### Tyre Selection Reference

<table>
<thead>
<tr>
<th>Type of operation</th>
<th>Axle position</th>
<th>Type</th>
<th>Long Distance Transport (one way transport distance : more than 300km)</th>
<th>Regional Distance Transport (one way transport distance : 300km or less)</th>
<th>On/Off Road Short Distance Transport</th>
<th>Short Distance, Urban, Local Multistop Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>107ZL, RY237, TY517(E), TY517, RY253, RY357, RY588</td>
<td>112R, 104ZR, TY607, TY303, RY023, RY253, RY357</td>
<td>MY507, MY547, Y773, LY717, LY053</td>
<td>MY507A, MY237, Y224</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Y793R, Y793R, Y793R</td>
<td>MY373, MY248, MY248</td>
</tr>
</tbody>
</table>

* Never use the unmatched tread pattern for their intended service conditions. Please consult YOKOHAMA distributors for detail, if some vehicle operations require specialized tyre fitment.
* TY237 shall be used only on steer axle in long distance smooth road operation to deliver the maximum performance.
* TY507 shall be used only on regional transport for maximum performance.
* TY235 can be used on steer axle in long/regional operations too.
* MY507A can be used on steer axle in on & off short distance operation too.
* The steer tyres above might be used on drive axles in case of normal highway conditions.
* Availability of products shown in this table may vary from country to country. Please consult your YOKOHAMA distributor for local availability.

**USER INFORMATION:**

- Always deflate tyre completely before removing lock or side rings.
- Never use wheels of different manufacturers or different sizes.
- Never mount tyres on wheels which are damaged or not smooth and clean.
- Always clean and inspect wheel. Lubricate beads and rim flanges for tubeless types, tube and rim side of flap with an approved rubber lubricant.
- Always be sure that all wheel components are properly seated before inflating.
- Always use an extension hose with gauge and clip-on chuck.
- Never inflate beyond 1.5 bar prior to placing the tyre/wheel assembly in a safety cage.
- Always use a safety cage or other restraining device when inflating the tyre to seat the beads and/or inflating the tyre to normal operating inflation pressure.
- Never stand, lean or reach over the tyre/wheel assembly during inflation.
- After beads are fully seated, adjust the tyre to recommended inflation pressure of vehicle manufacturer.
- Never mount radials and bias tyres on the same axle. Follow vehicle manufacturer’s recommendations.
- Tyres must be removed from the vehicle when remaining tread depth reaches regulated minimum tread depth in a country.
- Stones, gravel and other foreign objects stuck in the tyre treads may damage the tyre. Remove foreign objects from the treads.
- Objects in the road such as potholes, glass, metal, rocks, wood debris, kerbstones and the likes that could damage a tyre should be avoided.
- To preserve traffic safety and tyre life, YOKOHAMA recommends driving slowly and avoiding from hard acceleration, braking or cornering in unnecessary situation.
- When you feel the vehicle unstable or feel unusual noise or vibration, stop your vehicle in a safe place and inspect tyres. Even if no visible defects are found, drive slowly and ask your tyre dealer to inspect such tyre as soon as possible.
- Never use a tyre under the following conditions and replace such tyre immediately:
  - If the tread has worn to the tread wear indicator.
  - If breaks in the fabric appear.
  - If cords or wires are exposed.

* Moisture in a tyre can damage the casing. Stock tyres in dry area. Dry interior before mounting. Inflate with dry air.

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Delivering top quality YOKOHAMA Tyres to customers everywhere

We at YOKOHAMA will be celebrating our 100th anniversary in 2017. Ever since we were established, our focus as a tyre manufacturer has been to produce the highest quality tyres possible, since tyres are a component critical to vehicle safety. Thanks to the loyalty of our customers, our company now manufactures and delivers tyres to destinations around the world. We are pleased to provide this product that serves to support the daily lives of our customers and keep them fully satisfied.

In this connection, we work to boost our technologies on a daily basis. We integrate not only our tyre plants in Japan but at our overseas locations with cutting-edge production facilities and sophisticated technology standards to produce the highest quality product. Our promise is to deliver products that customers love from our plants across the globe to customers around the world.

At YOKOHAMA, we are keenly aware of the changing times, which means we never lose our passion to continuously improve safety, quality, and performance — no matter where our tyres are produced.

YOKOHAMA Global

We at YOKOHAMA will be celebrating our 100th anniversary in 2017. Ever since we were established, our focus as a tyre manufacturer has been to produce the highest quality tyres possible, since tyres are a component critical to vehicle safety. Thanks to the loyalty of our customers, our company now manufactures and delivers tyres to destinations around the world. We are pleased to provide this product that serves to support the daily lives of our customers and keep them fully satisfied.
IMPORTANT NOTE: Do not mix different tyre size designations or constructions on the same axle. Always use the tyres for their intended service purpose.

Please consult your YOKOHAMA distributor for details as some vehicle operations require specialized tyre fitment.

