

KEY FLAT SHANK JECTOR PUNCHES

—WPC® TREATMENT·HW COATING—



Calculating the projection length of the jector pin (reference value) **P.241**

For details of jector holes, refer to Jector Punch Blanks **P.236**
 For details of jector pins, refer to Jector Pin Sets **P.241**

Type	Shank diameter D tolerance	M H	Catalog No.		The tip shape can be selected from Tip shape A~G in the figure below.	
			Type	Tip shape	B Tip length	H
—WPC® treatment— RoHS	D +0.005 0		GW-SJ GW-SJV	A D	S L	<p>The tip edges are very slightly rounded.</p>
			GW-PJ GW-PJV	R E	X	
—HW coating—			GHW-PJ GHW-PJV	G		

Tip shape A

When D=4~6
D/2 -0.5 -0.01 (Z/0.01/12)

Tip shape D

When D=4~6
D/2 -0.5 -0.01 (Z/0.01/12)

Tip shape R

When D=4~6
D/2 -0.5 -0.01 (Z/0.01/12)

Tip shape E

Tip shape G

Type	Tip shape	Tip length	D	L										B	H
				0.01mm increments											
				A		D R E G		R							
—WPC® treatment— GW-SJ GW-PJ	S	(4)	40	50	60	70	80	1.00~	2.80	3.97	2.80	1.00	0.15 ≤ R < W/2	7	
		(5)	40	50	60	70	80	2.00~	3.80	4.97	3.80	2.00		8	
		(6)	40	50	60	70	80	2.00~	4.80	5.97	4.80	2.00		9	
		8	40	50	60	70	80	3.00~	5.80	7.97	5.80	3.00		11	
		10	40	50	60	70	80	3.00~	7.80	9.97	7.80	3.00		13	
		13	40	50	60	70	80	6.00~	10.80	12.97	10.80	6.00		16	
		16	40	50	60	70	80	10.00~	13.80	15.97	13.80	6.00		19	
		20	40	50	60	70	80	13.00~	17.80	19.97	17.80	6.00		23	
		25	40	50	60	70	80	18.00~	22.80	24.97	22.80	6.00		28	
		Spring reinforced type (D8~25) GW-SJV GW-PJV	S	(4)	50	60	70	80	1.00~	2.80	3.97	2.80		2.00	0.15 ≤ R < W/2
(5)	50			60	70	80	2.00~	3.80	4.97	3.80	2.00	8			
(6)	50			60	70	80	2.00~	4.80	5.97	4.80	2.00	9			
8	50			60	70	80	3.00~	5.80	7.97	5.80	3.00	11			
10	50			60	70	80	3.00~	7.80	9.97	7.80	3.00	13			
13	50			60	70	80	6.00~	10.80	12.97	10.80	6.00	16			
16	60			70	80	90	10.00~	13.80	15.97	13.80	6.00	19			
20	60			70	80	90	13.00~	17.80	19.97	17.80	6.00	23			
25	60			70	80	90	18.00~	22.80	24.97	22.80	6.00	28			
—HW coating— GHW-PJ	L			(4)	50	60	70	80	1.00~	2.80	3.97	2.80	2.00	0.15 ≤ R < W/2	
		(5)	50	60	70	80	2.00~	3.80	4.97	3.80	2.00	8			
		(6)	50	60	70	80	2.00~	4.80	5.97	4.80	2.00	9			
		8	50	60	70	80	3.00~	5.80	7.97	5.80	3.00	11			
		10	50	60	70	80	3.00~	7.80	9.97	7.80	3.00	13			
		13	50	60	70	80	6.00~	10.80	12.97	10.80	6.00	16			
		16	60	70	80	90	10.00~	13.80	15.97	13.80	6.00	19			
		20	60	70	80	90	13.00~	17.80	19.97	17.80	6.00	23			
		25	60	70	80	90	18.00~	22.80	24.97	22.80	6.00	28			
		—WPC® treatment— GW-SJ	X	(5)	60	70	80		2.00~	3.80	4.97	3.80	3.50		0.15 ≤ R < W/2
(6)	60			70	80		2.00~	4.80	5.97	4.80	3.50	9			
8	70			80	90	100	3.00~	5.80	7.97	5.80	5.00	11			
10	70			80	90	100	3.00~	7.80	9.97	7.80	6.00	13			
13	70			80	90	100	6.00~	10.80	12.97	10.80	6.00	16			
16	80			90	100		10.00~	13.80				19			
20	80			90	100		13.00~	17.80				23			
25	80			90	100		18.00~	22.80				28			

The spring constants of GW-SJV, GW-PJV, and GHW-PJV are twice those of GW-SJ, GW-PJ, and GHW-PJ respectively.
 L(40)→B=6 If full length is (40), tip length is 6 mm in all cases.
 L(50)→B=13 If full length is (50), tip length is 13mm in all cases.
 D R E G: P·K>D-0.05→ℓ=0 If P·K>D-0.05 for a shaped punch, D -0.01/-0.03 (press-in lead) is not included.
 D(4), (5), and (6) are specifications available for GW-SJ, GW-PJ, and GHW-PJ only.
 Spring reinforced types are available for D8~25 only.

