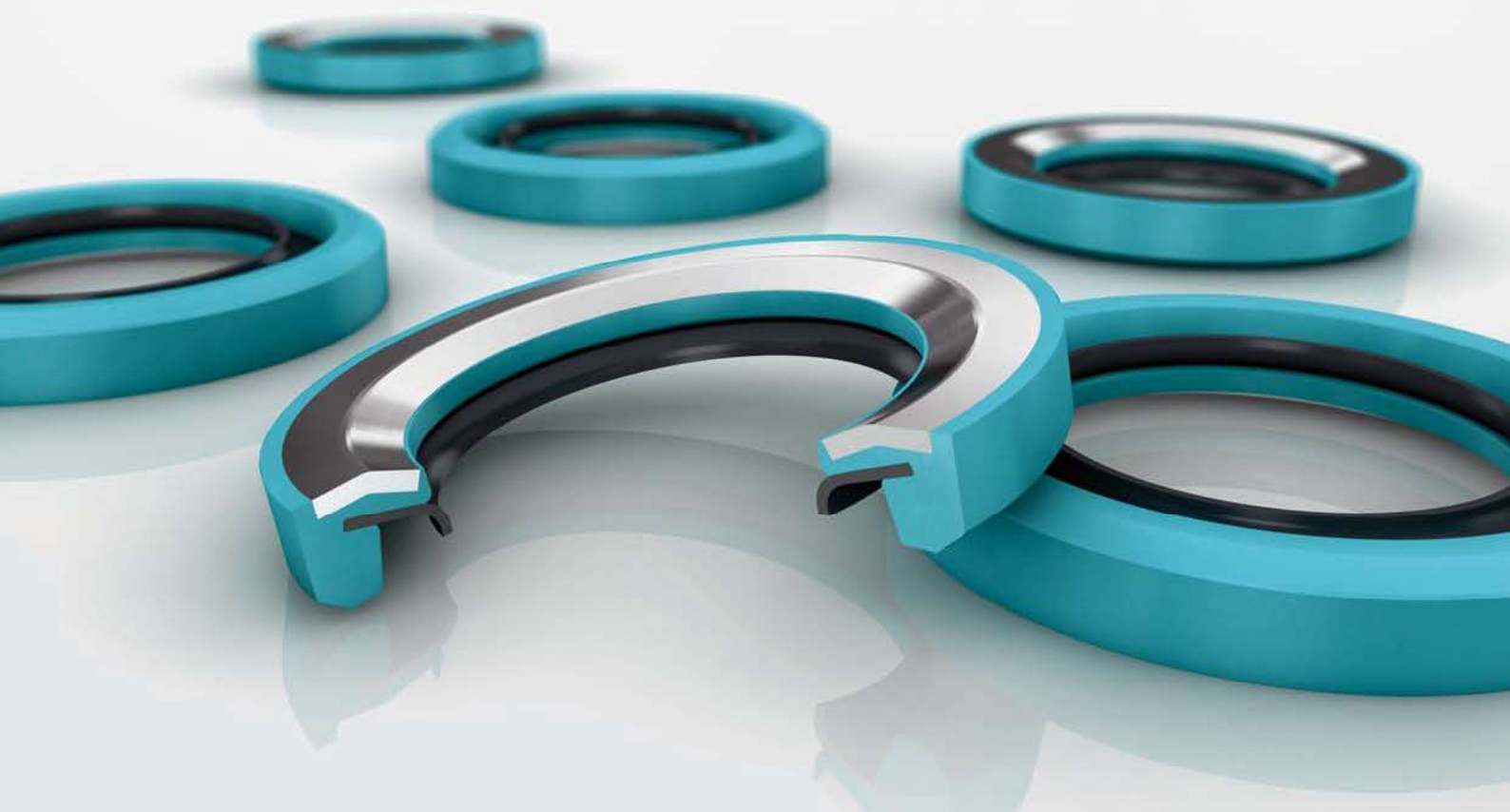


Turcon[®] Roto L





■ Turcon® Roto L

■ General Description



Figure 95: Turcon® Roto L

The Turcon® Roto L has been designed to cope with increasing requirements of high performance vehicle operators.

An ascending amount of vehicles incorporate a central tire inflation system, where sealing around the axle is required to increase or decrease pressure depending on the surface the vehicle is travelling on.

