JECTOR PUNCHES WITH LOCATING DOWEL HOLES
—FINISHED FOR RETAINERS・DICOAT® TREATMENT—

PRODUCTS DATA P.1599

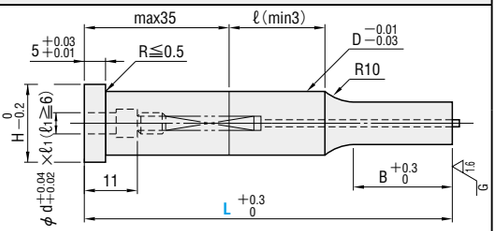
Calculating the projection length of the jector pin (reference value) P.241

- For details of jector holes, refer to Jector Punch Blanks. P.236
- For details of jector pins, refer to Jector Pin Sets. P.241

Type	A	Shank diameter D T tolerance	M H	Catalog No. Type	Tip shape	B Tip length	With dowel hole
Jector with locating dowel hole, Dicoat® treatment	Dowel pin D10～32 MS6—25 D38・45 SJB—CMS	Dm5	Equivalent to SKD11 60～63HRC Surface 3000HV	T—SJ —Spring reinforced type— T—SJV	Ⓐ Ⓓ Ⓡ Ⓔ Ⓖ	S L	—C

RoHS

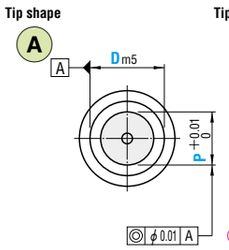
The tip shape can be selected from Tip shape A～G in the figure below.



D	d
10～32	6
38・45	10

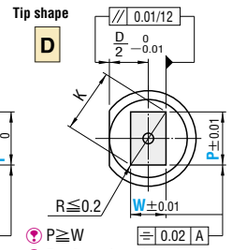
Tip length (B) L＞S

Tip shape A

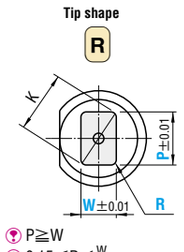


P≧W
R=0 can be selected.
K=√(P²+W²)

Tip shape D

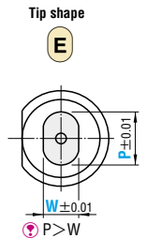


Tip shape R



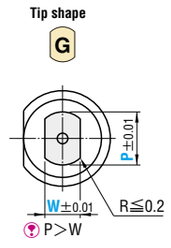
P≧W
0.15≦R＜W/2
K=√((P−2R)²+(W−2R)²+2R

Tip shape E



P＞W

Tip shape G



P＞W

Catalog No. Type	D	L							0.01mm increments Ⓐ min. P max.	Ⓓ Ⓡ Ⓔ Ⓖ P・Kmax.	Ⓓ Ⓡ Ⓔ Ⓖ P・Wmin.	Ⓡ R	B	H
S Spring reinforced type (D10～32) T—SJAS—C T—SJVAS—C	10	60	70	80	90	100			3.00～ 9.99	9.97	3.00	0.15≦R＜W/2 (Ⓡ only)	13	13
	13	60	70	80	90	100			6.00～ 12.99	12.97	6.00			16
	16	(60)	70	80	90	100			10.00～ 15.99	15.97	6.00		19	19
T—SJDS—C T—SJVDS—C	20	(60)	70	80	90	100			13.00～ 19.99	19.97	6.00			23
T—SJRS—C T—SJVRS—C	25	(60)	70	80	90	100			18.00～ 24.99	24.97	6.00			28
T—SJES—C T—SJVES—C	32	(60)	70	80	90	100	110	120	20.00～ 31.99	31.97	7.00			35
T—SJGS—C T—SJVGS—C	(38)	(60)	70	80	90	100	110	120	28.00～ 37.99	37.97	8.00			41
	(45)	(60)	70	80	90	100	110	120	35.00～ 44.99	44.97	9.00			48
L Spring reinforced type (D10～32) T—SJAL—C T—SJVAL—C	10		70	80	90	100			3.00～ 9.99	9.97	3.00		13	13
	13		70	80	90	100			6.00～ 12.99	12.97	6.00			16
	16		70	80	90	100			10.00～ 15.99	15.97	6.00		19	19
T—SJDL—C T—SJVDL—C	20		70	80	90	100			13.00～ 19.99	19.97	6.00			23
T—SJRL—C T—SJVRL—C	25		70	80	90	100			18.00～ 24.99	24.97	6.00			28
T—SJEL—C T—SJVEL—C	32		70	80	90	100	110	120	20.00～ 31.99	31.97	7.00			35
T—SJGL—C T—SJVGL—C	(38)		70	80	90	100	110	120	28.00～ 37.99	37.97	8.00			41
	(45)		70	80	90	100	110	120	35.00～ 44.99	44.97	9.00			48

