

BLOCK PUNCHES

— WITH KEY GROOVE —

Material	Catalog No.		RoHS
	Type	Tip shape	
(H3~5) Equivalent to SKH51 61~64HRC (H6~30) Equivalent to SKD11 60~63HRC	HK	D	
Equivalent to SKH51 61~64HRC	HSK (H6~30)	R, E, G	
Powdered high-speed steel 64~67HRC	PHK	G	

Details of key groove: $R \leq 0.3$
 Even when $P=V$ and $W=H$, the tip tolerance is determined by the P and W tolerances.

Type	Tip shape	Tip length	H	W min.	V																L	0.1mm T	B	U
					3	4	5	6	8	10	13	16	20	22	25	28	30	(40)	(50)					
HK HSK (H6~30) PHK	D	S	(3) 1.0																6	8	1.0			
			(4) 1.0																					
			5 1.2																					
			6 1.5																					
			8 2.0																	8		13		
			10 2.5																					
	R, E, G	L	13 3.0																13	19	1.5			
			16 4.0																					
			20 5.0																					
			22 6.0																					
			25 6.5																					
			28 7.0																					
30 7.5																								

(3) L(40) · H10~30 → B=13 If full length is (40) and H dimension is 10~30, tip length is 13mm in all cases.
 (4) L(50) · H16~30 → B=19 If full length is (50) and H dimension is 16~30, tip length is 19mm in all cases.
 H(3) (4) → L40~70 If H dimension is (3) or (4), full length L is within a range of 40~70.
 V(40) and (50) are specifications available for HK types only.

Order ■ Key groove position: K specification

(1) If tip is at center of shank

Catalog No. V H L ——— 0.01mm increments ——— 0.1mm increments ——— K
 PHKES 08 06 — 60 — P7.00 — W5.20 — T20.5 — K90

(2) If tip is not at center of shank

Catalog No. V H L ——— 0.01mm increments ——— 0.1mm increments ——— K ——— 0.01mm increments
 PHKEL 20 10 — 70 — P16.00 — W8.00 — T20.5 — K90 — X0.00 — Y0.50

X and Y must be set either to 0 or to 0.02 or more. Tolerance ±0.01

■ Fixing keys for punches with key grooves P.245

PSKB PSKBH PSKS PSKJ PSK PSKP PSKH PSKW

Alterations Catalog No. V H L(LC) P(PC) W(WC) R ——— T—K—X—Y— (BC-PKC, etc.)
 HKES 20 10 — L05.5 — P16.00 — W8.00 — T20.5 — K90 — X0.00 — Y0.50 — BC15.5

P Price **Quotation**

Alteration	Code	Spec.	1Code
Alterations to tip	PC	Tip dimension change $PC \geq V \times 0.3 \geq 1.00$	
	WC	$WC \geq H \times 0.15 \geq 0.50$	
	BC	Tip length change $2 \leq BC \leq B_{max}$	
	SC	Lapping of tip $W \geq 2.00$	
Alterations to full length	LC	Full length change $30 + B(BC) \leq LC < L$	Quotation
	LKC	Full length tolerance change	
	LKZ	Full length tolerance change	
	CC	Chamfering to four corners of shank	
Alterations to shape	TKC	Key groove position tolerance change	
	RTC	Key groove position tolerance change	
	WK	Addition of key groove at symmetrically opposite position	
	UK	Key groove depth change	
	VKC	Shank tolerance change	
	VKM	Shank tolerance change	
	VHM	Shank tolerance change	
VHZ	Shank tolerance change		
DC	Addition of press-in lead		