

BLOCK PUNCHES (FOR HEAVY LOAD)

— FLANGE THICKNESS 10mm • DOUBLE FLANGES —

Material	Catalog No.		Tip shape	Tip length
	Type	Tip length		
(H2~5) Equivalent to SKH51 61~64HRC	AHW	D	S	10
(H6~13) Equivalent to SKD11 60~63HRC				
Equivalent to SKH51 61~64HRC	AHSW (H6~13)	R	L	10
		E	L	10
Powdered high-speed steel 64~67HRC	APHW	G	L	10

RoHS

Ⓢ W ≤ P ≤ W × 20 Ⓢ W ≤ P ≤ W × 20 Ⓢ W ≤ P ≤ W × 20 Ⓢ W < P ≤ W × 20
 Ⓢ R = 0 can be selected. Ⓢ 0.15 ≤ R < W/2
 0.01mm increments
 Ⓢ Even when P = V and W = H, the tip tolerance is determined by the P and W tolerances.

Ⓢ Details of flange. The R is larger compared to the conventional 5mm thickness flange type.

R = 0.8 ~ 1.0

Catalog No.	Type	Tip shape	Tip length	H	V	P min. W min.														L	B	
						3	4	5	6	8	10	13	16	20	22	25	28	30	6		8	
AHW	D	S	(2)	1.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	50	6	8
			(3)	1.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	60	8	13
			(4)	1.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	70	8	13
																				80	13	19
AHSW (H6~13)	R	L	5	1.2		○	○	○	○	○	○	○	○	○	○	○	○					
APHW	E	L	6	1.5			○	○	○	○	○	○	○	○	○	○	○					
	G	L	8	2.0				○	○	○	○	○	○	○	○	○	○					
			10	2.5					○	○	○	○	○	○	○	○	○					
			13	3.0						○	○	○	○	○	○	○	○					

Ⓢ H (2) (3) (4) → L50~70 If H dimension is (2), (3) or (4), full length L is within a range of 50~70.

Order ■ The flange position is fixed. (WF need not be specified.)

(1) If tip is at center of shank

Catalog No. V H - L - P - W - R (R only)

APHWES 08 08 - 60 - P6.00 - W4.00

(2) If tip is not at center of shank

Catalog No. V H - L - P - W - R (R only) - X - Y

APHWEL 10 10 - 60 - P6.00 - W5.00 - X0.00 - Y0.10

Ⓢ X and Y must be set either to 0 or to 0.02 or more. Tolerance ±0.01

Days to Ship **Quotation**

Features

These block punches have greater flange strength than ordinary block punches. Use them for punching of heavy loads or high-tensile steels where punch flanges are prone to damage.

Comparison of flange dimensions Units: mm

Type	Thickness	Width	Base R
Ordinary type	5	1.5	0.3 or less
Flange thickness 10mm type	10	2.0	0.8 ~ 1.0

Alterations Catalog No. V H - L(LC) - P(PC) - W(WC) - R - X - Y - BC(PKC, etc.)
 APHWES 10 10 - L67.5 - P8.00 - W6.00 - TC8.0

P Price

Quotation

Alteration	Code	Spec.	1Code
Alterations to tip	PC WC	Tip dimension change PC ≥ V × 0.3 ≥ 1.00 WC ≥ H × 0.15 ≥ 0.50 0.01mm increments	W (WC) Bmax. 0.50~0.99 4 1.00~1.19 8 1.20~1.99 13 2.00~2.99 20 3.00~4.99 30 5.00~ 35
	BC	Tip length change 2 ≤ BC ≤ Bmax. 0.1mm increments	Full length (L) must be at least 36mm longer than tip length (BC).
	SC	Lapping of tip Ⓢ W ≥ 2.00 Ⓢ P dimension tolerance and increment remain the same. Ⓢ R = 0 cannot be selected for the tip corner.	
Alterations to full length	PKC PKV	Tip tolerance change P · W ± 0.01 ⇔ +0.01 0	
	LC LKC LKZ	Full length change 36 + B (BC) ≤ LC < L 0.1mm increments (If combined with LKC-LKZ, 0.01mm increments can be selected.) Ⓢ If difference between full length (LC) and tip length (B) is 36mm or less, tip length is adjusted to (Full length - 36). Full length tolerance change L +0.2 ⇔ +0.05 0 Full length tolerance change L +0.2 ⇔ +0.01 0	
Alterations to flange	HC	Flange width change 1.0 ≤ HC < 2.0 0.1mm increments	
	TC	Flange thickness change 5 ≤ TC < 10 0.1mm increments (If combined with TKC, 0.01mm increments can be selected.) Ⓢ Full length L is shortened by (10 - TC). If combined with LC, full length is equal to LC.	
	RE	Flange R change R = 0.8 ~ 1.0 → R ≤ 0.3	
Alterations to shape	FK	Relief chamfering is added to flange top edge.	
	TKC TKM	Flange tolerance change T +0.2 ⇔ +0.02 0 Flange tolerance change T +0.2 ⇔ 0 -0.02	
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. Ⓢ Chamfering of the flange base R portion is not performed.	
	VKC	Shank tolerance change V · H +0.01 ⇔ +0.005 0	
	VKM	Shank tolerance change V · H +0.01 ⇔ 0 -0.005	
	VHM VHZ	Shank tolerance change V · H +0.01 ⇔ 0 -0.01 Shank tolerance change V · H +0.01 ⇔ ±0.005	