



# TPU BELTS

THERMOPLASTIC POLYURETHANE



## e-Belt

TPU DRIVE BELTS TRANSMIT ELECTRICAL POWER AND SIGNALS

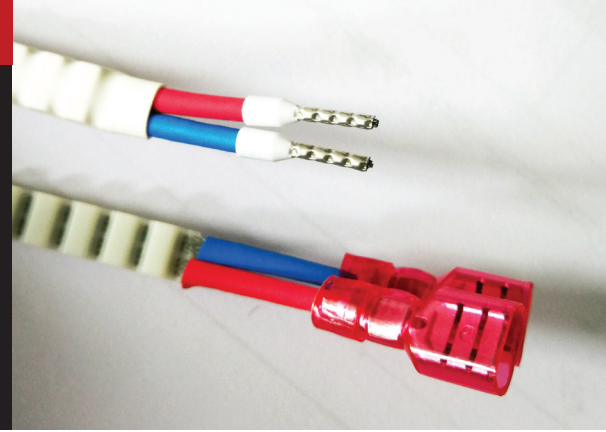
Our advancements and expertise in material science, design engineering, and processing technologies allow Gates to develop TPU belts that can transmit electric power or signals while incorporating the high tensile strength of the steel reinforcement. The steel cords are exposed at the belt ends for electrical connector attachment. The open-ended e-Belts can be cut to custom length. Several timing belt pitches and flat belts are available.

Gates® e-Belts supply limited electric power to small motors or actuators and can transmit electrical signals – saving space and costs of separate electrical cable and guiding installations. The maximum power is determined by the construction and the number of steel cords used for the electrical transmission. Gates® TPU delivers customized solutions with your specified connectors applied to the belt.

Gates® TPU e-Belts combine the durability of Gates quality products with optimal lead times within a reliable partnership – making GATES® e-Belts the number one choice for polyurethane synchronous belts.

### FEATURES + BENEFITS

- Belt with exposed steel cords
- Optional applied connectors
- Synchronous belt pitches or flat belt
- Electric power transmission up to 24V DC
- Maximum power depends upon steel cord construction
- Electrical signal transmission
- Steel reinforcement options for a wide range of applications
- Available within WR Belt series with fully encapsulated cord
- EU, RoHS, and REACH compliant
- Engineering support for custom designs


**PRODUCT SPECIFICATIONS**

<b>PITCHES</b>	T5 / T10 / T20 / AT5 / AT15 / AT10 / ATL10 / BFL20 / WR5 / WRT10 / WRAT10
<b>CORD</b>	Steel, Steel HF, Stainless Steel
<b>COLOR</b>	White, BFL20 Black
<b>FDA/EU APPROVAL</b>	No
<b>POLYURETHANE</b>	92° Shore A
<b>POLYAMIDE FABRIC</b>	N/A
<b>TEMPERATURE RANGE</b>	-5° C to +60° C
<b>MAXIMUM VOLTAGE</b>	24V DC
<b>MAXIMUM ELECTRICAL POWER</b>	Depending on cord construction
<b>OTHER TECHNICAL DATA</b>	Depending on belt construction

**ATTRIBUTES + APPLICATIONS**

Gates® e-Belts transmit electrical power and electrical signals along their steel cord reinforcement. The steel cords can be exposed at the ends by stripping off the polyurethane with electrical connectors applied at Gates® TPU to your specifications.

Multiple cords can be bundled by connectors to transmit electrical power.

Gates® e-Belts supply electric power to small motors or actuators.

**TYPICAL APPLICATIONS ARE:**

- Intralogistic shuttle systems
- Take-off devices at Automated Storage and Retrieval systems
- Automated handling systems

**USING GATES® E-BELT CAN SAVE COST AND SPACE FOR SEPARATE ELECTRICAL CABLES AND CABLE GUIDING SYSTEMS**
