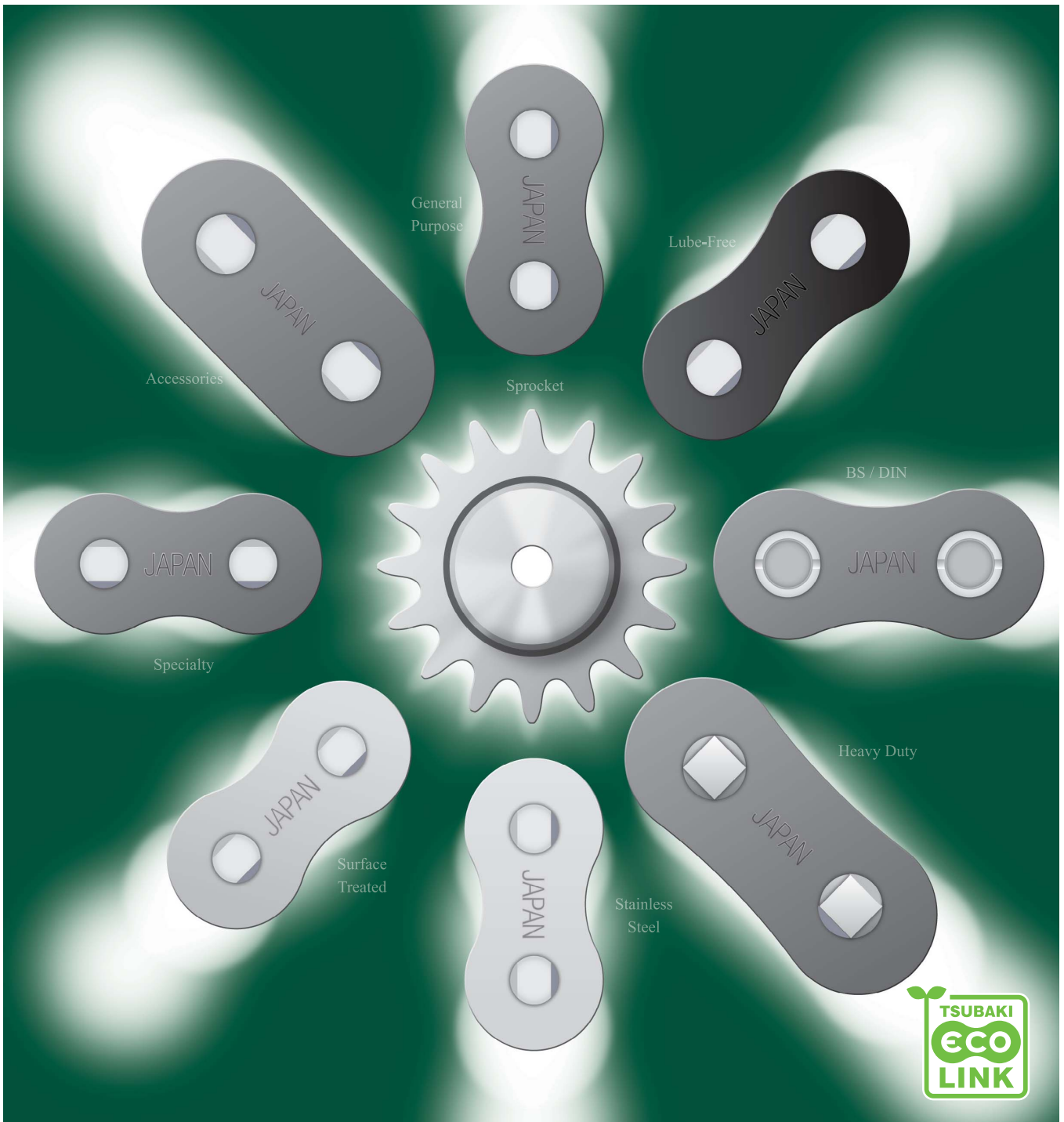
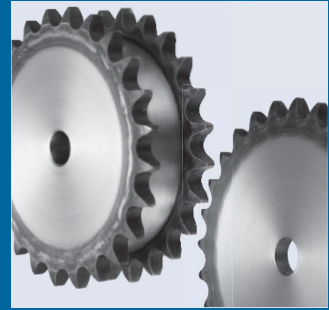


TSUBAKI DRIVE CHAINS & SPROCKETS





RS Sprocket Line-up

Index

■ RS Sprocket Standard Pilot Bore Series (1B, 1C, 2B, 2C, and 1A types)	Starting from pg. 18
■ RS Sprocket Standard Pilot Bore Series (2A type, Single-Dual type)	Pg. 98
■ Fit Bore Series	Pg. 101
■ Lock Series (S/N types)	Pg. 108
■ Corrosion Resistant Series (Stainless Steel, Engineering Plastic, and Fit Bore types)	Pg. 122
■ Specialty Sprockets	Pg. 133
■ Easy Bore Finishing Service	Pg. 134
■ RS Sprocket Engineering Information	Pg. 139

RS Sprocket Types

RS Sprocket types are determined by the following six items.

RS50-1B15T-SS- -

① Size of chain used

② No. of teeth

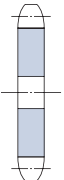
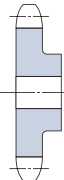

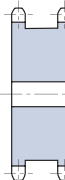
⑤ Bore type

⑥ Tooth hardening

③ Construction

④ Material

RS Sprockets come in the following four types




Type	A (Flat)	B (Single Hub)	C (Dual Hub)	SD (Single Dual)
Construction				
Specification	Flat structure with no hub (boss)	Flat structure with a hub (boss) on a single side	Flat structure with hubs (bosses) on both sides	Structure where two single strand chains can be mounted

RS Sprockets come standard in the following materials

Material	Specification	Code
Carbon steel	Standard specifications *Carbon steel for general engineering purposes (General rolled steel used on hubs and other areas)	Blank (no code)
Stainless steel	Corrosion resistant sprocket *Ni-Cr stainless steel	-SS
Plastic	Corrosion resistant, lube-free sprocket *Engineering plastic	-P
Sintered alloy	For RS25 chains *Ferrous sintered alloy	Blank (no code)

⑤ Bore type

RS Sprockets come with the following three types of bores for mounting on shafts.

Visual Appearance	Type	Code
	Pilot Bore sprocket Each sprocket is provided with a pilot bore that needs processing before use.	Blank (no code)
	Fit Bore sprocket Bore diameter is finished to an H7 tolerance, and the keyway tolerance is JIS Js9 tolerance. Includes holes for set screws. Can be used as is without further additional machining.	-H□□J Bore diameter
	Lock sprocket Tightening the bolts will create frictional force on the tapered sleeve that will tightly secure the sprocket to the shaft. No troublesome keyway machining is needed on the shaft side, making it easy to mount and align phases. Removal is also a snap.	Refer to each product page.

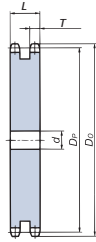
⑥ Tooth hardening

Material	Description
Hardened teeth	Use sprockets with hardened teeth when high tooth strength and increased wear life are required. Sprockets with small numbers of teeth and Strong Type RS Sprockets have hardened teeth.
Unhardened teeth	The sprocket teeth have not been hardened. RS Sprockets with large numbers of teeth have unhardened teeth.

List of RS Sprockets

Chain Used	Sprocket Type				
	Construction	Bore	Material	Tooth Hardening	
Drive Chain	Single strand	A Type	Pilot bore	Carbon steel	Hardened or unhardened
		B Type	Pilot bore Fit Bore Series Lock Series	Carbon steel Sintered alloy Stainless steel Engineering plastic	Hardened or unhardened
		C Type	Pilot bore	Carbon steel	Hardened or unhardened
	SD Type		Pilot bore	Carbon steel	Hardened
	Double strand	B Type	Pilot bore	Carbon steel	Hardened or unhardened
		C Type	Pilot bore	Carbon steel	Hardened or unhardened
BS/DIN Roller Chain	Uses a specialty sprocket (made-to-order)		Carbon steel	Hardened or unhardened	
Pin Gear Chain (See the Pin Gear Drive section for more information.)	Uses a specialty sprocket (made-to-order)		Carbon steel	Hardened	
Lambda Chain	Single strand	Can use standard drive sprockets			
	Double strand or greater	Uses a specialty sprocket (made-to-order)			

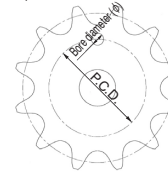
RS Sprocket 2A Type (Pilot bore or Strong Pilot bore types)



2A Sprocket Teeth and Lateral Width Dimensions

Type	Width L	Tolerance	Tooth Width T	Tolerance
RS40-2A	21.5	-0.32	7.1	-0.36
RS50-2A	26.8	-0.52	8.7	-0.36
RS60-2A	34.5	0.52	11.7	-0.43
RS80-2A	43.9	-0.62	14.6	-0.43
RS100-2A	53.4	-0.74	17.6	-0.43
RS120-2A	68.9	0.74	23.5	-0.52

Hanging hole dimensions
(Bore diameter: RS60/RS80: ϕ 30, RS100, RS120: ϕ 35)



The phase relationship between hanging hole and teeth may differ from the drawing.

●RS40 2A Type

Model Number	Pitch Circle Diameter D_p	(Outer Diameter) (D_o)	Pilot Bore Diameter d	Approximate Mass (kg)	Material
RS40-2A35T	141.68	149	16	2.4	Machine-structural carbon steel, machined.
RS40-2A36T	145.72	153	16	2.5	
RS40-2A38T	153.79	161	16	2.8	
RS40-2A40T	161.87	169	16	3.1	
RS40-2A42T	169.94	177	16	3.5	
RS40-2A45T	182.06	189	18	4.0	
RS40-2A48T	194.18	201	18	4.6	
RS40-2A50T	202.26	209	18	5.0	
RS40-2A54T	218.42	226	18	5.8	
RS40-2A60T	242.66	250	18	7.3	

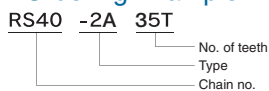
●RS60 2A Type

Model Number	Pitch Circle Diameter D_p	(Outer Diameter) (D_o)	Pilot Bore Diameter d	Approximate Mass (kg)	Material	Bore Phase (P.C.D.)
RS60-2A23T	139.90	150	18	3.5	Machine-structural carbon steel, machined.	
RS60-2A24T	145.95	156	18	3.8		
RS60-2A25T	151.99	162	18	4.2		
RS60-2A26T	158.04	168	18	4.6		
RS60-2A27T	164.09	174	18	4.9		
RS60-2A28T	170.14	180	18	5.4		
RS60-2A30T	182.25	193	18	6.2		
RS60-2A32T	194.35	205	18	7.1		
RS60-2A34T	206.46	217	18	8.1		
RS60-2A35T	212.52	223	18	8.6		
RS60-2A36T	218.57	229	18	9.1		
RS60-2A38T	230.69	241	18	10.2		
RS60-2A40T	242.80	253	18	11.4		
RS60-2A42T	254.92	266	23	12.6		
RS60-2A45T	273.09	284	23	14.5		
RS60-2A48T	291.27	302	23	16.6		
RS60-2A50T	303.39	314	23	18.1		
RS60-2A54T	327.63	338	23	21.2	293	
RS60-2A60T	363.99	375	23	26.2		

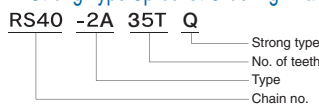
●RS100 2A Type

Model Number	Pitch Circle Diameter D_p	(Outer Diameter) (D_o)	Pilot Bore Diameter d	Approximate Mass (kg)	Material	Bore Phase (P.C.D.)	
RS100-2A15T	152.71	168	28	5.8	Machine-structural carbon steel, machined.		
RS100-2A16T	162.75	179	28	6.8			
RS100-2A17T	172.79	189	28	7.8			
RS100-2A18T	182.84	199	28	8.8			
RS100-2A19T	192.90	209	28	10.0			
RS100-2A20T	202.96	220	28	11.2			
RS100-2A21T	213.03	230	28	12.4			
RS100-2A22T	223.10	240	33	13.7			
RS100-2A23T	233.17	250	33	15.0			
RS100-2A24T	243.25	260	33	16.5			
RS100-2A25T	253.32	270	33	18.1			
RS100-2A26T	263.41	281	33	19.7			224
RS100-2A27T	273.49	291	33	21.3			
RS100-2A28T	283.57	301	33	23.0			
RS100-2A30T	303.75	321	33	26.8			
RS100-2A32T	323.92	341	33	30.3	245		
RS100-2A34T	344.10	362	33	34.5			
RS100-2A35T	354.20	372	33	36.7	255		
RS100-2A36T	364.29	382	33	38.9			
RS100-2A38T	384.48	402	33	43.7	305		
RS100-2A40T	404.67	422	33	48.7			
RS100-2A42T	424.86	443	33	53.9	326		
RS100-2A45T	455.15	473	33	62.4			
RS100-2A48T	485.45	503	33	71.4	386		
RS100-2A50T	505.65	524	33	77.7			
RS100-2A54T	546.05	564	33	91.2	407		
RS100-2A60T	606.66	625	33	113.4			
						447	
						508	

■Ordering Example



■Strong Type Sprocket Ordering Example



●RS50 2A Type

Model Number	Pitch Circle Diameter D_p	(Outer Diameter) (D_o)	Pilot Bore Diameter d	Approximate Mass (kg)	Material
RS50-2A26T	131.70	140	18	2.4	Machine-structural carbon steel, machined.
RS50-2A27T	136.74	145	18	2.6	
RS50-2A28T	141.79	150	18	2.8	
RS50-2A30T	151.87	161	18	3.3	
RS50-2A32T	161.96	171	18	3.8	
RS50-2A34T	172.05	181	18	4.3	
RS50-2A35T	177.10	186	18	4.6	
RS50-2A36T	182.15	191	18	4.9	
RS50-2A38T	192.24	201	18	5.5	
RS50-2A40T	202.33	211	23	6.0	
RS50-2A42T	212.43	221	23	6.7	
RS50-2A45T	227.58	237	23	7.7	
RS50-2A48T	242.73	252	23	8.9	
RS50-2A50T	252.82	262	23	9.7	
RS50-2A54T	273.03	282	23	11.3	
RS50-2A60T	303.33	312	23	14.1	

●RS80 2A Type

Model Number	Pitch Circle Diameter D_p	(Outer Diameter) (D_o)	Pilot Bore Diameter d	Approximate Mass (kg)	Material	Bore Phase (P.C.D.)
RS80-2A18T	146.27	159	23	4.6	Machine-structural carbon steel, machined.	
RS80-2A19T	154.32	167	23	5.2		
RS80-2A20T	162.37	176	23	5.8		
RS80-2A21T	170.42	184	23	6.5		
RS80-2A22T	178.48	192	28	7.1		
RS80-2A23T	186.54	200	28	7.9		
RS80-2A24T	194.60	208	28	8.6		
RS80-2A25T	202.66	216	28	9.4		
RS80-2A26T	210.72	224	28	10.2		
RS80-2A27T	218.79	233	28	11.1		
RS80-2A28T	226.86	241	28	12.0		
RS80-2A30T	243.00	257	28	14.0		
RS80-2A32T	259.14	273	28	16.0		
RS80-2A34T	275.28	289	28	18.2		
RS80-2A35T	283.36	297	28	19.4		
RS80-2A36T	291.43	306	28	20.6		
RS80-2A38T	307.58	322	28	23.0		
RS80-2A40T	323.74	338	33	25.4	242	
RS80-2A42T	339.89	354	33	28.1		
RS80-2A45T	364.12	378	33	32.5	258	
RS80-2A48T	388.36	403	33	37.3		
RS80-2A50T	404.52	419	33	40.6	283	
RS80-2A54T	436.84	451	33	47.7		
RS80-2A60T	485.33	500	33	59.4	307	
						323
						355
						404

●RS120 2A Type

Model Number	Pitch Circle Diameter D_p	(Outer Diameter) (D_o)	Pilot Bore Diameter d	Approximate Mass (kg)	Material	Bore Phase (P.C.D.)
RS120-2A14T	171.22	190	28	9.6	Machine-structural carbon steel, machined.	
RS120-2A15T	183.25	202	33	11.1		
RS120-2A16T	195.29	214	33	12.9		
RS120-2A17T	207.35	227	33	14.7		
RS120-2A18T	219.41	239	33	16.7		
RS120-2A19T	231.48	251	33	18.8		
RS120-2A20T	243.55	263	33	21.1		
RS120-2A21T	255.63	276	33	23.5		
RS120-2A22T	267.72	288	33	25.9		
RS120-2A23T	279.80	300	33	28.5		
RS120-2A24T	291.90	312	33	31.3		
RS120-2A25T	303.99	324	33	34.2		
RS120-2A26T	316.09	337	33	37.2		
RS120-2A27T	328.19	349	33	40.3		
RS120-2A28T	340.29	361	33	43.5		
RS120-2A30T	364.49	385	33	49.9	258	
RS120-2A32T	388.71	410	33	57.2		
RS120-2A34T	412.93	434	33	65.0	382	
RS120-2A35T	425.04	446	33	69.1		
RS120-2A36T	437.15	458	38	73.2	307	
RS120-2A38T	461.37	483	38	82.1		
RS120-2A40T	285.60	507	38	91.3	319	
RS120-2A42T	509.83	531	38	101.2		
RS120-2A45T	546.19	568	38	116.9	331	
RS120-2A48T	582.54	604	38	133.6		
RS120-2A50T	606.78	628	38	145.5	355	
RS120-2A54T	655.26	677	38	170.6		
RS120-2A60T	727.99	750	38	212.0	380	
						404
						440
						477
						501
						550
						623

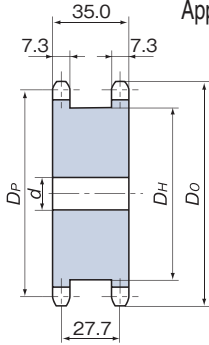
Note: 1. Maximum bore diameters shown are standard figures. Decide and confirm bore diameters and key surface pressures based on standard machinery design.
2. Sprockets shown with hole positions come with a hanging hole on the sprocket plate. Refer to the diagram above for hanging hole dimensions.
3. Strong Type sprockets, with teeth that can be hardened, are also available. (Made-to-order)

Before Use
Standard Roller Chains
Lube-Free Roller Chains
Heavy Duty Roller Chains
Corrosion Resistant Roller Chains
Specialty Roller Chains
Sprockets
Pin Gear Drives
Accessories
Selection
Handling

RS40~80 (SD: Single Dual)

RS40 SD Type

Applicable chain pitch : 12.70mm Roller dia : 7.92mm



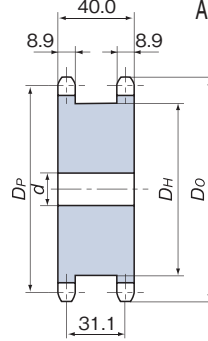
Model numbering example

RS40-SD-□□T

No. of teeth

RS50 SD Type

Applicable chain pitch : 15.875mm Roller dia : 10.16mm



Model numbering example

RS50-SD-□□T

No. of teeth

● RS40 SD Type

All models have hardened teeth.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	d		Hub		Approximate Mass (kg)
			Pilot Bore	Max.	Diameter D_H	Length L	
RS40-SD-12T	49.07	55	9.5	19	34	35	0.34
RS40-SD-13T	53.07	59	12.7	22	38	35	0.40
RS40-SD-14T	57.07	63	12.7	24	42	35	0.48
RS40-SD-15T	61.08	67	12.7	27	46	35	0.56
RS40-SD-16T	65.10	71	12.7	31	50	35	0.66
RS40-SD-17T	69.12	76	12.7	34	54	35	0.76
RS40-SD-18T	73.14	80	12.7	38	59	35	0.88
RS40-SD-19T	77.16	84	12.7	41	63	35	0.99
RS40-SD-20T	81.18	88	12.7	44	67	35	1.12
RS40-SD-21T	85.21	92	12.7	47	71	35	1.24
RS40-SD-22T	89.24	96	12.7	50	75	35	1.38
RS40-SD-23T	93.27	100	12.7	51	78	35	1.50
RS40-SD-24T	97.30	104	12.7	55	83	35	1.67
RS40-SD-25T	101.33	108	12.7	58	87	35	1.83

Material/Specifications

Machine-structural carbon steel, machined.

Contact a Tsubaki representative for teeth numbers not shown above.

● RS50 SD Type

All models have hardened teeth.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	d		Hub		Approximate Mass (kg)
			Pilot Bore	Max.	Diameter D_H	Length L	
RS50-SD-12T	61.34	69	12.7	25	43	40	0.62
RS50-SD-13T	66.33	74	12.7	29	48	40	0.75
RS50-SD-14T	71.34	79	12.7	33	53	40	0.90
RS50-SD-15T	76.35	84	12.7	37	58	40	1.05
RS50-SD-16T	81.37	89	12.7	41	63	40	1.22
RS50-SD-17T	86.39	94	12.7	44	68	40	1.40
RS50-SD-18T	91.42	100	12.7	48	73	40	1.60
RS50-SD-19T	96.45	105	15.9	52	79	40	1.80
RS50-SD-20T	101.48	110	15.9	56	84	40	2.02
RS50-SD-21T	106.51	115	15.9	60	89	40	2.25
RS50-SD-22T	111.55	120	15.9	62	92	40	2.44
RS50-SD-23T	116.59	125	15.9	67	99	40	2.75
RS50-SD-24T	121.62	130	15.9	70	102	40	2.96
RS50-SD-25T	126.66	135	15.9	75	109	40	3.30

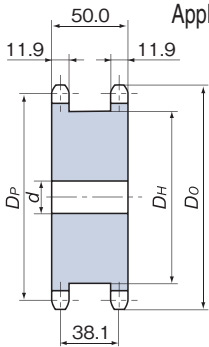
Material/Specifications

Machine-structural carbon steel, machined.

Contact a Tsubaki representative for teeth numbers not shown above.

RS60 SD Type

Applicable chain pitch : 19.05mm Roller dia : 11.91mm



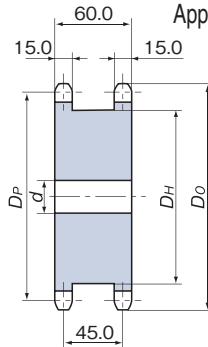
Model numbering example

RS60-SD-□□T

No. of teeth

RS80 SD Type

Applicable chain pitch : 25.40mm Roller dia : 15.88mm



Model numbering example

RS80-SD-□□T

No. of teeth

● RS60 SD Type

All models have hardened teeth.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	d		Hub		Approximate Mass (kg)
			Pilot Bore	Max.	Diameter D_H	Length L	
RS60-SD-12T	73.60	83	12.7	31	51	50	1.16
RS60-SD-13T	79.60	89	15.9	36	57	50	1.37
RS60-SD-14T	85.61	95	15.9	42	64	50	1.65
RS60-SD-15T	91.63	101	15.9	46	70	50	1.93
RS60-SD-16T	97.65	107	15.9	50	76	50	2.24
RS60-SD-17T	103.67	113	15.9	55	82	50	2.57
RS60-SD-18T	109.70	119	15.9	59	88	50	2.92
RS60-SD-19T	115.74	126	15.9	64	94	50	3.29
RS60-SD-20T	121.78	132	15.9	68	100	50	3.69
RS60-SD-21T	127.82	138	15.9	74	107	50	4.14
RS60-SD-22T	133.86	144	15.9	78	113	50	4.58
RS60-SD-23T	139.90	150	18	82	119	50	5.02
RS60-SD-24T	145.95	156	18	87	125	50	5.51
RS60-SD-25T	151.99	162	18	91	130	50	5.98

Material/Specifications

Machine-structural carbon steel, machined.

Contact a Tsubaki representative for teeth numbers not shown above.

● RS80 SD Type

All models have hardened teeth.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	d		Hub		Approximate Mass (kg)
			Pilot Bore	Max.	Diameter D_H	Length L	
RS80-SD-12T	98.14	110	20	45	69	60	2.5
RS80-SD-13T	106.14	118	20	50	77	60	3.0
RS80-SD-14T	114.15	127	20	55	85	60	3.6
RS80-SD-15T	122.17	135	20	63	93	60	4.2
RS80-SD-16T	130.20	143	20	70	102	60	4.9
RS80-SD-17T	138.23	151	20	74	110	60	5.6
RS80-SD-18T	146.27	159	20	80	118	60	6.4

Material/Specifications

Machine-structural carbon steel, machined.

Contact a Tsubaki representative for teeth numbers not shown above.

Note: Maximum bore diameters shown are standard figures. Decide and confirm bore diameters and key surface pressures based on standard machinery design.

RS Sprocket Fit Bore (Machined Bore) Series



For RS35 – RS100 Type 1B sprockets.
The bore and keyway have been machined, and comes with two set screws.
Can be used as is with no additional troublesome machining.

Specifications

- Tooth hardening · · · · All models feature induction hardened teeth
- Bore · · · · · · · · · · · · · · Bore diameters in high demand for motors and reducers are available and finished to within H7 tolerances.
- Keyway · · · · · · · · · · · · · · Finished with a tooth root standard based on Js9 (standard parallel key class) of new JIS B1301-1976 standards.
Contact a Tsubaki representative if precise phase matching is required.
- Set screws · · · · · · · · · · All models come with two set screws on the keyway and 90° side, or 120° side if the finished bore diameter exceeds 40mm.

Bore Tolerance

Applicable Bore Diameter	Tolerance (H7)
6 and up to 10	+0.015 0
More than 10 and up to 18	+0.018 0
More than 18 and up to 30	+0.021 0
More than 30 and up to 50	+0.025 0
More than 50 and up to 65	+0.030 0

Keyway Dimensions and Set Screw Size

Applicable Bore Dia.	Keyway Width	Tolerance (Js9)	Keyway Depth	Tolerance	Set Screw Size
10 and up to 12	4	±0.0150	1.8	+0.1 0	M4
More than 12 and up to 17	5		2.3		M5
More than 17 and up to 22	6		2.8		M6
More than 22 and up to 30	8	±0.0180	3.3	+0.2 0	M8
More than 30 and up to 38	10				
More than 38 and up to 44	12	±0.0215	3.8		M10
More than 44 and up to 50	14		4.3		
More than 50 and up to 58	16		4.4		
More than 58 and up to 65	18				

Precautions

1. When using the set screws, be sure to tighten the set screws securely so that they will not loosen. Remove the set screws if they are not required.
2. Take appropriate measures, such as the use of a stopper plate, to prevent the sprocket from falling off the shaft.

