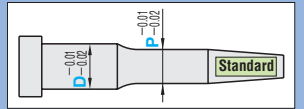


Dies steel
SKD61

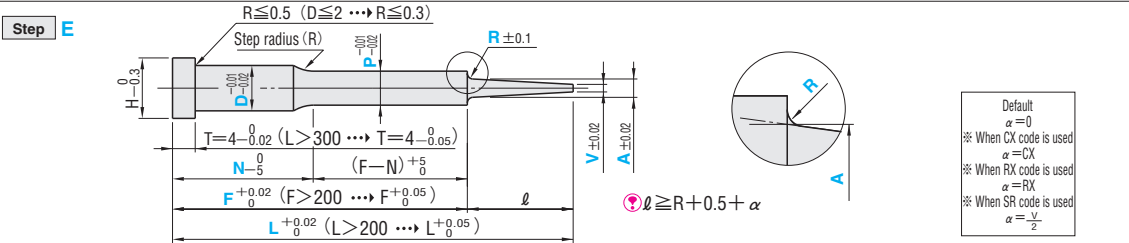
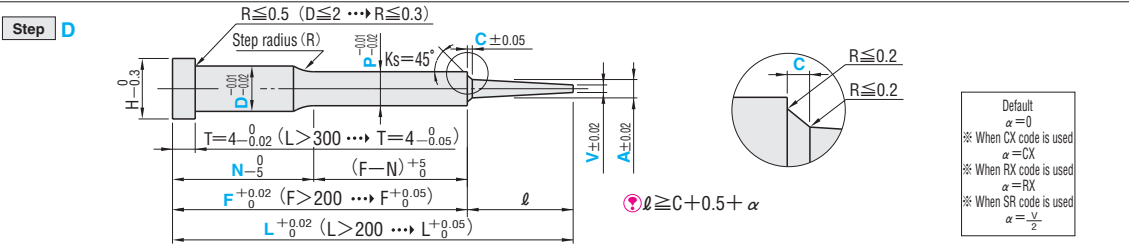
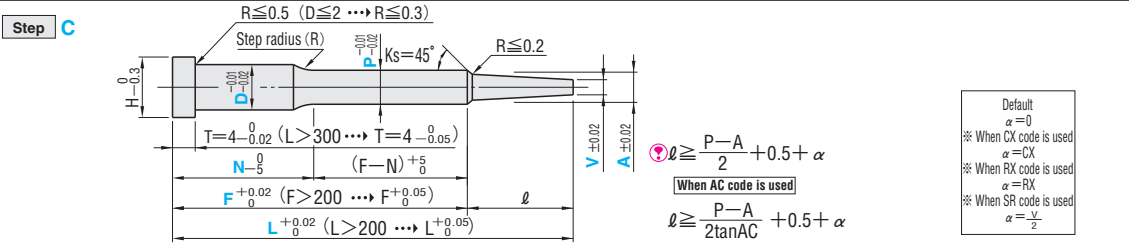
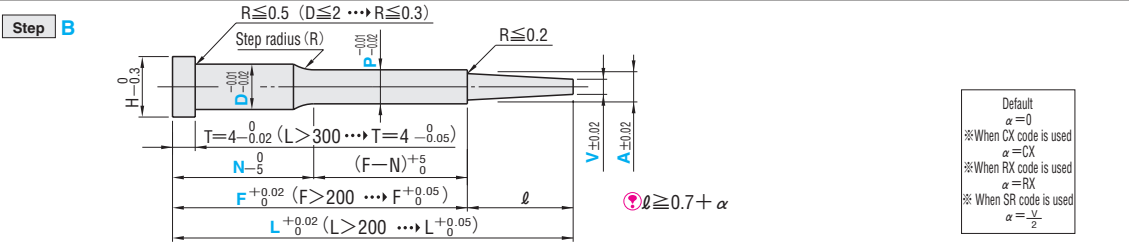
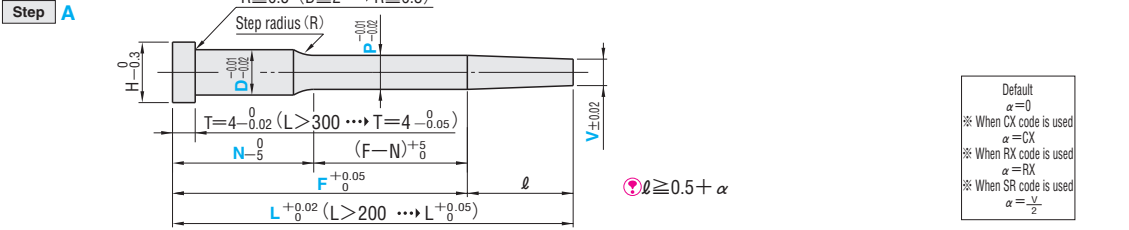
STEPPED ONE-STEP CENTER PINS

