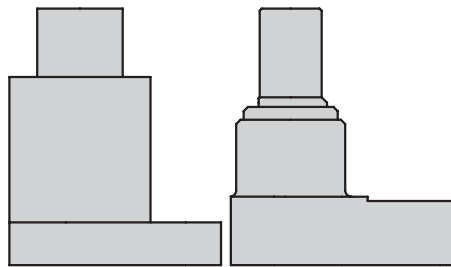


# Punch Stripper Unit PSCM and PSCM Series

## OUTLINE OF PUNCH STRIPPER UNIT

### Feature of PSCL and PSCM Series



BPS Series

PSC Series

Punch Stripper Unit for General Retainers

- The smaller design of the outer punch shape enables easier processing in limited spaces compared to the BPS series.
- PPSCL series for Light Duty  
PSCM series for Middle Duty
- Set the entry to the pierce 5 mm or less.
- The tip shape of the Pad can be changed.

When you order:

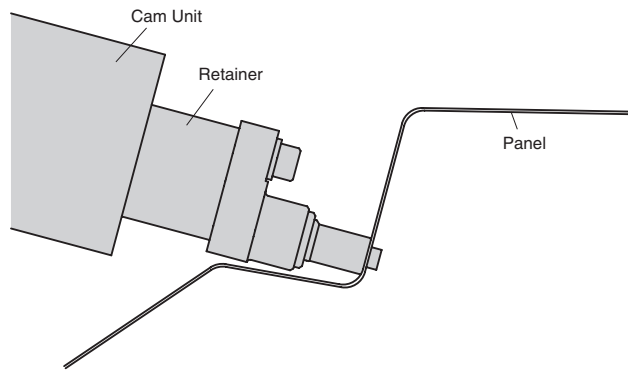
- For your Piercing Punch  $\phi 10$  and  $\phi 13$ , lengths 80, 90, and 100 mm are selectable.
- For Retainer, heights 25, 30, and 35 mm.  
For Ball Lock Retainer, heights 32 and 41 mm.

$\phi 16$ ,  $\phi 20$ ,  $\phi 25$ , and  $\phi 32$  upon request.



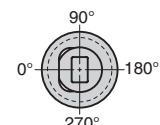
Example

The PSCL and PSCM series are designed to minimize its outer shape, which helps to process places that require avoiding any interfaces with a panel.

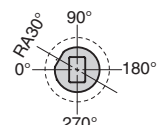


### Options for Additional Processing

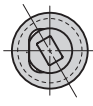
- Locking positions of irregular Punch Point Shapes can be changed by the option below. -RA



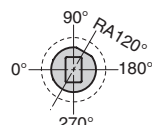
Standard 0° position



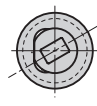
RA30° position



For RA30°



RA120° position



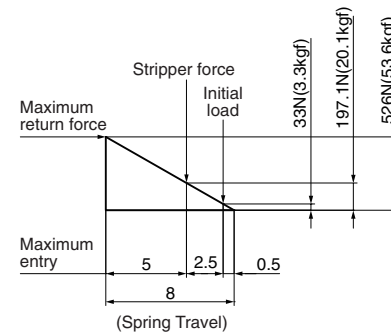
For RA120°

### Table of Components

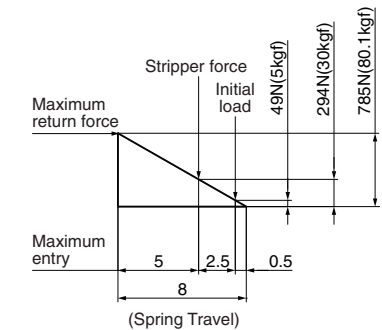
No.	Description	Qty	Material and Remark
①	Case	1	SS400
②	Pad	1	Copper alloy
③	Backing Plate	1	S45C
④	Hexagon Socket Head Bolt	1	SCM435 M5×10
⑤	Coil Spring	1	Refer to the standard table.
⑥	Washer (Accessory)	1	for M8
⑦	Hexagon Socket Head Bolt (Accessory)	1	SCM435 M8×25

