

Tubeless Sealing Ring (TSR)

For Continental Industrial Radial Tires To Improve Safety and Mobility

Improved Safety and Mobility

The Tubeless Sealing Ring (TSR) is a product which enables the mounting of Continental industrial radial tires on standard industrial vehicle rims, which, because of their construction, must normally be mounted with a tube and a flap. The TSR consists of a rubber ring with an integrated tire inflation valve. The rubber ring sits on the cylindrical part of the rim between the beads of the tire, and ensures an airtight interface sealing the tire chamber without the use of a tube and flap.

The TSR works as an enabler for the usage of ContiPressureCheck[™] in combination with a multi piece rim (tube type). ContiPressureCheck[™] uses a sensor inside the tire to continuously monitor the inflation pressure and tire temperature to prevent tire failures and damages and maximize fuel efficiency.



The principle

A rubber sealing ring is mounted inside the tire between its beads.



Disadvantages of tube tires

- Rapid deflation upon puncture
- Risk of valve rip-out
- Instant failure and increased downtime
- Risk of load and equipment damage



Advantages of tubeless tires

- No sudden airloss upon puncture
- Equipment remains safe, mobile and productive

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- Elimination of sudden weight transfer results in improved vehicle stability and safety
- Turning on the rim is not critical
- Low profile tires have increased durability
- Simplified and quicker mounting
- Fewer parts than a tubed tire

Mounting steps

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Lubricate bead area of the tire as well as the tire interior up to the middle of sidewall.



Fold the TSR in half to create a figure '8', and insert one loop into tire as far as possible.



Rotate TSR to match the axis of the tire.



Working around the tire, press the TSR fully into position by pushing the TSR wings into the tire. It is very important to ensure that the TSR lies symmetrically inside the tire.



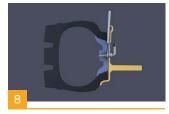
When the TSR is positioned in the tire, lubricate the visible surface of the TSR and the bead area.



Lubricate the rim.



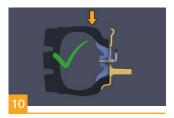
Align rim that valve slot is in line with TSR valve as shown, and let tire fall into position, whilst ensuring that valve remains centered in the slot.



Using a lever, push valve througth valve slot. Be careful not to decentralaise the TSR.



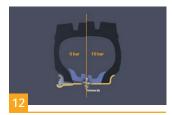
Wrong mounting with dislocated TSR: Don't compress the beads too far because the TSR will be dislocated and the valve may be damaged.



Correct ring mounting: Push the bead only as far as necessary to mount the rim rings.



Continue to assemble the rim with all the standard rim parts.



Inflate tire to 1 bar and check positioning of all components, before continuing to inflate to 10 bar within an inflation cage using a remote tire pressure gauge. Insert the valve core and reinflate to 10 bar.

Important notes

TSRs can only be used with Continental industrial radial tires marked "This tire is compatible with the Continental TSR system" on the sidewall. Tires with this designation can also be mounted without the TSR system, just with a tube and flap. The TSR system is not suitable for use with center split rims and (semi)drop center rims. A new TSR with a maximum age of 3years to be used everytime a tire is mounted. Do not re-use a TSR. Attach the wheel to the vehicle according to the vehicle manufacturer's specifications. After the TSR fitment, the tire pressure must be checked after 12 hours. A reinflation can be necessary to ensure the correct tire pressure. This is because as after fitting the TSR may realign itself on the rim which may lead to minor pressure loss.



Articles

	Article No.	⊘ mm*	© mm*	@ * *
125/75 R 8 TL (3.00)	793002	24	25	90
150/75 - 180/70 R 8 TL (4.33)	793003	24	48	90
5.00 R 8 TL (3.00)	793017	24	25	90
6.00 R 9 TL (4.00)	793033	24	25	90
225/75 R 10 TL (6.50)	793007	24	25	90
6.50 R 10 TL (5.00)	793005	24	25	90
250/75 R 12 TL (8.00)	793032	24	60	94
7.00 R 12 TL (5.00)	793001	24	48	90
7.00 R 12 TL (5.00) OC 7mm**	793039	24	48	90
225/75 R 15 TL (6.50) REINF.	793029	24	60	94
250/70 R 15 TL (7.00/7.50) REINF.	793031	24	60	94
315/70 R 15 TL (8.00) REINF.	793030	23	105	94
355/65 R 15 TL (9.75) REINF.	793026	23	105	94
7.00 R 15 TL (5.50)	793006	24	60	94
7.50 R 15 TL (6.00/6.50)	793008	23	70	94
8.25 R 15 TL (6.50)	793000	23	70	94
20" Radial TL (7.5/8.0/8.5) REINF.	793027	23	70	94
20" Radial TL (7.5/8.0/8.5) REINF.	793037	24	82	90
20" Radial TL (7.5/8.0/8.5) REINF. OC 22 mm**	793038	23	70	94

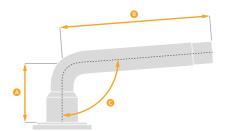
 *) approximate values - for der
**) off-centered valve position approximate values - for details refer to product datasheet

Accessories

Article No.	Article Description	Used for	
1732501	Valve slot cover plate	For rims with wide valve slot.	
1732054	Valve extension 34 mm	If valve access is difficult due to wheel offset Recommended for most TSR 6.00R9 and TSR 225/75R10 applications.	
1732055	Valve extension 24 mm	If valve access is difficult due to wheel offset.	6=0
1732150	Space-saving valve	In case of low free space.	<u> </u>
1732056	Special flat-base valve	In case of low clearance to brake drum.	
1732069	Valve slot cover plate 15"/20" TSR	For use with 15" and 20" TSRs for rim widths from 7.0" to 9.75". Supplied along with the TSR. If necessary, the cover plate must be adapted to match the rim width.	

Valve slot cover plate (article no. 1732069)

This plate is designed for use with 15" and 20" TSRs for rim widths of 7.0" to 9.75" and is supplied along with these TSRs. The plate prevents buckling at the valve slot. If necessary, the plate must be shortened at the predetermined break-off points to match the rim width before mounting the TSR. The conventional cover plate (article no. 1732501) can still be used for any other applications. Don't crimp the valve. Use a TSR with decentered valve in case of a short valve slot.



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