

STRAIGHT PILOT PUNCHES WITH KEY GROOVES

—NORMAL·TiCN COATING·DLC COATING—



Type	M H	Catalog No.	Shape
—Tip R type—	RoHS	Equivalent to SKD11 60~63HRC STKC	<p>⑤ Coating is not applied to a 5 mm length from the tip end. (TiCN coating·DLC coating) RT (※) If P < 8, tip is rounded for safety. To keep the sharp tip (no rounding), specify RT=0. (If P ≥ 8, tip end is flat. P.1592) For the length of tip R, refer to the products data "Punch R length". P.1592</p>
		Equivalent to SKH51 61~64HRC HSTKC	
		Equivalent to SKH51 61~64HRC Surface 3000HV TiCN coating H—HSTKC	
		Equivalent to SKH51 61~64HRC DLC coating N—HSTKC	
		Powdered high-speed steel 64~67HRC PSTKC	
		Powdered high-speed steel 64~67HRC Surface hardness 3000HV TiCN coating H—PSTKC	
—Tapered tip type—	RoHS	Equivalent to SKD11 60~63HRC TTKC	<p>⑤ Coating is not applied to a 5 mm length from the tip end. (TiCN coating·DLC coating)</p>
		Equivalent to SKH51 61~64HRC HTTKC	
		Equivalent to SKH51 61~64HRC Surface 3000HV TiCN coating H—HTTKC	
		Equivalent to SKH51 61~64HRC DLC coating N—HTTKC	
		Powdered high-speed steel 64~67HRC PTTKC	
		Powdered high-speed steel 64~67HRC Surface hardness 3000HV TiCN coating H—PTTKC	
—Sharp tip angle type—	RoHS	Equivalent to SKD11 60~63HRC ATTKC	<p>⑤ Coating is not applied to a 5 mm length from the tip end. (TiCN coating·DLC coating) RT (※) Tip is rounded for safety. To keep the sharp tip (no rounding), specify RT=0.</p>
		Equivalent to SKH51 61~64HRC HATKC	
		Equivalent to SKH51 61~64HRC Surface 3000HV TiCN coating H—HATKC	
		Equivalent to SKH51 61~64HRC DLC coating N—HATKC	
		Powdered high-speed steel 64~67HRC PATKC	
		Powdered high-speed steel 64~67HRC Surface hardness 3000HV TiCN coating H—PATKC	

Type	Catalog No.		L	0.01mm increments min. P max.	A	0.1mm increments T	Y	U
	No.							
Equivalent to SKD11 —Normal— STKC TTKC ATTKC	3	42 52 62 (72)	2.00 ~ 3.00	(10) (15) 20 25 30	T > 5.0		2	0.5
	4	42 52 62 (72)	3.00 ~ 4.00					
	5	42 52 62 (72)	4.00 ~ 5.00					
Equivalent to SKH51 —Normal— —TiCN coating— —DLC coating— HSTKC H—HSTKC N—HSTKC HTTKC H—HTTKC N—HTTKC HATKC H—HATKC N—HATKC	6	42 52 62 (72)	5.00 ~ 6.00					
	8	42 52 62 72 (82) (92)	6.00 ~ 8.00					
	10	42 52 62 72 (82) (92)	8.00 ~ 10.00					
Powdered high-speed steel —Normal— —TiCN coating— —DLC coating— PSTKC H—PSTKC N—PSTKC PTTKC H—PTTKC N—PTTKC PATKC H—PATKC N—PATKC	13	42 52 62 72 (82) (92)	10.00 ~ 13.00					
	16	42 52 62 72 (82) (92)	13.00 ~ 16.00					

⑤ L (72) (82) (92) → L72 of No.3~6 and L82/92 of No.8~16 can be used for tip R types and tapered tip types only.
 ⊗ A (10) → If P ≥ 6.00, A10 cannot be selected. ⊗ A (15) → If P ≥ 15.0, A15 cannot be selected.



Order Catalog No. — L — P — A — T — (RT=0 / R=0)
STKC 6 — 72 — P5.02 — T20.0
H—HATKC 4 — 62 — P3.80 — A15 — T16.0 — R0

- ⊕ A Can be used for sharp tip angle types only.
- ⊕ If no key groove is required, select T=L.
- ⊕ RT=0 only can be selected. (Can be selected for tip R types with P < 8 and sharp tip angle types.)
- ⊕ R=0 only can be selected. (Can be used for tapered tip types and sharp tip angle types.)



Days to Ship **Quotation**



Alterations Catalog No. — L(LC·LCT) — P — A — T — (RT=0 / R=0) — (YC...etc.)
PSTKC 10 — LC65 — P8.50 — T20.0 — YC1

Effects of DLC coating
 Effective for preventing adhesion during aluminum or copper blanking thanks to its low affinity for nonferrous metal. See the product data for details. **P.1609**

Alteration	Code	Tip R type	Tapered tip and sharp tip angle types	1Code
Alterations to tip	RLC	Tip R is cut flat. 2 ≤ RLC < Y < 8 Y = √(P(10-P/4)) 0.1mm increments	—	—
	YC	—	Tip taper length change • P < 2.0 1 ≤ YC ≤ P × 2.83 - 0.3 • P ≥ 2.0 1 ≤ YC ≤ P × 1.86 - 0.3 ≤ 18 L(LC) + YC ≤ Lmax. + 8 0.1mm increments ⊗ Cannot be used for sharp tip angle types.	Quotation
	SC	Lapping of tip ⊕ P dimension tolerance remains the same. ⊕ With TiCN coating·DLC coating, the base material is finished before the coating is applied.	Lapping range (B) P (B) 2.000~2.999 13 3.000~9.999 19 10.000~ 25	⊕ If L < (B) + 20, (B) is adjusted to (L-20). ⊗ R=0 and RT=0 cannot be selected. ⊕ Lapping range of straight part is min. 5mm.
Alterations to key groove	WKC	—	Tip tolerance change P +0.01 ⇔ +0.005 ⊗ Cannot be used with TiCN coating·DLC coating.	—
	TKC	—	—	—

Alteration	Code	Tip R type	Tapered tip and sharp tip angle types	1Code							
Alterations to full length	LC	Full length change 25 ≤ LC < L 0.1mm increments	—	—							
	LKC	—	Full length tolerance change L +0.3 ⇔ +0.05 0 0 ⊗ Cannot be used with TiCN coating·DLC coating.	—							
	LCT	Changes to key groove tolerance and full length are processed using a single code. The allowable range of change, increments, and notes (⊕) are the same as for LC.	TKC Key groove tolerance change + Full length change T +0.05 ⇔ 0 0 -0.02	LC	Quotation						
Alterations to key groove	WKC	—	Addition of double key grooves in parallel	—							
	TKC	—	T dimension tolerance change T +0.05 ⇔ 0 0 -0.02	—							
	UK	—	Key groove depth change ⊗ Cannot be used for No.3	<table border="1"> <tr> <td>No.</td> <td>UK</td> </tr> <tr> <td>4~5</td> <td>0.7</td> </tr> <tr> <td>6</td> <td>1.2</td> </tr> <tr> <td>8~16</td> <td>1.7</td> </tr> </table>	No.	UK	4~5	0.7	6	1.2	8~16
No.	UK										
4~5	0.7										
6	1.2										
8~16	1.7										
Alterations to Shank	NDC	—	No press-in lead ℓ=3 ⇔ ℓ=0	—							



Price **Quotation**

PILOT PUNCHES