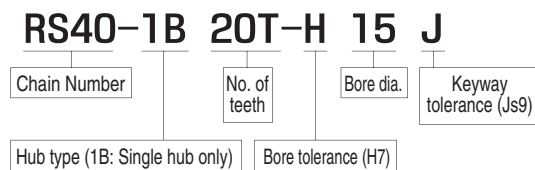
RS Sprocket Fit Bore Ordering Guide

Include the product code and model number in your order.

Ordering Example

Product Code	Model Number	Quantity
G120381	RS40-1B20T-H15J	10

Model Numbering Example



Other bore processing information

Tsubaki offers the following additional finishing for sprocket bores besides our Fit Bore Series (bore finished within H7 tolerances, keyway finished based on Js9 standards).

Use Tsubaki's **Easy Bore Finishing service (pg. 134)** if there is no Fit Bore Series for your desired sprocket.

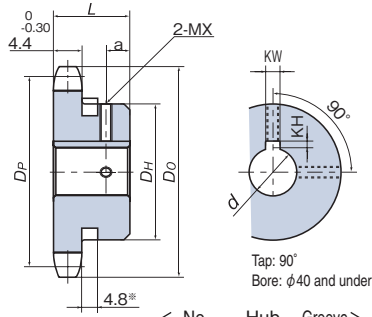
Contact a Tsubaki representative regarding special bore finishing.

RS35 Fit Bore[®]

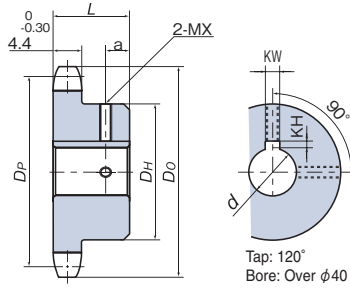
RS35 Fit Bore

Applicable chain pitch : 9.525mm Roller dia : 5.08mm

Hub with groove (9T – 13T)



Hub without groove (14T and over)

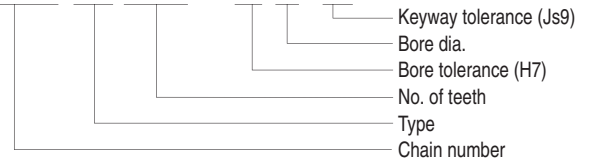


No. of teeth	Hub dia	Groove dia
9T	φ 22	φ 16
10T	φ 25	φ 18
11T	φ 27	φ 22
12T	φ 31	φ 24
13T	φ 32	φ 28

Applicable Bore Dia.	Keyway Width	Tolerance (Js9)	Keyway Depth	Tolerance	Set Screw Size
10 and up to 12	4		1.8		M4
More than 12 and up to 17	5	±0.0150	2.3	+0.1 0	M5
More than 17 and up to 22	6		2.8		M6
More than 22 and up to 30	8	±0.0180	3.3		M8
More than 30 and up to 38	10		3.8	+0.2 0	M8
More than 38 and up to 44	12		3.8		M10
More than 44 and up to 50	14	±0.0215	4.3		M10
More than 50 and up to 58	16		4.3		M10
More than 58 and up to 65	18		4.4		M10

• Comes with two alloy steel set screws.

Model Numbering Example RS35-1B 20T – H 15 J



*The groove is provided on the perimeter of the hub to prevent interference with the chain.

Model Number	No. of Teeth	Pitch Circle Dia. DP	(Outer Dia.) (DO)	Hub Dia. DH	Hub Length L	Tap Position a	Finished Bore Dia. d										No. of Teeth	
							10	12	14	15	16	17	18	19	20	22		
RS35-1B 9T-H□□J	9	27.85	32	22	20	5	○											9
RS35-1B 10T-H□□J	10	30.82	35	25	20	5	○	○										10
RS35-1B 11T-H□□J	11	33.81	38	27	20	5	○	○	○									11
RS35-1B 12T-H□□J	12	36.80	41	31	20	5	○	○	○	○								12
RS35-1B 13T-H□□J	13	39.80	44	32	20	5	○	○	○	○	○							13
RS35-1B 14T-H□□J	14	42.81	47	30	20	8	○	○	○	○	○	○						14
RS35-1B 15T-H□□J	15	45.81	51	35	20	8	○	○	○	○	○	○	○					15
RS35-1B 16T-H□□J	16	48.82	54	37	20	8	○	○	○	○	○	○	○	○				16
RS35-1B 17T-H□□J	17	51.84	57	41	20	8	○	○	○	○	○	○	○	○	○		○	17
RS35-1B 18T-H□□J	18	54.85	60	44	20	8	○	○	○	○	○	○	○	○	○	○	○	18
RS35-1B 19T-H□□J	19	57.87	63	47	20	8	○	○	○	○	○	○	○	○	○	○	○	19
RS35-1B 20T-H□□J	20	60.89	66	50	20	8	○	○	○	○	○	○	○	○	○	○	○	20
RS35-1B 21T-H□□J	21	63.91	69	53	20	8	○	○	○	○	○	○	○	○	○	○	○	21
RS35-1B 22T-H□□J	22	66.93	72	53	20	8	○	○	○	○	○	○	○	○	○	○	○	22
RS35-1B 23T-H□□J	23	69.95	75	53	20	8	○	○	○	○	○	○	○	○	○	○	○	23
RS35-1B 24T-H□□J	24	72.97	78	53	22	10	○	○	○	○	○	○	○	○	○	○	○	24
RS35-1B 25T-H□□J	25	76.00	81	53	22	10	○	○	○	○	○	○	○	○	○	○	○	25
RS35-1B 26T-H□□J	26	79.02	84	53	22	10	○	○	○	○	○	○	○	○	○	○	○	26
RS35-1B 27T-H□□J	27	82.05	87	53	22	10	○	○	○	○	○	○	○	○	○	○	○	27
RS35-1B 28T-H□□J	28	85.07	90	53	22	10	○	○	○	○	○	○	○	○	○	○	○	28
RS35-1B 30T-H□□J	30	91.12	96	53	22	10	○	○	○	○	○	○	○	○	○	○	○	30
RS35-1B 32T-H□□J	32	97.18	102	53	22	10	○	○	○	○	○	○	○	○	○	○	○	32
RS35-1B 34T-H□□J	34	103.23	109	53	22	10	○	○	○	○	○	○	○	○	○	○	○	34
RS35-1B 35T-H□□J	35	106.26	112	53	22	10	○	○	○	○	○	○	○	○	○	○	○	35
RS35-1B 36T-H□□J	36	109.29	115	53	22	10	○	○	○	○	○	○	○	○	○	○	○	36
RS35-1B 38T-H□□J	38	115.34	121	63	25	10	○	○	○	○	○	○	○	○	○	○	○	38
RS35-1B 40T-H□□J	40	121.40	127	63	25	10	○	○	○	○	○	○	○	○	○	○	○	40

Model Number	No. of Teeth	Pitch Circle Dia. DP	(Outer Dia.) (DO)	Hub Dia. DH	Hub Length L	Tap Position a	Finished Bore Dia. d							No. of Teeth				
							24	25	28	30	32	35	38					
RS35-1B 17T-H□□J	17	51.84	57	41	20	8	○										17	
RS35-1B 18T-H□□J	18	54.85	60	44	20	8	○											18
RS35-1B 19T-H□□J	19	57.87	63	47	20	8	○	○		○								19
RS35-1B 20T-H□□J	20	60.89	66	50	20	8	○	○	○	○								20
RS35-1B 21T-H□□J	21	63.91	69	53	20	8	○	○	○	○	○							21
RS35-1B 22T-H□□J	22	66.93	72	53	20	8	○	○	○	○	○	○						22
RS35-1B 23T-H□□J	23	69.95	75	53	20	8	○	○	○	○	○	○	○					23
RS35-1B 24T-H□□J	24	72.97	78	53	22	7	○	○	○	○	○	○	○	○				24
RS35-1B 25T-H□□J	25	76.00	81	53	22	7	○	○	○	○	○	○	○	○	○			25
RS35-1B 26T-H□□J	26	79.02	84	53	22	7	○	○	○	○	○	○	○	○	○			26
RS35-1B 27T-H□□J	27	82.05	87	53	22	7	○	○	○	○	○	○	○	○	○			27
RS35-1B 28T-H□□J	28	85.07	90	53	22	7	○	○	○	○	○	○	○	○	○			28
RS35-1B 30T-H□□J	30	91.12	96	53	22	7	○	○	○	○	○	○	○	○	○			30
RS35-1B 32T-H□□J	32	97.18	102	53	22	7	○	○	○	○	○	○	○	○	○			32
RS35-1B 34T-H□□J	34	103.23	109	53	22	7	○	○	○	○	○	○	○	○	○			34
RS35-1B 35T-H□□J	35	106.26	112	53	22	7	○	○	○	○	○	○	○	○	○			35
RS35-1B 36T-H□□J	36	109.29	115	53	22	7	○	○	○	○	○	○	○	○	○			36
RS35-1B 38T-H□□J	38	115.34	121	63	25	10	○	○	○	○	○	○	○	○	○	○	○	38
RS35-1B 40T-H□□J	40	121.40	127	63	25	10	○	○	○	○	○	○	○	○	○	○	○	40

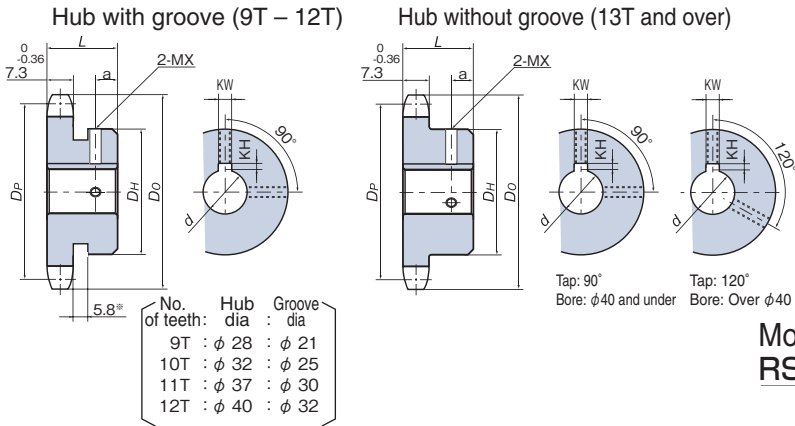
Enter the bore diameter for the □ found in the model numbers.

Before Use
 Standard Roller Chains
 Lubrication
 Heavy Duty Roller Chains
 Corrosion Resistant Roller Chains
 Specialty Roller Chains
 Sprockets
 Pin Gear Drives
 Accessories
 Selection
 Handling

RS40 Fit Bore®

RS40 Fit Bore

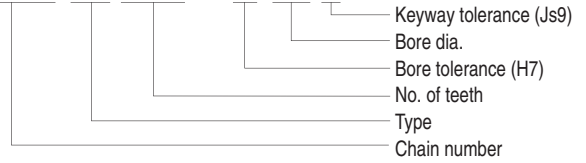
Applicable chain pitch : 12.70mm Roller dia : 7.92mm



Applicable Bore Dia.	Keyway Width	Tolerance (Js9)	Keyway Depth	Tolerance	Set Screw Size
10 and up to 12	4		1.8		M4
More than 12 and up to 17	5	±0.0150	2.3	+0.1 0	M5
More than 17 and up to 22	6		2.8		M6
More than 22 and up to 30	8	±0.0180	3.3	+0.2 0	M8
More than 30 and up to 38	10				
More than 38 and up to 44	12	±0.0215	3.8	+0.2 0	M10
More than 44 and up to 50	14		4.3		
More than 50 and up to 58	16		4.4		
More than 58 and up to 65	18				

• Comes with two alloy steel set screws.

Model Numbering Example RS40-1B 20T - H 15 J



*The groove is provided on the perimeter of the hub to prevent interference with the chain.

Model Number	No. of Teeth	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	Hub Dia. D_H	Hub Length L	Tap Position a	Finished Bore Dia. d										No. of Teeth	
							10	12	14	15	16	17	18	19	20	22		
RS40-1B 9T-H□□J	9	37.13	43	28	22	5	○	○	○	○	○	○	○	○	○	○	○	9
RS40-1B10T-H□□J	10	41.10	47	32	22	5	○	○	○	○	○	○	○	○	○	○	○	10
RS40-1B11T-H□□J	11	45.08	51	37	22	5	○	○	○	○	○	○	○	○	○	○	○	11
RS40-1B12T-H□□J	12	49.07	55	40	22	5	○	○	○	○	○	○	○	○	○	○	○	12
RS40-1B13T-H□□J	13	53.07	59	37	22	7	○	○	○	○	○	○	○	○	○	○	○	13
RS40-1B14T-H□□J	14	57.07	63	42	22	7	○	○	○	○	○	○	○	○	○	○	○	14
RS40-1B15T-H□□J	15	61.08	67	46	22	7	○	○	○	○	○	○	○	○	○	○	○	15
RS40-1B16T-H□□J	16	65.10	71	50	22	7	○	○	○	○	○	○	○	○	○	○	○	16
RS40-1B17T-H□□J	17	69.12	76	54	22	7	○	○	○	○	○	○	○	○	○	○	○	17
RS40-1B18T-H□□J	18	73.14	80	57	22	7	○	○	○	○	○	○	○	○	○	○	○	18
RS40-1B19T-H□□J	19	77.16	84	62	22	7	○	○	○	○	○	○	○	○	○	○	○	19
RS40-1B20T-H□□J	20	81.18	88	67	25	7	○	○	○	○	○	○	○	○	○	○	○	20
RS40-1B21T-H□□J	21	85.21	92	71	25	7	○	○	○	○	○	○	○	○	○	○	○	21
RS40-1B22T-H□□J	22	89.24	96	75	25	7	○	○	○	○	○	○	○	○	○	○	○	22
RS40-1B23T-H□□J	23	93.27	100	77	25	7	○	○	○	○	○	○	○	○	○	○	○	23
RS40-1B24T-H□□J	24	97.30	104	63	25	7	○	○	○	○	○	○	○	○	○	○	○	24
RS40-1B25T-H□□J	25	101.33	108	63	25	7	○	○	○	○	○	○	○	○	○	○	○	25
RS40-1B26T-H□□J	26	105.36	112	63	25	7	○	○	○	○	○	○	○	○	○	○	○	26
RS40-1B27T-H□□J	27	109.40	116	63	25	7	○	○	○	○	○	○	○	○	○	○	○	27
RS40-1B28T-H□□J	28	113.43	120	63	25	7	○	○	○	○	○	○	○	○	○	○	○	28
RS40-1B30T-H□□J	30	121.50	128	63	25	7	○	○	○	○	○	○	○	○	○	○	○	30
RS40-1B32T-H□□J	32	129.57	137	68	28	8	○	○	○	○	○	○	○	○	○	○	○	32
RS40-1B34T-H□□J	34	137.64	145	68	28	8	○	○	○	○	○	○	○	○	○	○	○	34
RS40-1B35T-H□□J	35	141.68	149	68	28	8	○	○	○	○	○	○	○	○	○	○	○	35
RS40-1B36T-H□□J	36	145.72	153	68	28	8	○	○	○	○	○	○	○	○	○	○	○	36

Model Number	No. of Teeth	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	Hub Dia. D_H	Hub Length L	Tap Position a	Finished Bore Dia. d								No. of Teeth			
							24	25	28	30	32	35	38	40		42	45	
RS40-1B14T-H□□J	14	57.07	63	42	22	7	○	○	○	○	○	○	○	○	○	○	○	14
RS40-1B15T-H□□J	15	61.08	67	46	22	7	○	○	○	○	○	○	○	○	○	○	○	15
RS40-1B16T-H□□J	16	65.10	71	50	22	7	○	○	○	○	○	○	○	○	○	○	○	16
RS40-1B17T-H□□J	17	69.12	76	54	22	7	○	○	○	○	○	○	○	○	○	○	○	17
RS40-1B18T-H□□J	18	73.14	80	57	22	7	○	○	○	○	○	○	○	○	○	○	○	18
RS40-1B19T-H□□J	19	77.16	84	62	22	7	○	○	○	○	○	○	○	○	○	○	○	19
RS40-1B20T-H□□J	20	81.18	88	67	25	7	○	○	○	○	○	○	○	○	○	○	○	20
RS40-1B21T-H□□J	21	85.21	92	71	25	7	○	○	○	○	○	○	○	○	○	○	○	21
RS40-1B22T-H□□J	22	89.24	96	75	25	7	○	○	○	○	○	○	○	○	○	○	○	22
RS40-1B23T-H□□J	23	93.27	100	77	25	7	○	○	○	○	○	○	○	○	○	○	○	23
RS40-1B24T-H□□J	24	97.30	104	63	25	7	○	○	○	○	○	○	○	○	○	○	○	24
RS40-1B25T-H□□J	25	101.33	108	63	25	7	○	○	○	○	○	○	○	○	○	○	○	25
RS40-1B26T-H□□J	26	105.36	112	63	25	7	○	○	○	○	○	○	○	○	○	○	○	26
RS40-1B27T-H□□J	27	109.40	116	63	25	7	○	○	○	○	○	○	○	○	○	○	○	27
RS40-1B28T-H□□J	28	113.43	120	63	25	7	○	○	○	○	○	○	○	○	○	○	○	28
RS40-1B30T-H□□J	30	121.50	128	63	25	7	○	○	○	○	○	○	○	○	○	○	○	30
RS40-1B32T-H□□J	32	129.57	137	68	28	8	○	○	○	○	○	○	○	○	○	○	○	32
RS40-1B34T-H□□J	34	137.64	145	68	28	8	○	○	○	○	○	○	○	○	○	○	○	34
RS40-1B35T-H□□J	35	141.68	149	68	28	8	○	○	○	○	○	○	○	○	○	○	○	35
RS40-1B36T-H□□J	36	145.72	153	68	28	8	○	○	○	○	○	○	○	○	○	○	○	36
RS40-1B38T-H□□J	38	153.79	161	68	28	8	○	○	○	○	○	○	○	○	○	○	○	38
RS40-1B40T-H□□J	40	161.87	169	68	28	8	○	○	○	○	○	○	○	○	○	○	○	40

Enter the bore diameter for the □ found in the model numbers.

Before Use Standard Roller Chains Lubrication Free Roller Chains Heavy Duty Roller Chains Corrosion Resistant Roller Chains Specialty Roller Chains Sprockets Pin Gear Drives Accessories Selection Handling

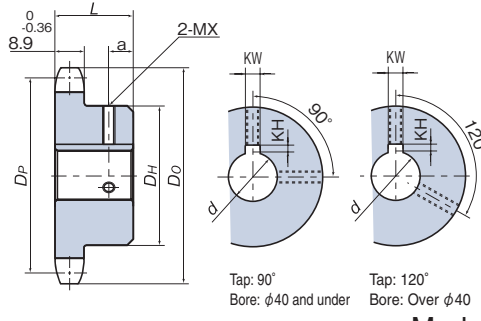
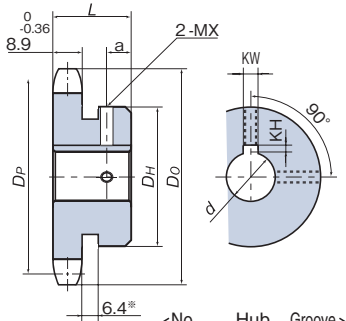
RS50 Fit Bore®

RS50 Fit Bore

Applicable chain pitch : 15.875mm Roller dia : 10.16mm

Hub with groove (9T – 13T)

Hub without groove (14T and over)



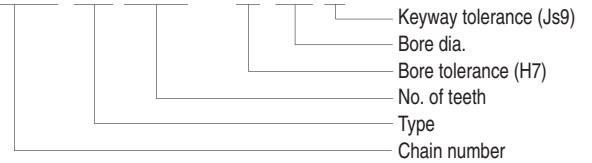
No. of teeth	Hub dia	Groove dia
9T	φ 34	φ 27
10T	φ 40	φ 32
11T	φ 46	φ 37
12T	φ 51	φ 42
13T	φ 51	φ 47

*The groove is provided on the perimeter of the hub to prevent interference with the chain.

Applicable Bore Dia.	Keyway Width	Tolerance (Js9)	Keyway Depth	Tolerance	Set Screw Size
10 and up to 12	4		1.8		M4
More than 12 and up to 17	5	±0.0150	2.3	+0.1 0	M5
More than 17 and up to 22	6		2.8		M6
More than 22 and up to 30	8				
More than 30 and up to 38	10	±0.0180	3.3		M8
More than 38 and up to 44	12			+0.2 0	
More than 44 and up to 50	14		3.8		
More than 50 and up to 58	16	±0.0215	4.3		M10
More than 58 and up to 65	18		4.4		

• Comes with two alloy steel set screws.

Model Numbering Example RS50-1B 20T – H 15 J



Model Number	No. of Teeth	Pitch Circle Dia. DP	Outer Dia. (DO)	Hub Dia. DH	Hub Length L	Tap Position a	Finished Bore Dia. d								No. of Teeth		
							14	15	16	17	18	19	20	22		24	
RS50-1B 9T-H□□□	9	46.42	53	34	25	6											9
RS50-1B 10T-H□□□	10	51.37	58	40	25	6											10
RS50-1B 11T-H□□□	11	56.35	64	46	25	6											11
RS50-1B 12T-H□□□	12	61.34	69	51	25	6											12
RS50-1B 13T-H□□□	13	66.33	74	51	25	6											13
RS50-1B 14T-H□□□	14	71.34	79	52	25	7											14
RS50-1B 15T-H□□□	15	76.35	84	57	25	7											15
RS50-1B 16T-H□□□	16	81.37	89	62	25	7											16
RS50-1B 17T-H□□□	17	86.39	94	67	25	7											17
RS50-1B 18T-H□□□	18	91.42	100	72	28	8											18
RS50-1B 19T-H□□□	19	96.45	105	73	28	8											19
RS50-1B 20T-H□□□	20	101.48	110	73	28	8											20
RS50-1B 21T-H□□□	21	106.51	115	73	28	8											21
RS50-1B 22T-H□□□	22	111.55	120	73	28	8											22
RS50-1B 23T-H□□□	23	116.59	125	73	28	8											23
RS50-1B 24T-H□□□	24	121.62	130	73	28	8											24
RS50-1B 25T-H□□□	25	126.66	135	73	28	8											25
Model Number	No. of Teeth	Pitch Circle Dia. DP	Outer Dia. (DO)	Hub Dia. DH	Hub Length L	Tap Position a	Finished Bore Dia. d								No. of Teeth		
							25	28	30	32	35	38	40	42		45	
RS50-1B 11T-H□□□	11	56.35	64	46	25	6											11
RS50-1B 12T-H□□□	12	61.34	69	51	25	6											12
RS50-1B 13T-H□□□	13	66.33	74	51	25	6											13
RS50-1B 14T-H□□□	14	71.34	79	52	25	7											14
RS50-1B 15T-H□□□	15	76.35	84	57	25	7											15
RS50-1B 16T-H□□□	16	81.37	89	62	25	7											16
RS50-1B 17T-H□□□	17	86.39	94	67	25	7											17
RS50-1B 18T-H□□□	18	91.42	100	72	28	8											18
RS50-1B 19T-H□□□	19	96.45	105	73	28	8											19
RS50-1B 20T-H□□□	20	101.48	110	73	28	8											20
RS50-1B 21T-H□□□	21	106.51	115	73	28	8											21
RS50-1B 22T-H□□□	22	111.55	120	73	28	8											22
RS50-1B 23T-H□□□	23	116.59	125	73	28	8											23
RS50-1B 24T-H□□□	24	121.62	130	73	28	8											24
RS50-1B 25T-H□□□	25	126.66	135	73	28	8											25
RS50-1B 26T-H□□□	26	131.70	140	73	28	8											26
RS50-1B 27T-H□□□	27	136.74	145	73	28	8											27
RS50-1B 28T-H□□□	28	141.79	150	73	28	8											28
RS50-1B 30T-H□□□	30	151.87	161	73	28	8											30
RS50-1B 32T-H□□□	32	161.96	171	73	28	8											32
RS50-1B 34T-H□□□	34	172.05	181	73	28	8											34
RS50-1B 35T-H□□□	35	177.10	186	73	28	8											35

Enter the bore diameter for the □ found in the model numbers.

Before Use | Standard Roller Chains | Lube-Free Roller Chains | Heavy Duty Roller Chains | Corrosion Resistant Roller Chains | Specialty Roller Chains | Sprockets | Pin Gear Drives | Accessories | Selection | Handling

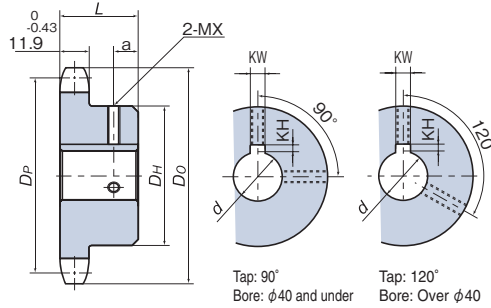
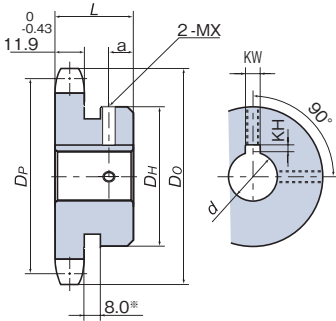
RS60 Fit Bore®

RS60 Fit Bore

Applicable chain pitch : 19.05mm Roller dia : 11.91mm

Hub with groove (9T – 11T)

Hub without groove (12T and over)



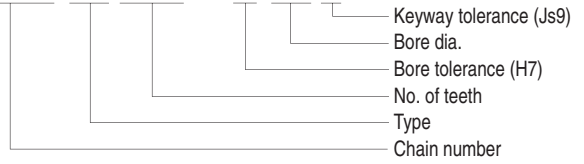
No. of teeth:	Hub dia :	Groove dia :
9T	: phi 43	: phi 32
10T	: phi 49	: phi 37
11T	: phi 51	: phi 45

*The groove is provided on the perimeter of the hub to prevent interference with the chain.

Applicable Bore Dia.	Keyway Width	Tolerance (Js9)	Keyway Depth	Tolerance	Set Screw Size
10 and up to 12	4		1.8		M4
More than 12 and up to 17	5	±0.0150	2.3	+0.1 0	M5
More than 17 and up to 22	6		2.8		M6
More than 22 and up to 30	8	±0.0180			
More than 30 and up to 38	10		3.3		M8
More than 38 and up to 44	12			+0.2 0	
More than 44 and up to 50	14	±0.0215	3.8		
More than 50 and up to 58	16		4.3		M10
More than 58 and up to 65	18		4.4		

• Comes with two alloy steel set screws.

