

# BLOCK PUNCHES

—CONFIGURABLE SIZE·TiCN COATING—



—TiCN coating—		●Tip machining limit				RoHS
		Tip shape	Tip shape	Tip shape	Tip shape	
		D	R	E	G	
<p>■ TiCN</p> <p>■ 3000HV</p> <p>⊕ Although the effective range of the coating is part B, an extremely thin coating film is formed also on the shank up to a length of approximately 10mm.</p>		<p>⊕ <math>W \leq P \leq W \times 20</math>   ⊕ <math>W \leq P \leq W \times 20</math>   ⊕ <math>W \leq P \leq W \times 20</math>   ⊕ <math>W &lt; P \leq W \times 20</math></p> <p>⊕ R=0 can be selected.   ⊕ <math>0.15 \leq R &lt; W/2</math></p> <p>⊕ 0.01mm increments</p> <p>⊕ Even when P=V and W=H, the tip tolerance is determined by the P and W tolerances.</p> <p>⊕ The tip end is ground before the coating is applied.</p>				
Shank dimensions	Catalog No.	Normal	Tip shape	Tip shape	Tip shape	Tip shape
V · H	Type		D	R	E	G
Equivalent to SKH51 61~64HRC	V3.0~30 H3.0~30					
Powdered high-speed steel 64~67HRC	V3.0~30 H3.0~30					
Shank dimensions	Catalog No.	Tapped	Tip shape	Tip shape	Tip shape	Tip shape
V · H	Type		D	R	E	G
Equivalent to SKH51 61~64HRC	V5.1~30 H5.1~30					
Powdered high-speed steel 64~67HRC	V5.1~30 H5.1~30					
Shank dimensions	Catalog No.	With key groove	Tip shape	Tip shape	Tip shape	Tip shape
V · H	Type		D	R	E	G
Equivalent to SKH51 61~64HRC	V3.0~30 H3.0~30					
Powdered high-speed steel 64~67HRC	V3.0~30 H3.0~30					
Shank dimensions	Catalog No.	Single flange	Tip shape	Tip shape	Tip shape	Tip shape
V · H	Type		D	R	E	G
Equivalent to SKH51 61~64HRC	V3.0~30 H3.0~30					
Powdered high-speed steel 64~67HRC	V3.0~30 H3.0~30					
Shank dimensions	Catalog No.	Double flanges	Tip shape	Tip shape	Tip shape	Tip shape
V · H	Type		D	R	E	G
Equivalent to SKH51 61~64HRC	V3.0~30 H3.0~30					
Powdered high-speed steel 64~67HRC	V3.0~25 H3.0~25					

■ Key groove position change   Flange position change

● With key groove K0 K90 K180 K270   ● Single flange FO F90 F180 F270   ● Double flanges WFO WF90

Catalog No.	Type	Tip shape	H	Wmin.	Pmin.	V											L	0.1mm T	B	M	U
						3.0	4.1	5.1	6.1	8.1	10.1	13.1	16.1	20.1	25.1	30.0					
Normal	H-FHSP	D	3.0~4.0	1.0	1.0	○	○	○	○	○	○	○	○	○	○	40	T <sub>≥2.0</sub>	8	—	1.0	
	H-FPHP		4.1~5.0	1.2	1.2	○	○	○	○	○	○	○	○	○	○						
Tapped	H-FHSM	D	5.1~6.0	1.5	1.5	○	○	○	○	○	○	○	○	○	50	T <sub>≥2.0</sub>	13	3	—		
	H-FPHM		6.1~8.0	2.0	2.0	○	○	○	○	○	○	○	○	○							
With key groove	H-FHSK	E	8.1~10.0	2.5	2.5	○	○	○	○	○	○	○	○	70	T <sub>≥2.0</sub>	19	5	6	—		
	H-FPHK		10.1~13.0	3.0	3.0	○	○	○	○	○	○	○	○							○	
Single flange	H-FHSF	E	13.1~16.0	4.0	4.0	○	○	○	○	○	○	○	○	80	T <sub>≥2.0</sub>	25	8	—	1.5		
	H-FPHF		16.1~20.0	5.0	5.0	○	○	○	○	○	○	○	○							○	
Double flanges	H-FHSW	G	20.1~25.0	6.5	6.5	○	○	○	○	○	○	○	○	90	T <sub>≥2.0</sub>	25	8	—	1.5		
	H-FPHW		25.1~30.0	7.5	7.5	○	○	○	○	○	○	○	○							○	

Order

(1) If tip is at center of shank

Catalog No. V H L P W R (R only) T ≥ 2 K F WF

H-FHSPD - V23.5 - H12.0 - 60 - P18.00 - W 4.00

H-FHSM D - V17.0 - H10.0 - 100 - P16.00 - W 9.00

H-FPHK D - V 9.0 - H 5.5 - 60 - P 8.00 - W 5.00 - T25.5 - K0

H-FPHFD - V17.0 - H14.0 - 60 - P15.00 - W12.00 - FO

H-FPHWD - V 9.5 - H 6.0 - 40 - P 8.00 - W 5.00 - WF90

(2) If tip is not at center of shank

Catalog No. V H L P W R (R only) T ≥ 2 K F WF X-Y

H-FHSFE - V16.5 - H14.0 - 50 - P15.00 - W12.00 - FO - 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

Price

Quotation

Alterations

Catalog No. V H L (LC) P (PC) W (WC) T K F WF BC HC TC, etc.

H-FHSM D - V19.9 - H7.9 - 60.0 - P19.00 - W1.50 - VKC - MC3

Alteration	Code	Spec.	1Code
Alterations to tip	PC	Tip dimension change	Quotation
	WC	WC ≥ H × 0.15 ≥ 1.00	
	BC	Tip length depth change	
Alterations to full length	LC	Full length change	Quotation
	LKC	Full length tolerance change	
Key groove	TKC	Key groove position tolerance change	Quotation
	RTC	Key groove position tolerance change	
Tap	WK	Addition of key groove at symmetrically opposite position	Quotation
	UK	Key groove depth change	
	MC	Tap diameter change	

Alteration	Code	Spec.	1Code
Alterations to flange	HC	Flange width change	Quotation
	TC	Flange thickness change	
	TKC	Flange tolerance change	
	TKM	Flange tolerance change	
	FK	Relief chamfering to flange top edge	
Alterations to shape	CC	Chamfering to four corners of shank	Quotation
	CCP	Chamfering to one corner of shank	
	VKC	Shank tolerance change	
	VKM	Shank tolerance change	
	VHZ	Shank tolerance change	
	DC	Addition of press-in lead	