


STRIPPER GUIDE BUSHINGS

— OIL-FREE TYPE —

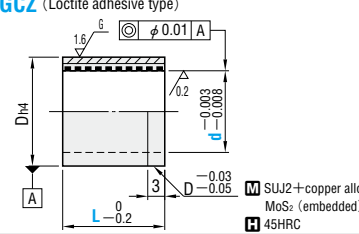
STRIPPER GUIDE BUSHINGS

— INTEGRATED BALL CAGE TYPE —


■ Copper alloy, oil-free type Use the stripper guide bushings at room temperature (40°C or less). Mounting method P.878



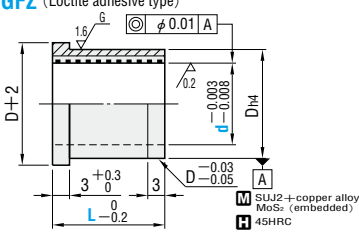
SGCZ (Loctite adhesive type)



Material: SUJ2+copper alloy, MoS₂ (embedded), 45HRC



SGFZ (Loctite adhesive type)




Material: SUJ2+copper alloy, MoS₂ (embedded), 45HRC

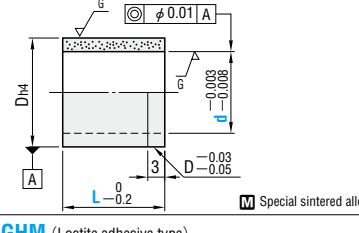
D _{h4}	Catalog No.		L						Base unit price 1~9 pieces
	Type	d	10	13	16	20	22	25	
16	SGCZ	10	10	13	16	20	22	25	Quotation
20		13	13	16	20	22	25	30	
24		16	16	20	22	25	30	35	
28		20	16	20	22	25	30	35	
34		25	20	22	25	30	35		

D _{h4}	Catalog No.		L						Base unit price 1~9 pieces
	Type	d	10	13	16	20	22	25	
16	SGFZ	10	10	13	16	20	22	25	Quotation
20		13	13	16	20	22	25	30	
24		16	16	20	22	25	30	35	
28		20	16	20	22	25	30	35	
34		25	20	22	25	30	35		


■ Sintered alloy (dispersed solid lubricant), oil-free type Guide P.878



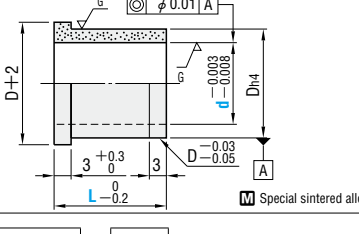
SGBM (Loctite adhesive type)



Material: Special sintered alloy



SGHM (Loctite adhesive type)



Material: Special sintered alloy

D _{h4}	Catalog No.		L						Base unit price 1~9 pieces
	Type	d	10	13	16	20	22	25	
16	SGBM	10	10	13	16	20	22	25	Quotation
20		13	13	16	20	22	25	30	
24		16	16	20	22	25	30	35	
28		20	20	22	25	30	35		
34		25	20	22	25	30	35		

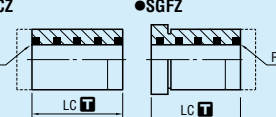
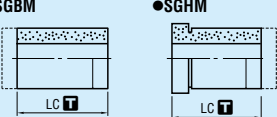
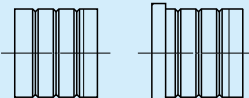
D _{h4}	Catalog No.		L						Base unit price 1~9 pieces
	Type	d	10	13	16	20	22	25	
16	SGHM	10	10	13	16	20	22	25	Quotation
20		13	13	16	20	22	25	30	
24		16	16	20	22	25	30	35	
28		20	20	22	25	30	35		
34		25	20	22	25	30	35		

Order **Catalog No.** — L
SGFZ 10 — 16


Price **Quotation**

Days to Ship **Quotation**

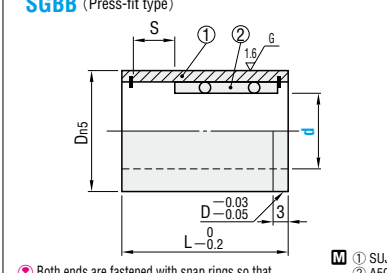
Alterations **Catalog No.** — L(LC) — (DLC)
SGFZ 16 — LC18.0 **Quotation**