Model Numbering Example RS60-1B 20T – H 19 J



Model Number	No. of Teeth	Pitch Circle Dia. DP	(Outer Dia.) (D0)	Hub Dia. DH	Hub Length L	Tap Position a	Finished Bore Dia. d								No. of Teeth		
							19	20	22	24	25	28	30	32			
RS60-1B 9T-H□□J	9	55.70	64	43	32	6		○	○	○	○						9
RS60-1B10T-H□□J	10	61.65	70	49	32	6	○	○	○	○	⊙	⊙	○				10
RS60-1B11T-H□□J	11	67.62	76	51	32	6	○	○	○	○	⊙	⊙	⊙	○			11
RS60-1B12T-H□□J	12	73.60	83	51	32	12	○	⊙	○	⊙	⊙	⊙	⊙	⊙	○		12
RS60-1B13T-H□□J	13	79.60	89	57	32	12	○	○	○	○	⊙	⊙	⊙	⊙	⊙	○	13
RS60-1B14T-H□□J	14	85.61	95	62	32	12	○	⊙	○	○	⊙	⊙	⊙	⊙	⊙	○	14
RS60-1B15T-H□□J	15	91.63	101	68	32	12	○	⊙	○	○	⊙	⊙	⊙	⊙	⊙	○	15
RS60-1B16T-H□□J	16	97.65	107	73	32	12	○	⊙	○	○	⊙	⊙	⊙	⊙	⊙	○	16
RS60-1B17T-H□□J	17	103.67	113	73	32	12	○	○	○	○	⊙	⊙	⊙	⊙	⊙	○	17
RS60-1B18T-H□□J	18	109.70	119	83	40	12	○	○	○	○	⊙	⊙	⊙	⊙	⊙	○	18
RS60-1B19T-H□□J	19	115.74	126	83	40	12	○	○	○	○	⊙	⊙	⊙	⊙	⊙	○	19
RS60-1B20T-H□□J	20	121.78	132	83	40	12	○	⊙	○	○	⊙	⊙	⊙	⊙	⊙	○	20
RS60-1B21T-H□□J	21	127.82	138	83	40	12		○	○	○	⊙	○	⊙	⊙	⊙	○	21
RS60-1B22T-H□□J	22	133.86	144	83	40	12		○	○	○	○	⊙	○	⊙	⊙	○	22
RS60-1B23T-H□□J	23	139.90	150	83	40	12		○	○	○	○	○	⊙	○	⊙	○	23
RS60-1B24T-H□□J	24	145.95	156	83	40	12		○	○	○	○	○	○	⊙	⊙	○	24
RS60-1B25T-H□□J	25	151.99	162	83	40	12		○	○	○	○	○	○	○	⊙	○	25
RS60-1B26T-H□□J	26	158.04	168	83	40	12		○	○	○	○	○	○	○	⊙	○	26
RS60-1B27T-H□□J	27	164.09	174	83	40	12		○	○	○	○	○	○	○	○	○	27
RS60-1B28T-H□□J	28	170.14	180	83	40	12		○	○	○	○	○	○	○	○	○	28
RS60-1B30T-H□□J	30	182.25	193	83	40	12		○	○	○	○	○	○	○	○	○	30

Model Number	No. of Teeth	Pitch Circle Dia. DP	(Outer Dia.) (D0)	Hub Dia. DH	Hub Length L	Tap Position a	Finished Bore Dia. d								No. of Teeth		
							35	38	40	42	45	48	50	55			
RS60-1B13T-H□□J	13	79.60	89	57	32	12	⊙										13
RS60-1B14T-H□□J	14	85.61	95	62	32	12	⊙	⊙									14
RS60-1B15T-H□□J	15	91.63	101	68	32	12	⊙		⊙								15
RS60-1B16T-H□□J	16	97.65	107	73	32	12	⊙	⊙	⊙								16
RS60-1B17T-H□□J	17	103.67	113	73	32	12	⊙	⊙	⊙	○							17
RS60-1B18T-H□□J	18	109.70	119	83	40	12	⊙	⊙	⊙	○	○						18
RS60-1B19T-H□□J	19	115.74	126	83	40	12	⊙	⊙	⊙	○	○	○					19
RS60-1B20T-H□□J	20	121.78	132	83	40	12	⊙	⊙	⊙	○	○	○	○				20
RS60-1B21T-H□□J	21	127.82	138	83	40	12	⊙	⊙	⊙	○	○	○	○	○			21
RS60-1B22T-H□□J	22	133.86	144	83	40	12	⊙	⊙	⊙	○	○	○	○	○	○		22
RS60-1B23T-H□□J	23	139.90	150	83	40	12	⊙	○	⊙	○	○	○	○	○	○	○	23
RS60-1B24T-H□□J	24	145.95	156	83	40	12	⊙	○	⊙	○	○	○	○	○	○	○	24
RS60-1B25T-H□□J	25	151.99	162	83	40	12	⊙	○	⊙	○	○	○	○	○	○	○	25
RS60-1B26T-H□□J	26	158.04	168	83	40	12	⊙	○	⊙	○	○	○	○	○	○	○	26
RS60-1B27T-H□□J	27	164.09	174	83	40	12	⊙	○	⊙	○	○	○	○	○	○	○	27
RS60-1B28T-H□□J	28	170.14	180	83	40	12	⊙	○	⊙	○	○	○	○	○	○	○	28
RS60-1B30T-H□□J	30	182.25	193	83	40	12	⊙	○	⊙	○	○	○	○	○	○	○	30

Enter the bore diameter for the □ found in the model numbers.

Before Use Standard Roller Chains Lubrication Free Roller Chains Heavy Duty Roller Chains Corrosion Resistant Roller Chains Specialty Roller Chains Sprockets Pin Gear Drives Accessories Selection Handling

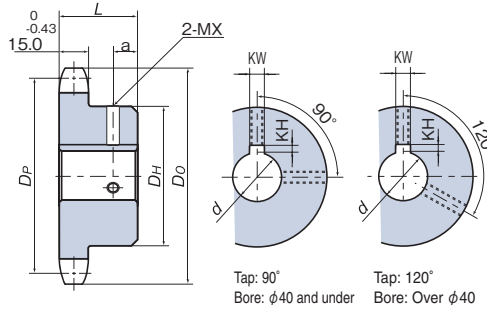
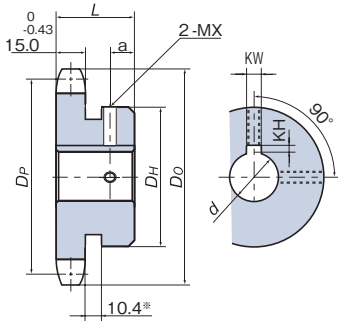
RS80 Fit Bore[®]

RS80 Fit Bore

Applicable chain pitch : 25.40mm Roller dia : 15.88mm

Hub with groove (9T)

Hub without groove (10T and over)



No. of teeth : 9T
Hub dia : ϕ 58
Groove dia : ϕ 44

*The groove is provided on the perimeter of the hub to prevent interference with the chain.

Applicable Bore Dia.	Keyway Width	Tolerance (Js9)	Keyway Depth	Tolerance	Set Screw Size
10 and up to 12	4	±0.0150	1.8	+0.1 0	M4
More than 12 and up to 17	5		2.3		M5
More than 17 and up to 22	6		2.8		M6
More than 22 and up to 30	8	±0.0180	3.3	+0.2 0	M8
More than 30 and up to 38	10				
More than 38 and up to 44	12	±0.0215	3.8		
More than 44 and up to 50	14		4.3		
More than 50 and up to 58	16		4.4		
More than 58 and up to 65	18				M10

• Comes with two alloy steel set screws.

Model Numbering Example RS80-1B 20T – H 25 J

- Keyway tolerance (Js9)
- Bore dia.
- Bore tolerance (H7)
- No. of teeth
- Type
- Chain number

Model Number	No. of Teeth	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	Hub Dia. D_H	Hub Length L	Tap Position a	Finished Bore Dia. d						No. of Teeth
							25	28	30	32	35	38	
RS80-1B 9T-H□□J	9	74.26	85	58	40	8	○	○	○	○	○	○	9
RS80-1B 10T-H□□J	10	82.20	93	52	40	12	○	○	○	○	○	○	10
RS80-1B 11T-H□□J	11	90.16	102	60	40	12	○	○	○	○	○	○	11
RS80-1B 12T-H□□J	12	98.14	110	67	40	12	○	○	○	○	○	○	12
RS80-1B 13T-H□□J	13	106.14	118	77	40	12	○	○	○	○	○	○	13
RS80-1B 14T-H□□J	14	114.15	127	77	40	12	○	○	○	○	○	○	14
RS80-1B 15T-H□□J	15	122.17	135	93	40	12	○	○	○	○	○	○	15
RS80-1B 16T-H□□J	16	130.20	143	93	40	12	○	○	○	○	○	○	16
RS80-1B 17T-H□□J	17	138.23	151	93	40	12	○	○	○	○	○	○	17
RS80-1B 18T-H□□J	18	146.27	159	93	40	12	○	○	○	○	○	○	18
RS80-1B 19T-H□□J	19	154.32	167	93	40	12	○	○	○	○	○	○	19
RS80-1B 20T-H□□J	20	162.37	176	93	40	12	○	○	○	○	○	○	20
RS80-1B 21T-H□□J	21	170.42	184	93	40	12	○	○	○	○	○	○	21

Model Number	No. of Teeth	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	Hub Dia. D_H	Hub Length L	Tap Position a	Finished Bore Dia. d						No. of Teeth
							40	42	45	48	50	55	
RS80-1B 12T-H□□J	12	98.14	110		40	12	○	○	○	○	○	○	12
RS80-1B 13T-H□□J	13	106.14	118		40	12	○	○	○	○	○	○	13
RS80-1B 14T-H□□J	14	114.15	127		40	12	○	○	○	○	○	○	14
RS80-1B 15T-H□□J	15	122.17	135		40	12	○	○	○	○	○	○	15
RS80-1B 16T-H□□J	16	130.20	143		40	12	○	○	○	○	○	○	16
RS80-1B 17T-H□□J	17	138.23	151		40	12	○	○	○	○	○	○	17
RS80-1B 18T-H□□J	18	146.27	159		40	12	○	○	○	○	○	○	18
RS80-1B 19T-H□□J	19	154.32	167		40	12	○	○	○	○	○	○	19
RS80-1B 20T-H□□J	20	162.37	176		40	12	○	○	○	○	○	○	20
RS80-1B 21T-H□□J	21	170.42	184		40	12	○	○	○	○	○	○	21

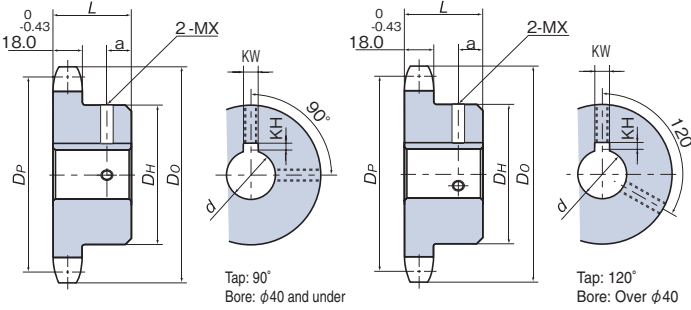
Enter the bore diameter for the □ found in the model numbers.

Before Use
 Standard Roller Chains
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 Specialty Roller Chains
 Sprockets
 Pin Gear Drives
 Accessories
 Selection
 Handling

RS100 Fit Bore®

Applicable chain pitch : 31.75mm Roller dia : 19.05mm

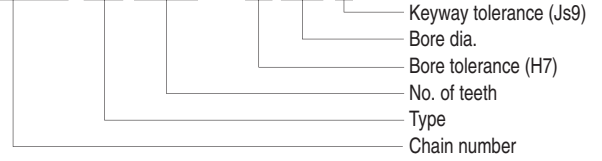
RS100 Fit Bore



Applicable Bore Dia.	Keyway Width	Tolerance (Js9)	Keyway Depth	Tolerance	Set Screw Size
10 and up to 12	4		1.8		M4
More than 12 and up to 17	5	±0.0150	2.3	+0.1 0	M5
More than 17 and up to 22	6		2.8		M6
More than 22 and up to 30	8	±0.0180	3.3		M8
More than 30 and up to 38	10		3.8	+0.2 0	M8
More than 38 and up to 44	12		3.8		M8
More than 44 and up to 50	14	±0.0215	4.3		M10
More than 50 and up to 58	16		4.3		M10
More than 58 and up to 65	18		4.4		M10

• Comes with two alloy steel set screws.

Model Numbering Example RS100-1B 20T – H 38 J



Model Number	No. of Teeth	Pitch Circle Dia. DP	(Outer Dia.) (DO)	Hub Dia. DH	Hub Length L	Tap Position a	Finished Bore Dia. d						No. of Teeth	
							25	28	30	32	35	38		
RS100-1B10T-H□□J	10	102.75	117	65	50	15	○	○	○	○	○	○	○	10
RS100-1B11T-H□□J	11	112.70	127	75	50	15	○	○	○	○	○	○	○	11
RS100-1B12T-H□□J	12	122.67	138	86	50	15	○	○	○	○	⊙	○	○	12
RS100-1B13T-H□□J	13	132.67	148	88	50	15	○	○	○	○	○	⊙	○	13
RS100-1B14T-H□□J	14	142.68	158	88	50	15	○	○	○	○	○	○	○	14
RS100-1B15T-H□□J	15	152.71	168	98	50	15	○	○	○	○	⊙	○	○	15
RS100-1B16T-H□□J	16	162.75	179	98	50	15							○	16
RS100-1B17T-H□□J	17	172.79	189	107	50	15							○	17
RS100-1B18T-H□□J	18	182.84	199	107	50	15							○	18
RS100-1B19T-H□□J	19	192.90	209	107	50	15							○	19
RS100-1B20T-H□□J	20	202.96	220	107	50	15							○	20

Model Number	No. of Teeth	Pitch Circle Dia. DP	(Outer Dia.) (DO)	Hub Dia. DH	Hub Length L	Tap Position a	Finished Bore Dia. d						No. of Teeth	
							40	42	45	48	50	55		60
RS100-1B10T-H□□J	10	102.75	117	65	50	15	○	○						10
RS100-1B11T-H□□J	11	112.70	127	75	50	15	○	○	○	○	○			11
RS100-1B12T-H□□J	12	122.67	138	86	50	15	○	○	○	○	⊙	⊙		12
RS100-1B13T-H□□J	13	132.67	148	88	50	15	○	○	○	○	⊙	⊙		13
RS100-1B14T-H□□J	14	142.68	158	88	50	15	○	○	○	○	○	⊙		14
RS100-1B15T-H□□J	15	152.71	168	98	50	15	○	○	○	○	⊙	⊙	⊙	15
RS100-1B16T-H□□J	16	162.75	179	98	50	15				○	⊙	⊙	⊙	16
RS100-1B17T-H□□J	17	172.79	189	107	50	15				○	○	⊙	⊙	17
RS100-1B18T-H□□J	18	182.84	199	107	50	15				○	⊙	⊙	⊙	18
RS100-1B19T-H□□J	19	192.90	209	107	50	15				○	○	⊙	⊙	19
RS100-1B20T-H□□J	20	202.96	220	107	50	15				○	○	○	⊙	20
RS100-1B21T-H□□J	21	213.03	230	107	50	15				○	○	○	⊙	21

Enter the bore diameter for the □ found in the model numbers.

Before Use
Standard Roller Chains
Lube-Free Roller Chains
Heavy Duty Roller Chains
Corrosion Resistant Roller Chains
Specialty Roller Chains
Sprockets
Pin Gear Drives
Accessories
Selection
Handling

Lock Series (with Tightening Device) S Type

Applicable models: RS35 – RS100 1B Type RS Sprockets

Allows RS standard sprockets to be mounted to shafts without using keys.

■ Features

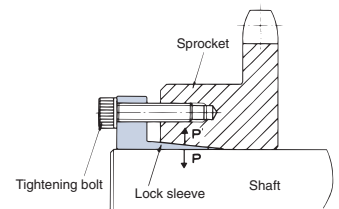


Lock Series

1. No wobbling after mounting (tightening)
2. Easy phase alignment
3. Easy mounting and dismounting
4. No retainers required

■ Tightening Principle

The inner diameter of the sprocket and the outer diameter of the lock sleeve are tapered. When the mounting bolts are tightened, the sprocket will slide and move up on the tapered surface. A wedge action will generate force P and force P' in the radial direction to press on the shaft and tapered inner side, and frictional force will tightly secure the sprocket and shaft.

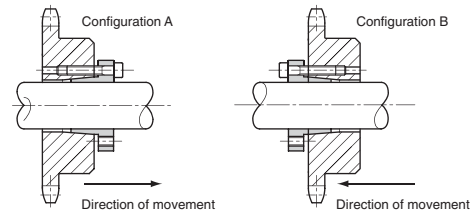


■ Bolt Tightening Positions

The same sleeve is used for all models, so some holes may not be used. Check the installation guide that comes with the product before attaching the mounting bolts for use.

■ Direction of Sprocket Movement when Tightening Bolts

When mounting a Lock Series S Type sprocket, the sprocket will move 0.5mm – 1.0mm in the direction of the shaft between the time the sprocket is initially secured and the time the sprocket is tightened. Therefore, take this movement into consideration when centering the sprocket. The amount of sprocket movement varies with the type. (See the illustration on the right.)



■ General Precautions

- 1) Allowable transmission torque
Ensure that the load torque does not exceed the specified transmission torque in the dimension table.
- 2) Shaft diameter tolerance and surface roughness
Use a shaft diameter tolerance of h8 and a surface roughness degree of 12S as your standards.
- 3) Mounting to shafts provided with keyways or D-shaped shafts
The allowable transmission torque will decrease by 10% when mounting the sprocket to a shaft provided with a finished keyway, such as a motor shaft, or to a D-shaped shaft.
- 4) Mounting to cold finished carbon steel bars
The allowable transmission torque will decrease by 10% when mounting the sprocket to a cold finished carbon steel bar (drawn steel with an allowable diameter of 8 – 10 class).
- 5) Ensure that the shaft is a solid shaft using S35C grade or higher steel.
- 6) Operating temperature range: -20°C to 200°C
- 7) Always use a torque wrench when tightening the bolts. (Refer to the torque wrench operation manual for proper use.)

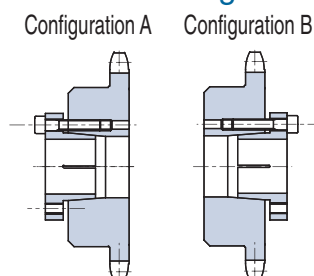
Ordering Lock Series S Type Sprockets

Please include the product code and model number in your order.

■ Ordering Example

Product Code	Model Number	No. of Pieces	Unit
G110218	RS40-1B21T-S4825A	10	K (pcs)

■ Sleeve Mounting Configuration

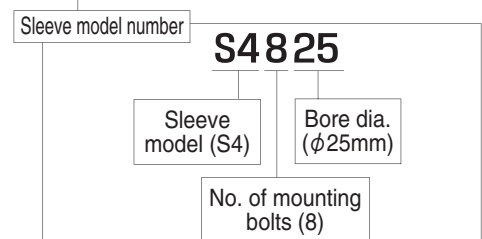


*Caution regarding sleeve mounting:
RS35-1B19T-S33□□□
RS40-1B15T-S33□□□
The above models can use configuration A only, as configuration B will cause interference with the chain.

■ Model Numbering Example

RS40-1B21T-S4825A

Chain number No. of teeth Configuration
Hub type (1B: single hub only)



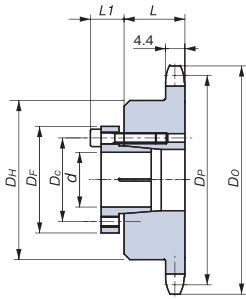
RS35 Lock Series (S Type)

Before Use | Standard Roller Chains | Lube-Free Roller Chains | Heavy Duty Roller Chains | Corrosion Resistant Roller Chains | Specialty Roller Chains | Sprockets | Pin Gear Drives | Accessories | Selection | Handling

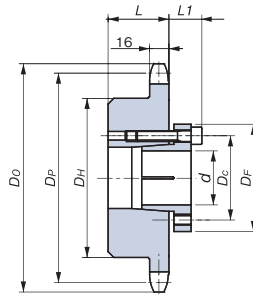
RS35 Lock Series S Type, Configurations A & B

● Applicable chain pitch : 9.525mm ● Roller dia : 5.08mm

Configuration A



Configuration B



Lock Series S Type dimensions

Sleeve Model	ϕD_F (mm)	ϕD_C (mm)	L_1 (mm)	Bolt Size (M x S)	Tightening Torque (N·m)
S1	32.0	24.0	12.0	M4 x 16	4.2
S2	42.0	32.0	14.0	M5 x 18	8.3
S3	48.0	38.5	15.5	M5 x 20	8.3
S4	56.0	46.0	15.5	M5 x 20	8.3
S5	66.0	56.0	17.5	M5 x 22	8.3
S6	80.0	68.0	21.0	M6 x 25	16.8
S7	101.0	86.0	24.5	M8 x 30	40.5

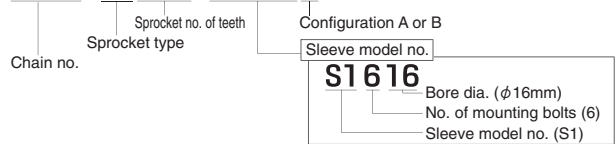
Ordering Example

Example: RS35-1B, No. of teeth: 15, Sleeve configuration: A, Bore dia.: 10mm

Product Code	Model Number
G131001	RS35-1B15T-S1410A

Model Numbering Example

RS35-1B23T-S1616



Dimensions

All models feature hardened teeth.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	Hub Dia. D_H	Hub Length L	Applicable Bore Dia. d											No. of Teeth	
					10	11	12	14	15	16	17	18	19	20	22		
RS35-1B15T-S14	45.81	51	35	20	●	●	●	●	●	●							15
RS35-1B16T-S14	48.82	54	37	20	●	●	●	●	●	●							16
RS35-1B17T-S14	51.84	57	41	20	●	●	●	●	●	●							17
RS35-1B17T-S24	51.84	57	41	20							●	●	●	●	●		17
RS35-1B18T-S14	54.85	60	44	20		●	●	●	●	●							18
RS35-1B18T-S24	54.85	60	44	20							●	●	●	●	●		18
RS35-1B19T-S14	57.87	63	47	20		●	●	●	●	●							19
RS35-1B19T-S24	57.87	63	47	20							●	●	●	●	●		19
RS35-1B20T-S14	60.89	66	50	20			●	●	●	●							20
RS35-1B20T-S24	60.89	66	50	20							●	●	●	●	●		20
RS35-1B21T-S16	63.91	69	53	20				●	●	●							21
RS35-1B21T-S24	63.91	69	53	20							●	●	●	●	●		21
RS35-1B22T-S16	66.93	72	53	20				●	●	●							22
RS35-1B22T-S24	66.93	72	53	20							●	●	●	●	●		22
RS35-1B23T-S16	69.95	75	53	20				●	●	●							23
RS35-1B23T-S24	69.95	75	53	20							●	●	●	●	●		23
RS35-1B24T-S16	72.97	78	53	20				●	●	●							24
RS35-1B24T-S24	72.97	78	53	20							●	●	●	●	●		24
RS35-1B25T-S16	76.00	81	53	20				●	●	●							25
RS35-1B25T-S24	76.00	81	53	20							●	●	●	●	●		25
RS35-1B26T-S16	79.02	84	53	22				●	●	●							26
RS35-1B26T-S24	79.02	84	53	22							●	●	●	●	●		26
RS35-1B27T-S16	82.05	87	53	22				●	●	●							27
RS35-1B27T-S24	82.05	87	53	22							●	●	●	●	●		27
RS35-1B28T-S16	85.07	90	53	22				●	●	●							28
RS35-1B28T-S24	85.07	90	53	22							●	●	●	●	●		28
RS35-1B30T-S16	91.12	96	53	22				●	●	●							30
RS35-1B30T-S24	91.12	96	53	22							●	●	●	●	●		30
RS35-1B32T-S16	97.18	102	53	22				●	●	●							32
RS35-1B32T-S24	97.18	102	53	22							●	●	●	●	●		32
RS35-1B34T-S16	103.23	109	53	22				●	●	●							34
RS35-1B34T-S24	103.23	109	53	22							●	●	●	●	●		34
RS35-1B35T-S16	106.26	112	53	22				●	●	●							35
RS35-1B35T-S24	106.26	112	53	22							●	●	●	●	●		35
RS35-1B36T-S16	109.29	115	53	22				●	●	●							36
RS35-1B36T-S24	109.29	115	53	22							●	●	●	●	●		36
RS35-1B38T-S16	115.34	121	63	25				●	●	●							38
RS35-1B38T-S24	115.34	121	63	25							●	●	●	●	●		38
RS35-1B40T-S16	121.40	127	63	25				●	●	●							40
RS35-1B40T-S24	121.40	127	63	25							●	●	●	●	●		40

Input the bore diameter in the white □□ boxes after the model number, and configuration A or B in the black ■ box. ● circles indicate applicable bore diameters.

RS35 Lock Series (S Type)

■ Dimensions

All models feature hardened teeth.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	Hub Dia. D_H	Hub Length L	Applicable Bore Dia. d						No. of Teeth
					24	25	28	30	32	35	
※RS35-1B19T-S33□□A	57.87	63	47	20	●	●	●				19
RS35-1B20T-S33□□■	60.89	66	50	20	●	●	●				20
RS35-1B21T-S34□□■	63.91	69	53	20	●	●	●				21
RS35-1B22T-S44□□■	66.93	72	53	20	●	●	●	●	●	●	22
RS35-1B23T-S44□□■	69.95	75	53	20	●	●	●	●	●	●	23
RS35-1B24T-S44□□■	72.97	78	53	20	●	●	●	●	●	●	24
RS35-1B25T-S44□□■	76.00	81	53	20	●	●	●	●	●	●	25
RS35-1B26T-S44□□■	79.02	84	53	22	●	●	●	●	●	●	26
RS35-1B27T-S44□□■	82.05	87	53	22	●	●	●	●	●	●	27
RS35-1B28T-S44□□■	85.07	90	53	22	●	●	●	●	●	●	28
RS35-1B30T-S44□□■	91.12	96	53	22	●	●	●	●	●	●	30
RS35-1B32T-S44□□■	97.18	102	53	22	●	●	●	●	●	●	32
RS35-1B34T-S44□□■	103.23	109	53	22	●	●	●	●	●	●	34
RS35-1B35T-S44□□■	106.26	112	53	22	●	●	●	●	●	●	35
RS35-1B36T-S44□□■	109.29	115	53	22	●	●	●	●	●	●	36
RS35-1B38T-S44□□■	115.34	121	63	25	●	●	●	●	●	●	38
RS35-1B40T-S44□□■	121.40	127	63	25	●	●	●	●	●	●	40

Input the bore diameter in the white □□ boxes after the model number, and configuration A or B in the black ■ box. ● circles indicate applicable bore diameters.
Note: Models with asterisks * indicate that only configuration A is available.

