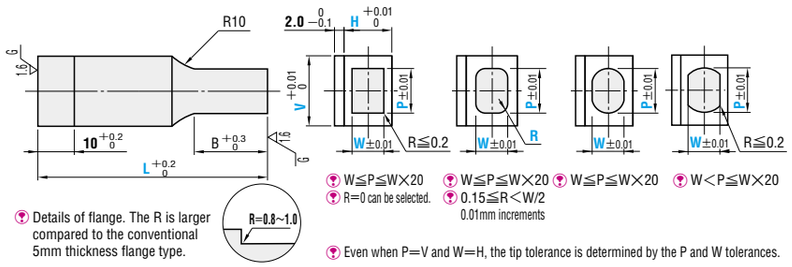
BLOCK PUNCHES（FOR HEAVY LOAD）
—FLANGE THICKNESS 10mm・SINGLE FLANGE—

M H	Catalog No. Type	Tip shape	B Tip length
(H2～5) Equivalent to SKH51 61～64HRC (H6～13) Equivalent to SKD11 60～63HRC	AHF	D R E G	S
Equivalent to SKH51 61～64HRC	AHSF (H6～13)		L
Powdered high-speed steel 64～67HRC	APHF		Tip length (B) L＞S

RoHS



- Details of flange. The R is larger compared to the conventional 5mm thickness flange type.
- W≦P≦W×20 R=0 can be selected.
- W≦P≦W×20 0.15≦R＜W/2 0.01mm increments
- W≦P≦W×20
- W＜P≦W×20
- Even when P=V and W=H, the tip tolerance is determined by the P and W tolerances.

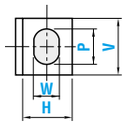
Catalog No. Type	Tip shape	B Tip length	H \ V: Pmin. / Wmin.	3 / 1.5	4 / 2.0	5 / 2.5	6 / 3.0	8 / 3.0	10 / 4.0	13 / 5.0	16 / 7.0	20 / 8.0	22 / 9.0	25 / 10.0	28 / 12.0	30 / 12.0	L	B S	B L
AHF AHSF (H6～13) APHF	D R E G	S	(2) 1.0	○	○	○	○	○	○	○							50	6	8
			(3) 1.0	○	○	○	○	○	○	○	○	○	○						
			(4) 1.0		○	○	○	○	○	○	○	○	○						
		L	5 1.2			○	○	○	○	○	○	○	○	○	○	○	60	8	13
			6 1.5				○	○	○	○	○	○	○	○	○	○	70		
			8 2.0					○	○	○	○	○	○	○	○	○	80		
			10 2.5						○	○	○	○	○	○	○	○		13	19
			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

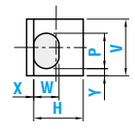
■The flange position is fixed.（F need not be specified.）

（1）If tip is at center of shank



Catalog No.	V	H	—	L	—	0.01mm increments P	—	W	—	R(R only)
APHFES	08	08	—	60	—	P8.00	—	W6.00		

（2）If tip is not at center of shank



Catalog No.	V	H	—	L	—	0.01mm increments P	—	W	—	R(R only)	—	0.01mm increments X—Y
APHFEL	10	10	—	60	—	P6.00	—	W5.00			—	X0.00 — Y0.50

(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.

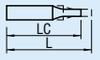
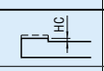
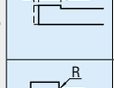
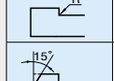
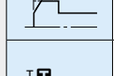
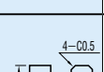
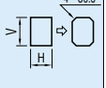
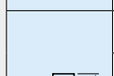
Comparison of flange dimensions　Units: mm

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.)
APHFES 10 10 - LC58.5 - P8.00 – W6.00 - HC1.5

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	
		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 D corner.	
		PKC	Tip tolerance change P・W±0.01⇨ +0.01 0	
		PKV	Tip tolerance change P・W±0.01⇨±0.005	
Alterations to full length		LC	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).	
		LKC	Full length tolerance change L +0.2 0 ⇨ +0.05 0	
		LKZ	Full length tolerance change L +0.2 0 ⇨ +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	
		FK	Relief chamfering to flange top edge Flange edge is chamfered to prevent flange breakage.	
		TKC	Flange tolerance change T +0.2 0 ⇨ +0.02 0	
		TKM	Flange tolerance change T +0.2 0 ⇨ 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 ⇨ +0.005 0	
		VKM	Shank tolerance change V・H +0.01 0 ⇨ 0 −0.005	
		VHM	Shank tolerance change V・H +0.01 0 ⇨ 0 −0.01	
		VHZ	Shank tolerance change V・H +0.01 0 ⇨±0.005	

Quotation