Alteration Code	L dimension change		Addition of grooves for Loctite																																					
	LC		DLC																																					
Spec.	<p>●SGCZ ●SGFZ</p>  <p>For SGCZ and SGFZ, R may become larger depending on the position of the solid lubricant.</p> <table border="1"> <tr><th>d</th><th>LC</th><th>T</th></tr> <tr><td>10</td><td>8.0 ≤ LC < L</td><td></td></tr> <tr><td>13</td><td>10.0 ≤ LC < L</td><td></td></tr> <tr><td>16</td><td>13.0 ≤ LC < L</td><td>0</td></tr> <tr><td>20</td><td>16.0 ≤ LC < L</td><td>-0.2</td></tr> <tr><td>25</td><td>20.0 ≤ LC < L</td><td></td></tr> </table>	d	LC	T	10	8.0 ≤ LC < L		13	10.0 ≤ LC < L		16	13.0 ≤ LC < L	0	20	16.0 ≤ LC < L	-0.2	25	20.0 ≤ LC < L		<p>●SGBM ●SGHM</p>  <p>Depending on the position of the solid lubricant, R may become larger.</p> <table border="1"> <tr><th>d</th><th>LC</th><th>T</th></tr> <tr><td>10</td><td>8.0 ≤ LC < L</td><td></td></tr> <tr><td>13</td><td>10.0 ≤ LC < L</td><td></td></tr> <tr><td>16</td><td>13.0 ≤ LC < L</td><td>0</td></tr> <tr><td>20</td><td>16.0 ≤ LC < L</td><td>-0.2</td></tr> <tr><td>25</td><td>20.0 ≤ LC < L</td><td></td></tr> </table>	d	LC	T	10	8.0 ≤ LC < L		13	10.0 ≤ LC < L		16	13.0 ≤ LC < L	0	20	16.0 ≤ LC < L	-0.2	25	20.0 ≤ LC < L		<p>Grooves for Loctite are machined on the outside of the bushing.</p>  <p>Straight-headed type * Number of grooves on outside 8.0 ≤ L(LC) ≤ 15.9 → 1 16.0 ≤ L(LC) ≤ 24.9 → 2 25.0 ≤ L(LC) ≤ 35.0 → 3</p>	
	d	LC	T																																					
10	8.0 ≤ LC < L																																							
13	10.0 ≤ LC < L																																							
16	13.0 ≤ LC < L	0																																						
20	16.0 ≤ LC < L	-0.2																																						
25	20.0 ≤ LC < L																																							
d	LC	T																																						
10	8.0 ≤ LC < L																																							
13	10.0 ≤ LC < L																																							
16	13.0 ≤ LC < L	0																																						
20	16.0 ≤ LC < L	-0.2																																						
25	20.0 ≤ LC < L																																							
1Code	Quotation		Quotation																																					


■ Integrated ball cage type



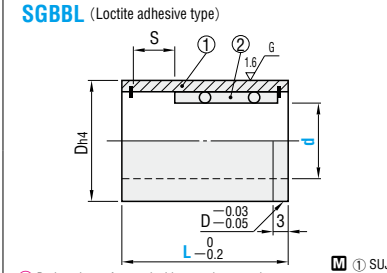
SGBB (Press-fit type)



Material: SUJ2, A5056, 58HRC~



SGBBL (Loctite adhesive type)



Material: SUJ2, A5056, 58HRC~

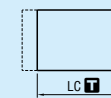
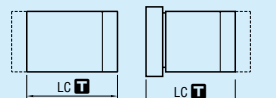
SGBB 8 Ball diameter 1.588mm (1/16 inch)
 SGBB 10 Ball diameter 2.381mm (3/32 inch)
 SGBB13~25 Ball diameter 3.175mm (1/8 inch)
 SGBBL/F 8 Ball diameter 1.5mm
 SGBBL/F10~16 Ball diameter 2.0mm
 SGBBL/F20~25 Ball diameter 3.0mm

Order **Catalog No.** — L
SGBB 20
SGBBL 20 — 35

Days to Ship **Quotation**

Alterations **Catalog No.** — L(LC) **Quotation**
SGBB 16.0 — LC30.0
SGBBF 13 — LC22.5

To use alternation LC for SGBB, specify dimension d to the first decimal place.

