

Sprockets, Chains

Sprockets Chains



Product Name	Standard Roller Chains	Joint Links, Offset Links	Standard Sprockets - 11B, 15B Series	25B Series	35B Series	40B Series
Page	1535	1535	1536	1537	1538	1539



50B Series	60B Series	80B Series	Double Sprockets	Keyless Sprockets	Double Pitch S	Joint Links
1540	1541	1542	1542	1543	1544	1544



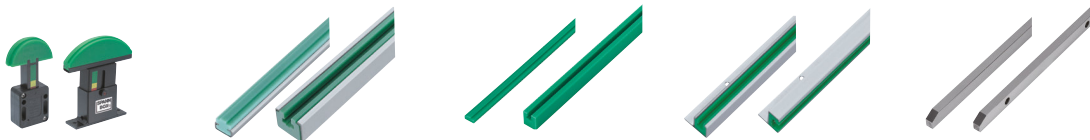
Chains with Attachments	Joint Links	Engineering Plastic Block Chains - Single Strand	Engineering Plastic Block Chains - Double Strand	Sprockets for Engineering Plastic Block Chains - Double Strand	Double Speed Chains	Double Speed Sprockets
1545	1545	1546	1546	1546	1547	1547



Aluminum Extrusions for Double Speed Chains	Return Guides	Table Top Conveyor Chains	Idler Sprockets	Idler Sprockets with Hub	Small Idlers	Idler Pins
1548	1548	1549	1550	1551, 1552	1552	1553



Tensioner Units with Idler	Tensioner Units	Tensioners - Link Bar Type	Slide Plates for Tension	Chain Tensioners - Idler Set Type
1554	1555	1556	1556	1557



Chain Guide Tensioners	Chain Guides with Steel Frame - Raised Track, Channel	Raised Track, Channel	Flanged	Steel Chain Guides
1558	1559	1559	1560	1560



Turnbuckles	Turnbuckle Components	Idler Sprockets with Hub	Idler Sprockets with Hub
1561	1562	1550	1551

Sprockets / Chains - Overview

All the specifications for Sprockets
/ Chains are compliant with
JIS A Series - Class 1.

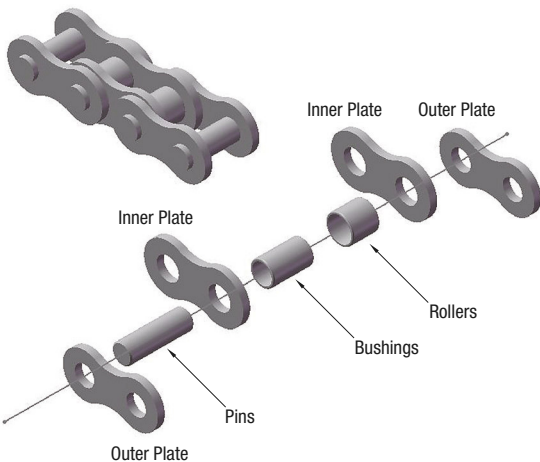
What are a Sprocket / Chain?

It is the mechanical part intended to transmit the driving force as tensile strength by engaging the serrations of a sprocket with the roller of a chain. This is used mainly for the following two types of application: for transmitting the driving force through the connected motor and for conveying workpieces by loading them directly or indirectly onto a chain. When combining a chain and sprocket, make sure that they are identical in specifications and sizes.

Benefits of selecting chains

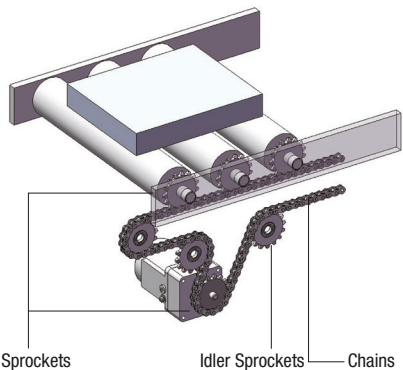
Long Distance Transmission : Enables transmission of the driving force at the level of several meters.
Transmission Force : Has a high allowable tension and thus, can convey a heavy workpiece.
Price : Enables more economical designs than when belt-based transmission is adopted.

Chain Components

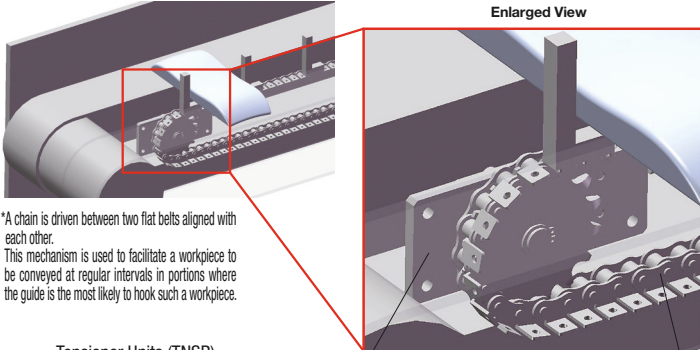


App. Example

For transmission
Mechanism intended to convert the driving force of a motor into rotation of a roller.



For transfer
Mechanism by which the attachment is mounted on a chain to facilitate a workpiece to be pushed out for conveyance.



Tensioner Units (TNSR)

When applying tension through the idler, the tension can be adjusted easily by using the adjustment screw.

Chains with Attachments (CHEL)

A bracket can be served as the protrusion intended to catch a workpiece by vertically mounting it onto the attachment.

Products needed to design Sprockets / Chains

Name	Sprockets	Chains	Idlers	Accessory
Photo				
Description	By engaging with a chain, transmits a driving force.	By working with rotation of a sprocket, transmits a driving force.	Sprocket with a bearing integrated. Can retain tension of a chain and, thus prevents the chain from generating vibration or noise and the sprocket part from malfunctioning in engagement.	Reduces the time and trouble of doing maintenance for chain stretch.
Features of MISUMI Product	Since this product has keyway and tap hole already machined, it can be assembled with other parts immediately after arrival. In addition, by focusing upon a scenario where any more keyways and tap holes need to be added, the Pilot Hole Type is also released.	A variety of products, such as lubrication-free chains for driving force transmission, chains with attachments for transfer and plastic chains, is offered.	Various types are available, including the Double Bearing Type for heavy load and the Small Type mountable even on limited spaces.	A variety of tools dedicated for designing chain guides or chain hanging mechanism units hard to manufacture in inner production environments is provided to help the customers reduce their time and costs of the said inner production.
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Standard Roller Chains / Joint Links / Offset Links

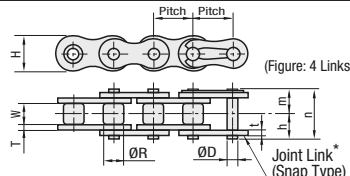
Standard Sprockets

11B, 15B Series

Standard Roller Chains



Type	Material
CHE	Steel
CHEM	Lubrication-Free (Steel, Oil Impregnated Bushings)
CHES	Stainless Steel



* The last link is the Joint Link.
* No.11~60 Joint Links are the Snap Type and No. 80 Joint Links are the Cotter Pin Type.

Number of Links Configurable

Part Number		Pitch	h	m	n	T	t	ØD	ØR	H	W	Max. Allowable Tension (kN)	Unit Price		Cutting Charge (+ Unit Price)
TYPE	No												Less than one unit link	One Unit Link or More	
CHE	15	4.763	3.05	3.85	6.80	0.57	0.57	1.62	2.48	4.3	2.38	0.31			
	25	6.35	3.80	4.80	8.60	0.75	0.75	2.31	3.30	5.8	3.18	0.64			
	35	9.525	5.70	7.10	12.80	1.25	1.25	3.59	5.08	8.8	4.78	2.16			
	40	12.7	8.02	9.53	17.55	1.50	1.50	3.97	7.92	11.7	7.95	3.63			
	50	15.875	10.15	11.60	21.75	2.00	2.00	5.09	10.16	14.6	9.53	6.37			
CHEM	40	19.05	12.65	14.15	26.80	2.40	2.40	5.96	11.91	17.5	12.70	8.83			
	50	25.4	16.07	19.18	35.25	3.20	3.20	7.94	15.88	23.0	15.88	14.71			
	60	12.7	8.55	10.05	18.60	2.00	1.50	3.97	7.92	11.7	7.95	3.63			
	40	15.875	10.57	12.03	22.60	2.40	2.00	5.09	10.16	14.6	9.53	6.37			
	50	19.05	13.45	14.95	28.40	3.20	2.40	5.96	11.91	17.5	12.70	8.83			
CHES	11	3.747	2.28	3.17	5.44	0.38	0.38	1.57	2.29	3.5	1.83	0.05			
	25	6.35	3.80	4.80	8.60	0.75	0.75	2.31	3.30	5.8	3.18	0.64			
	35	9.525	5.70	7.10	12.80	1.25	1.25	3.59	5.08	8.8	4.78	2.16			
	40	12.7	8.02	9.53	17.55	1.50	1.50	3.97	7.92	11.7	7.95	3.63			
	50	15.875	10.15	11.60	21.75	2.00	2.00	5.09	10.16	14.6	9.53	6.37			
	60	19.05	12.65	14.15	26.80	2.40	2.40	5.96	11.91	17.5	12.70	8.83			

Number of Links Fixed (per Unit)

Part Number		Number of Links per Unit	Unit Price		
TYPE	No		CHE	CHEM	CHES
CHE CHEM CHES	11	134 (Circumference Length 502mm)	-	-	-
	15	210 (Circumference Length 1000mm)	-	-	-
	25	480 (Circumference Length 3048mm)	-	-	-
	35	320 (Circumference Length 3048mm)	-	-	-
	40	240 (Circumference Length 3048mm)	-	-	-
	50	192 (Circumference Length 3048mm)	-	-	-
	60	160 (Circumference Length 3048mm)	-	-	-
	80	120 (Circumference Length 3048mm)	-	-	-

① Specify links by even numbers. The last link is the Joint Link.
② When the ordered number of links exceeds the given number of links per unit, the qty. of links per unit and the extra qty. of links are packaged separately.
Ex.) For CHE40-600, 3 separate packages: 240 links x 2 units +120 links
③ CHEM (Lubrication-free Chain) differs from CHE (Steel Chain) in dimensions and may require additional joint links. In such a case, specify JMTC or JMOC.

Ordering Example	Part Number	Number of Links
(Number of Links Configurable)	CHE80	200
(Unit Type)	CHE80	U

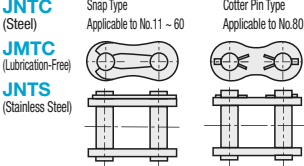
Joint Link



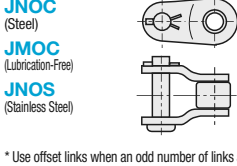
Offset Link



Joint Link



Offset Link



* Use offset links when an odd number of links are required.

Part Number		Unit Price					
Type	No.	Joint Link			Offset Link		
		JNTC	JMTC	JNTS	JNOC	JMOC	JNOS
10 ~ 50 Links							
(Joint Link)	11	-	-		-	-	-
JNTC	15	-	-	-	-	-	-
JMTC	25	-	-		-	-	-
JNTS	35	-	-			-	
(Offset Link)	40						
JNOC	50						
JMOC	60						
JNOS	80		-			-	

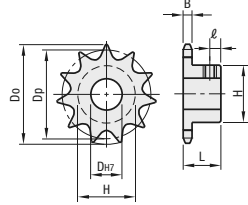
When ordering 1~ 9 link(s), "Unit Price + Low Quantity Surcharge (Line Item)" is applied.

Features: The Pilot Hole Type allowing taps or keyways to be machined freely is added to the product lineup.

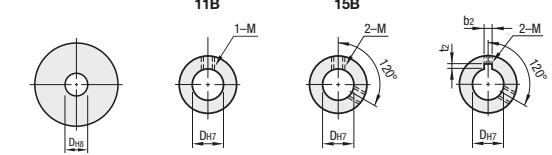


Type	Material
SSP11B	EN 1.4305 Equiv.
SP15B	EN 1.1181 Equiv.

Accessory: Set Screw (Only for shaft bore specifications [P] and [N])



Shaft Bore Specs. [S] (Pilot Bore) Shaft Bore Specs. [P] (Round Bore + Tap) 11B Shaft Bore Specs. [P] (Round Bore + Tap) 15B Shaft Bore Specs. [N] (New JIS Key + Tap)



Set Screw (11B)
Number of Teeth 12 ~ 18: M3
20 ~ 48: M4

Offset between tooth tip and keyway is ±0.5mm.

Part Number		Shaft Bore Specs.	Shaft Bore Specs.			Dp	Do	H	L	B	l	Mass (g)	Unit Price	
Type	Number of Teeth		S Specification (Df7)	P Specification (Df7)	N Specification (Df7)								S Specification	P, N Specification
SSP11B	12	S	5	5		14.475	16.2	9.4				6		
	15		5	5 6		18.02	19.9	13				12		
	16		5	5 6 8		19.204	21.1	14				14		
	18		6	6 8		21.575	23.5	16				18		
	20		8	8 10		23.949	25.9					23		
	24	P	8	8 10		28.703	30.7					26		
	28		8	8 10		33.462	35.5					29		
	30		8	8 10		35.842	37.9					30		
	34		8	8 10		40.604	42.7					38		
	36		8	8 10		42.986	45.1					41		
	40		8	8 10		47.751	49.8					47		
	48		8	8 10		57.283	59.4					61		
SP15B	11	S	5	5		16.9	19	11				9		
	12		5	5 6		18.4	20.5	12	10			10		
	13		5	5 6 8		19.9	22	14				14		
	14		8	8		21.4	23.5	15				17		
	15		8	8		22.91	25	17	12			22		
	16	P	10	10		24.41	26.5	18				23		
	17		10	10		25.92	28	20				32		
	18		10	10		27.43	29.5	22	14			40		
	20		10	10		30.44	32.5	24				49		
	24		10	10	10 12 15	36.49	39	30				88		
	26	S	12	12		39.51	42	33	16			104		
	28		12	12		42.54	45	37				131		
	30		12	12		45.56	48	39				147		
	33		12	12		50.1	52.5	40				178		
	35		12	12	12 15 16	53.13	55.5	40	18			182		

Shaft bore tolerance of S/P5 to S/P6 is H8.

Shaft Bore Machining Dimension Table (15B)		
Shaft Bore Dia. D	Keyway b x t x z	Set Screw M
5, 6	-	3
8	-	4
10	3x1.4	4
12	4x1.8	5
15	5x2.3	6
16	5x2.3	6

Ordering Example	Part Number	Bore Specification	Shaft Bore Dia.
	SSP11B15	P	6
	SP15B20	S	10

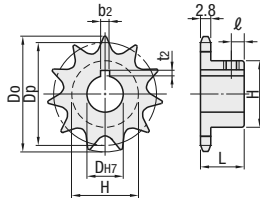
Standard Sprockets

25B Series



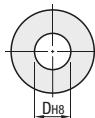
Type	M Material
SP25B	EN 1.1191 Equiv.
SSP25B	EN 1.4301 Equiv.

Accessory: Set Screw
(Only for shaft bore specifications [N])

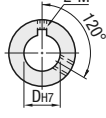


Offset between tooth tip and keyway is ±0.5mm.

Shaft Bore Specs. **S**
(Pilot Bore)



Shaft Bore Specs. **N**
(New JIS Key + Tap)



Part Number		Shaft Bore Specs.	Shaft Bore Dia.				Dp	Do	H	L	ℓ	Mass (g)	Unit Price			
Type	Number of Teeth		S Specification (Del)	N Specification (DH7)									S Specification	N Spec. (In Stock)	N Spec. (Other than In Stock)	
SP25B	16	S N	9	10*	10K*	12*	32.55	36	25	15	6	60				
	17		9	10*	10K*	12*	34.56	38				70				
	18		9	10*	10K*	12*	36.57	40								
	19		9	10*	10K*	12*	38.58	42				90				
	20		9	10*	10K*	12*	40.59	44	28			100				
	21		9	10*	10K	12*	42.61	46				110				
	22		9		12*	15*	44.62	48				120				
	23		9		12*	15*	46.63	50				30	140			
	24		9		12*	15*	48.65	52								
	25		9	12*	15*	16*	50.66	54								
	26		9	12*	15	16	52.68	56								
	28		9	12*	15*	16*	56.71	60	35			150				
	30		9	12*	15*	16	60.75	64				160				
	32		10		15*	16	20*	64.78				68	200			
	34		10		15	16	20	68.82				72		-		
	35		10		15	16	20	70.84	74			40	210		-	
36	10		15	16	20	72.86	76	220		-						
38	10		15	16	20	76.9	80	260		-						
40	10		15*	16*	20*	80.93	84	270								
SSP25B	16	S N	9	10*			32.55	36	21	16	18	7	60			
	17		9	10			34.56	38	23				70		-	
	18		9	10*			36.57	40	25				90			
	19		9	10	12*		38.58	42	26							
	20		9	10*	12*		40.59	44	28	30			100			
	21		9		12	15*	42.61	46	110							
	22		9		12	15*	44.62	48	120					-		
	23		9		12	15	46.63	50	140					-		
	24		9		12	15	48.65	52					-			
	25		9	12*	15		50.66	54								
	26		9		12	15	52.68	56					-			
	28		9		12	15	56.71	60	30	150				-		
	30		9		12	15	60.75	64		160				-		
	32		10		12	15*	64.78	68		200						

When selecting 10K, shaft bore diameter is Ø10 and keyway width is 4mm (1.8mm in height).

Shaft Bore Specifications

Shaft Bore Dia. D	Keyway b x t x z	Set Screw M
10	3x1.4	4
10K, 12	4x1.8	5
15, 16	5x2.3	6
20	6x2.8	6



Ordering Example

Part Number	Bore Specification	Shaft Bore Dia.
SP25B16	N	10
SSP25B22	S	9

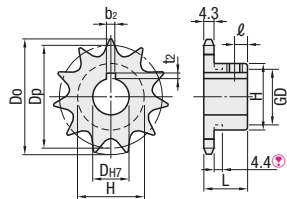
Standard Sprockets

35B Series



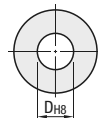
Type	M Material	S Surface Treatment
SP35B	EN 1.1191 Equiv.	-
BSP35B	Induction Hardened Teeth Tip	Black Oxide
SSP35B	EN 1.4301 Equiv.	-

Accessory: Set Screw
(Only for shaft bore specifications [N])

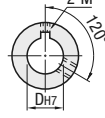


Offset between tooth tip and keyway is ±0.5mm.

Shaft Bore Specs. **S**
(Pilot Bore)



Shaft Bore Specs. **N**
(New JIS Key + Tap)



For the 13 or less teeth, sprockets have grooves on hub O.D.