*Some sizes of this tyre can be used on different axles. Please contact your local YOKOHAMA distributor for details.

Research and Development

Reliable technology based on world-class research and development is essential for developing and providing YOKOHAMA products that are safe and reliable, while also helping to preserve the environment. At every stage of design, testing and assessment, YOKOHAMA takes a comprehensive multi-faceted approach toward realising advances in macromolecular and other technologies to make materials and products as beneficial as possible.

RADIC (Research and Development Integrated Center) has been at the core of YOKOHAMA’s leading-edge R&D operations since being established in 1991. State-of-the-art instruments such as supercomputers, electron microscopes, ESCA (electron spectroscopy for chemical analysis) systems and a nuclear magnetic resonance spectrometer are used in pursuing materials development and product design and in conducting simulations under various conditions.

D-PARC (Daigo Proving-ground and Research Center) is YOKOHAMA’s comprehensive tyre test course facility that includes a speed oval course, steering and stability track, comfort test track with multiple surfaces made of materials sourced from around the world and handling test track simulating winding road conditions.

Tyre Group

By developing and manufacturing a wide range of high-quality tyres, we earn the trust of people across the spectrum of society who rely on YOKOHAMA products. These range from car tyres with a distinctive flair to reliable truck and bus tyres that support essential transport and logistics needs and extra-tough off-the-road tyres at resource development, mining and construction sites.

Truck & Bus Tyres

Truck and bus tyres have to adapt to all seasons, surfaces and other conditions, as well as provide reliable basic performance. YOKOHAMA supplies a wide range of truck and bus tyres worldwide that meet such requirements and enable cost-effective operation, efficient running, long product life and uncompromising safety under all circumstances.

Passenger Car Tyres

Light Truck Tyres

Off-the-Road Tyres

YOKOHAMA at a Glance

Since its establishment in 1917, The Yokohama Rubber Co., Ltd. (YRC) has introduced a wide range of tyre, industrial, golf and other products. For the benefit of every customer and society, we are dedicated to continuously advancing all production, sales and technology development processes within the YOKOHAMA Group in Japan and throughout the world. Our mission is to “deliver the best products at competitive prices and on time.” This, of course, requires the utmost attention to safety and environmental concerns.

Each and every member of the YOKOHAMA Group puts great passion and commitment into providing leading technologies and products that meet the needs of the times. Our earnest hope is to contribute to the well-being of people, society and the world.

Tyre Group

YOKOHAMA ORIGINAL TREAD PATTERN CODES

RY : Rib (All-Positions/Steer/Trailer)
TY : Traction Block (Drive)
MY : Rib/Lug (Mixed Service) (All Positions/Steer/Trailer)
LY : Lug (Drive)
107ZL : Rib (Zenvironment Series, Long Distance Steer)
104ZR : Rib (Zenvironment Series, Regional Distance Steer)
112R : Rib (Regional Distance Steer/All position)

On/Off Road Short Distance Transport P. 16.17

Light Truck Tyres

Short Distance, Urban, Local Multistop Transport/Light Truck P. 18

Light Truck

107ZL 104ZR 112R

TY17(E)M S TY17M S TY517M S

RY237 RY023 RY253

RY253 RY588 RY357

RY253 RY357 RY588

RY507M S RY547M S RY773

LY717M S LY053

MY507AM S

IMPORANT NOTE: Do not mix different tyre size designations or constructions on the same axle. Always use the tyres for their intended service purpose. Please consult your YOKOHAMA distributor for details as some vehicle operations require specialized tyre fitment. *Some sizes of this tyre can be used on different axles. Please contact your local YOKOHAMA distributor for details.

Regional Distance Transport P. 12.13.14.15

Steer axle

Drive axle

Trailer axles

112R 104ZR

TY607M S TY303M S

TY517M S

RY237 RY023 RY253

RY253 RY357 RY588

RY253 RY357 RY588

RY253 RY357 RY588

RY507M S RY547M S RY773

LY717M S LY053

MY507AM S

3Q15R 3Q15R 3Q15R

TY517M S TY517M S TY517M S

RY237 RY023 RY253

RY253 RY357 RY588

RY253 RY357 RY588
YOKOHAMA’s aim is to decrease your cost per kilometer by ensuring increased tread life and even wear without sacrificing other aspects of performance like traction, handling stability, riding comfort, retreadability and fuel economy. These aspects of performance are often trade-offs, but YOKOHAMA’s engineers have created the technology to maximize each performance factor, without losing out in any area.