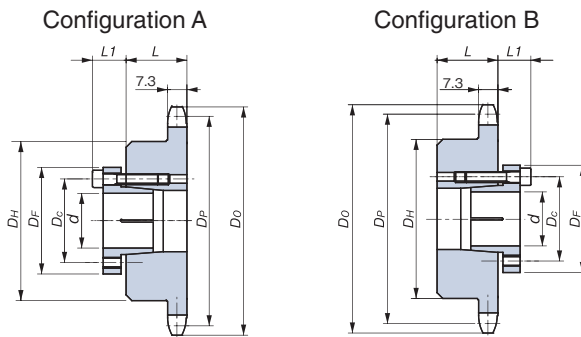
■ RS35 Lock Series (S Type) Maximum Allowable Torque (Unit: N·m)

Bore dia. No. of teeth	Bore dia. (mm)																	
	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	
15T																		
16T	58																	
17T		63																
18T			69	81	86	92												
19T							158	167	177	186	205	167	174	195				
20T																		
21T				121	130	138						223	232	260				
22-40T															279	298	325	

RS40 Lock Series (S Type)

RS40 Lock Series S Type, Configurations A & B

● Applicable chain pitch : 12.7mm ● Roller dia : 7.92mm



Lock Series S Type dimensions

Sleeve Model	ϕD_f (mm)	ϕD_c (mm)	L_1 (mm)	Bolt Size (M x S)	Tightening Torque (N·m)
S1	32.0	24.0	12.0	M4 × 16	4.2
S2	42.0	32.0	14.0	M5 × 18	8.3
S3	48.0	38.5	15.5	M5 × 20	8.3
S4	56.0	46.0	15.5	M5 × 20	8.3
S5	66.0	56.0	17.5	M5 × 22	8.3
S6	80.0	68.0	21.0	M6 × 25	16.8
S7	101.0	86.0	24.5	M8 × 30	40.5

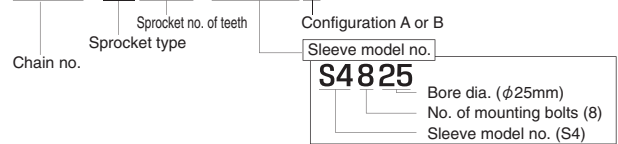
Ordering Example

Example: RS40-1B, No. of teeth: 14, Sleeve configuration: A, Bore dia.: 14mm

Product Code	Model Number
G131266	RS40-1B14T-S1614A

Model Numbering Example

RS40-1B21T-S4825



Dimensions

All models feature hardened teeth.

Model Number	Pitch Circle Dia. D_p	(Outer Dia.) (D_o)	Hub Dia. D_H	Hub Length L	Applicable Bore Dia. d								No. of Teeth	
					14	15	16	17	18	19	20	22		
RS40-1B14T-S16□□■	57.07	63	42	22	●									14
RS40-1B14T-S24□□■						●								14
RS40-1B15T-S16□□■	61.08	67	46	22	●									15
RS40-1B15T-S24□□■						●								15
RS40-1B16T-S16□□■	65.10	71	50	22	●									16
RS40-1B16T-S24□□■						●								16
RS40-1B17T-S24□□■	69.12	76	54	22		●								17
RS40-1B18T-S24□□■	73.14	80	57	22		●								18
RS40-1B19T-S24□□■	77.16	84	62	22		●								19
RS40-1B20T-S25□□■	81.18	88	67	25		●								20
RS40-1B21T-S25□□■	85.21	92	71	25		●								21
RS40-1B22T-S25□□■	89.24	96	75	25		●								22
RS40-1B23T-S25□□■	93.27	100	77	25		●								23
RS40-1B24T-S25□□■	97.30	104	63	25		●								24
RS40-1B25T-S25□□■	101.33	108	63	25		●								25
RS40-1B26T-S25□□■	105.36	112	63	25			●							26
RS40-1B27T-S25□□■	109.40	116	63	25			●							27
RS40-1B28T-S25□□■	113.43	120	63	25			●							28
RS40-1B30T-S25□□■	121.50	128	63	25				●						30
RS40-1B32T-S25□□■	129.57	137	68	28					●					32

Input the bore diameter in the white □□ boxes after the model number, and configuration A or B in the black ■ box. ● circles indicate applicable bore diameters.

RS40 Lock Series (S Type)

■ Dimensions

All models feature hardened teeth.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	Hub Dia. D_H	Hub Length L	Applicable Bore Dia. d										No. of Teeth	
					24	25	28	30	32	35	38	40	42	45		
※RS40-1B15T-S33□□□A	61.08	67	46	22	●	●	●									15
RS40-1B16T-S33□□□■	65.10	71	50	22	●	●	●									16
RS40-1B17T-S44□□□■	69.12	76	54	22	●	●	●	●	●	●						17
RS40-1B18T-S44□□□■	73.14	80	57	22	●	●	●	●	●	●						18
RS40-1B19T-S44□□□■	77.16	84	62	22	●	●	●	●	●	●						19
RS40-1B20T-S48□□□■	81.18	88	67	25	●	●	●	●	●	●						20
RS40-1B20T-S56□□□■												●	●	●	●	
RS40-1B21T-S48□□□■	85.21	92	71	25	●	●	●	●	●	●						21
RS40-1B21T-S56□□□■												●	●	●	●	
RS40-1B22T-S48□□□■	89.24	96	75	25	●	●	●	●	●	●						22
RS40-1B22T-S56□□□■												●	●	●	●	
RS40-1B23T-S48□□□■	93.27	100	77	25	●	●	●	●	●	●						23
RS40-1B23T-S56□□□■												●	●	●	●	
RS40-1B24T-S48□□□■	97.30	104	63	25	●	●	●	●	●	●						24
RS40-1B24T-S56□□□■												●	●	●	●	
RS40-1B25T-S48□□□■	101.33	108	63	25	●	●	●	●	●	●						25
RS40-1B25T-S56□□□■												●	●	●	●	
RS40-1B26T-S48□□□■	105.36	112	63	25	●	●	●	●	●	●						26
RS40-1B26T-S56□□□■												●	●	●	●	
RS40-1B27T-S48□□□■	109.40	116	63	25	●	●	●	●	●	●						27
RS40-1B27T-S56□□□■												●	●	●	●	
RS40-1B28T-S48□□□■	113.43	120	63	25	●	●	●	●	●	●						28
RS40-1B28T-S56□□□■												●	●	●	●	
RS40-1B30T-S48□□□■	121.50	128	63	25	●	●	●	●	●	●						30
RS40-1B30T-S56□□□■												●	●	●	●	
RS40-1B32T-S48□□□■	129.57	137	68	28	●	●	●	●	●	●						32
RS40-1B32T-S56□□□■												●	●	●	●	
RS40-1B34T-S48□□□■	137.64	145	68	28	●	●	●	●	●	●						34
RS40-1B34T-S56□□□■												●	●	●	●	
RS40-1B35T-S48□□□■	141.68	149	68	28	●	●	●	●	●	●						35
RS40-1B35T-S56□□□■												●	●	●	●	
RS40-1B36T-S48□□□■	145.72	153	68	28	●	●	●	●	●	●						36
RS40-1B36T-S56□□□■												●	●	●	●	
RS40-1B38T-S48□□□■	153.79	161	68	28	●	●	●	●	●	●						38
RS40-1B38T-S56□□□■												●	●	●	●	
RS40-1B40T-S48□□□■	161.87	169	68	28	●	●	●	●	●	●						40
RS40-1B40T-S56□□□■												●	●	●	●	

Input the bore diameter in the white □□ boxes after the model number, and configuration A or B in the black ■ box. ● circles indicate applicable bore diameters. Note: Models with asterisks * indicate that only configuration A is available.

■ RS40 Lock Series (S Type) Maximum Allowable Torque (Unit: N·m)

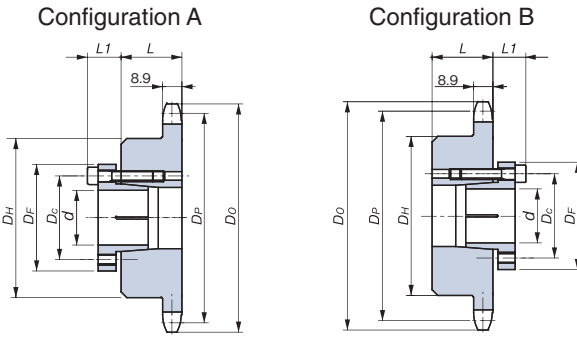
Bore dia. No. of teeth	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45
14T																		
15T	121																	
16T		139	149						167	174	195							
17T				158	167	177	186	205										
18T									223	232	260	279	298	325				
19T																		
20T																		
21T																		
22T		174																
23T			186															
24T				198	209	221	232	256										
25T									446	465	521	558	595	651	530	558	586	628
26T																		
27T																		
28T																		
30T																		
32T																		
34-40T																		

Before Use
 Standard Roller Chains
 Lube-Free Roller Chains
 Heavy Duty Roller Chains
 Corrosion Resistant Roller Chains
 Specialty Roller Chains
 Sprockets
 Pin Gear Drives
 Accessories
 Selection
 Handling

RS50 Lock Series (S Type)

RS50 Lock Series S Type, Configurations A & B

● Applicable chain pitch : 15.875mm ● Roller dia : 10.16mm



Lock Series S Type dimensions

Sleeve Model	ϕD_F (mm)	ϕD_C (mm)	L_1 (mm)	Bolt Size (M x S)	Tightening Torque (N·m)
S1	32.0	24.0	12.0	M4 x 16	4.2
S2	42.0	32.0	14.0	M5 x 18	8.3
S3	48.0	38.5	15.5	M5 x 20	8.3
S4	56.0	46.0	15.5	M5 x 20	8.3
S5	66.0	56.0	17.5	M5 x 22	8.3
S6	80.0	68.0	21.0	M6 x 25	16.8
S7	101.0	86.0	24.5	M8 x 30	40.5

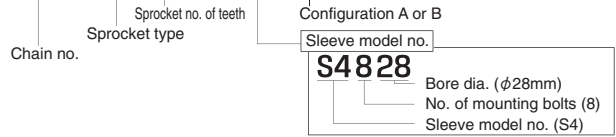
Ordering Example

Example: RS50-1B, No. of teeth: 14, Sleeve configuration: A, Bore dia.: 15mm

Product Code	Model Number
G131562	RS50-1B14T-S2515A

Model Numbering Example

RS50-1B20T-S4828



Dimensions

Teeth hardened up to 35T.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	Hub Dia. D_H	Hub Length L	Applicable Bore Dia. d										No. of Teeth			
					15	16	17	18	19	20	22	24	25	28		30		
RS50-1B14T-S25	71.34	79	52	25	●	●											14	
RS50-1B14T-S26					●	●	●	●	●	●								14
RS50-1B15T-S25							●	●	●	●								15
RS50-1B15T-S26	76.35	84	57	25			●	●	●	●								15
RS50-1B15T-S44											●	●	●	●				15
RS50-1B16T-S25					●	●												16
RS50-1B16T-S26	81.37	89	62	25			●	●	●	●								16
RS50-1B16T-S44											●	●	●	●				16
RS50-1B17T-S26										●	●							17
RS50-1B17T-S48	86.39	94	67	25							●	●	●	●				17
RS50-1B18T-S26											●							18
RS50-1B18T-S48	91.42	100	72	28								●	●	●	●			18
RS50-1B19T-S26											●							19
RS50-1B19T-S48	96.45	105	73	28								●	●	●	●			19
RS50-1B20T-S48	101.48	110	73	28								●	●	●	●			20
RS50-1B21T-S48	106.51	115	73	28								●	●	●	●			21
RS50-1B22T-S48	111.55	120	73	28								●	●	●	●			22
RS50-1B23T-S48	116.59	125	73	28								●	●	●	●			23
RS50-1B24T-S48	121.62	130	73	28								●	●	●	●			24
RS50-1B25T-S48	126.66	135	73	28								●	●	●	●			25
RS50-1B26T-S48	131.70	140	73	28								●	●	●	●			26
RS50-1B27T-S48	136.74	145	73	28								●	●	●	●			27
RS50-1B28T-S48	141.79	150	73	28									●	●	●			28
RS50-1B30T-S48	151.87	161	73	28										●	●			30
RS50-1B32T-S48	161.96	171	73	28										●	●			32
RS50-1B34T-S48	172.05	181	73	28											●			34

Input the bore diameter in the white boxes after the model number, and configuration A or B in the black box. ● circles indicate applicable bore diameters.

Before Use | Standard Roller Chains | Lube-Free Roller Chains | Heavy Duty Roller Chains | Corrosion Resistant Roller Chains | Specialty Roller Chains | Sprockets | Pin Gear Drives | Accessories | Selection | Handling

RS50 Lock Series (S Type)

■ Dimensions Teeth hardened up to 35T.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	Hub Dia. D_H	Hub Length L	Applicable Bore Dia. d									No. of Teeth						
					32	35	38	40	42	45	48	50	55							
RS50-1B15T-S44 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	76.35	84	57	25	●	●														15
RS50-1B16T-S44 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	81.37	89	62	25	●	●														16
RS50-1B17T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	86.39	94	67	25	●	●														17
RS50-1B17T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B18T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	91.42	100	72	28	●	●														18
RS50-1B18T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B19T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	96.45	105	73	28	●	●														19
RS50-1B19T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B20T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	101.48	110	73	28	●	●														20
RS50-1B20T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B21T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	106.51	115	73	28	●	●														21
RS50-1B21T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B22T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	111.55	120	73	28	●	●														22
RS50-1B22T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B23T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	116.59	125	73	28	●	●														23
RS50-1B23T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B24T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	121.62	130	73	28	●	●														24
RS50-1B24T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B25T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	126.66	135	73	28	●	●														25
RS50-1B25T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B26T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	131.70	140	73	28	●	●														26
RS50-1B26T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B27T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	136.74	145	73	28	●	●														27
RS50-1B27T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B28T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	141.79	150	73	28	●	●														28
RS50-1B28T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B30T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	151.87	161	73	28	●	●														30
RS50-1B30T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B32T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	161.96	171	73	28	●	●														32
RS50-1B32T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B34T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	172.05	181	73	28	●	●														34
RS50-1B34T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B35T-S48 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	177.10	186	73	28	●	●														35
RS50-1B35T-S56 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						●	●													
RS50-1B36T-S510 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	182.15	191	83	35			●	●	●	●										36
RS50-1B36T-S66 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																				
RS50-1B38T-S510 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	192.24	201	83	35			●	●	●	●										38
RS50-1B38T-S66 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																				
RS50-1B40T-S510 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	202.33	211	83	35			●	●	●	●										40
RS50-1B40T-S66 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																				

Input the bore diameter in the white boxes after the model number, and configuration A or B in the black box. ● circles indicate applicable bore diameters.

■ RS50 Lock Series (S Type) Maximum Allowable Torque

(Unit: N·m)

Bore dia. No. of teeth																					
	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	
14T																					
15T	174	186	237	251	265	279	307	223	232	260	279	298	325								
16T																					
17T																					
18T																					
19T																					
20T																					
21T																					
22T							446														
23T																					
24T								465	521	558	595	651	530	558	586	628					
25T																					
26T																					
27T																					
28T																					
30T																					
32T																					
34T																					
35T																					
36-40T														883	930	976	1046	1116	1162	1279	

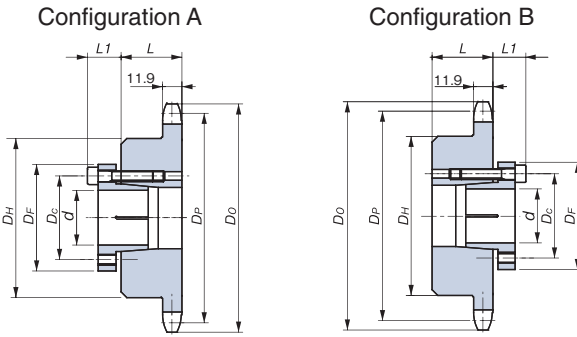
Before Use
Standard Roller Chains
Lube-Free Roller Chains
Heavy Duty Roller Chains
Corrosion Resistant Roller Chains
Specialty Roller Chains
Sprockets
Pin Gear Drives
Accessories
Selection
Handling

RS60 Lock Series (S Type)

Before Use
Standard Roller Chains
Lube-Free Roller Chains
Heavy Duty Roller Chains
Corrosion Resistant Roller Chains
Specialty Roller Chains
Sprockets
Pin Gear Drives
Accessories
Selection
Handling

RS60 Lock Series S Type, Configurations A & B

● Applicable chain pitch : 19.05mm ● Roller dia : 11.91mm



Lock Series S Type dimensions

Sleeve Model	ϕD_F (mm)	ϕD_C (mm)	L_1 (mm)	Bolt Size (M x S)	Tightening Torque (N·m)
S1	32.0	24.0	12.0	M4 x 16	4.2
S2	42.0	32.0	14.0	M5 x 18	8.3
S3	48.0	38.5	15.5	M5 x 20	8.3
S4	56.0	46.0	15.5	M5 x 20	8.3
S5	66.0	56.0	17.5	M5 x 22	8.3
S6	80.0	68.0	21.0	M6 x 25	16.8
S7	101.0	86.0	24.5	M8 x 30	40.5

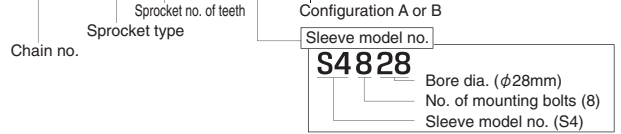
Ordering Example

Example: RS60-1B, No. of teeth: 12, Sleeve configuration: A, Bore dia.: 18mm

Product Code	Model Number
G131765	RS60-1B12T-S2618A

Model Numbering Example

RS60-1B16T-S4828



Dimensions

Teeth hardened up to 30T.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	Hub Dia. D_H	Hub Length L	Applicable Bore Dia. d										No. of Teeth	
					18	19	20	22	24	25	28	30	32	35		
RS60-1B12T-S26 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	73.60	83	51	32	●	●	●	●								12
RS60-1B13T-S26 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	79.60	89	57	32	●	●	●	●								13
RS60-1B13T-S46 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>									●	●	●	●	●	●		13
RS60-1B14T-S26 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	85.61	95	62	32	●	●	●	●								14
RS60-1B14T-S46 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>									●	●	●	●	●	●		14
RS60-1B15T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	91.63	101	68	32					●	●	●	●	●	●		15
RS60-1B16T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	97.65	107	73	32					●	●	●	●	●	●		16
RS60-1B17T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	103.67	113	73	32						●	●	●	●	●		17
RS60-1B18T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	109.70	119	83	40							●	●	●	●		18
RS60-1B19T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	115.74	126	83	40							●	●	●	●		19
RS60-1B20T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	121.78	132	83	40								●	●	●		20
RS60-1B21T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	127.82	138	83	40									●	●		21
RS60-1B22T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	133.86	144	83	40										●		22
RS60-1B23T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	139.90	150	83	40											●	23
RS60-1B24T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	145.95	156	83	40											●	24
RS60-1B25T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	151.99	162	83	40											●	25

Input the bore diameter in the white boxes after the model number, and configuration A or B in the black box. ● circles indicate applicable bore diameters.

RS60 Lock Series (S Type)

■ Dimensions

Teeth hardened up to 30T.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	Hub Dia. D_H	Hub Length L	Applicable Bore Dia. d							No. of Teeth
					38	40	42	45	48	50	55	
RS60-1B15T-S56□□■	91.63	101	68	32	●	●	●	●				15
RS60-1B16T-S56□□■	97.65	107	73	32	●	●	●	●				16
RS60-1B17T-S56□□■	103.67	113	73	32	●	●	●	●				17
RS60-1B18T-S510□□■	109.70	119	83	40	●	●	●	●				18
RS60-1B18T-S66□□■									●	●	●	
RS60-1B19T-S510□□■	115.74	126	83	40	●	●	●	●				19
RS60-1B19T-S66□□■									●	●	●	
RS60-1B20T-S510□□■	121.78	132	83	40	●	●	●	●				20
RS60-1B20T-S66□□■									●	●	●	
RS60-1B21T-S510□□■	127.82	138	83	40	●	●	●	●				21
RS60-1B21T-S66□□■									●	●	●	
RS60-1B22T-S510□□■	133.86	144	83	40	●	●	●	●				22
RS60-1B22T-S66□□■									●	●	●	
RS60-1B23T-S510□□■	139.90	150	83	40	●	●	●	●				23
RS60-1B23T-S66□□■									●	●	●	
RS60-1B24T-S510□□■	145.95	156	83	40	●	●	●	●				24
RS60-1B24T-S66□□■									●	●	●	
RS60-1B25T-S510□□■	151.99	162	83	40	●	●	●	●				25
RS60-1B25T-S66□□■									●	●	●	
RS60-1B26T-S510□□■	158.04	168	83	40	●	●	●	●				26
RS60-1B26T-S66□□■									●	●	●	
RS60-1B27T-S510□□■	164.09	174	83	40	●	●	●	●				27
RS60-1B27T-S66□□■									●	●	●	
RS60-1B28T-S510□□■	170.14	180	83	40	●	●	●	●				28
RS60-1B28T-S66□□■									●	●	●	
RS60-1B30T-S510□□■	182.25	193	83	40	●	●	●	●				30
RS60-1B30T-S66□□■									●	●	●	
RS60-1B32T-S510□□■	194.35	205	83	40	●	●	●	●				32
RS60-1B32T-S66□□■									●	●	●	
RS60-1B34T-S510□□■	206.46	217	83	40		●	●	●				34
RS60-1B34T-S66□□■										●	●	
RS60-1B35T-S510□□■	212.52	223	83	40				●				35
RS60-1B35T-S66□□■											●	
RS60-1B36T-S510□□■	218.57	229	83	40				●				36
RS60-1B36T-S66□□■											●	
RS60-1B38T-S510□□■	230.69	241	83	40				●				38
RS60-1B38T-S66□□■											●	
RS60-1B40T-S66□□■	242.80	253	83	40				●	●	●		40

Input the bore diameter in the white □□ boxes after the model number, and configuration A or B in the black ■ box. ● circles indicate applicable bore diameters.

■ RS60 Lock Series (S Type) Maximum Allowable Torque

(Unit: N·m)

Bore No. of teeth	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55
12T																	
13T	251	265	279	307													
14T					335	349	391	418	446	488							
15T																	
16T					446	465					530	558	586	628			
17T							521	558									
18T									595								
19T										651							
20T																	
21T																	
22T																	
23T																	
24T											883						
25T												930	976				
26T														1046			
27T															1116	1162	1279
28T																	
30T																	
32T																	
34T																	
35T																	
36T																	
38T																	
40T																	

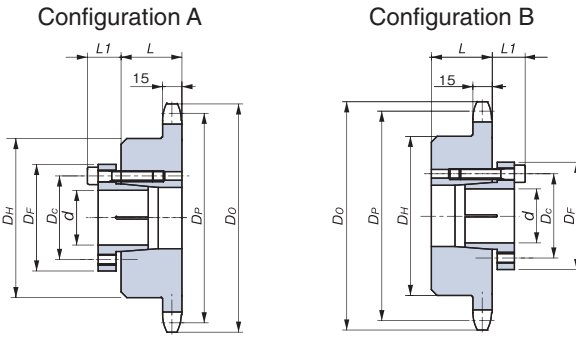
Before Use
 Standard Roller Chains
 Lube-Free Roller Chains
 Heavy Duty Roller Chains
 Corrosion Resistant Roller Chains
 Specialty Roller Chains
 Sprockets
 Pin Gear Drives
 Accessories
 Selection
 Handling

RS80 Lock Series (S Type)

Before Use
Standard Roller Chains
Lube-Free Roller Chains
Heavy Duty Roller Chains
Corrosion Resistant Roller Chains
Specialty Roller Chains
Sprockets
Pin Gear Drives
Accessories
Selection
Handling

RS80 Lock Series S Type, Configurations A & B

● Applicable chain pitch : 25.4mm ● Roller dia : 15.88mm



Lock Series S Type dimensions

Sleeve Model	ϕD_F (mm)	ϕD_C (mm)	L_1 (mm)	Bolt Size (M x S)	Tightening Torque (N·m)
S1	32.0	24.0	12.0	M4 x 16	4.2
S2	42.0	32.0	14.0	M5 x 18	8.3
S3	48.0	38.5	15.5	M5 x 20	8.3
S4	56.0	46.0	15.5	M5 x 20	8.3
S5	66.0	56.0	17.5	M5 x 22	8.3
S6	80.0	68.0	21.0	M6 x 25	16.8
S7	101.0	86.0	24.5	M8 x 30	40.5

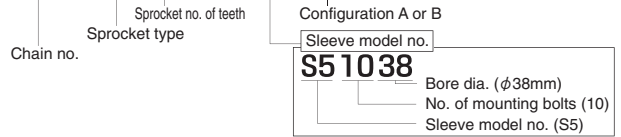
Ordering Example

Example: RS80-1B, No. of teeth: 12, Sleeve configuration: A, Bore dia.: 24mm

Product Code	Model Number
G133001	RS80-1B12T-S4824A

Model Numbering Example

RS80-1B18T-S51038



Dimensions

Teeth hardened up to 21T.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_O)	Hub Dia. D_H	Hub Length L	Applicable Bore Dia. d										No. of Teeth	
					24	25	28	30	32	35	38	40	42	45		
RS80-1B12T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	98.14	110	67	40	●	●	●	●	●	●						12
RS80-1B13T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	106.14	118	77	40	●	●	●	●	●	●						13
RS80-1B13T-S510 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>													●	●	●	●
RS80-1B14T-S48 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	114.15	127	77	40	●	●	●	●	●	●						14
RS80-1B14T-S510 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>													●	●	●	●
RS80-1B15T-S510 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	122.17	135	93	40						●	●	●	●	●		15
RS80-1B16T-S510 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	130.20	143	93	40						●	●	●	●	●		16
RS80-1B17T-S510 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	138.23	151	93	40						●	●	●	●	●		17
RS80-1B18T-S510 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	146.27	159	93	40						●	●	●	●	●		18
RS80-1B19T-S510 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	154.32	167	93	40						●	●	●	●	●		19
RS80-1B20T-S510 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	162.37	176	93	40						●	●	●	●	●		20
RS80-1B21T-S510 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	170.42	184	93	40						●	●	●	●	●		21

Input the bore diameter in the white boxes after the model number, and configuration A or B in the black box. ● circles indicate applicable bore diameters.

