

High Torque Timing Pulleys - 1.5GT, 2GT

Compatible with 1.5GT, 2GT
Types from Gates Unitta Asia
Company.

For 2GT High Torque Timing Belts, see P.1493. For 2GT Idlers with Teeth, see P.1487. For 1.5GT High Torque Timing Belts, see VONA website.

Type	Belt Width				Material*		Surface Treatment	Accessory* Set Screws
	4mm GT15040	4mm GT2040	6mm GT2060	9mm GT2090	Pulley	Flange		
GPA	●	●	●	●	Aluminum Alloy	Aluminum Alloy	Clear Anodize	SUS304

* The above material and accessory might be changed to the ones equivalent to the originals.
* Flange is already swaged, and set screws are included with for Shaft Bore Spec. P and N.

• Pulley Shape **A**

Shape A

Shape B

⊗ For 1.5GT, Shape B, 24 or less teeth is not selectable and, for 2GT, Shape B, 21 or less teeth is not selectable.

Standard Tooth Profile

Teeth groove dimensions slightly vary according to the number of teeth.
Top (Pitch: 1.5mm)
Bottom (Pitch: 2.0mm)

⊗ Shaft Bore Specs. H (Round Hole) do not have tapped holes.

Number of Teeth, Dimension: 1.5GT

mm	18	20	24	30	36
P.D.	8.59	9.55	11.46	14.32	17.19
O.D.	8.13	9.09	11.00	13.86	16.73
D	-	-	-	8	10
F	13	14	16	18	22
E	6	7	8	10	13

Number of Teeth, Dimension: 2GT

mm	14	15	16	18	20	21	22	24	25	26	28	30	32	34	36	38	40	44	48	50	60
P.D.	8.91	9.55	10.19	11.46	12.73	13.37	14.01	15.28	15.92	16.55	17.83	19.10	20.37	21.65	22.92	24.19	25.46	28.01	30.56	31.83	38.20
O.D.	8.40	9.04	9.68	10.95	12.22	12.86	13.50	14.77	15.41	16.04	17.32	18.59	19.86	21.14	22.41	23.68	24.95	27.50	30.05	31.32	37.69
D	-	-	-	-	-	8	10	10	10	10	11	13	14	14	16	17	19	22	22	22	28
F	13	14	14	16	17	18	18	20	20	21	23	24	27	27	29	30	32	35	36	42	
E	6	7	7	8	9	10	10	12	12	12	14	15	17	18	18	20	21	23	26	27	33

Belt Nominal Width / Dimension

mm	GT15040	GT2040	GT2060	GT2090
A	5.0	5.0	7.0	10.0
W	8.3	8.3	10.3	13.3
L	16.0	16.0	18.0	21.0

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

mm	M	Accessory Set Screws
5	M3	M3x3
6-22	M4	M4x3

Number of Teeth, Dimension: 2GT

• Shaft Bore Specs. Select shaft bore spec mark and d dim. from the table below. ⊗ 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

⊗ No tapped holes or set screws.
⊗ Shaft Bore Dia. 4.5 and 6.35 are selectable when the shaft bore dim. d is within the selection range.

⊗ Shaft Bore Dia. 6.35 is selectable when the shaft bore dim. d is within the selection range.

⊗ For Keyway Dimension Details, see P.1413. Specify NK10 when selecting "New JIS Keywayed Bore" + "Shaft Bore Dia. 10" + "Keyway Width 4.0mm".

⊗ No tapped holes or set screws.
⊗ Shaft Bore Dia. 6.35 is selectable when the shaft bore dim. d is within the selection range.

⊗ Applicable to Shape B only.
⊗ No tapped holes or set screws.
⊗ Shaft Bore Dia. 6.35 is selectable when the shaft bore dim. d is within the selection range.

⊗ Applicable to Shape A only.
⊗ No tapped holes or set screws.

1.5GT		Part Number		Pulley Shape	Pulley Shape			
Type	Number of Teeth	Type, Nominal Width	A		B			
			Shaft Bore Specs. d (Selection)		Shaft Bore Specs. d (Selection)			
				H Round Hole	P Round Hole + Tap	N Keyway + Tap	H Round Hole	P Round Hole + Tap
Aluminum GPA	18	GT15040	A	3				
	20			3, 4		-	-	-
	24			4, 4.5, 5	-			
	30			4, 4.5, 5, 6	5, 6		4	5, 6
	36		5, 6, 6.35, 7, 8	5, 6, 6.35, 7, 8	8	5, 6, 6.35, 7, 8	5, 6, 6.35, 7, 8	