### Spring Diagram

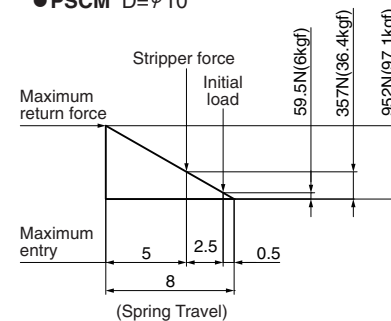
● PSCL D= $\phi 10$



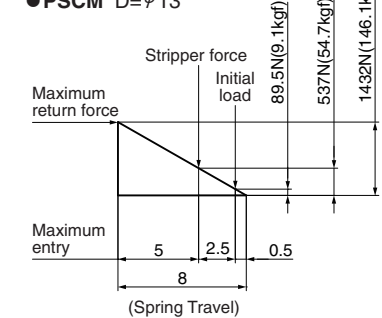
● PSCL D= $\phi 13$



● PSCM D= $\phi 10$



● PSCM D= $\phi 13$



# Punch Stripper Unit Compact Type

PUNCH STRIPPER UNIT

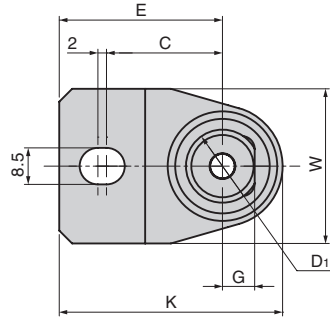
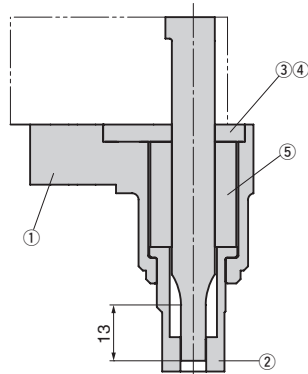
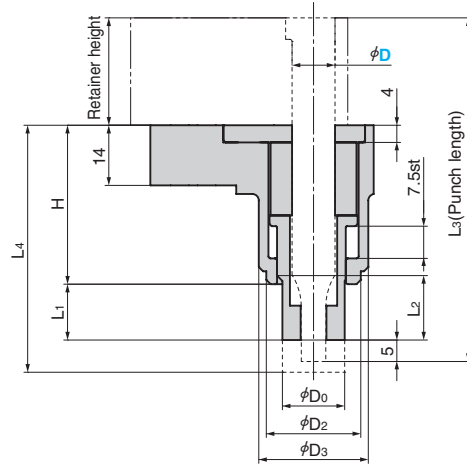
CAD FILE

Light Duty : 1,000,000-stroke model

- PSCLB (Bushing blank type)
- PSCLA (Round hole)
- PSCLR (Square hole with radius)
- PSCLE (Oblong hole)

Middle Duty : 300,000-stroke model

- PSCMB (Bushing blank type)
- PSCMA (Round hole)
- PSCMR (Square hole with radius)
- PSCME (Oblong hole)



Catalog No.	D	Punch Length L <sub>3</sub>	Travel S (mm)	Initial Load N (kgf)	Stripper Force N (kgf) Note1	Maximum Return Force N (kgf)	Spring Constant N/mm (kgf/mm)	Spring Type
PSCL	10	80	7.5	33	197	526	65.7	SWL22-25
		90		(3.3)	(20.1)	(53.6)	(6.7)	
		100						
PSCL	13	80	7.5	49	294	785	98.1	SWL27-25
		90		(5)	(30)	(80.1)	(10)	
		100						
PSCM	10	80	7.5	59.5	357	952	119	SWM22-25
		90		(6)	(36.4)	(97.1)	(12.1)	
		100						
PSCM Note 2	13	80	7.5	89.5	537	1432	179	SWM27-25
		90		(9.1)	(54.7)	(146.1)	(18.3)	
		100						

\*<Note 1> : When pad stroke is set to 2.5 mm

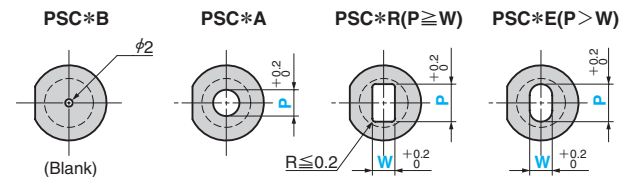
\*<Note 2> : This is a 300,000-stroke model. The spring must be replaced after 300,000 stroke.

