

JECTOR PUNCHES

—DICOAT® TREATMENT—



• 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	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	Tip length	
 RoHS Dm5 (D4~25)	Equivalent to SKD11 60~63HRC Surface 3000HV Powdered high-speed steel 62~64HRC Surface 3000HV	T-SJ T-SJV	A D R	S L		Tip length (B) L > S
D+0.005 (D4~13)	Equivalent to SKD11 60~63HRC Surface 3000HV Powdered high-speed steel 62~64HRC Surface 3000HV	AT-SJ AT-SJV	A D R E G	S L		Tip length (B) L > S
		AT-PJ AT-PJV	E G	S L		

Type	Tip shape	Tip length	D	L							0.01 mm increments			B	H	
				(4)	(5)	(6)	(7)	(8)	(9)	(10)	min. P max.	P-Kmax.	P-Wmin.			
(Dm5) T-SJ T-PJ Spring reinforced type (D8~25)	S	A	13	40	50	60	70	80	90	100	1.00~3.99	3.97	1.00	0.15 ≤ R < W/2 (R only)	8	7
				40	50	60	70	80	90	100	2.00~4.99	4.97	2.00			
				40	50	60	70	80	90	100	2.00~5.99	5.97	2.00			
				40	50	60	70	80	90	100	3.00~7.99	7.97	3.00			
				40	50	60	70	80	90	100	3.00~9.99	9.97	3.00			
				40	50	60	70	80	90	100	6.00~12.99	12.97	6.00			
(D+0.005) (D4~13) AT-SJ AT-PJ Spring reinforced type (D8~13)	L	E	13	50	60	70	80	90	100	1.00~3.99	3.97	2.00	0.15 ≤ R < W/2 (R only)	13	7	
				50	60	70	80	90	100	2.00~4.99	4.97	2.00				
				50	60	70	80	90	100	2.00~5.99	5.97	2.00				
				50	60	70	80	90	100	3.00~7.99	7.97	3.00				
				50	60	70	80	90	100	3.00~9.99	9.97	3.00				
				50	60	70	80	90	100	6.00~12.99	12.97	6.00				

The spring constants of T-SJV, T-PJV, AT-SJV, and AT-PJV are twice those of T-SJ, T-PJ, AT-SJ, and AT-PJ respectively.
 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: 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.
 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 13 mm in all cases.
 D(4), (5), and (6) are specifications available for T-SJ, T-PJ, AT-SJ, and AT-PJ only. T-SJV and T-PJV are available for D8~25 only. AT-SJV and AT-PJV are available for D8~13 only.

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

T-SJES 6 - 50 - P5.48 - W3.20

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 W R (BC-HC-TC, etc.)

T-SJES 6 - 50 - P5.48 - W3.20 - HC8.0-TC4.0

Alteration	Code	A	D R E G	1Code
Alterations to tip	BC	Tip length change (shorter than standard) 2 ≤ BC < B 0.1 mm increments		
	PRC	Rounding of tip side edge 0.3 ≤ PRC ≤ 1 0.1 mm increments PRC ≤ (P - d _i - 0.5) / 2 d _i dimension P.236		
Alterations to full length	LC	Full length change (reduction in tip length) LC < L 0.1 mm increments (If combined with LKC, 0.01 mm increments can be selected.) Tip length B is shortened by (L - LC). Projection length of the 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 are the same as for LC.	TKC Head thickness tolerance change T +0.3 → +0.02	LC Full length tolerance change L +0.3 → +0.1
	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.	TKM Head thickness tolerance change T +0.3 → -0.02	LC Full length tolerance change L +0.3 → +0.1
	LKC	Full length tolerance change L +0.3 → +0.05		
Alterations to head	KC	Addition of single key flat to head	Key flat 90°/180° position change 1° increments	
	WKC	Addition of double key flats in parallel	Double key flats in parallel Can be combined with KC.	
	KFC	Double key flats at 0° and a selected angle 1° increments	Double key flats at 0° and a selected angle 1° increments	
	NKC	No key flat		

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Alteration	Code	A	D R E G	1Code
Alterations to head	HC	Head diameter change D ≤ HC < H 0.1 mm increments		
	TC	Head thickness change 0.1 mm increments (If combined with TKC·TKM·LCT·LMT, 0.01 mm increments can be selected.) Full length L is shortened by (5 - TC). If combined with LC·LCT·LMT, full length remains as specified.	3.5 ≤ TC < 5	
	TKC	Head thickness tolerance change T +0.3 → +0.02		
	TKM	Head thickness tolerance change T +0.3 → 0		
Alterations to shank	TCC	Chamfering of head This improves the strength of the punch head P.1611 0.1 mm increments 0.5 ≤ TCC ≤ (H - D) / 2 If H ≤ 5, then TCC is 0.5.		
	RC	Head thickness is machined to a tolerance of -0.04~0 relative to the retainer surface. Cannot be used for D +0.005 types.		
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		

PUNCHES

Quotation