

JECTOR PUNCHES FOR HEAVY LOAD

— FINISHED FOR RETAINERS · RW COATING —



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 tolerance	Material	Catalog No.			The tip shape can be selected from Tip shape A~G in the figure below.
			Type	Tip shape	Tip length B	
RoHS	Dm5	Powdered highspeed steel 64~67HRC Surface 3100HV	RW-APJ Spring and pin reinforced type	A D R	S	<p>The tip edges are very slightly rounded.</p>
			ARW-APJ Spring and pin reinforced type	E G	L	

Tip shape	Tip shape	Tip shape	Tip shape	Tip shape
A	D	R	E	G
<p>Tip shape A: $P \geq W$, $K = \sqrt{P^2 + W^2}$</p>	<p>Tip shape D: $P \geq W$, $K = \sqrt{P^2 + W^2}$</p>	<p>Tip shape R: $P \geq W$, $0.15 \leq R < \frac{W}{2}$, $K = \sqrt{(P-2R)^2 + (W-2R)^2} + 2R$</p>	<p>Tip shape E: $P > W$</p>	<p>Tip shape G: $P > W$</p>

Catalog No.		Shape Tip shape	B Tip length	D	L	0.01mm increments				0.01mm R	B	H
Type	Tip shape					min. P	max. P	P-Kmax.	P-Wmin.			
(Dm5) (D ^{+0.005} ₀) RW-APJ ARW-APJ Spring and pin reinforced type Spring and pin reinforced type RW-APJV ARW-APJV	A	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)	R	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					21
			20		13.00 ~ 19.99	19.97	6.00					25
	R	L	8	4.00 ~ 7.99	7.97	4.00	19					25
			10	5.00 ~ 9.99	9.97	5.00	30					
			13	6.00 ~ 12.99	12.97	6.00	13					
			16	10.00 ~ 15.99	15.97	6.00	19					15
			20	13.00 ~ 19.99	19.97	6.00	18					21
G	L	16	10.00 ~ 15.99	15.97	6.00	25	25					
		20	13.00 ~ 19.99	19.97	6.00	25	25					
		25	18.00 ~ 24.99	24.97	6.00	30	30					

The spring constants of RW-APJV and ARW-APJV are twice those of RW-APJ and ARW-APJ respectively. L(50) → B=8 If full length is (50), tip length is 8mm in all cases. A: 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. L(110) (120) (130) → L110, 120 and 130 cannot be used for spring and pin reinforced types.

Order Catalog No. L P W R (R only)
RW-APJAS 20 80 P15.00

Effect of spring and pin reinforced type
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.

Days to Ship **Quotation**

Effects of RW coating
Effective for press processing of ultra-high-tensile material and thick plate high-tensile material thanks to its superior wear resistance, peeling resistance and heat resistance. See the product data for details. P.1607

Alterations Catalog No. L(LC) P W R (BC·KC...etc.)
RW-APJAS 20 LC79 P15.00 W6.00 BC13

Alterations	Code	A	D R E G	1Code
Alterations to tip	BC	Tip length change (shorter than standard) 2 ≤ BC < B 0.1mm increments		
	PRC	Rounding of tip side edge 0.3 ≤ PRC ≤ 1 0.1mm increments PRC ≤ (P - d1 - 0.5) / 2 d1 dimension P.238		
Alterations to full length	LC	Full length change LC < L (reduction in tip length) 0.1mm increments (If combined with LKC, 0.01mm increments can be selected.) Tip length B is reduced by (L - LC). Projection length of the jector pin is 2mm for reinforced types and 4mm for non-reinforced types.		
	LKC	Full length tolerance change L +0.3 / 0 → +0.05 / 0		

Alterations	Code	A	D R E G	1Code
Alterations to head	KC	Addition of single key flat to head	90° 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		
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**

PUNCHES