**PRODUCT CONCEPT**

**YOKOHAMA** Product Codes

<table>
<thead>
<tr>
<th>Surface Abrasion</th>
<th>Regional Distance Operation</th>
<th>Wear Rate</th>
<th>Urban Operation (City Bus, Rubbish Truck)</th>
<th>Long Distance Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Drive Traction: TY517(E), TY517</td>
<td></td>
<td></td>
<td>Drive Lug: LY717, LY053</td>
</tr>
<tr>
<td></td>
<td>Trailer Rib: RY253, RY357, RY588</td>
<td></td>
<td></td>
<td>Trailer Rib: RY023, RY253, RY357, RY588</td>
</tr>
<tr>
<td>Unpaved/Off-Road</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trailer Rib: MY507(A)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**YOKOHAMA ORIGINAL TREAD PATTERN CODES**
- **RY**: Rib (All-Position/Steer/Trailer)
- **TY**: Traction-Block (Drive)
- **MY**: Rib/Lug (Mixed Service) (All-Position/Steer/Trailer)
- **LY**: Lug (Drive)

**Lower Temperature/Higher Torque Mixing Method**

A new compound mixing method has increased the durability of tyres.

- **Traditional Mixing Method**
  - Multi-Step Mixing
    - The traditional multi-step mixing process mixes and kneads the rubber simultaneously.
    - The long periods of mixing result in high temperatures, which tend to cause deterioration in the quality of the rubber.
  - One Step Mixing & Roll Mixing
    - The new method performs the kneading of the rubber on rollers after the rubber has been mixed. This process results in lower temperatures. It thus minimizes the splitting of the rubber’s long polymer chains and promotes a more even distribution of the carbon black particles, which are used as a reinforcing agent.

**Performance**

- **Tyre Mileage**
  - Traditional Mixing
  - Lower Temp., High Torque Mixing

- **Strong and stretchable rubber**
  - Traditional Mixing
YOKOHAMA: MAXIMIZE YOUR PERFORMANCE

Recommendations to ensure the top performance of your YOKOHAMA tyres.

### Tyre Wear Factors

<table>
<thead>
<tr>
<th>Tyre Wear Factors</th>
<th>INFLATION PRESSURE</th>
<th>CARRYING LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tyre Mileage Index in %</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Recommended</strong> 100%</td>
<td>20% underloaded 150%</td>
</tr>
<tr>
<td></td>
<td>-20% lower 80%</td>
<td>normal load 100%</td>
</tr>
<tr>
<td></td>
<td>-30% lower 60%</td>
<td>30% over loaded 70%</td>
</tr>
</tbody>
</table>

The proper inflation pressure is essential for maximised performance of all kinds of tyre. YOKOHAMA recommends proper maintenance and utilization of a calibrated gauge/inflation pressure sticker or TPMS.

### STOP/GO OPERATION (Braking Abrasion)

<table>
<thead>
<tr>
<th>STOP/GO OPERATION (Braking Abrasion)</th>
<th>Tyre Mileage Index in %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Long haul 100%</td>
</tr>
<tr>
<td></td>
<td>Regional 80%</td>
</tr>
<tr>
<td></td>
<td>Urban 60%</td>
</tr>
</tbody>
</table>

Frequent “stop and go” results in additional stress and abrasion to tyres. YOKOHAMA recommends mild steering & braking especially while turning and curving in urban and local use.

### TRAILER AXLES

(Without liftup and/or steer axle)

<table>
<thead>
<tr>
<th>TRAILER AXLES (without liftup and/or steer axle)</th>
<th>Tyre Mileage Index in %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st. axle 60%</td>
</tr>
<tr>
<td></td>
<td>2nd. axle 100%</td>
</tr>
<tr>
<td></td>
<td>3rd. axle 30%</td>
</tr>
</tbody>
</table>

Trailer tyre wear is dependent on the sideforce of axles of trailers. YOKOHAMA recommends proper tyre rotation for retreaded tyres also.

### Regrooving

Regrooving must be undertaken when only between 2 to 3mm of the original tread pattern remains, in accordance with YOKOHAMA’s recommendations in this booklet.

### ECOLOGY-FUEL ECONOMY

The ecology and fuel economy issues are of great importance to transportation companies. YOKOHAMA tyres are designed to deliver excellent fuel economy with minimized trade-off of other performance aspects such as wet performance & tyre life.

---

**Tyre Construction**

- **Tread**: Compounds used in the tread depend on the tyre’s specific application needs. YOKOHAMA has chosen various compounding strategies to minimize treadwear rate, and maximize traction, fuel efficiency, and resistance to fatigue, chipping and scaling.

- **Belt Edge Cushion**: YOKOHAMA tyres feature a belt edge cushion to help prevent separation of the belt edges, and therefore the tread, caused by the shearing effect of the belt.

- **Inner Liner**: YOKOHAMA’s inner liner is specially designed to minimize air seepage into adjacent areas of the tyre. The quality of the inner liner is critical to prevent air from penetrating into the casing. YOKOHAMA’s special inner liner compound ensures a significantly longer casing life.

- **Bead Filler**: Two or more different compounds are used in YOKOHAMA’s bead filler (apex rubber) to stiffen the bead for steering response and to control the flexibility of other parts of the tyre.

**Inflation Pressure**

Truck tyres for commercial vehicles must be inflated to a pressure* suitable for the load, speed and condition of use to produce maximum performance in all aspects such as even wear (long mileage), traction and handling stability (riding comfort) in addition to safety issues.

