

PILOT PUNCHES

—DICOAT® TREATMENT—



Type	Shank diameter D tolerance	M	Catalog No.		Shape
			Type	B tip length	
—Tip R·Dicoat® treatment— RoHS Shape of tip changes depending on P dimension. P.250 For shank diameter tolerance D, select either m5 or +0.005.	Dm5	Equivalent to SKD11 60~63 HRC Surface 3000 HV	T—STA		
			T—PSTA		
			AT—STA		
	D+0.005/0	Equivalent to SKD11 60~63 HRC Surface 3000 HV	AT—PSTA		
			AT—PSTA		
			AT—PSTA		
—Tapered tip·Dicoat® treatment— RoHS For shank diameter tolerance D, select either m5 or +0.005.	Dm5	Equivalent to SKD11 60~63 HRC Surface 3000 HV	T—TPA		
			T—PTPA		
			AT—TPA		
	D+0.005/0	Equivalent to SKD11 60~63 HRC Surface 3000 HV	AT—TPA		
			AT—PTPA		
			AT—PTPA		

For the length of tip R, refer to the products data "Punch R length". P.1592

Type	Shank diameter D tolerance	M	Catalog No.		L	B	H	Y												
			Type	B tip length																
Equivalent to SKD11 (Dm5) T—STA T—TPA	Dm5	Equivalent to SKD11 60~63 HRC Surface 3000 HV	S	L	3	42	52	62	72	10	5	2								
					4	42	52	62	72											
					5	42	52	62	72											
					6	42	52	62	72											
					8	(42)	52	62	72				82	92						
					10	(42)	52	62	72				82	92	102					
					13	(42)	52	62	72				82	92	102					
					(16)	(42)	52	62	72				82	92	102					
					(20)	(42)	52	62	72				82	92	102					
					(25)	(42)	52	62	72				82	92	102					
					Powdered high-speed steel T—PSTA T—PTPA	D+0.005/0	Equivalent to SKD11 60~63 HRC Surface 3000 HV	L	L				3	52	62	72		15	7	2
													4	52	62	72				
													5	52	62	72				
													6	52	62	72				
													8	52	62	72	82			
10	52	62	72	82						92	102									
13	52	62	72	82						92	102									
(16)	62	72	82	92						102										
(20)	62	72	82	92						102										
(25)	62	72	82	92						102										
Equivalent to SKD11 (D+0.005) AT—STA AT—TPA	D+0.005/0	Equivalent to SKD11 60~63 HRC Surface 3000 HV	X	L						3	52	62	72		21	11	5			
										4	52	62	72							
										5	62	72								
										6	62	72								
										8	62	72	82	92						
					10	62	72	82	92	102										
					13	62	72	82	92	102										
					(16)	72	82	92	102											
					(20)	72	82	92	102											
					(25)	72	82	92	102											
					Powdered high-speed steel AT—PSTA AT—PTPA	D+0.005/0	Equivalent to SKD11 60~63 HRC Surface 3000 HV	X	L	3	52	62	72					27	13	8
										4	52	62	72							
										5	62	72								
										6	62	72								
										8	62	72	82	92						
10	62	72	82	92						102										
13	62	72	82	92						102										
(16)	72	82	92	102																
(20)	72	82	92	102																
(25)	72	82	92	102																

(D=(16), (20), and (25) are specifications available for shank diameter tolerance Dm5 only.
 L(42)→B=10 If full length is (42), tip length B is 10mm.
 P>D-0.03→ℓ=0 If P>D-0.03, D-0.01 (press-in lead) is not included.



Order
 Catalog No. — L — P — (R=0)
 T—STAS 10 — 72 — P6.48
 T—PTPAL 8 — 82 — P3.50 — R0
 (R=0) only can be selected. (Can be used for tapered tip types.)



Days to Ship **Quotation**



Alterations
 Catalog No. — (L(LC-LCT-LMT)) — P(PC) — (R=0) — (BC·HC·TC, etc.)
 T—STAS 10 — LC75 — PC2.25 — BC13

Alteration	Code	Tip R type	Tapered tip	1Code																													
Alterations to tip 	PC	Tip diameter change PC ≥ Pmin ≥ 1.00 0.01mm increments	Tip diameter change PC ≥ Pmin ≥ 1.00 0.01mm increments Ymax=YCmax. (Refer to YC)	Quotation																													
	BC	Tip length change 2 ≤ BC ≤ Bmax. Full length L must be at least 25mm longer than tip length BC.	<table border="1"> <tr><th>P(PC)</th><th>Bmax.</th></tr> <tr><td>1.00~1.19</td><td>15</td></tr> <tr><td>1.20~1.99</td><td>17</td></tr> <tr><td>2.00~2.99</td><td>27</td></tr> <tr><td>3.00~3.99</td><td>32</td></tr> <tr><td>4.00~5.99</td><td>42</td></tr> <tr><td>6.00~</td><td>47</td></tr> </table>		P(PC)	Bmax.	1.00~1.19	15	1.20~1.99	17	2.00~2.99	27	3.00~3.99	32	4.00~5.99	42	6.00~	47	<table border="1"> <tr><th>P(PC)</th><th>Bmax.</th></tr> <tr><td>1.00~1.19</td><td>15</td></tr> <tr><td>1.20~1.99</td><td>17</td></tr> <tr><td>2.00~2.99</td><td>27</td></tr> <tr><td>3.00~3.99</td><td>32</td></tr> <tr><td>4.00~5.99</td><td>42</td></tr> <tr><td>6.00~</td><td>47</td></tr> </table>	P(PC)	Bmax.	1.00~1.19	15	1.20~1.99	17	2.00~2.99	27	3.00~3.99	32	4.00~5.99	42	6.00~	47
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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																															
Alterations to full length 	LC	Full length change 25 + B(BC) ≤ LC < L 0.1mm increments If difference between full length and tip length is 25mm or less, tip length is adjusted to (Full length - 25mm).																															
	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 → -0.02	LC Full length change																														

Alteration	Code	Tip R type	Tapered tip	1Code
Alterations to head 	KC		Addition of single key flat to head	
	WKC		Addition of double key flats in parallel	
	RC		Head thickness is machined to a tolerance of -0.04~0 relative to the retainer surface. Ⓜ Cannot be used for D+0.005 types.	
	HC		Head diameter change D ≤ HC < H 0.1mm increments	
	TC		Head thickness change 2 ≤ 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.	
	TKC	TKM	TKC	Head thickness tolerance change T +0.3/0 → +0.02/0
Head thickness tolerance change T +0.3/0 → -0.02				
Alterations to shank 	NDC		No press-in lead ℓ ≥ 3 → ℓ = 0	



Price **Quotation**