TOOL ONLY AND SHOULD NOT BE USED AS OR CONSIDERED TO BE A TECHNICAL RECOMMENDATION. MRT plant will use the normal MRT production processes, which is to measure the width of the crown and apply the widest tread that will fit to most closely meet the original tire architecture, to determine the final tread size needed for each individual tire. This publication should be used as a general guide during the sales process to help select the MRT tread width that could optimally be used for a particular casing size.

Tread Wi	dth															
140	150	160	170	18	0	19	90	2	00	2	210		22	0	230	240
2	3/152	4/162	5/168	6/1	77	7/1	194	8/	203	8.5	N/211	9.	/219	9.5/225	10/232	10.5/238
Standard		_														
7.50R16	7.50R16	7.50R16	8.75R16.5	8.75R16	6.5	8.75R1	16.5	10R17	7.5	10.00	)R20	10.00	OR20	10.00R20	12.00R20	11.00R20
7.50R17	7.50R17	8.75R16.5	9R17.5	9.50R16	6.5	9.50R1	16.5	11R17	7.5	10.00	)R22	11.00	DR20	10.00R22	11.00R22	12.00R20
9R17.5	9R17.5	9.50R16.5	10R17.5	9.50R17	7.5	10R17	.5	9.00R	20	10R2	2.5	10R2	2.5	11R22.5	11R22.5	11.00R22
8R19.5	8R19.5	9R17.5	11R17.5	9R17.5		11R17	.5	10.00	R20	11R2	2.5	11R2	2.5	12R22.5	12R22.5	11R22.5
9R22.5	9R22.5	10R17.5	8R19.5	10R17.5	5	8R19.5	5	10R22	2.5	12R2	2.5	12R2	2.5	11.00R24	11.00R24	12R22.5
		8R19.5	8.25R20	11R17.5	5	9.00R2	20	11.00	R24	13R2	2.5	13R2	2.5	12.00R24	12.00R24	12/80R22.5
		7.50R20	9R22.5	8R19.5		10.00F	R20	12.00	R24	11.00	)R24	11.00	OR24	11R24.5	11R24.5	11.00R24
		9R22.5	10R22.5	7.50R20	0	9R22.5	5			12.00	)R24	12.00	OR24	12R24.5	12R24.5	12.00R24
				8.25R20	0	10R22	.5			11R2	4.5	11R2	4.5			11R24.5
				9R22.5						12R2	4.5	12R2	4.5			12R24.5
				10R22.5	5											
Low Profil	e												·			
215/85R16	215/85R16	215/85R16	215/85R16	215/85	R16	215/85	5R16	225/7	5R16	225/7	75R16	235/8	85R16	285/70R19.5	275/80R22.5	275/80R22.5
		225/75R16	225/75R16	225/75	R16	225/75	5R16	235/8	5R16	235/8	35R16	235/	75R17.5	275/80R22.5	275/80R24.5	295/80R22.5
		235/85R16	235/85R16	245/75	R16	235/85	5R16	245/7	5R16	245/7	75R16	245/	75R17.5	295/80R22.5		305/70R22.5
		215/75R17.5	5 245/75R16.	5 235/85	R16	245/75	5R16	215/7	5R17.5	235/7	75R17.5	245/	70R19.5	275/80R24.5		315/80R22.5
		235/75R17.5				245/75	5R16.5	235/7	5R17.5	245/7	75R17.5	265/	70R19.5			275/80R24.5
			235/75R17.	5 215/75	R17.5	215/75	5R17.5	245/7	5R17.5	225/7	70R19.5	285/	70R19.5			
			225/70R19.			235/75			0R19.5		70R19.5		70R22.5			
			235/80R22.	5 225/70	R19.5	225/70	DR19.5	245/7	0R19.5	265/7	70R19.5	255/8	80R22.5			
				245/70	R19.5	245/70	DR19.5	265/7	0R19.5	285/7	70R19.5	275/	70R22.5			
				235/80	R22.5	265/70			0R22.5		30R22.5	275/8	80R22.5			
				255/70	R22.5	235/80	DR22.5	255/7	0R22.5	255/7	70R22.5	295/8	80R22.5			
						255/70	DR22.5	255/8	0R22.5		30R22.5	275/8	80R24.5			
						255/80	DR22.5				70R22.5					
										275/8	30R22.5					
										275/8	30R24.5					
Tread Wi	dth															
250	260	270	280	290		320	35	50	37	5	380		385	390	395	400
12/252	13	14	200	15	_	520 16.5	1		5/		- 580			590	595	400
Standard	15	14		15		0.5										
13.00R20			1	5R22.5	16 5	R19.5	18R19	9.5							-	1
14.00R20				JILZZ.J	15R2		18R22									
12.00R24						R22.5									+	+
Low Profil	e				1.0.5		1									
335/80R20	315/80R22.5	315/80R22 5	315/80R22.5 3	65/80R20	365/8	30R20	445/65	R22 5	445/50	R22 5	445/50R2	25 4	445/50R22.5	5* 445/50R22.	5 445/50R22.5	445/50R22.5
365/80R20	305/75R24.5	305/75R24.5		85/65R22.5		55R22.5	445/65		100,00				455/55R22.			455/55R22.5
305/70R22.5	505,751(24.5	5557751127.5		551051122.J		65R22.5	445/50									133/33/122.3
505// UNZZ.J						JJ1122.J	105/05									

425/65R22.5

315/80R22.5

### **RECOMMENDED BUFFING SPECIFICATIONS**

SCULP	SIZE	LR	BUFF RADIUS <sup>(1)</sup> mm	BUFF WIDTH <sup>(2)</sup> mm	OPT BUFF WIDTH
X <sup>®</sup> Coach XZ	295/80R22.5	J	675	230	225
X One <sup>®</sup> XDA <sup>®</sup>	445/50R22.5	L	1700	380	
X One <sup>®</sup> XDA <sup>®</sup> ENERGY	445/50R22.5	L	1700	380	
X One <sup>®</sup> XDA-HT™	445/50R22.5	L	1700	380	
	455/55R22.5	L	1700	390	
X One <sup>®</sup> XDN <sup>®</sup> 2	445/50R22.5	L	1700	380	
X One <sup>®</sup> XTA <sup>®</sup>	445/50R22.5	L	1700	380	
X One <sup>®</sup> XTE <sup>®</sup>	445/50R22.5	L	1700	380	
	455/55R22.5 ⊛	L	1700	390	
X One <sup>®</sup> XZU <sup>®</sup> S	455/55R22.5	М	1700	390	
X One <sup>®</sup> XZY <sup>®</sup> 3	455/55R22.5	М	1700	390	
XCA®	7.5R17	D	300	140	
XD2 <sup>®</sup>	285/70R19.5	Н	750	225	219
	255/70R22.5	Н	850	211	203
	11R22.5	G	675	230	225
XD4®	275/80R22.5	G	675	230	225
	275/80R24.5	G	675	230	225
XDA <sup>®</sup> ENERGY	275/80R22.5	G	675	230	225
	11R22.5	G	675	230	225
XDA3®	275/80R22.5	G	675	230	225
	11R24.5	G	675	230	225
	11R22.5	G	675	240	225
	11R22.5	Н	675	240	225
	12R22.5	Н	675	252	250
XDA®5	275/80R22.5	G	675	240	225
	11R24.5	G	675	230	225
	11R24.5	Н	675	230	225
	275/80R24.5	G	675	240	225
	305/75R24.5	J	1000		
	11R22.5	G	675	230	225
XDA-HT <sup>™</sup>	275/80R22.5	G	675	230	225
	275/80R24.5	G	675	230	225
	11R22.5	Н	675	230	225
XDE <sup>®</sup> A/T	12R22.5	Н	675	230	225
	11R24.5	Н	675	225	219
	225/70R19.5	F	500	194	177
	225/70R19.5	G	500	194	177
	245/70R19.5	Н	1000	212	203
	9R22.5	F	550	168	152
	10R22.5	F	675	203	194
	10R22.5	G	675	203	194
XDE <sup>®</sup> M/S	11R22.5	G	675	230	225
	11R22.5 ⊛	Н	675	230	225
	235/80R22.5	G	550	194	177
	255/80R22.5		600	203	194
	275/80R22.5	G	675	230	225
	11R24.5	G	675	230	225
	11R24.5 👁	Н	675	230	225

SCULP	SIZE	LR	BUFF RADIUS <sup>(1)</sup> mm	BUFF WIDTH <sup>(2)</sup> mm	OPT BUFF WIDTH
XDE®1	215/75R17.5	F	525	177	168
XDE®2+	265/70R19.5	G	550	194	177
NDL 24	285/70R19.5	Н	750	225	219
	11R22.5	G	675	230	225
XDHT™	275/80R22.5	G	675	230	225
ADITI	11R24.5	G	675	230	225
	275/80R24.5	G	675	230	225
XDL®	12.00R24	J	675	225	219
XDN <sup>®</sup> GRIP	315/80R22.5	L	700		
	11R22.5	G	675	240	225
	11R22.5	Н	675	240	225
	12R22.5	Н	675	252	250
XDN®2	275/80R22.5	G	675	240	225
	11R24.5	G	675	230	225
	11R24.5	Н	675	230	225
	275/80R24.5	G	675	230	225
XDN®2 GRIP	315/80R22.5	L	700	240	238
	11R22.5	Н	675	230	225
XDS®	12R22.5	Н	675	230	225
	11R24.5	Н	675	230	225
	225/70R19.5	F	500	194	177
	225/70R19.5	G	500	194	177
XDS <sup>®</sup> 2	245/70R19.5	Н	1000	203	194
	11R22.5	Н	675	230	225
	11R24.5	Н	675	230	225
	11R22.5	G	675	230	225
	315/80R22.5	L	700	240	238
XDY <sup>®</sup> 3	11R24.5	Н	675	230	225
	12R24.5	Н	1000		
	11R22.5	Н	675	230	225
XDY-2 <sup>™</sup>	11R24.5	Н	675	230	225
XDY-EX <sup>™</sup>	11R24.5	Н	675	230	225
	385/65R22.5	L	1400	286	
XFE <sup>®</sup> (Wide Base) (Steer)	425/65R22.5	L	1400	318	290
	445/65R22.5	М	1000	340	320
	225/70R19.5	F	500	194	177
	245/70R19.5	F	1000	193	177
XRV®	235/80R22.5	G	550	194	177
	255/80R22.5	G	600	203	194
	11R22.5	G	675	230	225
VT 1®	275/80R22.5	G	675	230	225
XT-1®	11R24.5	G	675	230	225
	275/80R24.5	G	675	230	225
	10.00R15	J	450	177	168
VTA®	7.50R15	Н	450	152	140
XTA®	8.25R15	Н	450	152	140
	215/75R17.5	J	525	177	168
XTA <sup>®</sup> ENERGY	275/80R22.5	G	675	230	225
	245/70R17.5	J	650	203	194
TA®2 ENERGY	265/70R19.5	J	500	194	177

(1) Buff radius compliance does not automatically yield correct undertread amounts. Undertread should be controlled and measured.
 (2) Buff width and tread base width are not necessarily the same. Tread base width markings in even 10 mm increments will measure the marked width. Tread base width classic markings with die sizes, e.g. 225 \ 9.5 will be slightly narrower then the mm number marked as it is the mold width, not the finished base width.
 With tread compound for chip and cut resistance.