*Check YOKOHAMA’s recommendation for inflation pressures in this booklet.

<table>
<thead>
<tr>
<th>Pressure Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper</td>
<td>Maintains the even road contact for maximised performance.</td>
</tr>
<tr>
<td>Under</td>
<td>Causes abnormal tyre deflection, which builds up excessive heat, and risk of failure. It also causes excessive wear on both shoulders.</td>
</tr>
<tr>
<td>Over</td>
<td>Increases the risk of impact breaks and other road hazard damage. It also causes excessive wear in the centre.</td>
</tr>
</tbody>
</table>

Tyre pressures should be checked on cold tyres at least every two weeks, using a calibrated pressure gauge. Tyres with lower profiles must be checked strictly due to their less visible sidewall deflection.
**Steer axle**

**107ZL**

New highway steer tyre engineered with innovative “Zenvironment” technologies for ordinal highway operations.

- Newly-developed tread compound under “Zenvironment” technology provides longer mileage and better fuel economy.
- The 6-rib tread design is the perfect steer position high performer. Now enhanced with over 6,000 sipes, this premium feature provides excellent water evacuation and uniform wear.

---

**Steer axle**

**RY237**

Steer axle tyre engineered with advanced YOKOHAMA’s technologies for long-haul operation.

- The wide tread design with YOKOHAMA’s original SC Groove (Stress-wear Control Groove) is engineered to reduce regular tread wear and increase mileage.
- YOKOHAMA latest profile & construction improves retreadability and durability by extending casing life.

---

**Drive axle**

**TY517(E) M+S**

Drive axle tyre designed with YOKOHAMA's advanced technologies for long-haul operation.

- Wide & deep tread design produces long haul life.
- Alternated tread block with 4-straight wide grooves increases even wear without sacrificing wet traction.
- Shallow lug grooves at shoulder minimize shoulder heel & toe wear.

---

**Trailer axles**

**RY253**

Wide base long haul/Regional use tyre engineered primarily for the trailer axles. RY253 can be used on steer axle to deliver handling performance & shoulder wear resistance.

- 6-rib tread design enhances even wear & wet traction.
- Retreadability from a specially constructed casing.

---

**Trailer axles**

**RY357**

Wide base highway/regional use tyre for the trailer axles. The RY357 delivers long mileage & shoulder wear resistance on trailer axle use.

- 5-rib tread design enhances even wear and wet traction.
- Specially constructed casing makes this tyre well-suited for retreading.

---

**Trailer axles**

**RY588**

All-purpose trailer tyre for long distance/regional operations. (available: 11R22.5 only)

- 5-rib tread design with straight grooves enhances even wear & wet traction.
- Casing construction provides durability & retreadability for trailer service.

---

**PATTERN**

**TY517(E) M+S**

<table>
<thead>
<tr>
<th>SIZE</th>
<th>R1</th>
<th>R2</th>
<th>Tube</th>
<th>Overall Width</th>
<th>Overall Diameter</th>
<th>Load Rating</th>
<th>Measuring Row</th>
<th>Approved Rim</th>
</tr>
</thead>
<tbody>
<tr>
<td>295/80R22.5</td>
<td>16</td>
<td>152/148M</td>
<td>TL</td>
<td>303</td>
<td>1093</td>
<td>489</td>
<td>9.00</td>
<td>8.25, 9.00</td>
</tr>
<tr>
<td>315/70R22.5</td>
<td>16</td>
<td>156/150L (154/150M)</td>
<td>TL</td>
<td>313</td>
<td>1017</td>
<td>473</td>
<td>9.00</td>
<td>9.00, 9.75</td>
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<tr>
<td>315/80R22.5</td>
<td>20</td>
<td>154/150L (152/148M)</td>
<td>TL</td>
<td>314</td>
<td>1075</td>
<td>497</td>
<td>9.00</td>
<td>9.00, 9.75</td>
</tr>
</tbody>
</table>

**TY517(E) available size**

**TY517**

<table>
<thead>
<tr>
<th>PATTERN</th>
<th>SIZE</th>
<th>R1</th>
<th>R2</th>
<th>Tube</th>
<th>Overall Width</th>
<th>Overall Diameter</th>
<th>Load Rating</th>
<th>Measuring Row</th>
<th>Approved Rim</th>
</tr>
</thead>
<tbody>
<tr>
<td>11R22.5</td>
<td>16</td>
<td>148/145M</td>
<td>TL</td>
<td>278</td>
<td>1043</td>
<td>488</td>
<td>9.00</td>
<td>7.50, 8.25</td>
<td></td>
</tr>
<tr>
<td>315/80R22.5</td>
<td>18</td>
<td>154/150L (152/148M)</td>
<td>TL</td>
<td>314</td>
<td>1089</td>
<td>488</td>
<td>9.00</td>
<td>9.00, 9.75</td>
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</tbody>
</table>

