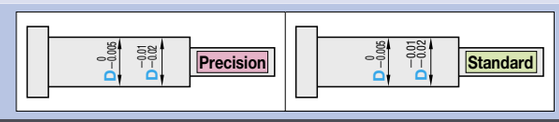
High Speed Steel
SKH51 equivalent
D $^{0}_{-0.005}$ / $^{-0.01}_{-0.02}$

TAPERLESS ONE-STEP CENTER PINS

—SHAFT DIAMETER (D) FIXED TIP (A) TOLERANCE $^{0}_{-0.005}$ / $^{0}_{-0.01}$ TYPE—



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

RoHS

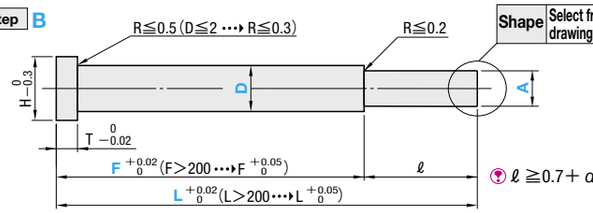
M SKH51 equivalent
H 58～60HRC

Range of guaranteed shaft diameter precision (Details P.1305)
Range of guaranteed base material hardness (Details P.1307)

Type	T D	Head thickness (T)	Applicable ejector sleeve hole tolerance
CPHS—5 CPVS—5	$^{0}_{-0.005}$	4mm (T4)	$^{+0.005}_{0}$ Details P.1309
CPHSJ—5 CPVSJ—5	$^{0}_{-0.005}$	6・8mm (JIS)	$^{+0.005}_{0}$ Details P.1309
CPHSE—5 CPVSE—5	$^{-0.01}_{-0.02}$	4mm (T4)	$^{+0.01}_{0}$ or H7 Details P.1309
CPHSJE—5 CPVSJE—5	$^{-0.01}_{-0.02}$	6・8mm (JIS)	$^{+0.01}_{0}$ or H7 Details P.1309

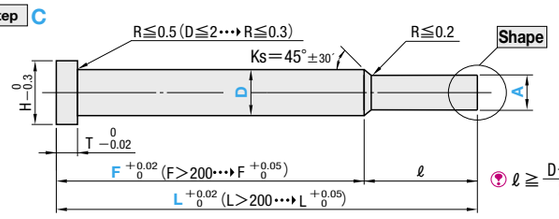
Step (Step type) Select from B～E in the drawing below.

Step B



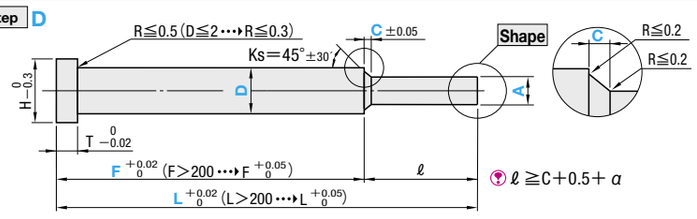
ℓ ≧0.7+α

Step C



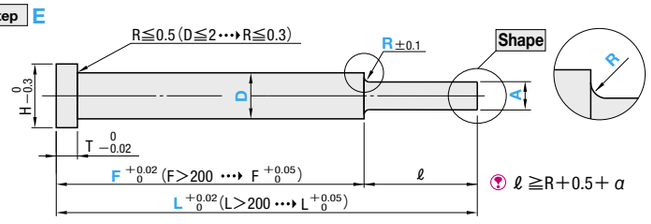
ℓ ≧ (D−A)/2 +0.5+α

Step D



ℓ ≧C+0.5+α

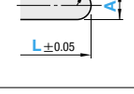
Step E



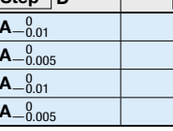
ℓ ≧R+0.5+α

Shape (Tip shape)

(Not processed)
Designation of the shape is unnecessary when tip processing is not required.
α=0

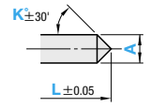


C (C chamfered)



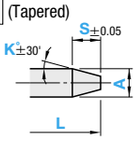
0.1≦G<A/2
0.1mm increments
α=G

G (Cone)



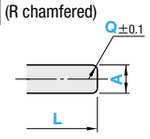
0<K≦60
1° increments
α = A / 2tanK

T (Tapered)



0.1≦S< A / 2tanK
0.1mm increments
0<K≦45
1° increments
α=S

R (R chamfered)



0.2≦Q<A/2
0.1mm increments
α=Q

B (Spherical processed)

