

Synchronous Power Transmission (Synchronous Belts)

List of Synchronous Power Transmission Belt Product Systems

Industrial machinery has recently been rapidly advancing in performance and automatization, with increasing demands for complication and diversification of power transmission mechanisms, and the fields in which synchronous belts are used have been expanding. Bando's synchronous power transmission belts are available in inventory in abundant types and sizes to meet the needs of any field, and they are sold together as a set with pulleys for ease of use.

Please adopt our synchronous power transmission belts for new designs or equipment improvement to help to solve your difficult problems.

Classification	Name		Belt type	S1.5M	S2M	S3M	S4.5M	S5M	S8M	S14M	Product introduction page	Design calculation page
Round teeth	King Power Synchronous Belt	KPS II	Material	R							29	31
				U						○		

Classification	Name		Belt type	S1.5M	S2M	S3M	S4.5M	S5M	S8M 8M	S14M	Product introduction page	Design calculation page
Round teeth	Ceptor-X	Ceptor-X	Material	R					●	●	42	79
				U								
	Ceptor-VI	Ceptor-VI	Material	R		●		●	●		44	
				U								
	High-Performance Super-Torque Synchronous Belt	HP-ST5	Material	R				●	●	●	48	
				U								
	High-Performance High-Torque Synchronous Belt	HP-HT5	Material	R					●		48	
				U								
	Super-Torque Synchronous Belt Eco	STS-eco	Material	R		●	●				52	
				U								
Super-Torque Synchronous Belt	STS	Material	R	●	●	●	●			53		
			U		○	○						

Classification	Name		Belt type	DS2M	DS3M	DS4.5M	DS5M	DS8M	DS14M	Product introduction page	Design calculation page
Round teeth	Double-Sided Super-Torque Synchronous Belt	Double-Sided ST5	Material	R	●	●	●	●	●	59	79
				U							

Material symbol / R: rubber, U: polyurethane

Remark: For the following special specification synchronous belts, please contact us.

- Special pitch synchronous belt
- Steel cord synchronous belt
- Oil-resistant synchronous belt
- Heat-resistant synchronous belt
- High-electric-resistance synchronous belt
- Special profile synchronous belt
- Wide synchronous belt
- Pale-colored synchronous belt

Classification	Name		Belt type	XXL	MXL	XL	L	H	XH	XXH	T2.5	T5	T10	Product introduction page	Design calculation page
Trapezoidal teeth	Synchronous Belt Eco	Material	R		●									64	79
			U												
Trapezoidal teeth	Synchronous Belt	Material	R	●	●	●	●	●	●	●				65	79
			U		○	○	○				○	○	○		

Classification	Name		Belt type	DXL	DL	DH	DT5	DT10	Product introduction page	Design calculation page
Trapezoidal teeth	Double-Sided Synchronous Belt	Material	R	●	●	●			76	79
			U	○			○	○		

Classification	Name		Belt type	TN10	TN15	Product introduction page	Design calculation page
Trapezoidal teeth	Synchronous Belt TN	Material	R			65	79
			U	○	○		

