

# High Torque Timing Pulleys - 8YU

Compatible with EV8YU Type from Gates Unitta Asia Company.

For Super High Torque Timing Belts (compatible EV8YU belts), see **P.1461** and for Idlers with Teeth, see **P.1453**.



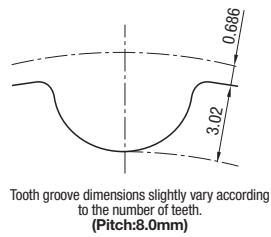
RoHS 10

| Type | Belt Width |      |      | Material*                  |                  | Surface Treatment | Accessory* Set Screws                 |
|------|------------|------|------|----------------------------|------------------|-------------------|---------------------------------------|
|      | 15mm       | 20mm | 25mm | Pulley                     | Flange           |                   |                                       |
| GPA  | ●          | ●    | ●    | 2000 Series Aluminum Alloy | Aluminum Alloy   | Clear Anodize     | EN 1.4301 Equiv.                      |
| GPT  | ●          | ●    | ●    | EN 1.1191 Equiv.           | EN 1.0330 Equiv. | -                 | Chrome Molybdenum Steel (Black Oxide) |
| GPM  | ●          | ●    | ●    |                            |                  | Black Oxide       |                                       |

\*Flange is installed, and set screws are included with Shaft Bores P and N.

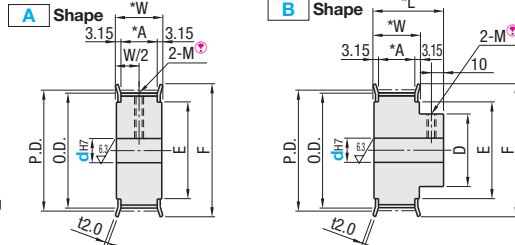
\*The above material and accessory might be changed to the ones equivalent to the originals.

## Standard Tooth Profile



Tooth groove dimensions slightly vary according to the number of teeth. (Pitch:8.0mm)

## Pulley Shape



## Tapped Hole Dimensions (Shaft Bore Specs.: P, N)

| dh7 Shaft Bore I.D. | M (Coarse) | Accessory Set Screws |
|---------------------|------------|----------------------|
| 16~17               | M5         | M5x4                 |
| 18~30               | M6         | M6x5                 |
| 31~45               | M8         | M8x6                 |
| 46~65               | M10        | M10x8                |

## Belt Nominal Width / Dimension

| mm | Nominal |        |        |
|----|---------|--------|--------|
|    | YU8150  | YU8200 | YU8250 |
| A  | 16.7    | 21.7   | 26.7   |
| W  | 23.0    | 28.0   | 33.0   |
| L  | 43.0    | 48.0   | 53.0   |

## Number of Teeth / Dimension

| mm   | Number of Teeth |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |
|------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
|      | 20              | 22    | 24    | 25    | 26    | 28    | 30    | 32    | 34    | 36    | 38    | 40     | 44     | 48     | 50     | 60     |
| P.D. | 50.93           | 56.02 | 61.12 | 63.66 | 66.21 | 71.30 | 76.39 | 81.49 | 86.58 | 91.67 | 96.77 | 101.86 | 112.05 | 122.23 | 127.32 | 152.79 |
| O.D. | 49.56           | 54.65 | 59.75 | 62.29 | 64.84 | 69.93 | 75.02 | 80.12 | 85.21 | 90.30 | 95.40 | 100.49 | 110.68 | 120.86 | 125.95 | 151.42 |
| D    | 36              | 40    | 44    | 46    | 48    | 52    | 56    | 60    | 64    | 68    | 72    | 74     | 78     | 80     | 82     | 88     |
| F    | 62              | 64    | 70    | 72    | 75    | 80    | 85    | 90    | 95    | 100   | 105   | 110    | 121    | 131    | 136    | 161    |
| E    | 40              | 45    | 50    | 52    | 54    | 59    | 64    | 69    | 74    | 79    | 84    | 89     | 99     | 109    | 114    | 140    |

## Shaft Bore Specs.

Surface treatment may not be applied to shaft bores.

**H** Round Hole    **P** Round Hole + Tap    **N** New JIS Keywayed Bore + Tap    **V** Stepped Hole    **F** Stepped Hole (Counterbored Holes on the Hub Side)    **Y** Both Ends Stepped Hole