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



SKD61 (H13) Range of guaranteed shaft diameter precision (D) (See technical data pages)
50~55HRC Range of guaranteed base material hardness (See technical data pages)

Type	P	Head Thickness (T)	Applicable ejector sleeve hole tolerance
CPDB-5	-0.01 -0.02	4mm (T4)	+0.01 0 or H7 See technical data pages



H	Part Number		0.01mm increments					0.1mm increments		l max.		
	Type	Step	D	L	P	F	A	Vmin.	C · R		N	
3	CPDB-5	A B C D E	1.5	70.00~200.00	1.00~1.49	F ≥ 55.00	No need to designate A when Step A is selected.	P > A ≥ V	0.50	Step D only 0.1 ≤ C ≤ 1.5 and C < (P-A)/2	N ≥ 25.0 and 30 ≤ (F-N) ≤ 200	20
4			2	70.00~250.00	1.50~1.99							25
5			2.5	70.00~250.00	1.50~2.49							30
6			3	70.00~300.00	2.00~2.99							35
7			3.5	70.00~300.00	2.50~3.49							40
8			4	70.00~300.00	3.00~3.99							45
9			4.5	70.00~300.00	3.50~4.49							45
10			5	70.00~500.00	4.00~4.99							50
11			5.5	70.00~500.00	5.00~5.49							50
15			6	70.00~500.00	5.00~5.99							50
17			6.5	70.00~500.00	6.00~6.49							50
					7							70.00~500.00
			8	70.00~500.00	6.00~7.99							
			10	70.00~500.00	8.00~9.99							
			12	70.00~500.00	10.00~11.99							

Step E is D ≥ 1.5 (P ≥ 1.10) ~ Refer to the drawing for l min. (normally, α = 0)

Alterations Part Number - L - P - F - A - V - C(R) - N - (KC · WKC...etc.) Express services not available for NHC/NHN. See alteration guide for more details

Alterations	Code	Spec.
	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
	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 head 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.
	TC	TC = 0.1mm increments 2.0 ≤ TC < 4 4 - TC ≤ Lmax - L (Dimensions L, F and N remain unchanged.)
	NC	Dowel hole boring Available when H ≥ 4 Combination with other than NHC-NHN-CX-RX-SR-AC-RR not available.
	NCW	Dowel hole boring + Spring pin driving Available when H ≥ 4 Combination with other than NHC-NHN-CX-RX-SR-AC-RR not available.
	NHC	Numbering on the head How to order see alteration guide Available when H ≥ 2 Express services not available.
	NHN	Automatic sequential numbering on the head How to order see alteration guide Available when H ≥ 2 Express services not available.
	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 Available when P ≥ 2 V is a dimension prior to RX machining. α = RX
	SR	Finishes the top in spherical shape (SR). Available when P ≥ 2 L is +0.05 α = V/2 V is a dimension prior to SR machining.
	AC	Changes the Ks angle (default: 45°). AC = 1° increments 30 ≤ AC ≤ 60 Available for Step C/D Combination with RR not available. When Step D, C ≤ 1.0, A + 2(C · tan AC) < P
	RR	Changes R to 0.3-0.5 from default value of 0.2 or less (to improve the strength) Designation method: RR Available for Step B/C/D P - A ≥ 1.0 When Step D, C ≥ 0.5

Order Part Number - L - P - F - A - V - C(R) - N
CPDB-5D 10 - 160.72 - P8.20 - F140.00 - A6.20 - V5.20 - C0.5 - N30.0