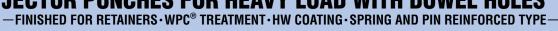
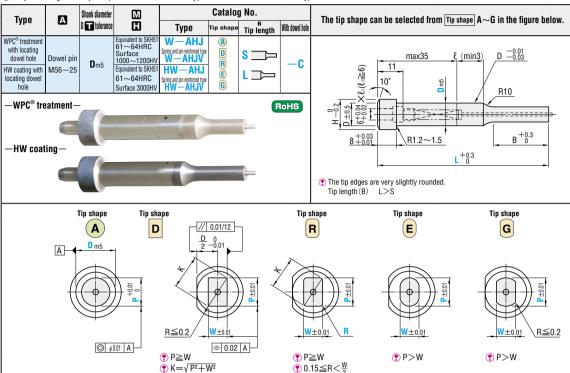
JECTOR PUNCHES FOR HEAVY LOAD WITH DOWEL HOLES



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



Catalog No.											0.01mm increments							
			Will down Link	n	L					A		E G	R	В	Н			
Туре	shape	B Tip length	WILL DOWN DIE	D									min. P max.	P∙Kmax.	P•Wmin.	R		
WPC® treatment W—AHJ Spring and pin reinforced type W—AHJV HW coating HW—AHJ Spring and pin reinforced type	R	D	-C 20 25 10 13	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	1	13	18
				16	(60)	70	80	90	100	(110)	(120)	(130)	10.00~ 15.99	15.97	6.00	00 19 00 19 00 19	:	21
				20	(60)	70	80	90	100	(110)	(120)	(130)	13.00~ 19.99	19.97	6.00		19	25
				25	(60)	70	80	90	100	(110)	(120)	(130)	18.00~ 24.99	24.97	6.00			30
		E		10	(60)	70	80	90	100	(110)	(120)	(130)	5.00~ 9.99	9.97	5.00		10	15
				13	(60)	70	80	90	100	(110)	(120)	(130)	6.00~ 12.99	12.97	6.00		19	18
				16		70	80	90	100	(110)	(120)	(130)	10.00~ 15.99	15.97	6.00			21
HW—AHJV				20		70	80	90	100	(110)	(120)	(130)	13.00~ 19.99	19.97	6.00		25	25
				25		70	80	90	100	(110)	(120)	(130)	18.00~ 24.99	24.97	6.00			30

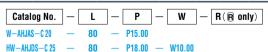
 $\mathbb{C} K = \sqrt{(P-2R)^2 + (W-2R)^2} + 2R$

• L(60) → B=8 If the full length is (60), the tip length is 8mm in all cases.

(*) ((b)) "*> ■ If the full length is (co), the up rought is driving in a drivi

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





■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.







	Alteration	Code	(A)	DREG	1Code
Alterations to tip	BC	BC	Tip length change (shorte 2≦BC <b 0.<="" th=""><th>er than standard) .1 mm increments</th><th></th>	er than standard) .1 mm increments	
	PRC±0.1	PRC	Rounding of tip side edge 0.3≦PRC≦1 0.1 mm increments PRC≦ (P−d₁−0.5)/2 d₁ dimension details ≥ P238 Cannot be combined with PCC.		
	PCC±0.1	PCC	Chamfering to tip side edge 0.3≦PCC≦1 0.1 mm increments P PCC≦ (P−d₁−0.5)/2 d₁ dimension details ≥ P238 Cannot be combined with PRC.		otation
		PKC	Tip tolerance change p+0.01 ⇒+0.005 0 P dinesion can be selected in 0.001 mm increments.) ★ HW Coating Cannot be used for D>13.	Tip tolerance change P•W±0.01⇔+0.01 ⊗ HW Coating Cannot be used for D>13.	Quo
Alterations to full length	LC L	LC	Full length change LC < L 0.1 mm increments (If combined with LK) Tip length B is shorter Projection length of the reinforced types and 4m		
		LKC	Full length tolerance change	0.05 0	

	Alteration	Code	A	DREG	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	0* Double key flats 0* 180* at 0* and a 270* 180* selected angle 1* increments	0° Double key flats at 0° and a selected angle 1° increments Cannot be combined	
			with KC•WKC.	with KC•WKC.	
		NKC		No key flat	otation
Alterations to shank		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.	Quota
		NC		The jector pin is removed. Cannot be combined with AC.	
	.	TPC	Dowel pin change MS6—25 that comes wit to MSTP6—25 (tapped ty	th the product is changed ype).	
	€ D-0.01 D-0.03	NDC	No press-in lead ℓ≧3 ⇔	ℓ=0	



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.



KFC225—TPC





190 189