

# TIMING BELT PROFILE - 2, 3 AND 5MM PITCH

2, 3 And 5MM - Hi-Torque and Precision Synchronous Belts

## PowerGrip® GT Series

The improvements in timing belt technology are accomplished by the introduction of a new curved tooth profile which allows greater strength and quieter operation all within a smaller envelope.

Forces are spread along the tooth profile and not at a single stress point. This new belt configuration allows almost complete tooth to pulley groove contact which gives the ability to transmit higher torque than traditional belts and yet maintain significantly reduced backlash characteristics.

**F** The belt life has been greatly enhanced by a combination of engineering features. Removal of the single stress point greatly reduces failure due to fatigue. Close manufacturing tolerances of the profiles help create the smooth entry into and out of the mating pulley. This both reduces wear and provides greatly enhanced positioning accuracy. Addition of the fiberglass reinforcement adds strength and life. A wear surface of nylon adds abrasion resistance to the teeth and gives the tough neoprene an even longer service life.

Engineers are finding uses for the new belt system in a variety of applications, especially when the requirement is for more power and higher accuracy in a smaller envelope. These truly unique belts offer the design engineer the flexibility of having a stronger, more durable belt with greatly improved positioning accuracy. Used in both low and high speed drives, the smooth mating of the belt and pulley plus the ability to use a smaller belt for the same amount of given work, significantly reduces vibration and noise thus affording a quieter operating environment.

Circular pitches are 2,3 and 5mm. The 2mm belts come in lengths from 100 to 744mm and 4, 6, and 9mm widths. The 3mm belts come in lengths from 165 to 1050mm and 6,9,12, and 15mm widths. Finally, the 5mm belts come in lengths from 300 to 2100mm and 9, 15, and 25mm widths.

**NOTE:** These Hi-Torque and Precision Synchronous Belts should not be confused with the standard 3,5, and 8mm pitch timing belts designated by FPX, FQX, and FRX which follow this series.