Part Number		Shaft Bore Specs.	S Specification (Del)	Shaft Bore Dia.										Dp	Do	H	GD	L	ℓ	Mass (g)	Unit Price							
Type	Number of Teeth			N Specification (DH7)																	S Specification	N Spec. (In Stock)	N Spec. (Other than In Stock)					
SP35B	9	S N	8	10*	10K*									27.85	32	21.5	17	20	6	60	-	-	-					
	10		8	10*	10K*	12*									30.82	34	24.5			20	80	-	-	-				
	11		8	10*	10K*	12*									33.81	38	27			23	90	-	-	-				
	12		10*	10K*	12*	14*	15*	16*	17*						36.8	41	30.5			26	120	-	-	-				
	13		9	10*	10K*	12*	14*	15*	16	17*					39.8	44	32			29		-	-	-				
	14		9	10	10K*	12*	14	15*	16	17*					42.81	47	32					-	-	-				
	15		9	10*	10K*	12*	14*	15*	16	17*	18*	19*	20*		45.81	51	35					160	-	-	-			
	16		9	10*	10K*	12*	14	15*	16	17*	18*	19	20*	22	48.82	54	37					190	-	-	-			
	17		11	12*	14	15*	16	17*	18*	19	20*	22	24	25*	51.84	57	41					220	-	-	-			
	18		11	12*	14	15*	16*	17*	18*	19	20*	22	24	25*	54.85	60	44					250	-	-	-			
	19		11	12	14	15*	16	17	18	19	20*	22	24	25	57.87	63	47					280	-	-	-			
	20		11	12*	14	15*	16*	17*	18*	19	20*	22*	24	25*	28*	30*	60.89			66	50			320	-	-	-	
	21		11	12	14	15	16	17	18*	19	20*	22	24	25	28	30*	63.91			69	53			360	-	-	-	
	22		11	12	14	15	16	17	18	19	20*	22	24	25*	28	30	66.93			72	56			370	-	-	-	
	23		11	12	14	15	16	17	18	19	20	22	24	25	28	30*	69.95			75	60			380	-	-	-	
	24		11	12*	14	15*	16	17	18	19	20*	22	24	25	28	30	72.97			78				430	-	-	-	
	25		11	15*	16*	17	18	19	20*	22	24*	25*	28	30*	76	81								440	-	-	-	
	26		11	15*	16	17	18	19	20	22	24	25	28	30	79.02	84								450	-	-	-	
	28		11	15*	16	17	18	19	20	22	24	25	28	30	85.07	90								480	-	-	-	
	30		11	15*	16	17	18	19	20*	22	24	25*	28	30	91.12	96					53			510	-	-	-	
32	11	15*	16	17	18	19	20*	22	24	25	28	30	97.18	102						540	-	-	-					
34	11												103.23	109						570	-	-	-					
35	11												106.26	112						590	-	-	-					
36	12												109.29	115						610	-	-	-					
38	12												115.34	121			63			820	-	-	-					
40	12												121.4	127						850	-	-	-					
BSP35B (BSP is not compliant with S Spec.)	9	N		10	10K									27.85	32	21.5	17	20	6	60	-	-	-					
	10		10	10K*	12*									30.82	34	24.5	20			80	-	-	-					
	11			10	10K*	12*								33.81	38	27	23			90	-	-	-					
	12			10	10K*	12*	14	15*	16*	17*				36.8	41	30.5	26			120	-	-	-					
	13			10*	10K	12*	14	15*	16	17				39.8	44	32	29				-	-	-					
	14			10	10K	12*	14	15*	16	17				42.81	47	32					-	-	-					
	15			10*	10K	12*	14	15*	16	17	18*	19	20*	45.81	51	35					160	-	-	-				
	16			10	10K	12*	14	15*	16	17*	18*	19	20*	48.82	54	37					190	-	-	-				
	17				12	14	15	16	17	18	19	20*	22	24	25	51.84	57			41			220	-	-	-		
	18				12	14	15*	16*	17	18	19	20*	22	24*	25*	54.85	60			44			250	-	-	-		
	19				12	14	15	16	17	18	19	20	22	24	25	57.87	63			47			280	-	-	-		
	20				12*	14	15*	16	17	18	19	20*	22	24	25*	28	30			60.89	66	50			320	-	-	-
	21				12	14	15	16	17	18	19	20	22	24	25	28	30			63.91	69	53			360	-	-	-
	22				12	14	15	16	17	18	19	20	22	24	25	28	30			66.93	72	56			370	-	-	-
	23				12	14	15	16	17	18	19	20	22	24	25	28	30			69.95	75	60			380	-	-	-
	24				12	14	15	16	17	18	19	20	22	24	25	28	30			72.97	78				430	-	-	-
	25				15	16	17	18	19	20	22	24	25	28	30	76	81								440	-	-	-
	26				15	16	17	18	19	20	22	24	25	28	30	79.02	84								450	-	-	-
	28				15	16	17	18	19	20	22	24	25	28	30	85.07	90								480	-	-	-
	30				15	16	17	18	19	20	22	24	25	28	30	91.12	96					53			510	-	-	-
32			15	16	17	18	19	20	22	24	25	28	30	97.18	102						540	-	-	-				
34													103.23	109						570	-	-	-					
35													106.26	112						590	-	-	-					
36													109.29	115						610	-	-	-					
38													115.34	121			63			820	-	-	-					
40													121.4	127						850	-	-	-					
SSP35B	10	S N	8	10*	12*									30.82	34	24.5	20	20	6	80	-	-	-					
	11		8	10	12*									33.81	38	27	23			90	-	-	-					
	12		9	10*	12*	15*								36.8	41	30.5	26			120	-	-	-					
	13		9	10	12	15*	16							39.8	44	32	29				-	-	-					
	14		9	10	12*	15*	16							42.81	47	32					-	-	-					
	15		9	10	12*	15*	16*							45.81	51	35					160	-	-	-				
	16		9	10*	12*	15*	16*	18*						48.82	54	37					190	-	-	-				
	17		11	12	15	16	18	20						51.84	57	41					220	-	-	-				
	18		11	12*	15*	16	18	20						54.85	60	44					250	-	-	-				
	19		11	12*	15*	16	18	20						57.87	63	47					280	-	-	-				
	20		11	12*	15*	16	18	20*						60.89	66	50					320	-	-	-				
	21		11	12	15	16	18	20*						63.91	69	53					360	-	-	-				
	22		11	12	15*	16	18	20						66.93	72	56					370	-	-	-				
	23		11	12	15	16	18	20						69.95	75	60					380	-	-	-				
	24		11	12	15*	16	18	20*						72.97	78						430	-	-	-				
	25		11	15*	16	18	20	22	25*					76	81						440	-	-	-				
	26		11	15	16	18	20	22	25					79.12	86					53			510	-	-	-		
	30		11	15	16	18	20	22	25					97.18	102								540	-	-	-		
	32		11	15	16	18	20	22	25					103.23	109								570	-	-	-		
	34		11	15	16	18	20	22	25					106.26	112								590	-	-	-		
36	11	15	16	18	20	22	25					109.29	115						610	-	-	-						
38	11	15	16	18	20	22	25					115.34	121			63			820	-	-	-						
40	12	18	20	22	25							121.4	127						850	-	-	-						

Standard Sprockets

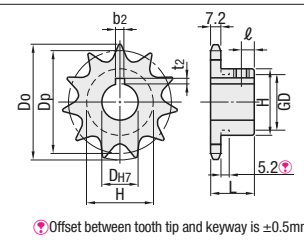
40B Series



Type **M Material** **S Surface Treatment**

SP40B EN 1.1191 Equiv.
BSP40B (Induction Hardened Teeth Tip)
SSP40B EN 1.4301 Equiv.

A Accessory: Set Screw
(Only for shaft bore specifications [N])



Shaft Bore Specs. **S** (Pilot Bore) Shaft Bore Specs. **N** (New JIS Key + Tap)

Offset between tooth tip and keyway is $\pm 0.5\text{mm}$. For the 12 or less teeth, sprockets have grooves on hub O.D.

Part Number	Type	Number of Teeth	Shaft Bore Specs.	Shaft Bore Dia.		Dp	Do	H	GD	L	ℓ	Mass (g)	Unit Price		
				Specification (Dn)	N Specification (DH7)								S Specification	N Spec. (In Stock)	N Spec. (Other than In Stock)
SP40B	S	9	N	10K* 12* 14*	10K* 12* 14 15* 16* 17* 18* 19 20* 22*	37.13	42	28	23	22	5	110			
		10		10K* 12* 14 15* 16* 17*	10K* 12* 14 15* 16 17* 18* 19 20* 22	41.1	46	32	27			140			
		11		10K* 12* 14 15* 16* 17*	10K* 12* 14 15* 16 17* 18* 19 20* 22	45.08	51	36	31			190			
		12		10K* 12* 14 15* 16* 17* 18*	10K* 12* 14 15* 16 17* 18* 19 20* 22*	49.07	55	40	35			220			
		13		12* 14 15* 16* 17* 18*	12* 14 15* 16 17* 18* 19 20* 22 24*	53.07	59	37				230			
		14		12* 14 15* 16* 17* 18*	12* 14 15* 16 17* 18* 19 20* 22 24*	57.07	63	42				280			
		15		12* 14 15* 16* 17* 18*	12* 14 15* 16 17* 18* 19 20* 22 24*	61.08	67	46				340			
		16		14* 15* 16* 17* 18* 19*	14* 15* 16 17* 18* 19* 20* 22* 24 25*	65.1	71	50				400			
		17		14* 15* 16* 17* 18* 19*	14* 15* 16 17* 18* 19* 20* 22* 24 25*	69.12	76	54				460			
		18		14 15* 16* 17* 18* 19*	14 15* 16 17* 18* 19* 20* 22* 24 25*	73.14	80	57				510			
		19		14 15* 16* 17* 18* 19*	14 15* 16 17* 18* 19* 20* 22* 24 25*	77.16	84	62				590			
		20		14* 15* 16* 17* 18*	14* 15* 16 17* 18* 19* 20* 22* 24 25*	81.18	88	67				760			
		21		14 15 16* 17* 18*	14 15 16 17* 18* 19* 20* 22* 24 25*	85.21	92	71				850			
		22		14 15 16* 17* 18*	14 15 16 17* 18* 19* 20* 22* 24 25*	89.24	96	75				950			
		23		14 15 16* 17* 18*	14 15 16 17* 18* 19* 20* 22* 24 25*	93.27	100	77				1000			
		24		14 15* 16* 17*	14 15* 16 17* 18* 19* 20* 22* 24 25*	97.3	104					840			
		25		14	14 15 16 17 18 19 20 22 24 25 28 30 32 35 40*	101.33	108					880			
		26		14	14 15 16 17 18 19 20 22 24 25 28 30 32 35 40*	105.36	112					920			
		28		14	20* 22 24 25* 28 30 32 35 40	113.43	120					1000			
BSP40B (BSP is not compliant with S Spec.)	N	9	N	10K 12 14	10K 12* 14 15* 16 17*	37.13	42	28	23	22	5	110	-	-	-
		10		10K 12* 14 15* 16 17*	10K 12* 14 15* 16 17* 18* 19 20	41.1	46	32	27			140	-	-	-
		11		10K 12* 14 15* 16 17*	10K 12* 14 15* 16 17* 18* 19 20	45.08	51	36	31			190	-	-	-
		12		10K 12* 14 15* 16 17*	10K 12* 14 15* 16 17* 18* 19 20	49.07	55	40	35			220	-	-	-
		13		12* 14* 15* 16* 17* 18*	12* 14* 15* 16 17* 18* 19 20* 22	53.07	59	37				230	-	-	-
		14		12* 14 15* 16* 17* 18*	12* 14 15* 16 17* 18* 19 20* 22 24 25	57.07	63	42				280	-	-	-
		15		12 14 15* 16* 17* 18*	12 14 15* 16 17* 18* 19 20* 22 24 25 28 30	61.08	67	46				340	-	-	-
		16		14 15* 16* 17* 18*	14 15* 16 17* 18* 19 20* 22 24 25* 28 30 32	65.1	71	50				400	-	-	-
		17		14 15* 16* 17* 18*	14 15* 16 17* 18* 19 20* 22 24 25* 28 30 32 35	69.12	76	54				460	-	-	-
		18		14 15 16* 17* 18*	14 15 16 17* 18* 19 20* 22 24 25* 28 30 32 35	73.14	80	57				510	-	-	-
		19		14 15* 16* 17* 18*	14 15* 16 17* 18* 19 20* 22 24 25* 28 30* 32 35 40	77.16	84	62				590	-	-	-
		20		14 15 16* 17* 18*	14 15 16 17* 18* 19 20* 22 24 25* 28 30 32 35 40	81.18	88	67				760	-	-	-
		21		14 15 16 17* 18*	14 15 16 17 18* 19 20* 22 24 25 28 30 32 35 40	85.21	92	71				850	-	-	-
		22		14 15 16 17* 18*	14 15 16 17 18* 19 20* 22 24 25 28 30 32 35 40	89.24	96	75				950	-	-	-
		23		14 15 16 17* 18*	14 15 16 17 18* 19 20* 22 24 25 28 30 32 35 40*	93.27	100	77				1000	-	-	-
		24		14 15 16 17* 18*	14 15 16 17 18* 19 20* 22 24 25 28 30 32 35 40*	97.3	104					840	-	-	-
		25		14 15 16 17* 18*	14 15 16 17 18* 19 20* 22 24 25 28 30 32 35 40*	101.33	108					880	-	-	-
		26		14 15 16 17* 18*	14 15 16 17 18* 19 20* 22 24 25 28 30 32 35 40*	105.36	112					920	-	-	-
		28		14 15 16 17* 18*	20 22 24 25 28 30 32 35 40	113.43	120					1000	-	-	-
SSP40B	S	9	N	12*	15* 16 18 20*	37.13	42	28	23	22	5	110			
		10		12*	15* 16 18 20*	41.1	46	32	27			140			
		11		12*	15* 16 18 20*	45.08	51	36	31			190			
		12		12	15* 16* 18 20*	49.07	55	40	35			220			
		13		12	15* 16 18 20*	53.07	59	37				230			
		14		12	15* 16 18* 19 20* 22 24 25	57.07	63	42				280			
		15		12	15* 16 18 19 20* 22 24 25* 28	61.08	67	46				340			
		16		13	15* 16 18 19 20* 22 24 25* 28 30	65.1	71	50				400			
		17		13	15 16 18 19 20* 22 24 25 28 30	69.12	76	54				460			
		18		13	15 16 18 19 20 22 24 25 28 30	73.14	80	57				510			
		19		14	15* 16 18 19 20 22 24 25* 28 30	77.16	84	62				590			
		20		14	15 16 18 19 20 22 24 25 28 30	81.18	88	67				760			
		21		14	15 16 18 19 20 22 24 25 28 30	85.21	92	71				850			
		22		14	18 20 22 24 25 28 30	89.24	96	75				950			
		23		14	18 20 22 24 25 28 30	93.27	100	77				1000			
		24		14	18 20 22 24 25 28 30	97.3	104					840			
		25		14	18 20 22 24 25 28 30	101.33	108					880			
		26		14	20 22 24 25 30	105.36	112					920			
		28		14	20 22 25 30	113.43	120					1000			
SSP40B	N	9	N	12*	15* 16 18 20*	37.13	42	28	23	22	5	110			
		10		12*	15* 16 18 20*	41.1	46	32	27			140			
		11		12*	15* 16 18 20*	45.08	51	36	31			190			
		12		12	15* 16* 18 20*	49.07	55	40	35			220			
		13		12	15* 16 18 20*	53.07	59	37				230			
		14		12	15* 16 18* 19 20* 22 24 25	57.07	63	42				280			
		15		12	15* 16 18 19 20* 22 24 25* 28	61.08	67	46				340			
		16		13	15* 16 18 19 20* 22 24 25* 28 30	65.1	71	50				400			
		17		13	15 16 18 19 20* 22 24 25 28 30	69.12	76	54				460			
		18		13	15 16 18 19 20 22 24 25 28 30	73.14	80	57				510			
		19		14	15* 16 18 19 20 22 24 25* 28 30	77.16	84	62				590			
		20		14	15 16 18 19 20 22 24 25 28 30	81.18	88	67				760			
		21		14	15 16 18 19 20 22 24 25 28 30	85.21	92	71				850			
		22		14	18 20 22 24 25 28 30	89.24	96	75				950			
		23		14	18 20 22 24 25 28 30	93.27	100	77				1000			
		24		14	18 20 22 24 25 28 30	97.3	104					840			
		25		14	18 20 22 24 25 28 30	101.33	108					880			
		26		14	20 22 24 25 30	105.36	112					920			
		28		14	20 22 25 30	113.43	120					1000			

For the H7 D dim. tolerance is applicable for the Shaft Bore Specs S with the number of teeth: 13

Standard Sprockets

60B Series

Standard Sprockets / Double Sprockets

80B Series

40SD, 50SD Series



Type **M Material** **S Surface Treatment**

SP60B EN 1.1191 Equiv. (Induction Hardened Teeth Tip)

BSP60B Black Oxide

SSP60B EN 1.4301 Equiv.

A Accessory: Set Screw
(Only for shaft bore specifications [N])

Shaft Bore Specs. **S** (Pilot Bore)

Shaft Bore Specs. **N** (New JIS Key + Tap)

Offset between tooth tip and keyway is ±0.5mm.

For the 11 or less teeth, sprockets have grooves on hub O.D.

