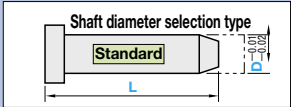


Dies Steel
SKD61 equivalent+Nitrided
D $\begin{matrix} -0.01 \\ -0.02 \end{matrix}$

STRAIGHT CENTER PINS WITH TIP PROCESS

—SHAFT DIAMETER (D) SELECTION TYPE—



Ⓜ Non JIS material definition is listed on P.1351 - 1352

Type	D	Head thickness(T)	Head Thickness(T)	Applicable ejector sleeve hole tolerance
CPN-5L	$\begin{matrix} -0.01 \\ -0.02 \end{matrix}$	4mm (T4)	$\begin{matrix} 0 \\ -0.02 \\ (L>300) \\ \dots T-0.05 \end{matrix}$	$\begin{matrix} +0.01 \text{ or } H7 \\ \text{Detail } \text{P.1309} \end{matrix}$
CPJ-5L	$\begin{matrix} \text{D}>12 \\ \text{or } L>500 \\ -0.01 \\ \dots D-0.03 \end{matrix}$	6 · 8mm (JIS)	$\begin{matrix} 0 \\ -0.05 \end{matrix}$	

SKD61 equivalent+Nitrided
 Surface 900HV~
 Base material 40~45HRC
 Range of guaranteed shaft diameter precision (Details [P.1305](#))
 Range of guaranteed base material hardness (Details [P.1307](#))
 Range of guaranteed shaft diameter precision (Details [P.1308](#))
 Ⓜ No nitriding on the tip.

Shape (Tip shape)

Shape C (C chamfered)

$R \leq 0.5(D \leq 2 \dots R \leq 0.3)$
 $C \pm 0.05$
 $45^\circ \pm 30'$
 $L \begin{matrix} +0.02 \\ 0 \end{matrix} (200 < L \leq 500 \dots L \begin{matrix} +0.05 \\ 0 \end{matrix}, L > 500 \dots L \begin{matrix} +0.5 \\ 0 \end{matrix})$

$C \dots 0.1\text{mm increments}$
 $0.1 \leq C \leq \frac{D-0.2}{2}$

Shape G (Cone)

$R \leq 0.5(D \leq 2 \dots R \leq 0.3)$
 $K \pm 30'$
 $L \begin{matrix} +0.05 \\ 0 \end{matrix} (200 < L \leq 500 \dots L \begin{matrix} +0.1 \\ 0 \end{matrix}, L > 500 \dots L \begin{matrix} +0.5 \\ 0 \end{matrix})$

$K \dots 1^\circ \text{ increments}$
 $45 \leq K < 90$

Shape T (Tapered)

$R \leq 0.5(D \leq 2 \dots R \leq 0.3)$
 $S \pm 0.05$
 $K \pm 30'$
 $L \begin{matrix} +0.02 \\ 0 \end{matrix} (200 < L \leq 500 \dots L \begin{matrix} +0.05 \\ 0 \end{matrix}, L > 500 \dots L \begin{matrix} +0.5 \\ 0 \end{matrix})$

$S \dots 0.1\text{mm increments}$
 $(L-S) \geq 45$
 and
 $0.1 \leq S \leq D \times 2$
 and
 $\frac{D}{2} - \text{Stank} \geq 0.1$

$K \dots 1^\circ \text{ increments}$
 $1 \leq K \leq 45$

Shape R (R chamfered)

$R \leq 0.5(D \leq 2 \dots R \leq 0.3)$
 $R \pm 0.1$
 $L \begin{matrix} +0.02 \\ 0 \end{matrix} (200 < L \leq 500 \dots L \begin{matrix} +0.05 \\ 0 \end{matrix}, L > 500 \dots L \begin{matrix} +0.5 \\ 0 \end{matrix})$

$R \dots 0.1\text{mm increments}$
 $0.2 \leq R \leq \frac{D-0.2}{2}$

Shape B (Spherical)