Material symbol / R: rubber, U: polyurethane

List of Belt Widths

Tooth pitch mm	Belt width			2 mm	2.5 mm	3 mm	4 mm	5 mm	6 mm	8.5 mm	10 mm	15 mm	20 mm	25 mm	30 mm	40 mm	50 mm	55 mm	60 mm	70 mm	80 mm	85 mm	100 mm	115 mm	120 mm	130 mm	150 mm	170 mm	
	Type	Belt type	Material																										
1.5	STS	S1.5M	R				●	●	●																				
2.0	STS	S2M	R				●	●	●																				
			U				○	○	○																				
	Double-Sided STS	DS2M	R				●	●	●																				
3.0	STS	S3M	R					●	●	●																			
			U					○	○	○																			
	Double-Sided STS	DS3M	R					●	●	●																			
	Ceptor-VI	S3M	R					●	●	●																			
4.5	STS	S4.5M	R					●	●	●																			
	Double-Sided STS	DS4.5M	R					●	●	●																			
5.0	Double-Sided STS	DS5M	R							●	●	●	●																
	HP-STTS	S5M	R							●	●	●	●																
	Ceptor-VI	S5M	R							●	●	●	●																
	Double-Sided STS	DS8M	R								●	●	●	●															
8.0	HP-STTS	S8M	R								●	●	●	●															
	HP-HTS	8M	R									●	●	●	●	●													
	Ceptor-VI	S8M	R								●	●	●	●															
	Ceptor-X	S8M	R								●	●	●	●															
	KPS II	KPS II 8M	U								○	○	○	○															
	Double-Sided STS	DS14M	R									●	●	●	●														
14.0	HP-STTS	S14M	R									●	●	●	●														
	Ceptor-X	S14M	R									●	●	●	●														
	KPS II	KPS II 14M	U									○	○	○	○														
	Belt width (mm)				2	2.5	3	4	5	6	8.5	10	15	20	25	30	40	50	55	60	70	80	85	100	115	120	130	150	170

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* For the S tooth profile, the nominal width is ten times the belt width.

List of Belt Widths

Tooth pitch mm	Nominal width			3.2 (3.2mm)	4.8 (4.8mm)	6.4 (6.4mm)	7.9 (7.9mm)	9.5 (9.5mm)	12.7 (12.7mm)									
	Type	Belt type	Material															
2.032	Synchronous	MXL	R	●	●	●		●	●									
			U	○	○	○	○	○	○									

Tooth pitch mm	Nominal width					025 (6.4mm)	031 (7.9mm)	037 (9.5mm)	050 (12.7mm)	075 (19.1mm)	100 (25.4mm)	150 (38.1mm)	200 (50.8mm)	300 (76.2mm)	400 (101.6mm)	500 (127.0mm)	600 (152.4mm)	
	Type	Belt type	Material															
5.080	Synchronous	XL	R			●	●	●	●	●								
			U			○	○	○	○	○								
	Double-sided synchronous	DXL	R			●	●	●	●	●								
			U			○	○	○	○	○								
9.525	Synchronous	L	R						●	●	●	●	●					
			U						○	○	○	○	○					
	Double-sided synchronous	DL	R						●	●	●	●	●					
			U															
12.700	Synchronous	H	R							●	●	●	●	●				
			U							○	○	○	○	○				
22.225	Synchronous	XH	R										●	●	●	●	●	
			U															
31.750	Synchronous	XXH	R										●	●	●	●	●	
3.175	Synchronous	XXL	R	No settings														

Tooth pitch mm	Nominal width			3 (3.04mm)	5 (5.0mm)	7 (7.0mm)	10 (10.0mm)	13 (13.0mm)	15 (15.0mm)	20 (20.0mm)	25 (25.0mm)	30 (30.0mm)	50 (50.0mm)
	Type	Belt type	Material										
2.5	Synchronous	T2.5	U	○	○	○	○	○					
5.0	Synchronous	T5	U		○		○		○	○	○		
	Double-sided synchronous	DT5	U		○		○		○	○	○		
10.0	Synchronous	T10	U						○	○	○	○	○
	Double-sided synchronous	DT10	U						○	○	○	○	○

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List of Pulley Product Systems

STS Pulleys with BAN-LOCK

Pulley tooth profile	Stock	Pulley nominal width	No. of teeth of pulley	Material	Details page
S5M	Made-to-order	0150, 0200, 0250	26~60	Carbon steel for machine construction	137~142
S8M	Made-to-order	0150, 0250, 0400	19~60		
S14M	Made-to-order	0400, 0600	28~50		

TL STS Pulleys (Bushing Type)

