

# PILOT PUNCHES WITH LOCATING DOWEL HOLES

—DLC COATING—

PRODUCTS DATA

P.1609

Type	Shank diameter D Tolerance	M F	Catalog No.			Shape
			Type	B tip length	With dowel hole	
—Tip R type— <b>ReHS</b>	D <sub>m5</sub>	~	Equivalent to SKD11 60~63 HRC Surface 3000 HV	N—STA		<p><b>A</b> MS6—25                      RT(※) → If P &lt; 8, tip is rounded for safety.                      To keep the sharp tip (no rounding), specify RT=0.                      (RT=0 cannot be selected with foundation WPC®.)                      (If P ≥ 8, tip end is flat. <b>P.1592</b>)                      For the length of tip R, refer to the products data "Punch R length". <b>P.1592</b></p>
			Equivalent to SKD11 60~63 HRC Surface 3000 HV			
—Tapered tip type— <b>ReHS</b>	D <sub>m5</sub>	~	Equivalent to SKD11 60~63 HRC Surface 3000 HV	N—TPA	S L X	<p><b>A</b> MS6—25                      RT(※) → Tip is rounded for safety.                      To keep the sharp tip (no rounding), specify RT=0.                      (RT=0 cannot be selected with foundation WPC®.)</p>
			Equivalent to SKD11 60~63 HRC Surface 3000 HV			
—Sharp tip angle type— <b>ReHS</b>	D <sub>m5</sub>	~	Equivalent to SKD11 60~63 HRC Surface 3000 HV	N—ATA		<p><b>A</b> MS6—25                      RT(※) → Tip is rounded for safety.                      To keep the sharp tip (no rounding), specify RT=0.                      (RT=0 cannot be selected with foundation WPC®.)</p>
			Equivalent to SKD11 60~63 HRC Surface 3000 HV			

Type	Shank diameter D	B tip length	With dowel hole	Catalog No.		L	0.01mm increments min. P max.	A	B	H	Y	
				Type	With dowel hole							
N—STA N—TPA N—ATA —Foundation WPC®— NW—STA NW—TPA NW—ATA	D <sub>m5</sub>	S	C		(42) 52 62 72 82 92 102 112 122 (132) (142)	10	3.00 ~ 9.99 (10)	15	21	13	5	8
						13	6.00 ~ 12.99 (15)					
						16	10.00 ~ 15.99 (20)					
						20	13.00 ~ 19.99 (25)					
						25	18.00 ~ 24.99 (30)					
						10	3.00 ~ 9.99 (10)					
	13	6.00 ~ 12.99 (15)										
	16	10.00 ~ 15.99 (20)										
	20	13.00 ~ 19.99 (25)										
	25	18.00 ~ 24.99 (30)										
	10	3.00 ~ 9.99 (10)	32	13	5							
	13	6.00 ~ 12.99 (15)										
16	10.00 ~ 15.99 (20)											
20	13.00 ~ 19.99 (25)											
25	18.00 ~ 24.99 (30)											
10	3.00 ~ 9.99 (10)	42				19	8					
13	6.00 ~ 12.99 (15)											
16	10.00 ~ 15.99 (20)											
20	13.00 ~ 19.99 (25)											
25	18.00 ~ 24.99 (30)											

L(42) → B=10 If full length L is (42), tip length B is 10mm in all cases.  
 L(132) (142) → L132 and 142 can be used for tip R types and tapered tip types only.  
 P > D - 0.03 → ℓ = 0 If P > D - 0.03, D<sub>-0.01</sub><sup>-0.03</sup> (press-in lead) is not included.  
 A(10) → If P ≥ 9.0, A10 cannot be selected.  
 A(15) → If P ≥ 15.0, A15 cannot be selected.  
 A(20) → If P ≥ 20.0, A20 cannot be selected.



Order

Catalog No. — L — P — A — (RT=0 / R=0)  
 N—STASC 10 — 72 — P5.50  
 N—ATASC 10 — 62 — P3.80 — A20 — R0  
 A Can be used for sharp tip angle types only.  
 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) — P(PC) — A — (RT=0 / R=0) — (BC-YC-HC...etc.)  
 N—STASC 16 — 72 — PC8.505 — PKC

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.)	Tip diameter change PC ≥ P <sub>min.</sub> 0.01mm increments (If combined with PKC, 0.001mm increments can be selected.) Y <sub>max.</sub> = YC <sub>max.</sub>	Quotation
	BC	P(PC) Bmax. 1.500~1.999 20 2.000~3.999 35 4.000~5.999 45 6.000~ (60)	P(PC) Bmax. 1.500~1.999 20 2.000~2.999 30 3.000~3.999 35 4.000~5.999 45 6.000~ (60)	
		Tip length change 2 ≤ BC ≤ Bmax. Full length L must be at least 30mm longer than tip length BC.	0.1mm increments	
	RLC	Tip R is cut flat. 2 ≤ RLC < Y < 8 Y = √(P(10 - P/4)) 0.1mm increments	—	
	YC	—	Tip taper length change 1 ≤ YC ≤ P × 1.86 - 0.3 ≤ 18 L(LC) + YC ≤ Lmax. + 8 0.1mm increments Cannot be used for sharp tip angle types.	
	PKC	Tip diameter tolerance change P + 0.01 / 0 → + 0.005 / 0 (P dimension can be selected in 0.001mm increments.)	—	

Alteration	Code	Tip R type	Tapered tip and sharp tip angle types	1Code
Alterations to head	LC	Full length change 30 + B (BC) ≤ LC < L 0.1mm increments If difference between full length and tip length is 30mm or less, tip length is adjusted to (Full length - 30mm).	—	Quotation
	HC	Head diameter change D ≤ HC < H 0.1mm increments	—	
	TC	Head thickness change 2 ≤ TC < 5 0.1mm increments Full length L is shortened by (5 - TC). If combined with LC, full length is equal to LC.	—	
	KC	Addition of single key flat to head	—	
Shank	WKC	Addition of double key flats in parallel	—	
	NDC	No press-in lead ℓ ≥ 3 → ℓ = 0	—	
Others	TPC	Dowel pin change MS6—25 that comes with the product is changed to MSTP6—25 (tapped type).	—	



Price

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**

PILOT PUNCHES