RS80 Lock Series (S Type)

■ Dimensions Teeth hardened up to 21T.

Model Number	Pitch Circle Dia. <i>D_P</i>	(Outer Dia.) <i>(D_O)</i>	Hub Dia. <i>D_H</i>	Hub Length <i>L</i>	Applicable Bore Dia. <i>d</i>						No. of Teeth
					48	50	55	60	65	70	
RS80-1B15T-S66□□■	122.17	135	93	40	●	●	●				15
RS80-1B16T-S66□□■	130.20	143	93	40	●	●	●				16
RS80-1B17T-S66□□■	138.23	151	93	40	●	●	●				17
RS80-1B18T-S66□□■	146.27	159	93	40	●	●	●				18
RS80-1B19T-S66□□■	154.32	167	93	40	●	●	●				19
RS80-1B20T-S68□□■	162.37	176	93	40	●	●	●				20
RS80-1B21T-S68□□■	170.42	184	93	40	●	●	●				21
RS80-1B22T-S612□□■	178.48	192	107	45	●	●	●				22
RS80-1B22T-S75□□■								●	●	●	
RS80-1B23T-S612□□■	186.54	200	107	45	●	●	●				23
RS80-1B23T-S75□□■								●	●	●	
RS80-1B24T-S612□□■	194.60	208	107	45	●	●	●				24
RS80-1B24T-S75□□■								●	●	●	
RS80-1B25T-S612□□■	202.66	216	107	45	●	●	●				25
RS80-1B25T-S75□□■								●	●	●	
RS80-1B26T-S612□□■	210.72	224	107	45	●	●	●				26
RS80-1B26T-S75□□■								●	●	●	
RS80-1B27T-S612□□■	218.79	233	107	45	●	●	●				27
RS80-1B27T-S75□□■								●	●	●	
RS80-1B28T-S612□□■	226.86	241	107	45	●	●	●				28
RS80-1B28T-S75□□■								●	●	●	
RS80-1B30T-S612□□■	243.00	257	107	45	●	●	●				30
RS80-1B30T-S75□□■								●	●	●	
RS80-1B32T-S612□□■	259.14	273	107	45	●	●	●				32
RS80-1B32T-S75□□■								●	●	●	
RS80-1B34T-S612□□■	275.28	289	107	45	●	●	●				34
RS80-1B34T-S75□□■								●	●	●	
RS80-1B35T-S612□□■	283.36	297	107	45	●	●	●				35
RS80-1B35T-S75□□■								●	●	●	

Input the bore diameter in the white □□ boxes after the model number, and configuration A or B in the black ■ box. ● circles indicate applicable bore diameters.

■ RS80 Lock Series (S Type) Maximum Allowable Torque (Unit: N·m)

Bore No. of teeth \ dia.	24	25	28	30	32	35	38	40	42	45	48	50	55	60	65	70
12T																
13T	446	465	521	558	595	651										
14T																
15T																
16T																
17T							883	930	976	1046	1116	1162	1279			
18T						814										
19T																
20T											1275	1329	1461			
21T																
22-35T											2232	2325	2557	2140	2319	2497

Before Use
 Standard Roller Chains
 Lubrication-Free Roller Chains
 Heavy Duty Roller Chains
 Corrosion Resistant Roller Chains
 Specialty Roller Chains
 Sprockets
 Pin Gear Drives
 Accessories
 Selection
 Handling

RS100 Lock Series (S Type)

Before Use

Standard Roller Chains

Lube-Free Roller Chains

Heavy Duty Roller Chains

Corrosion Resistant Roller Chains

Specialty Roller Chains

Sprockets

Pin Gear Drives

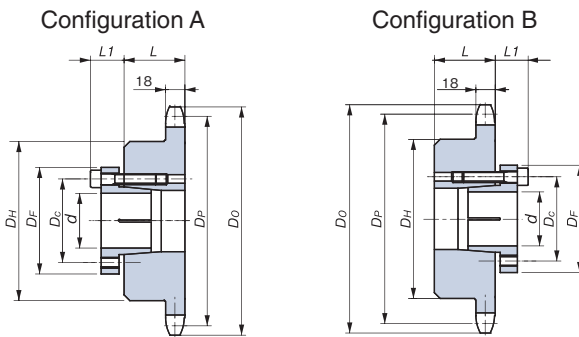
Accessories

Selection

Handling

RS100 Lock Series S Type, Configurations A & B

● Applicable chain pitch : 31.75mm ● Roller dia : 19.05mm



Lock Series S Type dimensions

Sleeve Model	ϕD_F (mm)	ϕD_C (mm)	L_1 (mm)	Bolt Size (M x S)	Tightening Torque (N·m)
S1	32.0	24.0	12.0	M4 × 16	4.2
S2	42.0	32.0	14.0	M5 × 18	8.3
S3	48.0	38.5	15.5	M5 × 20	8.3
S4	56.0	46.0	15.5	M5 × 20	8.3
S5	66.0	56.0	17.5	M5 × 22	8.3
S6	80.0	68.0	21.0	M6 × 25	16.8
S7	101.0	86.0	24.5	M8 × 30	40.5

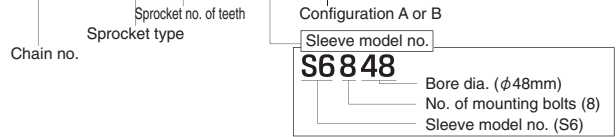
Ordering Example

Example: RS100-1B, No. of teeth: 13, Sleeve configuration: A, Bore dia.: 48mm

Product Code	Model Number
G133149	RS100-B13T-S6848A

Model Numbering Example

RS100-1B16T-S6848



Dimensions

All models feature hardened teeth.

Model Number	Pitch Circle Dia. D_P	(Outer Dia.) (D_O)	Hub Dia. D_H	Hub Length L	Applicable Bore Dia. d						No. of Teeth
					48	50	55	60	65	70	
RS100-1B13T-S68	132.67	148	88	50	●	●	●				13
RS100-1B14T-S68	142.68	158	88	50	●	●	●				14
RS100-1B15T-S68	152.71	168	98	50	●	●	●				15
RS100-1B16T-S68	162.75	179	98	50	●	●	●				16
RS100-1B17T-S612	172.79	189	107	50	●	●	●				17
RS100-1B17T-S75								●	●	●	
RS100-1B18T-S612	182.84	199	107	50	●	●	●				18
RS100-1B18T-S75								●	●	●	
RS100-1B19T-S612	192.90	209	107	50	●	●	●				19
RS100-1B19T-S75								●	●	●	
RS100-1B20T-S612	202.96	220	107	50	●	●	●				20
RS100-1B20T-S75								●	●	●	
RS100-1B21T-S612	213.03	230	107	50	●	●	●				21
RS100-1B21T-S75								●	●	●	

Input the bore diameter in the white boxes after the model number, and configuration A or B in the black box. ● circles indicate applicable bore diameters.

RS100 Lock Series (S Type) Maximum Allowable Torque (Unit: N·m)

No. of teeth	Bore dia. 48	Bore dia. 50	Bore dia. 55	Bore dia. 60	Bore dia. 65	Bore dia. 70
13T						
14T	1488	1550	1705			
15T						
16T						
17T	2232	2325	2257	2140	2319	2497
18T						
19T						
20T						
21T						

Lock Series (with Tightening Device) N Type

Applicable models: RS35 – RS60 1B Type RS Sprockets
 Allows RS standard sprockets to be mounted to shafts without using keys.



■ Features

- 1. Greatly increases work efficiency**
 Unlike conventional products that require a number of tightening bolts, this type can be simply tightened with a nut and coupled to a shaft with ease. Furthermore, it can be easily dismounted for fine-adjustment and mounted again.
- 2. Suitable for small shaft diameters**
 Tsubaki offers standard models with diameters ranging from 7 – 28mm to match a wide-variety of customer needs.
- 3. Compact design**
 Features a compact design with strength calculations that take the maximum allowable load of the chain in mind while eliminating any waste.

■ General Precautions

- 1) Allowable transmission torque
 Ensure that the load torque does not exceed the specified transmission torque in the dimension table.
- 2) Shaft diameter tolerance and surface roughness
 Use a shaft diameter tolerance of h8 and a surface roughness degree of 12S as your standards.
- 3) Mounting to shafts provided with keyways or D-shaped shafts
 The allowable transmission torque will decrease by 10% when mounting the sprocket to a shaft provided with a finished keyway, such as a motor shaft, or to a D-shaped shaft.
- 4) Mounting to cold finished carbon steel bars
 The allowable transmission torque will decrease by 10% when mounting the sprocket to a cold finished carbon steel bar (drawn steel with an allowable diameter of 8 – 10 class).
- 5) Ensure that the shaft is a solid shaft using S35C grade or higher steel.
- 6) Operating temperature range: -20°C to 200°C
- 7) Always use a torque wrench when tightening the bolts. (Refer to the torque wrench operation manual for proper use.)

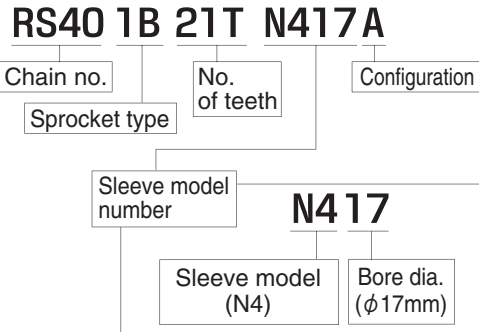
Ordering Lock Series N Type Sprockets

Please include the product code and model number in your order.

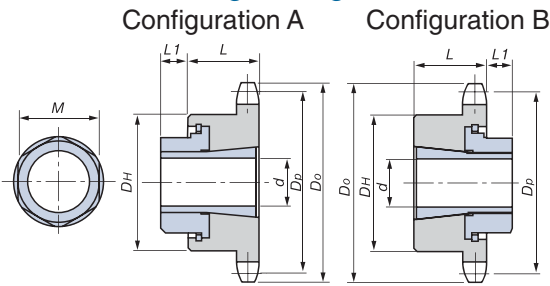
■ Ordering Example

Model Number	No. of Pieces	Unit
RS40-1B21T-N417A	10	K (pcs)

■ Ordering Example



■ Sleeve Mounting Configuration



■ RS35 Lock Series N Type

● Applicable chain pitch : 9.525mm ● Roller dia : 5.08mm
 All models feature hardened teeth.

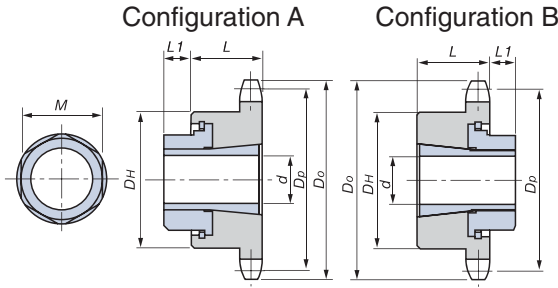
No. of Teeth	Basic Dimensions		Hub		Bore dia. d Max. Allowable Transmission Torque (N·m)	7	8	9	10	11	12	14	15	16	17	18	19	
	Pitch Circle Dia. D_p	Outer Dia. D_o	Dia. D_H	Length L		23	26	29	42	46	50	104	111	119	161	171	180	
12	36.80	41	31	20	Suitable sleeve model and dimensions	※	※	※										
13	39.80	44	32	20														
14	42.80	47	30	20		N1XX												
15	45.81	51	35	20						(Example)								
16	48.82	54	37	20														
17	51.84	57	41	20														
18	54.85	60	44	20														
19	57.87	63	47	20														
20	60.89	66	50	20														
21	63.91	69	53	20														
22	66.93	72	53	20														
23	69.95	75	53	20														
24	72.97	78	53	22														
25	76.00	81	53	22														
26	79.02	84	53	22														
27	82.05	87	53	22														
28	85.07	90	53	22														
30	91.12	96	53	22														
32	97.18	102	53	22														
34	103.23	109	53	22														
35	106.26	112	53	22														
36	109.29	115	53	22														
38	115.34	121	63	25														
40	121.40	127	63	25														
												N3XX						
																N4XX		

Models with 12T and asterisks * indicate that only configuration A is available.

● Understanding the table (Ex.) RS35 chain, Required no. of teeth: 15, Required bore dia.: 11mm
 Use an N211 sleeve. "XX" in the table refers to bore diameter. Maximum transmission torque will be 46N·m.

Before Use
 Standard Roller Chains
 Lube-Free Roller Chains
 Heavy Duty Roller Chains
 Corrosion Resistant Roller Chains
 Specialty Roller Chains
 Sprockets
 Pin Gear Drives
 Accessories
 Selection
 Handling

RS35 – RS60 Lock Series (N Type)



Lock Series N Type dimensions

Sleeve Model	Sleeve Protrusion L1	Nut Width Across Flats (M x S)	Nut Tightening Torque (N·m)
N1	5	18	18
N2	6	22	28
N3	8	30	65
N4	10	36	100
N5	11	41	130
N6	11	46	200

RS40 Lock Series N Type

●Applicable chain pitch : 12.7mm ●Roller dia : 7.92mm
All models feature hardened teeth.

No. of Teeth	Basic Dimensions		Hub		Bore dia. d Max. Allowable Transmission Torque (N·m)	10	11	12	14	15	16	17	18	19	20	22	24	
	Pitch Circle Dia. Dp	Outer Dia. Do	Dia. DH	Length L		42	46	50	104	111	119	161	171	180	214	236	257	
11	45.08	51	37	22	Suitable sleeve model and dimensions	**	**	**										
12	49.07	55	40	22		N2XX												
13	53.07	59	37	22														
14	57.07	63	42	22														
15	61.08	67	46	22														
16	65.10	71	50	22														
17	69.12	76	54	22														
18	73.14	80	57	22														
19	77.16	84	62	22														
20	81.18	88	67	25														
21	85.21	92	71	25														
22	89.24	96	75	25														
23	93.27	100	77	25														
24	97.30	104	63	25														
25	101.33	108	63	25														
26	105.36	112	63	25														
27	109.40	116	63	25														
28	113.43	120	63	25														
30	121.50	128	63	25														
32	129.57	137	68	28														
34	137.64	145	68	28														
35	141.68	149	68	28														
36	145.72	153	68	28														
38	153.79	161	68	28														
40	161.87	169	68	28														

Models with 11 and 12T and asterisks * indicate that only configuration A is available.

RS50 Lock Series N Type

●Applicable chain pitch : 15.875mm ●Roller dia : 10.16mm
All models feature hardened teeth.

No. of Teeth	Basic Dimensions		Hub		Bore dia. d Max. Allowable Transmission Torque (N·m)	14	15	16	17	18	19	20	22	24
	Pitch Circle Dia. Dp	Outer Dia. Do	Dia. DH	Length L		104	111	119	161	171	180	214	236	257
11	56.35	64	46	25	Suitable sleeve model and dimensions	**	**	**						
12	61.34	69	51	25		N3XX								
13	66.33	74	51	25										
14	71.34	79	52	25										
15	76.35	84	57	25										
16	81.37	89	62	25										
17	86.39	94	67	25										
18	91.42	100	72	28										
19	96.45	105	73	28										
20	101.48	110	73	28										
21	106.51	115	73	28										
22	111.55	120	73	28										
23	116.59	125	73	28										
24	121.62	130	73	28										
25	126.66	135	73	28										

Models with 11, 12, and 13T and asterisks * indicate that only configuration A is available.

RS60 Lock Series N Type

●Applicable chain pitch : 19.05mm ●Roller dia : 11.91mm
All models feature hardened teeth.

No. of Teeth	Basic Dimensions		Hub		Bore dia. d Max. Allowable Transmission Torque (N·m)	14	15	16	17	18	19	20	22	24	25	26	28
	Pitch Circle Dia. Dp	Outer Dia. Do	Dia. DH	Length L		104	111	119	161	171	180	214	236	257	370	385	415
9	55.70	64	43	32	Suitable sleeve model and dimensions	**	**	**									
10	61.65	70	49	32		N3XX											
11	67.62	76	51	32													
12	73.60	83	51	32													
13	79.60	89	57	32													
14	85.61	95	62	32													
15	91.63	101	68	32													
16	97.65	107	73	32													
17	103.67	113	73	32													
18	109.70	119	83	40													
19	115.74	126	83	40													
20	121.78	132	83	40													
21	127.82	138	83	40													
22	133.86	144	83	40													
23	139.90	150	83	40													
24	145.95	156	83	40													
25	151.99	162	83	40													

Models with 9, 10, and 11T and asterisks * indicate that only configuration A is available.

Before Use
 Standard Roller Chains
 Lubrication
 Heavy Duty Roller Chains
 Corrosion Resistant Roller Chains
 Specialty Roller Chains
 Sprockets
 Pin Gear Drives
 Accessories
 Selection
 Handling

RS Sprocket Corrosion Resistant Series

Includes our stainless steel pilot bore series with excellent corrosion resistance and our engineering plastic series that can be operated with no lubrication. *See pg. 189 for a table of corrosion resistance.



■ Stainless steel pilot bore series

Uses stainless steel for excellent corrosion resistance. These sprockets are also highly heat and cold resistant and can be used in special environments as well. Tsubaki has a stock of single-strand 1B type sprockets (single-hub type) for RS11 – RS80 chain sizes.

■ Engineering plastic pilot bore series

Made of special MC901 nylon (dark blue), these sprockets can be operated without lubrication. Chain speed should not exceed 70m/min, but chain speeds up to 150m/min are possible with additional lubrication. Tsubaki has a limited stock of single-strand 1B type sprockets (single-hub type) for RS35 – RS60 chain sizes.

Ordering Standard Pilot Bore Series Sprockets

Please indicate product code and model number on your order.

■ Ordering Example

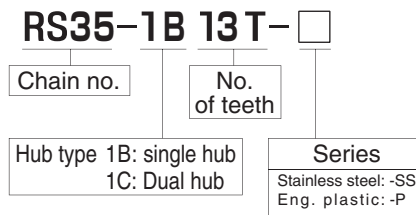
Stainless steel

Product Code	Model No.	Quantity	Unit
G140001	RS25-1B10T-SS	10	(pcs)

Engineering plastic

Product Code	Model No.	Quantity	Unit
G140157	RS35-1B13T-P	10	(pcs)

■ Model Numbering Example

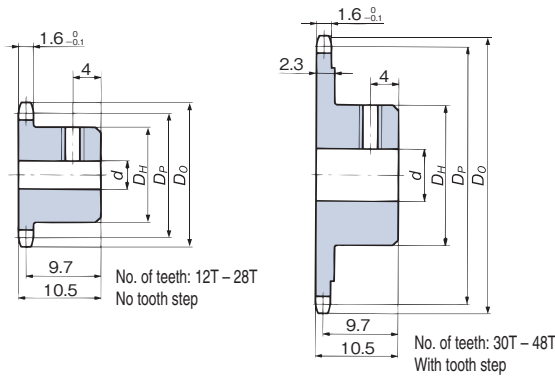


RS11 (Corrosion Resistant Stainless Steel)

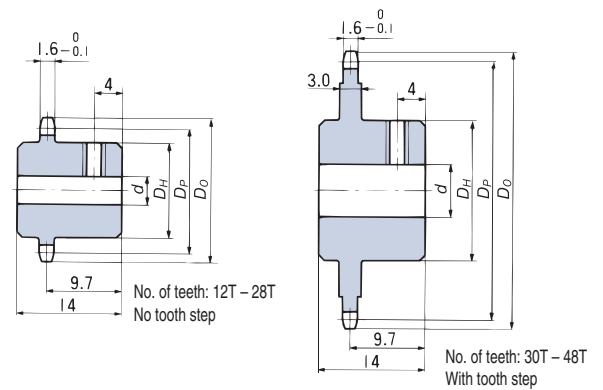
See pg. 79 for Tsubaki's corrosion resistant chain series

■ RS11 1B Type with stainless steel pilot bore

Applicable chain pitch: 3.7465mm Roller dia.: 2.285mm



■ RS11 1C Type with stainless steel pilot bore



(Be aware that no set screws are provided.)

Model No.	No. of Teeth	Pitch Circle Dia. D_p	(Outer Dia.) (D_o)	Bore Dia. d		Hub Dia. D_H	Set Screw Hole	1B Approx. Mass (g)	1C Approx. Mass (g)
				Pilot bore	Max.				
RS11-1■12T-SS	12	14.475	16.2	4	6	9.4	M3×0.5	5.9	7.4
RS11-1■15T-SS	15	18.020	19.9	4	9	13		11.5	14.7
RS11-1■16T-SS	16	19.204	21.1	4	9	14		13.5	17.3
RS11-1■18T-SS	18	21.575	23.5	4	11	16		17.7	22.8
RS11-1■20T-SS	20	23.949	25.9	6	13	19		23.3	30.8
RS11-1■24T-SS	24	28.703	30.7	6	13	19		25.7	32.7
RS11-1■28T-SS	28	33.462	35.5	6	13	19	28.7	35.7	
RS11-1■30T-SS	30	35.842	37.9	6	13	19	M4×0.7	29.7	39.3
RS11-1■34T-SS	34	40.604	42.7	6	13	19		37.9	48.9
RS11-1■36T-SS	36	42.986	45.1	6	13	19		40.7	52.4
RS11-1■40T-SS	40	47.751	49.8	6	13	19		46.5	59.9
RS11-1■48T-SS	48	57.283	59.4	6	13	19		60.5	77.8

Material/Specifications Machined stainless steel

Indicate type (B or C) in the ■ in the table above.

Contact a Tsubaki representative regarding numbers of teeth other than those above.

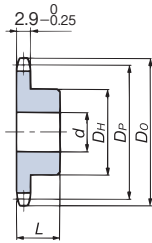
Note: Max. shaft bore diameter shown is for general situations. Please decide or confirm shaft bore diameter and key contact stress based on general machine design.

Before Use
 Standard Roller Chains
 Lube-Free Roller Chains
 Heavy Duty Roller Chains
 Corrosion Resistant Roller Chains
 Specialty Roller Chains
 Sprockets
 Pin Gear Drives
 Accessories
 Selection
 Handling

RS25 · RS35 (Corrosion Resistant Stainless Steel)

RS25 1B Type with stainless steel pilot bore

Applicable chain pitch: 6.35mm Roller dia.: 3.3mm

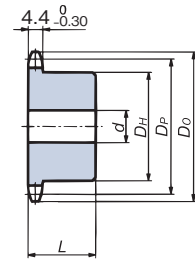
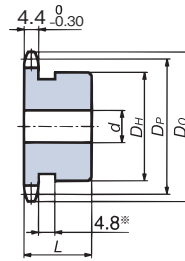


RS35 1B Type with stainless steel pilot bore

Applicable chain pitch: 9.525mm Roller dia.: 5.08mm

Hub with groove (10T – 13T)

Hub without groove (14T and over)



No. of teeth	Hub dia.	Groove dia.
10T	: φ 25	: φ 18
11T	: φ 27	: φ 22
12T	: φ 31	: φ 24
13T	: φ 32	: φ 28

*The groove is provided on the hub perimeter to prevent sprocket – chain interference.

RS25 1B Type with stainless steel pilot bore

Model No.	No. of Teeth	Pitch Circle Dia. D_P	Outer Dia. (D _o)	Bore Dia. d		Hub Dia.		Approx. Mass (kg)
				Pilot bore	Max.	Pilot bore D_H	Max. L	
RS25-1B10T-SS	10	20.55	23	6	9	14	15	0.02
RS25-1B11T-SS	11	22.54	25	6	10	16	15	0.03
RS25-1B12T-SS	12	24.53	28	6	11	18	15	0.04
RS25-1B13T-SS	13	26.53	30	6	12	20	15	0.05
RS25-1B14T-SS	14	28.54	32	6	12	20	15	0.06
RS25-1B15T-SS	15	30.54	34	6	12	20	20	0.07
RS25-1B16T-SS	16	32.55	36	8	15	25	20	0.08
RS25-1B17T-SS	17	34.56	38	8	15	25	20	0.09
RS25-1B18T-SS	18	36.57	40	8	15	25	20	0.10
RS25-1B19T-SS	19	38.58	42	8	15	25	20	0.10
RS25-1B20T-SS	20	40.59	44	8	15	25	20	0.10
RS25-1B21T-SS	21	42.61	46	10	18	30	20	0.12
RS25-1B22T-SS	22	44.62	48	10	18	30	20	0.13
RS25-1B23T-SS	23	46.63	50	10	18	30	20	0.13
RS25-1B24T-SS	24	48.65	52	10	21	35	20	0.15
RS25-1B25T-SS	25	50.66	54	10	21	35	20	0.16
RS25-1B26T-SS	26	52.68	56	10	25	40	20	0.17
RS25-1B27T-SS	27	54.70	58	10	25	40	20	0.20
RS25-1B28T-SS	28	56.71	60	10	25	40	20	0.21
RS25-1B30T-SS	30	60.75	64	12	28	45	20	0.23
RS25-1B32T-SS	32	64.78	68	12	31	50	20	0.40
RS25-1B34T-SS	34	68.82	72	12	31	50	20	0.41
RS25-1B35T-SS	35	70.84	74	12	31	50	20	0.41
RS25-1B36T-SS	36	72.86	76	12	31	50	20	0.42
RS25-1B38T-SS	38	76.90	80	12	31	50	22	0.43
RS25-1B40T-SS	40	80.93	84	12	31	50	22	0.45

Material/Specifications: Machined stainless steel

RS35 1B Type with stainless steel pilot bore

Model No.	No. of Teeth	Pitch Circle Dia. D_P	Outer Dia. (D _o)	Bore Dia. d		Hub Dia.		Approx. Mass (kg)
				Pilot bore	Max.	Pilot bore D_H	Max. L	
RS35-1B10T-SS	10	30.82	35	8	12	25	20	0.08
RS35-1B11T-SS	11	33.81	38	8	14	27	20	0.09
RS35-1B12T-SS	12	36.80	41	8	16.5	31	20	0.12
RS35-1B13T-SS	13	39.80	44	9.5	18	32	20	0.12
RS35-1B14T-SS	14	42.80	47	9.5	16.5	30	20	0.12
RS35-1B15T-SS	15	45.81	51	9.5	19	35	20	0.16
RS35-1B16T-SS	16	48.82	54	9.5	20	37	20	0.19
RS35-1B17T-SS	17	51.84	57	9.5	24	41	20	0.22
RS35-1B18T-SS	18	54.85	60	9.5	24.5	44	20	0.25
RS35-1B19T-SS	19	57.87	63	9.5	28.5	47	20	0.28
RS35-1B20T-SS	20	60.89	66	9.5	30	50	20	0.32
RS35-1B21T-SS	21	63.91	69	9.5	32	53	20	0.36
RS35-1B22T-SS	22	66.93	72	9.5	32	53	20	0.37
RS35-1B23T-SS	23	69.95	75	9.5	32	53	20	0.40
RS35-1B24T-SS	24	72.97	78	9.5	32	53	22	0.43
RS35-1B25T-SS	25	76.00	81	12.7	32	53	22	0.44
RS35-1B26T-SS	26	79.02	84	12.7	32	53	22	0.45
RS35-1B27T-SS	27	82.05	87	12.7	32	53	22	0.46
RS35-1B28T-SS	28	85.07	90	12.7	32	53	22	0.48
RS35-1B30T-SS	30	91.12	96	12.7	32	53	22	0.51
RS35-1B32T-SS	32	97.18	102	12.7	32	53	22	0.54
RS35-1B34T-SS	34	103.23	109	12.7	32	53	22	0.57
RS35-1B35T-SS	35	106.26	112	12.7	32	53	22	0.59
RS35-1B36T-SS	36	109.29	115	12.7	32	53	22	0.61
RS35-1B38T-SS	38	115.34	121	13	42	63	25	0.82
RS35-1B40T-SS	40	121.40	127	13	42	63	25	0.85

Material/Specifications: Machined stainless steel

Contact a Tsubaki representative regarding numbers of teeth other than those above.