Part Number		Shaft Bore Specs.	Shaft Bore Dia.											Dp	Do	H	GD	L	ℓ	Mass (g)	Unit Price					
Type	Number of Teeth		Specification (Dn)	N Specification (Dh7)																	S Specification	N Spec. (In Stock)	N Spec. (Other than In Stock)			
SP60B	9	S	N	12	19	22*				55.7	63	43	32	32	6	400	-	-	-							
	10			14	19	22	24	25*	61.65	68	49	37	490			-	-	-								
	11			14	19	22	24	25	28	30	67.62	76	51			45	600	-	-	-						
	12			14	19	22	24	25	28	30*	32*	35	73.6			83	51	690	-	-	-					
	13			14	19*	22	24	25	28*	30*	32	35	38			79.6	89	57	810	-	-	-				
	14			16	19	22	24	25*	28	30*	32	35	38			40	85.61	95	62	960	-	-	-			
	15			16	19	22	24	25*	28*	30*	32	35*	38			40*	42	45	91.62	101	68	1100	-	-	-	
	16			16	19	22	24	25*	28	30*	32	35*	38*			40	42	45	50*	97.65	107	73	1300	-	-	-
	17			16	19	22	24	25	28	30*	32*	35	38			40	42	45	50	103.67	113	100	1400	-	-	-
	18			16	19	22	24	25*	28	30	32	35*	38			40	42	45	50	109.71	119	100	2000	-	-	-
	19			16	19	22	24	25	28	30	32	35	38			40	42	45	50	115.74	126	100	2100	-	-	-
	20			16	19	22	24	25*	28	30*	32	35*	38			40*	42	45	50	121.78	132	100	2200	-	-	-
	21			16	22	24	25	28	30*	32	35	38	40			42	45	50	127.82	138	100	2300	-	-	-	
	22			16	22	24	25	28	30	32	35	38	40			42	45	50	133.86	144	100	2500	-	-	-	
	23			16	22	24	25	28	30	32	35	38	40			42	45	50	139.9	150	100	2600	-	-	-	
	24			18	22	24	25	28	30*	32	35*	38	40			42	45	50	145.95	156	100	2700	-	-	-	
	25			18	22	24	25	28	30	32	35	38	40			42	45	50	151.99	162	100	2900	-	-	-	
	26			18	22	24	25	28	30	32	35	38	40			42	45	50	158.04	168	100	3000	-	-	-	
	27			18	22	24	25	28	30	32	35	38	40			42	45	50	164.09	174	100	3100	-	-	-	
	28			18	22	24	25	28	30	32	35	38	40			42	45	50	170.14	180	100	3400	-	-	-	
29	18	22	24	25	28	30	32	35	38	40*	42	45	50	182.25	193	100										
BSP60B (BSP is not compliant with S Spec.)	9	N	N	19	22					55.7	63	43	32	32	8	400	-	-	-							
	10			19	22	24	25			61.65	68	49	37			490	-	-	-							
	11			19	22	24	25	28	30		67.62	76	51			45	600	-	-	-						
	12			19	22	24	25	28	30	32	35	73.6	83			51		690	-	-	-					
	13			19	22	24	25	28	30	32	35	38	79.6			89	57		810	-	-	-				
	14			19	22	24	25	28	30	32	35	38	40			85.61	95	62		960	-	-	-			
	15			19	22	24	25	28	30	32	35	38	40			91.62	101	68		1100	-	-	-			
	16			19	22	24	25*	28	30	32	35	38	40			97.65	107			1300	-	-	-			
	17			19	22	24	25	28	30	32	35	38	40			103.67	113			1400	-	-	-			
	18			19	22	24	25	28	30	32	35	38	40			109.71	119			2000	-	-	-			
	19			19	22	24	25	28	30	32	35	38	40			115.74	126			2100	-	-	-			
	20			19	22	24	25	28	30*	32	35	38	40			121.78	132			2200	-	-	-			
	21			22	24	25	28	30	32	35	38	40	127.82			138			2300	-	-	-				
	22			22	24	25	28	30	32	35	38	40	133.86			144			2500	-	-	-				
	23			22	24	25	28	30	32	35	38	40	139.9			150			2600	-	-	-				
	24			22	24	25	28	30	32	35	38	40	145.95			156			2700	-	-	-				
	25			22	24	25	28	30	32	35	38	40	151.99			162			2900	-	-	-				
	26			22	24	25	28	30	32	35	38	40	158.04			168			3000	-	-	-				
	27			22	24	25	28	30	32	35	38	40	164.09			174			3100	-	-	-				
	28			22	24	25	28	30	32	35	38	40	170.14			180			3400	-	-	-				
29	22	24	25	28	30	32	35*	38	40	182.25	193															
SSP60B	10	S	N	14	22	25				61.65	68	49	37	32	6	490	-	-	-							
	11			14	22	25			67.62	76	51	45	600			-	-	-								
	12			14	22	25			73.6	83	51		690			-	-	-								
	13			14	22	25	28		79.6	89	57		810			-	-	-								
	14			16	22	25	28		85.61	95	62		960			-	-	-								
	15			16	22	25	28	30	32	35	38	91.62	101			68		1100	-	-	-					
	16			16	22	25	28	30	32	35	38	97.65	107					1300	-	-	-					
	17			16	22	25	28	30	32	35	38	103.67	113					1400	-	-	-					
	18			16	22	25	28	30	32	35	38	109.71	119					2000	-	-	-					
	19			16	22	25	28	30	32	35	38	115.74	126					2100	-	-	-					
	20			16	22	25	28	30	32	35	38	121.78	132					2200	-	-	-					
	21			16	22	25	28	30	32	35	38	127.82	138					2300	-	-	-					
	22			16	30	35	40		133.86	144			2500			-	-	-								
	23			16	30	35	40		139.9	150			2600			-	-	-								
	24			18	30	35	40		145.95	156			2700			-	-	-								
	25			18	30	35	40		151.99	162			2900			-	-	-								
	30			18	30	35	40		182.25	193			3400			-	-	-								

For the Number of Teeth: 12 and the Shaft Dia.: 35mm, the M6 set screw is applicable.

Shaft Bore Dia. D	Keyway bxt2	Set Screw M
15-17	5x2.3	6
18-22	6x2.8	6
24-30	8x3.3	8
32-38	10x3.3	8
40	12x3.3	8
45	14x3.8	10



Ordering Example
Part Number - Bore Specification - Shaft Bore Dia.
SP60B24 - N - 30
SSP60B10 - S - 14



Type **M Material**

SP80B EN 1.1191 Equiv. (Induction Hardened Teeth Tip)

A Accessory: Set Screw
(Only for shaft bore specifications [N])

Shaft Bore Specifications

Shaft Bore Dia. D	Keyway bxt2	Set Screw M
25-30	8x3.3	8
32-38	10x3.3	8
40, 42	12x3.3	8
45, 50	14x3.8	10

Shaft Bore Specs. **S** (Pilot Bore)

Shaft Bore Specs. **N** (New JIS Key + Tap)

Offset between tooth tip and keyway is ±0.5mm.

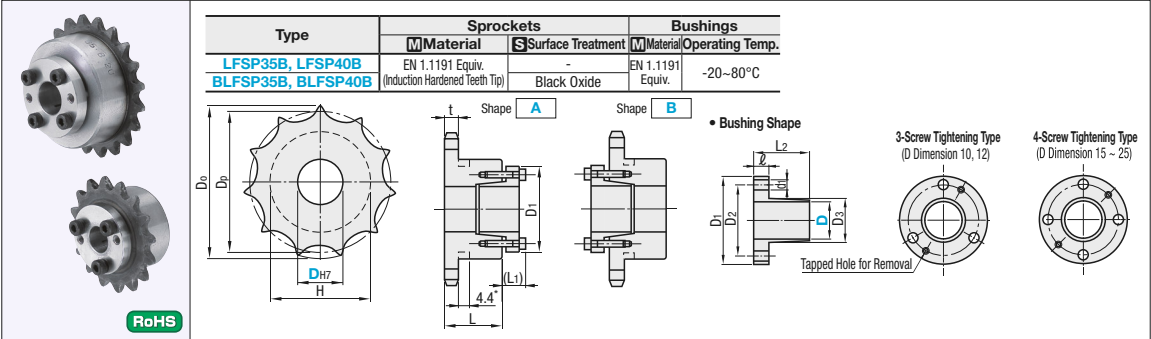
For the 9 teeth, sprockets have grooves on hub O.D.

Type	Number of Teeth	Bore Specs.	N Specification (Dh7)											Dp	Do	H	GD	L	ℓ	(g)	S Specification	N Spec. (In Stock)	N Spec. (Other than In Stock)	
SP80B	9	S N	14	25	28	30	32							74.27	85	58	44	40	7	870	-	-		
	10		15	25	28	30	32							82.19	93	52				1020	-	-		
	11		15	25	28	30	32	35	38							90.16	102		60	1250	-	-		
	12		15	25*	28	30	32	35	38	40	42								98.14	110	67	1600	-	-
	13		16	25	28	30*	32*	35	38	40	42	45	50*	77	106.14	118	40		12	1900	-	-		
	14		16	25	28	30	32	35	38	40	42	45	50		114.15	127				2150	-	-		
	15		20	25*	28	30	32	35	38	40	42	45	50*	93	122.17	135	40		12	2300	-	-		
	16		20	25	28	30	32	35	38	40*	42	45	50		130.2	143				2500	-	-		
	17		20	25	28	30*	32	35*	38	40*	42	45	50	93	138.23	151	40		12	2950	-	-		
	18		20	25	28	30	32	35	38	40	42	45	50		146.27	159				3150	-	-		
	19		20	25	28	30	32	35	38	40	42	45	50*	93	154.32	167	40		12	3400	-	-		
	20		20	25*	28	30	32	35	38	40	42	45	50		162.37	176				3600	-	-		
21	20	25	28	30	32	35	38	40	42	45	50	170.42	184	3850	-	-								

Keyless Sprockets

35B, 40B Series

■ **Features:** The strength of shafts is not deteriorated as machining to shafts is not required. Positioning is easy.



■ **35B Series** For Chains, see **P.1535.**

Part Number		Shaft Bore Dia. D _{H7}	Shape	D _p	D ₀	H	L	t	Unit Price	
Type	Number of Teeth								LFSP35B	BLFSP35B
LFSP35B BLFSP35B	12	10	A	36.80	41	30.5	20	4.3		
	13	10		39.80	44	32				
	14	10 12		42.81	47	32				
	15	10 12		45.81	51	35				
	16	10 12 15 16	B	48.82	54	37				
	18	12 15 16 17		54.85	60	44				
	20	12 15 16 17 18 20 22		60.89	66	50				

⚠ For sprockets with 12 teeth, A Shape only. Sprockets marked with * have grooves on hub O.D.

■ **40B Series** For Chains, see **P.1535.**

Part Number		Shaft Bore Dia. D _{H7}	Shape	D _p	D ₀	H	L	t	Unit Price	
Type	Number of Teeth								LFSP40B	BLFSP40B
LFSP40B BLFSP40B	12	12 15 16 17	A	49.07	55	40	22	7.2		
	13	12 15 16		53.07	59	37				
	14	12 15 16 17		57.07	63	42				
	15	12 15 16 17 18 20		61.08	67	46				
	16	15 16 17 18 20 22	B	65.10	71	50				
	17	15 16 17 18 20 22		69.12	76	54				
	18	15 16 17 18 20 22 25		73.14	80	57				
	19	15 16 17 18 20 22 25		77.16	84	62				
	20	15 16 17 18 20 22 25		81.18	88	67				
	20	15 16 17 18 20 22 25		81.18	88	67				

Sprockets marked with * have grooves on hub O.D.

■ **Bushing Dimension/Performance Table**

Shaft Bore Dia. D	D ₁	D ₂	D ₃	d ₁	(L ₁)	L ₂	ℓ	Maximum Allowable Torque N·m (kgf·m)	Allowable Thrust Load kN (kgf)	Screws		Screw Tightening Torque N·m (kgf·m)	Tapped Hole for Removal								
										Qty.	Size										
10	30	22	12	4.5	10.5	16.5	5	39 (4.0)	5.34 (545)	3	M4x16	4.0 (0.41)	M4x2								
12	32	24	14					48 (4.9)													
15	36	28	17.6					78 (7.95)													
16	37	29	18.6					83 (8.5)													
17	38	30	19.6	13	23	7		88 (9.0)	8.74 (895)	4	M4x18	8.3 (0.85)	M5x2								
18	43	33	20.6					154 (15.7)													
20	46	36	23.4					171 (17.4)													
22	48	38	24.6					186 (19.16)													
25	52	42	28.4					5.5						14	7	216 (21.8)	8.74 (895)	4	M5x20	8.3 (0.85)	M5x2
																216 (21.8)					

• Shaft tolerance g6 and shaft surface roughness Ra6.3 are standard.

• When there is keyway machining or D cut on the installed shaft, transmitting torque is reduced by approximately 15% or more.

⚠ In the event that transmissible torque exceeds values in the above table, shaft could slip, resulting in serious danger. Make sure that it is used within the allowable torque range.

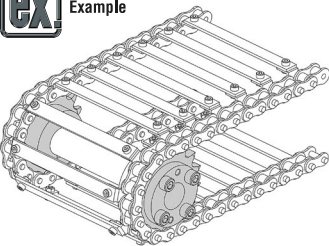


Features

• When a keyway is added to a shaft, the position of teeth / keys is fixed. On such a shaft, however, by using Keyless Sprockets, the position of teeth can be adjusted freely and, thereby, phase matching is facilitated.



Example



Note on Installation

- Tighten the bushing screws after inserting the shaft. (Bushing may deform if the screws are tightened before inserting the shaft.)
- Use torque wrench to tighten screws.
- Do not use tightening screws other than included.

Installation

- ① Wipe off the shaft surface and lightly apply oil or grease. (Do not use any oil or grease containing molybdenum type anti-friction agent.)
- ② Please completely wipe off sprockets and bushing contact surfaces also before lubricating with oil or grease. Please lubricate screw and seating surfaces in the same manner.
- ③ Sub-assemble Sprockets and bushing before the shaft is inserted. (Do not tighten the screws on the bushing before inserting into shaft.)
- ④ After locating, tighten the lock screws using a torque wrench in the diagonal line order, beginning lightly (approx. 1/4 of the predetermined tightening torque).
- ⑤ Tighten the screws further to an increased torque (approximately 1/2 specified torque).
- ⑥ Tighten with the predetermined tightening torque.
- ⑦ Finally, tighten the screws to the listed torque values in a circumferential order.

Removal

- Be sure the system is completely shut down before starting work.
- Loosen the tightening screws in circumferential order.
- Insert a screw in a screw hole for removal and tighten evenly.
- Repeat "Installation" process for re-installation.

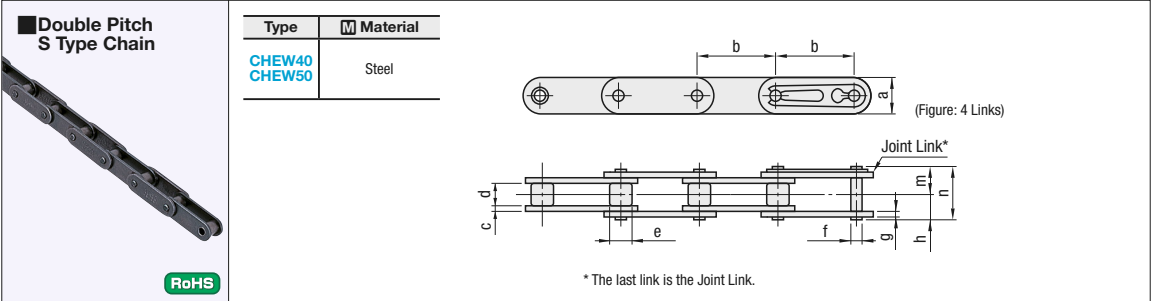


Ordering Example Part Number - Number of Teeth - d
LFSP35B16 - 15 - A

[S Type Roller] Double Pitch Chains, Sprockets, Joint Links

2040B, 2050B Series

■ **Features:** Flat plate allows workpiece to be put directly on plate for conveyance.



Part Number	Number of Links (Specify Even Number)	Max. Allowable Tension (kN)	1 Unit (Number of Links)	Unit Price	Cutting Charge
CHEW40	4~	2.75	120 (Circumference Length 3,048mm)		
CHEW50	4~	4.41	96 (Circumference Length 3,048mm)		

• Detailed Chain Dimension

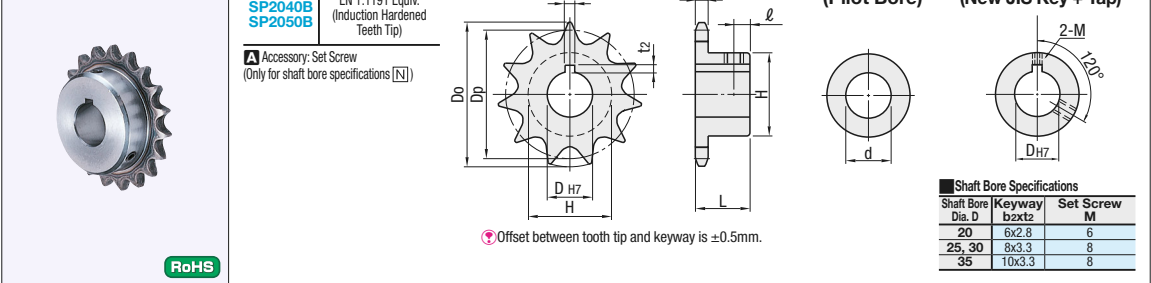
Type	a	b	c	d	e	f	g	h	m	n
CHEW40	11.7	25.4	1.5	7.95	7.95	3.97	1.5	8.02	9.53	17.55
CHEW50	14.6	31.75	2	9.53	10.16	5.09	2	10.15	11.6	21.75



Ordering Example Part Number - Number of Links
CHEW40 - 200

- ① Specify links by even numbers. The last link is the Joint Link.
- ② When the ordered number of links exceeds the given number of links per unit, the qty. of links per unit and the extra qty. of links are packaged separately. Ex.) For CHEW40-300, 3 separate packages: 120 links x 2 units + 60 links

Double Pitch S Type Dedicated Sprocket



Part Number		Shaft Bore Specs.	Shaft Bore Dia.					Number of Operating Teeth	Dp	Do	Hub		X	ℓ	Mass (kg)	Unit Price		
Type	Allocated Number of Teeth		S Specification (DHS)	N Specification (DHT)							H	L				S Specification	N Spec. (In Stock)	N Spec. (Other than In Stock)
SP2040B	19	S	14	20*	25*	30	35	9 1/2	78.23	84	60	25	7.2	7	0.64			
	21		14	20	25	30	35	10 1/2	86.17	92	69				0.93	-		
	23		14	20	25	30	35	11 1/2	94.15	100	77				0.99	-		
	25		N	14	20*	25	30	35	12 1/2	102.14	108				63	1.06		
SP2050B	19	S	14	20	25*	30	35	9 1/2	97.78	105	73	28	8.7	8	1.1			
	21		14	20	25	30	35	10 1/2	107.72	115					1.62	-		
	23		16	20	25	30	35	11 1/2	117.68	125					1.74	-		
	25		N	16	25	30	35	12 1/2	127.67	135					1.87	-		



Ordering Example Part Number - Bore Specification - Shaft Bore Dia.
SP2040B21 - N - 20

For double pitch chain idlers, see **P.1552.**

Double Pitch S Type Dedicated Joint Link



Material: Steel

Part Number		Unit Price	Volume Discount Rate
Type	No.	1 ~ 20 Link(s)	21 ~ 50 Links
JNTWC (Steel)	40		
	50		

⚠ For orders larger than indicated quantity, please request a quotation.



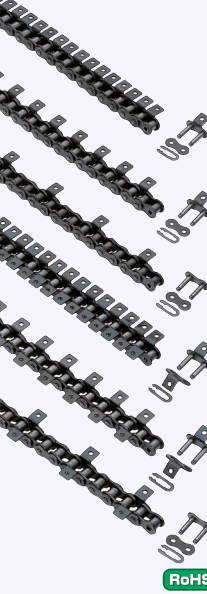
Ordering Example Part Number
JNTWC40

Chains with Attachments, Joint Links

40, 50, 60, 80 Series

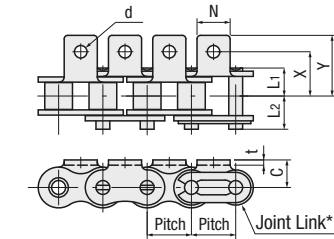
■ **Features:** Are standard chains with the Attachments and allow for conveyance of small workpieces, if desired.

