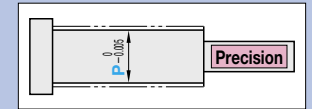


# PRECISION TAPERLESS ONE-STEP CORE PINS (NO DRAFT ANGLE CORE PINS)

—SHAFT DIAMETER (P) 0.005mm DESIGNATION TYPE—



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

RoHS	Material	Part Number		
		Type	Step	Shape
SKD61 equivalent 48~52HRC	CPZBS—	B	B	S
			C	C
			D	G
			E	T
SKH51 equivalent 58~60HRC	CPVBS—	E	D	R
			C	B
			B	B

**Step (Step type) Select from B~E in the drawing below.**

**B**

**C**

**D**

**E**

**Shape (Tip shape)**

**S** (Not processed)

**C** (C chamfering)

**G** (Cone)

**T** (Tapered)

**R** (R chamfering)

**B** (Spherical processed)

H	Part Number			0.01mm increments		0.005mm increments		0.01mm increments		0.1mm increments		l max.
	Type	Step	Shape	min.	max.	min.	Pmax.	min.	max.	C	R	
3	CPZBS—	B	S	1	100.00	14.00	0.800~0.995	12.00	L-l min. Refer to [Step] drawing	P>A	Only [Step] D is designated. Only [Step] E is designated.	l ≤ 12XA and l ≤ 35
4				1.5			1.000~1.495					
5				2			1.500~1.995					
6				2.5			2.000~2.495					
7				3			2.500~2.995					
8				3.5			3.000~3.495					
9				4			3.500~3.995					
10				4.5			4.000~4.495					
11				5			4.500~4.995					
15				5.5			5.000~5.495					
18				6			5.500~5.995					
21				6.5			6.000~6.495					
25				7			6.500~6.995					
				8			7.000~7.995					
				10			8.000~9.995					
				13			10.000~12.995					
	16	13.000~15.995										
	20	16.000~19.995										
			28.00	5.00								

Ⓜ [Step] E is No.1 (P ≥ 0.90)~

**Order**

Part Number — L — P — F — A — C · R — Tip size (K · S · G · Q)

CPZBS—BS 4 — 45.55 — P3.980 — F40.00 — A3.50  
 CPVBS—CC 6 — 52.30 — P5.565 — F42.50 — A4.60 — G1.0  
 CPZBS—DG 5 — 48.62 — P4.775 — F37.55 — A4.00 — C0.2 — K30  
 CPVBS—ER 6.5 — 55.65 — P6.230 — F42.35 — A4.50 — R0.5 — Q0.5

**Days to Ship** **Quotation** **Price** **Quotation**

**Alterations**

Part Number — L — P — F(FC) — A(AAC) — C(CVC) · R — K · S · G · Q — (K · C · WKC...etc.)

CPVBS—DC6 — 65.00 — P5.750 — F55.00 — A3.50 — C0.5 — G0.5 — RC — KC3.0  
 CPVBS—DS5 — 50.00 — P4.895 — F38.00 — A2.00 — C0.3 — TRN

Alterations	Code	Spec.	1Code	Alterations	Code	Spec.	1Code
	KC	Single flat cutting P/2 ≤ KC < H/2			TC	Head thickness change TC=0.1mm increments 1.5 ≤ TC < 4 (Dimensions L and F remain unchanged) 4 - TC ≤ Lmax. - L	
	WKC	Two flats cutting P/2 ≤ WKC < H/2			TRN	Relief under the head (Makes plate chamfering unnecessary)	
	KAC	Varied width parallel flats cutting P/2 ≤ KAC < H/2 KBC=0.1mm increments only KAC < KBC < H/2			NHC	Numbering on the head How to order <b>P.496</b> Available when H ≥ 2 Combination with SKC not available.	
	RKC	Two flats (right angled) cutting P/2 ≤ RKC < H/2			AAC	Extends the working limit of A min. AAC=0.01mm increments l ≤ 10 × AAC	
	DKC	Three flats cutting P/2 ≤ DKC < H/2			RC	Changes R (normally ≤ 0.1) to R ≤ 0.05. Designation method RC Available for [Step] B/C/D	
	SKC	Four flats cutting P/2 ≤ SKC < H/2			CVC	C dimension can be designated at 0.01mm increments. 0.10 ≤ CVC ≤ 1.00 CVC=0.01mm increments Available for [Step] D	
	KGC	Two flats (angled) cutting P/2 ≤ KGC < H/2 0 < AG < 360 AG=1° increments			AC	Changes the standard angle (Ks=45°). AC=1° increments Available for [Step] C · D 30 ≤ AC ≤ 60 Combination with CVC/RC not available. When [Step] D, C ≤ 1.0, A + 2(C × tanAC) < P	
	KTC	Three flats cutting at 120° P/2 ≤ KTC < H/2			FC	F dimension becomes shorter than F min., and L dimension becomes shorter than L min., too. FC ≥ 5mm It can be designated up to L min.=6.5mm.	
	HC	Head diameter change HC=0.1mm increments P ≤ HC < H In relation to the diameter tolerance, alteration may create a straight piece with little diameter difference between the head and shaft.			GVC	Gas vent machining GS · GB=1mm increments Available when P ≥ 2.00 2 ≤ GS ≤ 10 GS + 2 ≤ GB ≤ 30 F min. ≤ F - GB How to order <b>P.496</b>	
	HCC	Head diameter change (precision) HCC=0.1mm increments P - 0.5 ≤ HCC < H - 0.3					

Ⓜ For details of a Gas Release Core Pin, which is a product similar to alteration GVC, **P.513**