- H**: No tapped holes or set screws.
- P**: For A-Shape pulley, the screw holes are set at around 120° to keep away from peaks.
- N**: For Keyway Dimension Details, see P1377.
- V**: GPA is not applicable. No tapped holes or set screws.
- F**: GPA is not applicable. Applicable to Shape B only. No tapped holes or set screws.
- Y**: GPA is not applicable. Applicable to Shape A only. Shaft Bore Dia. d is +0.1 / 0. No tapped holes or set screws. Q (R) - Y ≥ 2

| Part Number | Pulley Shape  |                 |      |                 |      |                 |      |   |      |                 |      |                 |      |                 |
|-------------|---|-----------------|------|-----------------|------|-----------------|------|---|------|-----------------|------|-----------------|------|-----------------|
|             | A   |                 |      |                 |      |                 |      | B   |      |                 |      |                 |      |                 |
|             | Shaft Bore Specifications (-): Specify in 1mm Increment, (,): Select the former or latter |                 |      |                 |      |                 |      | Shaft Bore Specifications (-): Specify in 1mm Increment, (,): Select the former or latter |      |                 |      |                 |      |                 |
|             | Type  | Number of Teeth | Type | Number of Teeth | Type | Number of Teeth | Type | Number of Teeth   | Type | Number of Teeth | Type | Number of Teeth | Type | Number of Teeth |
|             |   | 20              |      | 22              |      | 24              |      | 25  |      | 26              |      | 28              |      | 30              |
|             |   | 32              |      | 34              |      | 36              |      | 38  |      | 40              |      | 44              |      | 48              |
|             |   | 50              |      | 52              |      | 54              |      | 59  |      | 64              |      | 69              |      | 74              |
|             |   | 80              |      | 85              |      | 90              |      | 95  |      | 100             |      | 105             |      | 110             |
|             |   | 121             |      | 131             |      | 136             |      | 140   |      | 145             |      | 150             |      | 155             |
|             |   | 160             |      | 170             |      | 180             |      | 190   |      | 200             |      | 210             |      | 220             |

**Ordering Example** (Shaft Bore Specs.: H, P, N) **GPA30YU8150** - **A** - **P25**  
 (Shaft Bore Specs.: V, F) **GPT36YU8200** - **B** - **V20** - **Z24** - **J20.0**  
 (Shaft Bore Specs.: Y) **GPM40YU8250** - **A** - **Y30** - **Q34** - **R38** - **S10** - **T15**

| Number of Teeth | Body Price                          |        |        |        |                  |        |        |        |                                |        |        |        |        |        | Shaft Bore Machining Charge (Body Price +) |        |              |
|-----------------|-------------------------------------|--------|--------|--------|------------------|--------|--------|--------|--------------------------------|--------|--------|--------|--------|--------|--|--------|--------------|
|                 | 2000 Aluminum Alloy (Clear Anodize) |        |        |        | EN 1.1191 Equiv. |        |        |        | EN 1.1191 Equiv. (Black Oxide) |        |        |        |        |        |  |        |              |
|                 | YU8150                              | YU8200 | YU8250 | YU8150 | YU8200           | YU8250 | YU8150 | YU8200 | YU8250                         | YU8150 | YU8200 | YU8250 | YU8150 | YU8200 | YU8250                                     | P Hole | N, V, F Hole |
| 20              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 22              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 24              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 25              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 26              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 28              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 30              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 32              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 34              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 36              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 38              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 40              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 44              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 48              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 50              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |
| 60              |                                     |        |        |        |                  |        |        |        |                                |        |        |        |        |        |  |        |              |

Alterations **Part Number** - Pulley Shape - Shaft Bore Specs., I.D. - Z - J - Q - R - S - T - (KC90--etc.)  
**GPA30YU8150** - **A** - **P25** - **Z** - **J** - **Q** - **R** - **S** - **T** - **KC90** - **QFC40** - **M4**

| Alterations Code | Set Screw Angle  | Flange Not Swaged                   | Flange Swaged on One Side               | Flange Cut  | Hub Shortening                                       |
|------------------|--|-------------------------------------|---|---|--|
|                  | <b>KC90</b>  | <b>NFC</b>                          | <b>RFC, LFC</b>                         | <b>FC</b>   | <b>BC</b>  |
| <b>Spec.</b>     | Changes an angle of set screw to 90°. For A-Shape pulley, the screw holes are set at around 90° to keep away from peaks. | (Flange 2 pcs. Included) <b>NFC</b> | (Flange 1 pc. Included) <b>RFC, LFC</b> | Cut the flange O.D. in 0.5mm increment. <b>FC17</b> | Cuts the hub length in 0.5mm increment. <b>BC6.5</b> |

| Alterations Code | Side Through Hole / Side Tapped Hole, 3 places                     | Side Through Hole / Side Tapped Hole, 4 places                     | Side Through Hole / Side Tapped Hole, 6 places                     |
|------------------|--|--|--|
|                  | <b>KTC, QTC</b>  | <b>KFC, QFC</b>  | <b>KSC, QSC</b>  |
| <b>Spec.</b>     | Machine Through Hole / Tapped Hole on the side surface of hub side | Machine Through Hole / Tapped Hole on the side surface of hub side | Machine Through Hole / Tapped Hole on the side surface of hub side |