### **RECOMMENDED BUFFING SPECIFICATIONS**

Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb Interb	SCULP	SIZE	LR	BUFF RADIUS (1) mm	BUFF WIDTH <sup>(2)</sup> mm	OPT BUFF WIDTH
XTE®InR24.5GGG73230225Z75/80R24.5G675230225XTE2®285/70R19.5I750225219XTE2® (Wide Base)285/6822.5I100340320XTY®2275/70R2.5I100340320XTY®2275/70R2.5I80225219XZ2%12R2.5H60520223X28%275/70R2.5J950233225X28%12R2.5J950233225305/70R19.5J950234223X28%15514750230225305/70R19.5J950230225305/70R19.5J800152140X28%11R2.5G67523022531580R2.5G67523022531580R2.5G67523022531580R2.5G67523022531580R2.5G67523022531580R2.5G67523022531580R2.5G67523022531580R2.5G67523022531580R2.5G67523022531580R2.5G67523022531580R2.5G67523022531580R2.5G67523022531580R2.5G6752302		11R22.5	G	675	230	225
International International International International International International International International International International International International International International International International 	VTER	275/80R22.5	G	675	230	225
XIE2®285/0R19.5117225219XIE2® (Wide Base)425/65R2.511400318290445/65R2.511000340320XIT®2275/0R2.516522302251XZ®12R2.516522302251305/0R19.5175225219305/0R19.5175225219305/0R19.5175225219305/0R19.51700225219305/0R19.51700225219305/0R19.51700225219305/0R19.51700225219305/0R19.51700220225305/0R19.56675230225305/0R19.56675230225305/0R12.56675230225375/0R2.56675230225375/0R2.56675230225375/0R2.56675230225375/0R2.56675230225375/0R2.578607532303275/0R2.5667523022535/0R2.5667523022535/0R2.5667523022535/0R2.5667523022535/0R2.5667523022535/0R2.566752	AIL	11R24.5	G	675	230	225
Number		275/80R24.5	G	675	230	225
XT2° (Wide Base)42/5682.5.I.1000318290XT*2275/082.5.I.100034003200XT*21282.5.I.850225219XZ01282.5.I.60500128225ATA0127.57081.5.I.N750230225305/071.5.I.750230225219XZ0*1315/8082.5.I.700240238XZ0*1315/8082.5.I.700240238X20*11182.5.G65523022575/8072.5.G65723022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G67523022575/8072.5.G </td <td>XTE2®</td> <td>285/70R19.5</td> <td>J</td> <td>750</td> <td>225</td> <td>219</td>	XTE2®	285/70R19.5	J	750	225	219
445/65R22.5II000340320XT*2275/70R22.5J850225219XZ212R22.5H675230225XZA*10R17.5G500168152887/081.95J95023823288719.5JF300152140XZA*315/80R22.5G67523022575/80R22.5G67523022575/80R22.5G67523022575/80R22.5G67523022575/80R22.5G67523022575/80R22.5G67523022575/80R22.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5J8667523022575/80R2.5J6523022575/80R2.5J8667523022575/80R2.5J8667523022575/80R2.5J8667523022575/80R2.5J8667523022575/80R2.5J8667523022575/80R2.5J8667523022575/80R2.5J6567523022575/80R2.5G67523022575/80R2.5G675		385/65R22.5	L	1400	286	
XTY*2275/70R22.5I8502.252.19XZ2*10R17.5G500168152285/70R19.5I7502.252.19305/70R19.5J9502.382.328R19.5J9502.382.32XZA*1315/00R2.5G7002.402.3811R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G6752.302.25275/80R2.5G <td>XTE2<sup>®</sup> (Wide Base)</td> <td>425/65R22.5</td> <td>L</td> <td>1400</td> <td>318</td> <td>290</td>	XTE2 <sup>®</sup> (Wide Base)	425/65R22.5	L	1400	318	290
XZ2®IRAIRAIRAIRAXZ2®IRR17.5IS00168152XZA®285/70R19.5I9502382328R19.5I9502382328R19.5I300152140XZA®1315/80R22.5I700240238XZA®1275/80R24.5G67523022511R2.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R25.5I850230225275/80R25.5I675230225275/80R25.5I675230225275/80R25.5I675230225275/80R25.5I675230225275/80R25.5I675230225275/80R25.5G675230225275/80R25.5I675230		445/65R22.5	L	1000	340	
NATA®IOR17.5IS0IOR18I122285/70R19.5I750225219305/70R19.5J9502382328R19.5F300152140XZA®1315/80R22.5I700240238XZA®111R2.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R25.5G675230225275/80R25.5J675230225275/80R25.5J675230225275/80R25.5I675230225275/80R25.5I675230225275/80R25.5I675230225275/80R25.5I675230225275/80R25.5I675230225275/80R25.5I675230225275/80R25.5I675230225275/80R25.5G675230225275/80R25.5G675230	XTY®2	275/70R22.5	J	850	225	219
XZA®285/70R19.5I750225219305/70R19.5I9502382328R19.5I300152140XZA®1315/80R2.5I700240238XZA®1IR2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G675230225XZA®1G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5J85022521975/80R2.5J85022521975/80R2.5J85022521975/80R2.5J85022521975/80R2.5J85022521975/80R2.5J85022521975/80R2.5J85022521975/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G	XZ2®					
XZA®305/70R19.5I9502382328R19.5F300152140XZA®1315/80R2.5L700240238XZA®1G67523022511R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5J85022521975/80R2.5G67523022575/80R2.5J85022521975/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G67523022575/80R2.5G675 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
Ref 0.5F300152140XZA*1315/80R2.5I700240238XZA*1315/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225ZXA*-1B275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5J850225219275/80R2.5J850225219275/80R2.5J850225219315/80R2.5H675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225275/80R2.5G675230225 <td>XZA®</td> <td></td> <td></td> <td></td> <td></td> <td></td>	XZA®					
XZA®1315/80R22.5L700240238XZA®1.411R22.5G675230225275/80R22.5G675230225275/80R24.5G675230225ZXA®-1B11R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R25.5H67523022511R2.5H675230225275/80R24.5G675230225275/80R25.5H675230225275/80R25.5H675230225275/80R25.5G675230225275/80R25.5G675230225275/80R25.5G675230225275/80R25.5F500194177285/70R19.5F500194177245/70R19.5F500194 </td <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td>			-			
XZA®-1+11R22.5G67523022511R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225XZA®-1B11R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R24.5G675230225275/80R25G675230225275/80R25J850225219XZA2® Energy295/80R25.5J850225275/80R25.5J6523022511R25.5G675230225275/80R25.5J850225219315/80R25.5J850225219315/80R25.5J65230225275/80R25.5G675230225275/80R25.5H675230225275/80R25.5G675230225275/80R25.5H675230225275/80R25.5G675230225275/80R25.5G675230225275/80R25.5F500194177285/70R19.5F500194177285/70R19.5F500194177 <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td>			-			
XZA®-1+Image: constraint of the sector of the s	XZA®1	5 TO/ CONLEENS	-		2.0	
XZA®-1+IIR24.5G67523022575/80R24.5G675230225XZA®-1B275/80R24.5G675230225IIR24.5G67523022575/80R24.5G67523022575/80R24.5G67523022511R24.5G675230225275/80R24.5G67523022511R24.5G67523022511R24.5G67523022511R24.5G675230225275/80R24.5G675230225275/80R25.5H67523022511R2.5G67523022511R2.5G67523022511R2.5H67523022511R2.5H67523022511R2.5G67523022511R2.5H67523022511R2.5G67523022511R2.5G675230225275/80R2.5H675230225XZA®G20/10.0200M675230225XZA®G20/10.0201M675230225XZA®G500194117725/70R15.5F50016815210R2.5F67523022511R2.5G67			-			
118.06616161616161275/80R24.56675230225XZA®-1B11R24.5667523022511R24.56675230225275/80R24.56675230225275/80R24.5667523022511R24.5667523022511R24.5667523022511R24.5667523022511R24.5667523022511R24.56675230225275/80R24.57850225219255/80R25.517523022511R25.51667523022511R25.517523022511R25.517523022511R25.51667523022511R25.51667523022511R25.516675230225275/80R25.516675230225275/80R25.516675230225275/80R25.518500194177255/70R25.511000210203205245/70R19.5110002102032051082.5166752302251082.516675230225 </td <td>XZA®-1+</td> <td></td> <td>-</td> <td></td> <td></td> <td></td>	XZA®-1+		-			
XZA®-1B275/80R22.5G67523022511R24.5G6755230225275/80R24.5G6755230225275/80R24.5G675523022511R24.5G675523022511R24.5G675523022511R24.5G6755230225175/80R24.5G675523022575/80R24.5G675523022575/80R25.5H675523022511R25.5H675523022511R25.5G6755230225175/80R25.5G6755230225175/80R25.5H6755230225175/80R25.5H6757230225175/80R25.5G6757230225175/80R25.5H6757230225175/80R25.5G6757230225175/80R25.5G6757230225175/80R25.5G6757230225175/80R25.5F1000210203245/70R19.5F500194177245/70R19.5G67572302251780R25.5F5002302251780R25G67572302251780R25G67572302251780R25F500104117257/70			-			
XZA®-1B         IIR24.5         G         675         230         225           XZA®-1B         IIR24.5         G         675         230         225           Z7580R24.5         G         675         230         225           XZA®         G         675         230         225           Z7580R22.5         G         675         230         225           T1R24.5         G         675         230         225           T7580R24.5         G         675         230         225           T7580R24.5         G         675         230         225           T7580R24.5         H         675         230         225           T1825         H         675         230         225           T580R22.5         H         675         230         225           T182.5         H         675         230         225           T580R22.5         G         675 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
And and 275/80R24.5G675219211XZA2®11R22.5G67523022511R24.5G67523022511R24.5G675230225275/80R24.5G675230225XZA2® Energy275/70R22.5J850225219315/80R22.5H67523022511R22.5G67523022511R22.5H67523022511R22.5H67523022511R22.5G67523022511R22.5G67523022511R22.5G67523022511R22.5G67523022511R24.5G67523022511R24.5G67523022511R24.5G67523022511R24.5G675230225257/80R24.5G67523022511R24.5G675230225XZA®620 (14.00R20)M675230225XZA®620 (14.00R20)M675230203257/80R25.5F500194177257/80R25.5G1000210203245/70R19.5F500194177245/70R19.5F55016815210R25.5G675230225 </td <td>V=1 @ 4 5</td> <td></td> <td>-</td> <td></td> <td></td> <td></td>	V=1 @ 4 5		-			
XZA2®11R22.5G675230225275/80R22.5G67523022511R24.5G675230225275/80R24.5G675230225275/80R22.5H675225219255/80R22.5H67523022511R22.5L70070070011R22.5G67523022511R22.5G67523022511R22.5G67523022511R22.5G675230225275/80R22.5G67523022511R24.5G675230225275/80R22.5H67523022511R24.5G675230225275/80R22.5G675230225275/80R2.5G675230225275/80R2.5G675230225XZ4®620 (14.00R20)M675230225/70R19.5F5001941177257/80R2.5G500194177245/70R19.5F1000210203245/70R19.5F55016815210R2.5G67523022511R2.5H67523022512R2.5H67523022512R2.5H67523022512R2.5G675230 <td>XZA®-1B</td> <td></td> <td></td> <td></td> <td></td> <td></td>	XZA®-1B					
XZA2®         C         G         G75/80R22.5         G         G75/5         Z30         Z25           11R24.5         G         G75         230         225           275/80R24.5         G         G75         230         225           Z75/80R24.5         G         G75         230         225           XZA2® Energy         275/70R22.5         J         850         225         219           XZA2® Energy         11822.5         L         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700         700						
XZA2®         11R24.5         G         675         230         225           Z75/80R24.5         G         675         230         225           XZA2® Energy         295/80R22.5         H         675         225         219           315/80R22.5         H         675         230         225           315/80R22.5         H         675         230         225           315/80R22.5         G         675         230         225           11R2.5         G         675         230         225           275/80R22.5         G         675         230         225           275/80R22.5         H         675         230         225           275/80R2.5         H         675         230         225           275/80R2.5         H         675         230         225           XZA9         G20 (14.00R20)         M         675         230         225           XZA9         G20 (14.00R20)         M         675         230         203           XZA9         G20 (14.00R20)         M         675         230         203           XZA9         G20 (14.00R20)         F         1000						
275/80R24.5G675230225XZA2® Energy275/70R22.5J850225219315/80R22.5H675225219315/80R22.5L700700700315/80R22.5G675230225318/20R2.5G675230225275/80R22.5G675230225275/80R22.5H675230225275/80R22.5G675230225275/80R22.5G675230225275/80R22.5G675230225275/80R24.5G675230225XZA®G20(14.00R20)M675273225/70R19.5G500194177245/70R19.5F500194177245/70R19.5F1000210203245/70R19.5F500194152245/70R19.5F550168152245/70R19.5F55016815210R22.5F55016815211R22.5F655023022511R22.5H67523022511R22.5H675230225235/80R22.5G6550194177255/0R22.5G600203194255/80R22.5G600203194255/80R22.5G675230225	XZA2®		-			
ZZA2® Energy275/70R22.5J850225219295/80R22.5H675225219315/80R22.5L700315/80R22.5G67523022511R22.5G675230225275/80R22.5G675230225275/80R22.5H67523022511R24.5G675230225275/80R22.5H675230225275/80R24.5G675230225XZA4®G20 (14.00R20)M675273225/70R19.5F500194177257/0R19.5F500194177245/70R19.5F1000210203245/70R19.5F1000210203245/70R19.5F550168152245/70R19.5F5501681529R22.5F55016815210R22.5F655023022511R22.5H67523022511R22.5H675230225235/80R22.5G550194177255/0R22.5G600203194255/80R22.5G600203194255/80R22.5G675230225275/80R22.5H850211194255/80R22.5G675230225275/80R22		-	-			-
XZA2® Energy295/80R22.5H675225219315/80R22.5L700700225315/80R22.5G67523022511R22.5H675230225275/80R22.5G675230225275/80R22.5H67523022511R24.5G67523022511R24.5G675230225275/80R24.5G675230225XZA4®620 (14.00R20)M675273225/70R19.5F500194177225/70R19.5F500194177225/70R19.5F1000210203245/70R19.5F1000210203245/70R19.5F10002112039R22.5F55016815210R22.5F55016815210R22.5F67523022511R22.5G67523022511R22.5H675230225235/80R22.5G600203194255/70R22.5H850211194255/80R22.5G600203194255/80R22.5G600230225275/80R22.5H675230225275/80R22.5H675230225275/80R22.5G600203194275/80R22						
XZE®         IIR22.5         L         700         IIR2           11R22.5         G         675         230         225           11R22.5         H         675         230         225           275/80R22.5         G         675         230         225           275/80R22.5         H         675         230         225           275/80R22.5         H         675         230         225           11R24.5         G         675         230         225           275/80R22.5         H         675         230         225           XZA4®         G20 (14.00R20)         M         675         230         225           XZA4®         G20 (14.00R20)         M         675         233         225           XZA4®         G20 (14.00R20)         M         675         233         225           XZA4®         G20 (14.00R20)         M         675         233         203           225/70R19.5         F         500         194         177           245/70R19.5         F         1000         210         203           245/70R19.5         F         675         203         194	V7A2® Enormy		-			-
XZA3®         11R22.5         G         675         230         225           11R22.5         H         675         230         225           275/80R22.5         G         675         230         225           275/80R22.5         H         675         230         225           275/80R22.5         H         675         230         225           275/80R24.5         G         675         230         225           275/80R24.5         G         675         230         225           XZA4®         G20 (14.00R20)         M         675         273         117           225/70R19.5         F         500         194         177           225/70R19.5         F         1000         210         203           245/70R19.5         F         1000         210         203           245/70R19.5         H         1000         211         203           9R22.5         F         550         168         152           10R22.5         G         675         230         225           11R22.5         H         1000         211         203           255/80R22.5         G	AZAZ - Ellergy				225	219