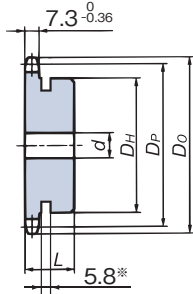
Contact a Tsubaki representative regarding numbers of teeth other than those above.

RS40 · RS50 (Corrosion Resistant Stainless Steel)

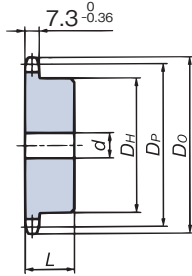
RS40 1B Type with stainless steel pilot bore

Applicable chain pitch: 12.70mm Roller dia.: 7.92mm

Hub with groove (10T – 12T)



Hub without groove (13T and over)



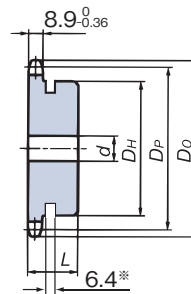
No. of teeth	Hub dia.	Groove dia.
10T	φ 32	φ 25
11T	φ 37	φ 30
12T	φ 40	φ 32

*The groove is provided on the hub perimeter to prevent sprocket – chain interference.

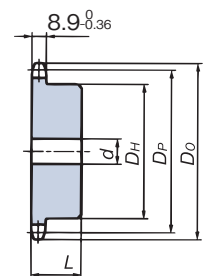
RS50 1B Type with stainless steel pilot bore

Applicable chain pitch: 15.875mm Roller dia.: 10.16mm

Hub with groove (10T – 13T)



Hub without groove (14T – 40T)



No. of teeth	Hub dia.	Groove dia.
10T	φ 40	φ 32
11T	φ 46	φ 37
12T	φ 51	φ 42
13T	φ 51	φ 47

*The groove is provided on the hub perimeter to prevent sprocket – chain interference.

RS40 1B Type with stainless steel pilot bore

Model No.	No. of Teeth	Pitch Circle Dia. D _P	Outer Dia. (D _O)	Bore Dia. d		Hub Dia. L		Approx. Mass (kg)
				Pilot bore	Max.	Pilot bore D _H	Max.	
RS40-1B10T-SS	10	41.10	47	9.5	16.5	32	22	0.14
RS40-1B11T-SS	11	45.08	51	9.5	20	37	22	0.19
RS40-1B12T-SS	12	49.07	55	9.5	22	40	22	0.22
RS40-1B13T-SS	13	53.07	59	9.5	20	37	22	0.23
RS40-1B14T-SS	14	57.07	63	9.5	24	42	22	0.28
RS40-1B15T-SS	15	61.08	67	9.5	28.5	46	22	0.34
RS40-1B16T-SS	16	65.10	71	12.7	30	50	22	0.40
RS40-1B17T-SS	17	69.12	76	12.7	32	54	22	0.46
RS40-1B18T-SS	18	73.14	80	12.7	35	57	22	0.51
RS40-1B19T-SS	19	77.16	84	12.7	39.5	62	22	0.59
RS40-1B20T-SS	20	81.18	88	12.7	45.5	67	25	0.76
RS40-1B21T-SS	21	85.21	92	12.7	45.5	71	25	0.85
RS40-1B22T-SS	22	89.24	96	12.7	50	75	25	0.95
RS40-1B23T-SS	23	93.27	100	12.7	50	77	25	1.0
RS40-1B24T-SS	24	97.30	104	12.7	42	63	25	0.84
RS40-1B25T-SS	25	101.33	108	12.7	42	63	25	0.88
RS40-1B26T-SS	26	105.36	112	12.7	42	63	25	0.92
RS40-1B27T-SS	27	109.40	116	12.7	42	63	25	0.96
RS40-1B28T-SS	28	113.43	120	12.7	42	63	25	1.0
RS40-1B30T-SS	30	121.50	128	12.7	42	63	25	1.1
RS40-1B32T-SS	32	129.57	137	16	45	68	28	1.3
RS40-1B34T-SS	34	137.64	145	16	45	68	28	1.3
RS40-1B35T-SS	35	141.68	149	16	45	68	28	1.4
RS40-1B36T-SS	36	145.72	153	16	45	68	28	1.4
RS40-1B38T-SS	38	153.79	161	16	45	68	28	1.5
RS40-1B40T-SS	40	161.87	169	16	45	68	28	1.6

Material/Specifications: Machined stainless steel

Contact a Tsubaki representative regarding numbers of teeth other than those above.

RS50 1B Type with stainless steel pilot bore

Model No.	No. of Teeth	Pitch Circle Dia. D _P	Outer Dia. (D _O)	Bore Dia. d		Hub Dia. L		Approx. Mass (kg)
				Pilot bore	Max.	Pilot bore D _H	Max.	
RS50-1B10T-SS	10	51.37	58	9.5	22	40	25	0.27
RS50-1B11T-SS	11	56.35	64	12.7	25	46	25	0.33
RS50-1B12T-SS	12	61.34	69	12.7	32	51	25	0.41
RS50-1B13T-SS	13	66.33	74	12.7	32	51	25	0.46
RS50-1B14T-SS	14	71.34	79	12.7	32	52	25	0.52
RS50-1B15T-SS	15	76.35	84	12.7	35	57	25	0.62
RS50-1B16T-SS	16	81.37	89	12.7	40	62	25	0.72
RS50-1B17T-SS	17	86.39	94	12.7	45.5	67	25	0.83
RS50-1B18T-SS	18	91.42	100	12.7	47.5	72	28	1.0
RS50-1B19T-SS	19	96.45	105	12.7	47.5	73	28	1.1
RS50-1B20T-SS	20	101.48	110	12.7	47.5	73	28	1.2
RS50-1B21T-SS	21	106.51	115	15.9	47.5	73	28	1.2
RS50-1B22T-SS	22	111.55	120	15.9	47.5	73	28	1.3
RS50-1B23T-SS	23	116.59	125	15.9	47.5	73	28	1.3
RS50-1B24T-SS	24	121.62	130	15.9	47.5	73	28	1.4
RS50-1B25T-SS	25	126.66	135	15.9	47.5	73	28	1.5
RS50-1B26T-SS	26	131.70	140	18	48	73	28	1.5
RS50-1B27T-SS	27	136.74	145	18	48	73	28	1.5
RS50-1B28T-SS	28	141.79	150	18	48	73	28	1.6
RS50-1B30T-SS	30	151.87	161	18	48	73	28	1.8
RS50-1B32T-SS	32	161.96	171	18	48	73	28	1.9
RS50-1B34T-SS	34	172.05	181	18	48	73	28	2.1
RS50-1B35T-SS	35	177.10	186	18	48	73	28	2.2
RS50-1B36T-SS	36	182.15	191	23	55	83	35	2.7
RS50-1B38T-SS	38	192.24	201	23	55	83	35	2.9
RS50-1B40T-SS	40	202.33	211	23	55	83	35	3.1

Material/Specifications: Machined stainless steel

Contact a Tsubaki representative regarding numbers of teeth other than those above.

RS60 · RS80 (Corrosion Resistant Stainless Steel)

RS60 1B Type with stainless steel pilot bore

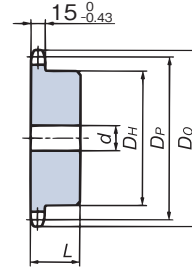
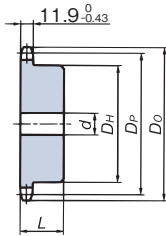
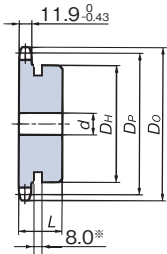
Applicable chain pitch: 19.05mm Roller dia.: 11.91mm

RS80 1B Type with stainless steel pilot bore

Applicable chain pitch: 25.40mm Roller dia.: 15.88mm

Hub with groove (10T – 11T)

Hub without groove (12T – 30T)



No. of teeth	Hub dia.	Groove dia.
10T	φ 49	φ 37
11T	φ 51	φ 45

*The groove is provided on the hub perimeter to prevent sprocket – chain interference.

RS60 1B Type with stainless steel pilot bore

Model No.	No. of Teeth	Pitch Circle Dia. D_P	Outer Dia. (D _O)	Bore Dia. d		Hub Dia.		Approx. Mass (kg)
				Pilot bore	Max.	Pilot bore D_H	Max. L	
RS60-1B10T-SS	10	61.65	70	12.7	30	49	32	0.49
RS60-1B11T-SS	11	67.62	76	12.7	32	51	32	0.60
RS60-1B12T-SS	12	73.60	83	12.7	32	51	32	0.69
RS60-1B13T-SS	13	79.60	89	15.9	35	57	32	0.81
RS60-1B14T-SS	14	85.61	95	15.9	39.5	62	32	0.96
RS60-1B15T-SS	15	91.63	101	15.9	45.5	68	32	1.1
RS60-1B16T-SS	16	97.65	107	15.9	47.5	73	32	1.3
RS60-1B17T-SS	17	103.67	113	15.9	47.5	73	32	1.4
RS60-1B18T-SS	18	109.70	119	15.9	55	83	40	2.0
RS60-1B19T-SS	19	115.74	126	15.9	55	83	40	2.1
RS60-1B20T-SS	20	121.78	132	15.9	55	83	40	2.2
RS60-1B21T-SS	21	127.82	138	15.9	55	83	40	2.3
RS60-1B22T-SS	22	133.86	144	15.9	55	83	40	2.5
RS60-1B23T-SS	23	139.90	150	18	55	83	40	2.5
RS60-1B24T-SS	24	145.95	156	18	55	83	40	2.6
RS60-1B25T-SS	25	151.99	162	18	55	83	40	2.7
RS60-1B26T-SS	26	158.04	168	18	55	83	40	2.9
RS60-1B27T-SS	27	164.09	174	18	55	83	40	3.0
RS60-1B28T-SS	28	170.14	180	18	55	83	40	3.1
RS60-1B30T-SS	30	182.25	193	18	55	83	40	3.4

Material/Specifications: Machined stainless steel

Contact a Tsubaki representative regarding numbers of teeth other than those above.

RS80 1B Type with stainless steel pilot bore

Model No.	No. of Teeth	Pitch Circle Dia. D_P	Outer Dia. (D _O)	Bore Dia. d		Hub Dia.		Approx. Mass (kg)
				Pilot bore	Max.	Pilot bore D_H	Max. L	
RS80-1B10T-SS	10	82.20	93	15.9	32	52	40	0.97
RS80-1B11T-SS	11	90.16	102	15.9	38	60	40	1.2
RS80-1B12T-SS	12	98.14	110	19	45	67	40	1.5
RS80-1B13T-SS	13	106.14	118	19	50	77	40	1.9
RS80-1B14T-SS	14	114.15	127	19	50	77	40	2.0
RS80-1B15T-SS	15	122.17	135	19	63	93	40	2.6
RS80-1B16T-SS	16	130.20	143	19	63	93	40	2.8
RS80-1B17T-SS	17	138.23	151	19	63	93	40	3.0
RS80-1B18T-SS	18	146.27	159	19	63	93	40	3.2
RS80-1B19T-SS	19	154.32	167	23	63	93	40	3.4
RS80-1B20T-SS	20	162.37	176	23	63	93	40	3.6
RS80-1B21T-SS	21	170.42	184	23	63	93	40	3.8
RS80-1B22T-SS	22	178.48	192	28	75	107	45	4.8
RS80-1B23T-SS	23	186.54	200	28	75	107	45	5.1
RS80-1B24T-SS	24	194.60	208	28	75	107	45	5.4
RS80-1B25T-SS	25	202.66	216	28	75	107	45	5.6

Material/Specifications: Machined stainless steel

Contact a Tsubaki representative regarding numbers of teeth other than those above.

RS35 – RS60 (Corrosion Resistant Engineering Plastic)

Corrosion Resistant Engineering Plastic Pilot Bore Series

Operating Conditions

Operating temperature : -10°C to 60°C

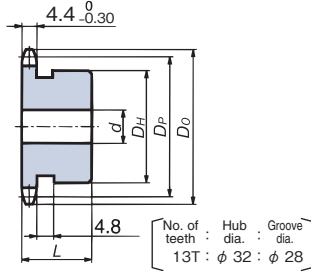
Permissible speed : Recommended at a circumferential speed of 70m/min or below (lube-free operation)
(Can be used up to 150m/min in lubed or pre-lubed operation.)

Material : Special MC901 nylon (dark blue)

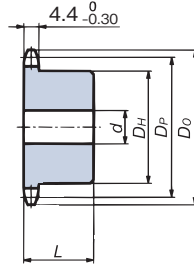


RS35 Engineering plastic pilot bore sprocket

Hub with groove (13T)



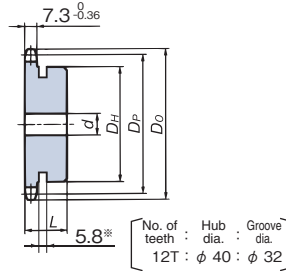
Hub without groove (14T and over)



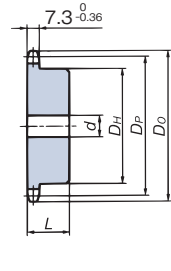
Model No.	No. of Teeth	Allowable Transmission Torque N · m	Pitch Circle Dia. D _P	(Outer Dia.) (D _O)	Bore Dia. d		Hub Dia.		Approx. Mass (kg)
					Pilot bore	Max.	Pilot bore D _H	Max. L	
RS35-1B13T-P	13	5.30	39.80	44	9.5	14	32	20	0.02
RS35-1B14T-P	14	5.69	42.80	46	9.5	15	30	20	0.02
RS35-1B15T-P	15	6.08	45.81	51	9.5	17	35	20	0.02
RS35-1B16T-P	16	6.47	48.82	53	9.5	19	37	20	0.03
RS35-1B17T-P	17	6.86	51.84	57	9.5	22	41	20	0.03
RS35-1B18T-P	18	7.26	54.85	60	12.7	22	44	20	0.04
RS35-1B20T-P	20	8.04	60.89	66	12.7	27	50	20	0.05
RS35-1B22T-P	22	8.83	66.93	72	12.7	28	53	20	0.06
RS35-1B24T-P	24	9.71	72.97	78	12.7	32	53	22	0.08
RS35-1B25T-P	25	10.1	76.00	81	12.7	32	53	22	0.08
RS35-1B26T-P	26	10.5	79.02	83	12.7	35	53	22	0.09
RS35-1B28T-P	28	11.3	85.07	90	12.7	40	53	22	0.10
RS35-1B30T-P	30	12.1	91.12	96	12.7	42	53	22	0.12

RS40 Engineering plastic pilot bore sprocket

Hub with groove (12T)



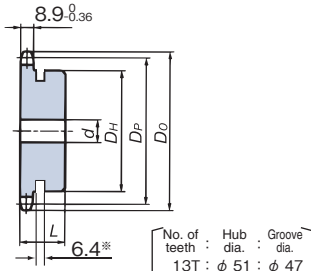
Hub without groove (13T and over)



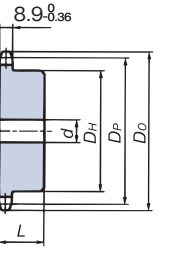
Model No.	No. of Teeth	Allowable Transmission Torque N · m	Pitch Circle Dia. D _P	(Outer Dia.) (D _O)	Bore Dia. d		Hub Dia.		Approx. Mass (kg)
					Pilot bore	Max.	Pilot bore D _H	Max. L	
RS40-1B12T-P	12	10.8	49.07	53	9.5	16	40	22	0.03
RS40-1B13T-P	13	11.7	53.07	58	12.7	18	37	22	0.04
RS40-1B14T-P	14	12.6	57.07	63	12.7	22	42	22	0.04
RS40-1B15T-P	15	13.4	61.08	67	12.7	25	46	22	0.05
RS40-1B16T-P	16	14.3	65.10	71	12.7	27	50	22	0.06
RS40-1B17T-P	17	15.3	69.12	75	12.7	28	54	22	0.07
RS40-1B18T-P	18	16.2	73.14	78	12.7	30	57	22	0.08
RS40-1B20T-P	20	17.9	81.18	88	12.7	35	67	25	0.11
RS40-1B22T-P	22	19.6	89.24	96	12.7	42	75	25	0.14
RS40-1B24T-P	24	21.5	97.30	104	12.7	50	80	25	0.16
RS40-1B25T-P	25	22.4	101.33	108	12.7	50	80	25	0.17
RS40-1B26T-P	26	23.2	105.36	112	12.7	52	85	25	0.18
RS40-1B28T-P	28	25.0	113.43	120	12.7	55	90	25	0.21
RS40-1B30T-P	30	26.8	121.50	128	12.7	60	100	25	0.26

RS50 Engineering plastic pilot bore sprocket

Hub with groove (13T)

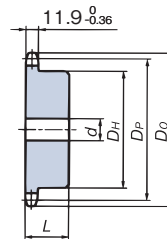


Hub without groove (14T and over)



Model No.	No. of Teeth	Allowable Transmission Torque N · m	Pitch Circle Dia. D _P	(Outer Dia.) (D _O)	Bore Dia. d		Hub Dia.		Approx. Mass (kg)
					Pilot bore	Max.	Pilot bore D _H	Max. L	
RS50-1B13T-P	13	22.8	66.34	73	12.7	25	51	25	0.07
RS50-1B14T-P	14	24.5	71.34	78	12.7	28	52	25	0.08
RS50-1B15T-P	15	26.2	76.35	83	12.7	30	57	25	0.09
RS50-1B16T-P	16	27.9	81.37	89	12.7	32	62	25	0.11
RS50-1B17T-P	17	29.6	86.39	93	12.7	35	67	25	0.12
RS50-1B18T-P	18	31.4	91.42	98	12.7	40	72	28	0.15
RS50-1B20T-P	20	34.8	101.48	110	15.9	50	80	28	0.20
RS50-1B22T-P	22	38.2	111.55	120	15.9	55	90	28	0.24
RS50-1B24T-P	24	41.8	121.62	130	15.9	60	100	28	0.29
RS50-1B25T-P	25	43.4	126.66	135	15.9	60	100	28	0.31
RS50-1B26T-P	26	45.2	131.70	140	18	65	110	28	0.34
RS50-1B28T-P	28	48.6	141.79	150	18	70	120	28	0.40
RS50-1B30T-P	30	52.2	151.87	161	18	70	120	28	0.43

RS60 Engineering plastic pilot bore sprocket



Model No.	No. of Teeth	Allowable Transmission Torque N · m	Pitch Circle Dia. D _P	(Outer Dia.) (D _O)	Bore Dia. d		Hub Dia.		Approx. Mass (kg)
					Pilot bore	Max.	Pilot bore D _H	Max. L	
RS60-1B13T-P	13	41.0	79.60	88	15.9	30	57	32	0.12
RS60-1B14T-P	14	44.1	85.61	93	15.9	32	62	32	0.14
RS60-1B15T-P	15	47.2	91.62	99	15.9	35	68	32	0.16
RS60-1B16T-P	16	50.3	97.65	107	15.9	42	73	32	0.19
RS60-1B17T-P	17	53.3	103.67	113	15.9	50	80	32	0.21
RS60-1B18T-P	18	56.5	109.71	119	15.9	52	85	40	0.30
RS60-1B20T-P	20	62.7	121.78	132	15.9	60	95	40	0.38
RS60-1B22T-P	22	68.9	133.86	144	15.9	65	110	40	0.51
RS60-1B24T-P	24	75.1	145.95	156	18	70	120	40	0.57
RS60-1B25T-P	25	78.3	151.99	162	18	70	120	40	0.59
RS60-1B26T-P	26	81.4	158.04	168	18	70	120	40	0.62
RS60-1B28T-P	28	87.6	170.14	180	18	70	120	40	0.65
RS60-1B30T-P	30	93.8	182.25	193	18	70	120	40	0.70

Bold lettering indicates stock items.

Before Use
 Standard Roller Chains
 Lube-Free Roller Chains
 Heavy Duty Roller Chains
 Corrosion Resistant Roller Chains
 Specialty Roller Chains
 Sprockets
 Pin Gear Drives
 Accessories
 Selection
 Handling

RS Sprocket Corrosion Resistant Fit Bore® Series



■ Stainless steel fit bore sprockets

Applicable models: RS25 – RS80 1B Type stainless steel sprockets

Each model is provided with a finished bore, keyway, and two set screws (RS25 has no keyway and only one set screw).

Can be used as is without additional machining.

Applicable bore processing specifications

Applicable bore dia. : 06 – 65mm Keyway specifications : New JIS standards (JIS B 1301 – 1996), normal type parallel key
 Bore tolerance : H7 Keyway tolerance : Js9
 (RS25 has a bore tolerance of H8 with no keyway)

Ordering Corrosion Resistant Stainless Steel Fit Bore Sprockets

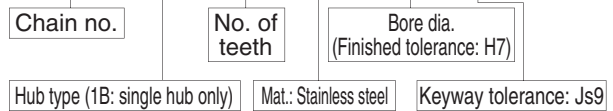
Please indicate product code and model number on your order.

■ Ordering Example

Product Code	Model No.	Quantity	Unit
G150001	RS25-1B10T-SS-H08	10	(pcs)

■ Model Numbering Example

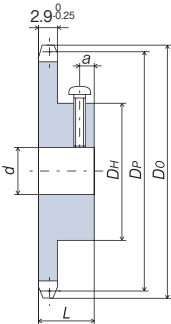
RS35-1B 10T-SS-H10 J



RS25 Stainless Steel Fit Bore® Sprockets

See pg. 79 for Tsubaki's corrosion resistant chain series

■ RS25 Stainless Steel Fit Bore Sprockets



Model Numbering Example

RS25 - 1B 10T - SS - H □ □

Bore dia. : Finished tolerance of H8
 (Put a zero (0) first if the finished diameter is a single-digit value.)

Stainless steel : SS

No. of teeth

Hub type (1B: Single hub only)

Chain no.

Set screw size

Bore dia. d	Bolt size
06	M3
08~15	M4

Comes with one stainless steel round Philips head screw.

Specifications: Bore tolerance of H8 provided with no keyway and one set screw.

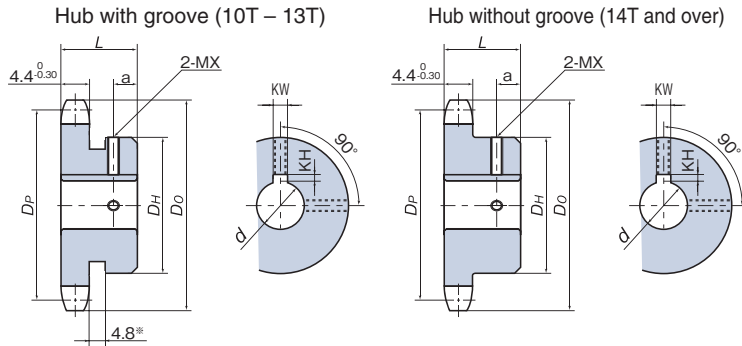
Model No.	No. of Teeth	Basic Dimensions		Hub		Tap position a	Finished bore dia. d Tolerance H8				
		Pitch Circle Dia. D_P	(Outer Dia.) (D_o)	Dia. D_H	Length L		06	08	10	12	15
RS25-1B10T-SS-H□□	10	20.55	23	14	15	5	●	●			
RS25-1B11T-SS-H□□	11	22.54	25	16	15	5	●	●			
RS25-1B12T-SS-H□□	12	24.53	28	18	15	5	●	●	●		
RS25-1B13T-SS-H□□	13	26.53	30	20	15	5	●	●	●		
RS25-1B14T-SS-H□□	14	28.54	32	20	15	5	●	●	●		
RS25-1B15T-SS-H□□	15	30.54	34	20	20	7	●	●	●		
RS25-1B16T-SS-H□□	16	32.55	36	25	20	7		●	●		
RS25-1B17T-SS-H□□	17	34.56	38	25	20	7		●	●		
RS25-1B18T-SS-H□□	18	36.57	40	25	20	7		●	●		
RS25-1B19T-SS-H□□	19	38.58	42	25	20	7		●	●		
RS25-1B20T-SS-H□□	20	40.59	44	25	20	7		●	●		
RS25-1B21T-SS-H□□	21	42.61	46	30	20	7			●	●	
RS25-1B22T-SS-H□□	22	44.62	48	30	20	7			●	●	
RS25-1B23T-SS-H□□	23	46.63	50	30	20	7			●	●	
RS25-1B24T-SS-H□□	24	48.65	52	35	20	7			●	●	
RS25-1B25T-SS-H□□	25	50.66	54	35	20	7			●	●	
RS25-1B26T-SS-H□□	26	52.68	56	40	20	7			●	●	
RS25-1B27T-SS-H□□	27	54.70	58	40	20	7			●	●	
RS25-1B28T-SS-H□□	28	56.71	60	40	20	7			●	●	
RS25-1B30T-SS-H□□	30	60.75	64	45	20	7				●	●
RS25-1B32T-SS-H□□	32	64.78	68	50	20	7				●	●

● Circles indicate permissible bore diameters.

