

BLOCK PUNCHES

— SINGLE FLANGE —

Catalog No.

Type	Tip shape	Tip length
HF (H2 ~ 5) Equivalent to SKH51 61 ~ 64HRC (H6 ~ 30) Equivalent to SKD11 60 ~ 63HRC	D	S
	R	L
HSF (H6 ~ 30)	R	S
	E	L
PHF Powdered high-speed steel 64 ~ 67HRC	R	S
	G	L

Tip shape D R E G

Ⓢ Tip length (B) L > S

RoHS

Ⓢ Details of flange $R \leq 0.3$

Ⓢ Even when $P=V$ and $W=H$, the tip tolerance is determined by the P and W tolerances.

- Ⓢ $W \leq P \leq W \times 20$
- Ⓢ $R=0$ can be selected.
- Ⓢ $W \leq P \leq W \times 20$
- Ⓢ $0.15 \leq R < W/2$
- Ⓢ $W \leq P \leq W \times 20$
- Ⓢ $W < P \leq W \times 20$

Catalog No.	Type	Tip shape	Tip length	V																		L	B
				2	3	4	5	6	8	10	13	16	20	22	25	28	30	(40)	(50)				
HF HSF (H6 ~ 30) PHF	D R E G	S S L L	(2) 1.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	6	8	
			(3) 1.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	8	13
			(4) 1.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	13	19
			5 1.2	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	19	25
			6 1.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	19	25
			8 2.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	19	25
			10 2.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	19	25
			13 3.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	19	25
			16 4.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	19	25
			20 5.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	19	25
22 6.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	19	25			
25 6.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	19	25			
28 7.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	19	25			
30 7.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	19	25			

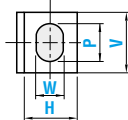
Ⓢ L (40) · H10 ~ 30 → B=13 If full length is (40) and H dimension is 10 ~ 30, tip length is 13mm in all cases.
 Ⓢ L (50) · H16 ~ 30 → B=19 If full length is (50) and H dimension is 16 ~ 30, tip length is 19mm in all cases.
 Ⓢ H (2) (3) (4) → L40 ~ 70 If H dimension is (2), (3), or (4), full length L is within a range of 40 ~ 70.
 Ⓢ V (40) and (50) are specifications available for HF types only.

Order

Flange position: F specification

F0 F90 F180 F270

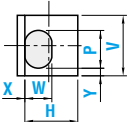
(1) If tip is at center of shank



Catalog No. V H L 0.01mm increments P W R (R only) F

PHFES 08 08 - 60 - P6.00 - W4.00 - F0

(2) If tip is not at center of shank



Catalog No. V H L 0.01mm increments P W R (R only) F 0.01mm increments X-Y

PHFEL 10 10 - 60 - P6.00 - W5.00 - F0 - X0.00 - Y0.50

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

Days to Ship **Quotation**

Alterations Catalog No. V H L (LC) P (PC) W (WC) R F X Y (BC) (PKC, etc.)

PHFES 10 10 - L58.5 - P8.00 - W6.00 - F90 - HC1.0

P Price **Quotation**

Alteration	Code	Spec.	1Code
Alterations to tip	PC	Tip dimension change $PC \geq V \times 0.3 \geq 1.00$ $WC \geq H \times 0.15 \geq 0.50$ 0.01mm increments	
	WC	Tip dimension change $PC \geq V \times 0.3 \geq 1.00$ $WC \geq H \times 0.15 \geq 0.50$ 0.01mm increments	
	BC	Tip length change $2 \leq BC \leq B_{max}$ 0.1mm increments	
Alterations to full length	SC	Lapping of tip $W \geq 2.00$ P dimension tolerance and increment remain the same. R=0 cannot be selected for the tip corner.	
	PKC	Tip tolerance change	$P \cdot W \pm 0.01 \rightarrow +0.01$ 0
Alterations to flange	PKV	Tip tolerance change	$P \cdot W \pm 0.01 \rightarrow \pm 0.005$
	LC	Full length change $30 + B(BC) \leq LC < L$ 0.1mm increments (If combined with LKC-LKZ, 0.01mm increments can be selected.) Ⓢ If difference between full length (LC) and tip length (B) is 30mm or less, tip length is adjusted to (Full length - 30).	
	LKC	Full length tolerance change	$L +0.2$ 0 $\rightarrow +0.05$ 0
	LKZ	Full length tolerance change	$L +0.2$ 0 $\rightarrow +0.01$ 0
Alterations to shape	HC	Flange width change $0 \leq HC < 1.5$ 0.1mm increments	
	TC	Flange thickness change $2 \leq TC < 5$ 0.1mm increments (If combined with TKC, 0.01mm increments can be selected.) Ⓢ Full length L is shortened by (5-TC). If combined with LC, full length is equal to LC.	
	TKC	Flange tolerance change	$T +0.2$ 0 $\rightarrow +0.02$ 0
	TKM	Flange tolerance change	$T +0.2$ 0 $\rightarrow -0.02$ 0
Alterations to shape	FK	Relief chamfering to flange top edge Flange edge is chamfered to prevent flange breakage.	
	CC	Chamfering to four corners of shank The four corners of shank are chamfered to C0.5. The distance between shank corners and the tip must be 0.5mm or more.	
	VKC	Shank tolerance change	$V \cdot H +0.01$ 0 $\rightarrow +0.005$ 0
	VKM	Shank tolerance change	$V \cdot H +0.01$ 0 $\rightarrow -0.005$ 0
	VHM	Shank tolerance change	$V \cdot H +0.01$ 0 $\rightarrow -0.01$ 0
VHZ	Shank tolerance change	$V \cdot H +0.01$ 0 $\rightarrow \pm 0.005$ 0	

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