

# Punch Stripper Unit [Overview]

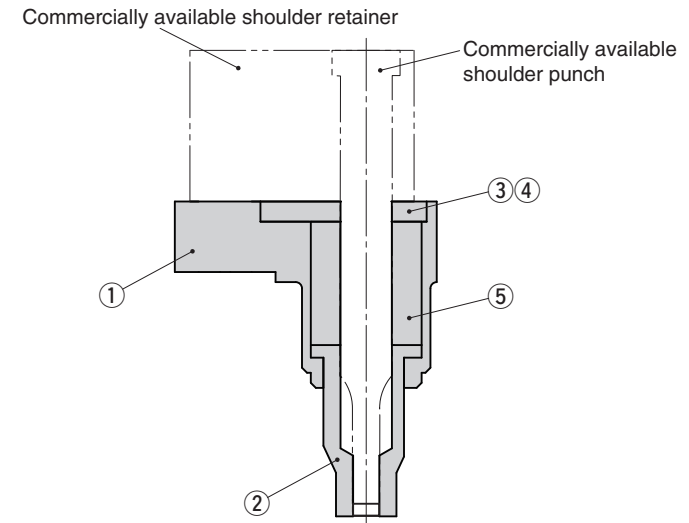
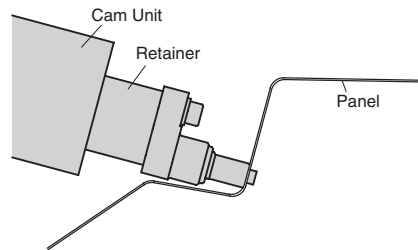
## Compact Type PSCL, PSCM, and PSCLS Series

### Pierce Components

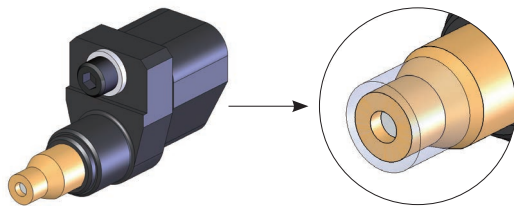
- Punch Stripper Unit for General Retainers
- The smaller design of the outer punch shape enables easier processing in limited spaces compared to the BPS series.  
For your Piercing Punch  $\phi 10$  and  $\phi 13$ , lengths 80, 90, and 100 mm are selectable.
- For Retainer, heights 25, 30, and 35 mm. For Ball Lock Retainer, heights 32 and 41 mm.
- Set the entry to the pierce 5 mm or less.
- The tip shape of the Pad can be changed.
- PSCL series for Light Duty  
PSCM series for Middle Duty  
\*  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$ , and  $\phi 32$  upon request.



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.



- Extra Small Bushing is ideal for Pierce Shank Diameter  $\phi 10$



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



No.	Description	Qty	Remark
1	Case	1	—
2	Pad	1	—
3	Backing Plate	1	—
4	Hexagon Socket Head Bolt	2	—
5	Coil Spring	1	Refer to the Spring Specification.
6	Washer (Accessory)	1	M8
7	Hexagon Socket Head Bolt (Accessory)	1	M8x25

# Punch Stripper Unit [Overview]

## Compact Type PSCL, PSCM, and PSCLS Series

### Pierce Components

#### Spring Specification: PSCL, PSCM

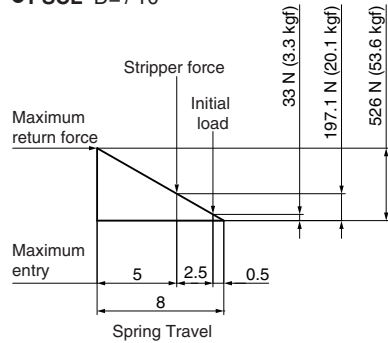
Catalog No.	D	Punch Length L <sub>3</sub>	Travel S	Initial Load N (kgf)	Stripper Force N (kgf)*1	Maximum Return Force N (kgf)	Spring Constant N/mm (kgf/mm)	Spring Model
PSCLB PSCLA	10	80	7.5	33 (3.3)	197 (20.1)	526 (53.6)	65.7 (6.7)	SWL22-25
		90						
		100						
PSCLR PSCLE	13	80	7.5	49 (5)	294 (30)	785 (80.1)	98.1 (10)	SWL27-25
		90						
		100						
PSCMB PSCMA	10	80	7.5	59.5 (6)	357 (36.4)	952 (97.1)	119 (12.1)	SWM22-25
		90						
		100						
PSCMR PSCME	13	80	7.5	89.5 (9.1)	537 (54.7)	1432 (146.1)	179 (18.3)	SWM27-25
		90						
		100						

\*1 When pad stroke is set to 2.5 mm

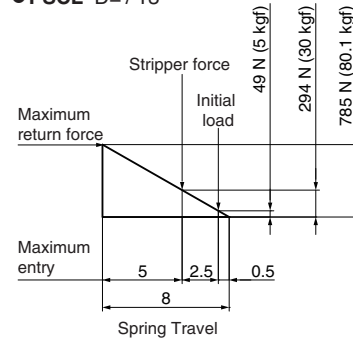
\*2 This is a 300,000 strokes model. The spring must be replaced after 300,000 strokes.

