

JECTOR PUNCHES

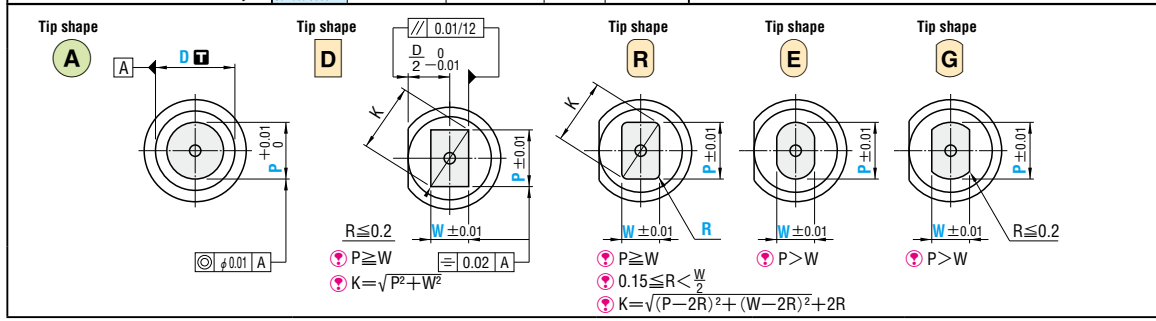
—WPC® TREATMENT·HW COATING—



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

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

Type	M	Catalog No.		Tip shape	B Tip length	The tip shape can be selected from Tip shape A~G in the figure below.
		Type	Shank dia. D			
—WPC® treatment— RoHS	61~64HRC Surface 1000~1100HV	W—SJ	AW—SJ	A	S	<p>The tip edges are very slightly rounded.</p>
		W—SJV	AW—SJV	D	L	
—HW coating—	Powdered high-speed steel 64~67HRC Surface 1000HV~1100HV	W—PJ	AW—PJ	R	X	
		W—PJV	AW—PJV	E	X	
For shank diameter tolerance D, select either m5 or +0.005	64~67HRC Surface 3000HV	HW—PJ	AHW—PJ	G	X	
		HW—PJV	AHW—PJV	G	X	