Order **Catalog No.** — **L** — **P** — **W** — **R (R only)**

GW-SJS6 — **60** — **P3.00** — **W2.80**

Days to Ship **Quotation**

Effect of spring reinforced type
 The spring constant is twice that of a standard type jector punch. The large spring load results in more effective scrap removal.

Alterations **Catalog No.** — **L(LC·LCT·LMT)** — **P(PC)** — **W(WC)** — **R** — **(BC·HC·TC, etc.)**

GW-SJS6 — **LC58** — **P3.00** — **W2.80** — **HC8**

Alteration	Code	A	D R E G	1Code																																							
Alterations to tip	PC WC	Tip dimension change PC≥PCmin. 0.01 mm increments (if combined with PKC, 0.001 mm increments can be selected.)	<table border="1"> <tr><th>D</th><th>PCmin.</th></tr> <tr><td>4</td><td>0.900</td></tr> <tr><td>5</td><td>1.800</td></tr> <tr><td>6</td><td>1.800</td></tr> <tr><td>8</td><td>2.500</td></tr> <tr><td>10</td><td>2.800</td></tr> <tr><td>13</td><td>5.000</td></tr> <tr><td>16</td><td>8.000</td></tr> <tr><td>20</td><td>9.000</td></tr> <tr><td>25</td><td>9.000</td></tr> </table>	D	PCmin.	4	0.900	5	1.800	6	1.800	8	2.500	10	2.800	13	5.000	16	8.000	20	9.000	25	9.000	Tip dimension change PC·WC≥PC·WCmin. 0.01mm increments ⊗ Cannot be used for D4. ⊗ Cannot be used for tip X.	<table border="1"> <tr><th>D</th><th>PC·WCmin.</th></tr> <tr><td>5</td><td>1.80</td></tr> <tr><td>6</td><td>1.80</td></tr> <tr><td>8</td><td>2.50</td></tr> <tr><td>10</td><td>2.80</td></tr> <tr><td>13</td><td>5.00</td></tr> <tr><td>16</td><td>5.00</td></tr> <tr><td>20</td><td>5.00</td></tr> <tr><td>25</td><td>5.00</td></tr> </table>	D	PC·WCmin.	5	1.80	6	1.80	8	2.50	10	2.80	13	5.00	16	5.00	20	5.00	25	5.00
		D	PCmin.																																								
4	0.900																																										
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20	5.00																																										
25	5.00																																										
Alterations to full length	LC	Full length change (reduction in tip length) LC<L 0.1 mm increments Tip length B is reduced by (L-LC). (If combined with LKC·LKZ, 0.01 mm increments can be selected.) Projection length of jector pin is 2 mm.																																									
Alterations to shank	SKF	Single key flat on shank, configurable size SKF -0.01P≤2 (SKF-0.1) W≤2 (SKF-0.1) 0.1mm increments 0.1mm increments																																									
		Chamfering to tip side edge. 0.3≤PCC≤1 0.1 mm increments PCC≤(P-d-0.5)/2 d, dimension P.236 ⊗ Cannot be combined with PRC.																																									
Alterations to head	WKC HC TC TKC TKM TCC	Addition of double key flats in parallel																																									
		Head diameter change D≤HC<H 0.1 mm increments																																									
Alterations to tip	BC	Tip length change (shorter than standard) 2≤BC<B 0.1 mm increments The following restriction applies to tip type X with D dimension of 5 or 6.																																									
		Rounding of tip side edge 0.3≤PRC≤1 0.1 mm increments PRC≤(P-d-0.5)/2 d, dimension P.236 ⊗ Cannot be combined with PCC.																																									
Alterations to shank	AC	The jector pin is removed to create an air path and the side vent hole is plugged from the inside by inserting a resin (ABS) ring.																																									
		The jector pin is removed. ⊗ Cannot be combined with AC.																																									
Alterations to tip	PRC PCC PKC	Tip tolerance change P+0.01 ⇄ +0.005 0 ⇄ 0 (P dimension can be selected as 0.001 mm increments) ⊗ Cannot be used with HW coating.																																									
		Tip tolerance change P·W±0.01 ⇄ +0.01 0 ⇄ 0																																									
Alterations to full length	LCT LMT	Changes to head thickness tolerance and full length are processed using a single code. The allowable range of change, increment, ordering process, and notes (⊗) are the same as for LC.																																									
		Changes to head thickness tolerance and full length are processed using a single code. The allowable range of change, increment, ordering process, and notes (⊗) are the same as for LC.																																									
Alterations to shank	NDC	No press-in lead ℓ≥3 ⇄ ℓ=0																																									
		Full length tolerance change L+0.3 ⇄ +0.05 0 ⇄ 0																																									

P Price **Quotation**

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