



# PILOT PUNCHES WITH KEY GROOVES

—TiCN COATING · HW COATING · DLC COATING—



Type	Shank diameter D tolerance	M H	Catalog No.		B tip length	Shape
			Type	Type		
— Tip R type —  Shape of tip changes depending on P dimension. P.250 For shank diameter tolerance D, select either m5 or +0.005/0.	D <sub>m5</sub>	Equivalent to SKH51 61~64 HRC Powdered high-speed steel 64~67HRC	N—HSTKA NW—HSTKA	H—HSTKA HW—HSTKA	 RT(*)... If P<8, tip is rounded for safety. To keep the sharp tip (no rounding), specify RT=0. RT=0 cannot be selected with HW coating·foundation WPC® (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	
			N—PSTKA NW—PSTKA	H—PSTKA HW—PSTKA		
	D <sub>+0.005/0</sub>	Equivalent to SKH51 61~64 HRC Powdered high-speed steel 64~67HRC	AN—HSTKA ANW—HSTKA	AH—HSTKA AHW—HSTKA		
			AN—PSTKA ANW—PSTKA	AH—PSTKA AHW—PSTKA		
	— Tapered tip type —  S L X	D <sub>m5</sub>	Equivalent to SKH51 61~64 HRC Powdered high-speed steel 64~67HRC	N—HTPKA NW—HTPKA		H—HTPKA HW—HTPKA
				N—PTPKA NW—PTPKA		H—PTPKA HW—PTPKA
D <sub>+0.005/0</sub>		Equivalent to SKH51 61~64 HRC Powdered high-speed steel 64~67HRC	AN—HTPKA ANW—HTPKA	AH—HTPKA AHW—HTPKA		
			AN—PTPKA ANW—PTPKA	AH—PTPKA AHW—PTPKA		
— Sharp tip angle type —  RoHS		D <sub>m5</sub>	Equivalent to SKH51 61~64 HRC Powdered high-speed steel 64~67HRC	N—HATKA NW—HATKA	H—HATKA HW—HATKA	
				N—PATKA NW—PATKA	H—PATKA HW—PATKA	
	D <sub>+0.005/0</sub>	Equivalent to SKH51 61~64 HRC Powdered high-speed steel 64~67HRC	AN—HATKA ANW—HATKA	AH—HATKA AHW—HATKA		
			AN—PATKA ANW—PATKA	AH—PATKA AHW—PATKA		

Catalog No.	Type	B tip length	D	L		A	0.1mm increments		B	Y	U	
				0.01mm increments min.	0.01mm increments max.		T	T				
M Equivalent to SKH51	—TiCN coating— H—HSTKA AH—HSTKA H—HTPKA AH—HTPKA H—HATKA AH—HATKA —HW coating— HW—HSTKA AHW—HSTKA HW—HTPKA AHW—HTPKA HW—HATKA AHW—HATKA —DLC coating— N—HSTKA AN—HSTKA N—HTPKA AN—HTPKA N—HATKA AN—HATKA —DLC foundation WPC®— NW—HSTKA ANW—HSTKA NW—HTPKA ANW—HTPKA NW—HATKA ANW—HATKA	S	3	42	52 62 (72)	1.00 ~ 2.99	(10)	T > 5.0	10	2	0.5	
			4	42	52 62 (72)	1.00 ~ 3.99						
			5	42	52 62 (72)	2.00 ~ 4.99						
			6	42	52 62 (72)	2.50 ~ 5.99						
			8	(42)	52 62 72 82 (92)	3.00 ~ 7.99						
			10	(42)	52 62 72 82 (92) (102)	3.00 ~ 9.99						
			13	(42)	52 62 72 82 (92) (102)	6.00 ~ 12.99						
			16	(42)	52 62 72 82 (92) (102)	10.00 ~ 15.99						
	M Powdered high-speed steel	—TiCN coating— H—PSTKA AH—PSTKA H—PTPKA AH—PTPKA H—PATKA AH—PATKA —HW coating— HW—PSTKA AHW—PSTKA HW—PTPKA AHW—PTPKA HW—PATKA AHW—PATKA —DLC coating— N—PSTKA AN—PSTKA N—PTPKA AN—PTPKA N—PATKA AN—PATKA —DLC foundation WPC®— NW—PSTKA ANW—PSTKA NW—PTPKA ANW—PTPKA NW—PATKA ANW—PATKA	L	3	52	62 (72)	1.00 ~ 2.99	(10)	T > 5.0	15	2	0.5
				4	52	62 (72)	1.00 ~ 3.99					
				5	52	62 (72)	2.00 ~ 4.99					
				6	52	62 (72)	2.50 ~ 5.99					
				8	52	62 72 82 (92)	3.00 ~ 7.99					
				10	52	62 72 82 (92) (102)	3.00 ~ 9.99					
				13	52	62 72 82 (92) (102)	6.00 ~ 12.99					
				16	52	62 72 82 (92) (102)	10.00 ~ 15.99					
M Powdered high-speed steel	—TiCN coating— H—PSTKA AH—PSTKA H—PTPKA AH—PTPKA H—PATKA AH—PATKA —HW coating— HW—PSTKA AHW—PSTKA HW—PTPKA AHW—PTPKA HW—PATKA AHW—PATKA —DLC coating— N—PSTKA AN—PSTKA N—PTPKA AN—PTPKA N—PATKA AN—PATKA —DLC foundation WPC®— NW—PSTKA ANW—PSTKA NW—PTPKA ANW—PTPKA NW—PATKA ANW—PATKA	X	3	52	62 (72)	1.20 ~ 2.99	(10)	T > 5.0	21	2	0.5	
			4	52	62 (72)	1.20 ~ 3.99						
			5	62	(72)	2.00 ~ 4.99						
			6	62	(72)	2.50 ~ 5.99						
			8	62	72 82 (92)	3.00 ~ 7.99						
			10	62	72 82 (92) (102)	3.00 ~ 9.99						
			13	62	72 82 (92) (102)	6.00 ~ 12.99						
			16	72	82 (92) (102)	10.00 ~ 15.99						

