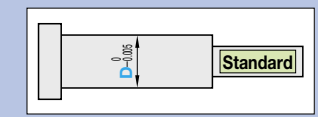


TAPERLESS ONE-STEP CORE PINS (NO DRAFT ANGLE CORE PINS)

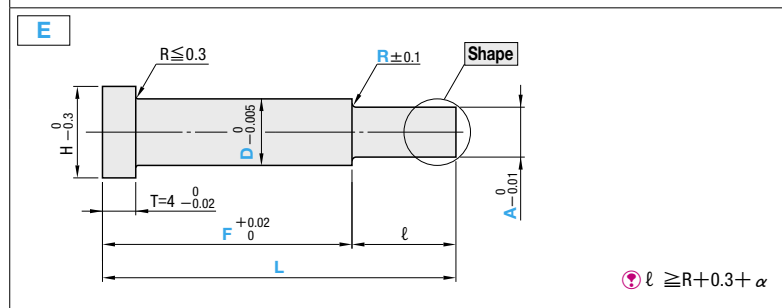
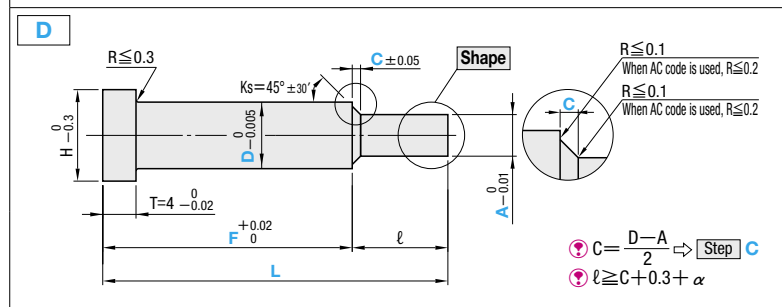
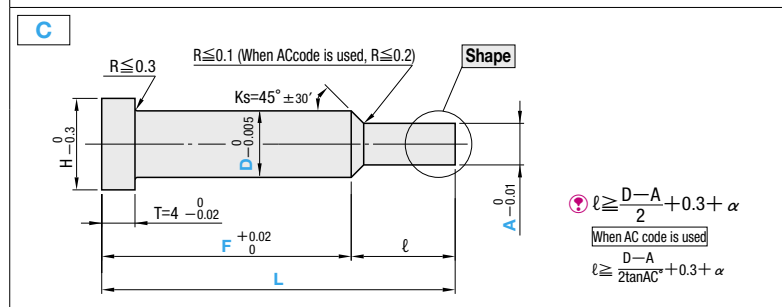
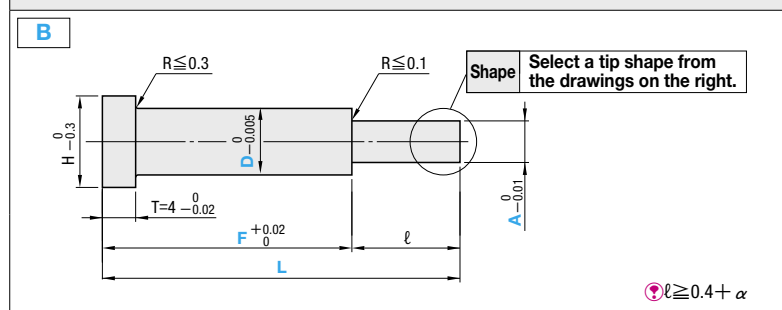
—SHAFT DIAMETER(D)SELECTION TYPE—



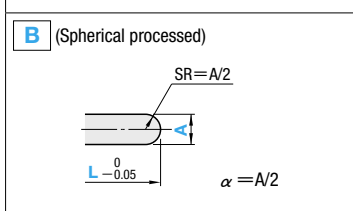
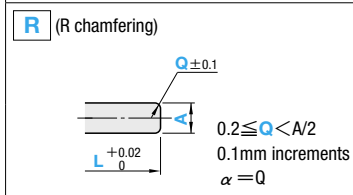
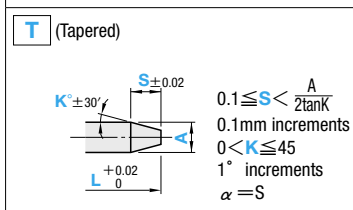
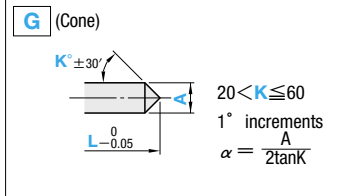
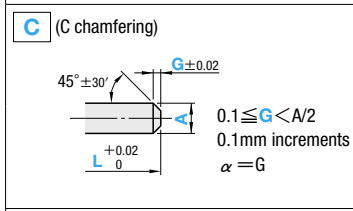
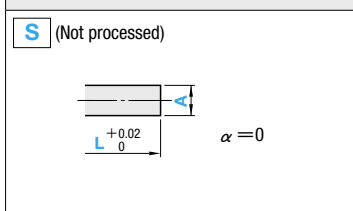
Ⓜ Non JIS material definition is listed on P.1351 - 1352