XZA3®         I I R22.5         H         675         230         225           275/80R22.5         G         675         230         225           275/80R22.5         H         675         230         225           275/80R22.5         H         675         230         225           11R24.5         G         675         230         225           275/80R24.5         G         675         230         225           XZA4®         G20 (14.00R20)         M         675         273         Intra           XZA4®         G20 (14.00R20)         M         675         273         Intra           XZA4®         G20 (14.00R20)         M         675         273         Intra           225/70R19.5         F         500         194         177           245/70R19.5         F         1000         210         203           245/70R19.5         F         550         168         152           10R22.5         F         675         203         194           11R22.5         H         1000         211         203           245/70R19.5         F         675         230         225			_		230	225
XZA3®         XZA3         G         G         G         G         G         G         G         Z35         Z30         Z25           275/80R22.5         H         675         230         225           11R24.5         G         675         230         225           275/80R24.5         G         675         230         225           XZA4®         G20 (14.00R20)         M         675         273         77           XZA4®         G20 (14.00R20)         M         675         273         77           225/70R19.5         F         500         194         177           225/70R19.5         G         500         194         177           225/70R19.5         F         1000         210         203           245/70R19.5         F         1000         211         203           9R22.5         F         650         168         152           10R2.5         G         675         230         225           11R22.5         H         675         230         225           12R2.5 *         H         675         230         225           12R2.5 *         H         <			-			
XZA3®         275/80R22.5         H         675         230         225           11R24.5         G         675         230         225           275/80R24.5         G         675         230         225           XZA4®         G20 (14.00R20)         M         675         273         1177           225/70R19.5         F         500         194         177           225/70R19.5         F         500         194         177           225/70R19.5         G         500         194         177           225/70R19.5         G         500         194         177           245/70R19.5         G         1000         210         203           245/70R19.5         H         1000         211         203           245/70R19.5         H         1000         211         203           9R22.5         F         550         168         152           10R22.5         G         675         230         225           11R2.5         H         675         230         225           1282.5 %         H         675         230         225           235/80R22.5         G						
11R24.5G675230225275/80R24.5G675230225XZA4®G20 (14.00R20)M675273225/70R19.5F500194177225/70R19.5G500194177225/70R19.5G500194177225/70R19.5G1000210203245/70R19.5F1000210203245/70R19.5H10002112039R2.5F55016815210R2.5F67520319410R2.5G67520319411R2.5G67523022511R2.5H675230225235/80R22.5G550194177255/70R2.5H850211194255/80R22.5G600203194255/80R22.5G600203194255/80R22.5G675230225275/80R22.5H675230225275/80R22.5H675230225275/80R22.5H675230225275/80R22.5H67523022511R24.5H67523022511R24.5H67523022511R24.5H67523022511R24.5H67523022511R24.5H675230 <td>XZA3®</td> <td></td> <td></td> <td></td> <td></td> <td></td>	XZA3®					
275/80R24.5G675230225XZA4®G20 (14.00R20)M675273225/70R19.5F500194177225/70R19.5G500194177225/70R19.5G500194177245/70R19.5F1000210203245/70R19.5F1000211203245/70R19.5H10002112039R2.5F55016815210R2.5F67520319410R2.5G67520319411R2.5G67523022512R2.5H675230225235/80R2.5G550194177255/70R2.5H850211194255/80R2.5G600203194275/80R22.5G675230225275/80R22.5H67523022511R24.5H67523022511R24.5H675230225						-
XZA4®         G20 (14.00R20)         M         675         273           225/70R19.5         F         500         194         177           225/70R19.5         G         500         194         177           225/70R19.5         G         500         194         177           245/70R19.5         F         1000         210         203           245/70R19.5         G         1000         211         203           245/70R19.5         H         1000         211         203           245/70R19.5         H         1000         211         203           9R22.5         F         550         168         152           10R22.5         G         675         203         194           10R22.5         G         675         230         225           11R22.5         H         675         230         225           12R22.5 *         H         675         230         225           12R22.5         G         550         194         177           255/70R22.5         G         550         194         177           255/80R22.5         G         550         230         <						
Z25/70R19.5         F         500         194         177           225/70R19.5         G         500         194         177           225/70R19.5         G         500         194         177           245/70R19.5         F         1000         210         203           245/70R19.5         G         1000         210         203           245/70R19.5         H         1000         211         203           245/70R19.5         H         1000         211         203           245/70R19.5         H         1000         211         203           9R22.5         F         550         168         152           10R22.5         G         675         203         194           10R22.5         G         675         230         225           11R22.5         H         675         230         225           12R22.5         H         675         230         225           235/80R22.5         G         550         194         177           255/70R25.5         G         600         203         194           275/80R22.5         G         675         230 <td< td=""><td> Χ7Δ4®</td><td></td><td></td><td></td><td></td><td>225</td></td<>	 Χ7Δ4®					225
225/70R19.5         G         500         194         177           245/70R19.5         F         1000         210         203           245/70R19.5         G         1000         210         203           245/70R19.5         G         1000         210         203           245/70R19.5         H         1000         211         203           245/70R19.5         H         1000         211         203           9R22.5         F         550         168         152           10R22.5         F         675         203         194           10R22.5         G         675         230         225           11R22.5         G         675         230         225           12R22.5 *         H         675         230         225           12R22.5 *         H         675         230         225           235/80R22.5         G         550         194         177           255/70R22.5 *         H         850         211         194           255/80R22.5         G         600         203         194           275/80R22.5         H         675         230         <						177
245/70R19.5         F         1000         210         203           245/70R19.5         G         1000         210         203           245/70R19.5         H         1000         211         203           245/70R19.5         H         1000         211         203           245/70R19.5         H         1000         211         203           9R22.5         F         550         168         152           10R22.5         F         675         203         194           10R22.5         G         675         230         225           11R22.5         G         675         230         225           12R22.5         H         675         230         225           12R22.5         G         550         194         177           255/70R22.5         G         550         194         177           255/80R22.5         G         600         203         194           275/80R22.5         G         600         203         194           275/80R22.5         G         675         230         225           275/80R22.5         H         675         230         225						
245/70R19.5         G         1000         210         203           245/70R19.5         H         1000         211         203           9R22.5         F         550         168         152           10R22.5         F         675         203         194           10R22.5         G         675         203         194           10R22.5         G         675         203         194           10R22.5         G         675         203         194           11R22.5         G         675         230         225           11R22.5         H         675         230         225           235/80R22.5         G         550         194         177           255/70R22.5         H         850         211         194           255/80R22.5         G         600         203         194           255/80R22.5         G         600         203         194           275/80R22.5         G         675         230         225           275/80R22.5         H         675         230         225           275/80R22.5         H         675         230         225						
245/70R19.5         H         1000         211         203           9R22.5         F         550         168         152           10R22.5         F         675         203         194           10R22.5         G         675         203         194           10R22.5         G         675         203         194           10R22.5         G         675         203         194           11R22.5         G         675         230         225           11R22.5         H         675         230         225           12R22.5         H         675         230         225           235/80R22.5         G         550         194         177           255/70R22.5         H         850         211         194           255/80R22.5         G         600         203         194           275/80R22.5         G         675         230         225           275/80R22.5         H         675         230         225           275/80R22.5         H         675         230         225           11R24.5         H         675         230         225						
9R22.5         F         550         168         152           10R22.5         F         675         203         194           10R22.5         G         675         203         194           10R22.5         G         675         203         194           11R22.5         G         675         230         225           11R22.5         H         675         230         225           12R22.5         H         675         230         225           235/80R22.5         G         550         194         177           255/70R22.5         H         850         211         194           275/80R22.5         G         600         203         194           275/80R22.5         G         675         230         225           275/80R22.5         H         675         230         225           275/80R22.5         H         675         230         225           275/80R22.5         H         675         230         225           11R24.5         H         675         230         225           11R24.5         H         675         230         225  <						
10R22.5         G         675         203         194           11R22.5         G         675         230         225           11R22.5         H         675         230         225           11R22.5         H         675         230         225           12R22.5         H         675         230         225           235/80R22.5         G         550         194         177           255/70R22.5         H         850         211         194           255/80R22.5         G         600         203         194           255/80R22.5         G         600         203         194           255/80R22.5         G         675         230         225           275/80R22.5         H         675         230         225           11R24.5         H         675         230         225           11R24.5         H         675         230         225		9R22.5	F			
10R22.5         G         675         203         194           11R22.5         G         675         230         225           11R22.5         H         675         230         225           11R22.5         H         675         230         225           12R22.5         H         675         230         225           235/80R22.5         G         550         194         177           255/70R22.5         H         850         211         194           255/80R22.5         G         600         203         194           275/80R22.5         G         675         230         225           275/80R22.5         H         675         230         225           11R24.5         H         675         230         225           11R24.5         H         675         230         225           11R24.5         H         675         230         225			F		203	194
XZE®         I1R22.5         G         675         230         225           11R22.5         H         675         230         225           12R22.5         H         675         230         225           235/80R22.5         G         550         194         177           255/70R22.5         H         850         211         194           255/80R22.5         G         600         203         194           255/80R22.5         G         600         203         194           275/80R22.5         G         675         230         225           275/80R22.5         H         675         230         225           11R24.5         H         675         230         225           11R24.5         H         675         230         225			G			
12R22.5 ★       H       675       230       225         235/80R22.5       G       550       194       177         255/70R22.5 ★       H       850       211       194         255/80R22.5       G       600       203       194         275/80R22.5       G       675       230       225         275/80R22.5       H       675       230       225         11R24.5       G       675       230       225         11R24.5       H       675       230       225		11R22.5	G	675	230	225
235/80R22.5       G       550       194       177         255/70R22.5       H       850       211       194         255/80R22.5       G       600       203       194         275/80R22.5       G       675       230       225         275/80R22.5       H       675       230       225         11R24.5       G       675       230       225         11R24.5       H       675       230       225	XZE®		Н			
235/80R22.5       G       550       194       177         255/70R22.5       H       850       211       194         255/80R22.5       G       600       203       194         275/80R22.5       G       675       230       225         275/80R22.5       H       675       230       225         11R24.5       G       675       230       225         11R24.5       H       675       230       225			Н			
255/80R22.5G600203194275/80R22.5G675230225275/80R22.5H67523022511R24.5G67523022511R24.5H675230225		235/80R22.5	G	550	194	177
275/80R22.5G675230225275/80R22.5H67523022511R24.5G67523022511R24.5H675230225		255/70R22.5 *	Н	850	211	194
275/80R22.5H67523022511R24.5G67523022511R24.5H675230225		255/80R22.5	G	600	203	194
11R24.5G67523022511R24.5H675230225		275/80R22.5	G	675	230	225
11R24.5 H 675 230 225		275/80R22.5	Н	675	230	225
		11R24.5	G	675	230	225
275/80R24.5 G 675 230 225		11R24.5	Н	675	230	225
		275/80R24.5	G	675	230	225