**RY253**

<table>
<thead>
<tr>
<th>PATTERN</th>
<th>SIZE</th>
<th>R1</th>
<th>R2</th>
<th>Tube</th>
<th>Overall Width</th>
<th>Overall Diameter</th>
<th>Load Rating</th>
<th>Measuring Row</th>
<th>Approved Rim</th>
</tr>
</thead>
<tbody>
<tr>
<td>425/65R22.5</td>
<td>20</td>
<td>165K</td>
<td>TL</td>
<td>422</td>
<td>1126</td>
<td>520</td>
<td>13.00</td>
<td>12.75, 13.00, 14.00</td>
<td></td>
</tr>
<tr>
<td>445/65R22.5</td>
<td>20</td>
<td>168K</td>
<td>TL</td>
<td>444</td>
<td>1154</td>
<td>532</td>
<td>14.00</td>
<td>13.00, 14.00</td>
<td></td>
</tr>
</tbody>
</table>

**RY253 available size**

**RY357**

<table>
<thead>
<tr>
<th>PATTERN</th>
<th>SIZE</th>
<th>R1</th>
<th>R2</th>
<th>Tube</th>
<th>Overall Width</th>
<th>Overall Diameter</th>
<th>Load Rating</th>
<th>Measuring Row</th>
<th>Approved Rim</th>
</tr>
</thead>
<tbody>
<tr>
<td>385/55R22.5</td>
<td>18</td>
<td>160L (158L)</td>
<td>TL</td>
<td>380</td>
<td>998</td>
<td>460</td>
<td>11.75</td>
<td>11.75, 12.25</td>
<td></td>
</tr>
<tr>
<td>385/55R22.5</td>
<td>18</td>
<td>160L (158L)</td>
<td>TL</td>
<td>380</td>
<td>1074</td>
<td>505</td>
<td>11.75</td>
<td>11.75, 12.25</td>
<td></td>
</tr>
</tbody>
</table>

**RY357 available size**

**RY588**

<table>
<thead>
<tr>
<th>PATTERN</th>
<th>SIZE</th>
<th>R1</th>
<th>R2</th>
<th>Tube</th>
<th>Overall Width</th>
<th>Overall Diameter</th>
<th>Load Rating</th>
<th>Measuring Row</th>
<th>Approved Rim</th>
</tr>
</thead>
<tbody>
<tr>
<td>11R22.5</td>
<td>16</td>
<td>148/145M</td>
<td>TL</td>
<td>278</td>
<td>1043</td>
<td>488</td>
<td>8.25</td>
<td>7.50, 8.25</td>
<td></td>
</tr>
</tbody>
</table>

**RY588 available size**
### Regional Distance Transport

**112R NEW**

Specially designed for ASEAN market
- Enhanced cut resistance and chipping compared with 104ZR
- Wide tread enhances wear resistance and high grip
- Adapt new pattern considering chipping

**Tread & Side Design**

- **Tread Pattern**
- **Side Branding**

**Performance chart**

- Wear Resistance
- Cut Resistance
- Chipping

**Profile comparison**

- Improved anti cut performance by wider profile with high rigidity ribs.

**CAP Compound**

- Featured performance - Cut resistance

**Improved chipping performance by 10% compared with 104ZR.**

#### Steer/All Position

**RY023(RY023T)**

Steer tyre for regional/highway service. (RY023T with higher load index only for trailer use.)
- Extra deep tread design for long mileage & shoulder wear resistance on steer axle use.
- Deep sub-grooves on ribs enhance wear resistance.

**Drive axle**

**TY303M+S**

Drive axle tyre for regional/highway service.
- Extra deep tread design provides excellent wet traction throughout all stages of wear for regional/highway service.
- The tread compound resists against cutting/chipping and extends mileage.

**Tyre carry a second load/speed index marking which indicates supplementary operational possibilities.**

### Steer/All Position

**112R**

- Improved chipping performance by 10% compared with 104ZR.

**TY607M+S**

Drive axle tyre for regional operation.
- Extra deep tread design with side tread produces long tread life for regional service.
- Aggressive block tread with lateral lug grooves delivers excellent wet traction.
- Alternated block placement with short blocks enhances even wear.

### Steer axle

**104ZR**

Steer tyre engineered with innovative “Zenvironment” technologies for regional/highway service.
- The 5-rib tread design with straight grooves enhances even wear & self-cleaning.
- Newly-designed stone ejectors and wavy grooves minimize stone binding & penetration in ordinal regional operation.
- Newly-developed tread compound under “Zenvironment” technology provides longer mileage and better fuel economy.
- This technology is available in major product scales.
- New casing compounds under “Zenvironment” technology extend casing life for multi-retread.

### Drive axle

**TY303M+S**

Drive axle tyre for regional/highway service.
- Extra deep tread design improves long mileage & shoulder wear resistance on steer axle use.
- Deep sub-grooves on ribs enhance wear resistance.

