

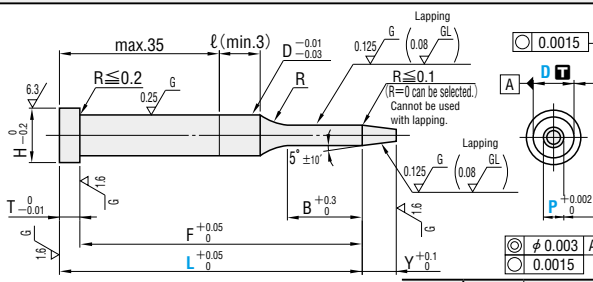




# PRECISION CARBIDE PILOT PUNCHES



# PRECISION CARBIDE PILOT PUNCHES FOR FIXING TO STRIPPER PLATE

Type	RoHS	Catalog No.	Shape
		VTPAS VTPAL	 <p>Although the marks of processing may remain in the center of a flange end face, it is satisfactory on a function.</p>
		VXTPAS VXTPAL	

Type	D	L						0.001mm increments		B	H	Y	T			
		2.0	2.5	3	4	5	6	min.	max.							
Lapping VTPAS VXTPAS	2.0	22	27	32	37	42	47	52	1.000	~	1.990	8	3.0	4	3	
	2.5	22	27	32	37	42	47	52	1.000	~	2.490					
	3			42	47	52	57	62	1.000	~	2.990	10	5	5		
	4			42	47	52	57	62	67	72	1.000				~	3.990
	5			42	47	52	57	62	67	72	2.000				~	4.990
	6			42	47	52	57	62	67	72	2.000				~	5.990
Lapping VTPAL VXTPAL	2.0			32	37	42	47	52	1.000	~	1.990	10	3.0	4	3	
	2.5			32	37	42	47	52	1.000	~	2.490					
	3					52	57	62	1.000	~	2.990	15	5	5		
	4					52	57	62	67	72	1.000				~	3.990
	5					52	57	62	67	72	2.000				~	4.990
	6					52	57	62	67	72	2.000				~	5.990

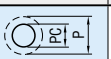
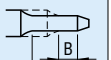
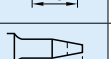
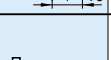
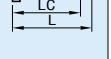

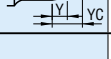
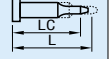
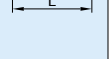
⚠ P>D-0.03 → ℓ=0 If P>D-0.03, D<sup>-0.01</sup>/<sub>0.03</sub> (press-in lead) is not included.

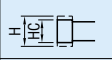
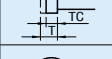


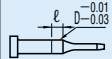
 **Order** Catalog No. — L — P — (R)  
 VTPAS 4 — 42 — P1.998  
 VXTPAL 5 — 57 — P2.301 — R0  
 ⚠ Only R=0 can be selected (except lapping).



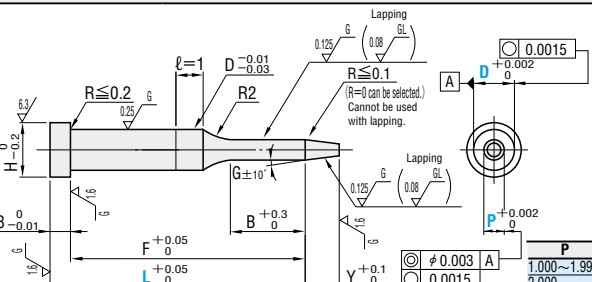

 **Price**  **Quotation**



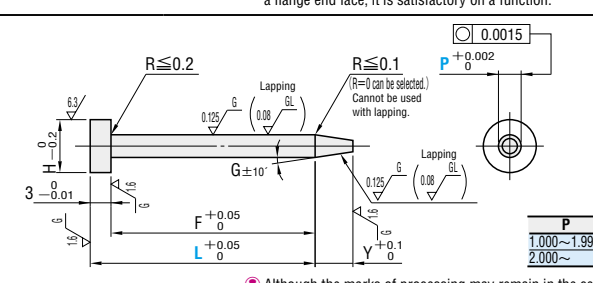
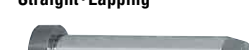
 **Days to Ship**  **Quotation**

 **Alterations** Catalog No. — L(LC) — P(PC) — (R) — (BC-YC-HC-TC, etc.)  
 VTPAS 4 — LC45.0 — P1.998 — YC3.0

Alteration	Code	Spec.	1Code									
	PC	Tip diameter change PC ≥ Pmin./2 ≥ 1.000 0.001mm increments	<table border="1"> <tr> <th>P</th> <th>Bmax</th> <th>Ymax</th> </tr> <tr> <td>1.000~1.999</td> <td>15</td> <td>4</td> </tr> <tr> <td>2.000~</td> <td>22</td> <td>5</td> </tr> </table>	P	Bmax	Ymax	1.000~1.999	15	4	2.000~	22	5
		P		Bmax	Ymax							
1.000~1.999	15	4										
2.000~	22	5										
	BC	Tip length change D ≥ 2.5 2 ≤ BC < B D ≥ 3 2 ≤ BC ≤ Bmax ⚠ Full length L must be 25mm longer than tip length BC. 0.1mm increments										
				YC	Tip taper length change 1 ≤ YC ≤ Ymax 0.1mm increments	<table border="1"> <tr> <th>P</th> <th>Ymax</th> </tr> <tr> <td>1.000~1.999</td> <td>4</td> </tr> <tr> <td>2.000~</td> <td>5</td> </tr> </table>	P	Ymax	1.000~1.999	4	2.000~	5
P	Ymax											
1.000~1.999	4											
2.000~	5											
	LC	Full length change D ≥ 2.5 22 < LC < 52 0.1mm increments D ≥ 3 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). ⚠ For LC32.1~LC36.9, D <sup>-0.01</sup> / <sub>0</sub> is 0.										
				HC	Head diameter change D ≤ HC < H 0.1mm increments							
	TC		Head thickness change 2 ≤ TC < T 0.1mm increments ⚠ Full length L is shortened by (T - TC). If combined with LC, full length is equal to LC.									
			KC	Addition of single key flat to head								
	WKC			Addition of double key flats in parallel								
			NDC	No press-in lead ℓ ≥ 3 → ℓ = 0								