SCULP	SIZE	LR	BUFF RADIUS <sup>(1)</sup> mm	BUFF WIDTH <sup>(2)</sup> mm	OPT BUFF WIDTH
XZE®1	215/75R17.5	F	525	177	168
	11R22.5	G	675	230	225
	11R22.5	Н	675	230	225
XZE2 <sup>™</sup>	275/80R22.5	G	675	230	225
(North American design)	11R24.5	G	675	230	225
	11R24.5	Н	675	230	225
	275/80R24.5	G	675	230	225
	215/75R17.5	G	525	177	168
	9.00R20	G	600	177	168
XZE <sup>®</sup> 2 (European design)	10.00R20	Н	600	219	216
	11.00R20	Н	600	219	216
	12.00R20	J	675	230	225
	265/70R19.5	G	550	194	177
V7F®2	285/70R19.5	Н	750	225	219
XZE®2+	275/70R22.5	J	850	225	219
	295/80R22.5	Н	675	225	219
V7I® arris	425/65R22.5	L	1300	318	290
XZL <sup>®</sup> (Wide Base)	445/65R22.5	L	1200	365	320
XZU <sup>®</sup> S	315/80R22.5	L	700	240	238
XZU <sup>®</sup> S (Wide Base)	425/65R22.5	L	1400	318	290
XZU®2	12R22.5	J	675	230	225
XZU®Z	275/70R22.5	J	850	225	219
XZU®3	11R22.5	Н	675	230	220
XZY®	12.00R24	J	675	225	219
XZY® 3	12R22.5	Н	675	230	225
	385/65R22.5	J	1300	286	
XZY <sup>®</sup> 3 (Wide Base)	425/65R22.5	L	1300	318	290
	445/65R22.5	L	1200	340	320
X7X 2™	11R22.5	Н	675	230	225
XZY-2™	11R24.5	Н	675	230	225
XZY®3	11R22.5	G	675	230	225
	11R22.5	Н	675	230	225
	315/80R22.5	L	700	240	238
	11R24.5	G	675	230	225
	11R24.5	Н	675	230	225

Buff radius compliance does not automatically yield correct undertread amounts. Undertread should be controlled and measured.
 Buff width and tread base width are not necessarily the same. Tread base width markings in even 10 mm increments will measure the marked width. Tread base width classic markings with die sizes, e.g. 225 \ 9.5 will be slightly narrower then the mm number marked as it is the mold width, not the finished base width.
 With tread compound for chip and cut resistance.

### **RETREAD TREAD DESIGNS**

## **X ONE® RETREADS**

### X One® XDA® Pre-Mold<sup>™</sup> Retread

- Unique fuel efficient\* compound, to help contribute to greater fuel savings
- Deep tread depth offering long tread life and excellent all-weather traction
- 24/32nds tread depth



Width	Tread Depth
380 mm	24/32"
390 mm	24/32"

#### X One<sup>®</sup> XDA-HT<sup>™</sup> **Pre-Mold**<sup>™</sup> Retread

- Aggressive lug-type tread design
- Increased traction
- Increased tread wear • Optimized for Regional and Line Haul operations
- Cool running compound
- Deep 26/32nds tread depth



Width	Tread Depth
390 mm	26/32"
400 mm	26/32"

### X One® XTA® Pre-Mold<sup>™</sup> Retread

- Tread design optimized to promote
- stability and resistance to uneven wear Fuel-efficient\* Advanced Technology<sup>\*</sup> compound
- Tapered tread extensions to help withstand the stress of long haul trailer use
- Also available as a Custom Mold<sup>™</sup> retread
  13/32nds tread depth





Width	Tread Depth
375/425 mm <sup>(1)</sup>	13/32

#### X One® XTE® **Pre-Mold**<sup>™</sup> Retread

- Tread design optimized to promote stability and resistance to uneven wear
  Scrub-resistant compound for regional
- operations
- Tapered tread extensions to help withstand the stress of regional trailer use
  Also available as a Custom Mold<sup>™</sup> retread
- 16/32nds tread depth

LH	R	0/0	U
	11	11	
		1 h	
	11	11 IL	
		A.F.	FI
		1 h	
	12 12	NA	

Width	Tread Depth
375/425 mm <sup>(1)</sup>	16/32"
385/435 mm <sup>(1)</sup>	16/32"

#### X One<sup>®</sup> XZU<sup>®</sup>S **Pre-Mold**<sup>™</sup> Retread

- Co-Ex technology, unique two layer compound designed to minimize casing temperature for longer casing life
   Enhanced protection against stone drilling from variable pitch groove walls and groove bottom protectors in all grooves
- Tread design optimized for all weather
- traction; 23/32nds tread depth



Width	Tread Depth
390/430 mm <sup>(1)</sup>	23/32"

\* Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

(1) Tread widths with two measurements have wings. The first number is tread base width in mm. The second number is the overall width, wing tip to tip. LH – Long Haul, R – Regional, O/O – On/Off Road, U – Urban

### RETREAD TREAD DESIGNS **DRIVE POSITION RETREADS**

#### XDA2<sup>®</sup> 19 and XDA2<sup>®</sup> 23 **Pre-Mold**<sup>™</sup> Retread

- Fuel-efficient\* Advanced Technology™ compound
- No compromise performance
  Modified tread block design optimized
- KDA2® 19 19/32nds tread depth and XDA2® 23 23/32nds tread depth
  XDA2® 23 also available as a Custom Mold™ retread



Width mm\inch	XDA2 19 Tread Depth	XDA2 23 Tread Depth
211\8.5	—	23/32"
219\9.0	19/32"	23/32"
225 \ 9.5	19/32"	23/32"
232 \ 10.0	—	23/32"

# XDA-HT<sup>™</sup> #igh 7orque<sup>™</sup> Pre-Mold<sup>™</sup> Retread

- Unique two compound design to help deliver long mileage and to help minimize internal casing temperatures
   Solid shoulder design optimized for long,
- smooth wear
- Open lug design helps provide excellent traction in adverse conditions
- 28/32nds tread depth



Width	Tread Depth
200 mm	28/32"
210 mm	28/32"
220 mm	28/32"
230 mm	28/32"
240 mm	28/32"
250 mm	28/32"
260 mm	28/32"

### XD4<sup>®</sup> **Pre-Mold**<sup>™</sup> Retread

- Extra deep tread design optimized for high torque applications e.g. 4x2's
  Open shoulder design helps deliver
- exceptional traction
- Unique scrub resistant compound
  Also available as a Custom Mold<sup>™</sup>
- 28/32nds tread depth



Width	Tread Depth
210 mm	28/32"
220 mm	28/32"
230 mm	28/32"

### XDN<sup>®</sup>2 Pre-Mold<sup>™</sup> Retread

- Exclusive, unique two-layer compound designed to minimize internal casing temperatures for longer tread & casing life
  Outstanding winter and wet traction utilizing *Matrix*<sup>™</sup> Siping technology
  Wide open shoulder grooves help deliver traction without compromising tread life
  27/32nds tread depth



Width	Tread Depth
220 mm	27/32"
230 mm	27/32"
240 mm	27/32"

#### **XDN® Pre-Mold**<sup>™</sup> Retread

- Excellent traction levels in snow and ice conditions
- Sipes and lateral inter-locking grooves for rain and snow evacuation
  Excellent mileage
  Square shoulder for stability

- Also available as a Custom Mold<sup>™</sup> retread
  17/32nds or 26/32nds tread depth, depending on tread width



Width	Tread Depth
210 mm	26/32"
220 mm	26/32"
230 mm	26/32"
250 mm	26/32"

#### **XDHT® Pre-Mold**<sup>™</sup> Retread

- Solid shoulder design optimized for high
- scrub applicationsBlock design optimized for high torque
- applications Available siped
- Also available as a Custom Mold<sup>™</sup> retread
   19/32nds or 23/32nds tread depth, depending on tread width



Width – mm\inch	Tread Depth
180 mm	19/32"
194 \ 7.0	23/32"
203 \ 8.0	23/32"
211\8.5	23/32"
219\9.0	23/32"
225 \ 9.5	23/32"
232 \ 10.0	23/32"

\* Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary. LH - Long Haul, R - Regional, O/O - On/Off Road, U - Urban

**Retread Products** 

### RETREAD TREAD DESIGNS DRIVE POSITION RETREADS



XDE<sup>®</sup> M/S

Pre-Mold<sup>™</sup> Retread

• Open shoulder tread design optimized to

excellent treadwear

LH

Width

170 mm

180 mm

190 mm

200 mm

210 mm

R

Tread Depth

18/32"

