

BENDING AND CHAMFERING PUNCHES & DIES

—FIXED SIZE TYPE—

Type (Select the tip shape from the figure below.)

BPHM (Tapped)
M×ℓ

BPHF (Single flange)

RoHS

BPHK (With key groove)

BPHW (Double flanges)

Ⓢ Details of key groove Ⓢ Details of flange

H5 Equivalent to SKH51 H6 ~50 H7 Equivalent to SKD11
H61 ~64HRC H62 ~63HRC

Tip shape

2A

F=L

2B

F=L-Y

Ⓢ Dimension T has been changed to dimension Y.

3B

4B

2C

F=L-S

3C

4C

5C

6C

2D

3D

4D

5D

2E

3E

4E

Ⓢ Increment: C·J·K·N·Q·S·U·Y → 0.01mm increments; B·E → 0.1mm increments; A·G → 0.5° increments.

Ⓢ Key groove position change (Free of charge): BPHK, KK0, KK90, KK180, KK270; BPHF, F0, F90, F180, F270.

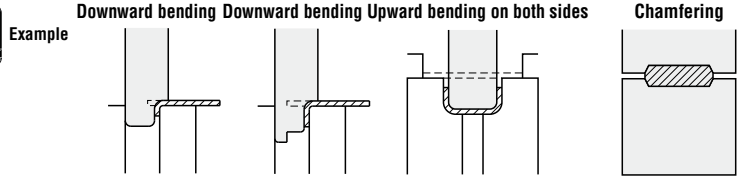
Ⓢ Flange position change (Free of charge): BPHW, WFO, WF90.

Ⓢ Machining limit: J·K·Q=0 or J·K·Q≥0.2; N·U≥0.2; T≤B/25; Y≤1; U≤C.

Ⓢ For shape 2B only: 0.2≤C·E·V-2; 0.5≤Y≤1; 2.00≤E≤3.99→Ymax.5; E≥4.00→Ymax.10.

Ⓢ For shape 5D only: 2.0≤C; F≥Fmin; For BPHK only: F-(T+5)≥2.

Ⓢ Shape 5C·6C: V-C/2; Smax.; 2.00~3.99 → 5; 4.00~ → 10.



Type	Shape	V H	5	6	8	10	13	16	20	22	25	28	30	40	50	0.1mm increments		F min.	U	
																L	T			
Tapped	BPHM	2A	5	6	8	10	13	16	20	22	25	28	30	40	50	20.0 ~ 100.0	Tapped H5~H8 → L20.0~ H10 → L24.0~ H13~50 → L28.0~	T≥20 (BPHK only)	15	1.0
			15	1.0																
			20	1.5																
			25	1.5																
With key groove	BPHK	2B 3B 4B	16	16	16	16	16	16	16	16	16	16	16	16						
Single flange	BPHF	2C 3C 4C 5C 6C	20	20	20	20	20	20	20	20	20	20	20	20						
Double flanges	BPHW	2D 3D 4D 5D	25	25	25	25	25	25	25	25	25	25	25	25						
		2E 3E 4E	30	30	30	30	30	30	30	30	30	30	30	30						
			40	40	40	40	40	40	40	40	40	40	40	40						
			50	50	50	50	50	50	50	50	50	50	50	50						

Ⓢ Be aware that for tapped BPHM, Lmin. varies depending on H dimension. However if H>V, dimension V is used.

Ⓢ If BPHK with no key groove is required, select T dimension that is the same as the full length L.T=L

Ⓢ V·H=40·50→2-M

Ⓢ Relationship between symbols in table and tap specification M×ℓ

V·H	40	50
ℓ1	20	24

Ⓢ M3×6 Ⓢ M4×8 Ⓢ M5×10 Ⓢ M6×12 Ⓢ M8×16

Order

Tapped Catalog No. V H L B·C·E·J·K·N·Q·S·Y·U·A·G

BPHM 2A 06 06 60.5 J3.00 K2.00

With key groove Catalog No. V H L T B·C·E·J·K·N·Q·S·Y·U·A·G KK

BPHK 2B 08 16 60.5 T23.5 E2.0 J1.50 Y0.5 KK0

Flanged type Catalog No. V H L B·C·E·J·K·N·Q·S·Y·U·A·G F·WF

BPHF 2B 08 16 60.5 E2.0 J1.50 Y0.5 F0

BPHW 3D 16 13 72.3 C6.00 J0.50 K0.5 N1.30 Q0.50 S19.27 WF90

Days to Ship **Quotation**

Alterations Catalog No. V H L B·C·E·J·K·N·Q·S·Y·U·A·G F·WF (HC·TC, etc.)

BPHF 2A 06 06 60.5 J3.00 K2.00 F0 HC1.0 TKC

Alteration	Code	Spec.	1Code																																																		
	HC	Flange width change 0≤HC<1.5 0.1mm increments	Quotation																																																		
	TC	Flange thickness change 2≤TC<5 0.1mm increments																																																			
	TKC	Key groove position tolerance change T _{-0.05} ⁰ → _{-0.02} ⁰																																																			
	LKC	Full length tolerance change L _{+0.2} ⁰ → ₀ ^{+0.02}	Quotation																																																		
	MC	Tap diameter change <table border="1" style="font-size: small;"> <tr> <th>ℓ</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>M4→M3</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>8</td> <td>-</td> <td>-</td> <td>M5→M4</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>10</td> <td>-</td> <td>-</td> <td>M6→M5</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>13</td> <td>-</td> <td>-</td> <td>M8→M6</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </table>		ℓ	6	8	10	13	16	20	22	25	28-30	6	-	-	M4→M3	-	-	-	-	-	-	8	-	-	M5→M4	-	-	-	-	-	-	10	-	-	M6→M5	-	-	-	-	-	-	13	-	-	M8→M6	-	-	-	-	-	-
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13	-	-	M8→M6	-	-	-	-	-	-																																												
	RTC	Key groove position tolerance change T _{-0.05} ⁰ → ₀ ^{+0.05}																																																			

Price **Quotation**

PUNCHES & DIES FOR FORMING