JECTOR PUNCHES FOR HEAVY LOAD
—FINISHED FOR RETAINERS・SPRING AND PIN REINFORCED TYPE—

PRODUCTS DATA P.1611
RELATED PRODUCTS P.161

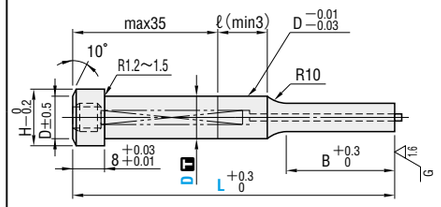
● For details of jector holes, refer to Jector Punch Blanks. P.238
● For details of jector pins, refer to Jector Pin Sets. P.241

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

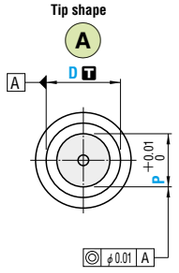
Type	Shank diameter D T tolerance	M H
 For shank diameter tolerance D T, select either m5 or $^{+0.005}_{0}$.	D_{m5} $D^{+0.005}_{0}$	Powdered high-speed steel 64 ～ 67HRC

Catalog No. Type	Tip shape	B Tip length
APJ Spring and pin Reinforced type APJV	A D R E G	S L Tip length (B) L>S
A—APJ Spring and pin Reinforced type A—APJV		

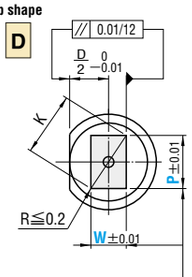
The tip shape can be selected from Tip shape A～G in the figure below.



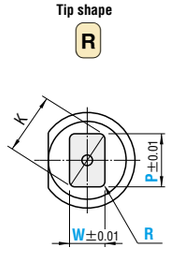
Tip shape A



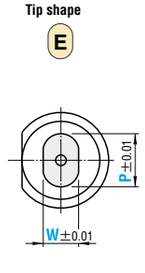
Tip shape D



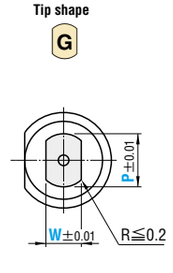
Tip shape R



Tip shape E



Tip shape G



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

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

P>W

P>W

Catalog No. Type	Tip shape	B Tip length	D	L	0.01mm increments Ⓐ min. P max.	0.01mm increments D R E G P・Kmax.	0.01mm increments D R E G P・Wmin.	0.01 mm R R	B	H
(Dm5) APJ —Spring and pin reinforced type— APJV	A D R E G	S	8	(50) 60 70 80 90 100 (110) (120) (130)	4.00～ 7.99	7.97	4.00	0.15≦R<W/2 (R 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
($D^{+0.005}_{0}$) A—APJ —Spring and pin reinforced type— A—APJV		L	8	60 70 80 90 100 (110) (120) (130)	4.00～ 7.99	7.97	4.00		19	13
			10		5.00～ 9.99	9.97	5.00			15
			13		6.00～ 12.99	12.97	6.00			18
			16	70 80 90 100 (110) (120) (130)	10.00～ 15.99	15.97	6.00		25	21
			20		13.00～ 19.99	19.97	6.00			25
			25		18.00～ 24.99	24.97	6.00			30

The spring constants of APJV and A—APJV are twice those of APJ and A—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 (R only)
APJAS 20 — 80 — P15.00

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. APJDS 20 — L(LC) LC79 — P P15.00 — W W6.00 — R — (BC・KC, etc.) KFC225

Alteration		Code	Ⓐ	D R E G	1Code
Alterations to tip	BC	BC	Tip length change (shorter than standard) 2≦BC<B 0.1 mm increments		
	PRC±0.05	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±0.05	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.	—	Quotation
	P W	PKC	Tip tolerance change $P^{+0.01}_{0}$ ⇨ $^{+0.005}_{0}$ (P dimension can be selected in 0.001 mm increments.)	Tip tolerance change P・W±0.01⇨$^{+0.01}_{0}$	
Alterations to full length	LC L	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). Projection length of the jector pin is 2mm for spring and pin reinforced types and 4mm for non-reinforced types.		
	L T	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	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 (Machining width 1) D R E G W≦D−2.2 ⊗ Cannot be combined with KC・WKC・KFC.		
		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.		
	ℓ D $^{-0.01}_{-0.03}$	NDC	No press-in lead	ℓ≧3 ⇨ ℓ=0	

Price: Quotation