#### Spring Diagram

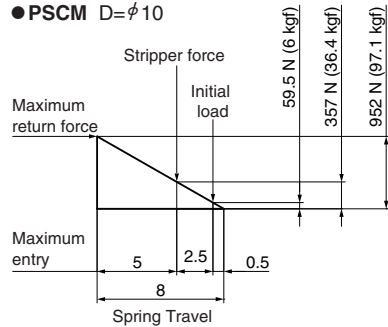
##### PSCL D=φ10



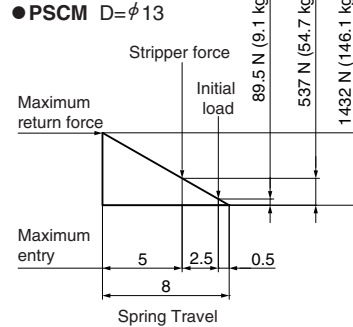
##### PSCL D=φ13



##### PSCM D=φ10

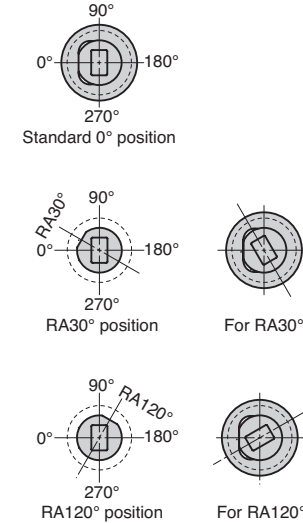


##### PSCM D=φ13



#### Options

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



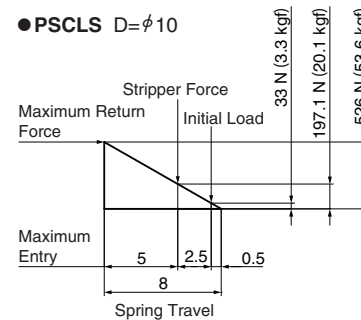
#### Spring Specification: PSCLS

Catalog No.	D	Punch Length L <sub>3</sub>	Travel S	Initial Load N (kgf)	Stripper Force N (kgf)*1	Maximum Return Force N (kgf)	Spring Constant N/mm (kgf/mm)	Spring Type
PSCLSB PSCLSA	10	80	7.5	33 (3.3)	197 (20.1)	526 (53.6)	65.7 (6.7)	SWL22-25
		90						
		100						

\*1 When working stroke is set to 2.5 mm.

#### Spring Diagram

##### PSCLS D=φ10



# Punch Stripper Unit

## Compact Type PSCL, PSCM Series

### Pierce Components

Light Duty: 1,000,000 strokes mode

**PSCLB** (Bushing blank type)

**PSCLA** (Round hole)

**PSCLR** (Square hole with radius)

**PSCLE** (Oblong hole)

Middle Duty: 300,000 strokes model

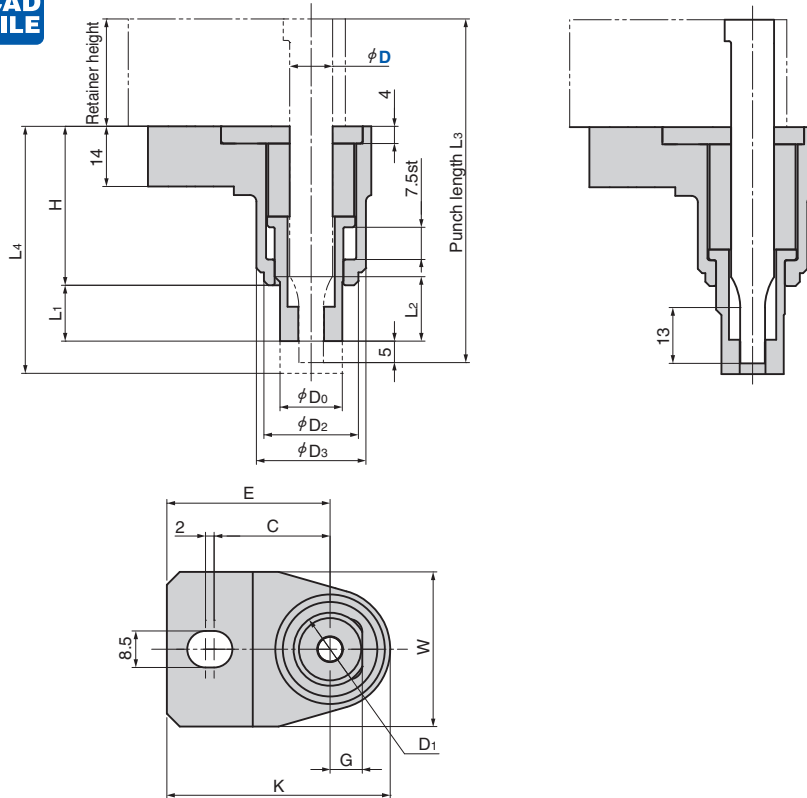
**PSCM** (Bushing blank type)

