



Genuine BMW Toothed Belts

- **Synchronised running**
- **High performance capability**
- **Large gear ratio**
- **Less space required**
- **High belt speed**
- **Quiet running**
- **Lubrication and maintenance free**
- **High efficiency**
- **High resistance to environmental influences**

Function in detail

The toothed belt creates the link from the crankshaft to the camshaft and is thus crucial to engine operation. It has to withstand great mechanical and thermal loads without failure.

The toothed belt itself is made of three different materials:

- The belt spine and the teeth are made from highly durable polychloroprene material.
- The especially low friction polyamide woven fabric protects the teeth continuously from material abrasion and ensures a long operating lifetime.
- The cords made from fibreglass cord are arranged in a helical curve shape over the entire belt width to achieve an extremely high length stability and tensile strength.

Benefits

Synchronised running

Like a gear drive, the teeth of the belt grip directly in the corresponding teeth of the drive disk. The positive locking drive principle produces synchronous running and a constant circumferential speed at all times.

High performance capability

The high rigidity of the teeth, together with the wear-resistant reinforcement fabric and the cord's high dynamic ability to resist loads, ensure reliable performance even at high engine speeds.

Large gear ratio

Through the positive locking, reliable drive function is achieved even with small loops and small tooth wheel diameter.

Less space required

The high dynamic ability to resist severe loads and the high performance capability allows for the use of a smaller tooth wheel diameter and shorter shaft centre. This allows BMW engineers to devise an efficient drive with smaller dimensions and less weight.

High belt speed

The low mass forces and the excellent elastic capability permit belt speeds of up to 25 metres/second.





Quiet running

The pliant toothed belt design with its fibre reinforced rubber teeth in conjunction with metal or plastic toothed disc reduces running noise to a minimum.

Lubrication and maintenance free

Genuine BMW Toothed Belts are maintenance free. Lubrication and tightening is not required during its service life. The use of glassfibre cords guarantees constant belt tension.

High efficiency

The belt's highly flexible construction and bending capacity, along with well dimensioned matching of the tooth contour of belt and toothed disc, creates a virtually abrasion free drive with 98% efficiency.

High resistance to environmental influences

Genuine BMW Toothed Belts are resistant to climatic influences, tropical atmospheres, ozone and temperatures from approx. -40 °C to +120 °C.

Quality assurance

Genuine BMW Toothed Belts must withstand extreme forces. The belts undergo comprehensive tests assessing a number of factors including rigidity, flexibility and resistance.

Every Genuine BMW Toothed Belt is individually packaged to protect it when stored or transported.

Advantages of Genuine BMW Toothed Belts

- Synchronised running and high performance capability
- Wear-resistant reinforcement fabric
- Great dynamic ability to resist severe loads
- Low mass forces
- Excellent elastic capability
- Belt speed up to 25 m/s, 98 % efficiency
- Maintenance free
- High resistance to environmental influences

