

# STRAIGHT PUNCHES

RoHS		• Tip machining limit		Tip shape	Tip shape	Tip shape	Tip shape	
				D	R	E	G	
				W ≤ P R=0 can be selected.	W ≤ P 0.15 ≤ R < W/2 W - 2R ≥ 1 0.01mm increments	P ≤ 10 P - W ≥ 1 10 < P ≤ 20 P - W ≥ 2 20 < P ≤ 30 P - W ≥ 3	P ≤ 10 P - W ≥ 1 10 < P ≤ 20 P - W ≥ 2 20 < P ≤ 30 P - W ≥ 3	
M	P-W	Catalog No.	Type	Tip shape	Straight			
W2.00~5.00 Equivalent to SKH51 61~64HRC W5.01~30.00 Equivalent to SKD11 60~63HRC	P2.00~50.00	HPC	D	D	D	R	E	G
	W2.00~30.00	HSPC	R	R	R	E	G	
	P5.01~30.00 W5.01~30.00	PHPC	G	G	G	E	G	
Equivalent to SKH51 61~64HRC	P2.00~30.00	PHPC	G	G	G	E	G	
Powdered high-speed steel 64~67HRC	W2.00~30.00	PHPC	G	G	G	E	G	
M	P-W	Catalog No.	Type	Tip shape	Tapped			
W2.00~5.00 Equivalent to SKH51 61~64HRC W5.01~30.00 Equivalent to SKD11 60~63HRC	P4.01~50.00	HMC	D	D	D	R	E	G
	W4.01~30.00	HSMC	R	R	R	E	G	
	P5.01~30.00 W5.01~30.00	PHMC	G	G	G	E	G	
Equivalent to SKH51 61~64HRC	P4.01~30.00	PHMC	G	G	G	E	G	
Powdered high-speed steel 64~67HRC	W4.01~30.00	PHMC	G	G	G	E	G	
M	P-W	Catalog No.	Type	Tip shape	With key groove			
W2.00~5.00 Equivalent to SKH51 61~64HRC W5.01~30.00 Equivalent to SKD11 60~63HRC	P2.00~50.00	HKC	D	D	D	R	E	G
	W2.00~30.00	HSKC	R	R	R	E	G	
	P5.01~30.00 W5.01~30.00	PHKC	G	G	G	E	G	
Equivalent to SKH51 61~64HRC	P2.00~30.00	PHKC	G	G	G	E	G	
Powdered high-speed steel 64~67HRC	W2.00~30.00	PHKC	G	G	G	E	G	
M	P-W	Catalog No.	Type	Tip shape	Single flange			
W2.00~5.00 Equivalent to SKH51 61~64HRC W5.01~30.00 Equivalent to SKD11 60~63HRC	P3.00~50.00	HFC	D	D	D	R	E	G
	W2.00~30.00	HSFC	R	R	R	E	G	
	P5.01~30.00 W5.01~30.00	PHFC	G	G	G	E	G	
Equivalent to SKH51 61~64HRC	P3.00~30.00	PHFC	G	G	G	E	G	
Powdered high-speed steel 64~67HRC	W2.00~30.00	PHFC	G	G	G	E	G	
M	P-W	Catalog No.	Type	Tip shape	Double flanges			
W2.00~5.00 Equivalent to SKH51 61~64HRC W5.01~30.00 Equivalent to SKD11 60~63HRC	P3.00~50.00	HWC	D	D	D	R	E	G
	W2.00~30.00	HSWC	R	R	R	E	G	
	P5.01~30.00 W5.01~30.00	PHWC	G	G	G	E	G	
Equivalent to SKH51 61~64HRC	P3.00~30.00	PHWC	G	G	G	E	G	
Powdered high-speed steel 64~67HRC	W2.00~30.00	PHWC	G	G	G	E	G	

