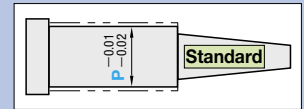


Dies Steel
SKD61 equivalent + Nitrided
P $\begin{matrix} -0.01 \\ -0.02 \end{matrix}$

ONE-STEP CENTER PINS

—SHAFT DIAMETER (P) DESIGNATION (0.1mm INCREMENTS) TIP (A · V) TOLERANCE $\pm 0.01 / \pm 0.02$ TYPE—



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



Ⓜ SKD61 equivalent + Nitrided Range of guaranteed shaft diameter precision (Details \mathbb{E} P.1305) Range of guaranteed surface hardness for nitriding (Details \mathbb{E} P.1308)
Ⓜ Surface 900HV~ Base material 40~45HRC Range of guaranteed base material hardness (Details \mathbb{E} P.1307) Ⓜ No nitriding on the tip!

Type	Head Thickness (T)	Head Thickness (T)	Applicable ejector sleeve hole tolerance
CPNG-5	4mm (T4)	$\begin{matrix} 0 \\ -0.02 \\ (L > 300 \\ \dots \rightarrow 1.05) \end{matrix}$	$\begin{matrix} +0.01 \\ 0 \\ \text{or H7} \end{matrix}$
CPNGK-5			
CPJG-5	4 · 6 · 8mm (JIS)	$\begin{matrix} 0 \\ -0.05 \end{matrix}$	Details \mathbb{E} P.1309
CPJKG-5			

Step (Step type) Select from A~E in the drawings below

Step A

Ⓜ $l \geq 0.5 + \alpha$

Step B

Ⓜ $l \geq 0.7 + \alpha$

Step C

Ⓜ $l \geq \frac{P-A}{2} + 0.5 + \alpha$

When AC code is used
 $l \geq \frac{P-A}{2 \tan AC} + 0.5 + \alpha$

Step D

Ⓜ $l \geq C + 0.5 + \alpha$

Step E

Ⓜ $l \geq R + 0.5 + \alpha$

Shape (Tip shape : V is dimension before tip processing.)

(Not processed) Ⓜ Designation of the shape is unnecessary when tip processing is not required.

C (C chamfered) $0.5 \leq G < V/2$
 $45^\circ \pm 30'$
 $G \pm 0.05$ 0.1mm increments
 $\alpha = G \theta < 45^\circ$
 (Calculation of θ \mathbb{E} P.1315)

G (Cone)
 $K' \pm 30'$
 $20 < K \leq 60$
 1° increments
 $\alpha = \frac{V}{2 \tan K} \theta < K$
 (Calculation of θ \mathbb{E} P.1315)

T (Tapered)
 $S \pm 0.05$
 $0.1 \leq S < \frac{V}{2 \tan K}$
 0.1mm increments

R (R chamfered)
 $0.2 \leq Q < V/2$
 0.1mm increments
 $\alpha = Q$

B (Spherical processed)
 $\alpha = V/2$

Group	Type		Step (Step type A · V · Ks) \mathbb{E}							
	4mm head	JIS head	Step A		Step B		Step C		Step E	
			V	A · V	A · V	Ks	A · V	Ks	A	V
Standard	CPNG-5	CPJG-5	± 0.02	± 0.02	± 0.02	$\pm 1^\circ$	± 0.02	$\pm 1^\circ$	± 0.02	± 0.02
	CPNGK-5	CPJKG-5	± 0.01	± 0.01	± 0.01	$\pm 1^\circ$	± 0.01	$\pm 1^\circ$		

