


# Sprockets / Chains

## 40B Series

**Sprockets - 40B Series**

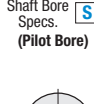


Type	Material	Surface Treatment
SP40B	1045 Carbon Steel or Equivalent (Induction Hardened Teeth Tip)	—
BSP40B	1045 Carbon Steel or Equivalent (Induction Hardened Teeth Tip)	Black Oxide
SSP40B	304 Stainless Steel Equivalent	—


**Accessories:** Set Screw  
(Only for shaft bore specifications (N))

⊖ Offset between tooth tip and keyway is ±0.5 mm.  
⊕ For the 12 or less teeth, sprockets have grooves on hub O.D.

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



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



**Shaft Bore Specifications**

Shaft Bore Dia. D	Keyway b <sub>2</sub> x l <sub>t</sub>	Set Screw M
10K 12	4 x 1.8	5
14-17	5 x 2.3	6
18-22	6 x 2.8	6
24-30	8 x 3.3	8
32 35	10 x 3.3	8
40	12 x 3.3	8

Part Number	Type	No. of Teeth	Shaft Bore Specs.	Shaft Bore Dia.		Dp	Do	H	GD	L	ℓ	Mass (g)	Available Types		
				S Specs. D <sub>98</sub>	N Specification D <sub>H7</sub>								S Spec. (In Stock)	N Spec. (Other than In Stock)	
9	SP40B	9	N	10K 12 14	14	37.13	42	28	23	5	110	•	•	•	
10		10K 12 14 15 16 17		17	45.08	51	36	31	•			•	•		
11		10K 12 14 15 16 17 18 19 20		20	49.07	55	40	35	•			•	•		
12		12 14 15 16 17 18 19 20 22		22	53.07	59	37	•	•			•			
13		12 14 15 16 17 18 19 20 22 24 25		25	57.07	63	42	•	•			•			
14		12 14 15 16 17 18 19 20 22 24 25 28 30		30	61.08	67	46	•	•			•			
15		12 14 15 16 17 18 19 20 22 24 25 28 30 32		32	65.1	71	50	•	•			•			
16		13 14 15 16 17 18 19 20 22 24 25 28 30 32 35		35	69.12	76	54	•	•			•			
17		13 14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	73.14	80	57	•	•			•			
18		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	77.16	84	62	•	•			•			
19		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	81.18	88	67	•	•			•			
20		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	85.21	92	71	•	•			•			
21		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	89.24	96	75	•	•			•			
22		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	93.27	100	77	•	•			•			
23		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	97.3	104	•	•	•			•			
24		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	101.33	108	•	•	•			•			
25		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	105.36	112	•	•	•			•			
26		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	109.39	116	•	•	•			•			
27		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	113.43	120	•	•	•			•			
28		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	117.46	124	•	•	•			•			
29		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	121.5	128	•	•	•			•			
30		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	125.57	132	•	•	•			•			
31		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	129.64	136	•	•	•			•			
32		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	133.71	140	•	•	•			•			
33		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	137.78	144	•	•	•			•			
34		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	141.85	148	•	•	•			•			
35		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	145.92	152	•	•	•			•			
36		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	150	156	•	•	•			•			
37		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	154.07	160	•	•	•			•			
38		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	158.14	164	•	•	•			•			
39		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	162.21	168	•	•	•			•			
40		14 15 16 17 18 19 20 22 24 25 28 30 32 35 40		40	166.28	172	•	•	•			•			

**Part Number Example** SP40B16 - N - 16

⊖ The H7 D dim. tolerance is applicable for the Shaft Bore Specs. S with the number of teeth: 13-15 or 19-25  
 ⊕ When selecting 10K, shaft bore diameter is Ø10 and keyway width is 4 mm (1.8 mm in height).  
 ⊕ For the Number of Teeth: 14 and the Shaft Dia.: 25 mm or for the Number of Teeth: 15 and the Shaft Dia.: 30 mm, the M6 set screw is applicable.

**Chains - 40B Series**

Type	Material
CHE40	Steel
CHEM40	Lubrication-Free (Steel Oil Contained Bushings)
CHES40	304 Stainless Steel

⊕ For details of Lubrication-Free Chains, refer to P.1510.  
 ⊕ For Small Conveyor Chains, refer to P.1510.

\*The last link is the Joint Link.

**Number of Links Configurable**

Part Number	No. of Links Specification (Specify Even No.)	h	m	n	Max. Allowable Tension (kN)
CHE40	4~	8.02	9.53	17.55	3.63
CHEM40	4~	8.55	10.05	18.60	3.63
CHES40	4~	8.02	9.53	17.55	0.44

**Part Number Example** CHE40 - 400

Number of Links Configurable CHE40 - 400  
 Unit Type CHE40-U

**Unit Type**


Part Number	Max. Allowable Tension (kN)
CHE40-U (240 Links, Circumference Length 3,048 mm)	3.63
CHEM40-U (240 Links, Circumference Length 3,048 mm)	3.63
CHES40-U (240 Links, Circumference Length 3,048 mm)	0.44

(1) Specify links by even numbers. (One joint link included)  
 (2) A roller chain longer than the unit length (number of unit links) is divided into separate packages per unit. Ex.) CHE40-400, 2 separate packages: 240 links + 160 links.

