

PUNCHES WITH KEY GROOVES

—RW COATING—



Type	M H	Catalog No.		Tip shape	B Tip length	The tip shape can be selected from Tip shape A ~ G in the figure below.
		Type	Type			
		Shank dia. T D _{m5}	Shank dia. T D _{+0.005/0}			
	RoHS	Equivalent to SKH51 61 ~ 64HRC Surface 3100HV	ARW-SHK	ARW-SHK	A D R E G	<p>The tip edges are very slightly rounded.</p>
		Powdered high-speed steel 64 ~ 67HRC Surface 3100HV	ARW-PK	ARW-PK	S L X	

Tip shape	Tip shape	Tip shape	Tip shape	Tip shape

Type	Tip shape	Tip length	D	L					0.01mm increments			0.1 mm increments	B	U Key groove depth				
				3	4	5	6	8	A	D R E G	R				T			
(D _{m5}) RW-SHK RW-PK	S	3	40	50	60	70	80	1.00	2.99	—	—	0.15 ≤ R < W/2 (R only)	T > 5.0	8	0.5			
		4	40	50	60	70	80	1.00	3.99	3.97	1.00							
		5	40	50	60	70	80	2.00	4.99	4.97	1.20							
		6	40	50	60	70	80	2.00	5.99	5.97	1.50							
		8	(40)	50	60	70	80	90	100	3.00	7.99					7.97	2.00	
		10	(40)	50	60	70	80	90	100	3.00	9.99					9.97	2.50	
	(D _{+0.005/0}) ARW-SHK ARW-PK	L	13	(40)	50	60	70	80	90	100	6.00			12.99	12.97	3.00	13	1.5
			16	(40)	50	60	70	80	90	100	6.00			15.99	15.97	4.00		
			3	50	60	70	80	1.20	2.99	—	—			25	1.0			
			4	50	60	70	80	1.20	3.99	3.97	2.00							
		5	50	60	70	80	2.00	4.99	4.97	2.00								
		6	50	60	70	80	2.00	5.99	5.97	2.00								
		8	50	60	70	80	90	100	3.00	7.99	7.97					2.50		
		10	50	60	70	80	90	100	3.00	9.99	9.97					2.50		
		13	50	60	70	80	90	100	6.00	12.99	12.97					3.00		
		16	50	60	70	80	90	100	6.00	15.99	15.97					4.00		
X	3	60	70	80	1.20	2.99	—	—	30	1.5								
	4	60	70	80	1.20	3.99	3.97	2.00										
	5	60	70	80	2.00	4.99	4.97	2.00										
	6	60	70	80	2.00	5.99	5.97	2.00										
	8	60	70	80	90	100	3.00	7.99	7.97	5.00	25	1.0						
	10	60	70	80	90	100	3.00	9.99	9.97	5.00								
	13	60	70	80	90	100	6.00	12.99	12.97	5.00								
	16	60	70	80	90	100	6.00	15.99	15.97	5.00								

Ⓛ (40) → B=8 If the full length is (40), the tip length is 8mm in all cases.
 Ⓢ If no key groove is required, select T dimension that is the same as the full length L.

Order **Catalog No.** — **L** — **P** — **W** — **R (R only)** — **T** Ⓢ If no key groove is required, select T=L.

ARW-SHKDL 13 — 80 — P10.50 — W7.34 — T20.1

Days to Ship **Quotation**

Effects of RW coating
 Effective for press processing of ultra-high-tensile material and thick plate high-tensile material thanks to its superior wear resistance, peeling resistance and heat resistance.
 See the product data for details. **P.1607**

Alterations **Catalog No.** — **L (LC-LCT)** — **P (PC)** — **W (WC)** — **R** — **T** — (BC-KC-LKC...etc.)
 RW-SHKEL 16 — LC68 — P12.00 — W6.00 — T20.5 — LKC

Alterations	Code	A	D R E G	1Code										
	PC WC	Tip dimension change PC ≥ P _{min} ≥ 1.00 0.01 mm increments	Tip dimension change WC ≥ P _{min} ≥ 1.00 0.01 mm increments Ⓢ Cannot be used for tip X.	<table border="1"> <tr> <th>P (PC)</th> <th>Bmax</th> </tr> <tr> <td>1.000~1.999</td> <td>20</td> </tr> <tr> <td>2.000~3.999</td> <td>35</td> </tr> <tr> <td>4.000~5.999</td> <td>45</td> </tr> <tr> <td>6.000~</td> <td>60</td> </tr> </table>	P (PC)	Bmax	1.000~1.999	20	2.000~3.999	35	4.000~5.999	45	6.000~	60
		P (PC)	Bmax											
		1.000~1.999	20											
2.000~3.999	35													
4.000~5.999	45													
6.000~	60													
	BC	Tip length change 2 ≤ BC ≤ Bmax. 0.1 mm increments Ⓢ Full length L must be at least 25mm longer than tip length BC.	Tip length change 2 ≤ BC ≤ Bmax. 0.1 mm increments Ⓢ Full length L must be at least 30mm longer than tip length BC.											
			PRC ± 0.1	Rounding of tip side edge 0.3 ≤ PRC ≤ 1 0.1 mm increments Ⓢ PRC ≤ (P-0.2)/2										
	LC LCT LKC	Full length change 25+B (BC) ≤ LC < L 0.1 mm increments Ⓢ If difference between full length and tip length is 25mm or less, tip length is adjusted to (Full length - 25mm). (If combined with LKC, 0.01 mm increments can be selected.)	Full length change 30+B (BC) ≤ LC < L 0.1 mm increments Ⓢ If difference between full length and tip length is 30mm or less, tip length is adjusted to (Full length - 30mm). (If combined with LKC, 0.01 mm increments can be selected.)	Quotation T dimension tolerance and full length changes are processed using a single code. The allowable range of change, increment, ordering process, and notes (Ⓢ) are the same as for LC. TKC LC tolerance change $T^{+0.05/0} \Rightarrow -0.02$ + Full length change + $L^{+0.3/0} \Rightarrow +0.1/0$										
			LKC		Full length tolerance change $L^{+0.3/0} \Rightarrow +0.05$									

Alterations	Code	A	D R E G	1Code								
	KC	—	Key flat 90° 180° position change 1° increments									
	NKC	—	No key flat									
	KD	—	Key groove 90° 180° position change 1° increments									
	WKD	Ⓢ Addition of double key grooves in parallel	Ⓢ Double key grooves in parallel. Can be combined with KD.									
	UK	Key groove depth change Ⓢ Cannot be used for D3.	<table border="1"> <tr> <th>D</th> <th>UK</th> </tr> <tr> <td>4-5</td> <td>0.7</td> </tr> <tr> <td>6</td> <td>1.2</td> </tr> <tr> <td>8-16</td> <td>1.7</td> </tr> </table>	D	UK	4-5	0.7	6	1.2	8-16	1.7	Quotation
		D	UK									
4-5	0.7											
6	1.2											
8-16	1.7											
	TKC	T dimension tolerance change $T^{+0.05/0} \Rightarrow -0.02$										
	SKC	Single key flat on shank Ⓢ +D4~6 P ≤ D-1.2 W ≤ D-1.2 (Machining width 0.5) Ⓢ +D8~ P ≤ D-2.2 W ≤ D-2.2 (Machining width 1) Ⓢ Cannot be used for D3. Ⓢ Cannot be combined with KC-KD-WKD.										

P Price **Quotation**

Fixing keys for punches with key grooves **P.245**

PSKB PSKBH PSKS PSKJ PSK PSKP PSKH PSKW