4mm head		JIS head		Part Number				L 0.01mm increments	P 0.1mm increments	0.01mm increments			0.1mm increments		l max.
H	T	H	T	Type	Step	Shape	No.			F	A	Vmin.	C · R	ℓ	
4	4	4	4	CPNG-5 CPJG-5 CPJKG-5	A B C D E	C G T R B	2 2.5 3 3.5 4 4.5 5 5.5 6 6.5 7 8 10 11 12 15 16	70.00~400.00 70.00~400.00 70.00~500.00	1.5~1.9 2.0~2.4 2.5~2.9 3.0~3.4 3.5~3.9 4.0~4.4 4.5~4.9 5.0~5.4 5.5~5.9 6.0~6.4 6.5~6.9 7.0~7.9 8.0~9.9 10.0~11.9 12.0~14.9 15.0~15.9	$F \geq 50.00$	No need to designate A when [Step] A is selected.	0.70 1.00 1.50 2.00 2.50	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	and $C - \frac{P-A}{2}$ [Step] E only and $R \geq 0.3$ and $R \leq \frac{P-A}{2}$	25 30 35 40 45 50

Ⓜ Refer to the drawing for l min. (normally, $\alpha = 0$) Ⓜ [Step] E is $P \geq 2.0$

Order Part Number - L - P - F - A - V - C(R) - Tip size (K · S · G · Q)
 CPJG-5EG 6 - 350.00 - P5.9 - F330.00 - A4.80 - V4.00 - R0.5 - K30

Days to Ship **Quotation**

Alterations Part Number - L - P - F - A - V - C(R) - Tip size (K · S · G · Q) - (KC · WKC...etc.)
 CPJG-5EG 6 - 350.00 - P5.9 - F330.00 - A4.80 - V4.00 - R0.5 - K30 - KC3.0

Alteration details \mathbb{E} P.351

Alterations	Code	Spec.	1Code	Alterations	Code	Spec.	1Code
	KC	Single flat cutting $P/2 \leq KC < H/2$			TC	TC=0.1mm increments $T/2 \leq TC < T$ $T - TC \leq L_{max} - L$ (Dimensions L and F remain unchanged.)	
	WKC	Two flats cutting $P/2 \leq WKC < H/2$	About Designation Unit for Key Flat Cutting		NC	Dowel hole boring Ⓜ Combination with other than NHC · NHN · AC · RR not available.	
	KAC KBC	Varied width parallel flats cutting $P/2 \leq KAC < H/2$ KBC=0.1mm increments only $KAC < KBC < H/2$	(1) To align the key flat with the shaft diameter		NCW	Dowel hole boring + Spring pin driving Ⓜ Combination with other than NHC · NHN · AC · RR not available.	
	RKC	Two flats (right angled) cutting $P/2 \leq RKC < H/2$	Unit of designation 0.05mm increments possible		NHC	Numbering on the head How to order \mathbb{E} P.352 Ⓜ Available when $H \geq 2$	
	DKC	Three flats cutting $P/2 \leq DKC < H/2$	(2) To designate arbitrary key flat dimensions		NHN	Automatic sequential numbering on the head How to order \mathbb{E} P.352 Ⓜ Available when $H \geq 2$	
	KGC	Two flats (angled) cutting $P/2 \leq KGC < H/2$ $AG = 1^\circ$ increments $0 < AG < 360$	Unit of designation 0.1mm		AC	Changes the standard angle ($Ks = 45^\circ$). $AC = 1^\circ$ increments Ⓜ $30 \leq AC \leq 60$ Ⓜ Available for [Step] C · D Ⓜ Combination with RR not available. When [Step] D, $C \leq 1.0$, $A + 2(C \times \tan AC) < D$	
	KTC	Three flats cutting at 120° $P/2 \leq KTC < H/2$			RR	Changes R (normally 0.2 or less) to $R0.3 \sim 0.5$. (for strength improvement) [Designation method] RR Ⓜ Available for [Step] B · C · D Ⓜ $P - A \geq 1.0$ When [Step] D, $C \geq 0.5$	
	HC	HC=0.1mm increments $P \leq HC < H$ Ⓜ In relation to the diameter tolerance, alteration may create a straight piece with little diameter difference between the head and shaft.					
	HCC	HCC=0.1mm increments $P + 1 \leq HCC < H - 0.3$					

P Price **Quotation**