$R \leq 0.5(D \leq 2 \dots R \leq 0.3)$
 $R(SR) \pm 0.1$
 $L \begin{matrix} +0.05 \\ 0 \end{matrix} (200 < L \leq 500 \dots L \begin{matrix} +0.1 \\ 0 \end{matrix}, L > 500 \dots L \begin{matrix} +0.5 \\ 0 \end{matrix})$

• Default $R(SR) = \frac{D}{2}$

* SR may be designated within $\frac{D}{2} < R \leq 2 \times D$
 $R \dots 0.1\text{mm increments possible}$

4mm head		JIS head		Part Number			L		Shape (Tip size)
H	T	H	T	Type		0.01mm increments	0.01mm increments (L>500~0.1mm increments)		
				4mm head	JIS head	CPN-5L	CPJ-5L		
3						1.5	50.00~250.00	Shape C $C \dots 0.1\text{mm increments}$	
4						2	50.00~400.00		
5						2.5		Shape G $K \dots 1^\circ \text{ increments}$	
6						3			
7						3.5	50.00~400.00	Shape T $S \dots 0.1\text{mm increments}$ $K \dots 1^\circ \text{ increments}$	
8	4	8	6	CPN-5L		4	50.00~500.00		
9						4.5		Shape R $R \dots 0.1\text{mm increments}$	
10						5	50.00~500.00		
11						5.5		Shape B Default $R(SR) = \frac{D}{2}$ $(R \dots 0.1\text{mm increments possible})$	
15						6	50.00~600.00		
17						6.5		Refer to the working limits shown in the drawing.	
						7	50.00~500.00		
						8			
						10			
						12	50.00~500.00		
						15			
						16	50.00~700.00		

Alterations Part Number — L — Tip size(C · S · K · R) — (KC · WKC...etc.)

CPN-5LC5 — 100.00 — C1.0 — HC7.0
 CPJ-5LT5 — 100.00 — S2.0-K30 — HC7.0

Alteration details [P.338](#)

Alterations	Code	Spec.	1Code	Alterations	Code	Spec.	1Code
	KC	Single flat cutting $D/2 \leq KC < H/2$			HC	$HC = 0.1\text{mm increments}$ $D \leq HC < H$ Ⓜ In relation to the diameter tolerance, alteration may create a straight piece with little diameter difference between the head and shaft.	
	WKC	Two flats cutting $D/2 \leq WKC < H/2$			HCC	$HCC = 0.1\text{mm increments}$ $D + 1 \leq HCC < H - 0.3$	
	KAC	Varied width parallel flats cutting $D/2 \leq KAC < H/2$ $KBC = 0.1\text{mm increments only}$ $KAC < KBC < H/2$	About Designation Unit for Key Flat Cutting (1) To align the key flat with the shaft diameter [Unit of designation] 0.05mm increments possible (2) To designate arbitrary key flat dimensions [Unit of designation] 0.1mm		TC	$TC = 0.1\text{mm increments}$ $T/2 \leq TC < T$ $T - TC \leq L_{\text{max}}$ — L (Dimension L remains unchanged.)	
	RKC	Two flats (right angled) cutting $D/2 \leq RKC < H/2$			NC	Dowel hole boring Ⓜ Combination with other than NHC · NHN not available	
	DKC	Three flats cutting $D/2 \leq DKC < H/2$	Quotation		NCW	Dowel hole boring+Spring pin driving Ⓜ Combination with other than NHC · NHN not available	
	KGC	Two flats (angled) cutting $D/2 \leq KGC < H/2$ $AG = 1^\circ \text{ increments}$ $0 < AG < 360$			NHC	Numbering on the head How to order P.338 Ⓜ Available when $H \geq 2$	
	KTC	Three flats cutting at 120° $D/2 \leq KTC < H/2$			NHN	Automatic sequential numbering on the head How to order P.338 Ⓜ Available when $H \geq 2$	

Price Quotation

Order Part Number — L — Tip size(C · S · K · R)
 CPN-5LC5 — 100.00 — C1.0
 CPJ-5LT5 — 100.00 — S2.0-K30

Days to Ship Quotation