④ L(42) → B=10 If full length L is (42), tip length B is 10mm in all cases.  
 ⑤ L(72) (92) (102) → L72 with D3~6 and L92~102 with D8~16 can be used for tip R types and tapered tip types only.  
 ⑥ A(10) → If P ≥ 6.0, A10 cannot be selected. ⑦ A(15) → If P ≥ 15.0, A15 cannot be selected.



Order	Catalog No.	L	P	A	T	(RT=0) (R=0)
	AN—HSTKA 6	72	P5.02		T20.0	RT0
	N—PTKA 6	52	P4.97		T15.0	
	H—HATKA 10	62	P5.01	A15	T16.0	RO

- ④ If no key groove is required, select T=L.
- ⑤ A can be used for sharp tip angle types only.
- ⑥ RT=0 only can be selected. (Can be used for tip R types with P<8 and sharp tip angle types.)
- ⑦ R=0 only can be selected. (Can be used for tapered tip types and sharp tip angle types.)



Days to Ship **Quotation**

**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



Alterations	Catalog No.	L(LC·LCT)	P(PC)	A	T	(RT=0) (R=0)	(BC·YC...etc.)
	AN—PSTKA 8	82	PC1.50		T20.0		YC1.0

Alteration	Code	Tip R type	Tapered tip and sharp tip angle types	1Code
Alterations to tip	PC	Tip diameter change PC ≥ P <sub>min.</sub> 0.01mm increments (If combined with PKC, 0.001mm increments can be selected.) ④ TiCN coating cannot be used for P < 1.	Tip diameter change PC ≥ P <sub>min.</sub> ≥ 1.00 0.01mm increments (If combined with PKC, 0.001mm increments can be selected.) ④ Ymax = -Ycmax.	Quotation
		Tip length change 2 ≤ BC ≤ Bmax. ④ Full length L must be at least 30mm longer than tip length BC. ④ For TiCN coating, Bmax. = 50.	Tip taper length change P < 2.0 1 ≤ YC ≤ P × 2.83 - 0.3 P ≥ 2.0 1 ≤ YC ≤ P × 1.86 - 0.2 ≤ 18 L(LC) + YC ≤ Lmax. + 8 0.1mm increments ④ Cannot be used for sharp tip angle types.	
Alterations to full length	LC	Full length change 30 + B (BC) ≤ LC < L 0.1mm increments ④ If difference between full length and tip length is 30mm or less, tip length is adjusted to (Full length - 30mm).	Full length change T + 0.05 ⇔ -0.02	Quotation
Alterations to key groove	TKC	T dimension tolerance change T + 0.05 ⇔ -0.02	Key groove depth change ④ Cannot be used for D3.	Quotation



Price **Quotation**

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