α=A/2

Group	Type 4mm head	Type JIS head	Shape (Tip shapeA) T Step B	Step C	Step D	Step E
Standard	CPHS—5□	CPHSJ—5□	A $^{0}_{-0.01}$	A $^{0}_{-0.01}$	A $^{0}_{-0.01}$	A $^{0}_{-0.01}$
Precision	CPVS—5□	CPVSJ—5□	A $^{0}_{-0.005}$	A $^{0}_{-0.005}$	A $^{0}_{-0.005}$	A $^{0}_{-0.005}$
Standard	CPHSE—5□	CPHSJE—5□	A $^{0}_{-0.01}$	A $^{0}_{-0.01}$	A $^{0}_{-0.01}$	A $^{0}_{-0.01}$
Precision	CPVSE—5□	CPVSJE—5□	A $^{0}_{-0.005}$	A $^{0}_{-0.005}$	A $^{0}_{-0.005}$	A $^{0}_{-0.005}$

4mm head H	4mm head T	JIS head H	JIS head T	Part Number Type 4mm head	Part Number Type JIS head	Step	Shape	D	0.01mm increments L	F	A	Amin.	0.1mm increments C・R	ℓmax.
3	4	—	—	CPHS—5 CPVS—5 Tolerance D $^{0}_{-0.005}$	—	B C G T R B	Designation is unnecessary when tip processing is not required.	1	70.00～200.00	F≧50.00	When tolerance D $^{0}_{-0.005}$ D−0.01>A≧Amin.	0.50	Step D only 0.1≦C≦1.5 and C<(D−A)/2	ℓ≦12XA and ℓ≦35
4								1.5						
5								2	70.00～250.00			0.70		
6								2.5						
7								3	70.00～300.00			1.00		
8		8	6		CPHSJ—5 CPVSJ—5 Tolerance D $^{0}_{-0.005}$			3.5						
								4						
		9		CPHSE—5 CPVSE—5 Tolerance D $^{-0.01}_{-0.02}$				4.5			When tolerance D $^{-0.01}_{-0.02}$ D−0.02>A≧Amin.	1.50	Step E only R≧0.3 and R≦(D−A)/2	
9								5						
		10						5.5						
10		11						6						
								6.5						
11		13	8		CPHSJE—5 CPVSJE—5 Tolerance D $^{-0.01}_{-0.02}$			7	70.00～350.00			2.00		
14		14						8						
15		15						9						
17		17						10						
								12						

Step E is D≧1.5 Refer to the drawing for ℓmin.(normally, α=0)

Order

Part Number	L	F	A	C(R)	Tip size (K・S・G・Q)
CPHS—5EG6	350.00	F330.00	A5.00	R0.5	K30

Days to Ship: Quotation

Alterations

Part Number	L	F	A	C(R)	Tip size (K・S・G・Q)	(KC・WKC…etc.)
CPHS—5EG6	350.00	F330.00	A5.00	R0.5	K30	KC3.0

Alteration details P.381

Alterations	Code	Spec.	1Code
VKC	VKC	Precision single flat cutting D/2≦VKC<H/2	
VWC	VWC	Precision two flats cutting D/2≦VWC<H/2	
KC	KC	Single flat cutting D/2≦KC<H/2	
WKC	WKC	Two flats cutting D/2≦WKC<H/2	
KAC KBC	KAC KBC	Varied width parallel flats cutting D/2≦KAC<H/2 KBC=0.1mm increments only KAC<KBC<H/2	
RKC	RKC	Two flats (right angled) cutting D/2≦RKC<H/2	
DKC	DKC	Three flats cutting D/2≦DKC<H/2	
KGC	KGC	Two flats (angled) cutting D/2≦KGC<H/2 AG=1° increments 0<AG<360	
KTC	KTC	Three flats cutting at 120° D/2≦KTC<H/2	

About Designation Unit for Key Flat Cutting
(1)To align the key flat with the shaft diameter
Unit of designation 0.05mm increments possible
(2)To designate arbitrary key flat dimensions
Unit of designation 0.1mm

Quotation

Alterations	Code	Spec.	1Code
H, HC	HC	HC=0.1mm increments D≦HC<H, D≧1.5 In relation to the diameter tolerance, alteration may create a straight piece with little diameter difference between the head and shaft.	
H, HCC	HCC	HCC=0.1mm increments D+1≦HCC<H−0.3, D≧1.5	
TC	TC	TC=0.1mm increments T/2≦TC<T, D≧1.5 T TC≦Lmax. L (Dimensions L and F remain unchanged.)	
H, ℓ, T	NC	Dowel hole boring Available when H≧4 Combination with other than NHC・NHN・RR not available.	Quotation
H, ℓ1, d	NCW	Dowel hole boring+Spring pin driving Available when H≧4 Combination with other than NHC・NHN・RR not available.	
217	NHC	Numbering on the head How to order P.382 Available when H≧2	
1 2 3	NHN	Automatic sequential numbering on the head How to order P.382 Available when H≧2	
RR	RR	Changes R (normally 0.2 or less) to R0.3～0.5 (Improves strength) Designation method RR Available for Step B・C・D D−A≧1.0 Step When D, C≧0.5	

Price: Quotation