<table>
<thead>
<tr>
<th>Pattern Size</th>
<th>Tyre Design</th>
<th>Tread Pattern</th>
<th>Side Branding</th>
<th>Tread Pattern</th>
<th>Side Branding</th>
</tr>
</thead>
<tbody>
<tr>
<td>255/75R17.5</td>
<td>12/12MM</td>
<td>TL 207</td>
<td>760 354</td>
<td>6.00 5.25, 6.00, 6.75</td>
<td></td>
</tr>
<tr>
<td>255/75R18.5</td>
<td>12/12MM</td>
<td>TL 215</td>
<td>776 360</td>
<td>6.00 6.00, 6.75</td>
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</tr>
<tr>
<td>255/75R18.5</td>
<td>13/13MM</td>
<td>TL 215</td>
<td>776 360</td>
<td>6.00 6.00, 6.75</td>
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<tr>
<td>112R</td>
<td>104ZR</td>
<td>300</td>
<td>1600 750</td>
<td>8.25 7.50, 8.25</td>
<td></td>
</tr>
<tr>
<td>104ZR</td>
<td>112R</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>112R</td>
</tr>
</tbody>
</table>
Regional Distance Transport

**Trailer axles**

**RY253**
Wide base Long haul/Regional use tyre engineered primarily for the trailer axles.
RY253 can be used on steer axle to deliver handling performance & shoulder wear resistance.
- 5-rib tread design enhances even wear & wet traction.
- Retreadability from a specially constructed casing.

**TY287M+S**
Multi purpose tyre for regional operations on paved road.
- Good traction on rainy and snowy roads.
- At approximately 60% of tread wear, the tread design becomes a rib pattern suitable for normal highway use.

**All positions**

**RY357**
Wide base highway/regional use tyre for the trailer axles.
The RY357 delivers long mileage & shoulder wear resistance on trailer axle use.
- 5-rib tread design enhances even wear and wet traction.
- Specially constructed casing makes this tyre well-suited for retreading.

**Y785R**
All purpose tyres including low platform trailer tyre.
- 5-rib tread design with straight grooves enhances even wear & wet traction.
- casing construction provides durability & retreadability for heavy trailer service.

**All positions**

**RY588**
All-purpose trailer tyre for long distance/regional operations. (available: 11R22.5 only)
- 5-rib tread design with straight grooves enhances even wear & wet traction.
- casing construction provides durability & retreadability for trailer service.

**Y793R**
All-purpose, all-position tyre for normal regional/city service.
- Pattern design with wide tread produces long mileage.
- The tread compound resists against cutting/chipping.

### Tyre Specifications

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Size</th>
<th>Position</th>
<th>Load Class</th>
<th>Overall Diameter (mm)</th>
<th>Load Range</th>
<th>Measuring Rim (inch)</th>
<th>Approved Rim (inch)</th>
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<tbody>
<tr>
<td>TY287M+S</td>
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<td>-/148/145L</td>
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<td>277</td>
<td>969</td>
<td>481</td>
<td>8.25</td>
</tr>
</tbody>
</table>

Availability of products shown in this document may vary from country to country. Please consult your YOKOHAMA distributor for local availability. Some tyres carry a second load/speed index marking which indicates supplementary operational possibilities.
## On/Off Road Short Distance Transport

### Steer axle/All positions

**MY507M+S**

- All-purpose, all-position tyre for on & off construction-site operation.
- Available only tubeless sizes.
- Deeper & wider tread increases mileage while the shoulder shoulder ribs resist against shoulder wear.
- 4 or 5 waved grooves produce traction and drainage.
- Stone ejectors & V-shaped grooves decrease stone holding to enhance retreadability.

**MY547M+S**

- All-purpose, all-position tyre for on & off construction-site operation.
- Available only tube-tread type sizes.
- Deeper tread produces longer mileage while the shoulder shoulder ribs resist against shoulder wear.
- 3 slanting grooves with shoulder lug produce traction and enhance smooth wear in local operation.

**Y773**

- All-purpose, all-position tyre for on & off construction-site operation such as dump or logging.
- The tread compound resists against cutting/chipping for extended mileage & retreadability.

### Drive axle

**LY717M+S**

- Drive axle tyre for on & off construction-site operation.
- Aggressive 4-block tread design with shoulder lug produces dependable traction on rough surfaces.
- Deeper & wider tread increase the mileage.
- Specially deep tread depth and cut-resistant tread compound delivers good tyre mileage.

**LY053**

- Drive axle tyre for logging and quarrying operations with some short haul highway use possible.
- Engineered to provide dependable traction and durability.
- Specially deep tread depth and cut-resistant tread compound deliver good tyre mileage.

**MY507A M+S**

- Wide base ON & OFF trailer tyre for on & off construction-site operation.
- Aggressive traction tread with transverse sub-grooves enhances traction over rough surfaces.
- Stone ejectors & funnel-shaped grooves decrease stone holding to enhance retreadability.

