

# SHORT BENDING PUNCHES & DIES

—FIXED SIZE TYPE—

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

**BPHMS** (Tapped)

H	ℓ	ℓ <sub>1</sub>
6	6	8.5
8	7.5	10
10	9	12.5
13	12	15.5
16		
20		

**BPHFS** (Single flange) RoHS

**BPHWS** (Double flanges)

Equivalent to SKD11  
60~63HRC

Tip shape

**2A**

F=L

**3B**

C±0.01

**4B**

S-0.02

**2C**

F=L-S, S-0.02

**3C**

**4C**

F=L-S

**2D**

2-R0.5, R≤0.5, E=0.2, B+0.2

**3D**

F+0.02, S-0.02

**4D**

F+0.02, S-0.02

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

**Machining limit**  
 J·K·Q=0 or J·K·Q≥0.2  
 N·U≥0.2  
 1≤B≤14.5  
 U≤C  
 0.2≤C≤V-2  
 K+N<S≤14.5  
 K+U<S≤14.5

A≤70°  
 G≥40°  
 F≥Fmin.

Catalog No.	Type	Shape	V	0.1mm increments L							Fmin.		
				H	6	8	10	13	16	20	Tapped	Single flange - double flanges	
Tapped BPHMS	2A 3B	3B	6	○	○	○	○	○	○	○	13.0~25.0	10.5	10.5
			8	○	△	△	△	△	△	12.0			
	10	○	△	□	□	□	□	14.5					
	13	○	△	□	●	●	●	17.5					
16	○	△	□	●	●	●							
20	○	△	□	●	●	●							
Single flange BPHFS	3C 4C	4C	13	○	△	□	●	●	●				
			16	○	△	□	●	●	●				
Double flanges BPHWS	2D 3D	3D	16	○	△	□	●	●	●				
			20	○	△	□	●	●	●				

Relationship between symbols in table and tap specification M×ℓ  
 ○: M4×6    □: M6×9  
 △: M5×7.5    ●: M8×12

**Order**

**Tapped**  
 Catalog No. **V H L** — **B·C·E·J·K·N·Q·S·U·A·G**  
**BPHMS 3B 06 06 — 24.5 — C2.00 — J1.50 — K2.00 — A60**

**Flanged**  
 Selection of flange position (Free of charge)  
 BPHFS F0 F90 F180 F270    BPHWS WF0 WF90

Catalog No. **V H L** — **B·C·E·J·K·N·Q·S·U·A·G** — **F·WF**  
**BPHFS 3B 08 16 — 20.0 — C2.00 — J1.50 — K2.00 — A60 — F0**  
**BPHWS 3D 16 13 — 25.0 — C6.00 — J0.50 — K0.50 — N1.30 — Q0.50 — S14.50 — WF90**

**Days to Ship** **Quotation**

**Alterations**  
 Catalog No. **V H L** — **B·C·E·J·K·N·Q·S·U·A·G** — **F·WF** — (HC·TC, etc.)  
**BPHFS 2A 06 06 — 20.0 — J1.00—K2.00 — F0 — HC1.3—TKC**

Alteration	Code	Spec.	1Code
	HC	Flange width change 0≤HC<1.5 0.1mm increments	<b>Quotation</b>
	TC	Flange thickness change 2≤TC<5 0.1mm increments	
	TKC	Flange thickness tolerance change 5+0.2 → +0.02 0 → 0	

Alteration	Code	Spec.	1Code																																							
	LKC	Full length tolerance change L+0.2 → +0.02 0 → 0	<b>Quotation</b>																																							
	MC	Tap diameter change <table border="1" style="font-size: small;"> <thead> <tr> <th>H</th> <th>V</th> <th>6</th> <th>8</th> <th>10</th> <th>13</th> <th>16</th> <th>20</th> </tr> </thead> <tbody> <tr> <td>6</td> <td></td> <td></td> <td></td> <td></td> <td>M4→M3</td> <td></td> <td></td> </tr> <tr> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td>M5→M4</td> <td></td> <td></td> </tr> <tr> <td>10</td> <td></td> <td></td> <td></td> <td></td> <td>M6→M5</td> <td></td> <td></td> </tr> <tr> <td>13</td> <td></td> <td></td> <td></td> <td></td> <td>M8→M6</td> <td></td> <td></td> </tr> </tbody> </table>		H	V	6	8	10	13	16	20	6					M4→M3			8					M5→M4			10					M6→M5			13					M8→M6	
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**P** Price **Quotation**

**ex** Example **Features** The shorter tap length and drill hole have made it possible to expand the dimensional limits for tip machining.

Downward bending

Upward bending on both sides

Chamfering

Upward bending

Stripper plate  
Die plate

PUNCHES & DIES FOR FORMING

Short block punch blanks P.463

705

706