RoHS	M H	Part Number		
		Type	Step	Shape
	SKD61 equivalent 48~52HRC	CPPS—	B	S
	SKH51 equivalent 58~60HRC	CPHS—		C
	NAK80 37~43HRC	CPKS—	D	T
	SUS440C 56~60HRC	CPWS—	E	R

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



Shape (Tip shape)



H	Part Number				0.01mm increments				0.1mm increments		ℓ max.		
	Type	Step	Shape	D	min.	max.	min.	max.	min.	max.		C	R
3	CPPS— CPHS— CPKS— CPWS— (D≤16)	B C D E	S C G T R B	1	12.00	100.00	10.00	L-ℓ	min.	0.50	D>A	Only [Step] D is designated.	Only [Step] E is designated.
4				1.5						0.70			
5				2						1.00			
6				2.5						1.50			
7				3						2.00			
8				3.5						2.50			
9				4						3.00			
10				4.5						3.50			
11				5						4.00			
15				6						4.50			
18				7						5.00			
21				8						5.50			
25	9	6.00											
				10	CPHS only						ℓ ≤ 10×A and ℓ ≤ 35		
				11									
				15									
				18									
				21									
				25									

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

CPPS—BS4 — 45.55 — F40.00 — A3.50 — — G1.0
 CPHS—CC6 — 52.30 — F42.50 — A4.60 — — K30
 CPWS—DG5 — 48.62 — F37.55 — A4.00 — C0.2 — R0.5
 CPKS—ER6.5 — 55.65 — F42.35 — A4.50 — — Q0.5

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

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

CPPS—DC6 — 65.00 — F55.00 — A3.50 — C0.5 — G0.5 — KC3.0—TC3.0
 CPHS—DS5 — 50.00 — F38.00 — A2.00 — 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	
	RKC	Two flats (right angled) cutting D/2 ≤ RKC < H/2	
	DKC	Three flats cutting D/2 ≤ DKC < H/2	
	SKC	Four flats cutting D/2 ≤ SKC < H/2	
	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	

Alterations	Code	Spec.	1Code																		
	TC	Head thickness change TC = 0.1mm increments 1.5 ≤ TC < 4 (Dimensions L and F remain unchanged) 4 - TC ≤ Lmax. - L																			
	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.																			
	RE	R shape alteration (enlargement) RE = 0.5mm increments Ⓜ 0.5 ≤ RE ≤ 2.0 Ⓜ F tolerance is +0.05 Ⓜ Available for [Step] E																			
	CVC	C dimension can be designated at 0.01mm increments. 0.10 ≤ CVC ≤ 1.00 CVC = 0.01mm increments Ⓜ Available for [Step] D																			
	AAC	Extends the working limit of A min. Ⓜ AAC = <table border="1"> <thead> <tr> <th>D</th> <th>A min.</th> <th>AAC min.</th> </tr> </thead> <tbody> <tr> <td>1~1.5</td> <td>0.50</td> <td>0.40</td> </tr> <tr> <td>3.5~4</td> <td>1.00</td> <td>0.70</td> </tr> <tr> <td>5.5</td> <td>1.50</td> <td>1.00</td> </tr> <tr> <td>6~16</td> <td>2.00</td> <td>1.50</td> </tr> <tr> <td>20</td> <td>5.00</td> <td>4.00</td> </tr> </tbody> </table> Ⓜ In case of D No. = 2~3 · 4.5 · 5 · A min. is the machining limit, and AAC cannot be used.	D	A min.	AAC min.	1~1.5	0.50	0.40	3.5~4	1.00	0.70	5.5	1.50	1.00	6~16	2.00	1.50	20	5.00	4.00	
D	A min.	AAC min.																			
1~1.5	0.50	0.40																			
3.5~4	1.00	0.70																			
5.5	1.50	1.00																			
6~16	2.00	1.50																			
20	5.00	4.00																			
	AC	Changes the standard angle (Ks = 45°). AC = 1° increments Ⓜ Available for [Step] C · D Ⓜ 30 ≤ AC ≤ 60 Ⓜ When [Step] D, C ≤ 1.0, A + 2 (C × tan AC) < D																			
	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																			

Ⓜ For details of a Gas Release Core Pin with Gas Vent, which is a product similar to alteration GVC P.511

Taperless Core Pins Standard