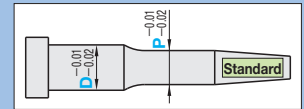


Dies Steel
SKD61 equivalent
+
Nitrided

STEPPED ONE-STEP CENTER PINS

—SHAFT DIAMETER (P) DESIGNATION (0.01mm INCREMENTS) TIP (A · V) TOLERANCE : ±0.02 TYPE—



Ⓜ Non JIS material definition is listed on P.1359 - 1360

RoHS

SKD61 equivalent+Nitrided Range of guaranteed shaft diameter precision (D) (Details P.1313)
 Surface 900HV Range of guaranteed base material hardness (Details P.1315)
 Base material 40~45HRC Range of guaranteed surface hardness for nitriding (Details P.1316)
 No nitriding on the tip (ℓ).
 Nitriding may extend to the head as it is applied after dimension P machining.

Type	P	Head Thickness (T)	Head Thickness (ℓ)	Applicable ejector sleeve hole tolerance
CPNB-5	-0.01 -0.02	4mm (T4)	0 -0.02 (L>300) T-0.05	+0.01 0 or H7
CPJB-5	Ⓜ P 12 or L>500 P-0.01 P-0.03	4 · 6 · 8mm (JIS)	0 -0.05	Details P.1317

Step A

Default $\alpha=0$
 Ⓜ When CX code is used $\alpha=CX$
 Ⓜ When RX code is used $\alpha=RX$
 Ⓜ When SR code is used $\alpha=\frac{V}{2}$

Step B

Default $\alpha=0$
 Ⓜ When CX code is used $\alpha=CX$
 Ⓜ When RX code is used $\alpha=RX$
 Ⓜ When SR code is used $\alpha=\frac{V}{2}$

Step C

Default $\alpha=0$
 Ⓜ When CX code is used $\alpha=CX$
 Ⓜ When RX code is used $\alpha=RX$
 Ⓜ When SR code is used $\alpha=\frac{V}{2}$

Step D

Default $\alpha=0$
 Ⓜ When CX code is used $\alpha=CX$
 Ⓜ When RX code is used $\alpha=RX$
 Ⓜ When SR code is used $\alpha=\frac{V}{2}$

Step E

Default $\alpha=0$
 Ⓜ When CX code is used $\alpha=CX$
 Ⓜ When RX code is used $\alpha=RX$
 Ⓜ When SR code is used $\alpha=\frac{V}{2}$

4mm head		JIS head		Part Number		L		0.01mm increments			0.1mm increments		ℓ		
H	T	H	T	4mm head	JIS head	Step	D	0.01mm increments (L>500 → 0.1mm increments)	P	F	A	Vmin.	C · R	N	max.
4	4	4	4	CPNB-5	CPJB-5	A	2	70.00 ~ 400.00	1.50~ 1.99	F≥50.00	No need to designate A when [Step] A is selected.	0.70	[Step] D only 0.1≤C≤1.5 and C<P-A 2	N≥L/3 and F-N≥30	25
5	5	5	2.5				1.50~ 2.49		30						
6	6	6	3				2.00~ 2.99		35						
7	7	7	3.5				2.50~ 3.49	40							
8	8	8	4				3.00~ 3.99	45							
9	9	9	4.5				3.50~ 4.49	50							
10	10	10	5				4.00~ 4.99								
11	11	11	5.5				5.00~ 5.49								
12	12	12	6				5.00~ 5.99								
13	13	13	6.5				6.00~ 6.49								
14	14	14	7				6.00~ 6.99								
15	15	15	8				8.00~ 8.99								
16	16	16	8				8.00~ 9.99								
17	17	17	12				10.00~ 11.99								
18	18	18	15				12.00~ 14.99								
19	19	19	16				15.00~ 15.99								
20	20	20													
21	21	21													

Ⓜ L dimension in () is available only for CPJB-5. Ⓜ Refer to the drawing for ℓ min. (normally, $\alpha=0$)

Alterations Part Number L P F A V C(R) N (KC · WKC · etc.)
 CPJB-5D 10 - 160.72 - P9.20 - F140.00 - A6.20 - V5.20 - C0.5 - N60.0 - KC5.0

Alteration details P.353

Alterations	Code	Spec.	1Code
	KC	Single flat cutting D/2≤KC<H/2	
	WKC	Two flats cutting D/2≤WKC<H/2	About Designation Unit for Key Flat Cutting
	KAC KBC	Varied width parallel flats cutting D/2≤KAC<H/2 KBC=0.1mm increments only KAC<KBC<H/2	(1) To align the key flat with the shaft diameter Unit of designation 0.05mm increments possible
	RKC	Two flats (right angled) cutting D/2≤RKC<H/2	
	DKC	Three flats cutting D/2≤DKC<H/2	(2) To designate arbitrary key flat dimensions Unit of designation 0.1mm
	KGC	Two flats (angled) cutting D/2≤KGC<H/2 AG=1° increments 0<AG<360	
	KTC	Three flats cutting at 120° D/2≤KTC<H/2	
	HC	HC=0.1mm increments D≤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 D+1≤HCC<H-0.3	

Alterations	Code	Spec.	1Code
	TC	TC=0.1mm increments T/2≤TC<T T-TC≤Lmax-L (Dimensions L, F and N remain unchanged.)	
	NC	Dowel hole boring Ⓜ Combination with other than NHC · NHN · CX · RX · SR · AC · RR not available.	
	NCW	Dowel hole boring+Spring pin driving Ⓜ Combination with other than NHC · NHN · CX · RX · SR · AC · RR not available.	
	NHC	Numbering on the head How to order P.354	
	NHN	Automatic sequential numbering on the head How to order P.354	
	CX	CX=0.1mm increments 0.3≤CX≤0.5, CX<V/2 Ⓜ Available when P≥2 V is a dimension prior to CX machining. Ⓜ α=CX	
	RX	RX=0.1mm increments P≤4.5 0.3≤RX≤0.5, RX<V/2 P>4.5 0.3≤RX≤1.0 V is a dimension prior to RX machining. Ⓜ α=RX	
	SR	Finishes the tip in spherical shape (SR). Ⓜ P≥2 Ⓜ α=V/2 Ⓜ L+0.05 (L≤500) V is a dimension prior to SR machining.	
	AC	Changes the standard angle (Ks=45°). AC=1° increments 30≤AC≤60 Ⓜ Available for [Step] C · D Ⓜ Combination with RR not available. When [Step] D, A+2(CXtanAC)<P	
	RR	Changes R (normally 0.2 or less) to R0.3~0.5. (for strength improvement) Designation method RR Ⓜ Available for [Step] B · C · D Ⓜ P-A≥1.0 When [Step] D, C≥0.5	

P Price

Quantity discount rate P.45

Quantity	1~4	5~12	13~19	20~50
Rate	-	5%	10%	15%

Ⓜ To be quoted on price & lead time above Max. Q'ty.

Order Part Number L P F A V C(R) N
 CPJB-5D 10 - 160.72 - P9.20 - F140.00 - A6.20 - V5.20 - C0.5 - N60.0

Days to Ship **5** Days
 Delivery days depend on subsidiary. P.45

Express B P.46