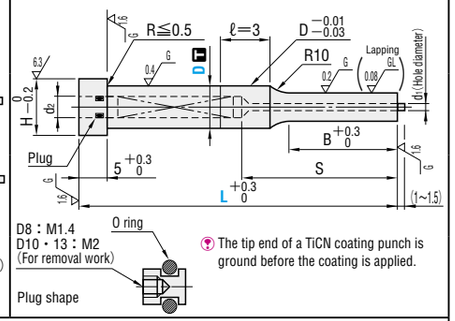
CARBIDE JECTOR PUNCHES
—NORMAL・LAPPING・TiCN COATING—

PRODUCTS DATA P.1604

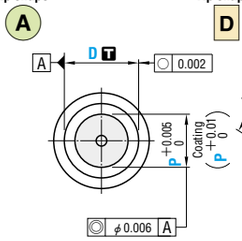
Type	Shank diameter D T tolerance	M H	Catalog No. Type	Tip shape	B Tip length
RoHS  For shank diameter tolerance D T, select either m5 or $^{+0.005}_{0}$.	D_{m5}	Punch V30(HIP) 88 ～ 89HRA Plug Equivalent to SUM23 O-ring Fluorine rubber	WJP Lapping L—WJP TiCN coating H—WJP	A D R E G	S L Tip length (B) L>S
	$D^{+0.005}_{0}$		A—WJP Lapping AL—WJP TiCN coating AH—WJP		

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

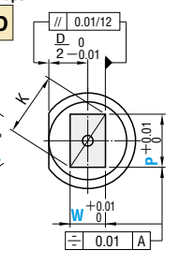


The tip end of a TiCN coating punch is ground before the coating is applied.

Tip shape A

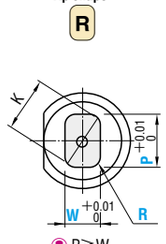


Tip shape D



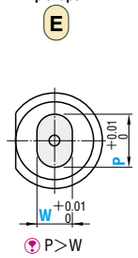
P≧W
K=$\sqrt{P^2+W^2}$

Tip shape R



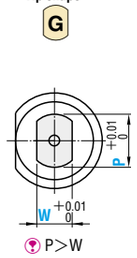
P≧W
0.15≦R<$\frac{W}{2}$
K=$\sqrt{(P-2R)^2+(W-2R)^2+2R}$

Tip shape E



P>W

Tip shape G



P>W

Catalog No. Type	Tip shape	B Tip length	D	L	0.001mm increments Ⓐ min. P max.	0.01mm increments D R E G P・Kmax.	0.01mm increments D R E G P・Wmin.	R R	B	d_1	S	d_2	H
(D_{m5}) WJP	A D R E G	S	8	(40) 50 60 70 80	3.000 ～ 7.990	7.97	3.00	0.15≦R<$\frac{W}{2}$ (R only)	13	1.2	27	3.4	11
($D^{+0.005}_{0}$) A—WJP			10	(40) 50 60 70 80	3.000 ～ 9.990	9.97	3.00			1.6	28	4.4	13
—Lapping— L—WJP			13	(40) 50 60 70 80	6.000 ～ 12.990	12.97	6.00			1.9			16
AL—WJP		L	8	50 60 70 80	3.000 ～ 7.990	7.97	3.00		19	1.2	27	3.4	11
—TiCN coating— H—WJP			10	50 60 70 80	3.000 ～ 9.990	9.97	3.00			1.6	28	4.4	13
AH—WJP			13	50 60 70 80	6.000 ～ 12.990	12.97	6.00			1.9			16

If L=(40), tip length B is 8 and S is 17. For TiCN coating, P dimension can be selected in 0.01mm increments.
Ⓐ: 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)
WJPDS 10	60	P8.00	W3.00	

Days to Ship Quotation

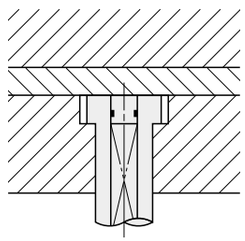
Price Quotation

■Features

- Because the jector pin and spring are integrated with the punch, scrap retention can be easily added even to carbide punches. (It is not necessary to install a spring from the punch holder.)
- Because the head tapping is eliminated, the loss of head strength is minimized.
- The plug holding the spring is only for provisional holding only. When using the punch, be sure to support both the head and the spring with a backing plate. (If the spring is not supported, the plug and spring may come off during use.)

