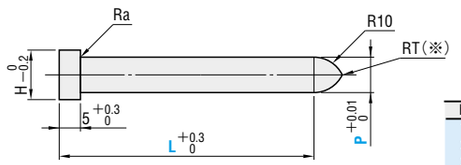
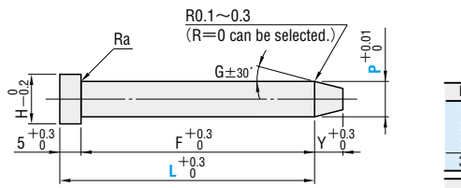
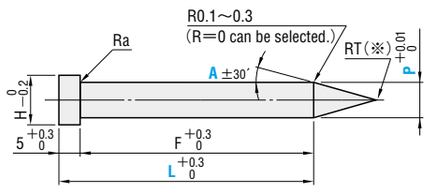
STRAIGHT PILOT PUNCHES
—DLC COATING—

PRESS NEW

PRODUCTS DATA P.1609

Type	M H	Catalog No.	Shape
—Tip R type— RoHS  Shape of tip changes depending on P dimension. P.250	Equivalent to SKH51 61～64HRC Surface 3000HV～	N—HSTC	
	Powdered high-speed steel 64～67HRC Surface 3000HV～	N—PSTC	
—Tapered tip type— RoHS 	Equivalent to SKH51 61～64HRC Surface 3000HV～	N—HTTC	
	Powdered high-speed steel 64～67HRC Surface 3000HV～	N—PTTC	
—Sharp tip angle type— RoHS 	Equivalent to SKH51 61～64HRC Surface 3000HV～	N—HATTC	
	Powdered high-speed steel 64～67HRC Surface 3000HV～	N—PATTC	

No.	Ra
1.6 2.0 2.5	R≦0.2
3～	R≦0.5

P	G
1.00～1.99	10°
2.00～	15°

No.	Ra
1.6 2.0 2.5	R≦0.2
3～	R≦0.5

(※)…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

(※)…Tip is rounded for safety. To keep the sharp tip (no rounding), specify RT=0.

Catalog No. Type	No.	L	0.01mm increments min. P max.	A	Y	H
M Equivalent to SKH51 N—HSTC N—HTTC N—HATTC M Powdered high-speed steel N—PSTC N—PTTC N—PATTC	1.6	42 52 62	1.00～ 1.60	(10) (15) (20) 25 30	2	2.6
	2.0	42 52 62	1.00～ 2.00			3
	2.5	42 52 62	1.50～ 2.50			3.5
	3	42 52 62 72 82 (92)	2.00～ 3.00			5
	4	42 52 62 72 82 (92)	3.00～ 4.00			7
	5	42 52 62 72 82 (92)	4.00～ 5.00		3	8
	6	42 52 62 72 82 (92)	5.00～ 6.00			9
	8	42 52 62 72 82 (92)	6.00～ 8.00		5	11
	10	42 52 62 72 82 (92) (102)	8.00～ 10.00			13
	13	42 52 62 72 82 (92) (102)	10.00～ 13.00		8	16
	16	42 52 62 72 82 (92) (102)	13.00～ 16.00			19
	20	42 52 62 72 82 (92) (102)	16.00～ 20.00			23
	25	42 52 62 72 82 (92) (102)	20.00～ 25.00			28

(92) (102)…L92 and 102 can be used for tip R types and tapered tip types only.
(10)…If P≧6.0, A10 cannot be selected. (15)…If P≧15.0, A15 cannot be selected.
(20)…If P≧20.0, A20 cannot be selected.

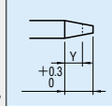
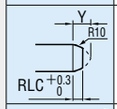
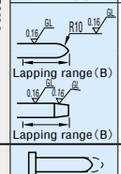
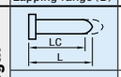
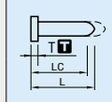
Order

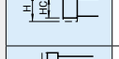
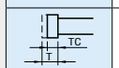
Catalog No.	L	P	A	RT=0 R=0
N—PSTC 6	72	P5.02		RT0
N—HATTC 8	42	P7.03	A15	

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.)
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·LMT) — P — A — (RT=0 R=0) — (YC·HC·TC…etc.)
N—PSTC 10 — LC65 — P8.50 — KC

Alteration		Code	Tip R type	Tapered tip and sharp tip angle types	1Code
Alterations to tip		YC	——	Tip taper length change ·P<2.0 1≦YC≦PX2.83−0.3 ·P≧2.0 1≦YC≦PX1.86−0.3≦18 L(LC)+YC≦Lmax.+8 0.1mm increments ⊗ Cannot be used for sharp tip angle types.	
		RLC	Tip R is cut flat. 2≦RLC<Y<8 Y=√P(10−P/4) 0.1mm increments	——	
		SC	Lapping of tip (※) P dimension tolerance remains the same. (※) the base material is finished before the coating is applied. Lapping range (B): P 1.00～2.99 (B) 13; 3.00～9.99 19; 10.00～ 25 (※) If L<(B)+20, (B) is adjusted to (L−20). ⊗ R=0 and RT=0 cannot be selected. (※) Lapping range for straight portion is min.5mm.	Quotation
Alterations to full length		LC	Full length change 25≦LC<L 0.1mm increments		
		LCT	Changes to head thickness 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 Head thickness tolerance change T +0.3 0 ⇨ +0.02 0 + LC Full length change	
		LMT	Changes to head thickness tolerance and full length are processed using a single code. The allowable range of change, increments, and notes (※) are the same as for LC. TKM Head thickness tolerance change T +0.3 0 ⇨ 0 −0.02 + LC Full length change	

Alteration		Code	Tip R type	Tapered tip and sharp tip angle types	1Code
Alterations to head		HC	Head diameter change P≦HC<H 0.1mm increments (※) 2.6≦HC<H		
		TC	Head thickness change 4≦TC<5 0.1mm increments (If combined with LCT, LMT, TKC, and TKM, 0.01mm increments can be selected.) (※) Full length L is shortened by (5−TC). If combined with LC, full length is equal to LC.		Quotation
		KC	Addition of single key flat to head		
		WKC	Addition of double key flats in parallel		
		TKC	Head thickness tolerance change T +0.3 0 ⇨ +0.02 0		
		TKM	Head thickness tolerance change T +0.3 0 ⇨ 0 −0.02		

■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

Price: Quotation