While conventional seals remain in contact with the axle all the time, Turcon® Roto L only seals when needed, meaning that pressure causes the sealing lip to press against the sealing surface until the pressure is relieved. In case of no activation, the jacket of the seal brings the sealing lip back to its original position, where it is just held against the sealing surface.

This leads to extended seal life as well as reduced friction and lower fuel consumption.

These features are realized through a PTFE sealing lip with a rubber jacket and a stable shape forming metal part.

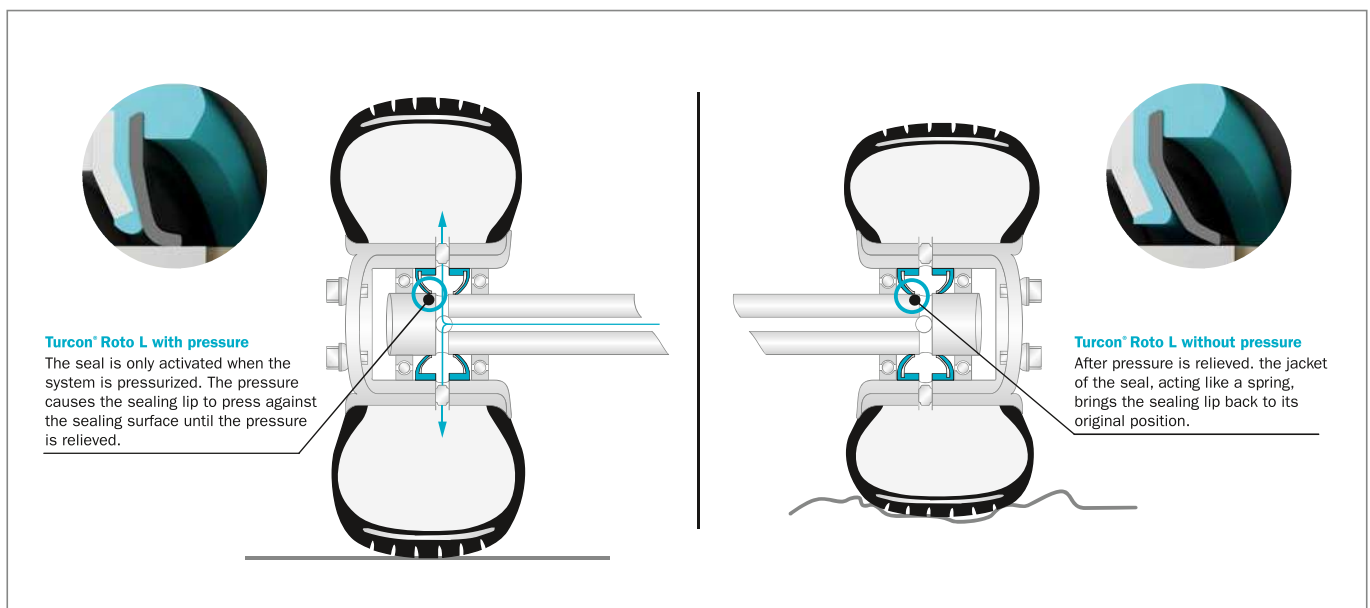


Figure 96: Functional Principle Turcon® Roto L

ADVANTAGES

- Extended seal life on axle systems due to reduced frictional torque (see fig. "Dry air torque test" and "Lifetime of hardware")
- Low friction and suited to short stroke linear movement
- Compatible with all types of hydraulic fluid, especially those fluids with low lubrication performance
- High wear resistance
- Deflation and inflation of tires on the move minimizes down time
- Lower overall vehicle operator costs