D	Punch Length L <sub>3</sub>	Retainer Height	H	L <sub>1</sub>	L <sub>2</sub>	L <sub>4</sub>	C	E	G	D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	W	K
80	10	25	37	13	12	57.5	27	38	7.5	14.5	17	22	25.5	36	52
		30		8	7	52.5									
		(32)		12	11	56.5									
		35(41)		3	2	47.5									
90	10	25	37	23	22	67.5	27	38	7.5	14.5	17	22	25.5	36	52
		30		18	17	62.5									
		(32)		22	21	66.5									
		35(41)		13	12	57.5									
100	10	25	37	33	32	77.5	27	38	7.5	14.5	17	22	25.5	36	52
		30		28	27	72.5									
		32		32	31	76.5									
		35(41)		23	22	67.5									
80	13	25	37	13	12	57.5	30	39	9	17.5	20	26	33	35	56.5
		30		8	7	52.5									
		(32)		12	11	56.5									
		35(41)		3	2	47.5									
90	13	25	37	23	22	67.5	30	39	9	17.5	20	26	33	35	56.5
		30		18	17	62.5									
		32		22	21	66.5									
		35(41)		13	12	57.5									
100	13	25	37	33	32	77.5	30	39	9	17.5	20	26	33	35	56.5
		30		28	27	72.5									
		32		32	31	76.5									
		35(41)		23	22	67.5									

\* The figures in parentheses ( ) are for ball lock retainers.

## Punch Point Shape

Set the point shape diameter to +0.1 mm or more.



\* Use PSCLB/PSCMB with the additional processing of the pad hole shape.

\* Set the entry of the pierce to 5mm or less.

D	Punch Length L <sub>3</sub>	0.1 mm increments				
		PSC*A	PSC*R		PSC*E	
		P	P	W	P	W
10	80	3.0~11.0	3.0~8.0	3.0~8.0	3.1~11.0	3.0~10.8
	90					
	100					
13	80	3.0~14.0	3.0~10.1	3.0~10.1	3.1~14.0	3.0~13.8
	90					
	100					



Order	Catalog No.	Point Shape	Shank Diameter	Punch Length	Retainer Height	Hole Diameter	Option
	PSCL	B	10	80	32		
	PSCL	A	10	90	41	P6.5	
	PSCM	R	13	100	35	P8.2-W6.0	RA120

