
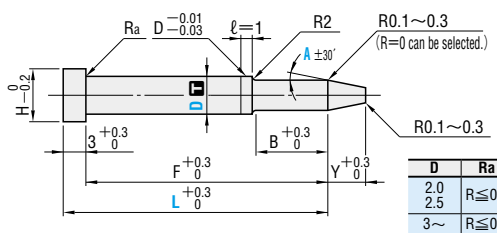
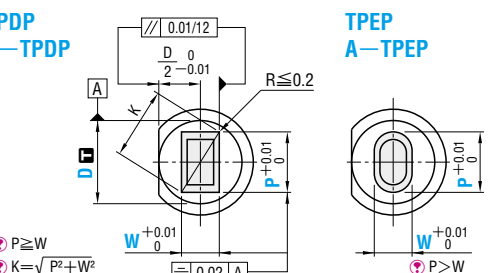


SHAPED PILOT PUNCHES FOR FIXING TO STRIPPER PLATES

Type	Shank diameter D tolerance	Material	Catalog No.	Shape								
 RoHS	D m5	Equivalent to SKD11 60~63HRC	TPDP TPEP	 <table border="1"> <thead> <tr> <th>D</th> <th>Ra</th> </tr> </thead> <tbody> <tr> <td>2.0</td> <td>R ≤ 0.2</td> </tr> <tr> <td>2.5</td> <td>R ≤ 0.2</td> </tr> <tr> <td>3~</td> <td>R ≤ 0.5</td> </tr> </tbody> </table>	D	Ra	2.0	R ≤ 0.2	2.5	R ≤ 0.2	3~	R ≤ 0.5
				D	Ra							
2.0	R ≤ 0.2											
2.5	R ≤ 0.2											
3~	R ≤ 0.5											
D +0.005/0	Equivalent to SKD11 60~63HRC	A-TPDP A-TPEP	 <p>⊙ P ≥ W ⊙ K = √(P² + W²)</p>									

For shank diameter tolerance D, select either m5 or +0.005/0.

Catalog No.	Type	D	0.1mm increments L	0.01mm increments		A	B	Y	H
				P-K max.	P-W min.				
TPDP TPEP		2.0	12.0 ~ 32.0	1.95	0.30	5	4	(4)	3
		2.5		2.45	0.50				3.5
A-TPDP A-TPEP		3		2.95	0.70	10			5
		4		3.95	1.00	15			7

⊙ Y(4) → May be 4 or less depending on P·W·A.

Order **Catalog No.** - L - P - W - A - (R)
 TPDP 2.0 - 15.5 - P1.40 - W1.25 - A5
 A-TPDP 3 - 15.0 - P2.50 - W1.50 - A10 - R0
 ⊙ Only R=0 can be selected.

Days to Ship **Quotation**

Price **Quotation**

Alterations **Catalog No.** - L - P - W - A - (R) - (BC-YC-HC, etc.)
 TPDP 2.0 - 15.5 - P1.40 - W1.25 - A5 - BC3-HC2.5

Alteration	Code	Spec.	1Code										
Alterations to tip	BC	Tip length change 2 ≤ BC ≤ BCmax. 0.1mm increments ⊙ Cannot be used with P0.30~0.40 ⊙ Full length L must be at least 8mm longer than tip length BC.	<table border="1"> <thead> <tr> <th>P-W</th> <th>BCmax.</th> </tr> </thead> <tbody> <tr> <td>0.50~0.99</td> <td>8</td> </tr> <tr> <td>1.00~1.19</td> <td>15</td> </tr> <tr> <td>1.20~1.99</td> <td>20</td> </tr> <tr> <td>2.00~</td> <td>24</td> </tr> </tbody> </table>	P-W	BCmax.	0.50~0.99	8	1.00~1.19	15	1.20~1.99	20	2.00~	24
	P-W	BCmax.											
	0.50~0.99	8											
1.00~1.19	15												
1.20~1.99	20												
2.00~	24												
YC	Tip taper length change 1 ≤ YC ≤ 4 0.1mm increments	YC ≤ $\frac{W}{2 \tan A} - 0.2$	Quotation										
PKC	Tip diameter tolerance change	P-W +0.01/0 ⇨ +0.005/0											
Alterations to full length	LKC	Full length tolerance change	L +0.3/0 ⇨ +0.05/0										

Alteration	Code	Spec.	1Code
Alterations to head	HC	Head diameter change D ≤ HC < H 0.1mm increments	
	TC	Head thickness change 2 ≤ TC < 3 0.1mm increments ⊙ The full length remains as specified.	
	WKC	Addition of double key flats in parallel	
	TKC	Head thickness tolerance change	T +0.3/0 ⇨ +0.02/0
Alterations to shank	TKM	Head thickness tolerance change	T +0.3/0 ⇨ -0.02/0
	FKC	F dimension tolerance change ⊙ Cannot be combined with LKC.	F +0.3/0 ⇨ +0.05/0
Alterations to shank	NDC	No press-in lead	ℓ = 1 ⇨ ℓ = 0
	TNK	Addition of undercut (Cut of 0.2 or less)	

PILOT PUNCHES