18/32"

20/32"

20/32"

20/32"

0/0

Width

220 mm

230 mm

240 mm

250 mm

U

Tread Depth

22/32"

22/32"

26/32"

26/32"

tread width

help deliver high traction while providing

Offset shoulder blocks help provide added traction in mud and soft soil conditions 18/32nds, 20/32nds, 22/32nds, or

26/32nds tread depth depending on

#### XM+S4® Pre-Mold<sup>™</sup> Retread

- Standard highway compound
- Open lug tread design promotes self-cleaning of lugs and helps maximize mud and snow traction
- mud and snow tractionChevron block design for high traction and low noise
- 21/32nds tread depth



Width mm\inch	Tread Depth	Width mm\inch	Tread Depth
168 \ 5.0	21/32"	211\8.5	21/32"
177 \ 6.0	21/32"	219\9.0	21/32"
194 \ 7.0	21/32"	225\9.5	21/32"
203\8.0	21/32"		

### XDS® Pre-Mold™ Retread

- Unique MICHELIN® compounding and tread siping to help deliver outstanding traction in severe snow conditions
- Extensive full-width sipes and lateral grooves for effective rain and snow evacuation
- Directional tread optimized for traction
- Also available as a Custom Mold<sup>™</sup> retread
- 25/32nds tread depth



Width	Tread Depth
210 mm	25/32"
220 mm	25/32"
230 mm	25/32"
250 mm	25/32"

### RETREAD TREAD DESIGNS **DRIVE POSITION RETREADS**

**XDY<sup>®</sup>** 

Pre-Mold<sup>™</sup> Retread

• Compound for chip and cut resistance

### **XDU®S** Pre-Mold<sup>™</sup> Retread

- More rubber mass to aid in scrub resistance • Exclusive, unique two-layer compound designed to minimize internal casing
- temperatures for long tread & casing life Proprietary compound specifically formu-lated for demanding, high scrub operations Lug design optimized for high scrub, high
- traction operations
- 32/32nds tread depth



Tread Depth
32/32"
32/32"
32/32"
32/32"
32/32"

### • Deep tread for traction and mileage 26/32nds or 32/32nds tread depth, depending on tread width



Width mm∖inch	Tread Depth	Width mm∖inch	Tread Depth
203\8.0	26/32"	238 \ 10.5	26/32"
211\8.5	26/32"	240 mm	32/32"
219\9.0	26/32"	252 \ 12.0	32/32"
225\9.5	26/32"		
232 \ 10.0	26/32"		

### XDY-1<sup>™</sup> **Pre-Mold<sup>™</sup> Retread**

- Compound for chip and cut resistance
- Directional tread optimized for traction
- Extra deep tread for extra protection and mileage
- 30/32nds tread depth



Width – mm\inch	Tread Depth
211\8.5	30/32"
219\9.0	30/32"
225 \ 9.5	30/32"
232 \ 10.0	30/32"
238 \ 10.5	30/32"

### **ALL-WHEEL POSITION RETREADS**

#### XZA® Pre-Mold<sup>™</sup> Retread

- Solid shoulder to help withstand scrub and abrasion
- · Designed for long mileage and even wear Available siped
- Also available as a Custom Mold<sup>™</sup> retread • 13/32nds, 15/32nds or 20/32nds tread depth, depending on tread width



Width	Tread Depth	Width mm\inch	Tread Depth
140 mm	13/32"	194 \ 7.0	15/32"
150 mm	13/32"	203\8.0	15/32"
160 mm	13/32"	211\8.5	15/32"
170 mm	13/32"	219\9.0	15/32"
180 mm	13/32"	225 \ 9.5	15/32"
*240 mm	20/32"		

### XZE<sup>®</sup> SA Pre-Mold<sup>™</sup> Retread

- Rounded shoulders to help minimize scrub effects typical of spread axle applications
- Tapered tread extensions to help withstand shifting footprint stress typical of spread axle applications while helping to maintain casing durability
- 18/32nds tread depth



Width	Tread Depth
185/225 mm <sup>(1)</sup>	18/32"
195/235 mm <sup>(1)</sup>	18/32"
205/245 mm <sup>(1)</sup>	18/32"
215/255 mm <sup>(1)</sup>	18/32"
225/265 mm <sup>(1)</sup>	18/32"
245/285 mm <sup>(1)</sup>	18/32"

### **XZE**<sup>®</sup> Pre-Mold<sup>™</sup> Retread

• Solid shoulders to help withstand scrub

- and abrasion
- Deep siping for optimized traction Deep tread depth designed for long
- mileage
- Available siped
- Also available as a Custom Mold<sup>™</sup> retread
- 16/32nds or 18/32nds tread depth, depending on tread width



Width mm\inch	Tread Depth	Width mm\inch	Tread Depth
168 \ 5.0	16/32"	211\8.5	18/32"
177 \ 6.0	18/32"	219\9.0	18/32"
194 \ 7.0	18/32"	225\9.5	18/32"
203\8.0	18/32"		

(1) Tread widths with two measurements have wings. The first number is tread base width in mm. The second number is the overall width, wing tip to tip. LH - Long Haul, R - Regional, O/O - On/Off Road, U - Urban

### RETREAD TREAD DESIGNS ALL-WHEEL POSITION RETREADS



#### **XZU<sup>®</sup>S** Pre-Mold<sup>™</sup> Retread

- More rubber mass to aid in scrub resistance Exclusive, unique two-layer compound designed to minimize internal casing
- reperatures for long tread & casing life
  Proprietary compound specifically formulated for demanding, high scrub operations
  Rib design optimized for high scrub, madium tractice accessible.
- medium traction operations
  26/32nds tread depth



Tread Depth
26/32"
26/32"
26/32"
26/32"
26/32"

### **XZY**<sup>®</sup> Pre-Mold<sup>™</sup> Retread

- Compound for chip and cut resistance
- Rib design optimized for quiet running and even wear
- All wheel position capable
- Shoulder scallops help provide additional traction
- 18/32nds or 20/32nds tread depth depending on tread width



Width mm\inch	Tread Depth	Width mm\inch	Tread Depth
203\8.0	18/32"	232 \ 10.0	18/32"
211\8.5	18/32"	238\10.5	18/32"
219\9.0	18/32"	250 mm	20/32"
225\9.5	18/32"		

### XZY-1™ **Pre-Mold**<sup>™</sup> Retread

- Compound for chip and cut resistance
  Square shoulder helps increase ground
- contact
- All-wheel-position capable
  20/32nds or 26/32nds tread depth depending on tread width



Width – mm\inch	Tread Depth
211\8.5	20/32"
219\9.0	20/32"
225 \ 9.5	20/32"
232 \ 10.0	20/32"
238 \ 10.5	20/32"
252 \ 12.0	26/32"

# XZY-2<sup>™</sup> Pre-Mold<sup>™</sup> Retread

- Compound for chip and cut resistance
   Square buttressed shoulder helps provide impact protection from road hazards • Zig-zag tread grooves and shoulder traction scallops help enhance traction in virtually all weather conditions
- 26/32nds tread depth



Width	Tread Depth
210 mm	26/32"
220 mm	26/32"
230 mm	26/32"
240 mm	26/32"
250 mm	26/32"

## **RETREAD TREAD DESIGNS**

### TRAILER POSITION RETREADS



#### **XTY® SA Pre-Mold**<sup>™</sup> Retread

- Application specific compound for chip and cut resistance
- Tapered tread extensions to help
- Tapered tread extensions to help withstand shifting footprint stress typical of spread axle and multi-axle applications
   Aggressive tread design for demanding regional and on/off road trailer operations • 22/32nds tread depth



Width	Tread Depth
195/235 mm <sup>(1)</sup>	22/32"
205/245 mm <sup>(1)</sup>	22/32"
215/255 mm <sup>(1)</sup>	22/32"

\* Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

(1) Tread widths with two measurements have wings. The first number is tread base width in mm. The second number is the overall width, wing tip to tip. LH – Long Haul, R – Regional, O/O – On/Off Road, U – Urban

## **RETREAD TREAD DESIGNS**

### WIDE BASE RETREADS

# XTE2<sup>®</sup> wide BASE Pre-Mold<sup>™</sup> Retread

- Wide grooves help provide exceptional water evacuation
- Wide shoulder rib to help resist scrub and abrasion
- Tapered tread extensions to help withstand shifting footprint stress typical of wide base service
- 20/32nds tread depth



#### XZA<sup>®</sup> WIDE BASE Pre-Mold<sup>™</sup> Retread

- Wide shoulder rib to help withstand scrub and abrasion
- Tapered tread extensions to help withstand shifting footprint stress typical
- of wide base service
- 19/32nds tread depth



Width	Tread Depth
290/345 mm <sup>(1)</sup>	19/32"
320/365 mm <sup>(1)</sup>	19/32"
350/395 mm <sup>(1)</sup>	19/32"

# XZH<sup>®</sup> wide BASE Pre-Mold<sup>™</sup> Retread

- Compound for abrasion-resistance
- Self-cleaning lugs, open shoulder design for exceptional traction and excellent floatation
- Tapered tread extensions to help withstand shifting footprint stress typical
- of wide base service 20/32nds tread depth



Width	Tread Depth
350/395 mm	20/32"

# XZL<sup>™</sup> wide base Pre-Mold<sup>™</sup> Retread

- Co-Ex technology, unique two-layer compound designed to minimize internal casing temperature for longer tread and casing life
- Wing tread design for added protection on the shoulders for high scrub applications
  30/32nds tread depth



Tread Depth
30/32"

### XZY<sup>®</sup> WIDE BASE Pre-Mold<sup>™</sup> Retread

- Compound for abrasion-resistance to
- promote long casing and tread life Tapered tread extensions to help
- withstand shifting footprint stress typical of wide base service
- 20/32nds tread depth



Width	Tread Depth
320/365 mm <sup>(1)</sup>	20/32"

(1) Tread widths with two measurements have wings. The first number is tread base width in mm. The second number is the overall width, wing tip to tip. LH – Long Haul, R – Regional, O/O – On/Off Road, U – Urban

# Appendix



### TUBE-TYPE TUBES, FLAPS AND VALVES

A tire cannot perform properly unless it is mounted properly on the correct size wheel. The following are general instructions for demounting and mounting MICHELIN® tube-type tires. For detailed instructions on mounting and demounting truck tires on particular types of wheels, refer to the instructions of the wheel manufacturer or the RMA (Rubber Manufacturers Association) wall charts.

Do not reinflate any tires that have been run underinflated or flat without careful inspection for damage. If run-flat damage is detected, scrap the tire. A tire is considered run-flat if it is found to be less than 80% of normal recommended operating pressure. This can result in serious injury or death. The tire may be damaged on the inside and can explode during inflation. The wheel parts may be worn, damaged, or dislodged and can explosively separate.

TUBES AND FLAPS FOR COMMERCIAL TRUCK TIRES				
SIZE	TUBE	TUBE MSPN	FLAP	FLAP MSPN
10.00R15	15P	04560	15x7.50	58753
10.00R20	20N	17078	20x7.50	44274
365/80R20	20Q	39144		
14.00R20				
G20 (14.00R20)	205	32420	20x10.00	47501
395/85R20				
16.00R20	20V	32961		
12.00R24	24Q	11708	24/25x8.50	48842

MOUNTING LUBRICANT			
Product Size Product code			
Tigre grease4 Kg25817			

#### SELECTION OF PROPER COMPONENTS AND MATERIALS

a. All tires must be mounted with the proper MICHELIN® tube and flap (if required) and wheel as indicated in the specification tables on Page 84.



- b. Make certain that wheel components are properly matched and of the correct dimensions for the tire.
- c. Always fit a new MICHELIN® tube in a new mounting. Since a tube will exhibit growth in size through normal use, an old tube used in a new mounting increases the possibility of tube creasing and chafing, possibly resulting in failure.



