

Grub Screw Sets

with Ball Point / with Thrust Point / Stainless Steel Type

Grub Screw Sets – with Ball Point

Type	Screw	Pad	
		Material	Surface Treatment
SGBS	Straight Slot Groove	12L13 Carbon Steel	Black Oxide
SGBSN	Hex Socket	12L13 Carbon Steel	Black Oxide

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Part Number	Type	M (Coarse)	L	e	D	h	H	d	B	B ₁	Mass (g)
SGBS	10	50	3.4	18	2.5	9.2	11	7.8	5	15	
		63	3.4	21	3	10	13	9.4	6	19	
		100	3.4	21	3	10	13	9.4	6	68	

⊕ Screws and pads are not assembled when shipped.

Application Example

Features

- Useable to tighten or position the work or as a stopper.
- Clamping Screws can be made easily by assembling with a lever or a knob.
- Pad is made of plastic and will not damage the work-piece. It is effective when the work surface is uneven or tilted.

Grub Screw Sets – with Thrust Point

Type	Screw	Pad		Cap
		Material	Surface Treatment	
SGTS	Standard Type	1045 Carbon Steel or Equivalent	Black Oxide	—
SGTP	Wide-Angle Type	12L13 Carbon Steel	Black Oxide	—
SGTPP	Wide-Angle Type with Cap	12L13 Carbon Steel	Black Oxide	Polyacetal

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M (Coarse)	Screw Dimension					Pad Dimension										
	B	b	Z ₁	Z ₂	B ₁	D	h ₁	H ₁	t	d	C	e ₁	h ₂	H ₂	e ₂	D ₁
6	4.5	4	5.4	2.5	3	12	2.5	7	4	10	4.6	2.2	—	—	—	—
8	6	5.4	6.8	3	4	16	4	9	5	12(15)	6.1(6.3)	3	7	8	2.2	19
10	8	7.2	8.2	4.5	5	20	5	11	6	15(18)	8.1(8.4)	3.6	8.5	10	2.6	23
12	10	8	8.6	5	6	25	6	13	7	18(21)	8.1(9.2)	4.5	8	11	2.9	28
16	12	11	10.6	5	8	32	7	15	7.5	22(27)	12.1(12.5)	5.3	10	14	4.5	35
20	15.5	14.4	12.4	5.5	10	40	9	16	8	28	15.6	5.6	—	—	—	—

⊕ For dimensions C and d, the values shown in parentheses are the dimensions for SGTP and SGTPP.
⊕ SGTPP is SGTP attached with a polyacetal cap. ⊕ Screws and pads are not assembled when shipped

Application Example

With Thrust Point

How to Assemble Grub Screw & Thrust Pad

Insert a tilted grub screw to the open side of the retaining ring set in the thrust pad as shown in Fig. 1. Pull the grub screw up to fit into the pad as shown in Fig. 2. Assemble by hand. Do not assemble with hammer, etc. Do not use force when assembling.

Grub Screw Sets – Stainless Steel

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Material: 304 Stainless Steel

Part Number	Type	M (Coarse)	L Selection	D	D ₁	d	L ₁	L ₂	(t)	B	Available Types				
											L30	L50	L80		
SGKS	10	4	30	13	7	2.2	8	2	2	2	•	•	•		
		6	30								50	•	•	•	
		8	30								50	80	•	•	•
		10	50								80	•	•	•	

⊕ Screw and pad are caulked for Stainless Steel Type. (Screw and pad cannot be separated.)

Part Number Example

Part Number - L

SGBS10 - 50

SGTS8 - 60

SGKS4 - 30

Grub Screw Sets / Clamp Plates / Shims for Clamp Plates

Rubber Pads Type / Flanged Type

Grub Screw Sets – Rubber Pads Type

Type	Screw	Pad		Pad End Face
		Material	Surface Treatment	
SGKG	4137 Alloy Steel	1018 Carbon Steel or Equivalent	Black Oxide	NBR Nitrile Rubber

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Part Number	Type	M (Coarse)	L Selection	D	t	L ₁	L ₂	B	Available Types				
									L=30, 40	L=50, 60	L=80~		
SGKG	10	4	30	12	2	3	5	2	•	•	•		
		6	30						40	50	•	•	•
		8	40						50	60	•	•	•
		10	50						80	•	•	•	
		12	100						•	•	•	•	
		16	125						•	•	•	•	

Part Number Example

Part Number - L

SGKA12 - 100

Features: Optional attachments can be mounted using through holes on the pad.

Grub Screw Sets – Flanged Type

Type	Screw	Pad		Surface Treatment
		Material	Surface Treatment	
SGKA	4137 Alloy Steel	1018 Carbon Steel or Equivalent	Black Oxide	Black Oxide

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⊕ The coatings peeled off at swaging are retouched with repair sprays.

Part Number	Type	M (Coarse)	L Selection	D	P	D ₁	D ₂	L ₁	L ₂	L ₃	d ₁	B	Available Types				
													L=30, 40	L=50, 60	L=80~		
SGKA	10	4	30	20	14	7	2.2	3	5	2	3.5	2	•	•	•		
		6	30										40	50	•	•	•
		8	40										50	60	•	•	•
		10	50										80	•	•	•	
		12	100										•	•	•	•	
		16	125										•	•	•	•	

Part Number Example

Part Number - L

SGKA12 - 100

Clamp Plates

Type	Material	Hardness
PCWN	1045 Carbon Steel or Equivalent	45~50 HRC (Induction Hardened)
PCW	1045 Carbon Steel or Equivalent	—
PCWJ	Polyacetal	—

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⊕ No R1 for PCWJ (Polyacetal).
⊕ Induction hardening is applicable to PCW only.
⊕ For PCWJ, $\sqrt{6}$ is substituted for $\sqrt{1.6}$ part.

Part Number	Type	A	T	L	X	Y	d	d ₁	h								
										PCWN PCW PCWJ	10	12	12	30	7	6	4.5
15																	
16																	
19																	
25																	
30																	
40																	
50																	
12	15	50	9	7.5	8	6.6	11	7									
15																	
16																	
19																	
25																	
30																	
40																	
50																	
12									20	75	11	12.5	11	11	18	11	
15																	
16																	
19																	
25																	
30																	
40																	
50																	

Application Example

Shims for Clamp Plates

RoHS10

Material: 304 Stainless Steel (T=0.1, 0.2)
Low Carbon Steel (T=0.5-4)

Part Number	Type	A	T	L	D	b	e						
								CPWC	10	12	12	30	5
15													
16													
19													
25													
30													
40													
50													
12	15	50	7	9	7.5	8							
15													
16													
19													
25													
30													
40													
50													
12							20	75	12	13	12.5	15	
15													
16													
19													
25													
30													
40													
50													

Part Number Example

Part Number - T - L

PCWN50 - 20 - 100

CPWC50 - 2 - 75