

STRAIGHT PILOT PUNCHES — FOR FIXING TO STRIPPER PLATE —

— TIP R AND TAPER COMBINED TYPE, MINUS HEAD TOLERANCE · NORMAL LAPPING TiCN COATING · DLC COATING —



Type	M H	Catalog No.		Shape						
		DLC coating	TiCN coating Surface hardness 3000HV							
	Equivalent to SKH51 61~64HRC	N-HTFRF	H-HTFRF	<p>—Straight type—</p> <p>Enlarged view of circled part</p> <p>RT (※) → Tip is rounded for safety. To keep the sharp tip (no rounding), specify RT=0.</p> <table border="1"> <tr><th>No.</th><th>Ra</th></tr> <tr><td>1.6 2.0 2.5</td><td>R≤0.2</td></tr> <tr><td>3 ~</td><td>R≤0.5</td></tr> </table>	No.	Ra	1.6 2.0 2.5	R≤0.2	3 ~	R≤0.5
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1.6 2.0 2.5	R≤0.2									
3 ~	R≤0.5									
Powdered high-speed steel 64~67HRC	N-PTFRF	H-PTFRF								

Catalog No.		0.1mm increments	0.01mm increments (0.001mm increments for lapping)	H
Type	No.	L	min. P max.	
M Equivalent to SKH51 M Powdered high-speed steel M Equivalent to SKH51 M Powdered high-speed steel	DLC coating	10.0 ~ 40.0	1.00~1.60	2.6
			1.00~2.00	3.0
	1.50~2.50		3.5	
	2.00~3.00		5	
	3.00~4.00		7	
	4.00~5.00		8	
	5.00~6.00		9	
	6.00~8.00		11	

(Y) → Tip Y length = $0.6 + \sqrt{(P-0.2)(40.2-P)/4}$

Order

Catalog No.	L	P	(RT=0)
N-HTFRF 2.0	28.0	P1.90	RTO
H-PTFRF 2.5	35.0	P2.20	

■ Features ● These pilot punches for fixing to stripper plates were developed for use with press dies that are used with thin workpieces.
● The under-head dimension F is highly accurate and the tip is smoothly rounded.

Days to Ship **Quotation**

Alterations Catalog No. — L — P — (RT=0) — (RLC·HC...etc.)
H-HTFRF3 — 28.0 — P2.48 — HC4

Alteration	Code	Spec.	1Code														
	RLC	Tip R is cut flat. 3 ≤ RLC < Ymax. 0.1mm increments ⊗ RT=0 cannot be selected.	<table border="1"> <tr><th>P(PC)</th><th>Ymax.</th></tr> <tr><td>1.000~1.499</td><td>3</td></tr> <tr><td>1.500~2.499</td><td>4</td></tr> <tr><td>2.500~3.499</td><td>5</td></tr> <tr><td>3.500~4.999</td><td>6</td></tr> <tr><td>5.000~6.999</td><td>7</td></tr> <tr><td>7.000~8.000</td><td>8</td></tr> </table>	P(PC)	Ymax.	1.000~1.499	3	1.500~2.499	4	2.500~3.499	5	3.500~4.999	6	5.000~6.999	7	7.000~8.000	8
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7.000~8.000	8																
	SC	Lapping of tip ⊙ P dimension increment remains the same. ⊙ The base material is finished before the coating is applied. ⊗ RT=0 cannot be selected.															
	PKC	Tip diameter tolerance change $P \begin{matrix} +0.01 \\ 0 \\ -0.005 \end{matrix} \Rightarrow \begin{matrix} +0.005 \\ 0 \\ 0 \end{matrix}$ ⊙ P dimension can be selected in 0.001mm increments.															

Alteration	Code	Spec.	1Code
	LKC	Full length tolerance change $L \pm 0.05 \Rightarrow \begin{matrix} +0.05 \\ 0 \end{matrix}$ ⊙ F dimension tolerance $F \begin{matrix} +0.05 \\ 0 \end{matrix} \Rightarrow \pm 0.05$	Quotation
	HC	Head diameter change $2.6 \leq P+0.1 \leq HC < H$ 0.1mm increments	
	WKC	Addition of double key flats in parallel	
	TNK	Addition of undercut (Cut of 0.2 or less)	

Price **Quotation**