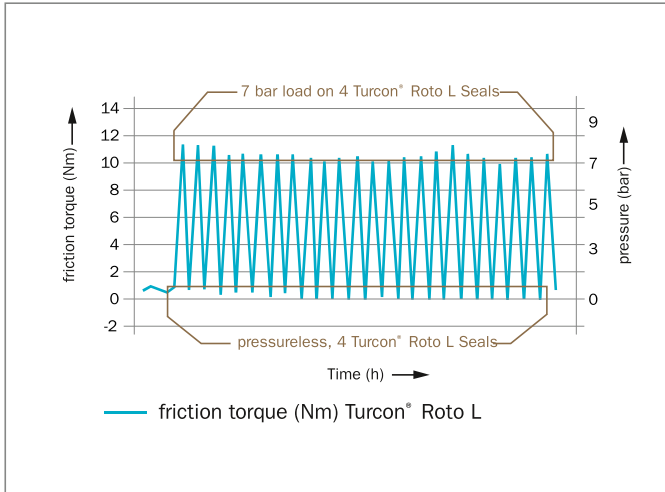


Figure 97: Dry air torque tes

APPLICATION EXAMPLES

- Rotary Applications, e.g. deflation and inflation of tires
- Axle systems
- Transmission
- On- and Off-Highway
- Trucks and Trailers
- Super sports cars

OPERATING CONDITIONS

Pressure:	Up to 1 MPa for standard lip profiles
Medium:	Air
Temperature:	-40 °C to +200 °C (depending on material)

Trelleborg Sealing Solutions has carried out several thousand compability tests. Please ask your local Trelleborg Sealing Solutions marketing company for details.

IMPORTANT NOTE

The above data are maximum values and cannot be used at the same time, e.g. the maximum operating speed depends on material type, pressure and temperature.

Turcon® M12 from Trelleborg Sealing Solutions is a polytetrafluoroethylene (PTFE) based sealing material whose performance is unrivaled in key hydraulic sealing characteristics, such as friction, wear and high pressure operation.

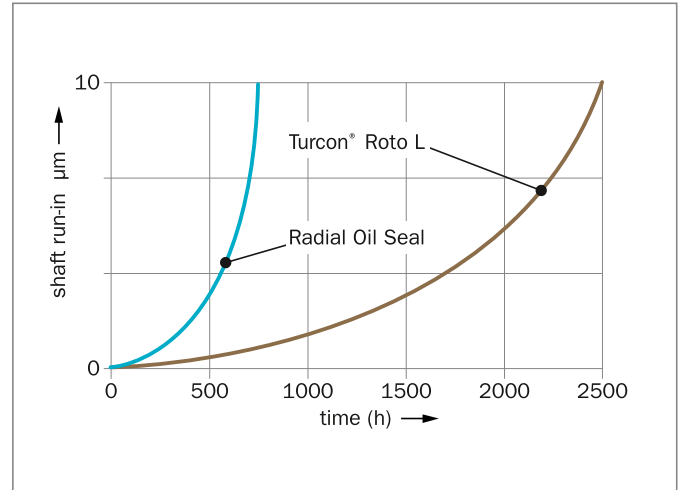


Figure 98: Lifetime of hardware

No other material can give such universally exceptional performance

Extensive testing showed that Turcon® M12 is resistant to virtually all media, including a broad range of lubricants, and has outstanding wear resistance and friction characteristics. This cost-effective material also provides customers with extended seal life, as well as wide operating window in terms of temperature, pressure and velocity. Comprehensive testing has shown that no other PTFE material can give such universally exceptional performance, and Turcon® M12 is now recommended by Trelleborg Sealing Solutions as the material of choice for a wide variety of hydraulic applications.



FEATURES AND BENEFITS OF TURCON® M12

- Resistant to virtually all media including a broad range of lubricants
- Outstanding wear resistance and friction characteristics
- Provides extended seal life
- Operates in wide temperature, pressure and velocity ranges
- Minimal abrasion of hardware, preventing damage to counter surfaces
- Robust for harsh environments
- Good resistance to extrusion
- Reduced environmental impact as it does not include bronze fillers
- Sealing material for universal use in hydraulic applications
- Lower stock holding and fewer items to handle
- Cost-effective solution

Table 62: Material combinations

Material Code new	Description
M12SH	Turcon® M12 - metal-HNBR
M12SN	Turcon® M12 - metal-NBR
M12SV	Turcon® M12 - metal-FKM
M12SA	Turcon® M12 - metal-ACM
M12ZH	Turcon® M12 - stainless steel-HNBR
M12ZN	Turcon® M12 - stainless steel-NBR
M12ZV	Turcon® M12 - stainless steel-FKM
M12ZA	Turcon® M12 - stainless steel-ACM

ORDERING INFORMATION

Due to the design requirements of this product, contact your local Trelleborg Sealing Solutions marketing company to place an order or for further information.