**PSCMA** (Round hole)

**PSCMR** (Square hole with radius)

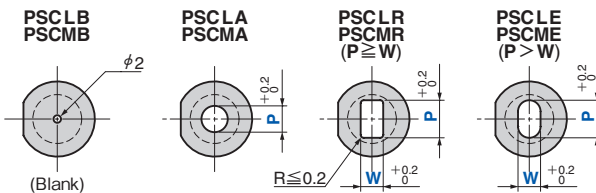
**PSCME** (Oblong hole)

CAD FILE



● Punch Point Shape

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



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

Catalog No.	D	Punch Length L <sub>3</sub>	0.1 mm increments					
			PSCLA·PSCMA		PSCLR·PSCMR		PSCLE·PSCME	
			P	P	W	P	W	
PSCLB PSCLA PSCLR PSCLE	10	80 90 100	3.0~11.0	3.0~ 8.0	3.0~ 8.0	3.1~11.0	3.0~10.8	
PSCMB PSCMA PSCMR PSCME	13	80 90 100	3.0~14.0	3.0~10.1	3.0~10.1	3.1~14.0	3.0~13.8	



Order

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



Option

Option Code	Specification
RA	Lock position of the irregular shape (square or oblong hole) bushing is changed (at increments of 1°).



Refer to page 246 for option details.

■ Guideline for Use

- Use PSCLB/PSCMB with the additional processing of the pad hole shape.
- Set the entry of the pierce to 5 mm or less.

**NEW**

# Punch Stripper Unit

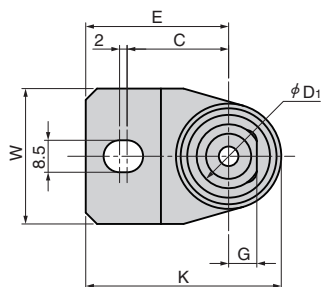
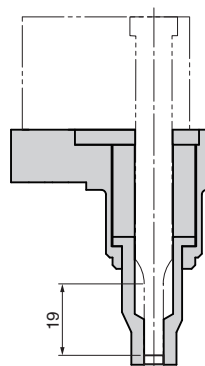
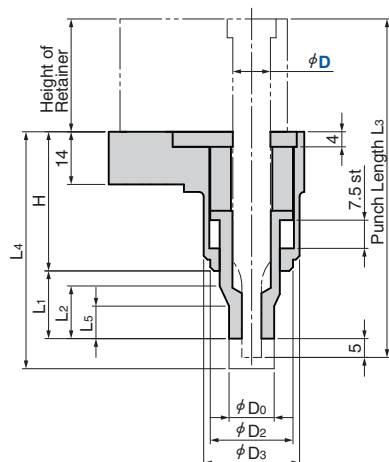
## Compact Type PSCLS Series

### Pierce Components

Light Duty: 1,000,000 strokes model

**PSCLSB** (Extra Small Blank Bushing)

**PSCLSA** (Extra Small Bushing with Round Punch)

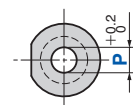
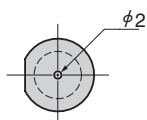


● Punch Point Shape

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

**PSCLSB**

**PSCLSA**



(Blank)

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
80	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	90	25	37	23		67.5		27	38	7.5	12	17	22	25.5	36	52
		30		18		62.5										
		(32)		22		66.5										
100	100	35 (41)	37	13	14	57.5	8.6	27	38	7.5	12	17	22	25.5	36	52
		25		33		77.5										
		30		28		72.5										
		(32)		32		76.5										
		35 (41)	37	23		67.5		27	38	7.5	12	17	22	25.5	36	52

Inside "( )" shows the dimension for Ball Retainer.

Catalog No.	D	Punch Length L <sub>3</sub>	0.1 mm increments	
			PSCLSA	P
<b>PSCLSB</b>	10	80		
<b>PSCLSA</b>		90	3.0~6.6	
		100		



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

■ Guideline for Use

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

Pierce Components