Chains with Attachments Chains

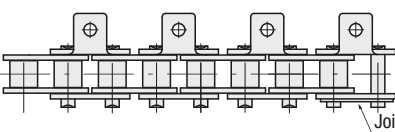


Attachment on One Side Type

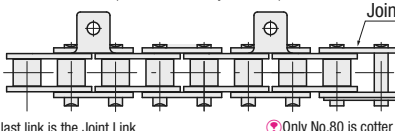
CHEL (Attachment on All Links)



CHEL (Attachment on Every Two Links)

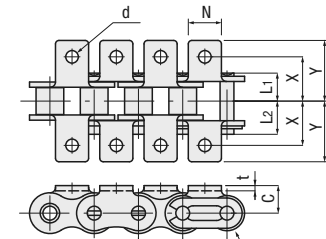


CHEL (Attachment on Every Four Links)

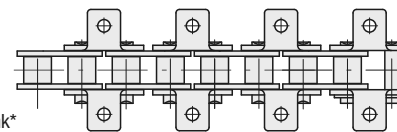


Attachment on Both Sides Type

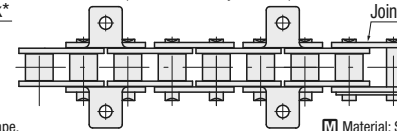
CHET (Attachment on All Links)



CHET (Attachment on Every Two Links)



CHET (Attachment on Every Four Links)



* The last link is the Joint Link.

Only No.80 is cotter pin shape.

M Material: Steel

Part Number			* Number of Links	Pitch	Pins		Plate	Attachment						Max. Allowable Tension kN (kgf)
Type	No.	Nominal			L ₁	L ₂	t	C	X	Y	N	d		
CHEL (One Side Type) CHET (Both Sides Type)	40	A (All Links) B (Every Two Links) C (Every Four Links)	4~	12.7	8.07	9.48	1.5	7.9	12.7	17.4	9.5	3.6	2.75 (280)	
	50		4~	15.875	10.17	11.63	2	10.3	15.9	22.3	12.7	5.2	4.41 (450)	
	60		4~	19.05	12.7	14.2	2.4	11.9	19.05	27.2	15.9	5.2	6.28 (640)	
	80		4~	25.4	16.15	19.25	3.2	15.9	25.4	35.2	19.1	6.8	10.69 (1090)	

* Use 2's multiples for "attachment on every link" and "attachment on every 2 links". Use 4's multiples for "attachment on every 4 links".

No.	Unit Price						Cutting Charge
	Attachment on One Side Type			Attachment on Both Sides Type			
	CH _{EL} □□A	CH _{EL} □□B	CH _{EL} □□C	CH _{ET} □□A	CH _{ET} □□B	CH _{ET} □□C	
Specified Number of Links	Multiple of 2	Multiple of 2	Multiple of 4	Multiple of 2	Multiple of 2	Multiple of 4	
40							
50							
60							
80							

Number of Links per Unit

Part Number	No.	Number of Links per Unit
CHEL	40	240 (Circumference Length 3,048mm)
CHET	50	192 (Circumference Length 3,048mm)
	60	160 (Circumference Length 3,048mm)
	80	120 (Circumference Length 3,048mm)

When the ordered number of links exceeds the given number of links per unit, the qty. of links per unit and the extra qty. of links are packaged separately.
Ex.) For CHEL50A-300, 2 separate packages: 192 links x 1 unit + 108 links

Ordering Example
Part Number - Number of Links
CHEL40A - 200

Chains with Attachments Joint Link



JNT-L

JNT-T

M Material: Steel

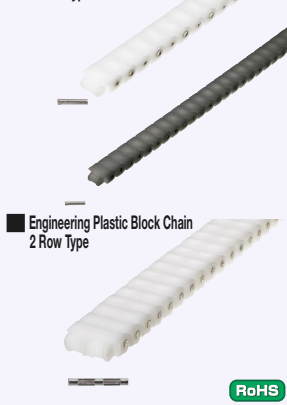
Ordering Example
Part Number
JNT-L40

Engineered Plastic Block Chains / Dedicated Sprockets

1 Row Type, 2 Row Type

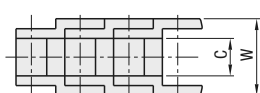
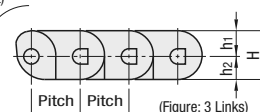
■ **Features:** Use the products in environments where workpieces must not be tainted with chain oil or must not be damaged. Generally, they are used for conveying cans, etc.

Engineering Plastic Block Chains 1 Row Type



1 Row Type

CHEED (General Use)
CHEEC (Conductive)
CHEEH (Heat Resistant)
CHEEY (Chemical Resistant)

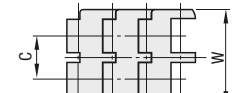
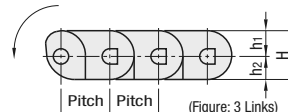


Chains only bend in the arrow direction but not in the opposite direction.

Part Number CHEEP60 is changed to CHEED60. Pin Shape: from Round to D.
Since the bending angle of chain is predetermined, specify the mating sprocket with the number of teeth: 14 or more.

2 Row Type

CHEE (General Use)
Select CHEES as Sprockets.



Chains only bend in the arrow direction but not in the opposite direction.

The pin shape of CHEE is changed from Round to D.

Part Number	Number of Links	Number of Rows	Usage	Color	Allowable Tension (N)	Allowable Chain Speed (m/min)	Coefficient of Sliding Friction μ_1	Reference Mass (kg/m)	Operating Temp. (°C)	Pitch	C	W	H	h1	h2	Number of Links per Unit	Unit Price
CHEED	40	4~	Single	General Use	441	60	0.25	0.32	-5~65	12.7	7.95	20	12.7	6.7	6	240 (Circumference Length 3,048mm)	1 Link Unit Price x Number of Links
	60				882					19.05	12.7	30	17.3	8.8	8.5	160 (Circumference Length 3,048mm)	
CHEEC	40				340					12.7	7.95	20	12.7	6.7	6	240 (Circumference Length 3,048mm)	
CHEEH	40				440					12.7	7.95	20	12.7	6.7	6	240 (Circumference Length 3,048mm)	
CHEEY	40	2 Rows	General Use	Heat Resistant	250	60	0.25	0.36	-20~80	12.7	7.95	20	12.7	6.7	6	240 (Circumference Length 3,048mm)	
CHEE	40				1270					12.7	14.4	32	12.7	6.4	6.3	240 (Circumference Length 3,048mm)	

When the ordered number of links exceeds the given number of links per unit, the qty. of links per unit and the extra qty. of links are packaged separately.
Ex.) For CHEE-300, 2 separate packages: 240 links x 1 unit + 60 links

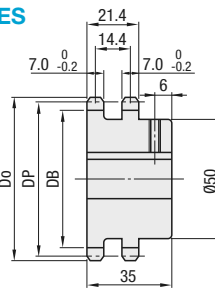


Ordering Example
Part Number - Number of Links
CHEED40 - 200
CHEE - 200

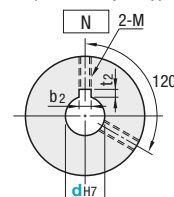
Sprocket for Engineering Plastic Block Chains - Double Strand



CHEES



Shaft Bore Specifications (New JIS Key + Tap)



Shaft Bore Dia. d	Keyway b x t	Set Screw M
20	6x2.8	6
25	8x3.3	8
30	8x3.3	8

M Material: EN 1.1191 Equiv.
S Surface Treatment: Bright Chromate Plating
A Accessory: Set Screw

Offset between tooth tip and keyway is ±0.5mm.

Part Number	Do	Dp	Root Dia. DB	Number of Teeth	Reference Mass (kg)	Unit Price
CHEES	20	68	65.1	16	0.6	
	25					
	30					



Ordering Example
Part Number
CHEES20



Resistance Against Chemicals and Oils

Chemical Name	Spec. for General Use / Conductive Type	Spec. for Chemical Resistant Type
Acetone	CHEED	CHEEY
Oil (Vegetable, Mineral)	CHEEC	
Alcohol		
Ammonia Water		
Sodium Chloride		
Hydrochloric Acid (2%)		
Seawater		
Oxygenated Water		
Sodium Hydroxide (Sodium Hydroxide 2%)		
Gasoline		
Formic Acid		
Formic Aldehyde		
Citric Acid		

Chemical Name	Spec. for General Use / Conductive Type	Spec. for Chemical Resistant Type
Chromic Acid	CHEED	CHEEY
Acetic Acid	CHEEC	
Carbon Tetrachloride		
Sodium Hypochlorite		
Nitric Acid (5%)		
Potassium Hydrate		
Soap Solution		
Lactic Acid		
Paraffin		
Benzene		
Iodine		
Sulfuric Acid		
Phosphoric Acid (10%)		

Resistance Against Foods

Chemical Name	Spec. for General Use / Conductive Type	Spec. for Chemical Resistant Type
Whiskey	CHEED	CHEEY
Milk	CHEEC	
Vinegar		
Soft Drinks		
Beer		
Fruit Juice		
Water		
Vegetable Juice		
Wine		

CHEEH is intended for use in dry environments and cannot be used in wet environments where water is splashed.

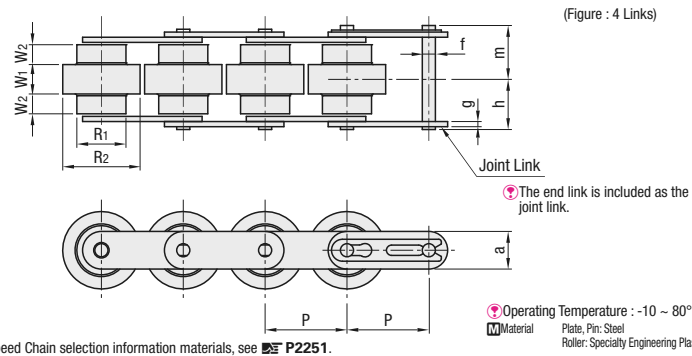
Double Speed Chains & Sprockets / Aluminum Extrusions / Return Guides

Features: Mixed structure of Small and Large Diameter Rollers enables a workpiece to be conveyed approx. 2.5 times faster than the chain speed. Suitable for free flow conveyors.

Double Speed Chains



WCHE



For Double Speed Chain selection information materials, see **P2251**.

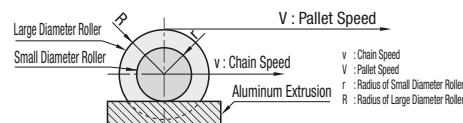
Part Number		Number of Links Specification (Specify Even Number)	Pitch		Roller		Plate		Pins			Max. Allowable Tension (kN)	Speed Multiplier	Approx. Mass kg/m	Unit Number of Links	
Type	Nominal		P	R ₁	R ₂	W ₁	W ₂	a	g	f	h					m
(Chain) WCHE	3	4-550	19.05	11.91	18.3	7.0	4.1	8.8	1.2	3.28	11.2	12.95	0.55	2.54	0.4	160 (Circumference Length 3.048m)
	4	4-410	25.40	15.88	24.6	9.0	6.0	11.7	1.5	3.97	15.2	16.75	0.88	2.55	0.8	128 (Circumference Length 3.048m)
	5	4-350	31.75	19.05	30.0	11.4	7.0	14.6	2.0	5.08	19.45	20.90	1.37	2.57	1.3	96 (Circumference Length 3.048m)

Part Number		Unit Price 1 ~ 2 pc(s).		Cutting Charge (+ Unit Price)
Type	Nominal	Number of Links less than 1 Unit	Number of Links 1 Unit or More	
(Chain) WCHE	3	120 x Number of Links	100 x Number of Links	
	4	120 x Number of Links	100 x Number of Links	
	5	150 x Number of Links	130 x Number of Links	

 No cutting charge when placing orders by Unit Number of Links



■ Principle of the Double Speed Chains



When a chain runs at v speed, circumferential velocity of the small diameter roller is v . At this time circumferential velocity of the large diameter roller becomes $(R/r) \cdot v$ due to ratio of radius.

Therefore, Pallet Speed V becomes a value that chain speed V and $(R/r) \cdot v$ are combined.

$$\begin{aligned} V &= (R/r) \cdot v + v \\ &= (R/r + 1) \cdot v \end{aligned}$$

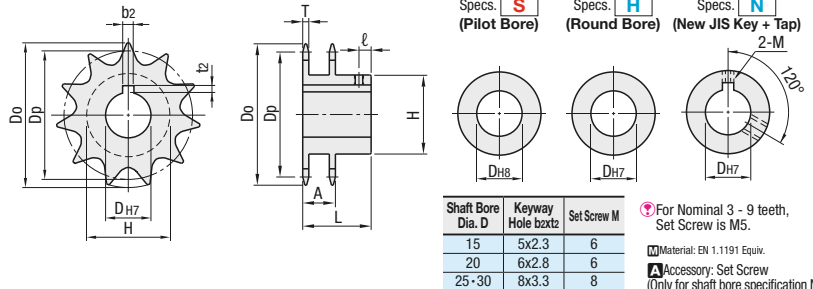
Since the ratio of radius of the large diameter roller and the small diameter roller is approximately 1.5:1

$$\begin{aligned} V &= (1.5 + 1) \cdot v \\ &= 2.5v \end{aligned}$$

■ Double Speed Sprockets



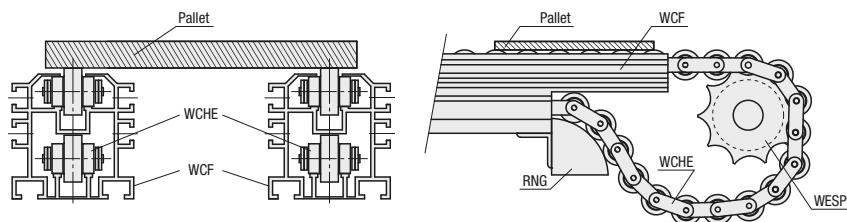
WESP



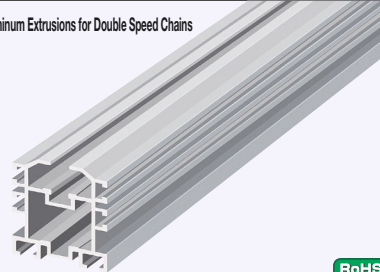
Part Number	Number of Teeth	Shaft Bore Dia.			Dp	Do	T	H	L	ℓ	A	Unit Price 1 ~ 10 pc(s).		
Type	Nominal	S Specification (Dns)	S Specification (Dns)	S Specification (Dns)								Shaft Bore Spec.	S Shaft Bore Spec.	H Shaft Bore Specification
(Sprocket) WESP	3	9	14	15 20	15 20	55.70	63	3	33	22	4	15.3		
	10	14	15 20	15 20	61.65	68	3	37	25	5	15.3			
	4	10	19	20 25	20 25	82.20	93	4	52	40	8	21.5		
	5	10	24	25 30	25 30	102.75	117	5	66	45	9	27.0		



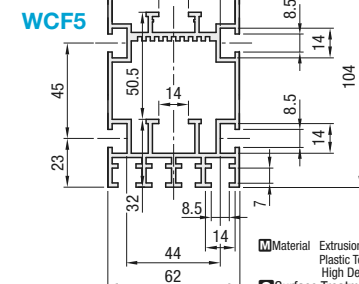
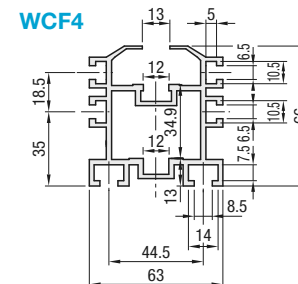
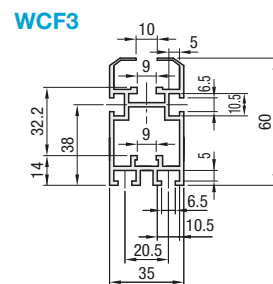
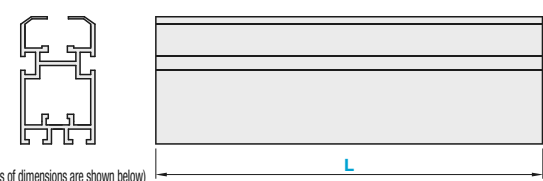
Example



■ Aluminum Extrusions for Double Speed Chains



WCF



Material Extrusion : EN AW-6063-T5 Equiv.
Plastic Top Cover :
High Density Polyethylene

Surface Treatment: Anodize

⚠ General purpose hex nut is applicable.

Part Number		L	Approx. Mass	Unit Price
Type	Nominal	10mm Increment	kg/m	/m
WCF	3	500~3000	1.39	
	4		2.49	
	5		3.17	



Ordering

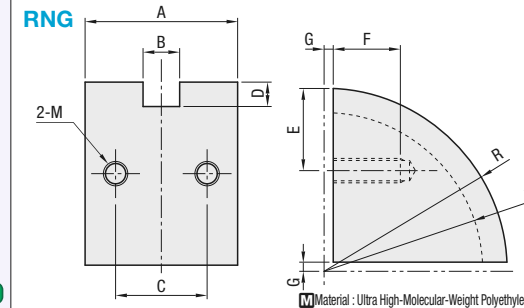
Part Number - L
WCF3 - 1000



Alterations  Part Number - **L** - (FLC, FRC, YA, YB, ZA, ZB)
WCF3 - 1000 - FLC

Alterations Code	Extrusion Cut FLC · FRC		Counterbore on the Side Slots YA, YB, ZA, ZB																												
	The extrusion ends are cut.		Adds counterbored holes for nuts on desired positions of the side slots.																												
	FLC (for Driving Side) FRC (for Non-drive Side)		<table><thead><tr><th>Minired</th><th>X</th><th>Y</th><th>S</th></tr></thead><tbody><tr><td>3</td><td>210</td><td>80</td><td>25</td></tr><tr><td>4</td><td>300</td><td>100</td><td>25</td></tr><tr><td>5</td><td>340</td><td>120</td><td>45</td></tr></tbody></table>	Minired	X	Y	S	3	210	80	25	4	300	100	25	5	340	120	45	Use YA or YB as the code intended to specify the distance from the left end (on Plane Y) and ZA or ZB as the code intended to specify the distance from the right end (on Plane Z). Ordering Example ZA50-ZB200 1mm Increment Ordering Code ZA150 ZB100-ZB250 Part Number Nuts Machined Applicable Nut (JIS Class 1) <table><tbody><tr><td>WCFC3</td><td>Ø12</td><td>M6 or M5</td></tr><tr><td>WCFC4</td><td>Ø12</td><td>M6 or M5</td></tr><tr><td>WCFC5</td><td>Ø16</td><td>M8</td></tr></tbody></table>			WCFC3	Ø12	M6 or M5	WCFC4	Ø12	M6 or M5	WCFC5	Ø16	M8
Minired	X	Y	S																												
3	210	80	25																												
4	300	100	25																												
5	340	120	45																												
WCFC3	Ø12	M6 or M5																													
WCFC4	Ø12	M6 or M5																													
WCFC5	Ø16	M8																													
Spec.	X S Y S Ordering Code FLC, FRC ⚡ L-X-Y≥10		50 200 Plane Y Plane Z ⚡ YA, ZA≥10 ⚡ L-YA, L-ZA≥10 ⚡ L-YB, L-ZB≥10 ⚡ YB-YA, ZB-ZA≥10																												

Return Guides



Part Number		A	B	C	D	E	M	r	R	F	G	Unit Price
Type	Nominal											
RNG	3	34	9	22	6	31	M6	54	60	25	3	
	4	50	12	30	8	30	M8	52	60	25	3	
	5	44	14	20	10	52	M8	54	64	25	3	



Ordering Example	Part Number
	RNG3



Alterations  Part Number - (SET)
BNG3 - SET

Alterations

Code

Bracket Set

SET

Bracket set is shipped with Return Guide.

