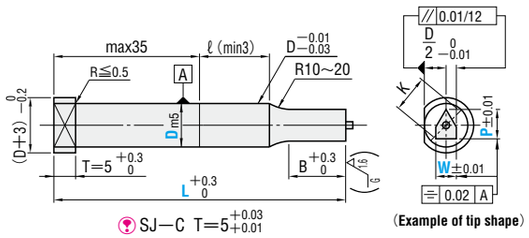
SPECIAL SHAPED JECTOR PUNCHES

RoHS Type	Applicable shank diameter	M	H	Catalog No. Normal	TiCN coating Surface hardness 3000HV	WPC® treatment Surface hardness 1000~1100HV	HW coating Surface hardness 3000HV
Shoulder type 	5～25	(D5～6) Equivalent to SKH51 (D8～25) Equivalent to SKD11	(D5～6) 61～64HRC (D8～25) 60～63HRC	SJ	—	W—SJ	—
		Powdered high-speed steel	64～67HRC	PJ	H—PJ	W—PJ	HW—PJ
With locating dowel hole 	10～45 (L≧60)	Equivalent to SKD11	60～63HRC	SJ—C	(D10～25) H—SJ—C	W—SJ—C	(D10～25) HW—SJ—C

Tip shape Select from the shapes shown on P.715.



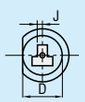
SJ—C T=5 +0.03 +0.01 (Example of tip shape)

A Dowel pin MS6—25 (with locating dowel hole only)
The tip edges of a WPC® treatment or HW coating type are slightly rounded.
The tip end of a TiCN coating punch is ground before the coating is applied.

Catalog No. Type	Shape	D	L	P·K max.	P·W min.	B
—Normal— —TiCN coating— —WPC® treatment— —HW coating—	2H～12H 2J～18J 3K～29K 2L～7L 8L (With locating dowel hole only)	5	(40) 50 60 70 80	4.90	2.00	8
		6		5.90	2.00	
		8	(40) (50) (60) 70 80 90 100	7.90	3.00	13
		10		9.90	3.00	
		13		12.90	6.00	
		16		15.90	6.00	19
		20		19.90	6.00	
		25		24.90	6.00	
		32	70 80 90 100 110 120	31.90	7.00	
		38	80 90 100 110 120	37.90	8.00	
		45		44.90	9.00	

Tip shape Select from the shapes shown on P.715.

L (40)···B=6 If full length is (40), tip length is 6mm in all cases.
L (50)···B=13 If full length is (50), tip length is 13mm in all cases.
SJ—C···L≧60 Specifications with L<60 are not available. If full length is (60), tip length is 13mm in all cases.
Jector hole and machining limit



D	J
5～8	1.0
10·13	1.5
16～32	2.0
38·45	4.0

For TiCN coating, WPC® treatment, and HW coating types, **10J·13J·5K·10K·18K** cannot be used.

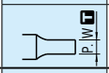
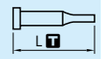
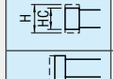
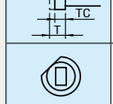
Order

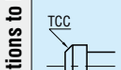
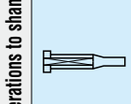
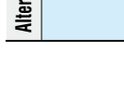
Catalog No.	—	L	—	P·W·A·B·C·Q·R·S···0.01mm increments
SJ3K 25	—	80	—	P18.00—W16.00—A8.00
W—SJ29K10	—	80	—	P 7.00—W 5.00

Days to Ship Quotation

Alterations

Catalog No.	—	L (LC)	—	P·W·A·B·C·Q···	—	(BC·HC·TC, etc.)
SJ3K 25	—	LC75	—	P18.00—W16.00—A8.00	—	BC13—KFC225

Alteration		Code	Spec.	1Code
Alterations to tip		BC	Tip length change 2≦BC<B 0.1mm increments If D≧32 for shapes 9J～13J·16J·K·L, tip length B is as indicated in the table below. L: 50.0～59.9 / 60.0～69.9 / 70.0～79.9 / 80.0～ — Bmax. D32: 6 / 13 / 19 / 19 — D38·45: — / 4 / 11 / 19	
		PKC	Tip tolerance change P·W±0.01 ⇨ +0.01 0 Cannot be used for D≧32. Can be used for normal types only.	
Alterations to full length		LC	Full length change LC<L 0.1mm increments Tip length B is shortened by (L—LC). If D≧32 for 9J～13J·16J·K·L, tip length B is as indicated in the table below. L: 50.0～59.9 / 60.0～69.9 / 70.0～79.9 / 80.0～ — Bmax. D32: 6 / 13 / 19 / 19 — D38·45: — / 4 / 11 / 19	Quotation
		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 for D>25. Can be used for normal types only.	
Alterations to head		HC	Head diameter change D≦HC<D+3 0.1mm 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.	
		KC	Key flat position change 1° increments	

Alteration		Code	Spec.	1Code
Alterations to head		WKC	Addition of double key flats in parallel	
		KFC	Double key flats at 0° and a selected angle 1° increments Cannot be combined with KC·WKC.	
		TCC	Chamfering of head This improves the strength of the punch head. P.1611 0.1 mm increments 0.5≦TCC≦(H-D)/2 If H≦5, then TCC is 0.5. Cannot be combined with SRC.	
		RC	Head thickness is machined to a tolerance of −0.04～0 relative to the retainer surface. Can be used for shoulder punches only.	Quotation
		TKC	Head thickness tolerance change T +0.3 0 ⇨ +0.02 0 Can be used for shoulder punches only.	
		TKM	Head thickness tolerance change T +0.3 0 ⇨ 0 −0.02 Can be used for shoulder punches only.	
Others		AC	The jector pin is removed to create an air path and the side vent hole is plugged from the inside.	
		NC	The jector pin is removed. Cannot be combined with AC.	
Alterations to shank		SKC	D5·6 Single key flat on shank Can be used for normal types only. Cannot be used for D>25. Cannot be used for 2L, 3L. Cannot be combined with KC·WKC·KFC. (However this restriction does not apply to 8H, 12H, 18J, 2L, 3L.) D5·6 (Machining width 0.5) W≦D−1.2 D8～ (Machining width 1) W≦D−2.2 D8～ 8H, 12H, 18J D5·6 (Machining width 0.5) P·K≦D−1.2 D8～ (Machining width 1) P·K≦D−2.2	

Price Quotation

SPECIAL SHAPED PUNCHES & DIES