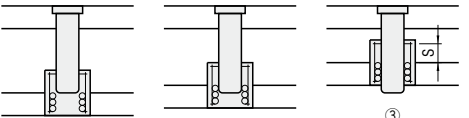
Alteration Code	L dimension change																																													
	LC																																													
Spec.	<p>●SGBB</p>  <table border="1"> <tr><th>d</th><th>LC</th><th>T</th></tr> <tr><td>8</td><td>20.0 ≤ LC < L</td><td></td></tr> <tr><td>10</td><td>25.0 ≤ LC < L</td><td></td></tr> <tr><td>13</td><td>30.0 ≤ LC < L</td><td></td></tr> <tr><td>16</td><td>30.0 ≤ LC < L</td><td>0</td></tr> <tr><td>20</td><td>35.0 ≤ LC < L</td><td>-0.2</td></tr> <tr><td>25</td><td>40.0 ≤ LC < L</td><td></td></tr> </table> <p>S dimension is shortened by (L-LC). (S ≥ 2.5)</p>	d	LC	T	8	20.0 ≤ LC < L		10	25.0 ≤ LC < L		13	30.0 ≤ LC < L		16	30.0 ≤ LC < L	0	20	35.0 ≤ LC < L	-0.2	25	40.0 ≤ LC < L		<p>●SGBBL ●SGBBF</p>  <table border="1"> <tr><th>d</th><th>LC</th><th>T</th></tr> <tr><td>8</td><td>17.5 ≤ LC < L</td><td></td></tr> <tr><td>10</td><td>22.5 ≤ LC < L</td><td></td></tr> <tr><td>13</td><td>22.5 ≤ LC < L</td><td></td></tr> <tr><td>16</td><td>25.0 ≤ LC < L</td><td></td></tr> <tr><td>20</td><td>25.0 ≤ LC < L</td><td>0</td></tr> <tr><td>25</td><td>35.0 ≤ LC < L</td><td>-0.2</td></tr> </table> <p>S dimension is shortened by (L-LC). (S ≥ 2.5)</p>	d	LC	T	8	17.5 ≤ LC < L		10	22.5 ≤ LC < L		13	22.5 ≤ LC < L		16	25.0 ≤ LC < L		20	25.0 ≤ LC < L	0	25	35.0 ≤ LC < L	-0.2		
	d	LC	T																																											
8	20.0 ≤ LC < L																																													
10	25.0 ≤ LC < L																																													
13	30.0 ≤ LC < L																																													
16	30.0 ≤ LC < L	0																																												
20	35.0 ≤ LC < L	-0.2																																												
25	40.0 ≤ LC < L																																													
d	LC	T																																												
8	17.5 ≤ LC < L																																													
10	22.5 ≤ LC < L																																													
13	22.5 ≤ LC < L																																													
16	25.0 ≤ LC < L																																													
20	25.0 ≤ LC < L	0																																												
25	35.0 ≤ LC < L	-0.2																																												
1Code	Quotation		Quotation																																											

D _{h5}	L	N Number of rows	n Number of balls	S	Maximum stroke	Catalog No.		Base unit price 1~9 pieces
						Type	d	
16	24	5	55	7.8	15.6	SGBB (Press-fit type)	8	Quotation
20	30	5	55	8.4	16.8		10	
25	35	6	66	9.25	18.5		13	
28	37	6	78	10.15	20.3		16	
32	45	7	96	12.75	25.5		20	
38	50	7	112	14.0	28.0	25		

D _{h4}	N Number of rows	n Number of balls	S	Maximum stroke	Catalog No.		L (Selection)	Base unit price 1~9 pieces
					Type	d		
16	5	35	5	10	SGBBL (Loctite adhesive type)	8	20	Quotation
20	7	49				10	25	
	8	64				13	30	
	6	60				16	35	
25	8	80				7	77	
28	9	99	7.5	15	25	40		
32	4	44	8	112	SGBBF (Loctite adhesive type)	8	20	Quotation
38	6	66				10	25	

D _{h4}	N Number of rows	n Number of balls	S	Maximum stroke	Catalog No.		L (Selection)	Base unit price 1~9 pieces
					Type	d		
16	5	35	5	10	SGBBF (Loctite adhesive type)	8	20	Quotation
20	7	49				10	25	
	8	64				13	30	
	6	60				16	35	
25	8	80				7	77	
28	9	99	7.5	15	25	40		
32	4	44	8	112	SGBBF (Loctite adhesive type)	8	20	Quotation
38	6	66				10	25	

EX Example



① Insert the pin into the bushing that is set in the stripper plate.
② ③ Because the pin and bushing are fastened by an interference fit of 2~20 μm, push the pin down to the bottom dead center.

Max. stroke = S × 2

Price **Quotation**