

TAPPED PUNCHES

—WPC® TREATMENT·HW COATING—



Type	M	Catalog No.		Tip shape	B Tip length	The tip shape can be selected from Tip shape A~G in the figure below.
		Type	Type			
—WPC® treatment— RoHS	Equivalent to SKD11 60~63HRC Surface 1000~1100HV	WPC® treatment W—MP	WPC® treatment AW—MP	A	S	
—HW coating—		WPC® treatment W—MPH	WPC® treatment AW—MPH			
	Powdered high-speed steel 64~67HRC Surface 1000~1100HV	HW coating HW—MPH	HW coating AHW—MPH	R	X	
	Powdered high-speed steel 64~67HRC Surface 3000HV			E		
				G		

Type	Tip shape	Tip length	D	L								0.01mm increments				B	M
				5	6	8	10	13	16	20	25	min. P max.	P-Kmax.	P-Wmin.	R		
—WPC® treatment— W—MP W—MPH	S	8	5	40	50	60	70	80			2.00	~	4.99	4.97	1.20	8	3
			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		
			13	(40)	50	60	70	80	90	100	6.00	~	12.99	12.97	3.00		
			16	(40)	50	60	70	80	90	100	10.00	~	15.99	15.97	4.00		
—HW coating— HW—MPH	L	13	5	50	60	70	80			2.00	~	4.99	4.97	2.00	13	3	
			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	60	70	80	90	100			10.00	~	15.99	15.97			4.00
—WPC® treatment— AW—MP AW—MPH	X	25	60	70	80	90	100			13.00	~	19.99	19.97	5.00	25	6	
			70	80	90	100			18.00	~	24.99	24.97	6.00				
			5	60	70	80					2.00	~	4.99	4.97			3.50
			6	60	70	80					2.00	~	5.99	5.97			3.50
			8	60	70	80	90	100			3.00	~	7.99	7.97			5.00
			10	60	70	80	90	100			3.00	~	9.99	9.97			5.00
—HW coating— AHW—MPH	X	30	60	70	80	90	100			6.00	~	12.99	12.97	5.00	30	5	
			70	80	90	100					10.00	~	15.99				
			16	70	80	90	100				13.00	~	19.99				
			20	70	80	90	100				13.00	~	19.99				
			25	70	80	90	100				18.00	~	24.99				
			25	70	80	90	100				18.00	~	24.99				

Ⓛ(40)→B=8 If the full length is (40), the tip length is 8mm in all cases.

Order **Catalog No.** — **L** — **P** — **W** — **R** (Ⓡ only)
AW—MPDL 13 — 80 — P10.50 — W7.34

Days to Ship **Quotation**

Alterations **Catalog No.** — **L(LC)** — **P(PC)** — **W(WC)** — **R** — (BC-KC-WKC, etc.)
W—MPHAL 13 — 80 — P8.24 — KC-LKC

Alteration	Code	A	D R E G	1Code
Alterations to tip	PC WC	Tip dimension change $PC \geq \frac{P_{min.}}{2}$ 0.01 mm increments (If combined with PCC, 0.01 mm increments can be selected.)	Tip dimension change $PC \geq \frac{P \cdot W_{min.}}{2} \geq 1.00$ 0.01 mm increments ⊗ Cannot be used for tip X.	Quotation
	BC	Tip length change $2 \leq BC \leq B_{max.}$ 0.1 mm increments ⊗ Full length L must be at least 25 mm longer than tip length BC.	Tip length change $2 \leq BC \leq B_{max.}$ 0.1 mm increments ⊗ Full length L must be at least 30mm longer than tip length BC.	
	PRC	Rounding of tip side edge $0.3 \leq PRC \leq 1$ 0.1 mm increments ⊗ PRC $\leq (P-0.2)/2$ ⊗ Cannot be combined with PCC.		
	PCC	Chamfering to tip side edge $0.3 \leq PCC \leq 1$ 0.1 mm increments ⊗ PCC $\leq (P-0.2)/2$ ⊗ Cannot be combined with PRC.		
	PKC	Tip tolerance change $P + 0.01 \rightarrow +0.005$ 0 ⊗ (P dimension can be selected in 0.001 mm increments.)	Tip tolerance change $P - W \pm 0.01 \rightarrow +0.01$ 0	
			⊗ HW coating cannot be used for D > 13.	

Price **Quotation**

Alteration	Code	A	D R E G	1Code
Alterations to full length	LC	Full length change $25 + B(BC) \leq LC < L$ 0.1 mm increments ⊗ If difference between full length and tip length is 25 mm or less, tip length is adjusted to (Full length - 25 mm).	Full length change $30 + B(BC) \leq LC < L$ 0.1 mm increments ⊗ If difference between full length and tip length is 30mm or less, tip length is adjusted to (Full length - 30mm).	Quotation
	LKC	Full length tolerance change $L + 0.3 \rightarrow +0.05$ 0		
Others	KC	Addition of single key slot ⊗ Cannot be used for DS.	Key slot position change $0^\circ \sim 180^\circ$ 1° increments	Quotation
	WKC	Addition of double key slots in parallel ⊗ Cannot be used for DS.	Double key slots in parallel Can be combined with KC.	
	NKC		No key slot	
	SKC	Single key flat on shank ⊗ Cannot be combined with KC-WKC.		

PUNCHES