Timing Belts / Pulleys - Overview

**Overview**

As the means of transmitting the power of rotary motion driven by a motor, a designing approach based on timing belts and pulleys is generally and widely used. Even for machinery parts which are required to have higher positioning accuracy than ever along with improvement of the machinery in precision and speed, MISUMI Timing Pulleys and Belts can be used with a sense of security due to their thorough control of quality.

Various types of Pulleys and Belts are offered. For Belts, Conventional Timing Belts for Transmission, Timing Belts with Attachments for Conveyance, Tooth Count Configurable Long Timing Belts, and Open End Belts are available.

As to delivery, the first day shipping is available at earliest if the express service is used for pulleys machined with shaft bores and surface-treated. And for Keyless Timing Pulleys, the 5th day shipping is available. For belts, as well as In Stock products, products 3rd-day-shipped even on a made-to-order basis are added to the product lineup.

**App. Example**

Driving-to-rotating motors and rotary shafts to allow the driving force of rotary motion to be transmitted.

**Cautions**

- Do not bend belts too hard.
- Avoid direct contact with water, solvent, oil, acid, alkali, ultra-violet light, ozone, etc. If the belt swells due to contact with oil, its service life will be considerably shortened.
- When core wire is steel cord, avoid giving tension from the backside.
- When in use, the belt should be replaced if any damage such as cracking or abrasion is observed.

**Technical Data**

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**Usage Features**

- **Conveyance** is used for reciprocating motion with high positioning accuracy rather than for rotary motion.

**Timing Pulley Belt Selection Steps**

- When selecting timing pulleys and belts, please check each of the following steps for its details by referring to the page indicated on the right side.

  1. Determine conditions needed for designing. P.2253
  2. Calculate the design power. P.2253
  3. By using the simplified selection table, select the target belt types on an interim basis. P.2255
  4. For each of Small/Large Dia. Pulley, determine the number of teeth, belt length and shaft center distance. P.2256
  5. Determine the belt width. P.2256
  6. Check that the adjustment allowance of the shaft center distance is adequate. P.2257
  7. Verify the transmission capacity. P.2259

**Usage Belts**

- For belts, as well as In Stock products, products 3rd-day-shipped even on a made-to-order basis are added to the product lineup.

**List of Timing Pulleys and Idlers**

- MISUMI Timing Pulleys are shaft bore machined and surface-treated. In addition to regular pulleys, wide variety of pulleys including Non-Backlash Timing Pulley and MechaLock Incorporated Keyless Timing Pulleys are available.

**List of Timing Belts**

- MISUMI offers a wide variety of timing belts. Conventional Timing Belts for Transmission, Timing Belts with Attachments for Conveyance, Tooth Count Configurable Long Timing Belts, and Open End Belts are available. The CT series suitable for high accuracy positioning is also offered.

**Usage**

- For timing belts dedicated for 1.5GT and T2.5, please contact MISUMI VONA.