

PILOT PUNCHES FOR FIXING TO STRIPPER PLATES

—STRAIGHT · DLC COATING—



Type	M	Catalog No.	Shape
—Tip R type—	RoHS	N—HTFR	
	Equivalent to SKH51 61~64HRC Surface hardness 3000HV~		
—Tapered tip type—	RoHS	N—HTFT	
	Equivalent to SKH51 61~64HRC Surface hardness 3000HV~		
—Sharp tip angle type—	RoHS	N—HTFA	
	Equivalent to SKH51 61~64HRC Surface hardness 3000HV~		
—Tip R type—	RoHS	N—PTFR	
	Powdered high-speed steel 64~67HRC Surface hardness 3000HV~		
—Tapered tip type—	RoHS	N—PTFT	
	Powdered high-speed steel 64~67HRC Surface hardness 3000HV~		
—Sharp tip angle type—	RoHS	N—PTFA	
	Powdered high-speed steel 64~67HRC Surface hardness 3000HV~		

Catalog No.		0.1mm increments	0.01mm increments (0.001mm increments for lapping)	A	Y	H	
Type	No.	L	min. P max.				
Equivalent to SKH51	1.6	10.0 ~ 40.0	1.00 ~ 1.60	(10)	2	2.6	
	2.0		1.00 ~ 2.00			3	
	2.5		1.50 ~ 2.50			3.5	
	3		2.00 ~ 3.00			5	
	4		3.00 ~ 4.00			7	
Powdered high-speed steel	5		4.00 ~ 5.00		8	3	9
	6		5.00 ~ 6.00		25		11
	8		6.00 ~ 8.00		30	13	
	10		8.00 ~ 10.00			16	
	13		10.00 ~ 13.00			19	
	16	13.00 ~ 16.00					

⊗ A(10) ... If P ≥ 2.00, A10 cannot be selected.

Order **Catalog No.** — **L** — **P** — **A** — **(RT=0)**
 N—PTFR 6 — 18.2 — P5.80 — RT0
 N—HTFT 6 — 18.3 — P5.73

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

- ⊕ **A** Can be used for sharp tip angle types only.
- ⊕ **RT=0** only can be selected. (Can be used for tip R types with P < 8 and sharp tip angle types. However lapping cannot be used.)
- ⊕ **R=0** only can be selected. (Can be used for tapered tip types and sharp tip angle types. However lapping cannot be used.)

Days to Ship **Quotation**

Alterations **Catalog No.** — **L** — **P** — **A(AC)** — **(RT=0)** — (YC·GC·HC...etc.)
 N—HTFA6 — 20.0 — P5.02 — AC18

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 0.1mm increments ⊗ Cannot be used for sharp tip angle types.	Quotation
	GC	—	Tip angle change 1.000 ≤ P ≤ 1.999 ...5° ≤ GC < 10° 2.000 ≤ P ≤ 5.999 ...5° ≤ GC < 15° ⊕ Can be used with P1.000~5.999. ⊕ Can be used for No.2.5~No.6. YC ≤ P/2 (min 0) - 0.3 ≤ 18 ⊗ Cannot be used for sharp tip angle types.	
	AC	—	Tip angle change 15° < AC ≤ 45° 1° increments ⊗ Cannot be used for tapered tip types.	
	SC	—	Lapping of tip ⊕ P dimension tolerance remains the same. ⊕ The base material is finished before the coating is applied. ⊗ R=0 and RT=0 cannot be selected.	

Alteration	Code	Tip R type	Tapered tip and sharp tip angle types	1Code
Alterations to head	PKC	—	Tip diameter tolerance change P + 0.01 ⇄ + 0.005 ⊕ P dimension can be selected in 0.001mm increments.	Quotation
	LKC	—	Full length tolerance change L + 0.3 ⇄ + 0.05	
	HC	—	Head diameter change 2.6 ≤ P ≤ HC < H 0.1mm increments	
	KC	—	Addition of single key flat to head	
	WKC	—	Addition of double key flats in parallel	
Alterations to shank	TKC	—	Head thickness tolerance change T + 0.3 ⇄ + 0.02 ⊕ Head thickness tolerance change (F + 0.3 ⇄ + 0.1)	Quotation
	TKM	—	Head thickness tolerance change T + 0.3 ⇄ - 0.02 ⊕ Head thickness tolerance change (F + 0.3 ⇄ + 0.1)	
Shank	TNK	—	Addition of undercut (Cut of 0.2 or less) ⊕ Can be used for P ≥ 1.00.	Quotation
	FKC	—	F dimension tolerance change F + 0.3 ⇄ + 0.05 ⊗ Cannot be combined with LKC.	

P Price **Quotation**

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