Type	Tip shape	B Tip length	D	0.01mm increments										B	H	
				L					D R E G							
				min.	P max.	P-Kmax.	P-Wmin.	R	min.	P max.	P-Kmax.	P-Wmin.	R			
—WPC® treatment— W—SJ W—PJ	S	8	(4)	40	50	60	70	80	1.00	3.99	3.97	1.00	0.15 ≤ R < W/2 (R only)	7		
			(5)	40	50	60	70	80	2.00	4.99	4.97	2.00		8		
			(6)	40	50	60	70	80	2.00	5.99	5.97	2.00		9		
			8	(40)	50	60	70	80	90	100	3.00	7.99		7.97	3.00	11
			10	(40)	50	60	70	80	90	100	3.00	9.99		9.97	3.00	13
			13	(40)	50	60	70	80	90	100	6.00	12.99		12.97	6.00	16
Spring reinforced type (D8~25) W—SJV W—PJV	S	13	(4)	50	60	70	80	1.00	3.99	3.97	2.00	0.15 ≤ R < W/2 (R only)	19			
			(5)	50	60	70	80	2.00	4.99	4.97	2.00		23			
			(6)	50	60	70	80	2.00	5.99	5.97	2.00		28			
			8	50	60	70	80	90	100	3.00	7.99		7.97	3.00	19	
			10	50	60	70	80	90	100	3.00	9.99		9.97	3.00	23	
			16	(40)	(50)	60	70	80	90	100	10.00		15.99	15.97	6.00	28
Spring reinforced type (D8~25) HW—PJV	S	25	(4)	50	60	70	80	1.00	3.99	3.97	2.00	0.15 ≤ R < W/2 (R only)	19			
			(5)	50	60	70	80	2.00	4.99	4.97	2.00		23			
			(6)	50	60	70	80	2.00	5.99	5.97	2.00		28			
			8	50	60	70	80	90	100	3.00	7.99		7.97	3.00	19	
			10	50	60	70	80	90	100	3.00	9.99		9.97	3.00	23	
			16	60	70	80	90	100	10.00	15.99	15.97		6.00	28		
—WPC® treatment— AW—SJ AW—PJ	L	8	(4)	50	60	70	80	1.00	3.99	3.97	2.00	0.15 ≤ R < W/2 (R only)	7			
			(5)	50	60	70	80	2.00	4.99	4.97	2.00		8			
			(6)	50	60	70	80	2.00	5.99	5.97	2.00		9			
			8	50	60	70	80	90	100	3.00	7.99		7.97	3.00	11	
			10	50	60	70	80	90	100	3.00	9.99		9.97	3.00	13	
			16	60	70	80	90	100	10.00	15.99	15.97		6.00	19		
Spring reinforced type (D8~25) AW—SJV AW—PJV	L	13	(4)	50	60	70	80	1.00	3.99	3.97	2.00	0.15 ≤ R < W/2 (R only)	19			
			(5)	50	60	70	80	2.00	4.99	4.97	2.00		23			
			(6)	50	60	70	80	2.00	5.99	5.97	2.00		28			
			8	50	60	70	80	90	100	3.00	7.99		7.97	3.00	19	
			10	50	60	70	80	90	100	3.00	9.99		9.97	3.00	23	
			16	60	70	80	90	100	10.00	15.99	15.97		6.00	28		
Spring reinforced type (D8~25) AHW—PJ	L	25	(4)	50	60	70	80	1.00	3.99	3.97	2.00	0.15 ≤ R < W/2 (R only)	19			
			(5)	50	60	70	80	2.00	4.99	4.97	2.00		23			
			(6)	50	60	70	80	2.00	5.99	5.97	2.00		28			
			8	70	80	90	100	3.00	7.99	7.97	5.00		19			
			10	70	80	90	100	3.00	9.99	9.97	6.00		23			
			16	80	90	100	10.00	15.99	15.97	6.00	28					
—WPC® treatment— AW—SJ	X	13	(4)	70	80	90	100	6.00	12.99	12.97	6.00	0.15 ≤ R < W/2 (R only)	16			
			(5)	70	80	90	100	6.00	12.99	12.97	6.00		19			
			(6)	70	80	90	100	6.00	12.99	12.97	6.00		23			
			16	80	90	100	10.00	15.99	15.97	6.00	19					
			20	80	90	100	13.00	19.99	19.97	6.00	23					
			25	80	90	100	18.00	24.99	24.97	6.00	28					

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

Order	Catalog No.	L	P	W	R (R only)
	W—SJDS 6	60	P3.00	W2.80	
	HW—PJEL 10	70	P8.50	W4.25	

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.

Days to Ship **Quotation**

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	<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>2.80</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	2.80	10	2.80	13	5.00	16	5.00	20	5.00	25	5.00	1Code
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25	5.00																																										
Tip length change (shorter than standard) 2≤BC<B The following restriction applies to tip type X with D dimension of 5 or 6. PC-WC Bmax. 1.80~1.99 20	BC																																										
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.	PRC																																										
Chamfering of 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.	PCC																																										
Tip tolerance change P+0.01 → +0.005 0 → 0 (P dimension can be selected in 0.001 mm increments.) Cannot be used with HW coating.	PKC																																										
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, 0.01 mm increments can be selected.) Projection length of jector pin is 2 mm.																																									
	LCT	Changes to head thickness tolerance and full length are processed using a single code. The allowable range of change, increment, ordering process, and notes (R) are the same as for LC. Head thickness tolerance change T+0.3 → +0.02 0 → 0 Full length change L+0.3 → +0.1 0 → 0																																									
	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 (R) are the same as for LC. Head thickness tolerance change T+0.3 → 0 0 → -0.02 Full length change L+0.3 → +0.1 0 → 0																																									
	LKC	Full length tolerance change L+0.3 → +0.05 0 → 0																																									
	Alterations to shank	SKC	Single key flat on shank D4~6 P≤D-1.2 W≤D-1.2 (Machining width 0.5) D8~ P≤D-2.2 W≤D-2.2 (Machining width 1) Cannot be combined with KC-WKC-KFC.																																								
		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.																																								
NC		The jector pin is removed. Cannot be combined with AC.																																									
NDC		No press-in lead ℓ≥3 → ℓ=0																																									

Price **Quotation**

PUNCHES

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