



RunFlat & Wheel Systems

Product Range

The Toota Group supplies a complete range of RunFlat systems, available for all types of wheels from 14" to 27". All products can be fitted quickly without special, expensive tooling and are re-useable and recyclable.

Each system can be compliant with FINABEL requirements or tailored to each customer's specific requirements – distance to cover after the puncture, peak speed, type of terrain, geometry of the wheel, tyre profile, wheel load, and more.

DYNAMIC RUNFLAT SYSTEM

For single-piece wheels, we offer a Dynamic RunFlat System made of 2 or 3 antiballistic composite segments bolted around the wheel rim. The segments remain fixed on the rim when the tyre is fully inflated, but slip in the opposite direction to the forward rotation of the tyre and wheel when the tyre is deflated, compensating for the difference in diameters between the tyres on each side of the axle.

Within this range we offer three main run-flat capabilities; other variants exist based on specific client requirements.



- **Dynamic 15km:** a light-duty 2-segment system designed and manufactured to cover 15 km at 50 km/h on road in run-flat mode.
- **Dynamic 50km:** a 3-segment system designed and manufactured to cover 50 km on road (3 km at escape speed up to 90 km/h, 10 km at 50 km/h and 37 km at 25 km/h), or 30 miles at 30 mph on road, or 40 km off road at 20 km/h in run-flat mode.
- **Dynamic 100km:** a 3-segment system designed and manufactured to cover 100 km on road (3 km at escape speed up to 90 km/h, 22 km at 50 km/h and 75 km at 25 km/h), or 60 km off road at 30 km/h in run-flat mode.



STATIC RUNFLAT SYSTEM

For multiple-piece wheels (and tubeless tyres), we manufacture a Static System made of 3 antiballistic imperishable composite segments bolted tightly around the wheel rim, which remain fixed and keep the tyre in place whether inflated or not. Its “beadlock” function is particularly strong in run-flat mode thanks to its patented shape.

Primarily designed for military applications on and off-road, the system is typically available in 2 main run-flat capabilities.



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- **Static 100km:** a 3-segment system designed and manufactured to cover 100 km on road (3 km at escape speed up to 90 km/h, 22 km at 50 km/h and 75 km at 25 km/h), or 60 km off road at 30 km/h in run-flat mode.

BEADLOCK SYSTEM

For multiple-piece wheels (and tubeless tyres), we also offer a Beadlock made of an imperishable elastic polymer: a single-piece system which is inserted on the rim and covers it from one tyre bead to the other.

It remains fixed and locks the tyre beads at all tyre pressures, preventing the tyre from slipping on the wheel (at low pressure, typically sand pressure) and ensuring that the vehicle always retains traction.

Unlike a Static RunFlat, this system is not a RunFlat system, only enabling short distances in run-flat mode in emergency situations.





SINGLE PIECE WHEELS

We offer a range of lightweight, high-load wheels (with 2 safety humps for optimal run-flat performance) for military and security vehicles, designed to cope with the increased loads and stresses that occur when a vehicle is armoured.

With full European manufacturing facilities, CAD and FEA modelling capability, we can supply forged/cast alloy and steel wheels manufactured to the highest quality automotive standards, with complete control and traceability throughout the process.



MULTI PIECE WHEELS

Multi-piece wheels are designed for loads up to 5,000 kg and are available in both steel and aluminium. Designs are available as bolt-together or three-piece wheels and include popular sizes such as 20" x 10" and 20" x 11".

Bolt-together wheels can be disassembled and reassembled in the field with standard fitting tools, and when fitted with our Static RunFlat allow for a fully mountable/demountable RunFlat and wheel solution.

CTIS (Central Tyre Inflation System) integration is also available, allowing tyre pressure control in motion and improving vehicle mobility in difficult terrain.



COMPLETE WHEELS

Our product range is built on the concept of overall tyre protection. This goes beyond the RunFlat system itself with our offering of complete wheel solutions, working with major brands such as Michelin, Continental and BF Goodrich to supply fitted, balanced and inflated wheel assemblies.

By offering a finished solution for all wheel types, customers can be confident that the RunFlat system has been fitted correctly, and that the wheel, RunFlat system and tyre assembly can be fitted straight onto the vehicle.



TOOTA RUNFLAT LUBRICANT – TTGR 3810



Every run-flat installation is completed with Toota Long Life Grease (TTGR 3810), applied between the tyre and the RunFlat insert. In deflated running the tyre carcass and insert drag against each other; TTGR 3810 cuts that friction and heat, protecting both components and preserving the system's full rated run-flat distance. Applied once at installation – no in-service maintenance – and renewed whenever the tyre comes off the wheel.

Applicator tube (TTGR3810): 11.5 fl oz (340 mL), applied with a standard caulk gun; one tube covers a single wheel install. Alternate item to NSN 2640-01-419-6200.

55-gallon drum (TTGR2790): for depots, assembly lines and fleet programs, dispensed by pump. Alternate item to NSN 2640-01-457-5552.

Supplied with every RunFlat order, or separately for existing fleet programs (FMTV, HMMWV, 5-ton and other run-flat equipped platforms).



Tube – TTGR3810



Drum – TTGR2790