Catalog No.		L	W	P	(2.00)	3.00	5.01	10.01	15.01	20.01	25.01	(30.01)	(40.01)	(50.00)	0.1mm	M	U	
Type	Tip shape				(2.99)	5.00	10.00	15.00	20.00	25.00	30.00	(40.00)	(50.00)	T				
Straight	Single flange	D	13	2.00 ~ 2.99	○	○	○	○							T ≥ 2	1.0	—	
			16	3.00 ~ 4.00														3
			20	4.01 ~ 5.00		○	○	○	○									4
			25	5.01 ~ 6.00			○	○	○	○								5
			☒ P.457	6.01 ~ 8.00				○	○	○	○							6
Tapped	Double flanges	R	40	6.01 ~ 8.00			○	○	○	○	○	○	○		T ≥ 2	1.5	—	
			50	8.01 ~ 10.00				○	○	○	○	○	○					
			60	10.01 ~ 15.00					○	○	○	○	○					
			70	15.01 ~ 20.00						○	○	○	○					
			(80)	20.01 ~ 25.00							○	○	○					
With key groove	G	G	(90)	25.01 ~ 30.00								○	○					
			(100)	25.01 ~ 30.00										○	○			
			(100)	25.01 ~ 30.00										○	○			

☒ L(80)(90) → W4.01~30.00. If L(80)(90)(100), then select W within the range of 4.01~30.00.  
 ☒ For L13~25, refer to the short straight punches.  
 ☒ P2.00~2.99 is a specification available for the straight and key groove types only.  
 ☒ P(30.01~40.00) · (40.01~50.00) is a specification available for H□CD (SKD11, D shape) only.  
 ☒ For P30.01~40.00, there are 2 tap holes with a pitch of 20mm. (Figure at right)  
 ☒ For P40.01~50.00, there are 2 tap holes with a pitch of 24mm. (Figure at right)

**Key groove position specified**    **Flange position specified**

Order    Catalog No.    L    P    W    R (R only)    T ≥ 2    K · F · WF

PHPCD — 60 — P14.28 — W9.28  
 HMC — 80 — P 5.80 — W5.20  
 PHKCR — 60 — P14.28 — W9.28 — R0.50 — T25.5 — K0

Tip shape D : H=W  
 Tip shape R : 2 ≤ W-2R-1  
 H=W-2R-1

Days to Ship **Quotation**

Price **Quotation**

Alterations    Catalog No. — L(LC) — P — W — R — T — K — (MC-PKC, etc.)  
 PHPCD — LC65.5 — P5.20 — W5.20 — PKC

Alteration	Code	Spec.	1Code
Alterations to tip	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 20 ≤ LC < L (For tapped type, 30 ≤ LC < L) 0.1mm increments (If combined with LKC-LKZ, 0.01mm increments can be selected.)	
	LKC	Full length tolerance change L + 0.2 ↔ +0.05 0	
Alterations to tap	LKZ	Full length tolerance change L + 0.2 ↔ +0.01 0	
	MC (MMC)	Tap diameter change    MMC can be used for material equivalent to SKD11 only. To change the tap diameter, specify MMC. W \ P    5.01~20.00 5.01~6.00    M4 → M3 6.01~8.00    M5 → M4 8.01~10.00    M6 → M5 · M4 10.01~13.00    M8 → M6 · M5	

Alteration	Code	Spec.	1Code
Key groove	TKC	Key groove position tolerance change T - 0.05 ↔ 0 -0.02	
	RTC	Key groove position tolerance change T - 0.05 ↔ +0.05 0	
Alterations to flange	HC	Flange width change 0 ≤ HC < 1.5 0.1mm increments	
	TC	Flange thickness change 2 ≤ TC < 5 0.1mm increments (If combined with TKC, 0.01mm increments can be selected.) Full length L is shortened by (5-TC). If combined with LC, full length is equal to LC.	
Alterations to tap	TKK	Flange thickness tolerance change T + 0.2 ↔ +0.02 0	
	TKM	Flange thickness tolerance change T + 0.2 ↔ 0 -0.02	
Shape	FK	Relief chamfering to flange top edge Flange edge is chamfered to prevent flange breakage.	
Shape	CCN	Chamfering to shank (4 positions) 5 ≤ CCN ≤ L 1mm increments (if CCN = L, 0.1mm increments)	
		Can be used for tip D shape only. Cannot be used for tapped types with P-W-M < 2. Flange side of flanged punch becomes CCN-T (TC).	