(Ordering Code) SET

Spec.

⚠️ Screws are not included.

M Material : A6063T5

Normal	L	F	G	d ₁	d ₂	S	P	Q	t
3	34	6.75	6	6.5	6.5	25	18	17	3
4	60	7.75	15	8.5	8.5	30	20	17	3
5	62	9	21	8.5	8.5	35	24	20	4

Table Top Conveyor Chains, Sprockets, Idlers

■ **Features:** Plate is flat and wide. Workpiece can be put directly on plate for conveyance. Suitable for accumulation conveyance.

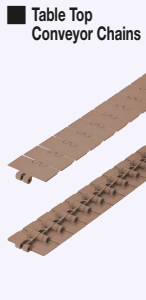
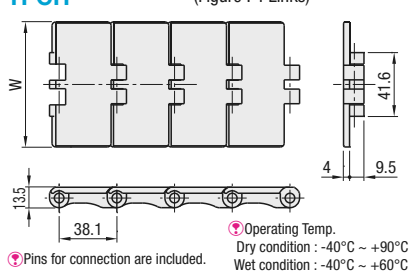


Table Top Conveyor Chains

TPCH (Figure : 4 Links)



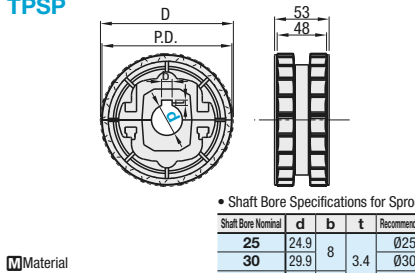
Operating Temp.
Dry condition : -40°C ~ +90°C
Wet condition : -40°C ~ +60°C

Material Chain : Low Friction Polyacetal
Pin : EN 1.4016 Equiv.



Table Top Conveyor Chain Sprockets

TPSP

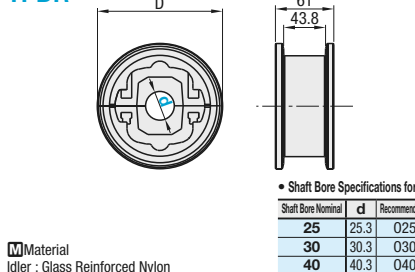


Material Sprockets : Glass Reinforced Nylon



Table Top Conveyor Chain Idlers

TPDR



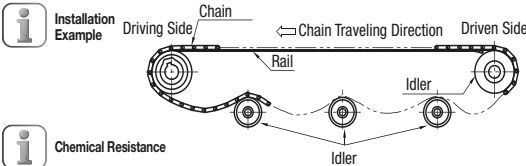
Material Idler : Glass Reinforced Nylon

Chains						
Part Number	Number of Links Specified	W	Max. Allowable Tension (kN)	Mass (kg/m)	Number of Links per Unit	Unit Price
Type	Nominal					
TPCH	826	20~360	82.6	0.85	160	
	1143		114.3	1.03	(Circumference Length 6,096mm)	
① The chain can be made longer than 360 links by connecting them with a pin included. ② Sprockets and Idlers are common, regardless of the Chain models. ③ For Top Chains selection information materials and Frictional Coefficient Table, refer to P2251. ④ When the ordered number of links exceeds the given number of links per unit, the qty. of links per unit and the extra qty. of links are packaged separately. Ex.) For TPCH826-240, 2 separate packages: 160 links x 1 unit + 80 links						

Sprockets					
Part Number	Shaft Bore Dia. d	D	P.D.	Unit Price	
Type	Number of Teeth				
TPSP	21	25 30 40	128.9	129.3	
	23		142.0	141.2	
	25		153.8	153.2	

Idlers			
Part Number	Shaft Bore Dia. d	D	Unit Price
Type	Nominal		
TPDR	21	25 30 40	130.0
	23		142.5
	25		154.5

Ordering Example	Chain	Part Number	Number of Links
		TPCH826	100
	Sprocket	Part Number	Shaft Bore Dia.
		TPSP21	25
	Idler	Part Number	Shaft Bore Dia.
		TPDR23	30



Chemical Resistance				
Chemical Name	Ambient Temperature (20°C)	Ambient Temperature (60°C)	Chemical Name	Ambient Temperature (20°C)
Acetic Acid: 5% or More	△	×	Chromic Acid 50%	×
Acetic Acid: Less than 5%	○	-	Chromic Acid 3%	△
Acetone	△	△	Citric Acid	×
Alcohol (All Types)	△	△	Orange Juice	○
Ammonia	○	○	Coconut Oil	-
Aniline	-	-	Corn Oil	-
Beer	○	-	Cotton Oil	○
Benzene	△	△	Neutral Detergent	-
Soft Drink	○	○	Diethyl Ether	△
Salt Water 10%	○	-	Acetic ether	×
Butter	○	-	Ethylene Glycol	△
Carbon Tetrachloride	○	△	Iron Compounds	×
Cheese	○	-	Formaldehyde	○
Chlorine Gas	×	×	Chlorofluorocarbon	△
Liquefied Chlorine	×	×	Heavy Oil	△
Chlorine Water 0.4%	×	×	Fruit Juice	○
Chlorobenzene	△	△	Gasoline	○
Chloroform	×	×	Glucose	○
Chocolate	○	-	Heptane	○

Chemical Name	Ambient Temperature (20°C)	Ambient Temperature (60°C)	Chemical Name	Ambient Temperature (20°C)	Ambient Temperature (60°C)
Hexane	○	-	Phosphoric Acid Less Than 30%	×	×
Hydrobromic Acid	×	×	Potassium Hydrate	○	○
Hydrofluoric Acid	×	×	Potassium Iodide 3%	○	○
Oxygenated Water 3%	○	-	Seawater	△	-
Oxygenated Water 90%	△	×	Sodium Hydroxide 60%	○	○
Crystal of Iodine	×	×	Stearic Acid	×	×
Isopropyl Alcohol	○	○	Sulfuric Acid Less Than 20%	△	-
Jet Fuel	○	○	Solution of Sulfate	×	×
Kerosene	○	○	Dilute Sulfuric Acid Less Than 10%	×	×
Methyl Isobutyl Ketone	△	△	Acidum Tartaricum	×	×
Petroleum	○	○	Toluene	△	△
Mineral Spirits	○	○	Transformer Oil	△	×
Naphtha	○	○	Cresyl Phosphate	△	△
Nitric Acid	×	×	Urea	○	-
Nitrobenzene	×	×	Wine	○	○
Olive Oil	○	-	Whiskey	○	-
Palmitin Hydrochloric Acid	×	×	Xylene	○	○
Peanut Oil	○	○			
Phenol 5% or Less	×	×			

Idler Sprockets

Single Bearing, Double Bearing

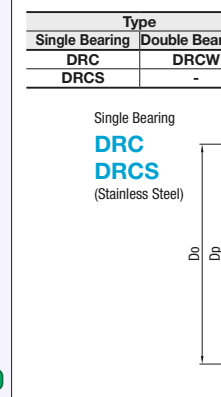
■ **Features:** Can retain tension of a chain and, thus prevents the chain from generating vibration or noise and the sprocket part from malfunctioning in engagement.



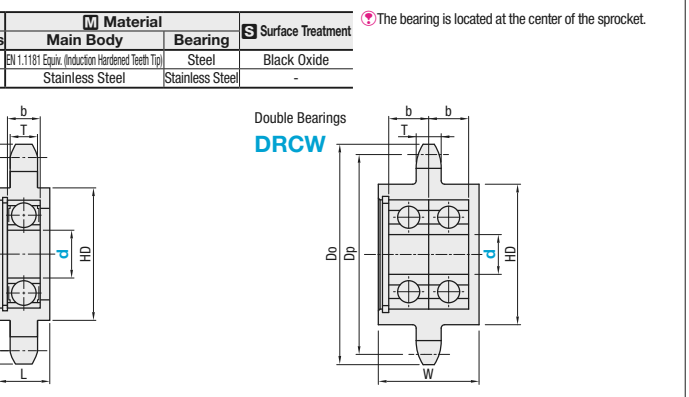
Single Bearing
DRC
DRCS
(Stainless Steel)

Type	M Material	S Surface Treatment
Single Bearing	Main Body	Bearing
DRC	EN 1.1181 Equiv. (Induction Hardened Teeth Tip)	Steel
DRCS	Stainless Steel	Stainless Steel

① The bearing is located at the center of the sprocket.



Double Bearings
DRCW



Part Number		Number of Teeth		d	Dp	Do	T	HD	L	W	Bearing		Idler Pin Applicable Size		Approx. Mass (kg)			Unit Price		
Type	No.										Part No.	b	Single Bearing	Double Bearing	DRC	DRCS	DRCW	DRC	DRCS	DRCW
Single Bearing DRC DRCS	25	17	6	34.56	38		2.8	27	12		606ZZ	6			0.04					
		19	8	38.58	42			31	13		608ZZ	7			0.08					
		21	10	40.59	44			31	13		6900ZZ	6			0.08					
		20	12	40.59	44			33	13		6901ZZ	6			0.08					
	35	16	10	48.82	54		4.3	38	14		6000ZZ	8	IDP6000S		0.11	0.12				
		18	15	54.85	60			44	17		6001ZZ	8	IDP6001S		0.1	0.11				
		21	17	63.91	69			53	19		6202ZZ	11	IDP6202S		0.16	0.17				
		21	17	63.91	69			53	19		6203ZZ	12	IDP6203S		0.24	0.25				
	40	25	20	76	81			60	21		6204ZZ	14	IDP6204S		0.33	0.34				
		15	10	53.07	59		7.2	38	14	22	6000ZZ	8	IDP6000S		0.15	0.16				
		15	15	61.08	67			44	17	28	6202ZZ	11	IDP6202S	IDP6001W	0.14	0.15	0.19			
		17	17	69.12	76			53	19	31	6203ZZ	12	IDP6203S	IDP6202W	0.19	0.2	0.29			
Double Bearings DRCW	50	19	20	77.16	84			60	21	35	6204ZZ	14	IDP6204S	IDP6203W	0.3	0.31	0.45			
		12	12	61.34	69		8.7	43	16	26	6201ZZ	10	IDP6201S	IDP6204W	0.4	0.41	0.62			
		13	15	66.34	74			44	17	28	6202ZZ	11	IDP6202S	IDP6201W	0.21	0.22	0.31			
		15	17	76.35	84			53	19	31	6203ZZ	12	IDP6203S	IDP6202W	0.23	0.24	0.34			
	60	17	20	86.39	94			60	21	35	6204ZZ	14	IDP6204S	IDP6203W	0.37	0.38	0.51			
		11	12	67.62	76		11.7	44	16		6201ZZ	10	IDP6201S	IDP6204W	0.49	0.5	0.72			
		13	17	79.6	89			44	17		6202ZZ	11	IDP6202S		0.26					
		14	20	85.61	95			53	19		6203ZZ	12	IDP6203S		0.27					
	80	9	15	74.27	85			60	21		6204ZZ	14	IDP6204S		0.46					
		10	17	82.2	93		14.6	52	19		6202ZZ	11	IDP6202S		0.56					
		11	20	90.16	102			52	19		6203ZZ	12	IDP6203S		0.38					
		11	20	90.16	102			60	21		6204ZZ	14	IDP6204S		0.57					

① Please use Cantilever pins for the models without applicable idler pin listings. P883-906

■ **Features of Double Bearing Type (DRCW)**
Since double bearings are installed, this type of idler sprocket can withstand heavier load than the Single Type and is suitable for adjusting tension on the driven side.

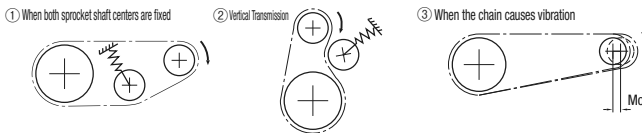
When Using Idlers

Chain elongation decreases transmission efficiency and accelerates wear, resulting in short life. Adjustment mechanism is required for the following power transmission conditions.

- The center distance between shafts is long. (In the case that the shaft center distance exceeds 30 to 50 times greater than used chain pitch, or 20 times or greater than chain pitch under pulsating loads)
- Relative positioning of the two sprocket shafts is exactly, or nearly, perpendicular to each other.
- Distance between both shaft centers is short, and the upper side is the chain's loose side.
- The chain length is long on multi-shaft transmission.
- When the chain is severely vibrating.

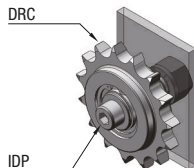
There are following two types of chain stretch compensation mechanisms.

- Installing an idler or a tensioner (when (1) the both sprocket shaft centers are fixed; (2) transmission is in vertical direction; or (3) the chain causes vibration)
- Moving either of the shafts (It may be the easiest way for regular transmission applications.)



Rollers or guide rails are used as idlers in very low speed operations while Sprockets are commonly used for power transmitting chains. The idler should be installed on the chain's loose side span rather than on the tense side, except otherwise needed or in applications that require reversing operation. Installing the idler on the tension side unnecessarily increases the chain tension and makes its service life shorter. Ensure that the number of teeth of idler is designed so that the idler does not exceed the max. allowable speed (Note when the number of teeth is smaller than a small sprocket, speed increases). At least 3 teeth of the idler should contact with chain. There are several ways of idler adjustment: 1. eccentric shaft system, 2. arm system, 3. sliding system. (Please refer to "Chain Drive Mechanism" on P2243.)

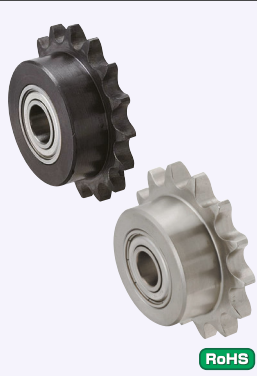
Combination of these app. examples can be selected on our website. Details about Selection Procedure P87



Idler Sprockets with Hub

35B, 40B, 50B, 60B Series

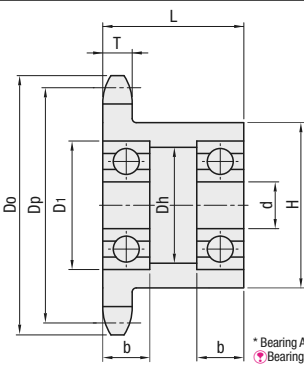
■ **Features:** The Idlers with bearings built-in on both sides of general purpose sprockets.



RoHS

Type	Material		Surface Treatment
	Main Body	Bearing	
DRCBW	EN 1.1191 Equiv. (Induction Hardened Teeth Tip)	Steel	Black Oxide
DRCSBW	EN 1.4301 Equiv.	Stainless Steel	-

• For Cantilever Shafts, see [P.883-906](#).
• For non-drive shaft side tension adjustments, please see Tensioner Unit on [P.1555](#).



* Bearing Accuracy : JIS B1514 Class 0
⚙ Bearings are press-fit.

Part Number Type	No.	Number of Teeth	d	Dp	Do	Dh	Hub		T	Bearing Dimensions			Unit Price	
							H	L		No.	D1	b	DRCBW	DRCSBW
DRCBW DRCSBW	35	10	10	30.82	34	13	*24.5	20	4.3	6700ZZ	15	4		
		12	12	36.80	41	18	*30.5			6801ZZ	21	5		
		13	12	39.80	44	18	*32			6801ZZ	21	5		
		14	12	42.81	47	21	32			6901ZZ	24	6		
		15	12	45.81	51	24	35			6001ZZ	28	8		
		16	12	48.82	54	24	37			6001ZZ	28	8		
		18	15	54.85	60	28	44			6002ZZ	32	9		
		20	15	60.89	66	28	50			6002ZZ	32	9		
		21	15	63.91	69	28	53			6002ZZ	32	9		
		25	20	76	81	34	53			6904ZZ	37	9		
		32	20	97.18	102	34	53			6904ZZ	37	9		
	40	10	12	41.10	46	18	*32	22	7.2	6801ZZ	21	5		
		11	12	45.08	51	21	*36			6901ZZ	24	6		
		12	12	49.07	55	24	*40			6001ZZ	28	8		
		13	12	53.07	59	24	37			6001ZZ	28	8		
		14	12	57.07	63	24	42			6001ZZ	28	8		
		15	15	61.08	67	28	46			6002ZZ	32	9		
		16	15	65.1	71	28	50			6002ZZ	32	9		
		17	20	69.12	76	34	54			6904ZZ	37	9		
		18	20	73.14	80	34	57			6904ZZ	37	9		
		19	20	77.16	84	34	62			6904ZZ	37	9		
		20	25	81.18	88	36	67			6905ZZ	42	9		
		24	25	97.3	104	36	63			6905ZZ	42	9		
DRCBW DRCSBW	50	25	25	101.33	108	36	63	25	8.7	6905ZZ	42	9		
		26	25	105.36	112	36	63			6905ZZ	42	9		
		12	15	61.34	69	29	*50			6202ZZ	35	11		-
		14	15	71.34	79	29	52			6202ZZ	35	11		-
		15	20	76.35	84	34	57			6904ZZ	37	9		-
		17	20	86.39	94	34	67			6904ZZ	37	9		-
		18	25	91.42	100	41	72			6005ZZ	47	12		-
		20	25	101.48	110	41	73			6005ZZ	47	12		-
		24	30	121.62	130	48	73			6006ZZ	55	13		-
		28	35	141.79	150	49	73			6907ZZ	55	10		-
	60	12	15	73.6	83	29	51	32	11.7	6202ZZ	35	11		-
		14	20	85.61	95	40	62			6204ZZ	47	14		-
		15	20	91.62	101	40	68			6204ZZ	47	14		-
		17	25	103.67	113	45	73			6205ZZ	52	15		-
		19	30	115.74	126	55	83			6206ZZ	62	16		-
		20	30	121.78	132	55	83			6206ZZ	62	16		-
		22	30	133.86	144	55	83			6206ZZ	62	16		-
		25	35	151.99	162	60	83			6207ZZ	72	17		-
		30	35	182.25	193	60	83			6207ZZ	72	17		-

⚙ Sprockets marked with * have grooves on hub O.D.