Pinched tube

- d. Always install a new flap in a new mounting. A flap, through extended use, becomes hard and brittle. After a limited time, it will develop a set to match the tire and wheel in which it is fitted. Therefore, it will not exactly match a new tire and wheel combination.
- e. Always install new valve cores and metal valve caps containing plastic or rubber seals. For tires requiring O-rings, be sure to properly install a new silicone O-ring at every tire change.

#### $f. \quad \mbox{Always use a safety device such as an inflation cage}$

or other restraining device that will constrain all wheel components during an explosive separation of a multipiece wheel, or during the sudden release of the contained air of a single piece wheel that is in compliance with OSHA (Occupational Safety and Health Administration) standards. Do not bolt restraining device to the floor. Never stand over a tire or in front of a tire when inflating. Always use a clip-on valve chuck with an in-line valve with a pressure gauge or a presettable regulator. Additionally, ensure there is a sufficient length of hose between the clip-on chuck and the in line valve (if one is used) to allow the service technician to stand outside the trajectory path when inflating. Trajectory zone means any potential path or route that a wheel component may travel during an explosive separation, or the sudden release of the

pressurized air, or an area at which an blast from a single piece wheel may be released. The trajectory may deviate from paths that are perpendicular to the assembled position of the wheel at the time of separation or explosion.







NEVER WELD OR APPLY HEAT TO A WHEEL ON WHICH A TIRE IS MOUNTED.

### **GENERAL INFORMATION**

### UNITS OF MEASUREMENT

Quantity	S.I. Units	Other Units
Length	m (meter)	1 inch (") = 0.0254 m or 25.4 mm 1 mile = 1609 m (1.609 km) 1 kilometer = 0.621 mile
Mass	kg (Kilogram)	1 pound (lb) = 0.4536 kg 1 kilogram (kg) = 2.205 lbs.
Pressure	kPa (Pascal)	1 bar* = 100 kPa 1 psi = 6.895 kPa 1 pound per square inch 1 kg/cm2 - 98.066 kPa
Speed	m/s (meter per second)	1 kilometer per hour (kph)* = 0.27778 m/s 1 mile per hour (mph) = 0.4470 m/s (or 1.60935 kph)

\* Non S.I. unit to be retained for use in specialized fields.

### SPEED SYMBOL

The ISO\* SPEED SYMBOL indicates the speed at which the tire can carry a load corresponding to its Load Index under service conditions specified by the tire manufacturer.\*\*

Speed Symbol	Speed		
speed symbol	(kph)	mph	
A1	5	2.5	
A2	10	5	
A3	15	10	
A4	20	12.5	
A5	25	15	
A6	30	20	
A7	35	22.5	
A8	40	25	
В	50	30	
С	60	35	
D	65	40	
E	70	43	
F	80	50	
G	90	56	
J	100	62	
K	110	68	
L	120	75	
М	130	81	
N	140	87	

PRESSURE UNIT CONVERSION TABLE

kPa	bar	lb/in²*	kg/cm²*
100	1.0	15	1.0
150	1.5	22	1.5
200	2.0	29	2.0
250	2.5	36	2.5
300	3.0	44	3.1
350	3.5	51	3.6
400	4.0	58	4.1
450	4.5	65	4.6
500	5.0	73	5.1
550	5.5	80	5.6
600	6.0	87	6.1
650	6.5	94	6.6
700	7.0	102	7.1
750	7.5	109	7.7
800	8.0	116	8.2
850	8.5	123	8.7
900	9.0	131	9.2
950	9.5	138	9.7
1000	10.0	145	10.2
1050	10.5	152	10.7

### LOAD RANGE/PLY RATING

В	- 4
C	- 6
D	- 8
E	- 10
F	- 12
G	- 14
Н	- 16
J	- 18
L	- 20
М	- 22

Appendix

\* International Standardization Organization \*\* Exceeding the legal speed limit is neither recommended nor endorsed.

### LOAD INDEX

The ISO LOAD INDEX is a numerical code associated with the maximum load a tire can carry at the speed indicated by its SPEED\* SYMBOL under service conditions specified by the tire manufacturer. (1 kg = 2.205 lbs.)

Load Index	kg	lbs
100	800	1,765
101	825	1,820
102	850	1,875
103	875	1,930
104	900	1,985
105	925	2,040
106	950	2,095
107	975	2,150
108	1,000	2,205
109	1,030	2,270
110	1,060	2,335
111	1,090	2,405
112	1,120	2470
113	1,150	2,535
114	1,180	2,600
115	1,215	2,680
116	1,250	2,755
117	1,285	2,835
118	1,320	2,910
119	1,360	3,000
120	1,400	3,085
121	1,450	3,195
122	1,500	3,305
123	1,550	3,415
124	1,600	3,525
125	1,650	3,640
126	1,700	3,750
127	1,750	3,860
128	1,800	3,970
129	1,850	4,080
130	1,900	4,190
131	1,950	4,300
132	2,000	4,410
133	2,060	4,540

Load Index	kg	lbs
134	2,120	4,675
135	2,180	4,805
136	2,240	4,940
137	2,300	5,070
138	2,360	5,205
139	2,430	5,355
140	2,500	5,510
141	2,575	5,675
142	2,650	5,840
143	2,725	6,005
144	2,800	6,175
145	2,900	6,395
146	3,000	6,610
147	3,075	6,780
148	3,150	6,940
149	3,250	7,160
150	3,350	7,390
151	3,450	7,610
152	3,550	7,830
153	3,650	8,050
154	3,750	8,270
155	3,875	8,540
156	4,000	8,820
157	4,125	9,090
158	4,250	9,370
159	4,375	9,650
160	4,500	9,920
161	4,625	10,200
162	4,750	10,500
163	4,875	10,700
164	5,000	11,000
165	5,150	11,400
166	5,300	11,700
167	5,450	12,000

Load Index	kg	lbs			
168	5,600	12,300			
169	5,800	12,800			
170	6,000	13,200			
171	6,150	13,600			
172	6,300	13,900			
173	6,500	14,300			
174	6,700	14,800			
175	6,900	15,200			
176	7,100	15,700			
177	7,300	16,100			
178	7,500	16,500			
179	7,750	17,100			
180	8,000	17,600			
181	8,250	18,195			
182	8,500	18,745			
183	8,750	19,295			
184	9,000	19,845			
185	9,250	20,400			
186	9,500	21,000			
187	9,750	21,500			
188	10,000	22,050			
189	10,300	22,720			
190	10,600	23,400			
191	10,900	24,040			
192	11,200	24,700			
193	11,500	25,360			
194	11,800	26,020			
195	12,150	26,800			
196	12,500	27,565			
197	12,850	28,355			
198	13,200	29,110			
199	13,600	30,000			
200	14,000	30,870			
201	14,500	31,980			

### STATIC AND LOW SPEED LOAD AND PRESSURE COEFFICIENTS

### STATIC AND LOW SPEED LOAD AND PRESSURE COEFFICIENTS



Do not exceed loads or pressure limits of the wheel without permission of the component manufacturer. Exceeding the legal speed limit is neither recommended nor endorsed.

#### TRA (THE TIRE AND RIM ASSOCIATION, INC.) STANDARDS

(These Tables apply to tires only. Consult wheel manufacturer for wheel load and inflation capacities.)

## Load limits at various speeds for radial ply truck-bus tires used on improved surfaces. "

#### A. METRIC AND WIDE BASE TIRES

The service load and minimum (cold) inflation must comply with the following limitations unless a speed restriction is indicated on the tire.\*

Speed Range (mph)	% Load Change	Inflation Pressure Change
41 thru 50	+7%	No increase
31 thru 40	+9%	No increase
21 thru 30	+12%	+10 psi
11 thru 20	+17%	+15 psi
6 thru 10	+25%	+20 psi
2.6 thru 5	+45%	+20 psi
Creep thru 2.5	+55%	+20 psi
Creep (2)	+75%	+30 psi
Stationary	+105%	+30 psi

Note: For bias ply tires please consult the TRA Year Book.

#### **B. CONVENTIONAL TIRES**

The service load and minimum (cold) inflation must comply with the following limitations unless a speed restriction is indicated on the tire.\*

Speed Range (mph)	% Load Change	Inflation Pressure Change
41 thru 50	+9%	No increase
31 thru 40	+16%	No increase
21 thru 30	+24%	+10 psi
11 thru 20	+32%	+15 psi
6 thru 10 <sup>(2)</sup>	+60%	+30 psi
2.6 thru 5 <sup>(2)</sup>	+85%	+30 psi
Creep thru 2.5 <sup>(2)</sup>	+115%	+30 psi
Creep (2) (3)	+140%	+40 psi
Stationary <sup>(2)</sup>	+185%	+40 psi

# Load limits at various speeds for radial ply truck-bus tires, rated at 75 mph or above, used on improved surfaces. <sup>(1)</sup>

#### C. METRIC AND WIDE BASE TIRES

Speed Range (mph)	% Load Change	Inflation Pressure Change
41 thru 50	+7%	No increase
31 thru 40	+9%	No increase
21 thru 30	+12%	+10 psi
11 thru 20	+17%	+15 psi
6 thru 10	+25%	+20 psi
2.6 thru 5	+45%	+20 psi
Creep thru 2.5	+55%	+20 psi
Creep (2)	+75%	+30 psi
Stationary	+105%	+30 psi

#### **D. CONVENTIONAL TIRES**

Speed Range (mph)	% Load Change	Inflation Pressure Change
41 thru 50	+9%	No increase
31 thru 40	+16%	No increase
21 thru 30	+24%	+10 psi
11 thru 20	+32%	+15 psi
6 thru 10 <sup>(3)</sup>	+60%	+30 psi
2.6 thru 5 <sup>(3)</sup>	+85%	+30 psi
Creep thru 2.5 (3)	+115%	+30 psi
Creep (2)(3)	+140%	+40 psi
Stationary <sup>(3)</sup>	+185%	+40 psi

(1) These load and inflation changes are only required when exceeding the tire manufacturer's rated speed for the tire.

(2) Apply these increases to Dual Loads and Inflation Pressures.

(3) Creep – Motion for not over 200 feet in a 30-minute period.

Note 1: The inflation pressures shown in the referenced tables are minimum cold pressures for the various loads listed.

Higher pressures should be used as follows:

A. When required by the above speed/load table.

- B. When higher pressures are desirable to obtain improved operating performance.
- For speeds above 20 mph, the combined increases of A and B should not exceed 20 psi above the inflation specified for the

maximum load of the tire.

**Note 2:** Load limits at various speeds for:

Tires used in highway service at restricted speed.

Mining and logging tires used in intermittent highway service

\*Exceeding the legal speed limit is neither recommended or endorsed.

### **PROPER APPLICATION OF ON/OFF ROAD (Y AND L) TIRES\***

The tires with "Y" or "L" (see Page 25) as the third character in the tread designations are designed and optimized for on/off road applications and are speed restricted. These tires should not be used in applications that operate the tires continuously on highway over an extended period of time or at speeds that exceed the speed rating of the tire. This could lead to heat build up and cause premature or sudden tire failure.

Tires with the "Y" designation are for applications expected to be 80% On-road use and 20% Off-road use. They have a maximum speed of 65 mph.

Tires with the "L" designation are for applications

expected to be 20% On-road use and 80% Off-road use. Some of the "L" designated tires have a maximum speed of 50 mph while others have maximum speeds of 55, 60 and of 70 mph.

The Tire and Rim Association (TRA) permits operating a 65 mph rated tire at higher speeds with a reduced load and increased inflation. No such permission is granted by TRA for tires with speed rating rated below 65 mph.