---

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Size</th>
<th>PR</th>
<th>TL/SS</th>
<th>Overall Diameter (mm)</th>
<th>Loaded Radius (mm)</th>
<th>Measuring Rim (mm)</th>
<th>Approach Rim (mm)</th>
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<tbody>
<tr>
<td>11R22.5</td>
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<td>154/150K</td>
<td>TL</td>
<td>317 x 1133</td>
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<td>9.00, 7.75</td>
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<tr>
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<thead>
<tr>
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<th>PR</th>
<th>TL/SS</th>
<th>Overall Diameter (mm)</th>
<th>Loaded Radius (mm)</th>
<th>Measuring Rim (mm)</th>
<th>Approach Rim (mm)</th>
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<td>154/150K</td>
<td>TL</td>
<td>312 x 1136</td>
<td>527</td>
<td>8.50</td>
<td>8.00, 7.50, 7.00</td>
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<tr>
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<td>16</td>
<td>148/145K</td>
<td>TL</td>
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<td>497</td>
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<td>152/148K</td>
<td>TL</td>
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<td>152/148K</td>
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<tr>
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<td>156/150K (154/150G)</td>
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<table>
<thead>
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<th>Pattern</th>
<th>Size</th>
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<th>TL/SS</th>
<th>Overall Diameter (mm)</th>
<th>Loaded Radius (mm)</th>
<th>Measuring Rim (mm)</th>
<th>Approach Rim (mm)</th>
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<td>150/146K</td>
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<td>293 x 1088</td>
<td>507</td>
<td>8.00</td>
<td>7.50, 6.00, 5.00</td>
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<td>154/150K</td>
<td>TT</td>
<td>315 x 1129</td>
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<table>
<thead>
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<th>Pattern</th>
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<th>PR</th>
<th>TL/SS</th>
<th>Overall Diameter (mm)</th>
<th>Loaded Radius (mm)</th>
<th>Measuring Rim (mm)</th>
<th>Approach Rim (mm)</th>
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<tbody>
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<td>152/148K</td>
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<td>303 x 1054</td>
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<tr>
<td>315/80R22.5</td>
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<td>156/150K</td>
<td>TL</td>
<td>313 x 1082</td>
<td>501</td>
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<td>9.00, 7.75</td>
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<table>
<thead>
<tr>
<th>Pattern</th>
<th>Size</th>
<th>PR</th>
<th>TL/SS</th>
<th>Overall Diameter (mm)</th>
<th>Loaded Radius (mm)</th>
<th>Measuring Rim (mm)</th>
<th>Approach Rim (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>265/70R19.5</td>
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<td>143/141</td>
<td>TL</td>
<td>280 x 873</td>
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<td>7.50</td>
<td>7.50, 6.25</td>
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<td>385/65R22.5</td>
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<td>1600</td>
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<td>TL</td>
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<td>13.00, 14.00</td>
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</tbody>
</table>

Availability of products shown in this document may vary from country to country. Please consult your YOKOHAMA distributor for local availability. Some tyre carry a second load/capacity index marking which indicates supplementary operational possibilities.
Short Distance, Urban, Local Multistop Transport/Light Truck

| All positions |

**RY537**

All-position tyre for urban bus operation.
- Enclosed tread with 6-ply design enhances long mileage & low cost per kilometer on severe abrasion operation.
- Sidewall protections minimize curb damage & abrasion from curb.

Availability of products shown in this document may vary from country to country. Please consult your YOKOHAMA distributor for local availability.

● Strong resistance to wear and long-lasting performance.

**For Light Truck Tyre**
- Total balanced performance tyre — wear resistance, ride quality and anti-uneven wear —
- Deep tread and shoulder lug produce excellent long life and traction.

**MY248**

All-position radial for urban operating trucks and buses.

- Extra deep tread with 4-rib design enhances long mileage & low cost per kilometer on severe abrasion operation.

**MY248**

11R22.5 - 150/146K TL
12R22.5 - 150/146K TL

**LT151R**

For Light Truck Tyre
- Enclosed tread with 6-ply design enhances long mileage & low cost per kilometer on severe abrasion operation.
- Sidewall protections minimize curb damage & abrasion from curb.

Typical Patterns of Uneven Wear

- **Centre Wear**
  - The centre of the tread wearing faster than the shoulders.
  - Causes:
    1. Overinflation.
    2. Improper matching of tyres and rims.

- **Wavy (Polygonal) Wear**
  - Wavy conditions are created on some part of, or on whole circumference, of tread.
  - Causes:
    1. Excessive run-out of tyre & rim assembly.
    2. Dynamic imbalance of tyre & rim assembly.
    3. Faulty suspension & restraints such as axle beams, bearing & brake shoes.
    4. Improper wheel alignment.
    5. Underinflation and/or overload.

- **Spot Wear**
  - Excessive wear in a part of the tread.
  - Causes:
    1. Sudden braking & rapid acceleration.
    2. Faulty suspension & faulty rotating parts such as axle beams, bearings & brake shoes.

- **One-Sided Wear**
  - The shoulder wearing faster than the centre of the tread.
  - Causes:
    1. Tire or center of steer axle influence.
    2. Asymmetric tire or corner, rapid changing of lanes at high-speed.
    3. Improper air pressure, wheel alignment or mismatch of tyres and rims.
    4. Road inclination.