Pulley tooth profile	Stock	Pulley nominal width	No. of teeth of pulley	Material	Details page
S8M	Standard stock	0150	28~96	Cast iron or carbon steel for machine construction	143~144
	Made-to-order		120~156		
	Standard stock	0250	32~96		
	Made-to-order		120~156		
	Standard stock	0400	36~96		
	Made-to-order		120~156		
	Standard stock	0600	48~96		
	Made-to-order		120~156		
S14M	Standard stock	0400	28~84	Cast iron or carbon steel for machine construction	145~146
	Made-to-order		96~156		
	Standard stock	0600	28~84		
	Made-to-order		96~156		
	Standard stock	0800, 1000	36~84		
	Made-to-order		96~156		
	Made-to-order	1200	40~156		
	Made-to-order		40~156		

STS Pulleys (Shaft-Hole-Machined Type)

Pulley tooth profile	Stock	Pulley nominal width	No. of teeth of pulley	Material	Details page
S1.5M	Made-to-order	0040, 0060, 0100	16~60	High-strength aluminum alloy	147~152
S2M	Made-to-order	0040, 0060, 0100	14~24		
S3M	Made-to-order	0060, 0100, 0150	26~60		
S4.5M	Standard stock	0060, 0100, 0150	12~44	Carbon steel for machine construction	153~160
	Made-to-order		48~72		
S5M	Standard stock	0100, 0150, 0200, 0250	14~60		
S8M	Standard stock	0150, 0250, 0400, 0600	18~60		
	Made-to-order		72~156		
S14M	Standard stock	0400, 0600, 0800, 1000	28~50		
	Made-to-order		60~156		
	Made-to-order	1200	28~156		

HTS Pulleys (Shaft-Hole-Machined Type)

Pulley tooth profile	Stock	Pulley nominal width	No. of teeth of pulley	Material	Details page
8M	Made-to-order	0200, 0300, 0500	22~56	Carbon steel for machine construction	162~164
14M	Made-to-order	0400, 0550, 0850	28~44		

List of Pulley Product Systems

TL Synchronous Pulleys (Bushing Type)

Pulley tooth profile	Stock	Pulley nominal width	No. of teeth of pulley	Material	Details page
L	Standard stock	050, 075, 100	19~84	Cast iron or carbon steel for machine construction	169~170
	Made-to-order				
H	Standard stock	100	18~96	Cast iron or carbon steel for machine construction	171~172
	Made-to-order				
	Standard stock	150	20~96		
	Made-to-order				
	Standard stock	200	24~96		
	Made-to-order				
Made-to-order	300	40~72			
XH	Made-to-order	200, 300, 400	32~120	Cast iron or carbon steel for machine construction	173~174

Synchronous Pulleys (Shaft-Hole-Machined Type)

Pulley tooth profile	Stock	Pulley nominal width	No. of teeth of pulley	Material	Details page
TN15	Made-to-order	5.0, 10.0	20~96	High-strength aluminum alloy	175
MXL	Made-to-order	6.4	12~100	High-strength aluminum alloy	176
		9.5	16~100		
XL	Standard stock	037	10~72	Carbon steel for machine construction	177~178
	Made-to-order	050	10~72		
	Standard stock	037S	10~30	Sintered alloy	
L	Standard stock	050, 075	12~50	Carbon steel for machine construction	179~180
	Made-to-order		60, 72, 84		
	Standard stock	100	14~50		
	Made-to-order		60, 72, 84		
H	Standard stock	0100, 0150, 0200	14~72	Carbon steel for machine construction	181~182
	Made-to-order		84, 96		
	Standard stock	300	16~36		
	Made-to-order		40~72		
XH	Made-to-order	200, 300, 400	18~120	Carbon steel for machine construction	183~184
XXH	Made-to-order	200, 300, 400, 500	18~60	Carbon steel for machine construction	185~186
T5	Made-to-order	10, 15	12~72	Carbon steel for machine construction	187
T10	Made-to-order	15, 25	12~72	Carbon steel for machine construction	188