Always refer to this <u>MICHELIN Truck Tire Data Book</u> on Page 25 and match the tire to the application when making tire selections.

### **COLD CLIMATE PRESSURE CORRECTION DATA**

Because the pressure inside a tire will decrease when the vehicle is taken from a warm environment to a cold one, some adjustments may be necessary when adjusting the tire pressures of a vehicle to be operated in very cold temperatures.

These adjustments are only necessary if the pressures are verified and adjusted inside a heated garage with an air supply that is also at the higher room temperature. (No adjustment necessary if done outside.)

**In extreme cases,** the following table should be used to ensure that the operating pressure and deflection of tires are adequate at the outside ambient temperature.

Using the load and pressure charts below, determine the appropriate "Recommended Pressure" required for the axle load. Then find the same pressure down the left column of the table to the right. Going across to the relevant outside ambient temperature you will find the corrected inflation pressure to be used.

#### For example:

- A log truck in Alaska has a front axle loaded weight of 12,000 lbs.
- The truck is equipped with 11R24.5 MICHELIN® XZY®3 tires.
- The recommended pressure for this fitment is 105.
- The truck is parked overnight in a heated garage.
- The outside high forecasted for today is -20°F.
- The tire pressures are checked and adjusted prior to leaving the heated garage.

According the chart below, the tires should be adjusted to 128.

Recommended	Outside Ambient Temperature												
Pressure	F° 50°	40°	30°	<b>20</b> °	10°	<b>0</b> °	-10°	<b>-20</b> °	-30°	-40°	-50°		
(psi)	C° 10°	<b>4</b> °	-1°	-7°	-12°	-18°	-23°	-29°	-34°	-40°	-46°		
75	78	80	81	83	86	88	90	92	95	98	100		
80	83	85	87	89	91	93	96	98	101	104	107		
85	88	90	92	94	97	99	102	104	107	110	113		
90	93	95	98	100	102	105	108	110	113	116	119		
95	98	101	103	105	108	111	113	116	119	123	126		
100	103	106	108	111	113	116	119	122	125	129	132		
105	109	111	114	116	119	122	125	128	132	135	139		
110	114	116	119	122	125	128	131	134	138	141	145		
115	119	122	124	127	130	133	137	140	144	148	151		
120	124	127	130	133	136	139	143	146	150	154	158		
125	129	132	135	138	141	145	148	152	156	160	164		
130	134	137	140	144	147	150	154	158	162	166	171		

#### Adjusted Inflation Pressure (psi) (when inflating indoors at 65°F [18°C])

### CHANGES IN TOP SPEED WHEN TIRE REVOLUTIONS PER MILE CHANGES

#### **GEAR RATIO**

A change in tire dimension will result in a change in engine RPM at a set cruise speed\* that will result in a change in speed and fuel economy. The effect of tire size change on gear ratio should be considered in individual operations.

A decrease in tire radius will increase tractive torque and increase indicated top speed. An increase in tire radius will reduce tractive torque and decrease indicated speed.

**Tire Revs./Mile – Speed – Size:** These factors can affect engine RPM if corresponding changes are not made to engine ratios.

Example: Going from larger diameter tire to smaller diameter tire.

If you currently run a 275/80R22.5 MICHELIN XDN®2

tire (511 Tire Revs./Mile) and change to a 445/50R22.5 MICHELIN X One<sup>®</sup> XDN<sup>®</sup>2 tire (515 Tire Revs./Mile), the speedometer will indicate a slightly higher speed than the actual speed the vehicle is traveling.

Final Tire Revs./Mile – Initial Tire Revs./Mile=Initial Tire Revs./Mile515 - 511 = 0.0078 or .78% (< 1% change)</td>511

So when your actual speed is 60 mph, your speedometer will read 60.47 mph.

MICHELIN X One Tire Size	MICHELIN X One Tire Tire Revs./Mile	MICHELIN X One Tire Size	MICHELIN X One Tire Tire Revs./Mile
445/50R22.5	515 (X One XDN2)	455/55R22.5	492 (X One XDN2)
Dual Size	Dual Tire Revs./Mile	Dual Size	Dual Tire Revs./Mile
275/80R22.5	511 (XDN2)	11R22.5 or 275/80R24.5	496 (XDN2)

**<u>Rule of Thumb:</u>** When going from a lower Tire Revs./Mile to a higher Tire Revs./Mile, the actual vehicle speed is less than the speedometer reading. When going from a higher Tire Revs./Mile to a lower Tire Revs./Mile, the actual vehicle speed is greater than the speedometer reading.

\* Exceeding the legal speed limit is neither recommended nor endorsed.

To determine the proper load/inflation table, always comply with to the markings on the tire sidewall for maximum load at cold pressure.

Load and inflation industry standards are in a constant state of change. Michelin continually updates its product information to reflect these changes. Therefore, printed material may not reflect the current load and inflation information. NOTE: Never exceed the wheel manufacturer's maximum pressure limitation.

S = Single configuration – 2 tires per axle. D = Dual configuration – 4 tires per axle. Loads are indicated per axle.

### LOAD / INFLATION TABLE FOR MICHELIN 315/80R22.5 LRL

The following table applies to LRL use with 8.25x22.5 Wheels.

Dimension	Dimension Load	PSI kPa		75	80	85	90	95	100	105	110	115	120*		
Dimension Range	Range			520	550	590	620	660	690	720	760	790	830		
315/80R22.5 <b>8.25" Wheel</b>		lbs.	S	10990	11570	12140	12710	13280	13820	14380	14920	15460	16000		
		per axle	D	20900	22000	23100	24180	25260	26300	27360	28400	29440	30440		
	L	L	el L	kg.	S	4980	5250	5510	5770	6020	6270	6520	6770	7010	7260
		per axle	D	9480	9980	10480	10970	11460	11930	12410	12880	13350	13810		

Note: Never exceed the wheel manufacturer's maximum cold pressure limitation and/or load rating.

\* When used on an 8.25" wheel, the max load and pressure is lower than that indicated on the sidewall.

### TECHNICAL SPECIFICATIONS FOR MICHELIN 455/55R22.5 LRM ON 13.00x22.5 WHEELS STEER AXLE, FIRST LIFE ONLY

Dimension RPM		Max. Load Single*					
Range in. mm.	lbs.	psi	kg.	kPa			
455/55R22.5 LRM 19.5 496 493	10000	120	4535	830			

Dimension Load Range	psi	75	80	85	90	95	100	105	110	115	120
	kPa	520	550	590	620	660	690	720	760	790	830
455/55R22.5 13.00" Wheel	lbs. per axle	13740	14460	15180	15880	16600	17280	17980	18660	19340	20000
	kg. per axle	6240	6520	6900	7180	7560	7820	8100	8460	8720	9070

\* Note: When used on a 13.00" wheel the max load and pressure is lower than that indicated on the sidewall.

### FRONT AXLE OVERLOAD ON AUTO HAULERS

Recent studies by Michelin's Customer Engineering Support have shown that Auto Haulers may sometimes exceed the designed load capacity of the front axle tires either across the axle or at one of the two axle ends. Improper positioning of the top front loaded vehicle or positioning of heavier than intended vehicles in the top front position contribute to overload conditions.

### 275/70R22.5 LRJ

MICHELIN<sup>®</sup> 275/70R22.5 XZE<sup>®</sup>2+ and MICHELIN<sup>®</sup> XZA2<sup>®</sup> Energy LRJ truck tires have a maximum single tire load of 6,940 lbs at 130 psi with a maximum speed rating of 75 mph<sup>(1)</sup>. See Load and Inflation table below.<sup>(3)</sup>

Overloading the 275/70R22.5 LRJ tires (or any highway tire) and/or exceeding the speed rating of the tire is dangerous and may lead to tire failure.

#### Specifications for 275/70R22.5 MICHELIN® XZE®2+ and MICHELIN® XZA2® ENERGY LRJ

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (1)		ded lius	Ove Dian	erall neter	Overal (2	2)	Approved Wheels (Measuring wheel	Min. Spaci		Revs Per Mile	Max.		ind Pres gle	sure	Max.	Load a Du	ind Pres Ial	sure
			32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	whie	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
275/70R22.5 XZE2+	J	78395	19	75	17.6	448	38.0	966	10.9	276	7.50, 8.25	11.9	303	545	6940	130	3150	900	6395	120	2900	830
275/70R22.5 XZA2 ENERGY	J	90059	18	75	17.6	448	38.0	966	10.9	277	7.50, 8.25	11.9	303	545	6940	130	3150	900	6395	120	2900	830

#### Load and Inflation Table for 275/70R22.5 MICHELIN® XZE®2+ and MICHELIN® XZA2® ENERGY LRJ

7.50", 8.25" Wheel,	PSI	85	90	95	100	105	110	115	120	125	130		MAXIMUM LOAD AND
Max Speed 75 mph <sup>(1)</sup>	kPa	590	620	660	690	720	760	790	830	860	900		PRESSURE ON SIDEWALL
275/70R22.5 LRJ	LBS SINGLE	9880	10340	10800	11250	11700	12140	12580	13020	13460	13880	S	6940 LBS AT 130 PSI
	LBS DUAL	19420	20320	21220	22100	22980	23860	24720	25580			D	6395 LBS AT 120 PSI
XZE2+,	KG SINGLE	4480	4690	4900	5100	5310	5510	5710	5900	6080	6300	S	3150 KG AT 900 kPa
XZA2 ENERGY	KG DUAL	8810	9220	9630	10020	10420	10820	11210	11600			D	2900 KG AT 830 kPa

If an Auto Hauler cannot ensure that the front axle ends were loaded within the limit of the 275/70R22.5 LRJ, the tires should be assumed to have been overloaded, and must be removed and scrapped.

### 295/60R22.5 LRJ

The recommended alternative fitment for the 275/70R22.5 LRJ is the 295/60R22.5 MICHELIN® XZA2® Energy LRJ tire MSPN 33215.

#### Specifications for 295/60R22.5 MICHELIN® XZA2® ENERGY

Siz	e	Load Range	Catalog Number	Tread Depth	Max. Speed (1)		ded lius	Ove Dian	erall neter	Ove Widt		Approved Wheels (Measuring wheel	Min. Spacii		Revs Per Mile	Max.		nd Pres gle	sure	Max.	Load a Du	ınd Pres ıal	sure
				32nds	mph	in.	mm	in.	mm	in.	mm	listed first.)	in	mm	wille	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
295/60R XZA2 EI		J	33215	16	<b>65</b> (5)	16.7	424	36.1	918	11.4	290	9.00 (4)	13.0	329	575	7390	130	3350	900	6780	130	3075	900

# Load and Inflation Table for 295/60R22.5 MICHELIN® XZA2® ENERGY LRJ for use on an 9.00 x 22.5" wheel, maximum speed 65 mph

9.00" Wheel,	PSI	85	90	95	100	105	110	115	120	125	130		MAXIMUM LOAD AND
Max Speed 65 mph <sup>(1)</sup>	kPa	590	620	660	690	720	760	790	830	860	900		PRESSURE ON SIDEWALL
	LBS SINGLE	10520	11010	11500	11980	12460	12930	13400	13860	14320	14780	S	7390 LBS AT 130 PSI
295/60R22.5 LRJ	LBS DUAL	19300	20200	21100	21980	22860	23720	24580	25440	26280	27120	D	6780 LBS AT 130 PSI
XZA2 ENERGY	KG SINGLE	4770	4990	5220	5430	5650	5860	6080	6290	6460	6700	S	3350 KG AT 900 kPa
	KG DUAL	8750	9160	9570	9970	10370	10760	11150	11540	11880	12300	D	3075 KG AT 900 kPa

(1) Exceeding the legal speed limit is neither recommended nor endorsed.

