JECTOR PUNCHES FOR HEAVY LOAD

—FINISHED FOR RETAINERS・CONFIGURABLE FULL LENGTH・FIXED B TYPE・SPRING AND PIN REINFORCED TYPE・WPC® TREATMENT・HW COATING—

PRODUCTS DATA P.1605・1611

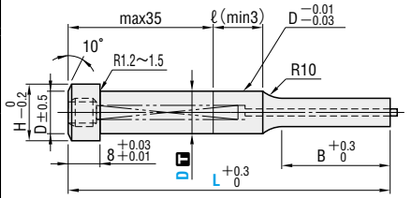
※ Jector punch which maintains the same tip length B even when L is changed.
Ⓡ Projection length of the jector pin is 2mm for reinforced types and 4mm for non-reinforced types.

● 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
—WPC® treatment— RoHS	D_{m5}	Powdered high-speed steel with WPC® treatment 64～67HRC Surface 1000～1100HV	W—LFAPJ	A D R E G	S
			Spring and pin reinforced type W—LFAPJV		
		Powdered high-speed steel with HW coating 64～67HRC Surface 3000HV	HW—LFAPJ		
			Spring and pin reinforced type HW—LFAPJV		
—HW coating—	$D^{+0.005}_{0}$	Powdered high-speed steel with WPC® treatment 64～67HRC Surface 1000～1100HV	AW—LFAPJ		L
			Spring and pin reinforced type AW—LFAPJV		
		Powdered high-speed steel with HW coating 64～67HRC Surface 3000HV	AHW—LFAPJ		
			Spring and pin reinforced type AHW—LFAPJV		

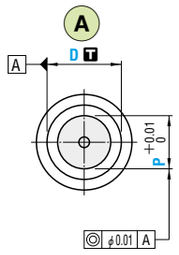
For shank diameter tolerance D T, select either m5 or $^{+0.005}_{0}$.

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

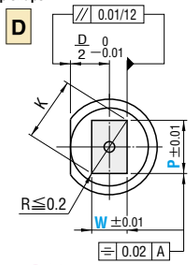


Ⓡ The tip edges are very slightly rounded.

Tip shape A

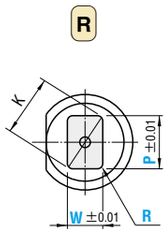


Tip shape D



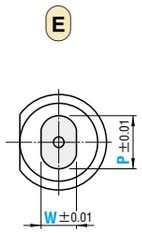
Ⓡ P≧W
Ⓡ $K=\sqrt{P^2+W^2}$

Tip shape R



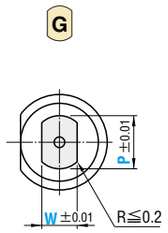
Ⓡ P≧W
Ⓡ $0.15 \leqq R < \frac{W}{2}$
Ⓡ $K=\sqrt{(P-2R)^2+(W-2R)^2}+2R$

