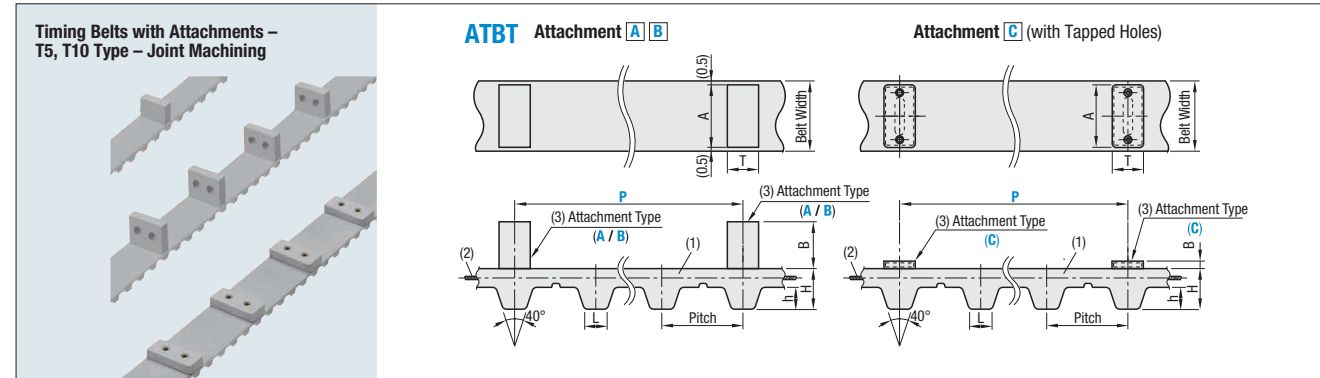


# Timing Belts with Attachments

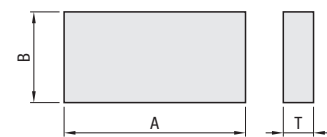
## T5, T10 Type – Joint Machining

Attachments are thermally bonded to the backside of the Timing Belt. It enables a constant pitch conveyance of various work pieces. For Timing Pulleys, refer to P.1380–1382.



### Attachment Shape Details

#### Attachment A



Operating Temperature -20~70°C

Material	
(1) Main Body	Polyurethane (for Joint Process)
(2) Core Wire	Aramid Core Wire
(3) Attachment	Polyurethane (for Joint Process)

Type	Pitch	H	h	L
T5	5	2.2	1.2	1.8
T10	10	4.5	2.5	3.5

#### Attachment A Dimensions

Type	Belt Width (mm)	A	B	T	Belt Unit Mass g/m (Width: 10 mm)	Attach. Mass (g)	Pulley Minimum Number of Teeth
T5	10	9			20.0	0.34	12
	15	14				0.52	
	20	19	10	3		0.71	
	25	24				0.89	
T10	15	14			40.0	0.86	14
	20	19	10			1.17	
	25	24				1.47	
	30	29	15	5		2.67	
	40	39				3.59	
	50	49	20			6.02	

\*B dimension is a dimension after adhesion.

Operating Temperature -20 to 70°C (Reference Value).

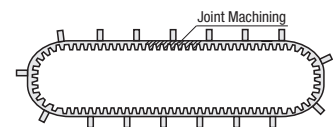
- The attachment is mounted on the backside above the belt teeth.
- Attachment C is mounted on the center of the belt.
- Joining process reduces allowable tension to approx. 50% of open end belts.
- Adhesion burrs are now same level as NB alteration due to the process improvement.

#### Tolerance of Mounting Pitch Attachment (mm)

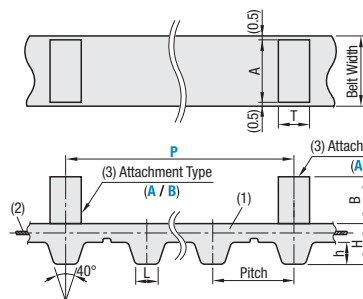
Mounting Pitch	Tolerance of Mounting Pitch
30-200	±0.5
300-	±1.0

#### Joint Process

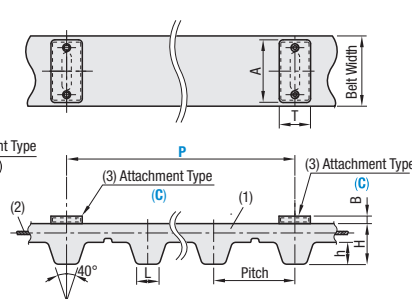
The Open End Belt can be changed to an endless belt by heat-sealing the ends of the Open End Belt. Core wires of the joint part are not connected.



