

JECTOR PUNCHES FOR HEAVY LOAD WITH DOWEL HOLES

— FINISHED FOR RETAINERS · RW COATING · SPRING AND PIN REINFORCED TYPE —



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	Equivalent to SKH51 61~64HRC Surface 3100HV	Catalog No.			The tip shape can be selected from Tip shape A~G in the figure below.
			Type	Tip Shape	Tip length with dowel hole	
Locating with dowel hole RW coating	MS6-25	Dm5	RW-AHJ Spring and pin reinforced type RW-AHJV	A D R E G	S L	-C

The tip edges are very slightly rounded. Tip length (B) L > S

Tip shape A

$P \geq W$
 $K = \sqrt{P^2 + W^2}$

Tip shape D

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

Tip shape R

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

Tip shape E

$P > W$

Tip shape G

$P > W$

Type	Tip Shape	Tip length	with dowel hole	D	0.01mm increments										B	H				
					L					D R E G			R							
					min.	P	max.	P	Wmin.	P	Kmax.	P		Wmin.						
RW-AHJ Spring and pin reinforced type RW-AHJV	A	S	-C	10	60	70	80	90	100	110	120	130	5.00	~	9.99	9.97	5.00	13	15	
					13	60	70	80	90	100	110	120	130	6.00	~	12.99	12.97		6.00	18
					16	60	70	80	90	100	110	120	130	10.00	~	15.99	15.97		6.00	21
					20	60	70	80	90	100	110	120	130	13.00	~	19.99	19.97		6.00	25
					25	60	70	80	90	100	110	120	130	18.00	~	24.99	24.97		6.00	30
	D	S	-C	10	60	70	80	90	100	110	120	130	5.00	~	9.99	9.97	5.00	19	15	
					13	60	70	80	90	100	110	120	130	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		21	
					20	70	80	90	100	110	120	130	13.00	~	19.99	19.97	6.00		25	
					25	70	80	90	100	110	120	130	18.00	~	24.99	24.97	6.00		30	
	R	S	-C	10	60	70	80	90	100	110	120	130	5.00	~	9.99	9.97	5.00	19	15	
					13	60	70	80	90	100	110	120	130	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		21	
					20	70	80	90	100	110	120	130	13.00	~	19.99	19.97	6.00		25	
					25	70	80	90	100	110	120	130	18.00	~	24.99	24.97	6.00		30	
E	L	-C	10	60	70	80	90	100	110	120	130	5.00	~	9.99	9.97	5.00	25	15		
				13	60	70	80	90	100	110	120	130	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		21		
				20	70	80	90	100	110	120	130	13.00	~	19.99	19.97	6.00		25		
				25	70	80	90	100	110	120	130	18.00	~	24.99	24.97	6.00		30		

The spring constants of RW-AHJV are twice those of RW-AHJ.
 L(60)→B=8 If full length is (60), 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 (press-in lead) is not included.
 R E G: P>K>D-0.05→l=0 If P>K>D-0.05 for a shaped punch, D-0.01 (press-in lead) is not included.
 L(110), (120) and (130) cannot be used for spring and pin reinforced types.

Order **Catalog No.** RW-AHJDS-C 25 **L** 80 **P** P18.00 **W** W10.00 **R** (R only)

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.

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. For details, see the product data P.1607

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 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		
Alterations to shank	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.		
	TPC	Dowel pin change MS6-25 that comes with the product is changed to MSTP6-25 (tapped type).		
	NDC	No press-in lead	l ≥ 3 → l = 0	

Example
 Uses of punches with locating dowel holes.....
 This type of punch is mainly used with dies for parts such as automobile bodies, in combination with a retainer that holds the punch.
 Rather than indirect positioning using the retainer dowel hole, these punches can be positioned directly using the dowel hole machined on the punch axis, improving die accuracy.
 These punches are particularly effective when used for die machining with NC machines.
 This type of punch can be also used with dies for the external panels of electrical appliances, either in combination with a retainer, or attached to the punch plate of an ordinary progressive die.

Price **Quotation**