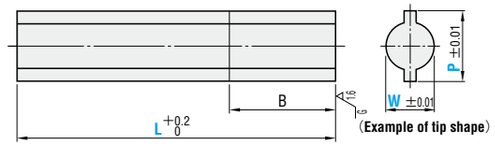
SPECIAL SHAPED STRAIGHT PUNCHES

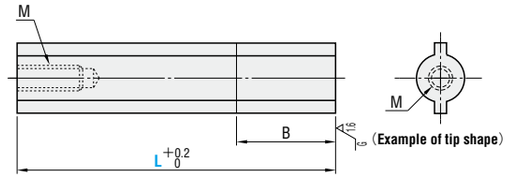
Note) For types HPC・HMC・HKC, if the tip shape does not include a W dimension specification, (such as shapes **2L and 3L**), the material is determined by the maximum width of the shape.

M	H	S	Type: Straight	Type: Tapped	Type: With key groove
W2.00～5.00 Note) Equivalent to SKH51	61～64HRC	—	HPC	HMC	HKC
W5.01～30.00 Note) Equivalent to SKD11	60～63HRC				
Powdered high-speed steel	64～67HRC	—	PHPC	PHMC	PHKC
Equivalent to SKH51	61～64HRC	TiCN surface hardness 3000HV	H—HSPC	H—HSMC	H—HSKC
Powdered high-speed steel	64～67HRC	TiCN surface hardness 3000HV	H—PHPC	H—PHMC	H—PHKC

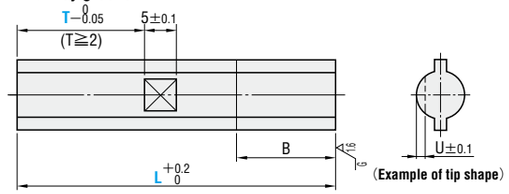
Straight



Tapped



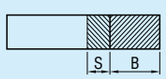
With key groove



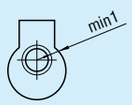
Catalog No. Type: Straight	Tapped	With key groove	Shape	L	W \ P: 2.00～5.00	5.01～10.00	10.01～15.00	15.01～20.00	20.01～25.00	25.01～30.00	M	U	B
Equivalent to SKH51 (W2.00～5.00) Equivalent to SKD11 (W5.01～30.00) HPC	HMC	HKC	2～12H	40	2.00～ 3.00	○	○	○				—	1.0	15
			2～18J	50	3.01～ 4.00	○	○	○	○					
Powdered high-speed steel PHPC	PHMC	PHKC	3～28K	60	4.01～ 5.00	○	○	○	○	○	○	3		
Equivalent to SKH51 Coating H—HSPC	H—HSMC	H—HSKC	2～ 7L	70	5.01～ 6.00		○	○	○	○	○	4		
Powdered high-speed steel Coating H—PHPC	H—PHMC	H—PHKC	Tip shape Select from the shapes shown on P.715.	80	6.01～ 8.00		○	○	○	○	○	5		
					8.01～ 10.00		○	○	○	○	○	6	1.5	
					10.01～ 15.00			○	○	○	○	8		
					15.01～ 20.00				○	○	○			
					20.01～ 25.00					○	○			
					25.01～ 30.00						○			

⊗ For coating punches, **10J・13J・5K・10K・18K** cannot be used.

Although the effective range of coating is part B, an extremely thin coating film is formed also on part S to a length of approximately 10mm.
The dimension of the uncoated part is reduced by an amount equivalent to the coating thickness (6～10 μm).



Machining limit for **HMC・PHMC・H—HSMC・H—PHMC**
① Shapes **23K・25K** cannot be manufactured. ② Machining limit for tapping and tip



③ P・W dimensions and tap M

	P(W)	M
P≦W (P>W)	4.01～ 5.00	3
	5.01～ 6.00	4
	6.01～ 8.00	5
	8.01～10.00	6
	10.01～30.00	8

P or W＜8･･･L≦50 If P or W dimension is smaller than 8.00, full length is within a range of 40～50.

Details of key groove

Tap M is based on either P or W dimension, whichever is shorter.
Tap M for shapes **8H・18J** is based on P dimension.
P size of 8H.18J should specify that K size does not exceed an edge-of-a-blade size limit.
The center of tap M is at the same position as the center of each tip shape (except for shapes **2L・3L**).
The center of tap M for shapes **2L・3L** is the midpoint at the maximum lateral width of the tip.

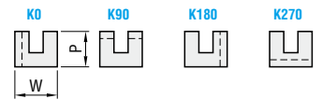
Order

W	No.
2.00～10.00	1
10.01～20.00	2
20.01～30.00	3

Catalog No. — No. — Catalog No. — L — 0.01mm increments / P・W・A・B・C・R・S･･･ — (T・K)

- In case of W2.00～10.00: HPC 8J — 1 — HPC 8J — 50 — P10.55—W8.85—R2.50
- In case of W10.01～20.00: HPC 8J — 2 — HPC 8J — 60 — P19.62—W16.35— R4.50
- In case of W20.01～30.00: HPC 8J — 3 — HPC 8J — 70 — P28.25—W25.68—R6.20

■Key groove position selection

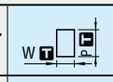
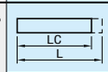


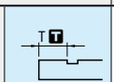
Days to Ship Quotation

Alterations

Catalog No. — No. — Catalog No. — L(LC) — P・W・A・B･･･ — (PKC・LC・LKC・TKC・RTC)

H—HSPC 8J — 1 — H—HSPC 8J — LC58.0 — P12.40 — W10.00 — R2.00 — LKC

Alteration		Code	Spec.	1Code
Tip		PKC	Tip tolerance change P・W±0.01⇨+0.01 0 ⊗Cannot be used with TiCN coating.	Quotation
Alterations to full length		LC	Full length change 30≦LC＜L 0.1mm increments	
		LKC	Full length tolerance change L +0.3 0 ⇨ +0.05 0	

Alteration		Code	Spec.	1Code
Alterations to key groove		TKC	Key groove position tolerance change T −0 −0.05 ⇨ −0 −0.02	Quotation
		RTC	Key groove position tolerance change T −0 −0.05 ⇨ +0.05 0	

Price Quotation