# Sprockets / Chains / Oil-Free Chains

## 50B Series

**Sprockets - 50B Series**

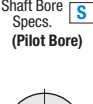


Type	Material	Surface Treatment
SP50B	1045 Carbon Steel or Equivalent (Induction Hardened Teeth Tip)	—
BSP50B	1045 Carbon Steel or Equivalent (Induction Hardened Teeth Tip)	Black Oxide
SSP50B	304 Stainless Steel Equivalent	—

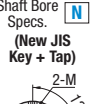
**Accessories:** Set Screw  
(Only for shaft bore specifications (N))

⊖ Offset between tooth tip and keyway is ±0.5mm.  
 ⊕ For the 13 or less teeth, sprockets have grooves on hub O.D.

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



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



**Shaft Bore Specifications**

Shaft Bore Dia. D	Keyway b <sub>2</sub> x l <sub>t</sub>	Set Screw M
15-17	5 x 2.3	6
18-22	6 x 2.8	6
24-30	8 x 3.3	8
32-38	10 x 3.3	8
40	12 x 3.3	8
45	14 x 3.8	10

Part Number	Type	No. of Teeth	Shaft Bore Specs.	Shaft Bore Dia.		Dp	Do	H	GD	L	ℓ	Mass (g)	Available Types		
				S Specs. D <sub>98</sub>	N Specification D <sub>H7</sub>								S Spec. (In Stock)	N Spec. (Other than In Stock)	
9	SP50B	9	N	10	14	46.42	53	34	29	5	200	•	•	•	
10		10 15 16 17 18 19 20 22		22	51.37	58	40	34	•			•	•		
11		12 15 16 17 18 19 20 22 24 25		25	56.35	64	45.5	38	•			•	•		
12		12 15 16 17 18 19 20 22 24 25 28 30 32		32	61.34	69	50	44	•			•	•		
13		12 15 16 17 18 19 20 22 24 25 28 30 32		32	66.34	74	51	49	•			•	•		
14		12 15 16 17 18 19 20 22 24 25 28 30 32		32	71.34	79	52	•	•			•			
15		12 15 16 17 18 19 20 22 24 25 28 30 32 35 38		38	76.35	84	57	•	•			•			
16		12 15 16 17 18 19 20 22 24 25 28 30 32 35 38 40		40	81.37	89	62	•	•			•			
17		14 15 16 17 18 19 20 22 24 25 28 30 32 35 38 40 45		45	86.39	94	67	•	•			•			
18		14 15 16 17 18 19 20 22 24 25 28 30 32 35 38 40 45		45	91.42	100	72	•	•			•			
19		14 15 16 17 18 19 20 22 24 25 28 30 32 35 38 40 45		45	96.45	105	•	•	•			•			
20		14 15 16 17 18 19 20 22 24 25 28 30 32 35 38 40 45		45	101.48	110	•	•	•			•			
21		14 15 16 17 18 19 20 22 24 25 28 30 32 35 38 40 45		45	106.51	115	•	•	•			•			
22		16 20 22 24 25 28 30 32 35 38 40 45		45	111.55	120	•	•	•			•			
23		16 20 22 24 25 28 30 32 35 38 40 45		45	116.58	125	•	•	•			•			
24		16 20 22 24 25 28 30 32 35 38 40 45		45	121.62	130	•	•	•			•			
25		16 24 25 28 30 32 35 38 40 45		45	126.66	135	•	•	•			•			
26		16 24 25 28 30 32 35 38 40 45		45	131.7	140	•	•	•			•			
27		16 24 25 28 30 32 35 38 40 45		45	136.74	145	•	•	•			•			
28		16 24 25 28 30 32 35 38 40 45		45	141.79	150	•	•	•			•			
29		16 24 25 28 30 32 35 38 40 45		45	146.83	155	•	•	•			•			
30		16 24 25 28 30 32 35 38 40 45		45	151.87	161	•	•	•			•			
31		16 24 25 28 30 32 35 38 40 45		45	156.91	166	•	•	•			•			
32		16 24 25 28 30 32 35 38 40 45		45	161.96	171	•	•	•			•			
33		16 24 25 28 30 32 35 38 40 45		45	167.01	176	•	•	•			•			
34		16 24 25 28 30 32 35 38 40 45		45	172.05	181	•	•	•			•			
35		16 24 25 28 30 32 35 38 40 45		45	177.1	186	•	•	•			•			

**Part Number Example** SP50B16 - N - 16

⊕ For the Number of Teeth: 11-13 and the Shaft Dia.: 24 mm or less, the M6 set screw is applicable.

**Chains - 50B Series**

Type	Material
CHE50	Steel
CHEM50	Lubrication-Free (Steel / Oil Contained Bushings)
CHES50	304 Stainless Steel

⊕ For details of Lubrication-Free Chains, refer to P.1510.  
 ⊕ For Small Conveyor Chains, refer to P.1510.

\*The last link is the Joint Link.

**Number of Links Configurable**

Part Number	No. of Links Specification (Specify Even No.)	h	m	n	Max. Allowable Tension (kN)
CHE50	4~	10.15	11.6	21.75	6.37
CHEM50	4~	10.57	12.03	22.60	6.37
CHES50	4~	10.15	11.6	21.75	0.69

**Part Number Example** CHE50 - 300

Number of Links Configurable CHE50 - 300  
 Unit Type CHE50-U

**Unit Type**

Part Number	Max. Allowable Tension (kN)
CHE50-U (192 Links, Circumference Length 3,048 mm)	6.37
CHEM50-U (192 Links, Circumference Length 3,048 mm)	6.37
CHES50-U (192 Links, Circumference Length 3,048 mm)	0.69

(1) Specify links by even numbers. (One joint link included)  
 (2) A roller chain longer than the unit length (number of unit links) is divided into separate packages per unit. Ex.) CHE50-300, 2 separate packages: 192 links + 108 links.