

CARBIDE BLOCK PUNCH BLANKS WITH AIR HOLES

ZJB —Normal—	ZJK —With key groove—	ZJF —Single flange—	ZJW —Double flanges—
V30 (HIP) 88~89HRA V·H 5~20	V30 (HIP) 88~89HRA V·H 5~20	V30 (HIP) 88~89HRA V·H 5~16 Cannot be used for products marked with ● in the specification table.	V30 (HIP) 88~89HRA V·H 5~16 Cannot be used for products marked with ● in the specification table.

Catalog No.	H	V	L							L	0.1mm T	d ₁ ×S			d ₂	U
			5	6	8	10	13	16	20			L=40	L=50	L=60-70		
ZJB	5		○	○	○	○	○	○	40	T≥2.0	0.8×17	0.8×20	2.1	1.0		
	6		○	○	○	○	○	1.2×17			1.2×27	2.6				
ZJK	8			○	○	○	○	50	T≥2.0	1.6×17	1.6×28	3.4	1.5			
	10			○	○	○	○			1.9×17	1.9×28	4.4				
ZJF	13				○	○	○	60	T≥2.0	2.9×17	2.9×24	2.9×36	1.5			
	16				○	○	○									
ZJW	20						○	70	T≥2.0							

Specifications marked with ● cannot be used for ZJF-ZJW.

Order **Example**

Catalog No. V H L $\frac{0.1mm \text{ increments}}{T \geq 2}$ K·F·WF

ZJB 08 06 — 40 — — —
 ZJK 10 05 — 50 — T25.0 — K90
 ZJF 13 10 — 70 — — — F0
 ZJW 16 16 — 60 — — — WF90

Days to Ship **Quotation**

	Alterations		Catalog No.	V	H	L(LC)	T	K·F·WF	(TC·VKC...etc.)
			ZJF	10	05	— 50	—	F0	— TKC
Alterations to full length	Alteration	Code	Spec.						1Code
Alterations to full length		LC	Full length change $30 \leq LC < L$ 0.1mm increments (If combined with LKC·LKZ, 0.01mm increments can be selected.)						
		LCX	Full length change with no change to tip length S $30 \leq LCX < L$ 0.1mm increments ⊕ If combined with LKC or LKZ, 0.01mm increments can be selected. ⊗ Cannot be used for flanged types.						
		LKC	Full length tolerance change $L \begin{matrix} +0.3 \\ +0.1 \\ 0 \end{matrix} \begin{matrix} +0.05 \\ 0 \\ 0 \end{matrix}$						
		LKZ	Full length tolerance change $L \begin{matrix} +0.3 \\ +0.1 \\ 0 \end{matrix} \begin{matrix} +0.01 \\ 0 \\ 0 \end{matrix}$						
Alterations to flange		HC	Flange width change $0 \leq HC < 1.5$ 0.1mm increments						Quotation
		TC	Flange thickness change $2 \leq TC < 5$ 0.1mm increments (If combined with TKC·TKM, 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 thickness tolerance change $T \begin{matrix} +0.2 \\ 0 \\ 0 \end{matrix} \begin{matrix} +0.02 \\ 0 \\ 0 \end{matrix}$						
		TKM	Flange thickness tolerance change $T \begin{matrix} +0.2 \\ 0 \\ 0 \end{matrix} \begin{matrix} 0 \\ -0.02 \\ 0 \end{matrix}$						
Alterations to key groove		FK	Relief chamfering to flange top edge Flange edge is chamfered to prevent flange breakage.						
		RTC	Key groove position tolerance change $T \begin{matrix} 0 \\ -0.02 \\ 0 \end{matrix} \begin{matrix} +0.05 \\ 0 \\ 0 \end{matrix}$						
		UK	Key groove depth change $0.5 \leq UK \leq U + 0.2$ 0.1mm increments $H(V) - \{UK + d_2(d_1)\} \geq 2.0$ ⊕ Can be used for key groove types.						
Alterations to shape	Alteration	Code	Spec.						1Code
Alterations to shape		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.						
		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. $a + b \geq 1.3$						Quotation
		VKC	Shank tolerance change $V \cdot H \begin{matrix} +0.005 \\ 0 \\ 0 \end{matrix} \begin{matrix} +0.003 \\ 0 \\ 0 \end{matrix}$						
		VKM	Shank tolerance change $V \cdot H \begin{matrix} +0.005 \\ 0 \\ 0 \end{matrix} \begin{matrix} 0 \\ -0.003 \\ 0 \end{matrix}$						
	VHM	Shank tolerance change $V \cdot H \begin{matrix} +0.005 \\ 0 \\ 0 \end{matrix} \begin{matrix} 0 \\ 0 \\ -0.005 \end{matrix}$							

Price **Quotation**

Additional machining cost will be required for the following types:
 ■ With key groove (ZJK)
 ■ Single flange (ZJF)
 ■ Double flanges (ZJW) **Quotation**

Fixing keys for punches with key grooves P.245

PSKB PSKBH PSKS PSKJ PSK PSKP PSKH PSKW