Alteration	Code	Spec.	1Code
	HC	Head diameter change D ≤ HC < H 0.1mm increments	
			
	KC		Addition of single key flat to head
			WKC
	NDC		



Type	RoHS	Catalog No.	Shape
		VTPTP	 <p>Although the marks of processing may remain in the center of a flange end face, it is satisfactory on a function.</p>
		VXTPTP	

Type	RoHS	Catalog No.	Shape
		VTPT	 <p>Although the marks of processing may remain in the center of a flange end face, it is satisfactory on a function.</p>
		VXTPT	

Type	D	0.1mm increments		0.001mm increments		B	Y	H	
		L	min.	max.					
Lapping VTPTP VXTPTP	2.0	12.0 ~ 32.0		0.500	~	1.990	4	1	3
	2.5		1.000	~	2.490				
	3		1.000	~	2.990	3	2	5	
	4		2.000	~	3.990				
	5		2.000	~	4.990				
	6		2.500	~	5.990				

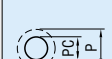
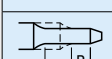
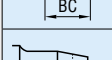
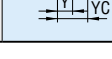

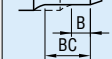
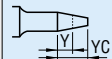
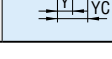
⚠ P>D-0.03 → ℓ=0 If P>D-0.03, D<sup>-0.01</sup>/<sub>0.03</sub> (press-in lead) is not included.

 **Order** Catalog No. — L — P — (R)  
 VTPTP3 — 23.0 — P1.998  
 VTPT2.5 — 23.0 — P1.998 — R0  
 ⚠ Only R=0 can be selected (except lapping).

 **Price**  **Quotation**

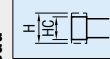

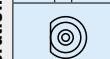

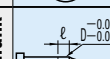
 **Days to Ship**  **Quotation**

 **Alterations** Catalog No. — L — P(PC) — (R) — (BC-YC-HC-TC, etc.)  
 VTPTP 3 — 18 — PC0.900 — YC1.0

Alteration	Code	Spec.	1Code																					
	PC	Tip diameter change PC ≥ Pmin./2 ≥ 0.5 0.001mm increments ⚠ Cannot be used for straight types.	<table border="1"> <tr> <th>P</th> <th>Bmax</th> <th>Ymax</th> </tr> <tr> <td>0.500~0.999</td> <td>6</td> <td>1</td> </tr> <tr> <td>0.800~0.999</td> <td>8</td> <td>1</td> </tr> <tr> <td>1.000~1.499</td> <td>13</td> <td>2</td> </tr> <tr> <td>1.500~1.999</td> <td>13</td> <td>3</td> </tr> <tr> <td>2.000~2.499</td> <td>19</td> <td>3</td> </tr> <tr> <td>2.500~</td> <td>19</td> <td>4</td> </tr> </table>	P	Bmax	Ymax	0.500~0.999	6	1	0.800~0.999	8	1	1.000~1.499	13	2	1.500~1.999	13	3	2.000~2.499	19	3	2.500~	19	4
		P		Bmax	Ymax																			
0.500~0.999	6	1																						
0.800~0.999	8	1																						
1.000~1.499	13	2																						
1.500~1.999	13	3																						
2.000~2.499	19	3																						
2.500~	19	4																						
	BC	Tip length change 2 ≤ BC ≤ Bmax. 0.1mm increments ⚠ Full length L must be at least 8mm longer than tip length BC. ⚠ Cannot be used for straight types.																						
				YC	Tip taper length change 1 ≤ YC ≤ Ymax. 0.1mm increments	<table border="1"> <tr> <th>P</th> <th>Ymax</th> </tr> <tr> <td>1.000~1.499</td> <td>2</td> </tr> <tr> <td>1.500~2.499</td> <td>3</td> </tr> <tr> <td>2.500~</td> <td>4</td> </tr> </table>	P	Ymax	1.000~1.499	2	1.500~2.499	3	2.500~	4										
P	Ymax																							
1.000~1.499	2																							
1.500~2.499	3																							
2.500~	4																							
	HC	Head diameter change D - P ≤ HC < H 0.1mm increments																						
				TC	Head thickness change 2 ≤ TC < 3 0.1mm increments ⚠ The full length remains as specified.																			
	KC		Addition of single key flat to head																					
			WKC	Addition of double key flats in parallel																				
	NDC			No press-in lead ℓ = 1 → ℓ = 0 ⚠ Cannot be used for straight types.																				

Type	No.	0.1mm increments		0.001mm increments		Y	H	
		L	min.	max.				
Lapping VTPT VXTPT	2.0	12.0 ~ 32.0		1.000	~	2.000	2	3
	2.5		1.500	~	2.500			
	3		2.000	~	3.000	3	5	
	4		3.000	~	4.000			
	5		4.000	~	5.000			
	6		5.000	~	6.000			

 **Price**  **Quotation**

Alteration	Code	Spec.	1Code
	HC	Head diameter change D - P ≤ HC < H 0.1mm increments	
			
	KC		Addition of single key flat to head
			WKC
	NDC		