 Ordering Example

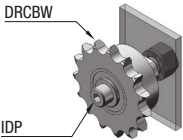
Part Number - Number of Teeth

DRCBW50 - 20

DRCSBW40 - 25

 Example

Combination of these app. examples can be selected on our website.
Details about Selection Procedure [P.87](#)



Idler Sprockets with Hub / Small Idlers

2040B, 2050B, 2060B Series

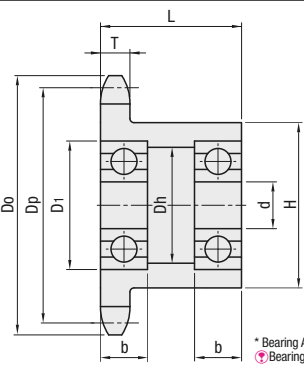
■ **Features:** The Idlers with bearings built-in on both sides of Double Pitch Sprockets



RoHS

Type	Material		Surface Treatment
	Main Body	Bearing	
DRCBW	EN 1.1191 Equiv. (Induction Hardened Teeth Tip)	Steel	Black Oxide

• For Cantilever Shafts, see [P.883-906](#).
• For non-drive shaft side tension adjustments, please see Tensioner Unit on [P.1555](#).



* Bearing Accuracy : JIS B1514 Class 0
⚙ Bearings are press-fit.

Part Number Type	No.	Number of Teeth	d	Dp	Do	Dh	Hub		T	Bearing Dimensions			Unit Price
							H	L		No.	D1	b	
DRCBW	2040	21	20	86.17	92	34	69	25	7.2	6904ZZ	37	9	
		23	25	94.15	100	36	77			6905ZZ	42	9	
		25	25	102.14	108	36	63			6905ZZ	42	9	
	2050	19	25	97.78	105	41	73	28	8.7	6005ZZ	47	12	
		21	30	107.72	115	48				6006ZZ	55	13	
		25	30	127.67	135	48				6006ZZ	55	13	
	2060	19	30	117.34	126	55	83	40	11.7	6206ZZ	62	16	
		25	30	153.2	162	55	80			6206ZZ	62	16	

 Ordering Example

Part Number - Number of Teeth

DRCBW2040 - 23

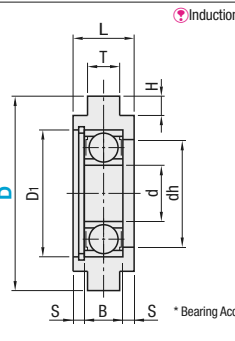


RoHS

Type	Material		Surface Treatment	Hardness
	Main Body	Bearing		
SDRCH	EN 1.1191 Equiv. (Induction Hardened)	Steel	Black Oxide	55-60HRC Hardening on T Part Depth 1 ~ 2mm

■ Installation Example

Is suitable for use in portions where the serrations of the current sprocket are the most likely to interfere with those of the other sprocket.



⚙ Induction Hardening on T part only

* Bearing Accuracy: JIS B1514 Class 0

For Idler Shafts, please see Cantilever Shafts on [P.883-906](#).

Part Number Type	No.	D	d	L	T	dh	H	S	Bearing Dimensions			Retaining Ring	Unit Price
									No.	D1	B		
SDRCH	35	30	6	12	4.4	13	2.2	3	606ZZ	17	6	RTWN17	
		40	10	15		22			6000ZZ	26	8	RTWN26	
		50	12	16		26			6201ZZ	32	10	RTWN32	
	40	40	10	15	7.5	22	2.2	3.5	6000ZZ	26	8	RTWN26	
		50	12	16		26			6201ZZ	32	10	RTWN32	
		60	15	19		29			6202ZZ	35	11	RTWN35	
	50	50	10	19	9	22	2.7	5.5	6000ZZ	26	8	RTWN26	
		60	12	19		26			6201ZZ	32	10	RTWN32	
		70	15	19		29			6202ZZ	35	11	RTWN35	
	60	60	12	23	11.8	26	3.5	6.5	6201ZZ	32	10	RTWN32	
		70	15	23		29			6202ZZ	35	11	RTWN35	

 Ordering Example

Part Number - D

SDRCH40 - 60

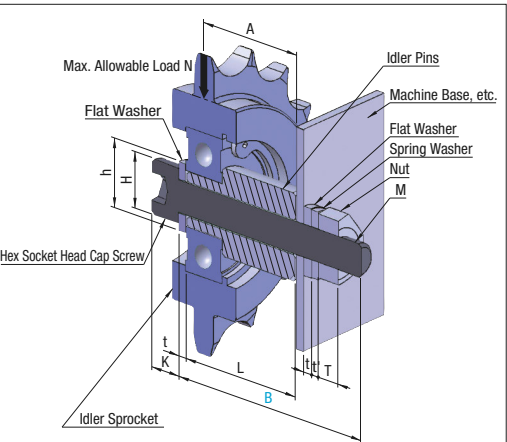
Idler Pins

■ **Features:** Tools needed to attach idler sprockets are sold as a set.



IDP (Steel)
IDPS (Stainless Steel)

Type S
Type W



Max. Allowable Load N
Flat Washer
Hex Socket Head Cap Screw
Idler Pins
Machine Base, etc.
Flat Washer
Spring Washer
Nut
M
Idler Sprocket

Part Name	Type		
	IDP	IDPS	
Idler Pins	M Material EN 1.1191 Equiv.	S Surface Treatment	M Material
Hex Socket Head Cap Screw	EN 1.7220 Equiv.	Black Oxide	Stainless Steel
Nut, Plain Washer	EN 1.0038 Equiv.		
Spring Washer	JIS-SWRH57		

Part Number			A Selection	B Selection 5mm Increment	Applicable Bearing	Pin Body Size				Size of Screw, Washer								Max. Allowable Load N (kgf)	Unit Price												
Type	Bearing No.	Type				L	F	Vt6	D	d	M	K	H	T	t	t'	h		IDP	IDPS											
IDP (Steel) IDPS (Stainless Steel)	6000	S	12	30~40	6000ZZ (b=8)	A+3.8	7.8	10	16	6.2	M6	6	10	5.0	1.6	1.5	12.5	323 (33)													
			14, 16	35~45																											
			18, 20	40~50																											
		W	12, 14	40~50		A+11.8	15.8																						274 (28)		-
			16, 18	45~55																											
			20	50~60																											
	6001	S	14	35~45	6001ZZ (b=8)	A+3.8	7.8	12	16	8.2	M8	8	13	6.5	1.6	2.0	17.0	548 (56)													
			16, 18, 20	40~50																											
			22	45~55																											
		W	14, 16	45~55		A+11.8	15.8																						441 (45)		-
			18, 20, 22	50~60																											
	6201	S	14	35~45	6201ZZ (b=10)	A+4.8	9.8	12	16	8.2	M8	8	13	6.5	1.6	2.0	17.0	548 (56)													
			16, 18	40~50																											
			20, 22	45~55																											
		W	14	45~55		A+14.8	19.8																						441 (45)		-
			16, 18	50~60																											
			20, 22	55~65																											
	6202	S	16, 18, 20	45~55	6202ZZ (b=11)	A+5.3	10.8	15	20	10.5	M10	10	16	8.0	2.0	2.5	21.0	999 (102)													
			22, 24	50~60																											
			16, 18	55~65																											
		W	20, 22	60~70		A+16.3	21.8																						803 (82)		-
			24	65~75																											
	6203	S	16, 18	45~55	6203ZZ (b=12)	A+5.8	11.8	17	25	10.5	M10	10	16	8.0	2.0	2.5	21.0	1244 (127)													
			20, 22, 24	50~60																											
			16	55~65																											
		W	18, 20, 22	60~70		A+17.8	23.8																						990 (101)		-
			24	65~75																											
	6204	S	20, 22	55~65	6204ZZ (b=14)	A+6.8	13.8	20	25	14.5	M14	14	21	11.0	2.5	3.5	28.0	1989 (203)													
			24, 26	60~70																											
			28, 30	65~75																											
		W	20, 22	70~80		A+20.8	27.8																						1617 (165)		-
			24, 26, 28	75~85																											
			30	80~90																											

Ordering Example
Part Number - A - B
IDP6000S - 16 - 35

Tensioner Units with Idler

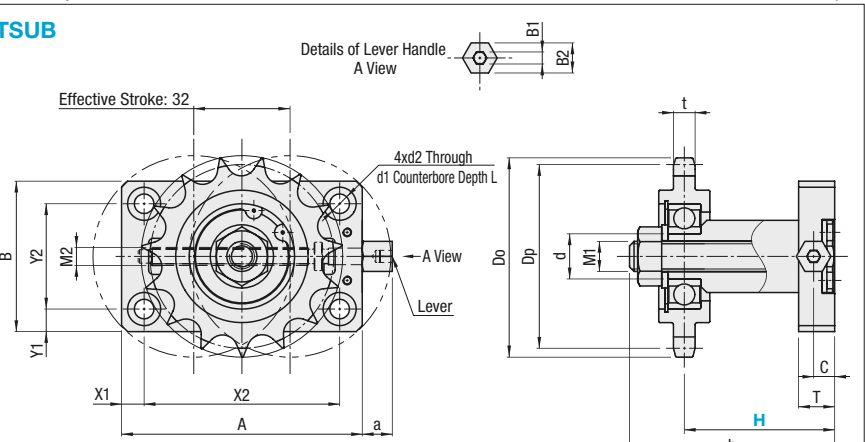
Height Configurable

■ **Features:** The following bidirectional tension adjustment is available: "Push" direction and "Pull" direction. This unit and idler are assembled in a set before delivery.



TSUB

RoHS



Effective Stroke: 32
Details of Lever Handle A View
4xd2 Through d1 Counterbore Depth L
Lever
A View
H
h

Part Name	M Material	S Surface Treatment
Base Block	EN 1.0038 Equiv.	
Idler Shaft		
Adjustment Screw	EN 1.1191 Equiv.	Black Oxide
Nut		
Washer		
Idler Sprocket	EN 1.1181 Equiv. (Induction Hardened Teeth Tip)	-

One Point
By using the adjustment screw coupled to the idler shaft machined with the tapped hole, tension can be adjusted bidirectionally: "Push" and "Pull."
Since the adjustment screw is structured with the dual support frame, it prevents the idler shaft from being inclined and facilitates tension adjustment.

Part Number	Number of Teeth	H 1mm Increment	h (Max.)	M1	M2	Travel per Handle Rotation (mm)	d	A	B	T	X1	X2	Y1	Y2	a	d1	d2	L	C	B1	B2	Unit Price
TSUB	35	16	25~45	59.2	8	1.0	12	80	50	12	7.5	65	7.5	35	10.5	11	6.5	6.5	7	4	10	
		18		63.2	10		15															
	40	13	30~50	64.2	8	1.0	12	85	60	12	7.5	70	7.5	45	10.5	11	6.5	6.5	7	4	10	
		15		68.2	10		15															
	50	13	35~55	73.2	10	1.25	15	90	60	16	10	70	10	40	15.5	14	8.5	8.5	8	5	13	
		15		76.2	12		17															
	60	11	40~60	79.2	14	1.25	20	90	60	16	10	70	10	40	15.5	14	8.5	8.5	8	5	13	
		14		84.2	14		20															
		11		78.2	10		15															
		14		84.2	14		20															

Idler Specifications

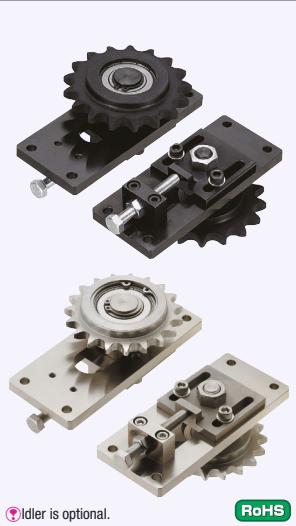
No.	Number of Teeth	Shaft Dia.	Dp	Do	t	Bearing Part No.
35	16	12	48.82	54	4.3	6001ZZ
	18	15	54.85	60	4.3	6202ZZ
40	13	12	53.07	59	7.2	6001ZZ
	15	15	61.08	67	7.2	6202ZZ
50	13	15	66.34	74	8.7	6202ZZ
	15	17	76.35	84	8.7	6203ZZ
60	11	20	86.39	94	11.7	6204ZZ
	14	20	85.61	95	11.7	6204ZZ

For

Tensioner Unit

Slotted Hole, Adjustment Screw Type

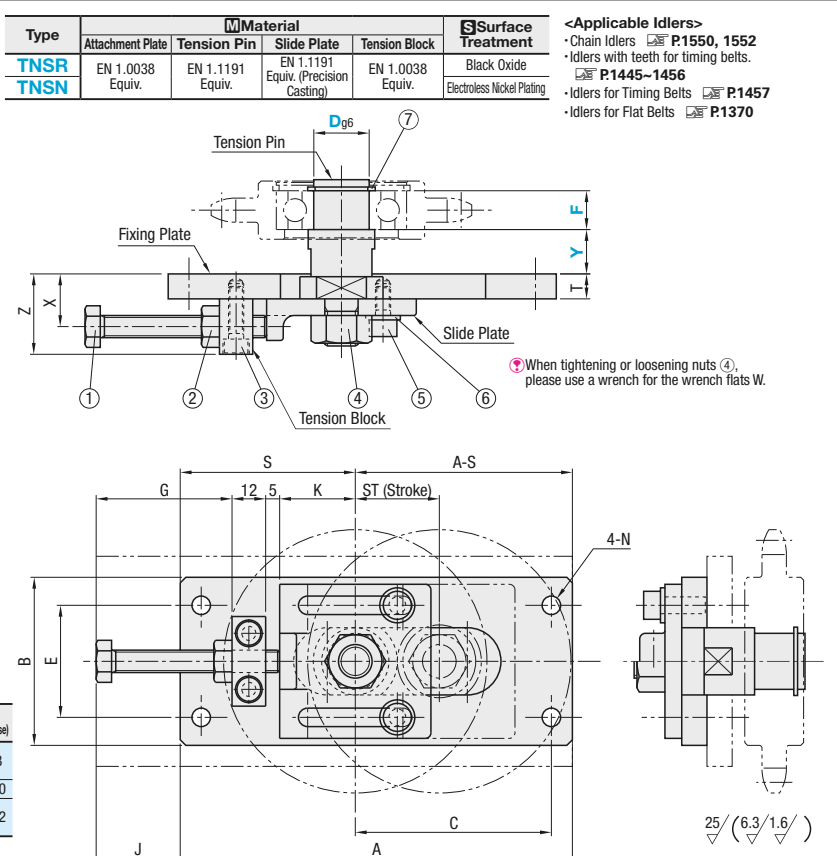
■ **Features:** Tensioner units applicable on both driven side and middle section. Can be used for chain or belt drive.



Idler is optional. **RoHS**

Type	Attachment Plate	Tension Pin	Slide Plate	Tension Block	Surface Treatment
TNSR	EN 1.0038	EN 1.1191	EN 1.1191	EN 1.0038	Black Oxide
TNSN	Equiv.	Equiv.	Equiv. (Precision Casting)	Equiv.	Electroless Nickel Plating

<Applicable Idlers>
• Chain Idlers **P1550, 1552**
• Idlers with teeth for timing belts. **P1445~1456**
• Idlers for Timing Belts **P1457**
• Idlers for Flat Belts **P1370**



When tightening or loosening nuts ④, please use a wrench for the wrench flats W.

Tension Pin Dimension Details

Dg6	V	d	t	P	H	W	M (Coarse)
10	13	9.6	5	13	15	11	M8
12	15	11.5				13	
15	20	14.3		16	20	17	M10
17	22	16.2	8	17	24	19	M12
20	24	19			24	22	

TNSR Accessory

Dg6	① Adjustment Screw	② Nut	③ (2 pcs.) Hex Socket Head Cap Screw	④ Nut	⑤ (2 pcs.) Hex Socket Head Cap Screw	⑥ (2 pcs.) Flat Washer	⑦ C Type Retaining Ring
10	M6x55	LBNR6	CB4-16	LBNR8	CB5-10	PWF5	STWN10
12				LBNR10	CB5-14		STWN12
15	M8x60	LBNR8	CB5-22	LBNR12	CB6-16	PWF6	STWN15
17							STWN17
20							STWN20

TNSN Accessory

Dg6	① Adjustment Screw	② Nut	③ (2 pcs.) Stainless Steel Hex Socket Head Cap Screw	④ Nut	⑤ (2 pcs.) Stainless Steel Hex Socket Head Cap Screw	⑥ (2 pcs.) Flat Washer	⑦ C Type Retaining Ring
10	M6x55	SLBNR6	M4x16	SLBNR8	M5x10	SPWF5	STWS10
12				SLBNR10	M5x14		STWS12
15	M8x60	SLBNR8	M5x22	SLBNR12	M6x16	SPWF6	STWS15
17							STWS17
20							STWS20

Tensioners / Slide Plates for Tension

Link Bar Type

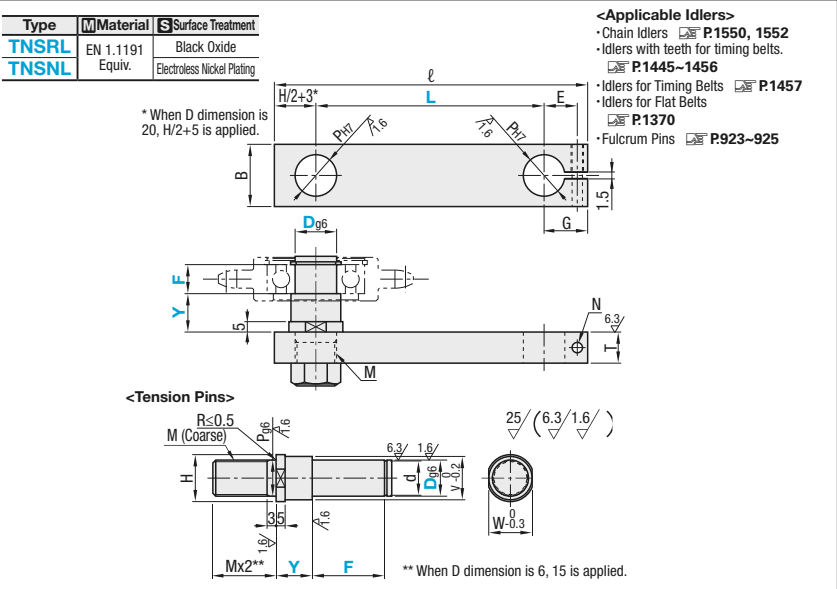
■ **Features:** Tensioners for intermediate tensioning which can be easily mounted with holes on the side of plate. Can be installed in small spaces.