2GT		Part Number		Pulley Shape	
Type	Number of Teeth	Type, Nominal Width	Pulley Shape	Shaft Bore Specs. d (Selection)	
Aluminum GPA	14	GT2040	A	H Round Hole	P Round Hole + Tap
	15			3	-
	16			3, 4	-
	18			4, 4.5, 5	-
	20			4, 4.5, 5, 6	-
	21			4-6	-
	22			4-6	-
	24			5-8	-
	25			5-8	-
	26			5-8	-
	28			5-10	-
	30			5-11	-
	32			5-13	-
	34			5-13	-
	36			5-13	-
Aluminum GPA	14	GT2060	B	H Round Hole	P Round Hole + Tap
	15			3	-
	16			3, 4	-
	18			4, 4.5, 5	-
	20			4, 4.5, 5, 6	-
	21			4-6	-
	22			4-6	-
	24			5-8	-
	25			5-8	-
	26			5-8	-
	28			5-10	-
	30			5-11	-
	32			5-13	-
	34			5-13	-
	36			5-13	-
Aluminum GPA	14	GT2090	B	H Round Hole	P Round Hole + Tap
	15			3	-
	16			3, 4	-
	18			4, 4.5, 5	-
	20			4, 4.5, 5, 6	-
	21			4-6	-
	22			4-6	-
	24			5-8	-
	25			5-8	-
	26			5-8	-
	28			5-10	-
	30			5-11	-
	32			5-13	-
	34			5-13	-
	36			5-13	-

For e-Catalog non-standard products, see P.131.

Number of Teeth	Body Price								Shaft Bore Machining Charge (Body Price +)				
	A2000 Aluminum Alloy (Clear Anodize)								1.5GT				
	GT15040	GT2040	GT2060	GT2090	GT15040	GT2040	GT2060	GT2090	P Hole	N Hole	P Hole	N, V, F Hole	Y Hole
14	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-	-	-	-	-	-	-
34	-	-	-	-	-	-	-	-	-	-	-	-	-
36	-	-	-	-	-	-	-	-	-	-	-	-	-
38	-	-	-	-	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-	-	-	-	-
44	-	-	-	-	-	-	-	-	-	-	-	-	-
48	-	-	-	-	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-	-	-	-

Alterations

Part Number - Pulley Shape - Shaft Bore Specs., ID. - (KC90...etc.)

GPA32GT2060 - A - H8 - NFC

Alterations	Set Screw Angle	No Flange Swaged	Single Flange	Flange Cut	Hub Shortening
Code	KC90	NFC	RFC, LFC	FC	BC
Spec.	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) Ordering Code NFC	(Flange 1 pc. Included) Ordering Code RFC	Cuts the flange O.D. in 0.5mm increment. Ordering Code FC17 Application Notes ⊗ FC≥(O.D.)+1 ⊗ FC≤F-2 ⊗ No surface treatment is applied on flange circumference.	Cuts the hub length in 0.5mm increment. Ordering Code BC6.5 Application Notes ⊗ Shaft Bore Specs. H: 3≤BC<L-W ⊗ Shaft Bore Specs. P, N: M+3≤BC<L-W ⊗ Not available for Shape A.

Alterations	Add Side Holes			Conditions may vary depending on the shaft bore specs. P.1414		
Code	Side Tapped Hole	Side Through Hole	Side Counterbored	Side Tapped Hole	Side Through Hole	Side Counterbored
Code	QTC, QFC, QSC	KTC, KFC, KSC	ZTC, ZFC, ZSC	QTC, QFC, QSC	KTC, KFC, KSC	ZTC, ZFC, ZSC
Spec.	Machines tapped hole on the side surface of hub side. Ordering Code QTC28-M4 QTC Selection Specify the hole position (P, C, D, dim.). M Selection M3, M4, M5, M6, M8 Application Notes ⊗ Not available for 1.5GT ⊗ Minimum Thickness: 2mm Formula P.1414 ⊗ Conditions may vary depending on the shaft bore specs. P.1414	Machines through hole on the side surface. Ordering Code KTC28-K4.5 KTC Selection Specify the hole position (P, C, D, dim.). Code K K4.0 ~ 8.0 (0.5mm Increments) Application Notes ⊗ Not available for 1.5GT ⊗ Minimum Thickness: 2mm Formula P.1414 ⊗ Conditions may vary depending on the shaft bore specs. P.1414	Machines counterbored hole on the side surface. Ordering Code ZTC28-Z4 ZTC Selection Specify the hole position (P, C, D, dim.). Z Selection ZM3, ZM4, ZM5, ZM6, ZM8 Application Notes ⊗ Not available for 1.5GT ⊗ Minimum Thickness: 2mm Formula P.1414 ⊗ Conditions may vary depending on the shaft bore specs. P.1414	Machines tapped hole on the side surface of hub side. Ordering Code QTC28-M4 QTC Selection Specify the hole position (P, C, D, dim.). M Selection M3, M4, M5, M6, M8 Application Notes ⊗ Not available for 1.5GT ⊗ Minimum Thickness: 2mm Formula P.1414 ⊗ Conditions may vary depending on the shaft bore specs. P.1414	Machines through hole on the side surface. Ordering Code KTC28-K4.5 KTC Selection Specify the hole position (P, C, D, dim.). Code K K4.0 ~ 8.0 (0.5mm Increments) Application Notes ⊗ Not available for 1.5GT ⊗ Minimum Thickness: 2mm Formula P.1414 ⊗ Conditions may vary depending on the shaft bore specs. P.1414	Machines counterbored hole on the side surface. Ordering Code ZTC28-Z4 ZTC Selection Specify the hole position (P, C, D, dim.). Z Selection ZM3, ZM4, ZM5, ZM6, ZM8 Application Notes ⊗ Not available for 1.5GT ⊗ Minimum Thickness: 2mm Formula P.1414 ⊗ Conditions may vary depending on the shaft bore specs. P.1414