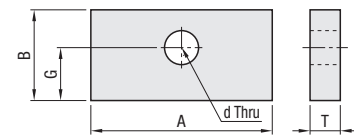
#### ATBT Attachment A/B



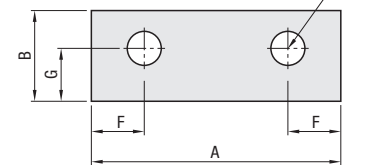
#### Attachment C (with Tapped Holes)



#### Attachment B (Belt width 10 and 15mm)



(Belt Width 20, 25, 30, 40 and 50 mm)

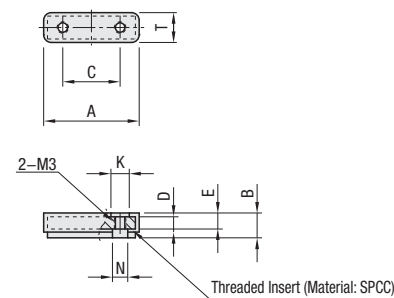


#### Attachment B Dimensions

Type	Belt Width (mm)	A	B	d (Through Hole)	G	F	T	Belt Unit Mass g/m (Width: 10mm)	Attach. Mass (g)	Pulley Minimum Number of Teeth
T5	10	9	10	3.5	5.5			20.0	0.30	12
	15	14	15	4.5	9	5	3		0.72	
	20	19	20	2-4.5	13	6			0.94	
	25	24	25	2-5.5	13	6			1.61	
	30	29	30	2-5.5	13	6			1.19	
T10	15	14	15	4.5	9			40.0	1.55	14
	20	19	20	2-4.5	13	7			2.66	
	25	24	25	2-5.5	13	7			3.15	
	30	29	30	2-6.5	13	7			4.38	
	40	39	40						5.61	
	50	49	50							

\*B and G dimensions are dimensions after adhesion.

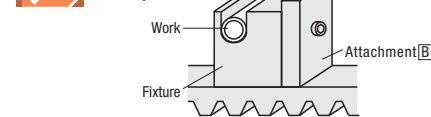
#### Attachment C (with Tapped Holes)



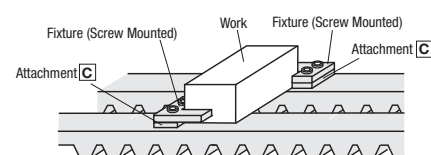
#### Attachment C Dimensions

Type	Belt Width (mm)	A	B	T	C	D	E	K	N	Belt Unit Mass g/m (Width: 10 mm)	Attach. Mass (g)	Pulley Minimum Number of Teeth
T5	25	25.0	6.5	7.8	15.0	3.2	5.0	4.8	4.0	40.0	3.9	20
	30											
	40											
	50											
	60											
T10	25											
	30											
	40											
	50											
	60											

#### Application Example



Attachment B allows mounting of work-piece specific fixtures.



Attachment C allows screw-mounting of fixtures/brackets from above, providing freedom in work-piece heights and shapes.

# Timing Belts with Attachments

## T5, T10 Type – Joint Machining, continued

### Type T5 (Pitch: 5 mm)

Type	Part Number			Attachment Type	Attachment Mounting Pitch P
	Belt Circumference Length (mm)	Belt Shape	Belt Width		
ATBT	700-4000 (5 mm Increment)	T5	100 (10 mm)	A  B	30-4000 (5 mm Increment)
			150 (15 mm)		
			200 (20 mm)		
			250 (25 mm)		

### Type T10 (Pitch: 10 mm)

Type	Part Number			Attachment Type	Attachment Mounting Pitch P
	Belt Circumference Length (mm)	Belt Shape	Belt Width		
ATBT	700-4000 (10 mm Increment)	T10	150 (15 mm)	A  B  C	30-4000 (10 mm Increment)  * For Attachment C 40-4000 (10 mm Increment)
			200 (20 mm)		
			250 (25 mm)		
			300 (30 mm)		
			400 (40 mm)		
500 (50 mm)					

- Attachments are available from one piece.
  - When 1 attachment is specified, please make the attachment mounting pitch (P) same as the belt circumference length.
  - Select a mounting pitch for attachment that belt circumference length is divisible by integers.
- (Ex.) T5 Type, when belt circumference is 1050  
 [Good Ex] 1050/30=35 [Good Ex] 1050/50=21 [Good Ex] 1050/350=3  
 [Bad Ex] 1050/100=10.5  
 Attachment Mounting Pitch 30, 50 and 350 are selectable, but 100 is not selectable.

#### Part Number Example

Type	Belt No.	Belt Nominal Width	Attachment Type (A / B / C)	Attachment Mounting Pitch P
ATBT	1200T10	200	A	P100
ATBT	2450T10	300	C	P2450

- When specifying one attachment, select a mounting pitch of the same number as belt number.
- Select a mounting pitch for attachment that belt circumference length is divisible by integers.

Belt Shape	Belt Nominal Width	Attachment Available Sizes		
		A	B	C
T5	100			
	150			
	200			
	250			
T10	150	•	•	
	200			
	250			
	300			•
	500			