RS35 Stainless Steel Fit Bore® Sprockets

RS35 Stainless Steel Fit Bore Sprockets

Applicable chain pitch: 9.525mm Roller dia.: 5.08mm



No. of teeth	Hub dia.	Groove dia.
10T	φ 25	φ 18
11T	φ 27	φ 22
12T	φ 31	φ 24
13T	φ 32	φ 28

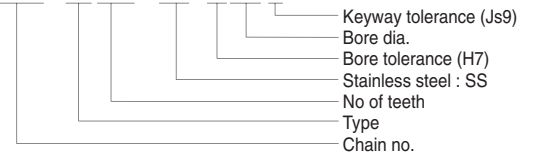
*The groove is provided on the hub perimeter to prevent sprocket - chain interference.

Applicable Bore Dia.	Keyway Width KW	Tolerance (Js9)	Keyway Depth KH	Tolerance	Set Screw Size MX
10 and up to 12	4		1.8		M4
More than 12 and up to 17	5	±0.0150	2.3	+0.10	M5
More than 17 and up to 22	6		2.8		M6
More than 22 and up to 30	8	±0.0180	3.3		M8
More than 30 and up to 38	10		3.8	+0.20	M8
More than 38 and up to 44	12		3.8		M8
More than 44 and up to 50	14	±0.0215	4.3		M10
More than 50 and up to 58	16		4.4		M10
More than 58 and up to 65	18		4.4		M10

Provided with two stainless steel set screws.

Model Numbering Example

RS35 - 1B 20T - SS - H □ □ J



Model No.	No. of Teeth	Basic Dimensions		Hub		Tap position a	Finished bore dia. d Tolerance H7															
		Pitch Circle Dia. DP	(Outer Dia.) (DO)	Dia. DH	Length L		10	12	14	15	16	17	18	19	20	22	24	25	28	30	32	
RS35-1B10T-SS-H□□J	10	30.82	35	25	20	5	●	●														
RS35-1B11T-SS-H□□J	11	33.81	38	27	20	5	●	●	●													
RS35-1B12T-SS-H□□J	12	36.80	41	31	20	5	●	●	●	●												
RS35-1B13T-SS-H□□J	13	39.80	44	32	20	5	●	●	●	●	●											
RS35-1B14T-SS-H□□J	14	42.81	47	30	20	8	●	●	●	●	●	●										
RS35-1B15T-SS-H□□J	15	45.81	51	35	20	8	●	●	●	●	●	●	●									
RS35-1B16T-SS-H□□J	16	48.82	54	37	20	8	●	●	●	●	●	●	●	●								
RS35-1B17T-SS-H□□J	17	51.84	57	41	20	8		●	●	●	●	●	●	●	●							
RS35-1B18T-SS-H□□J	18	54.85	60	44	20	8			●	●	●	●	●	●	●	●						
RS35-1B19T-SS-H□□J	19	57.87	63	47	20	8				●	●	●	●	●	●	●	●					
RS35-1B20T-SS-H□□J	20	60.89	66	50	20	8					●	●	●	●	●	●	●	●				
RS35-1B21T-SS-H□□J	21	63.91	69	53	20	8						●	●	●	●	●	●	●	●			
RS35-1B22T-SS-H□□J	22	66.93	72	53	20	8							●	●	●	●	●	●	●	●		
RS35-1B23T-SS-H□□J	23	69.95	75	53	20	8								●	●	●	●	●	●	●	●	
RS35-1B24T-SS-H□□J	24	72.97	78	53	22	10/7**									●	●	●	●	●	●	●	●
RS35-1B25T-SS-H□□J	25	76.00	81	53	22	10/7**										●	●	●	●	●	●	●
RS35-1B26T-SS-H□□J	26	79.02	84	53	22	10/7**											●	●	●	●	●	●
RS35-1B27T-SS-H□□J	27	82.05	87	53	22	10/7**												●	●	●	●	●
RS35-1B28T-SS-H□□J	28	85.07	90	53	22	10/7**													●	●	●	●
RS35-1B30T-SS-H□□J	30	91.12	96	53	22	10/7**														●	●	●

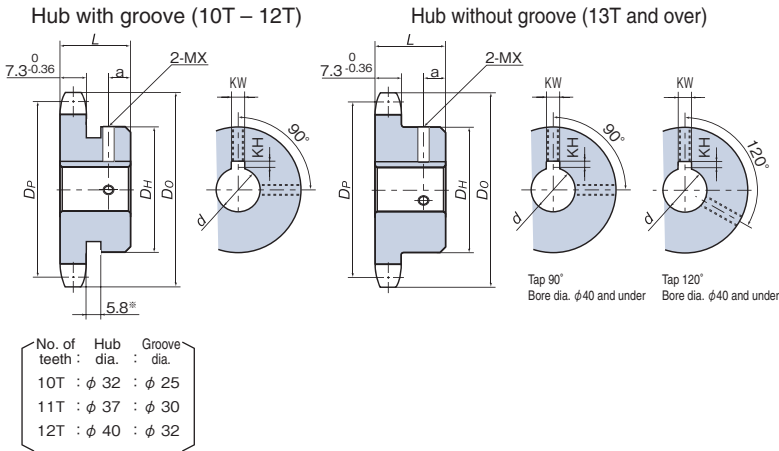
● circles indicate applicable bore diameters.
○ circles indicate that the tap position is at 7mm for applicable bore diameters.

Before Use Standard Roller Chains Lube-Free Roller Chains Heavy Duty Roller Chains Corrosion Resistant Roller Chains Specialty Roller Chains Sprockets Pin Gear Drives Accessories Selection Handling

RS40 Stainless Steel Fit Bore® Sprockets

RS40 Stainless Steel Fit Bore Sprockets

Applicable chain pitch: 12.70mm Roller dia.: 7.92mm

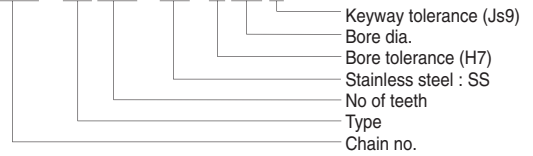


Applicable Bore Dia.	Keyway Width K W	Tolerance (Js9)	Keyway Depth K H	Tolerance	Set Screw Size MX
10 and up to 12	4		1.8		M4
More than 12 and up to 17	5	±0.0150	2.3	+0.1 0	M5
More than 17 and up to 22	6		2.8		M6
More than 22 and up to 30	8	±0.0180	3.3		M8
More than 30 and up to 38	10		3.3		M8
More than 38 and up to 44	12		3.3	+0.2 0	M8
More than 44 and up to 50	14	±0.0215	3.8		M10
More than 50 and up to 58	16		4.3		M10
More than 58 and up to 65	18		4.4		M10

Provided with two stainless steel set screws.

Model Numbering Example

RS40 - 1B 20T - SS - H □ □ J



*The groove is provided on the hub perimeter to prevent sprocket - chain interference.

Model No.	No. of Teeth	Basic Dimensions		Hub		Tap position a	Finished bore dia. d Tolerance H7																				
		Pitch Circle Dia. (DP)	(Outer Dia.) (Do)	Dia. (DH)	Length (L)		10	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48
RS40-1B10T-SS-H□□J	10	41.10	47	32	22	5	●	●	●	●	●																
RS40-1B11T-SS-H□□J	11	45.08	51	37	22	5	●	●	●	●	●	●	●														
RS40-1B12T-SS-H□□J	12	49.07	55	40	22	5	●	●	●	●	●	●	●	●													
RS40-1B13T-SS-H□□J	13	53.07	59	37	22	7			●	●	●	●	●	●	●												
RS40-1B14T-SS-H□□J	14	57.07	63	42	22	7			●	●	●	●	●	●	●	●											
RS40-1B15T-SS-H□□J	15	61.08	67	46	22	7			●	●	●	●	●	●	●	●	●										
RS40-1B16T-SS-H□□J	16	65.10	71	50	22	7			●	●	●	●	●	●	●	●	●	●									
RS40-1B17T-SS-H□□J	17	69.12	76	54	22	7			●	●	●	●	●	●	●	●	●	●	●								
RS40-1B18T-SS-H□□J	18	73.14	80	57	22	7			●	●	●	●	●	●	●	●	●	●	●	●							
RS40-1B19T-SS-H□□J	19	77.16	84	62	22	7			●	●	●	●	●	●	●	●	●	●	●	●	●						
RS40-1B20T-SS-H□□J	20	81.18	88	67	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●					
RS40-1B21T-SS-H□□J	21	85.21	92	71	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
RS40-1B22T-SS-H□□J	22	89.24	96	75	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
RS40-1B23T-SS-H□□J	23	93.27	100	77	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS40-1B24T-SS-H□□J	24	97.30	104	63	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
RS40-1B25T-SS-H□□J	25	101.33	108	63	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS40-1B26T-SS-H□□J	26	105.36	112	63	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS40-1B27T-SS-H□□J	27	109.40	116	63	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS40-1B28T-SS-H□□J	28	113.43	120	63	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS40-1B30T-SS-H□□J	30	121.50	128	63	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

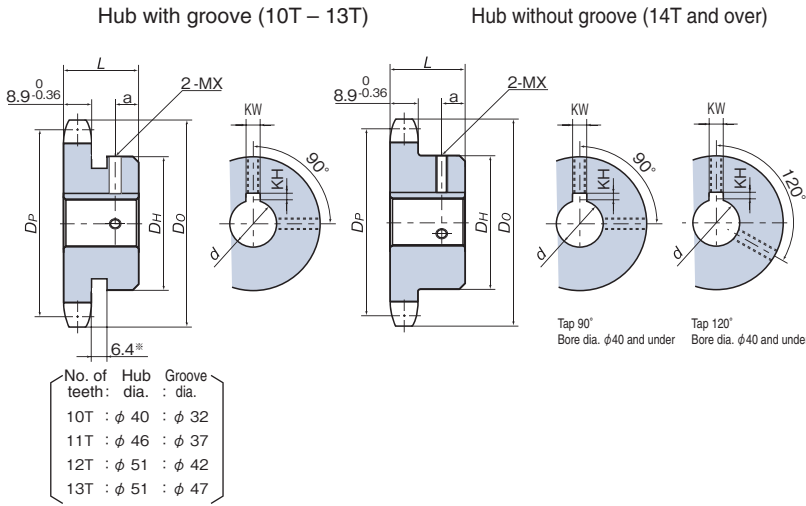
● Circles indicate permissible bore diameters.

Before Use | Standard Roller Chains | Lubrication | Heavy Duty Roller Chains | Corrosion Resistant Roller Chains | Specialty Roller Chains | Sprockets | Pin Gear Drives | Accessories | Selection | Handling

RS50 Stainless Steel Fit Bore® Sprockets

RS50 Stainless Steel Fit Bore Sprockets

Applicable chain pitch: 15.875mm Roller dia.: 10.16mm



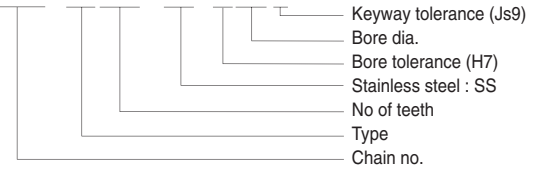
*The groove is provided on the hub perimeter to prevent sprocket – chain interference.

Applicable Bore Dia.	Keyway Width KW	Tolerance (Js9)	Keyway Depth KH	Tolerance	Set Screw Size MX
10 and up to 12	4		1.8		M4
More than 12 and up to 17	5	±0.0150	2.3	+0.1 0	M5
More than 17 and up to 22	6		2.8		M6
More than 22 and up to 30	8	±0.0180	3.3		M8
More than 30 and up to 38	10		3.8	+0.2 0	M8
More than 38 and up to 44	12		4.3		M10
More than 44 and up to 50	14	±0.0215	4.4		M10
More than 50 and up to 58	16				
More than 58 and up to 65	18				

Provided with two stainless steel set screws.

Model Numbering Example

RS50 – 1B 20T – SS – H □ □ J



Model No.	No. of Teeth	Basic Dimensions		Hub		Tap position	Finished bore dia. d Tolerance H7																							
		Pitch Circle Dia. DP	(Outer Dia.) (DO)	Dia. DH	Length L		a	10	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48		
RS50-1B10T-SS-H□□J	10	51.37	58	40	25	6	●	●																						
RS50-1B11T-SS-H□□J	11	56.35	64	46	25	6			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B12T-SS-H□□J	12	61.34	69	51	25	6			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B13T-SS-H□□J	13	66.34	74	51	25	6			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B14T-SS-H□□J	14	71.34	79	52	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B15T-SS-H□□J	15	76.35	84	57	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B16T-SS-H□□J	16	81.37	89	62	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B17T-SS-H□□J	17	86.39	94	67	25	7			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B18T-SS-H□□J	18	91.41	100	72	28	8			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B19T-SS-H□□J	19	96.45	105	73	28	8			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B20T-SS-H□□J	20	101.48	110	73	28	8			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B21T-SS-H□□J	21	106.51	115	73	28	8			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B22T-SS-H□□J	22	111.55	120	73	28	8			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B23T-SS-H□□J	23	116.58	125	73	28	8			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B24T-SS-H□□J	24	121.62	130	73	28	8			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B25T-SS-H□□J	25	126.66	135	73	28	8			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B26T-SS-H□□J	26	131.70	140	73	28	8			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B27T-SS-H□□J	27	136.74	145	73	28	8			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B28T-SS-H□□J	28	141.79	150	73	28	8			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
RS50-1B30T-SS-H□□J	30	151.87	161	73	28	8			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		

● circles indicate applicable bore diameters.

Before Use Standard Roller Chains Lube-Free Roller Chains Heavy Duty Roller Chains Corrosion Resistant Roller Chains Specialty Roller Chains Sprockets Pin Gear Drives Accessories Selection Handling

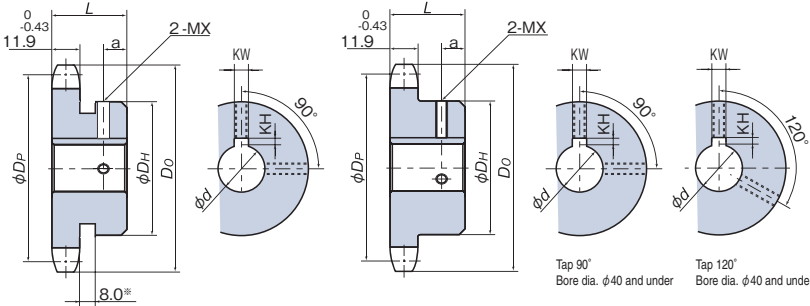
RS60 Stainless Steel Fit Bore® Sprockets

RS60 Stainless Steel Fit Bore Sprockets

Applicable chain pitch: 19.05mm Roller dia.: 11.91mm

Hub with groove (10T – 11T)

Hub without groove (12T and over)



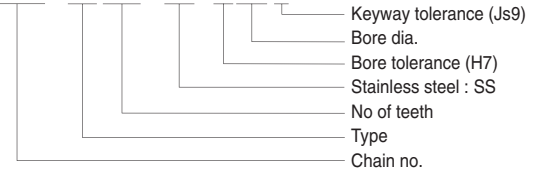
No. of teeth	Hub dia.	Groove dia.
10T	φ 49	φ 37
11T	φ 51	φ 45

Applicable Bore Dia.	Keyway Width KW	Tolerance (Js9)	Keyway Depth KH	Tolerance	Set Screw Size MX
10 and up to 12	4		1.8		M4
More than 12 and up to 17	5	±0.0150	2.3	+0.10	M5
More than 17 and up to 22	6		2.8		M6
More than 22 and up to 30	8	±0.0180	3.3		M8
More than 30 and up to 38	10		3.8	+0.20	M8
More than 38 and up to 44	12		4.3		M10
More than 44 and up to 50	14	±0.0215	4.4		M10
More than 50 and up to 58	16				
More than 58 and up to 65	18				

Provided with two stainless steel set screws.

Model Numbering Example

RS60 – 1B 20T – SS – H □ □ J



*The groove is provided on the hub perimeter to prevent sprocket – chain interference.

Model No.	No. of Teeth	Basic Dimensions		Hub		Tap position a	Finished bore dia. d Tolerance H7																					
		Pitch Circle Dia. DP	(Outer Dia.) (Do)	Dia. DH	Length L		14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	
RS60-1B10T-SS-H□□J	10	61.65	70	49	32	6	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B11T-SS-H□□J	11	67.62	76	51	32	6	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B12T-SS-H□□J	12	73.60	83	51	32	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B13T-SS-H□□J	13	79.60	89	57	32	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B14T-SS-H□□J	14	85.61	95	62	32	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B15T-SS-H□□J	15	91.62	101	68	32	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B16T-SS-H□□J	16	97.65	107	73	32	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B17T-SS-H□□J	17	103.67	113	73	32	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B18T-SS-H□□J	18	109.71	119	83	40	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B19T-SS-H□□J	19	115.74	126	83	40	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B20T-SS-H□□J	20	121.78	132	83	40	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B21T-SS-H□□J	21	127.82	138	83	40	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B22T-SS-H□□J	22	133.86	144	83	40	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B23T-SS-H□□J	23	139.90	150	83	40	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B24T-SS-H□□J	24	145.95	156	83	40	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B25T-SS-H□□J	25	151.99	162	83	40	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B26T-SS-H□□J	26	158.04	168	83	40	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B27T-SS-H□□J	27	164.09	174	83	40	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B28T-SS-H□□J	28	170.14	180	83	40	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS60-1B30T-SS-H□□J	30	182.25	193	83	40	12	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

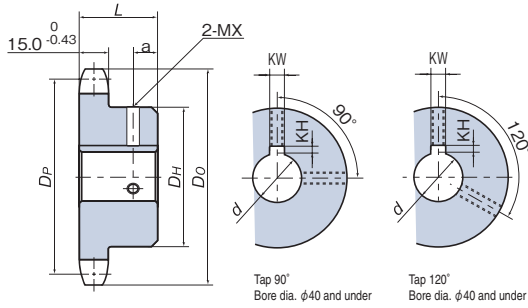
● Circles indicate permissible bore diameters.

Before Use Standard Roller Chains Lubrication Free Roller Chains Heavy Duty Roller Chains Corrosion Resistant Roller Chains Specialty Roller Chains Sprockets Pin Gear Drives Accessories Selection Handling

RS80 Stainless Steel Fit Bore® Sprockets

RS80 Stainless Steel Fit Bore Sprockets

Applicable chain pitch: 25.40mm Roller dia.: 15.88mm



Applicable Bore Dia.	Keyway Width KW	Tolerance (Js9)	Keyway Depth KH	Tolerance	Set Screw Size MX
10 and up to 12	4		1.8		M4
More than 12 and up to 17	5	±0.0150	2.3	+0.1 0	M5
More than 17 and up to 22	6		2.8		M6
More than 22 and up to 30	8	±0.0180			
More than 30 and up to 38	10		3.3		M8
More than 38 and up to 44	12			+0.2 0	
More than 44 and up to 50	14	±0.0215	3.8		
More than 50 and up to 58	16		4.3		M10
More than 58 and up to 65	18		4.4		

Provided with two stainless steel set screws.

Model Numbering Example

RS80 - 1B 20T - SS - H □ □ J



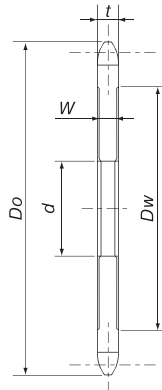
Model No.	No. of Teeth	Basic Dimensions		Hub		Tap position a	Finished bore dia. d Tolerance H7																		
		Pitch Circle Dia. DP	(Outer Dia.) (Do)	Dia. DH	Length L		17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60
RS80-1B10T-SS-H□□J	10	82.20	93	52	40	12	●	●	●	●	●	●	●	●	●										
RS80-1B11T-SS-H□□J	11	90.16	102	60	40	12	●	●	●	●	●	●	●	●	●	●									
RS80-1B12T-SS-H□□J	12	98.14	110	67	40	12				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B13T-SS-H□□J	13	106.14	118	77	40	12				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B14T-SS-H□□J	14	114.15	127	77	40	12				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B15T-SS-H□□J	15	122.17	135	93	40	12				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B16T-SS-H□□J	16	130.20	143	93	40	12				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B17T-SS-H□□J	17	138.23	151	93	40	12				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B18T-SS-H□□J	18	146.27	159	93	40	12				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B19T-SS-H□□J	19	154.32	167	93	40	12				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B20T-SS-H□□J	20	162.37	176	93	40	12				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B21T-SS-H□□J	21	170.42	184	93	40	12					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B22T-SS-H□□J	22	178.48	192	107	45	12						●	●	●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B23T-SS-H□□J	23	186.54	200	107	45	12							●	●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B24T-SS-H□□J	24	194.60	208	107	45	12								●	●	●	●	●	●	●	●	●	●	●	●
RS80-1B25T-SS-H□□J	25	202.66	216	107	45	12									●	●	●	●	●	●	●	●	●	●	●

● circles indicate applicable bore diameters.

Before Use Standard Roller Chains Lubrication Free Roller Chains Corrosion Resistant Roller Chains Specialty Roller Chains Sprockets Pin Gear Drives Accessories Selection Handling

Torque Limiter Sprockets

Torque limiters are typical mechanical devices for overload protection, and as such it is essential that the friction surface of the center member be finished properly to ensure the precise, accurate overload detection of the torque limiter. Dedicated sprockets for torque limiters are provided with special surface processing to realize the ideal surface finish.



- Manufacturer's recommended value: Former JIS 3S – 6S
- Torque limiter sprocket: Ra 1.6μm and under (roughly former JIS 6S)

Model Numbering Example

RS40-1A 20T-CM 30

Chain no. _____ Finished bore dia. *d*
 Sprocket type (Type A) _____ Torque limiter sprocket
 No. of teeth _____

Chain No.	RS40	RS50	RS60	RS80	RS100
<i>W</i>	6.5	8.0	10.5	13.5	16.5
<i>t</i>	7.3	8.9	11.9	15.0	18.0

- Operating conditions: Sprocket width > Torque limiter bush width (The sprocket width must be larger than the bush width.)
 - All other dimensions are the same as those for standard 1A Type sprockets.
 - Refer to the following table for the *d* and *Dw* ranges.
 - Uses an H7 finished bore diameter (*d*).
- Note: Be sure to check the with the torque limiter manufacturer's catalog for the dimensions of each part. Specify the model number of the torque limiter when placing your order.

■ Torque Limiter Compatibility Table (Ref.)

		Applicable sprocket range <i>d</i> × <i>Dw</i>																												
No. of Teeth		16	17	18	19	20	21	22	23	24	25	26	27	28	30	32	34	35	36	38	40	42	45	48	50					
RS40*	TL200	30 × 53																												
	TL250					41 × 68																								
	TL350															49 × 92														
RS50	TL250			41 × 68																										
	TL350													49 × 92																
	TL500														74 × 134															
RS60	TL350			49 × 92																										
	TL500													74 × 134																
	TL700																105 × 184													
RS80	TL500			74 × 132																										
	TL700													105 × 184																
RS100	TL500			74 × 132																										
	TL700													105 × 184																

Sprockets compatible with torque limiters from every major manufacturer are available. We also offer made-to-order sprockets. Contact a Tsubaki representative for more information.

*Check the bush width if TL250 or TL350 are used with RS40 sprockets.

BS Roller Chain Sprockets (conform to BS standards)

Dedicated BS sprockets are required for BS Roller Chains. Please contact a Tsubaki representative for more information.

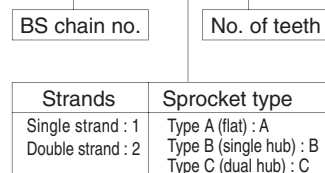
★ Made-to-order item

(Unit: mm)

RS Chain No.	BS Chain Specifications			BS Sprocket Specifications			
	Pitch	Roller Dia.	Inner Link Inner Width	Tooth Width	Pitch Dia.	Outer Dia.	Corresponding BS/RS Chain Nos.
RF06B	9.53	6.35	5.72	5.30	Same as the basic dimensions of the corresponding RS sprocket model	Roughly the same as the basic dimensions of the corresponding RS sprocket model (may be slightly smaller)	RF06B → RS35
RS08B	12.70	8.51	7.75	7.20			RS08B → RS40
RS10B	15.88	10.16	9.65	9.00			RS10B → RS50
RS12B	19.05	12.07	11.68	11.00			RS12B → RS60
RS16B	25.40	15.88	17.02	16.10			RS16B → RS80
RS20B	31.75	19.05	19.56	18.60			RS20B → RS100
RS24B	38.10	25.40	25.40	24.20			RS24B → RS120
RS28B	44.45	27.94	30.99	29.20			RS28B → RS140
RS32B	50.80	29.21	30.99	29.20			RS32B → RS160
RS40B	63.50	39.37	38.10	36.40			RS40B → RS200

● Model Numbering Example

RS08B-1B 20T



Easy Bore Finishing Service

Easy Bore Finishing Service features

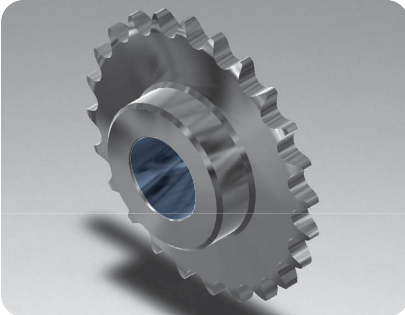
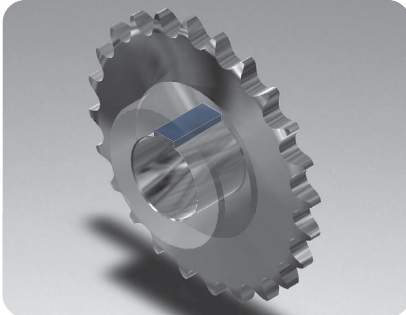
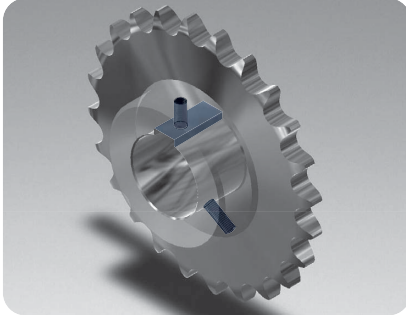
- Coded processing specifications allow for accurate specification confirmation and submittal.
- Processing codes eliminate the need to create or attach drawings when ordering.
- Processing codes also allow for speedy finishing and reliable delivery.