(2) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.

(3) If used on wheels with 120 psi cold ratings the maximum load/tire in single mount is limited to 6,510 lb/tire.

(4) See Page 93 for use on 8.25 x 22.5" wheel.

(5) See Page 93 for use at 75 mph maximum speed.

### 295/60R22.5 MICHELIN® XZA2 ENERGY LRJ AND 295/60R22.5 MICHELIN® X MULTIWAY XD LRJ. ADJUSTED LOAD AND PRESSURE TABLES FOR USE ON 8.25" WHEEL, OR AT 75 MPH<sup>(1)</sup>

### 295/60R22.5 LRJ – 9.00" Wheel, Max Speed 65 mph <sup>(1)</sup>

The 295/60R22.5 MICHELIN® XZA2® Energy and MICHELIN® X MultiWay XD LRJ are designed to be used on a 9.00 x 22.5" wheel and at a maximum speed of 65 mph.<sup>(1)</sup> MAXIMUM LOAD AND PRESSURE (Note that the maximum load and pressure under these conditions match those indicated on the sidewall.) PER AXLE

9.00" Wheel,	PSI	85	90	95	100	105	110	115	120	125	130	130
Max Speed 65 mph <sup>(1)</sup>	kPa	590	620	660	690	720	760	790	830	860	900	900
295/60R22.5 LRJ	LBS SINGLE	10520	11010	11500	11980	12460	12930	13400	13860	14320	14780	7390
	LBS DUAL	19300	20200	21100	21980	22860	23720	24580	25440	26280	27120	6780
XZA2 ENERGY,	KG SINGLE	4770	4990	5220	5430	5650	5860	6080	6290	6460	6700	3350
X MULTIWAY XD	KG DUAL	8750	9160	9570	9970	10370	10760	11150	11540	11880	12300	3075

DESIGN

ADJUSTED

MAXIMUM LOAD

AND PRESSURE

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MAXIMUM LOAD

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**PER AXLE** 

DESIGN

MAXIMUM LOAD AND PRESSURE

DER TIRE

ADJUSTED

MAXIMUM LOAD

AND PRESSURE

PER TIRE

ADJUSTED

MAXIMUM LOAD

AND PRESSURE

PER TIRE

### 295/60R22.5 LRJ – 9.00" Wheel, Max Speed 75 mph (1)

The maximum speed of the 295/60R22.5 MICHELIN® XZA2® Energy LRJ and MICHELIN® X MultiWay XD LRJ on a 9.00 x 22.5" wheel may be increased to 75 mph<sup>(1)</sup> by applying the following reduced load and pressure table.

(Note that the maximum load under these conditions is less than that indicated on the sidewall.)

9.00" Wheel,	PSI	90	95	100	105	110	115	120	125	130	130
Max Speed 75 mph <sup>(1)</sup>	kPa	620	660	690	720	760	790	830	860	900	900
295/60R22.5 LRJ	LBS SINGLE	10520	11010	11500	11980	12460	12930	13400	13860	14320	7160
	LBS DUAL	19300	20200	21100	21980	22860	23720	24580	25440	26280	6570
XZA2 ENERGY,	KG SINGLE	4770	4990	5220	5430	5650	5860	6080	6290	6460	3230
X MULTIWAY XD	KG DUAL	8750	9160	9570	9970	10370	10760	11150	11540	11880	2970

### 295/60R22.5 LRJ – 8.25" Wheel, Max Speed 75 mph<sup>(1)</sup>

In addition to running at 75 mph<sup>(1)</sup>, the 295/60R22.5 MICHELIN® XZA2® Energy LRJ and MICHELIN® X MultiWay XD LRJ may be mounted on an 8.25 x 22.5" wheel by applying the following further reduced load and pressure table.

(Note that the maximum load and pressure under these conditions are less than that indicated on the sidewall.)

8.25" Wheel	PSI	70	75	80	85	90	95	100	105	110	115	120	120
Max Speed 75 mph <sup>(1)</sup>	kPa	480	520	550	590	620	660	690	720	760	790	830	830
295/60R22.5 LRJ	LBS SINGLE	8600	9030	9350	9850	10250	10710	11040	11420	11680	12170	12350	6175
	LBS DUAL	16160	16980	17640	17920	18660	19760	20100	20780	21420	22140	22700	5675
XZA2 ENERGY,	KG SINGLE	3900	4100	4240	4460	4660	4860	5000	5180	5300	5520	5600	2800
X MULTIWAY XD	KG DUAL	7320	7720	8000	8120	8480	8960	9120	9440	9720	10040	10300	2575

(1) Exceeding the legal speed limit is neither recommended nor endorsed.

Load and inflation industry standards are in a constant state of change. Michelin continually updates its product information to reflect these changes. Therefore, printed material may not reflect the current load and inflation information.

NOTE: The actual load and inflation pressure used must not exceed the wheel manufacturer's maximum conditions. Never exceed a wheel manufacturer's limits without permission of the component manufacturer.

Single configuration = 2 tires per axle. Dual configuration = 4 tires per axle. Loads are indicated per axle.

Always refer to the MICHELIN® Truck Tire Data Book (MWL40731) and MICHELIN® Truck Tire Service Manual (MWL40732) for proper tire selection, inflation and maintenance.

### **BALANCE AND RUNOUT**

Current Technology & Maintenance Council (TMC) limits from *TMC RP 214C, Tire/Wheel End Balance and Runout,* are listed in the tables below.

#### TABLE A:

#### RECOMMENDED BALANCE AND RUNOUT VALUES FOR DISC WHEELS AND DEMOUNTABLE RIMS

		Balance (See Note 2)	Radial Runout (See Note 3)	Lateral Runout (See Note 3)
Tubeless Steel Disc Wheels		6 oz. max	0.070 inch max	0.070 inch max
Tubeless Aluminum Disc Wheels		4 oz. max	0.030 inch max	0.030 inch max
Tubeless Demountable Rims		N/A	0.070 inch max	0.070 inch max
Wide Base Wheels	Steel	See Note 1	0.075 inch max	0.075 inch max
	Aluminum	See Note 1	0.030 inch max	0.030 inch max

**Note 1:** Refer to the manufacturer's specifications for balance and runout values.

Note 2: Amount of weight applied to wheel to balance individual wheel component.

**Note 3:** For steel wheels, the area adjacent to the rim butt weld is not considered in runout measurements.

#### TABLE B: TIRE/WHEEL ASSEMBLY BALANCE AND RUNOUT LIMITS

	Tire Position	19.5 Tire/Wheel	Over The Road Applications	On/Off-Road Applications	Wide Base Tire/Wheel
Maximum total weight correction expressed in ounces of weight	Steer	14 oz.	16 oz.	18 oz.	24 oz.
required to correct at wheel diameter per rotating assembly	Drive/Trailer	18 oz.	20 oz.	22 oz.	28 oz.
Lateral runout	Steer	0.095"	0.095"	0.110"	0.125"
for rotating assembly	Drive/Trailer	0.125"	0.125"	0.125"	0.125"
Radial runout	Steer	0.095"	0.095"	0.110"	0.125"
for rotating assembly	Drive/Trailer	0.125"	0.125"	0.125"	0.125"

**Note:** If tire and wheel assembly is within these limits and ride problem still exists, refer to *TMC RP 648, Troubleshooting Ride Complaints*.

### **TRUCK TIRE BRANDING**

1. The following limits apply when branding MICHELIN<sup>®</sup> truck tires using equipment without accurate temperature control or which may exceed 465 degrees fahrenheit (240°C). *(Hand held equipment is typically used for this "HOT BRANDING.")* 

a. <u>Brand Temperature</u>	<u>Maximum Depth</u>
570°F (300°C)	1/64 inch (0.4 mm)
480°F (250°C)	1/32 inch (0.8 mm)

b. Only brand in the "BRAND TIRE HERE" area.

- 2. For equipment capable of "COLD BRANDING" i.e. <u>controlled</u> temperatures below 465°F (240°C), the following restrictions apply:
  - a. Temperature
  - b. Contact pressure
  - c. Time of contact
  - d. Character Height
  - e. Character Depth
  - f. Location: Circumferentially Radially
- Maximum 465°F (240°C) Maximum 100 psi Maximum 1 Minute
- Maximum 1 Inch
- Maximum 0.040 Inch (1.0 mm)
- in the "BRAND TIRE HERE" area, or centered above it.
- in the "BRAND TIRE HERE" area with no portion of any character extending more than 1" above the outline of the area.

### TREAD DEPTH MEASUREMENT ON TIRES RETREADED WITH THE MRT XDU<sup>®</sup>S PRE-MOLD<sup>™</sup> RETREAD

The MRT XDU®S Pre-Mold<sup>™</sup> Retread has a lug design optimized for high scrub, high traction operations as well as 32/32nds original tread depth. The tread design incorporates bridges between the lugs in order to stabilize the lugs. See photo below.

Care must be taken when taking tread depth measurements in order to get an accurate determination of the remaining tread depth. Do not take measurements on top of the bridges! This will give a false reading and may lead to the tire being pulled from service earlier than necessary. There may be as much as 4/32nds difference in the measurements taken on top of the bridge as opposed to taking it at the bottom of the groove.





FMVSS -119 Section (c) and The Federal Motor Carrier Safety Regulation Part 393.75 state that (non – steer axle) "tires shall have a tread groove pattern depth of at least 2/32nds of an inch when measured in a major tread groove. The measurement shall not be made where tie bars, humps or fillets are located."

### **PROPER APPLICATION OF URBAN ("U") TIRES**

The tires with the **"U"** designation are designed and optimized for **urban applications** and should not be used in nonurban applications including but not limited to, long haul and RV/motorhomes/coaches. These aforementioned applications may subject the tires to continuous use over an extended period of time. This could lead to heat build up and may cause the tire to fail prematurely and/or suddenly. See information below.

ALWAYS REFER TO THE MICHELIN® DATA BOOK AND MATCH THE TIRE TO THE APPLICATION WHEN MAKING TIRE SELECTIONS.

### **TREAD PATTERN DESIGNATIONS**

Tire manufacturers will use specific numbers or letters to identify different types of tread patterns or casing construction.

Michelin uses letters to denote specific qualities and/or applications for its tires.



### TIRE APPLICATIONS

The specific tread design used should only be considered after the vehicle type and user vocation has been examined.

There are several categories of tire service applications:



### **REGROOVING THE MICHELIN® XZU®2 TIRE**

Only MICHELIN® truck tires that are marked "REGROOVABLE" on the sidewall may be regrooved. After regrooving, you must have at least 3/32nds of under tread covering the top ply. If steel is exposed, the tire must be scrapped or retreaded. In addition, some tread designs will have a regrooving depth indicator as shown below. Do not regroove below the depth of the indicator. Regrooving depth indicators are holes (of 4 mm depth) situated on the treadwear indicator to indicate the recommended regrooving depth for these tires.

It is the responsibility of the regroover to assure that all Federal Regulations are met. See US Code of Federal Regulations: Title 49, Transportation; Parts 569 and 393.75.



One of the regulations governing regrooving tires requires that a regrooved tire must have a minimum of 90 linear inches of tread edge per linear foot of the circumference.

The MICHELIN® XZU®2 tire has only 3 circumferential tread grooves. To meet the 569.7 (iii) requirement, additional lateral grooves must be added as shown below.



#### U. S. CODE OF FEDERAL REGULATIONS: TITLE 49, TRANSPORTATION; PARTS 569.7 AND 393.75 (EXTRACTS)

For complete regulations, go to: ecfr.gpoaccess.gov

#### PART 393.75, SECTION D

"(d) No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels."

### NOTES

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## **MICHELIN<sup>®</sup> Truck Tire Data Book**

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