

## HT500 synchronous belt drives

Reduce maintenance. Improve reliability. Save money.



For 140 years, Dodge has been an industry-leading manufacturer of mechanical belt drive products. HT500 is the latest generation of Dodge “high-torque” synchronous belt drive systems. The innovative HT500 synchronous belt and sprocket system requires no retensioning, and no lubrication. The result: **maintenance-free** power transmission.

### Keep employees safe

- Downsize large, heavy v-belt drives by up to 50% with compact, lighter-weight HT500 synchronous drives, and **make installations easier and safer**.
- Reduce the risk of slipping on grease or oil in workspace areas by replacing roller chain with a lubrication-free belt system.

### Reduce total cost

- Eliminate v-belt slip and improve energy efficiency to as high as 98% with a positively engaged synchronous drive.
- Get more torque from a less-bulky drive and **save money** up-front with an economical, compact HT500 selection.

### Extend equipment life

- The design and construction of HT500 can handle more torque than traditional v-belts or synchronous belts. Go longer between belt replacements with HT500 and **improve the reliability of your drive**.
- Synchronous belts require less tensioning than v-belts. When properly installed synchronous drives can reduce overhung load on connected equipment, improve reliability, and keep applications running longer.

### Easily make selections

- Passport, Dodge’s online selection program, quickly and easily designs complete belt drive packages
- From conception to completion, start your journey today at [dodgepassport.abb.com](http://dodgepassport.abb.com)

The HT500 synchronous belt drive product line is one of many examples of Dodge's commitment to our customers' success. Contact Dodge sales or engineering for additional supplier service and support!



• **Modified-curvilinear belt teeth**

Fewer fatigue points, less wear, less sliding, less noise, low backlash, and a generally more effective design than other synchronous belt tooth profiles, such as trapezoidal, parabolic, or curvilinear toothed belts

• **Carbon fiber cords**

Prevents elongation, a common issue in v-belts and roller chain. Carbon fiber is also capable of higher torque transmission than other common belt cord materials, such as polyester and fiberglass

• **Polyurethane & nylon**

Constructed with a polyurethane backing and black nylon tooth face, the HT500 belt is resistant to wet, abrasive, and high temp environments

• **Taper-Lock hubs**

HT500 belts are more narrow than older generations of synchronous belts. With flangeless Taper-Lock bushings and sprocket hubs, the HT500 package is an extremely compact design. A smaller, lighter assembly is easier to handle during installation and can reduce the overhung load on connected equipment

• **Designed to MPTA standards**

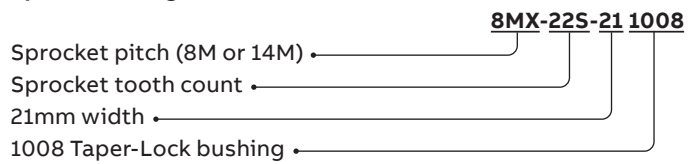
Rugged and reliable sprockets manufactured to the highest quality standards. HT500 sprockets are also protected by corrosion-resistant coatings, including e-coat, making them more resistant to rust and paint chipping than any other line of sprockets on the market

HT500 belt and sprocket sizes

| Belt width         | Sprocket tooth range | Bushing min - max | Belt length range |
|--------------------|----------------------|-------------------|-------------------|
| <b>8 mm pitch</b>  |                      |                   |                   |
| 12mm               | 22S - 224S           | MPB/1008 - 2517   | 248mm - 4480mm    |
| 21mm               | 22S - 224S           | MPB/1008 - 3020   | 248mm - 4480mm    |
| 36mm               | 22S - 224S           | MPB - 3525        | 248mm - 4480mm    |
| 62mm               | 22S - 224S           | MPB - 3526        | 640mm - 4480mm    |
| <b>14 mm pitch</b> |                      |                   |                   |
| 20mm               | 28S - 224S           | 2012 - 4030       | 994mm - 4410mm    |
| 37mm               | 28S - 224S           | MPB/2012 - 4030   | 994mm - 4410mm    |
| 68mm               | 28S - 224S           | MPB - 5040        | 994mm - 4410mm    |
| 90mm               | 28S - 224S           | MPB - 6050        | 994mm - 4410mm    |
| 125mm              | 28S - 224S           | MPB - 7060        | 994mm - 4410mm    |

HT500 part nomenclature:

**Sprocket designation**



**Belt designation**