- **Step Wear**
  - The outer portion of the shoulder rib wearing faster than the inner portion.
  - Causes:
    1. Repeated sharp turns in cornering and frequent, rapid changing of lanes at high-speed.
    2. Improper wheel alignment.
    3. Faulty suspension and faulty rotating parts such as axle beams, bearings and brake shoes.

- **Island Wear**
  - Some parts of tread wearing less than the other parts, forming islands or coastlines.
  - Causes:
    1. Repeated sharp turns in cornering and frequent, rapid changing of lanes at high-speed.
    2. Improper wheel alignment.
    3. Faulty suspension and faulty rotating parts such as axle beams, bearings and brake shoes.

- **Heel & Toe Wear**
  - One side of blocks and/or lugs on the tread wears faster than other side circumferentially.
  - Direction of Rotation
    - Causes:
      1. Under-inflation and/or overload.
      2. Sudden braking or rapid acceleration.

- **Shoulder Wear**
  - Both shoulders wearing faster than the centre of the tread.
  - Causes:
    1. Under-inflation and/or overload.
    2. Repeated sharp turns at high-speed when cornering.
    3. Mismatch of tyres and rims.

- **River Wear**
  - Edges of the ribs except the outer edge of the shoulder ribs wearing faster than the tread surface, like overlords.
  - Causes:
    1. Underinflation and/or overload.
    2. Repeated sharp turns in cornering and frequent, rapid changing of lanes at high-speed.
    3. Improper wheel alignment.
    4. Faulty suspension and faulty rotating parts such as axle beams, bearings and brake shoes.

- **Feather Edge Wear**
  - The blocks or the ribs treading diagonally faster than the other parts of the tread surface.
  - Causes:
    1. Improper wheel alignment.
    2. Faulty restraints such as axle beams, bearings and brake shoes.

- **Diagonal Wear**
  - One or several parts of the tread treading diagonally faster than the other parts of the tread surface.
  - Causes:
    1. Faulty suspension, faulty rotating parts and/or brake parts such as axle beams, bearings and brake shoes.
    2. Improper wheel alignment.
Regrooving Procedures

### Long Distance Transport

<table>
<thead>
<tr>
<th>Tyre Size</th>
<th>Dimension of Regroove</th>
</tr>
</thead>
<tbody>
<tr>
<td>295/80R22.5</td>
<td>2.5 mm, 7.0 mm</td>
</tr>
<tr>
<td>315/70R22.5</td>
<td>2.5 mm, 7.0 mm</td>
</tr>
<tr>
<td>315/80R22.5</td>
<td>3.0 mm, 7.0 mm</td>
</tr>
</tbody>
</table>

Pattern after 70% worn:
- Pattern when new
- Pattern when 70% worn
- Pattern after regrooved

Pattern when new:
- Pattern when new
- Pattern when 70% worn
- Pattern after regrooved

### Regional Distance Transport

<table>
<thead>
<tr>
<th>Tyre Size</th>
<th>Dimension of Regroove</th>
</tr>
</thead>
<tbody>
<tr>
<td>295/80R22.5</td>
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</tr>
<tr>
<td>315/70R22.5</td>
<td>2.5 mm, 7.0 mm</td>
</tr>
<tr>
<td>315/80R22.5</td>
<td>3.0 mm, 7.0 mm</td>
</tr>
</tbody>
</table>

Pattern after 70% worn:
- Pattern when new
- Pattern when 70% worn
- Pattern after regrooved

Pattern when new:
- Pattern when new
- Pattern when 70% worn
- Pattern after regrooved

### On/Off Road Short Distance Transport

<table>
<thead>
<tr>
<th>Tyre Size</th>
<th>Dimension of Regroove</th>
</tr>
</thead>
<tbody>
<tr>
<td>295/80R22.5</td>
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<tr>
<td>315/70R22.5</td>
<td>2.5 mm, 7.0 mm</td>
</tr>
<tr>
<td>315/80R22.5</td>
<td>3.0 mm, 7.0 mm</td>
</tr>
</tbody>
</table>

Pattern after 70% worn:
- Pattern when new
- Pattern when 70% worn
- Pattern after regrooved

Pattern when new:
- Pattern when new
- Pattern when 70% worn
- Pattern after regrooved
## LOAD AND INFLATION PRESSURE TABLE

This table shows the load capacity (kg) per axle at tyre pressure (kPa / bar / psi) for normal operation based on ETRTO standard. Some vehicle operation require specialized inflation pressure. Please contact your YOKOHAMA distributor for details.

<table>
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<th>Inch</th>
<th>Size</th>
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<th>Dual Unit</th>
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<td>8.485</td>
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<td>13.265</td>
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**NOTE:** Regarding " * " marked sizes tyre, YOKOHAMA may give you "additional service" for some patterns. For details, please contact your YOKOHAMA distributor.