Applicable sprockets and limitations for Easy Bore Finishing Service

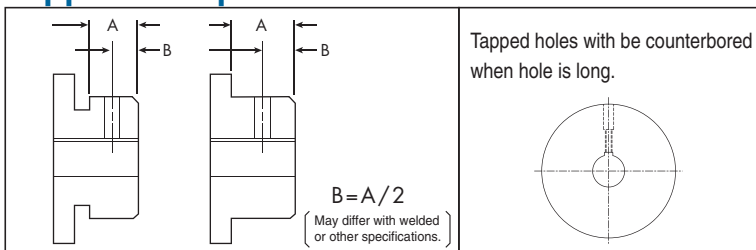
Applicable Sprockets	Applicable Models
RS Sprockets (1A, 1B, 2B, and 1C Types)	For all stock items
RS Sprockets (SD Type)	
RS Sprockets (Stainless Steel Series)	

Limitations	We cannot provide delivery drawings, certificates of inspection, or mill sheets. (Orders requiring such items will be treated as standard made-to-order items.)
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Processing Range

Bore Finishing (L)	Keyway Finishing (K)	Hole Tapping (D)
		
<ul style="list-style-type: none"> · Whole number dimensions only in 1 mm units. No imperial (inch) dimensions available. · Bore tolerances: Choose from H7, G7, or M7. 	<ul style="list-style-type: none"> · Parallel keyways only. · Keyway tolerances: Choose from Js9, F7, P9, or E9. Follows JIS standards for keyway width and height. 	<ul style="list-style-type: none"> · Tapped hole size determined by bore diameter (see pg. 136). · Choose up to two (2) hole locations: <ul style="list-style-type: none"> D1: Above the keyway D2: Above the keyway and at 90° D3: Above the keyway and at 120° (See below) · Set screws provided.

Tapped hole position



Set screw specifications

- Steel cup point set screws with hexagonal hole
- Use stainless steel screws with stainless steel sprockets



Easy Bore Finishing Service

List of Applicable Sprockets for Easy Bore Finishing Service

RS Sprockets (●: Hardened teeth, ○: Standard teeth, ◎: Both)

Sprocket Model / No. of Teeth	Steel																								Stainless Steel															
	Single Strand												Double Strand				SD Type				Single Strand Type																			
	35			40			50			60			80			100			120			140			160			40		50		60		80		25	35	40	50	60
	B	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	B	B	B	B	B	B	B	B	B	40	50	60	80	B	B	B	B	B	B			
9	●		●			●			●																															
10	●		●			●			●					●				●	●	●													○	○	○	○	○	○		
11	●		●			●			●					●				●	●	●													○	○	○	○	○	○		
12	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
13	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
14	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○		
15	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
16	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
17	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
18	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
19	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
20	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
21	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
22	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
23	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
24	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
25	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
26	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
27	●	◎	●		◎	●		◎	●		◎	●		◎	●		◎	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
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35	●	◎	●		◎	●		◎	●	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
36	●	◎	●	○	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
38	●	◎	●	○	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
40	●	◎	●	○	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
42	○	◎	○	○	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
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48	○	◎	○	○	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
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54	○	◎	○	○	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
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70	○	◎	○	○	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
75	○	◎	○	○	◎	◎	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

Note: Processing fee for boxes colored blue in the thick outlined area is relatively high.

Easy Bore Finishing Service

Processing Code and Details

	Processing Code			A Type	B Type	C Type	SD Type
	Bore	Key	Tap				
I							
II							
III			1				
			2				
			3				
IV			1				
			2				
			3				

Tap hole "1" shown above is tapped in one spot in the center of the keyway. Tap hole "2" is tapped at a 90° angle to tap hole "1", while tap hole "3" is tapped at a 120° angle to tap hole "1".

List of Finishing Dimensions

With a key tolerance of Js9, P9 (new JIS)

Bore Dia.	Keyway Width	Tap Size	Bore Mounting Dim.
10~12	4	M4	1
13~17	5	M5	
18~20	6	M6	
21~22			1.2
23~30	8	M8	
31~32	10		

With a key tolerance of F7, E9 (former JIS)

Bore Dia.	Keyway Width	Tap Size	Bore Mounting Dim.
10~13	4	M4	1
14~20	5	M5	
21~30	7	M6	1.2
31~32	10	M8	
33~40			1.6
41~50	12		

*With processing code IV (no keyway), the bore mounting dimensions will be half of the new JIS table.

Easy Bore Finishing Service

(Continued from previous page)

With a key tolerance of Js9, P9 (new JIS)

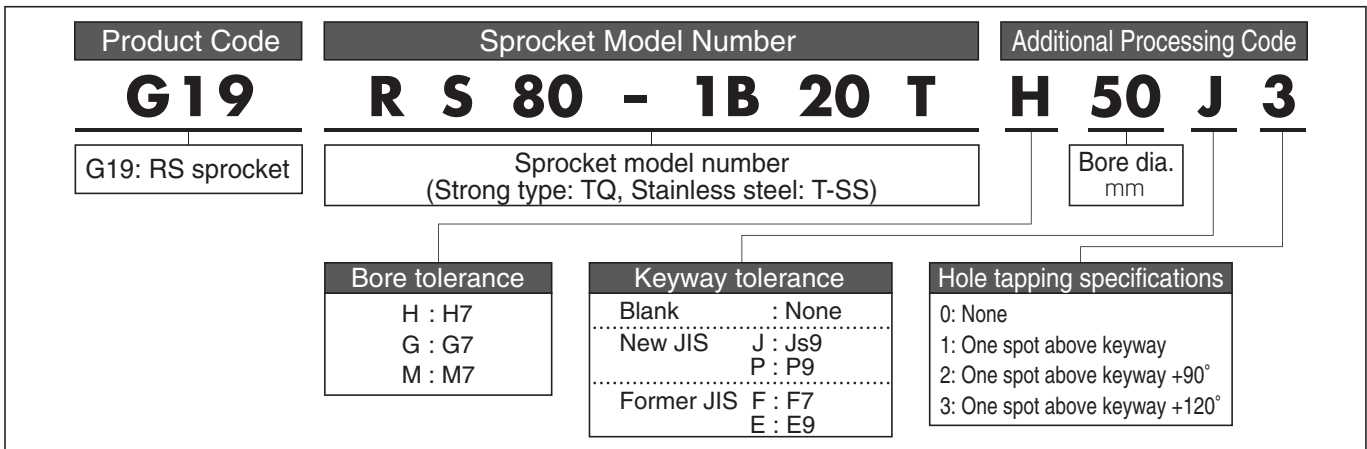
Bore Dia.	Keyway Width	Tap Size	Bore Mounting Dim.
33~38	10	M8	1.6
39~44	12		
45~50	14		
51~58	16	M10	2.5
59~65	18		
66~75	20	M12	3
76~80	22		
81~85	25	M16	3
86~95	28		
96~110	32		
111~130	32	M20	

With a key tolerance of F7, E9 (former JIS)

Bore Dia.	Keyway Width	Tap Size	Bore Mounting Dim.
51~60	15	M8	2.5
61~70	18	M10	
71~80	20	M12	
81~95	24		
96~110	28	M16	3
111~125	32		
126~140	35		

· With processing code IV (no keyway), the bore mounting dimensions will be half of the new JIS table.

Easy Bore Finishing Service Numbering Example



Note: Contact a Tsubaki representative when set screws will differ or the hub length will be machined.

Easy Bore Finishing Service Reference

■ Allowable bore dimensional tolerances

(Taken from JIS B0401-2)

Unit: μm

Bore Classification mm		G7		H6		H7		H8		M7		N7		P7		R7		
More than	Up to	Above	Below	Above	Below	Above	Below	Above	Below	Above	Below	Above	Below	Above	Below	Above	Below	
3	6	+16	+4	+8	0	+12	0	+18	0	+0	-12	-4	-16	-8	-20	-11	-23	
6	10	+20	+5	+9	0	+15	0	+22	0	+0	-15	-4	-19	-9	-24	-13	-28	
10	18	+24	+6	+11	0	+18	0	+27	0	+0	-18	-5	-23	-11	-29	-16	-34	
18	30	+28	+7	+13	0	+21	0	+33	0	+0	-21	-7	-28	-14	-35	-20	-41	
30	40	+34	+9	+16	0	+25	0	+39	0	+0	-25	-8	-33	-17	-42	-25	-50	
40	50															-30	-60	
50	65	+40	+10	+19	0	+30	0	+46	0	+0	-30	-9	-39	-21	-51	-32	-62	
65	80															-38	-73	
80	100	+47	+12	+22	0	+35	0	+54	0	+0	-35	-10	-45	-24	-59	-41	-76	
100	120															-48	-88	
120	140	+54	+14	+25	0	+40	0	+63	0	+0	-40	-12	-52	-28	-68	-50	-90	
140	160															-53	-93	
160	180	+61	+15	+29	0	+46	0	+72	0	+0	-46	-147	-60	-33	-79	-60	-106	
180	200															-63	-109	
200	225	+69	+17	+32	0	+52	0	+81	0	+0	-52	-14	-66	-36	-88	-67	-113	
225	250															-74	-126	
250	280	+75	+18	+36	0	+57	0	+89	0	+0	-57	-16	-73	-41	-98	-78	-130	
280	315															-87	-144	
315	355	+83	+20	+40	0	+63	0	+97	0	+0	-63	-17	-80	-45	-108	-93	-150	
355	400															-103	-166	
400	450															-109	-172	
450	500																	

■ Keyway dimensions and tolerances

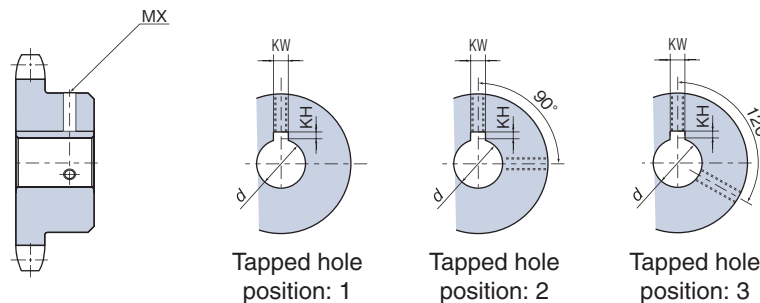
New JIS (B1301 – 1996)

Former JIS (B1301 – 1959)

Unit: μm

Applicable Bore Dia.	Keyway Width	Tolerance (Js9)	Tolerance (P9)	Keyway Depth	Tolerance	Set Screw	Applicable Bore Dia.	Keyway Width	Tolerance (F7)	Tolerance (E9)	Keyway Depth	Tolerance	Set Screw
d	KW			KH		MX	d	KW			KH		MX
10~12	4	±0.0150	0.012 -0.042	1.8	+0.1 0	M4	More than 10, up to 13	4	+0.022	+0.050	1.5	+0.050 0	M4
12~17	5			2.3		More than 13, up to 20	5	+0.010	+0.020	2.0	M5		
17~22	6			2.8		More than 20, up to 30	7	+0.028	+0.061	3.0	M6		
22~30	8	±0.0180	-0.015 -0.051	3.3	+0.2 0	M6	More than 30, up to 40	10	+0.013	+0.025	3.5	M8	
30~38	10			3.3			More than 40, up to 50	12	+0.034	+0.075	5.0		M10
38~44	12	±0.0215	-0.018 -0.061	3.3		More than 50, up to 60	15	+0.016	+0.032	6.0	M12		
44~50	14			3.8		More than 60, up to 70	18	+0.041	+0.092	6.0	M16		
50~58	16	±0.0260	-0.022 -0.074	4.3		More than 70, up to 80	20	+0.020	+0.040	8.0	M20		
58~65	18			4.4		More than 80, up to 95	24	+0.050	+0.112	12.0		M24	
65~75	20	±0.0310	-0.026 -0.088	4.9		+0.3 0	M12	More than 95, up to 110	28	+0.025	+0.050	13.0	M24
75~85	22			5.4				More than 110, up to 125	32	+0.060	+0.134	15.5	
85~95	25	±0.0370	-0.032 -0.106	5.4			More than 125, up to 140	35	+0.030	+0.060	17.5	M24	
95~110	28			6.4			More than 140, up to 160	38	+0.071	+0.159	20.0		M24
110~130	32	±0.0435	-0.037 -0.124	7.4	More than 160, up to 180		42	+0.036	+0.072	22.5	M24		
130~150	36			8.4	More than 180, up to 200		45	+0.071	+0.159	25.0		M24	
150~170	40	±0.0435	-0.037 -0.124	9.4	More than 200, up to 224		50	+0.036	+0.072	28.0	M24		
170~200	45			10.4	More than 224, up to 250		56	+0.071	+0.159	31.5		M24	
200~230	50	±0.0435	-0.037 -0.124	11.4	More than 250, up to 280		63	+0.036	+0.072	35.5	M24		
230~260	56			12.4	More than 280, up to 315		71	+0.071	+0.159	35.5		M24	
260~290	63	±0.0435	-0.037 -0.124	12.4	More than 315, up to 355		80	+0.036	+0.072	35.5	M24		
290~330	70			14.4	More than 355, up to 400		90	+0.071	+0.159	35.5		M24	
330~380	80	±0.0435	-0.037 -0.124	15.4	More than 400, up to 450	100	+0.036	+0.072	35.5	M24			
380~440	90			17.4	More than 450, up to 500	112	+0.071	+0.159	35.5		M24		
440~500	100			19.5									

Note: Combinations of Tsubaki standard processing and bore/keyway specifications may differ from the above. Refer to the processing dimension lists on pgs. 136 – 137.



Tapped hole position: 1

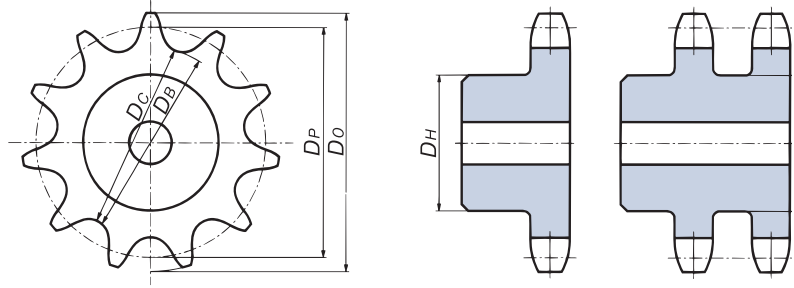
Tapped hole position: 2

Tapped hole position: 3

Before Use
 Standard Roller Chains
 Lube-Free Roller Chains
 Heavy Duty Roller Chains
 Corrosion Resistant Roller Chains
 Specialty Roller Chains
 Sprockets
 Pin Gear Drives
 Accessories
 Selection
 Handling

RS Sprocket Engineering Information

1. Part names and standard dimensional formulae



$$D_P = P / \sin \frac{180^\circ}{N}$$

$$D_O = P \left(0.6 + \cot \frac{180^\circ}{N} \right)$$

$$D_B = D_P - d_l$$

$$D_C = D_B \quad (\text{When number of teeth is even})$$

$$D_C = D_P \cos \frac{90^\circ}{N} - d_l \quad (\text{When number of teeth is odd})$$

$$D_H = P \left(\cot \frac{180^\circ}{N} - 1 \right) - 0.76$$

D_P = Pitch diameter

D_O = Standard outer diameter

D_B = Tooth root diameter

D_C = Tooth root distance

D_H = Max. hub diameter and max. groove diameter

P = Chain pitch

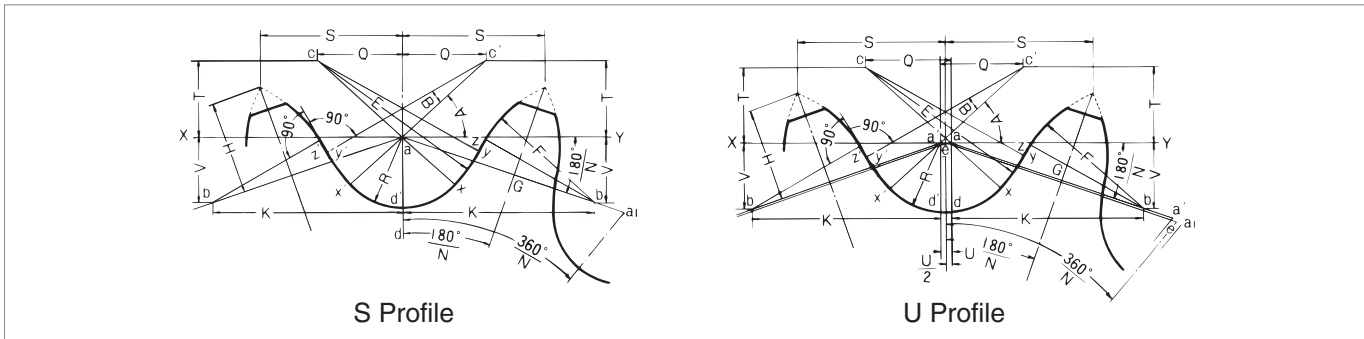
d_l = Roller outer diameter

N = Number of teeth

2. Tooth profile specifications

2-1. Tooth profile

Tsubaki sprocket teeth profiles use S profiles from JIS standards, and are machine hobbled. We currently are partially combining these with JIS standard U profiles.



S Profile

U Profile

$$p_a = p \left(1 + \frac{D_S - d_l}{D_P} \right)$$

$$D_S = 2R = 1.005 d_l + 0.076$$

$$U = 0.07 (p - d_l) + 0.051$$

$$R = D_S / 2 = 0.5025 d_l + 0.038$$

$$A = 35^\circ + 60^\circ / N$$

$$B = 18^\circ - 56^\circ / N$$

$$ac = 0.8 d_l$$

$$Q = 0.8 d_l \cos (35^\circ + 60^\circ / N)$$

$$T = 0.8 d_l \sin (35^\circ + 60^\circ / N)$$

$$E = cy = 1.3025 d_l + 0.038$$

$$\bar{xy} = (2.605 d_l + 0.076) \sin (9^\circ - 28^\circ / N)$$

$$yz = d_l [1.4 \sin (17^\circ - 64^\circ / N) - 0.8 \sin (18^\circ - 56^\circ / N)]$$

$$G = ab = 1.4 d_l \quad [\text{Point b forms a line from point a on the XY line to the } 180^\circ / N \text{ angle on the XY line.}]$$

$$K = 1.4 d_l \cos 180^\circ / N$$

$$V = 1.4 d_l \sin 180^\circ / N$$

$$F = d_l [0.8 \cos (18^\circ - 56^\circ / N) + 1.4 \cos (17^\circ - 64^\circ / N) - 1.3025] - 0.038$$

$$H = \sqrt{F^2 - \left(1.4 d_l - \frac{p_a}{2} + \frac{U}{2} \cos 180^\circ / N \right)^2} + \frac{U}{2} \sin 180^\circ / N$$

[Assuming that $U = 0$ for the S profile]

$$S = \frac{p_a}{2} \cos 180^\circ / N + H \sin 180^\circ / N$$

Outer diameter when teeth profiles taper = $p_a \cot 180^\circ / N + 2H$

Max. pressure angle = $x_{ab} = 35^\circ - 120^\circ / N$

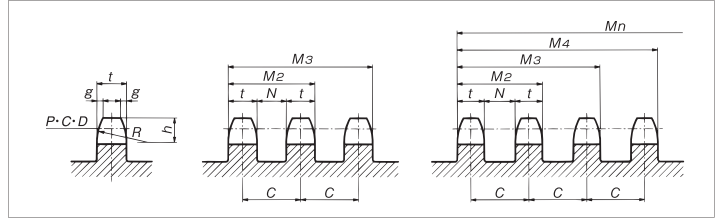
Min. pressure angle = $x_{ab} - B = 17^\circ - 64^\circ / N$

Ave. pressure angle = $26^\circ - 92^\circ / N$

N = No. of teeth, d_l = Roller outer dia., D_P = Pitch diameter, p = Chain pitch, p_a = Tooth profile pitch (a-a1 for S profiles, e-e1 for U profiles)

Engineering Information

2-2 Tooth width dimensions



Chain No.	Each Strand			t (Max.)			C	Double/Triple Strands			Quadruple or More Strands					
	g (ref.)	h	R (min.)	Single strand	Double/triple strands	Quadruple or more strands		Double strands or more	M ₂	M ₃	N	M ₂	M ₃	M ₄	M ₅	M ₆
RS 11	0.5	1.9	4.0	1.6	—	—	—	—	—	—	—	—	—	—	—	—
RS 15	0.6	2.4	5.1	2.0	—	—	—	—	—	—	—	—	—	—	—	—
RS 25	0.8	3.2	6.8	2.9	2.8	2.8	6.4	9.2	15.6	3.6	9.2	15.6	22.0	28.4	34.8	3.6
RS 35	1.2	4.8	10.1	4.4	4.3	4.2	10.1	14.4	24.5	5.8	14.3	24.4	34.5	44.6	54.7	5.9
RS 41	1.6	6.4	13.5	5.8	—	—	—	—	—	—	—	—	—	—	—	—
RS 40	1.6	6.4	13.5	7.3	7.1	7.0	14.4	21.5	35.9	7.3	21.4	35.8	50.2	64.6	79.0	7.4
RS 50	2.0	7.9	16.9	8.9	8.7	8.6	18.1	26.8	44.9	9.4	26.7	44.8	62.9	81.0	99.1	9.5
RS 60	2.4	9.5	20.3	11.9	11.7	11.4	22.8	34.5	57.3	11.1	34.2	57.0	79.8	102.6	125.4	11.4
RS 80	3.2	12.7	27.0	15.0	14.6	14.3	29.3	43.9	73.2	14.7	43.6	72.9	102.2	131.5	160.8	15.0
RS100	4.0	15.9	33.8	18.0	17.6	17.2	35.8	53.4	89.2	18.2	53.0	88.8	124.6	160.4	196.2	18.6
RS120	4.7	19.0	40.5	24.0	23.5	23.0	45.4	68.9	114.3	21.9	68.4	113.8	159.2	204.6	250.0	22.4
RS140	5.5	22.2	47.3	24.0	23.5	23.0	48.9	72.4	121.3	25.4	71.9	120.8	169.7	218.6	267.5	25.9
RS160	6.3	25.4	54.0	30.0	29.3	28.7	58.5	87.8	146.3	29.2	87.2	145.7	204.2	262.7	321.2	29.8
RS180	7.1	28.6	60.8	33.7	33.0	32.3	65.8	98.8	164.6	32.8	98.1	163.9	229.7	295.5	361.3	33.5
RS200	8.0	31.8	67.5	36.0	35.2	34.4	71.6	106.8	178.4	36.4	106.0	177.6	249.2	320.8	392.4	37.2
RS240	9.5	38.1	81.0	45.0	44.0	43.1	87.8	131.8	219.6	43.8	130.9	218.7	306.5	394.3	482.1	44.7

Maximum sprocket hub diameter and standard maximum bore diameter

Chain No.	RS25		RS35		RS40 · 41		RS50		RS60		RS80		RS100		RS120		RS140		RS160		RS180		RS200		RS240			
Chain Pitch	6.35		9.525		12.70		15.875		19.05		25.40		31.75		38.10		44.45		50.80		57.15		63.50		76.20			
No. of Teeth	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.	Hub dia.	Max. bore dia.
10	12	3.2	19	8.8	26	14	32	18	39	22	52	32	65	42	78	50	92	60	105	70	118	78	131	88	158	108		
11	15	5.6	22	11	30	18	37	22	45	27	60	38	76	50	91	60	106	71	121	80	137	92	152	103	183	126		
12	17	7.2	25	13	34	20	43	26	51	31	69	45	86	57	103	69	121	80	138	93	155	106	173	118	207	144		
13	19	8.8	28	15	38	22	48	30	57	36	77	51	96	64	116	79	135	91	155	105	174	119	193	132	232	162		
14	21	10	31	17	42	26	53	33	64	41	85	57	107	72	128	85	150	101	171	117	192	132	214	148	257	180		
15	23	12	35	20	46	28	58	37	70	46	93	61	117	80	140	95	164	111	187	129	211	146	235	163	282	199		
16	25	13	38	21	50	31	63	41	76	51	102	68	127	85	153	104	178	122	204	141	229	159	255	179	306	216		
17	27	14	41	24	54	34	68	45	82	53	110	74	137	93	165	112	193	132	220	152	248	173	275	193	331	232		
18	29	16	44	26	59	37	73	49	88	59	118	80	148	100	177	121	207	144	237	165	266	186	296	208	355	252		
19	31	17	47	29	63	41	79	51	94	62	126	84	158	108	189	129	221	153	253	177	284	199	316	224	380	268		
20	33	19	50	30	67	44	84	55	100	66	134	90	168	114	202	140	235	163	269	188	303	213	337	238	404	283		
21	35	20	53	33	71	47	89	59	107	72	142	95	178	122	214	148	250	175	285	200	321	226	357	254	429	303		
22	37	21	56	35	75	50	94	62	113	77	150	101	188	128	226	157	264	185	302	212	339	239	377	266	453	318		
23	39	22	59	37	79	51	99	65	119	80	159	109	199	137	238	165	278	196	318	224	358	254	398	278	477	338		
24	41	24	62	40	83	54	104	70	125	83	167	113	209	144	251	176	292	205	334	235	376	265	418	294	502	354		
25	43	25	65	42	87	57	109	73	131	88	175	120	219	152	263	184	307	217	351	249	394	275	438	310	526	372		

Note: When selecting max. bore diameter, select a hub wall thickness that matches the operating conditions based on standard machine design. Standard-type max. bore diameters for standard situations (SS400 sprocket, JIS keyway) are shown for your reference. The values have been calculated using JIS hub diameter formulae.

Before Use | Standard Roller Chains | Lube-Free Roller Chains | Heavy Duty Roller Chains | Corrosion Resistant Roller Chains | Specialty Roller Chains | Sprockets | Pin Gear Drives | Accessories | Selection | Handling