

# JECTOR PUNCHES

—NORMAL AND LAPPING TYPES WITH LARGE DIAMETER PINS— ※Jector punches with thicker jector pins (compared with other MISHUMI jector punches)

Calculating the projection length of the jector pin (reference value) P.185

For details of jector holes, refer to Jector Punch Blanks. P.180  
For details of jector pins, refer to Jector Pin Sets. P.185

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	
 —Lapping—	D <sub>m5</sub>		SJF	 S L L—SJF	
Tip shape A	Tip shape D	Tip shape R	Tip shape E	Tip shape G	

$P \geq W$   
 $R=0$  can be selected. (However lapping cannot be used.)  
 $K = \sqrt{P^2 + W^2}$

$P \geq W$   
 $0.15 \leq R < \frac{W}{2}$   
 $K = \sqrt{(P-2R)^2 + (W-2R)^2} + 2R$

Type	Tip shape	Tip length B	D	L						0.01mm increments (0.001mm increments for lapping)				B	H				
				L						A		DREG				R			
				L						min.	P max.	P-Kmax.	P-Wmin.						
(D <sub>m5</sub> ) SJF	A	S	8	50	60	70	80	90	100	5.00	7.99	7.97	5.00	0.15 ≤ R < W/2 (B only)	13	11			
			10	50	60	70	80	90	100	5.00	9.99	9.97	5.00						
			13	50	60	70	80	90	100	8.00	12.99	12.97	8.00						
			16	50	60	70	80	90	100	10.00	15.99	15.97	8.00						
			20	50	60	70	80	90	100	13.00	19.99	19.97	10.00						
	Lapping L—SJF	L	L	8	50	60	70	80	90	100	5.00	7.99	7.97				5.00	19	13
				10	50	60	70	80	90	100	5.00	9.99	9.97				5.00		
				13	50	60	70	80	90	100	8.00	12.99	12.97				8.00		
				16	60	70	80	90	100	10.00	15.99	15.97	8.00						
				20	60	70	80	90	100	13.00	19.99	19.97	10.00						
25	60	70	80	90	100	18.00	24.99	24.97	10.00										

$L(50) \rightarrow B=13$  If full length is (50), tip length is 13 mm in all cases.  
 $A: P > D - 0.03 \rightarrow \ell = 0$  If  $P > D - 0.03$  for a round punch,  $D_{-0.01}$  (press-in lead) is not included.  
 $DREG: P \cdot K > D - 0.05 \rightarrow \ell = 0$  If  $P \cdot K > D - 0.05$  for a shaped punch,  $D_{-0.01}$  (press-in lead) is not included.

Order	Catalog No.	L	P	W	R (B only)
	SJFDS 16	60	P12.50	W9.35	
	L—SJFEL 10	70	P8.50	W6.75	

Days to Ship **Quotation**

Alterations **Quotation** Catalog No. — L(LC·LCT·LMT) — P — W — R — (BC·HC·TC, etc.)  
SJFDS 13 — LC58 — P10.50 — W9.50 — HC15—KC45

Alteration	Code	A	DREG	1Code
Alterations to tip	PC WC	Tip dimension change PC ≥ PCmin. 0.01 mm increments (For a lapping combined with PC, 0.001 mm increments can be selected.)	Tip dimension change PC·WC ≥ PC·WCmin. 0.01 mm increments (For a lapping, 0.001 mm increments can be selected.)	
	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) - 0.5 / 2 d, dimension P.180 Cannot be combined with PC.		
	PCC	Chamfering to tip side edge 0.3 ≤ PCC ≤ 1 0.1 mm increments PCC ≤ (P - d) - 0.5 / 2 d, dimension P.180 Cannot be combined with PRC.		
	PKC	Tip tolerance change P + 0.01 → +0.005 P dimension can be selected in 0.01 mm increments. Cannot be used with lapping.	Tip tolerance change P·W ± 0.01 → +0.01 0 Cannot be used with lapping.	
	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 full length	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 (A) are the same as for LC.	Full length tolerance change LC + 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 (A) are the same as for LC.	Full length tolerance change LC + Full length change + L + 0.3 → +0.1 0 → 0	
	LKC	Full length tolerance change L + 0.3 → +0.05 0 → 0		
	LKZ	Full length tolerance change L + 0.3 → +0.01 0 → 0		

Alteration	Code	A	DREG	1Code
Alterations to head	KC	Addition of single key flat to head	Key flat 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 Cannot be combined with KC-WKC.	Double key flats at 0° and a selected angle 1° increments Cannot be combined with KC-WKC.	
	NKC	—	No key flat	
	HC	Head diameter change D ≤ HC < H 0.1 mm increments		
	TC	Head thickness change 3.5 ≤ TC < 5 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.		
	TKC	Head thickness tolerance change T + 0.3 → +0.02 0 → 0		
	TKM	Head thickness tolerance change T + 0.3 → 0 0 → -0.02		
	TCC	Chamfering of head This improves the strength of the punch head. P.1097 0.1 mm increments 0.5 ≤ TCC ≤ (H - D) / 2 Cannot be combined with SRC.		
	RC	Head thickness is machined to a tolerance of -0.04 ~ 0 relative to the retainer surface.		
Alterations to shank	SRC	Modification of head for use with select retainers (SLS) For details, refer to P.629. Can be used for D10 ~ 25.		
	NC	The jector pin is removed. Cannot be combined with AC.		
	NDC	No press-in lead ℓ ≥ 3 → ℓ = 0		

**Features**

- With a standard type, scraps inside the die may rotate, resulting in scrap lifting.
- This product has a larger diameter pin, which expands the area of contact with scraps and improves the scrap removal effect.
- Because of the pin diameter that is larger than the standard type, this pin type features superior strength and rigidity.

**P** Price **Quotation**