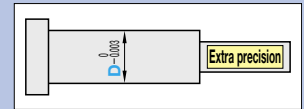


EXTRA PRECISION TAPERLESS ONE-STEP CORE PINS (NO DRAFT ANGLE CORE PINS)

—SHAFT DIAMETER (D) SELECTION TYPE—



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

	RoHS	M	Part Number		
		Ⓜ	Type	Step	Shape
	SKH51 equivalent 58~60HRC		CPMS—	B C D E	S C G T R B

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

B

Shape Select a tip shape from the drawings on the right.

$\ell \geq 0.4 + \alpha$
When RC code is used $\ell \geq 0.35 + \alpha$

C

Shape

$\ell \geq \frac{D-A}{2} + 0.3 + \alpha$
When AC code is used $\ell \geq \frac{D-A}{2 \tan \alpha} + 0.3 + \alpha$

D

Shape

$C = \frac{D-A}{2} \rightarrow$ [Step] C
 $\ell \geq C + 0.3 + \alpha$
When CVC code is used $\ell \geq CVC + 0.3 + \alpha$

E

Shape

$\ell \geq R + 0.3 + \alpha$

Shape (Tip shape)

S (Not processed)

$\alpha = 0$

When LKC code is used $L \begin{matrix} +0.005 \\ 0 \end{matrix}$

C (C chamfering)

$0.1 \leq G < A/2$
0.05mm increments
 $\alpha = G$

When LKC code is used $L \begin{matrix} +0.005 \\ 0 \end{matrix}$

G (Cone)

$20 < K \leq 60$
1° increments
 $\alpha = \frac{A}{2 \tan K}$

T (Tapered)

$0.1 \leq S < \frac{A}{2 \tan K}$
0.05mm increments
 $0 < K \leq 45$
1° increments
 $\alpha = S$

When LKC code is used $L \begin{matrix} +0.005 \\ 0 \end{matrix}$

R (R chamfering)

$0.2 \leq Q < A/2$
0.1mm increments
 $\alpha = Q$

When LKC code is used $L \begin{matrix} +0.005 \\ 0 \end{matrix}$

B (Spherical processed)

$\alpha = A/2$

H	Part Number			0.01mm increments				0.001mm increments		0.1mm increments		ℓ max.											
	Type	Step	Shape	D	L min.	L max.	F min.	F max.	A min.	A max.	C		R										
3	CPMS—	B C D E	S C G T R B	1	14.00	100.00	12.00	L—ℓ min. ℓ min. Refer to [Step] drawing	D > A	0.500	Only [Step] D is designated.	Only [Step] E is designated.											
4				1.5																			
5				2																			
6				2.5																			
7				3																			
8				3.5																			
9				4																			
10				4.5																			
11				5																			
15				5.5																			
18				6																			
															6.5								
															7								
				8																			
				10																			
				13																			

Order

Part Number	L	F	A	C · R	Tip size (K · S · G · Q)
CPMS—BS 4	45.55	F40.00	A3.500		G1.0
CPMS—CC 6	52.30	F42.50	A4.600		
CPMS—DG 5	48.62	F37.55	A4.000	C0.2	K30
CPMS—ER 6.5	55.65	F42.35	A4.500	R0.5	Q0.5

Days to Ship

Alterations

Quotation

Part Number	L	F(FC)	A(AAC)	C(CVC) · R	K · S · G · Q	(KC · WKC...etc.)
CPMS—DC6	65.00	F55.00	A3.505	C0.5	G0.5	RC — KC3.0
CPMS—DS5	50.00	F38.00	A2.000	C0.3		— TRN

Alteration details P.495

Alterations	Code	Spec.	1Code
	KC	Single flat cutting D/2 ≤ KC < H/2	
	WKC	Two flats cutting D/2 ≤ WKC < H/2	
	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
	RKC	Two flats (right angled) cutting D/2 ≤ RKC < H/2	Unit of designation 0.05mm increments possible
	DKC	Three flats cutting D/2 ≤ DKC < H/2	(2) To designate arbitrary key flat dimensions
	SKC	Four flats cutting D/2 ≤ SKC < H/2	Unit of designation 0.1mm
	KGC	Two flats (angled) cutting D/2 ≤ KGC < H/2 0 < AG < 360 AG = 1° increments	
	KTC	Three flats cutting at 120° D/2 ≤ KTC < H/2	
	HC	Head diameter change 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	Head diameter change (precision) HCC = 0.1mm increments D + 0.5 ≤ HCC < H - 0.3	
	TC	Head thickness change TC = 0.1mm increments 1.5 ≤ TC < 4 (Dimensions L and F remain unchanged) 4 - TC ≤ Lmax. - L	

Price

Quotation

Alterations	Code	Spec.	1Code
	TRN	Relief under the head (Makes plate chamfering unnecessary)	
	NHC	Numbering on the head How to order P.496 Available when H ≥ 2 Combination with SKC not available.	
	LKC	L dimension tolerance alteration L (designated in 0.005mm increments possible) Available when 1.5 ≤ D ≤ 5 Combination with FC not available. Available for [Shape] S · C · T · R	
	AAC	Extends the working limit of A min. AAC = 0.001mm increments ℓ ≤ 10 × AAC In case of No. = 2~3 · 4.5 · 5, A min. is the machining limit, and AAC cannot be used.	
	RC	Changes R (normally ≤ 0.1) to R ≤ 0.05. Designation method RC Available for [Step] B/C/D	
	CVC	C dimension can be designated at 0.01mm increments. 0.10 ≤ CVC ≤ 1.00 CVC = 0.01mm increments Available for [Step] D	
	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 × tan AC) < D	
	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.	
	GVC	Gas vent machining GS · GB = 1mm increments Available when D ≥ 2 2 ≤ GS ≤ 10 GS + 2 ≤ GB ≤ 30 F min. ≤ F - GB How to order P.496	