Idler is optional. **RoHS**

Type	Material	Surface Treatment
TNSRL	EN 1.1191	Black Oxide
TNSNL	Equiv.	Electroless Nickel Plating

<Applicable Idlers>
• Chain Idlers **P1550, 1552**
• Idlers with teeth for timing belts. **P1445~1456**
• Idlers for Timing Belts **P1457**
• Idlers for Flat Belts **P1370**
• Fulcrum Pins **P923~925**



* When D dimension is 20, H/2+5 is applied.

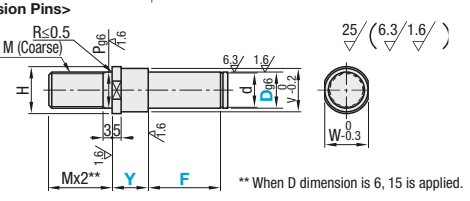
Tension Pin Dimension Details

Dg6	V	d	H	W	P	M (Coarse)
6	8	5	10	8	6	M6
8	10	7	12	10	8	M8
10	13	9.6	15	13	10	M10
12	15	11.5	17	14	12	M12
15	18	14.3	20	17	12	M12
17	20	16.2	23	20	16	M16
20	24	19	26	24	20	M20

Accessory

Type	Accessory	Material
TNSRL	Retaining Ring C Type, Hex Socket Head Cap Screw, Nut, Washer.	Steel
TNSNL		Stainless Steel

Tension Pins



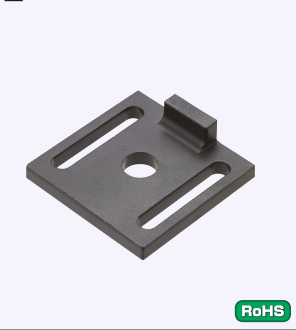
** When D dimension is 6, 15 is applied.

Part Number		1mm Increment			ℓ	B	T	E	G	N	Included Screw	Unit Price	
Type	Dg6	Y	F	L								TNSRL	TNSNL
TNSRL TNSNL	6	7~50	6~75	30~200	L+20	25	10	7	12	6.6	M6x25		
	8				L+23								
	10				L+25.5								
	12	10~75			L+27.5	30	12	12	18	M6x30			
	15				L+31								
	17				L+34.5								
	20				L+40								

Ordering Example

Part Number - Y - F - L
TNSRL15 - Y12 - F10 - L50

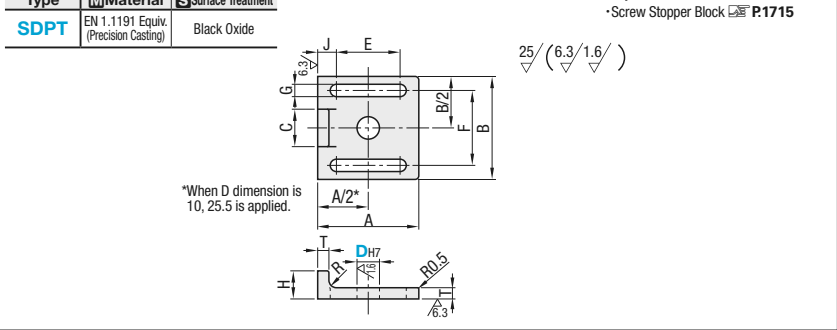
Slide Plates for Tension



RoHS

Type	Material	Surface Treatment
SDPT	EN 1.1191 Equiv. (Precision Casting)	Black Oxide

• Adjustment Screw **P1712**
• Screw Stopper Block **P1715**



*When D dimension is 10, 25.5 is applied.

Part Number		1mm Increment		ST	A	B	T	J	C	E	G	K	S	X	Z	N	Unit Price	
Type	Dg6	Y	F	(Stroke)													TNSR	TNSN
TNSR TNSN	10	10~50	8~50	25	120	50	6	24	55	35	42.0	22.5	57.5	14	21	5.5		
	12			25	125	55	9	31	57.5	40	48.5	25.5	60	19	29	6.6		
	15	12~60	10~50	30	140	60		30	70		27	62.5						
	17																	
	20																	

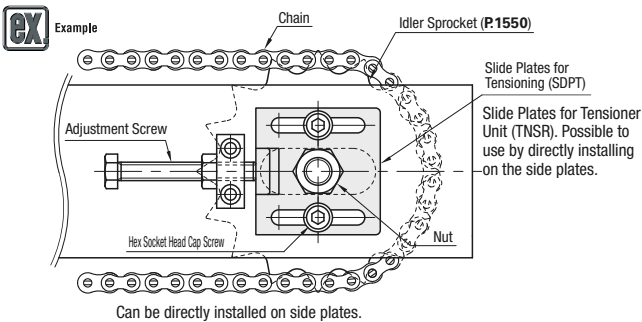
① When D=10 or 12, Y+F≤80
When D=15 ~ 20, Y+F≤120

② For the F dim., specify a value identical to the width of the bearing included with the current idler. (Tolerance of F dim. : 0~+0.1mm)

Ordering Example
Part Number - Y - F
TNSR20 - Y15 - F12
TNSN15 - Y20 - F32

Ordering Example
Part Number
SDPT8

Example

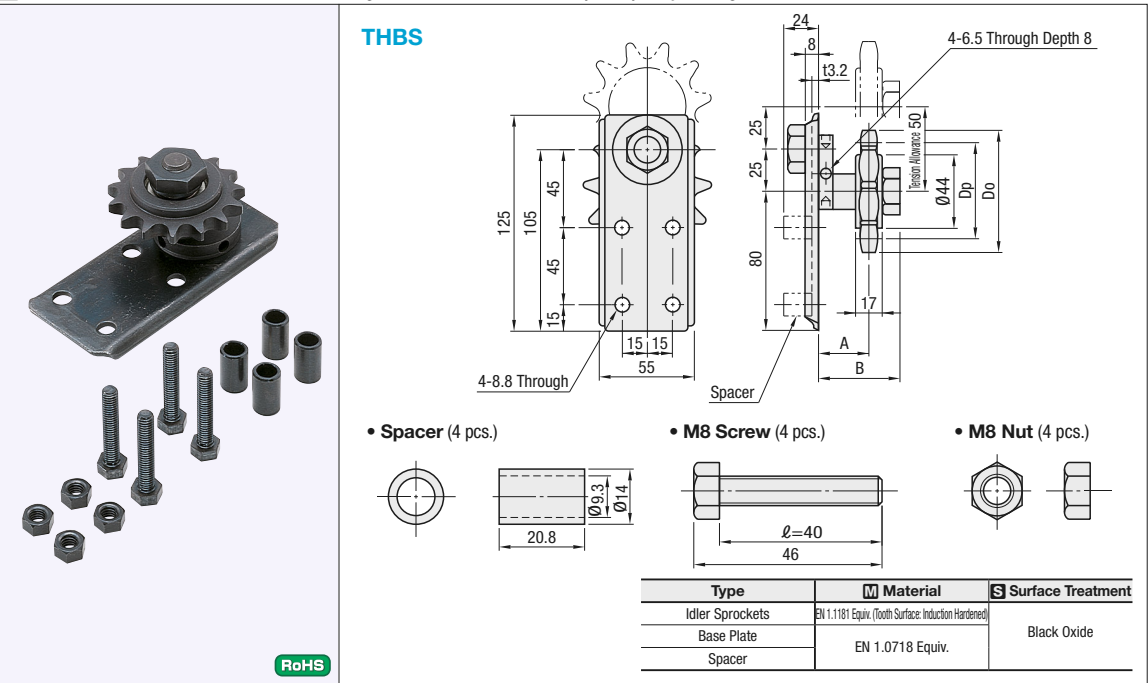


Chain
Idler Sprocket (P1550)
Slide Plates for Tensioning (SDPT)
Slide Plates for Tensioner Unit (TNSR). Possible to use by directly installing on the side plates.
Adjustment Screw
Hex Socket Head Cap Screw
Nut
Can be directly installed on side plates.

Chain Tensioners

Idler Set Type

■ **Features:** Tensioners for intermediate tensioning which allows tension to be adjusted just by rotating the shaft.

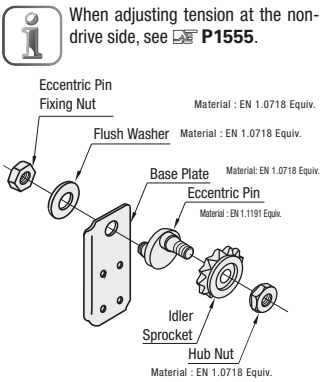


Part Number		Applicable Roller Chain		Idler Sprockets			A	B	Mass (kg)	Unit Price
Type	No.	Part No.	Number of Teeth	Do	Dp					
THBS	35	JIS35	DRC35-18	18	60	54.85	26	47	0.89	
	40	JIS40	DRC40-15	15	67	61.08			0.92	
	50	JIS50	DRC50-13	13	74	66.34			0.96	
	60	JIS60	DRC60-11	11	76	67.62			1.00	
	80	JIS80	DRC80-9	9	85	74.26	30	51	1.11	

Ordering Example

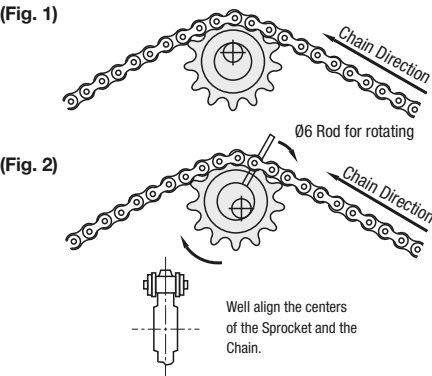
Part Number

THBS35



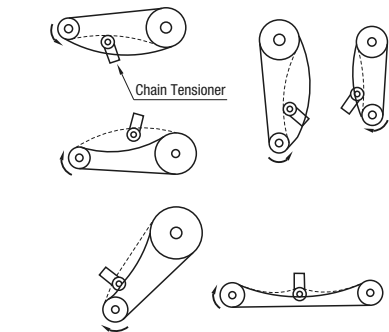
Tension Adjustment Method

By inserting a $\phi 6$ rod in a hole of the eccentric pin and rotating, tension adjustment of max. 50mm can be obtained. Fix base plate so that idler and chain engage each other at a position of max. tension tolerance (Fig. 1), and tighten the eccentric pin nut in chain driving direction.



Chain Tensioner Position

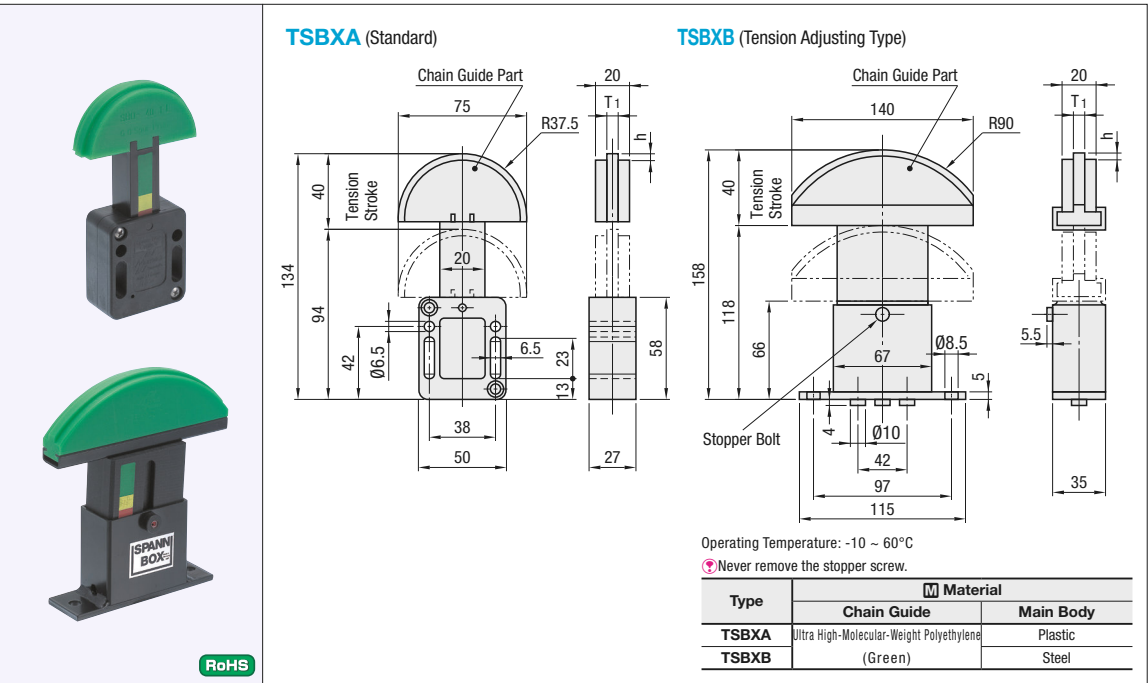
Install a chain tensioner on the loose side as shown in the figure below.



(Note) Do not use the Chain Tensioner under the conditions where it is located on the side of adjusting tensions, such as forward reverse rotary drive.

Chain Guide Tensioners

■ **Features:** Automatically adjusts tension in response to chain elongation and thus, reduces the time and trouble of doing maintenance for chain tension.



Part Number			T1	h	Applicable Chain	Unit Price
Type	No.	Load Type (Refer to Fig. 1)				
TSBXA (Standard)	35	L	4	2.6	CHE35	
	35	H				
	40	L				
	40	H	7	2.6	CHE40/CHE50	
	60	H				
TSBXB (Tension Adjusting Type)	40	L	11	3.5	CHE60	
	40	H				
	50	L				
	50	H	6.3	2.6	CHE40	
	50	H				

Ordering Example

Part Number

TSBXA40H

TSBXB50L

Features

Ultra High-Molecular-Weight Polyethylene with excellent abrasion resistance is used for the guide part of the Chain Guide Tensioner. Force of built-in spring constantly maintains appropriate tension automatically, and enhances the performance and extends life without maintenance.

How to Install

Install by putting the guide onto the chain, firmly push until reaching a location where the tension stroke does not exceed 50% of that during empty load (40mm). If necessary, adjust location by using shims or spacers.

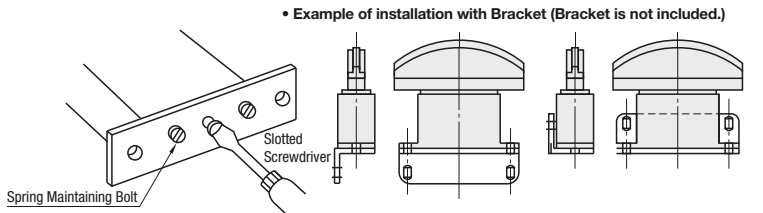
Tension Adjusting Method (TSBXB)

For TSBXB, it is possible to adjust tension load in 3 stages by loosening the spring retention screw. During shipment, all 3 pieces of springs are not released. Loosen the center screw when required to release only one maintaining screw, loosen screws on both sides when 2 springs need to be released. Provide enough free space below the retention screw to allow access for tension adjustments after installation. The springs can be returned to retained state by turning the retention screws while pressing the guide down.

* There is no spring retention screw in TSBXA.

Table 1 : Load Type

Type	Loosening Retaining Screw Qty.	Tension Load (N)			
		Load Type L		Load Type H	
		min.	max.	min.	max.
TSBXA	(Not provided)	37	64	64	137
	1 pc.	37	64	64	137
	2 pcs.	75	127	127	274
TSBXB	3 pcs.	112	191	191	412

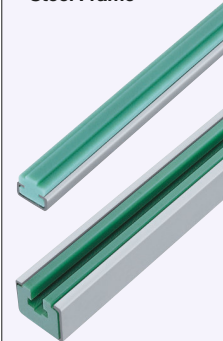


Chain Guides with Steel Frame / Chain Guides

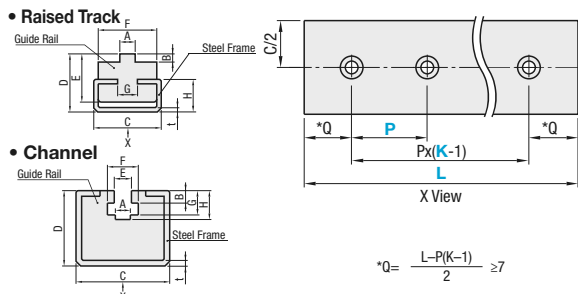
L Dimension Selectable / Configurable

■ **Features:** By passing a chain through this type of guide, conveyance is provided with little dust/noise.

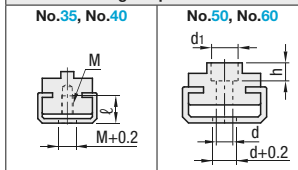
Chain Guides with Steel Frame



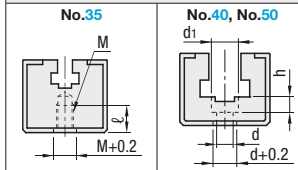
Type				Material	
L Dimension Selectable w/o Hole Machining		L Dimension Configurable with Hole Machining			
Raised Track	Channel	Raised Track	Channel	Guide Rail	Steel Frame
GDTC	GDCC	LGTC	LGCC	Ultra High-Molecular-Weight Polyethylene	Steel (Galvanized)
GDTS	GDCS	LGTS	LGCS		Stainless Steel



Hole Machining Shape for Raised Track



Hole Machining Shape for Channel



L Dimension Selectable w/o Hole Machining

Part Number		L Length Selection (mm)	A	B	C	D	E	F	G	H	t	Mass (kg/m)	Unit Price							
Type	No.												GDTC, GDCC			GDTS, GDCS				
													L=450	L=950	L=2000	L=450	L=950	L=2000		
Raised Track GDTC (Steel) GDTS (Stainless Steel)	35	450	4.4	2.3								0.67								
	40	950	7.4	2.4	20	17	14	17	10	10	1.5	0.69								
	50	2000	8.8	2.8								0.69								
	60		11.8	3.5	28	20		24	14	12	2	1.12								
Channel GDCC (Steel) GDCCS (Stainless Steel)	35	450	4.6	4.3				5.3	9.9	7.9	9.3	1.46								
	40	950	5.1	7.4				8.4	13.2	11.7	13.7	1.40								
	50	2000	6.4	8.9	30	24		10.7	16.5	14.5	16.2	1.34								
	60		7.4	11.7				12.4	19.8	18.5	20.6	1.28								

L Dimension Configurable with Hole Machining

Part Number		L	K	P	A	B	C	D	E	F	G	H	t	M	ℓ	d	d1	h	Mass (kg/m)
Type	No.	10mm Increment	Number of Holes	5mm Increment															
Raised Track LGTC (Steel) LGTS (Stainless Steel)	35	200~2000	0~10 ⊗Hole=1 cannot be specified.	50~500	4.4	2.3								M4	6	-	-	-	0.67
	40				7.4	2.4	20	17	14	17	10	10	1.5	M5	7.5	-	-	-	0.69
	50				8.8	2.8								-	-	4.5	7.5	5	0.69
	60				11.8	3.5	28	20		24	14	12	2	-	-	5.5	9	6	1.12
Channel LGCC (Steel) LGCS (Stainless Steel)	35	200~2000	0~10 ⊗Hole=1 cannot be specified.	50~500	4.6	4.3				5.3	9.9	7.9	9.3	M6	9	-	-	-	1.46
	40				5.1	7.4	30	24		8.3	13.2	11.7	13.7	-	-	4.5	7.5	5	1.40
	50				6.4	8.9				10.7	16.5	14.5	16.2	-	-	5.5	9	6	1.34
	60				7.4	11.7				12.4	19.8	18.5	20.6	-	-	-	-	-	1.28

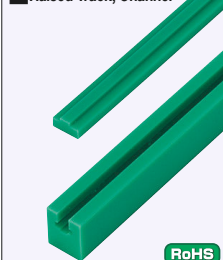
⊗ P selection is unnecessary when Number of hole is 0. ⊗ Hole machining is not applicable to Channel No. 60.