- The spring constant of T—SJV□□—C is twice that of T—SJ□□—C.
- L (60)⋯B=13 If the full length is (60), the tip length is 13 mm in all cases.
- Ⓐ: P＞D—0.03⋯ℓ=0 If P＞D—0.03 for a round punch, $D_{-0.03}^{-0.01}$ (press-in lead) is not included.
- Ⓓ Ⓡ Ⓔ Ⓖ: P・K＞D—0.05⋯ℓ=0 If P・K＞D—0.05 for a shaped punch, $D_{-0.03}^{-0.01}$ (press-in lead) is not included.
- D (38) and (45) are specifications available for T—SJ□□—C only. Spring reinforced types are available for D10～32 only.

Order

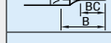
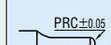
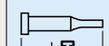
Catalog No.	L	P	W	R (Ⓡ only)
T—SJAS—C 25	100	P18.05		

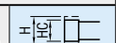
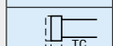
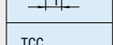
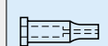
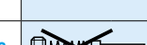
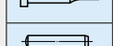
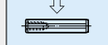
Days to Ship Quotation

■**Effect of spring reinforced type**
The spring constant is twice that of a standard type jector punch. The large spring load results in more effective scrap removal.

Alterations

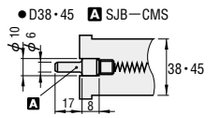
Catalog No. — L (LC) — P — W — R — (BC・HC・TC, etc.)
T—SJDS—C 38 — 100 — P20.00 — W10.00 — BC13

Alteration		Code	Ⓐ	Ⓓ Ⓡ Ⓔ Ⓖ	1Code
Alterations to tip		BC	Tip length change (shorter than standard) 2≦BC＜B 0.1 mm increments		
		PRC	Rounding of tip side edge 0.3≦PRC≦1 0.1 mm increments PRC≦(P—d_1—0.5)/2 d_1 dimension details P236	——	
Alterations to full length		LC	Full length change (reduction in tip length) LC＜L 0.1 mm increments Tip length B is reduced by (L—LC). (If combined with LKC, 0.01 mm increments can be selected.) Projection length of jector pin is 2mm.		
		LKC	Full length tolerance change $L\ ^{+0.3}_{0} \Rightarrow\ ^{+0.05}_{0}$		Quotation
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.	
		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	

Alteration		Code	Ⓐ	Ⓓ Ⓡ Ⓔ Ⓖ	1Code
Alterations to head		HC	Head diameter change D≦HC＜H 0.1 mm increments		
		TC	Head thickness change 3.5≦TC＜5 0.1mm increments Full length L is shortened by (5—TC). If combined with LC, full length is equal to LC.		
		TCC	Chamfering of head This improves the strength of the punch head. P1611 0.1 mm increments 0.5≦TCC≦(H—D)/2		Quotation
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). ⊗Cannot be used for D38・45.		
		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.



- Finished for retainer
- For details on retainers **P.731** and later pages.
- Optional backing plates are available. Only the backing plates for ϕ38・ϕ45 punches have a ϕ10.2 hole for a stepped dowel pin. **P.236**

Price Quotation