

BLOCK PUNCH BLANKS

M	H	Catalog No.						RoHS
		Normal	Tapped	With key groove	Single flange	Double flanges	Flange stopper	
H3~5	SKH51 61~64HRC	HPB	HMB	HKB	HFB	HWB	HTB	
H6~30	Equivalent to SKD11 60~63HRC							
H3~30	Powdered high-speed steel 64~67HRC	PHPB	PHMB	PHKB	PHFB	PHWB	PHTB	

Normal
HPB
PHPB

Single flange
HFB
PHFB

Tapped
HMB
PHMB

Tap pilot hole length = 2×M + 5 ± 2.0

Double flanges
HWB
PHWB

With key groove
HKB
PHKB

T ≥ 2

Flange stopper
HTB
PHTB

Details of key groove: R ≤ 0.3

Flange Head details: R ≤ 0.3

Key groove position specified: KO, K90, FO, F90, WFO, WF90

Flange position specified: TF0, TF90

Flange stopper position specified:

Catalog No.	H	V	L																	L	T		M	U
			3	4	5	6	8	10	13	16	20	22	25	28	30	(40)	(50)	With key groove	Flange stopper					
Normal	HPB PHPB	(3)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	13	1.0				
		(4)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	20					
Tapped (H5~30)	HMB PHMB	5		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	25	3				
		6			○	○	○	○	○	○	○	○	○	○	○	○	○	○	8	4				
With key groove	HKB PHKB	8			○	○	○	○	○	○	○	○	○	○	○	○	○	○	16	5				
		10				○	○	○	○	○	○	○	○	○	○	○	○	○	20	6				
Single flange	HFB PHFB	13				○	○	○	○	○	○	○	○	○	○	○	○	○	25	1.5				
		16					○	○	○	○	○	○	○	○	○	○	○	○	22					
Double flanges	HWB PHWB	20					○	○	○	○	○	○	○	○	○	○	○	○	28	8				
		22						○	○	○	○	○	○	○	○	○	○	○	25					
Flange stopper	HTB PHTB	25						○	○	○	○	○	○	○	○	○	○	○	30					
		28							○	○	○	○	○	○	○	○	○	○	30					
		30							○	○	○	○	○	○	○	○	○	○	100					

○ H(3) (4) → L40~70 If H dimension is (3) or (4), full length L is within a range of 40~70. (L80 is a specification available for HPB only.)

○ HMB: V=40·50 → Tap holes at 2 locations

○ V(40)·(50) are specifications available for HPB·HMB·HKB·HFB·HWB only.

○ For L13~25, refer to short block punch blanks. However, only tapped and flange types are available. P.463

V	40	50
ℓ	20	24

Alterations Catalog No. **V H L(LC) T K-F-WF-TF** (HC·TC·TKC, etc.)
PHKB 08 04 LC58.5 T25.5 K0 TKC

Alteration	Code	Spec.	1Code
Full length	LC	Full length change $13 \leq LC < L$ 0.1mm increments For HMB·PHMB: If H dimension is 8 or less → LC ≥ 20 If H dimension is 10 → LC ≥ 24 If H dimension is 13 or more → LC ≥ 28 For tapped types, HMB and PHMB (P.491) can be used to provide shorter sizes.	
Alterations to flange, head, and key groove	HC	Flange width or head 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 (S-TC). If combined with LC, full length is equal to LC. Head thickness change $2 \leq TC < 25$ 0.1mm increments (if combined with TKC, 0.01mm increments can be selected.) Can be used for flange stopper types.	Quotation
	TKC	Key groove position tolerance change $T -0.05 \rightarrow 0$ Flange tolerance change $T +0.2 \rightarrow +0.02$ Head thickness tolerance change $T -0.05 \rightarrow -0.02$	
	TKM	Flange tolerance change $T +0.2 \rightarrow 0$ Head thickness tolerance change $T -0.05 \rightarrow -0.02$	
RTC	Key groove position tolerance change $T -0.05 \rightarrow +0.05$		

P Price **Quotation**

Alteration	Code	Spec.	1Code																																																		
Alterations to tap	MC (MMC)	Tap hole diameter change: Material equivalent to SKD11 <table border="1" style="font-size: small;"> <tr> <th>H/V</th> <th>6</th> <th>8</th> <th>10</th> <th>13</th> <th>16</th> <th>20</th> <th>22</th> <th>25</th> <th>28-30</th> </tr> <tr> <td>6</td> <td></td> <td></td> <td></td> <td>M4 → M3</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>8</td> <td></td> <td></td> <td></td> <td>M5 → M4</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>10</td> <td></td> <td></td> <td></td> <td>M6 → M4</td> <td></td> <td></td> <td></td> <td>M6 → M5</td> <td></td> </tr> <tr> <td>13</td> <td></td> <td></td> <td></td> <td>M8 → M5</td> <td></td> <td></td> <td></td> <td>M8 → M6</td> <td></td> </tr> </table> For change from M6 to M4 or change from M8 to M5, select MMC.	H/V	6	8	10	13	16	20	22	25	28-30	6				M4 → M3						8				M5 → M4						10				M6 → M4				M6 → M5		13				M8 → M5				M8 → M6		Quotation
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Alterations to shape	CC	Chamfering to four corners of shank. The four corners of shank are chamfered to C0.5.	Quotation																																																		
	CCP	Chamfering to one corner of shank (for error prevention) One corner of shank is chamfered to C1.0. Can be used if distances a and b from tip corners to shank meet the following conditions. $a + b \geq 1.3$																																																			

Order **Catalog No. V H L T K·F·WF·TF**
PHKB 16 13 50 T20.5 K90

Days to Ship **Quotation**