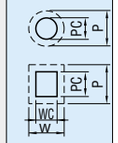
■Example of use

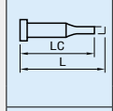
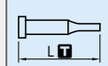
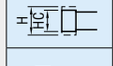
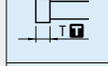
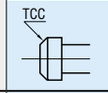
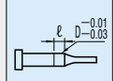
Use a backing plate to support the plug as well.



Alterations

Catalog No.	L (LC・LCT・LMT)	P (PC)	W (WC)	R	(BC・HC・TC, etc.)
WJPDS 10	60	P8.00	W3.00		BC10

Alteration	Code	Ⓐ	D R E G	1Code
Alterations to tip 	PC WC	Tip dimension change PC≧PCmin. 0.001mm increments D / PCmin.: 8 / 2.300; 10 / 2.800; 13 / 5.000	Tip dimension change PC WC≧PC・WCmin. 0.01mm increments (If combined with PKC, 0.001mm increments can be selected.) D / PC・WCmin.: 8 / 2.50; 10 / 2.80; 13 / 5.00	
	BC	Tip length change 2≦BC<B 0.1mm increments If combined with LC, B dimension is shortened by (L−LC).		
	SC	Tip roughness change 0.2 ⇨ 0.08 The base material is finished before the coating is applied. Can be used for coating types only.		Quotation
	PRC	Rounding of tip side edge 0.3≦PRC≦1 0.1mm increments PRC≦(P−d_1−0.5)/2	——	
	PKC	Tip tolerance change Normal P $^{+0.005}_{0}$ ⇨ $^{+0.003}_{0}$ TiCN coating P $^{+0.01}_{0}$ ⇨ $^{+0.005}_{0}$	Tip tolerance change (P・W dimensions can be selected in 0.001mm increments.) P・W $^{+0.01}_{0}$ ⇨ $^{+0.005}_{0}$ ⊗ Cannot be used with TiCN coating.	
	PKV	Tip tolerance change Normal P $^{+0.005}_{0}$ ⇨ ±0.002 TiCN coating P $^{+0.01}_{0}$ ⇨ ±0.005	Tip tolerance change (P・W dimensions can be selected in 0.001mm increments.) P・W $^{+0.01}_{0}$ ⇨ ±0.005 ⊗ Cannot be used with TiCN coating.	
		P dimension increment remains the same.		

Alteration	Code	Ⓐ	D R E G	1Code
Alterations to full length 	LC	Full length change 25+B(BC)≦LC<L 0.1mm increments B and S dimensions are shortened by L−(LC). (If combined with LKC・LKZ, 0.01mm increments can be selected.)	Full length change 30+B(BC)≦LC<L 0.1mm increments B and S dimensions are shortened by L−(LC).	
	LKC	Full length tolerance change L $^{+0.3}_{0}$ ⇨ $^{+0.05}_{0}$		
	LKZ	Full length tolerance change L $^{+0.3}_{0}$ ⇨ $^{+0.01}_{0}$	⊗ Cannot be used with TiCN coating.	
Alterations to head 	KC	Addition of single key flat to head	90° 0° 180° 270° Key flat position change 1° increments	
	WKC	Addition of double key flats in parallel	Double key flats in parallel Can be combined with KC.	
	NKC	——	No key flat	Quotation
	HC	Head diameter change D≦HC<H 0.1mm increments		
	TKC	Head thickness tolerance change T $^{+0.3}_{0}$ ⇨ $^{+0.02}_{0}$		
	TKM	Head thickness tolerance change T $^{+0.3}_{0}$ ⇨ $^{0}_{-0.02}$		
	TCC	Chamfering of head This improves the strength of the punch head. P.1611 0.1mm increments 0.5≦TCC≦(H−D)/2		
Shank 	NDC	No press-in lead ℓ=3⇨ℓ=0		