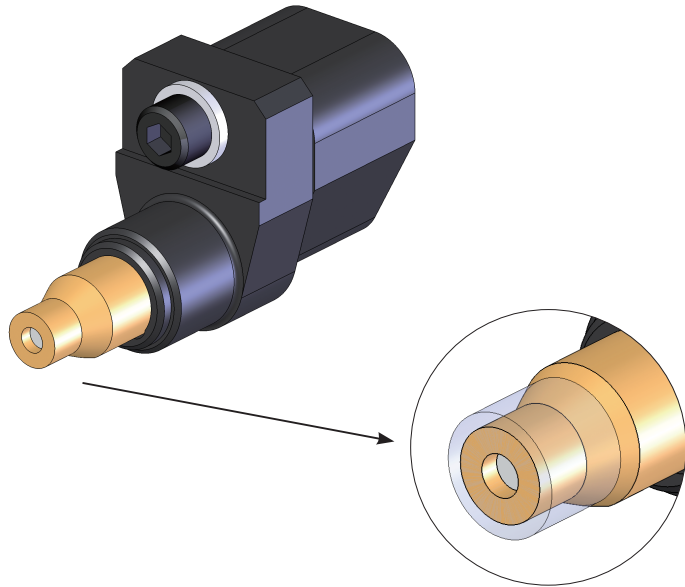
# Punch Stripper Unit Compact Type

PUNCH STRIPPER UNIT

**NEW** CAD FILE

**NEW** CAD FILE

Wider Application Range attained with Smaller Stripper Head



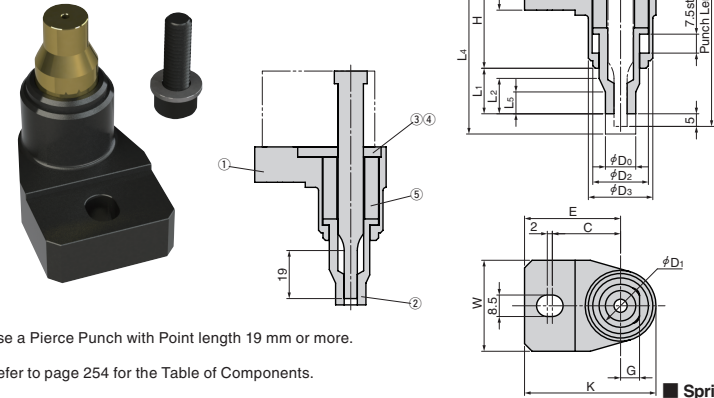
Tip downsized from  $\phi 14.5$  to  $\phi 12$

- Stripper Head modification of Old PSCL Series, Decreases Head from  $\phi 14.5$  to  $\phi 12$  for Punch Stripping in Compact Spaces Applications.
- Extra Small Bushing is ideal for Pierce Shank Diameter  $\phi 10$

Light Duty : 1,000,000-stroke model

**PSCLSB** - Extra Small Blank Bushing

**PSCLSA** - Extra Small Bushing with Round Punch

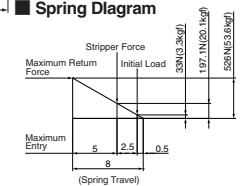


⚠ Use a Pierce Punch with Point length 19 mm or more.

📖 Refer to page 254 for the Table of Components.

■ Spring Diagram

Catalog No.	D	Punch Length L <sub>3</sub>	Travel S(mm)	Initial Load N(kgf)	Stripper Force N(kgf)*	Maximum Return Force N(kgf)	Spring Constant N/mm (kgf/mm)	Spring Type
<b>PSCLSB</b>	10	80	7.5	33 (3.3)	197 (20.1)	526 (53.6)	65.7 (6.7)	SWL22-25
<b>PSCLSA</b>		90						
		100						

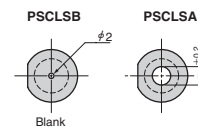


\* When working stroke is set to 2.5 mm.

D	Punch Length L <sub>3</sub>	Retainer Height	H	L <sub>1</sub>	L <sub>2</sub>	L <sub>4</sub>	L <sub>5</sub>	C	E	G	D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	W	K
10	80	25	37	13	14	57.5	8.6	27	38	7.5	12	17	22	25.5	36	52
		30		8	9	52.5	3.6									
		(32)		12	14	56.5	8.6									
	90	25		23	67.5	8.6										
		30		18	62.5											
		(32)		22	66.5											
	100	35(41)		13	14	57.5	8.6									
		25		33	77.5											
		30		28	72.5											
(32)		32	76.5													
	35(41)	23	67.5													

■ Punch Point Shape

Set the point shape diameter to +0.1 mm or more.



\* NOTE: Inside "( )" shows the dimension for Ball Retainer.

D	Punch Length L <sub>3</sub>	0.1mm increments
		P
10	80	3.0 ~ 6.6
	90	
	100	

- ⚠ PSCLSB requires the processing of additional punch point shape before use.
- Set the entry of the pierce to 5 mm or less.
- Other shapes upon request.



Order

Catalog No.	Point Shape	Shank Diameter	Punch Length	Retainer Height	Hole Diameter
<b>PSCLS</b>	<b>B</b>	<b>10</b>	<b>80</b>	<b>32</b>	
<b>PSCLS</b>	<b>A</b>	<b>10</b>	<b>90</b>	<b>41</b>	<b>P5.2</b>