Tip shape E



Ⓡ P>W

Tip shape G



Ⓡ P>W

Catalog No. Type	Tip shape	B Tip length	D	L 0.1mm increments	0.01mm increments Ⓐ min. P max.	0.01mm increments DREG P・Kmax.	0.01mm increments DREG P・Wmin.	0.01 mm Ⓡ R	B	H
(D_{m5}) —WPC® treatment— W—LFAPJ	A D R E G	S	8	60.0～130.0	4.00～ 7.99	7.97	4.00	$0.15 \leqq R < \frac{W}{2}$ (Ⓡ only)	13	13
Spring and pin reinforced type W—LFAPJV			10	Spring and pin reinforced type (70.0～100.0)	5.00～ 9.99	9.97	5.00			15
			13		6.00～ 12.99	12.97	6.00			18
			16	70.0～130.0	10.00～ 15.99	15.97	6.00		19	21
			20	Spring and pin reinforced type (80.0～100.0)	13.00～ 19.99	19.97	6.00			25
			25		18.00～ 24.99	24.97	6.00			30
($D^{+0.005}_{0}$) —WPC® treatment— AW—LFAPJ		L	8	70.0～130.0	4.00～ 7.99	7.97	4.00		19	13
Spring and pin reinforced type AW—LFAPJV			10	Spring and pin reinforced type (70.0～100.0)	5.00～ 9.99	9.97	5.00			15
			13		6.00～ 12.99	12.97	6.00			18
—HW coating— HW—LFAPJ			16	80.0～130.0	10.00～ 15.99	15.97	6.00		25	21
Spring and pin reinforced type HW—LFAPJV			20	Spring and pin reinforced type (80.0～100.0)	13.00～ 19.99	19.97	6.00			25
			25		18.00～ 24.99	24.97	6.00			30
—HW coating— AHW—LFAPJ			8	70.0～130.0	4.00～ 7.99	7.97	4.00		19	13
Spring and pin reinforced type AHW—LFAPJV			10	Spring and pin reinforced type (70.0～100.0)	5.00～ 9.99	9.97	5.00			15
			13		6.00～ 12.99	12.97	6.00			18
			16	80.0～130.0	10.00～ 15.99	15.97	6.00		25	21
			20	Spring and pin reinforced type (80.0～100.0)	13.00～ 19.99	19.97	6.00			25
			25		18.00～ 24.99	24.97	6.00			30

Ⓡ The spring constants of W—LFAPJV, AW—LFAPJV, HW—LFAPJV, and AHW—LFAPJV are twice those of W—LFAPJ, AW—LFAPJ, HW—LFAPJ, and AHW—LFAPJ respectively.
Ⓡ Ⓐ: 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.
Ⓡ DREG :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.
Ⓡ Jector holes are based on the jector punch blanks for heavy load. P.238

Order

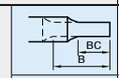
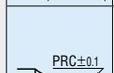
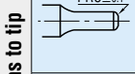
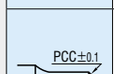
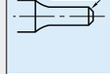
Catalog No.	L	P	W	R (Ⓡ only)
W—LFAPJAS 20	80	P15.00		

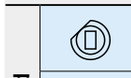
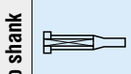
■Effect of spring and pin reinforced type
The spring constant is twice that of the standard type, resulting in improved scrap removal. In addition, the improved strength under the pin head prevents breakage below the head.

Days to Ship Quotation

Alterations

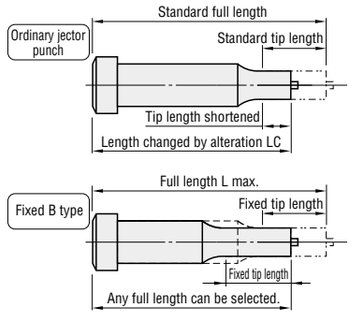
Catalog No.	L	P	W	R	(BC・KC, etc.)
W—LFAPJDS 20	79	P15.00	W6.00		BC13

Alteration		Code	Ⓐ	DREG	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.	——	
		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 ⇨ $^{+0.01}_{0}$	
			⊗ HW coating cannot be used for D>13.		
Alterations to full length		LKC	Full length tolerance change L $^{+0.3}_{0}$ ⇨ $^{+0.05}_{0}$		

Alteration		Code	Ⓐ	DREG	1Code
Alterations to head		KC	Addition of single key flat to head	90° 0° 180° 270° Key flat position change 1° increments	Quotation
		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	
Alterations to shank		SKC	Single key flat on shank Ⓐ P≦D−2.2	DREG W≦D−2.2 (Machining width 1) ⊗ Cannot be combined with KC・WKC・KFC.	
		NC	The jector pin is removed.		
		NDC	No press-in lead	ℓ≧3 ⇨ ℓ=0	

Price Quotation

■Features



- Whereas the tip length B gets shortened when alteration LC is added to an ordinary jector punch, a fixed B type maintains the same tip length B for any L dimension.
- Because a fixed B type jector punch has no side hole on the shank, it can be used as an air blow punch simply by removing the jector pin.