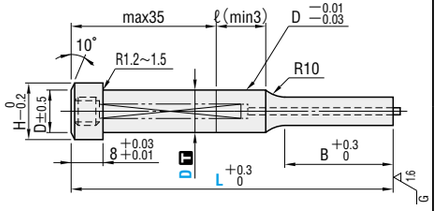
JECTOR PUNCHES FOR HEAVY LOAD

—FINISHED FOR RETAINERS・DICOAT® TREATMENT・SPRING AND PIN REINFORCED TYPE—

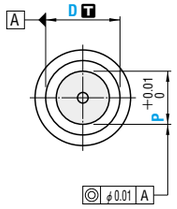
PRODUCTS DATA P.1599・1611

Projection length of the jector pin is 2mm for reinforced types and 4mm for non-reinforced types.

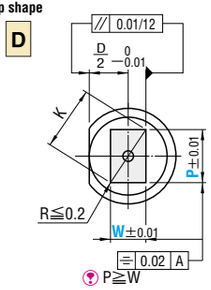
- For details of jector holes, refer to Jector Punch Blanks. P.238
- For details of jector pins, refer to Jector Pin Sets. P.241

Type	Shank diameter D T tolerance	M H	Catalog No. Type	Tip shape	B Tip length	The tip shape can be selected from Tip shape A～G in the figure below.
RoHS  For shank diameter tolerance D T, select either m5 or $^{+0.005}_{0}$.	D_{m5}	Powdered high-speed steel 62～64HRC Surface 3000HV	T—APJ Spring and pin reinforced type T—APJV	A D R E G	S L Tip length (B) L>S	
	$D^{+0.005}_{0}$ (D8～13)		AT—APJ Spring and pin reinforced type AT—APJV			

Tip shape A

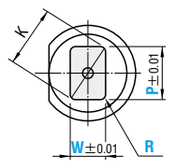


Tip shape D



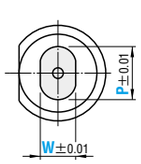
- P≧W
- R=0 can be selected.
- $K=\sqrt{P^2+W^2}$

Tip shape R



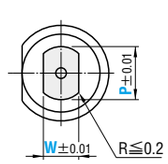
- P≧W
- $0.15 \leqq R < \frac{W}{2}$
- $K=\sqrt{(P-2R)^2+(W-2R)^2}+2R$

Tip shape E



- P>W

Tip shape G



- P>W

Catalog No. Type	Tip shape	B Tip length	D	L	0.01mm increments Ⓐ min. P max.	Ⓓ Ⓡ Ⓔ Ⓖ P・Kmax.	Ⓓ Ⓡ Ⓔ Ⓖ P・Wmin.	Ⓡ R	B	H
(D_{m5}) T—APJ —Spring and pin reinforced type— T—APJV	A D R E G	S	8	(50) 60 70 80 90 100	4.00～ 7.99	7.97	4.00	$0.15 \leqq R < \frac{W}{2}$ (Ⓡ only)	13	13
			10		5.00～ 9.99	9.97	5.00			15
			13		6.00～ 12.99	12.97	6.00			18
			16		10.00～ 15.99	15.97	6.00		19	21
			20		13.00～ 19.99	19.97	6.00			25
			25		18.00～ 24.99	24.97	6.00			30
($D^{+0.005}_{0}$) AT—APJ (D8～13) —Spring and pin reinforced type— AT—APJV (D8～13)		L	8		4.00～ 7.99	7.97	4.00		19	13
			10	60 70 80 90 100	5.00～ 9.99	9.97	5.00			15
			13		6.00～ 12.99	12.97	6.00			18
			16		10.00～ 15.99	15.97	6.00		25	21
			20	70 80 90 100	13.00～ 19.99	19.97	6.00			25
			25		18.00～ 24.99	24.97	6.00			30

- The spring constants of T—APJV and AT—APJV are twice those of T—APJ and AT—APJ respectively.
- L(50)⋯B=8 If the full length is(50), the tip length is 8mm in all cases.
- Ⓐ: P>D−0.03 ⋯ℓ=0 If P>D−0.03 for a round punch, $D^{-0.01}_{-0.03}$ (press-in lead) is not included.
- Ⓓ Ⓡ Ⓔ Ⓖ: 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.

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

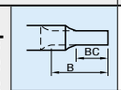
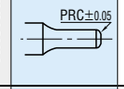
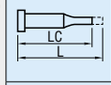
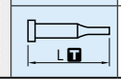
T—APJDS 25 — 80 — P18.00 — W10.00

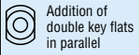
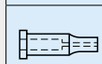
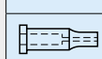
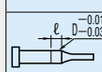
Days to Ship Quotation

■Effect of spring and pin reinforced type
The spring constant is twice that of the standard type, resulting in improved scrap removal. In addition, the improved strength under the pin head prevents breakage below the head.

Alterations Catalog No. — L(LC) — P — W — R — (BC・KC・WKC, etc.)

T—APJDS 20 — LC79 — P15.00 — W6.00 — SKC

Alteration		Code	Ⓐ	Ⓓ Ⓡ Ⓔ Ⓖ	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_1−0.5)/2 d_1 Dimension P.238	—	Quotation
Alterations to full length		LC	Full length change LC<L (reduction in tip length) 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 2mm for spring and pin reinforced types and 4mm for non-reinforced types.		
		LKC	Full length tolerance change $L\ ^{+0.3}_{0} \Rightarrow {}^{+0.05}_{0}$		

Alteration		Code	Ⓐ	Ⓓ Ⓡ Ⓔ Ⓖ	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	Quotation
Alterations to shank		SKC	Single key flat on shank Ⓐ 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