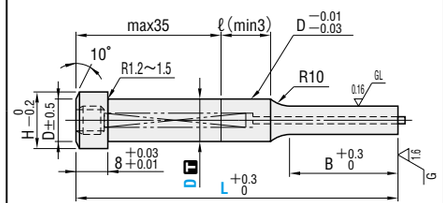
JECTOR PUNCHES FOR HEAVY LOAD

—FINISHED FOR RETAINERS・LAPPING・SPRING AND PIN REINFORCED TYPE—

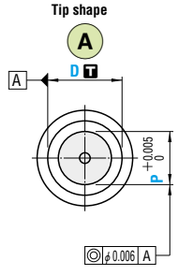
PRODUCTS DATA P.1611

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

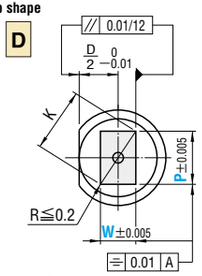
- For details of jector holes, refer to Jector Punch Blanks. P.238
- For details of jector pins, refer to Jector Pin Sets. P.241

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 64～67HRC	L—APJ Spring and pin Reinforced type L—APJV	A D R E G	S L Tip length (B) L>S	
	$D^{+0.005}_{0}$		AL—APJ Spring and pin Reinforced type AL—APJV			

Tip shape A

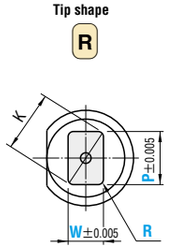


Tip shape D



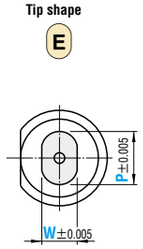
P≧W
K=$\sqrt{P^2+W^2}$

Tip shape R



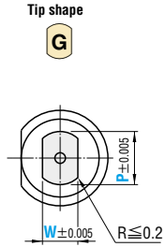
P≧W
0.15≦R<$\frac{W}{2}$
K=$\sqrt{(P-2R)^2+(W-2R)^2}+2R$

Tip shape E



P>W

Tip shape G



P>W

Catalog No. Type	Tip shape	B Tip length	D	L	0.001 mm increments Ⓐ min. P max.	0.001 mm increments D R E G P・Kmax.	0.001 mm increments D R E G P・Wmin.	0.01 mm R R	B	H
(Dm5) L—APJ —Spring and pin reinforced type— L—APJV	A D R E G	S	8	(50) 60 70 80 90 100 (110) (120) (130)	4.000～ 7.990	7.970	4.000	0.15≦R<W/2 (Ⓡ only)	13	13
			10		5.000～ 9.990	9.970	5.000			15
			13		6.000～ 12.990	12.970	6.000			18
			16		10.000～ 15.990	15.970	6.000		19	21
			20		13.000～ 19.990	19.970	6.000			25
			25		18.000～ 24.990	24.970	6.000			30
($D^{+0.005}_{0}$) AL—APJ —Spring and pin reinforced type— AL—APJV		L	8	60 70 80 90 100 (110) (120) (130)	4.000～ 7.990	7.970	4.000		13	13
			10		5.000～ 9.990	9.970	5.000		19	15
			13		6.000～ 12.990	12.970	6.000			18
			16	70 80 90 100 (110) (120) (130)	10.000～ 15.990	15.970	6.000		25	21
			20		13.000～ 19.990	19.970	6.000			25
			25		18.000～ 24.990	24.970	6.000			30

The spring constants of L—APJV and AL—APJV are twice those of L—APJ and AL—APJ respectively.

⊗ L(110) (120) (130)⋯L110, 120, and 130 cannot be used for spring and pin reinforced types.

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.

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.

Order

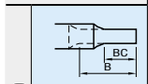
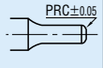
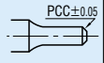
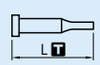
Catalog No.	L	P	W	R (Ⓡ only)
AL—APJDS 25	80	P18.000	W10.000	

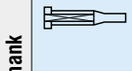
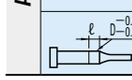
■Effect of spring and pin reinforced type

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.

Days to Ship Quotation

Alterations Catalog No. L—APJDS 20 — L(LC) LC79 — P P15.000 — W W6.000 — R W6.000 — (BC・KC, etc.) BC13

	Alteration	Code	Ⓐ	D R E G	1Code
Alterations to tip		BC	Tip length change (shorter than standard) 2≦BC<B 0.1 mm increments		Quotation
		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 ⊗ Cannot be combined with PCC.	—	
		PCC	Chamfering to tip side edge 0.3≦PCC≦1 0.1 mm increments ⓡ PCC≦(P−d_1−0.5)/2 d_1 dimension P.238 ⊗ Cannot be combined with PRC.	—	
Alterations to full length		LC	Full length change LC<L (reduction in tip length) 0.1 mm increments (If combined with LKC・LKZ, 0.01 mm increments can be selected.) ⓡ Tip length B is shortened by (L−LC). ⓡ The 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 $L^{+0.3}_{0}$ ⇨ $^{+0.05}_{0}$		
		LKZ	Full length tolerance change $L^{+0.3}_{0}$ ⇨ $^{+0.01}_{0}$		

	Alteration	Code	Ⓐ	D R E G	1Code
Alterations to head		KC	Addition of single key flat to head	90° 0° 180° 270° 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	90° 0° 180° 270° Double key flats at 0° and a selected angle 1° increments ⊗ Cannot be combined with KC・WKC.	90° 0° 180° 270° 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 (Machining width 1) ⊗ Cannot be combined with KC・WKC・KFC.	D R E G W≦D−2.2 $\frac{D}{2}-1^{0}_{-0.01}$	
		AC	AIR 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