⊗ Ultra High-Molecular-Weight Polyethylene may change in dimensions as its stretch rate changes by temperature.

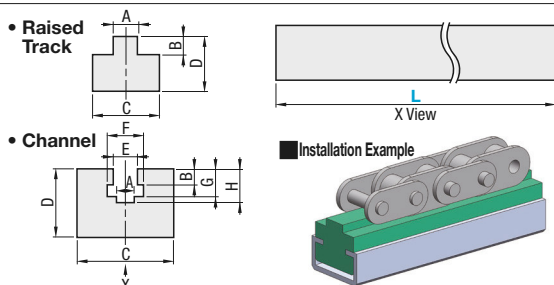
Ordering Example	Part Number	-	L	-	K	-	P
	GDCC50	-	450				
	LGTC40	-	860	-	K8	-	P100
	LGCS60	-	1600	-	K0		

No.		Body Price										Hole Machining Charge (Body Price +)	
		LGTC					LGTS						
		L200~450	L460~950	L960~1400	L1410~2000	L200~450	L460~950	L960~1400	L1410~2000				
35													
40													
50													
60													
		Body Price										Hole Machining Charge (Body Price +)	
		LGCC					LGCS						
		L200~450	L460~950	L960~1400	L1410~2000	L200~450	L460~950	L960~1400	L1410~2000				
35													
40													
50													
60													

Raised Track, Channel



Type		Material
Raised Track	GDTC	Ultra High-Molecular-Weight Polyethylene
Channel	GDCC	



L Dimension Selectable Type

Part Number		L Length Selection (mm)		A	B	C	D	E	F	G	H	t	Mass (kg/m)	Unit Price		
Type	No.													L=450	L=950	L=2000
Raised Track GDT	40	450		7.4	2.4								0.16			
	50	950		8.8	2.8	20	10	-	-	-	-	-	0.16			
	60	2000		11.8	3.5	25							0.36			
Channel GDC	40	450		5.1	7.4	25	30	8.4	13.2	11.7	13.7	0.58				
	50	950		6.4	8.9	30	35	10.7	16.5	14.5	16.2	0.8				
	60	2000		7.4	11.7	35	40	12.4	19.8	18.5	20.6	1.04				

⊗ Ultra High-Molecular-Weight Polyethylene may change in dimensions as its stretch rate changes by temperature.

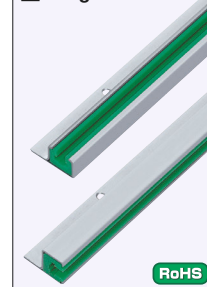
Ordering Example	Part Number	-	L
	GDT50	-	450
	GDC60	-	2000

Flanged Chain Guides / Steel Chain Guides

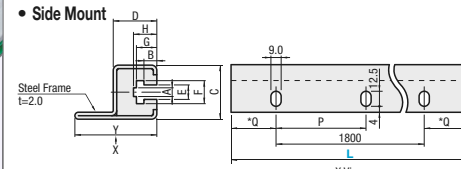
L Dimension Selectable

■ **Features:** This type of chain guide can be installed just by screw-tightening its flange through the mounting hole.

Flanged



Type		Material	
L Dimension Selectable			
Side Mount	Up Mount	Guide Rail	Steel Frame
GDYC	GDRC	Ultra High-Molecular-Weight Polyethylene	Steel (Galvanized)
GDYS	GDRS		Stainless Steel



⊗ Upon existing stock is depleted, the flange part on the steel frame will be changed from Folded type to Welded Type. Note that this new type is equivalent to the conventional type, but has some traces of welding.

⊗ Channel can be pulled out of Steel Frame.

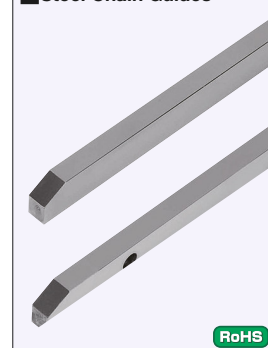
L Dimension Selectable

Part Number		L Length (mm)		K	P	A	B	C	D	E	F	G	H	W	Y	Mass (kg/m)	Unit Price	
Type	No.			Number of Holes	Hole Pitch												GDYC·GDRC	GDYS·GDRS
Side Mount GDYC (Steel) GDYS (Stainless Steel)	35	2000	10	200		4.6	4.3			5.3	9.9	7.9	9.3		47	2.37		
	40					5.1	7.4			8.4	13.2	11.7	13.7			2.31		
	50					6.4	8.9	30	25	10.7	16.5	14.5	16.2			2.24		
	60					7.4	11.7			12.4	19.8	18.5	20.6			2.18		
Up Mount GDRC (Steel) GDRS (Stainless Steel)	35	2000	10	200		4.6	4.3			5.3	9.9	7.9	9.3			2.40		
	40					5.1	7.4			8.4	13.2	11.7	13.7			2.34		
	50					6.4	8.9	30	25	10.7	16.5	14.5	16.2	53	-	2.27		
	60					7.4	11.7			12.4	19.8	18.5	20.6			2.21		

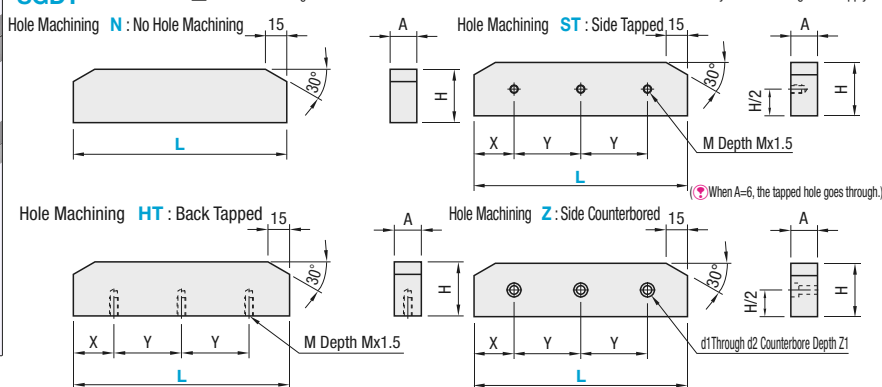
⊗ Ultra High-Molecular-Weight Polyethylene may change in dimensions as its stretch rate changes by temperature.

Ordering Example	Part Number	-	L
	GDYC50	-	2000

Steel Chain Guides



SGDT



Mounting Hole

L	Number of Holes	X	Y
300	2	100	100
500	3	150	100
1000	5	200	150

⊗ No surface treatment on machined holes.

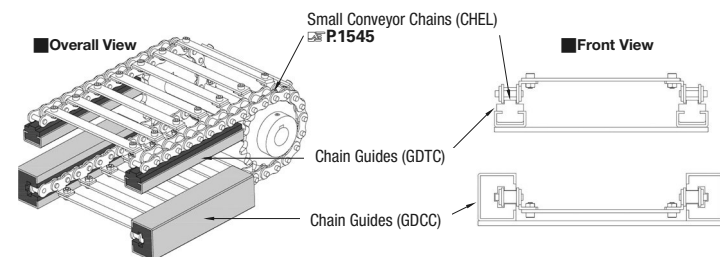
L Dimension Selectable Type

Part Number		Hole Machining		L Length Selection (mm)		A	H	d1	d2	Z1	M	L=300 Unit Price		L=500 Unit Price		L=1000 Unit Price	
Type	No.											N	ST, HT	Z	N	ST, HT	Z
SGDT	40	N (No Hole Machining)		300		6	13	4.5	8	4.5	4						
	50	ST (Side Tapped)		500		9	16	5.5	9.5	5.5	5						
	60	HT (Back Tapped) Z (Side Counterbored)		1000		12	22	6.5	11	6.5	6						

Ordering Example	Part Number	-	L
	SGDT50ST	-	500

■ **Example**

When a conveyor or other type chain is operated in highly frictional environments, the roller and palate are worn sharply and thereby, generate dust and noise. This phenomenon causes the service life of the chain to be lowered. As the solution against the said problem, a chain guide with low friction and high abrasion resistance is used. Furthermore, this guide is also used for the purpose of suppressing chain vibration or of controlling the chain travelling path.



Turnbuckles

Standard / Long / Threaded

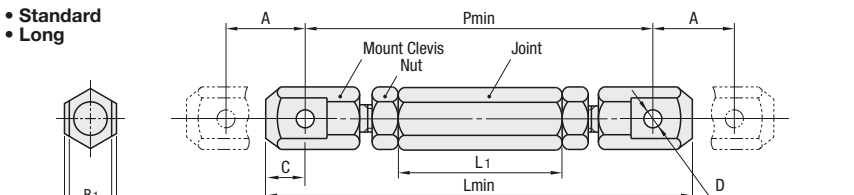
■ **Features:** By coupling this turn buckle with the end of a chain, tension can be adjusted or a workpiece can be hung.



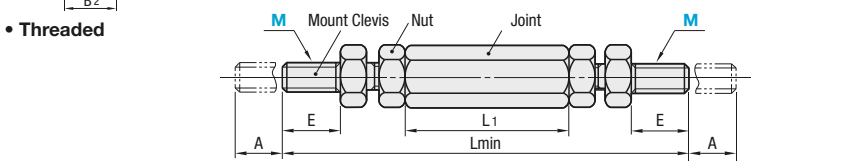
RoHS

Type			Parts	Material	Surface Treatment	Hardness
Standard	Long	Threaded				
STRT	LSTRT	STBT	Joint	EN 1.0715 Equiv.	Black Oxide	35~40HRC
			Mount Clevis	EN 1.1191 Equiv.		
			Nut	EN 1.0038 Equiv.		
STRTS	-	-	Joint	EN 1.4305 Equiv.	-	-
			Mount Clevis	EN 1.4301 Equiv.		

• Standard
• Long



• Threaded



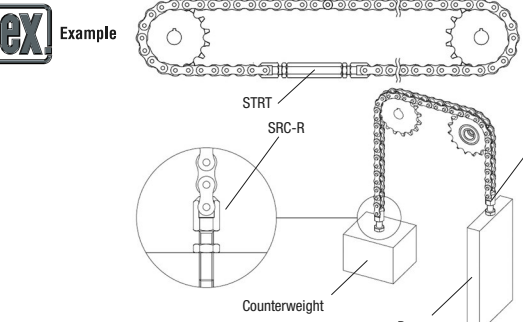
Standard												Unit Price	
Part Number	Type	Applicable Roller Chain Nominal	Lmin	Pmin	A	B1	B2	C	L1	D	Mass (g)	STRT	STRTS
STRT STRTS	11	40	36.4	4	2.4	5	1.8	20	1.7	6.6	-		
	15	46	41.6	5	3.4	6	2.2	22					
	25	62	56	7.5	4.8	7	3	33	2.4	18			
	35	85	76	10	7.4	10	4.5	43	3.7	44			
	40	110	98	13	11.2	13	6	55	4	105			
	50	135	120	16	13.8	17	7.5	67	5.2	215			
	60	161	143	20	17.8	19	9	81	6	330			
	80	201	177	21	22.6	24	12	95	8	680			

⚠ STRTS is available for sizes marked with * only.

Long												Unit Price	
Part Number	Type	Applicable Roller Chain Nominal	Lmin	Pmin	A	B1	B2	C	L1	D	Mass (g)	STRT	STRTS
LSTRT	25	102.6	96.6	22.4	4.8	7	3	69	2.4	57			
	35	143	134	33	7.4	10	4.5	95	3.7	134			
	40	175	163	39	11.2	13	6	115	4	283			
	50	200	185	40	13.8	17	7.5	126	5.2	411			
	60	275	257	66	17.8	19	9	185	6	918			
	80	335	311	80	22.6	24	12	225	8	1741			

Threaded							Unit Price	
Part Number	Type	M (Coarse)	Lmin	E	A	L1	Mass (g)	STBT
STBT	3	46	6	5	22	7.6		
	4	64	8	7.5	33	16		
	6	89	12	10	43	40		
	8	116	16	13	55	115		
	10	143	20	16	67	185		
	12	171	24	20	81	290		
	16	217	32	21	95	600		

Ordering Example
Part Number
STRT40



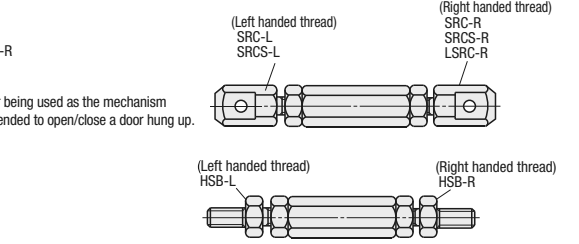
STRT

SRC-R

SRC-R

Counterweight

Door



(Left handed thread)
SRC-L
SRC-S-L

(Right handed thread)
SRC-R
SRC-S-R
LSRC-R

(Left handed thread)
HSB-L

(Right handed thread)
HSB-R

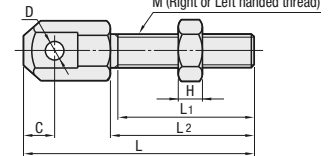
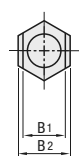
Turnbuckle Components

■ **Features:** Turnbuckle Components can be purchased as separate items.



RoHS

Type			Parts	Material	Surface Treatment	Hardness
Standard	Long	Threaded				
SRC-R	SRC-L	LSRC-R	Main Body	EN 1.1191 Equiv.	Black Oxide	35~40HRC
SRC-S-R	SRC-S-L	-	Nut	EN 1.0038 Equiv.		
SRC-S-R	SRC-S-L	-	Main Body	EN 1.4305 Equiv.	-	-
SRC-S-R	SRC-S-L	-	Nut	EN 1.4301 Equiv.		



Standard																
Part Number		M (Coarse)	L ₁	L ₂	L	C	D	B ₁	B ₂	H	Max. Load (kN)		Mass (g)	Unit Price		
Type	Applicable Roller Chains Nominal										SRC-R, L	SRC-S-R, L		SRC-R, L	SRC-S-R, L	
SRC-R	(Right-hand Thread)	15	3	10	12	20.6	2.2	1.7	3.4	6	1.8	0.44	-	2.8		-
		25	4	16.5	18	28.2	3	2.4	4.8	7	2.4	0.78	0.68	5		
SRC-L	(Left-hand Thread)	35	6	23.5	25	40	4.5	3.7	7.4	10	3.6	1.96	1.57	12		
SRC-S-R	(Right-hand Stainless Steel Thread)	40	8	31	33	52.5	6	4	11.2	13	5	3.53	2.84	30		
SRC-S-L	(Left-hand Stainless Steel Thread)	50	10	39	41	65	7.5	5.2	13.8	17	6	5.68	4.51	60		
		60	12	47	49	78	9	6	17.8	19	7	8.23	6.57	100		
		80	16	57	60	98	12	8	22.6	24	10	15.4	12.3	210		

⚠ 15 is not available for SRC-S-R. SRC-S-L is available for sizes marked with * only.

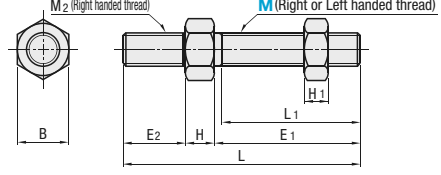
⚠ Please check the Allowable Tension of the paired Chains.

Long														
Part Number		M (Coarse)	L1	L2	L	C	D	B1	B2	H	Max. Load (kN)	Mass (g)	Unit Price	
Type	Applicable Roller Chain Nominal													
LSRC-R (Right-Hand Thread)	25	6	35	38	48.2	3	2.4	4.8	7	3.6	0.78	11		
	35	8	50	54	69	4.5	3.7	7.4	10	5	1.96	27		
	40	10	60	64.5	84	6	4	11.2	13	6	3.53	56		
	50	12	65	71	95	7.5	5.2	13.8	17	7	5.68	94		
	60	16	100	106	135	9	6	17.8	19	10	8.23	218		
	80	20	119	127	165	12	8	22.6	24	12	15.4	414		



RoHS

Type			Parts	Material	Surface Treatment	Hardness
Right-Hand Thread	Left-Hand Thread	Threaded				
HSB-R	HSB-L		Main Body	EN 1.1191 Equiv.	Black Oxide	35~40HRC
			Nut	EN 1.0038 Equiv.		

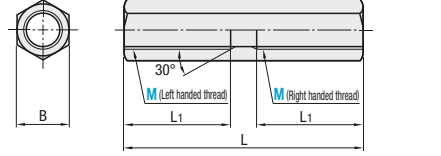


Threaded												Unit Price	
Part Number	Type	M (Coarse)	L1	E1	M2	E2	H	H1	L	B	Mass (g)	STBT	STRTS
HSB-R	(Right-Hand Thread)	4	16.5	18	M 4	8	3.2	2.4	29.2	7	4		
		6	23.5	25	M 6	12	5	3.6	42	10	10		
		8	31	33	M 8	16	6.5	5	55.5	13	25		
		10	39	41	M10	20	8	6	69	17	45		
		12	47	49	M12	24	10	7	83	19	80		
		16	57	60	M16	32	13	10	105	24	170		



RoHS

Type		Material	Surface Treatment
Tapped	Threaded		
SJN		EN 1.0715 Equiv.	Black Oxide
SJNS		EN 1.4305 Equiv.	-



Tapped						Unit Price	
Part Number	Type	M (Coarse)	L	L1	B	Mass (g)	SJN SJNS
SJN SJNS (Stainless Steel)	3	22	9	6	4		
	4	33	14	7	8		
	*6	43	19	10	20		
	*8	55	25	13	45		
	*10	67	31	17	95		
	12	81	38	19	130		
	16	95	45	24	260		

⚠ SJNS is available for sizes marked with * only.

Ordering Example
Part Number
SRC-R40
HSB-R8
SJN10