



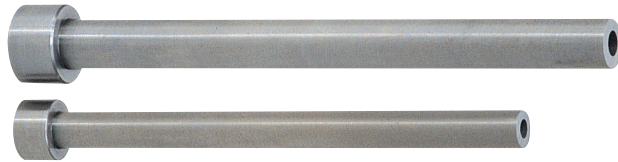
SKD61 equivalent + Nitrided  
Concentricity  $\phi 0.06$   
JIS head

# STRAIGHT EJECTOR SLEEVE

—SHAFT DIAMETER SELECTION TYPE • SHAFT DIAMETER DESIGNATION TYPE—

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

RoHS

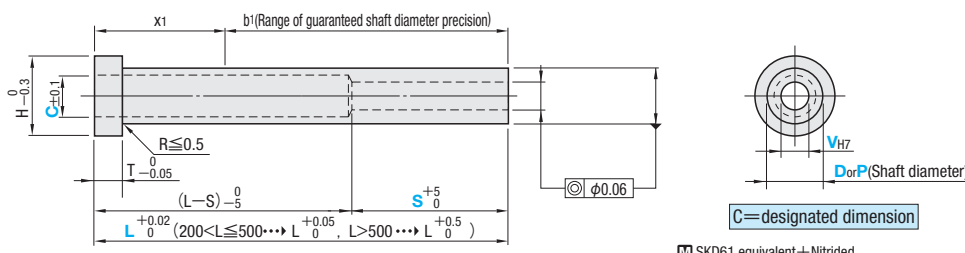


Part Number		D or P	D · P	V	Applicable center pin shaft diameter tolerance
Shaft diameter selection type	Shaft diameter designation (0.01mm increments) type				
ESNJ	ESJB	D or P ≤ 12.00	-0.01 -0.02	H7	※Note that for sleeves with V dimension tolerance of H7, combination with center pins that have shaft diameter tolerance $\frac{0}{-0.005}$ is not recommended. The reason for this is the fitting sections S are longer. (Details <a href="#">P.1309</a> )
		D or P > 12.00	-0.01 -0.03		

**VH7**

V ≤ 3.0	3.1 ≤ V ≤ 6.0	6.1 ≤ V ≤ 10.0	V ≥ 10.1
$\frac{+0.010}{0}$	$\frac{+0.012}{0}$	$\frac{+0.015}{0}$	$\frac{+0.018}{0}$

Ⓢ SKD61 equivalent + Nitrided  
 Ⓢ Surface : 900HV  
 Base material : 40 ± 3HRC  
 Ⓢ b<sub>1</sub> (Range of guaranteed shaft diameter precision) (Details [P.1305](#))  
 x<sub>1</sub> max. = 35  
 Range of guaranteed base material hardness (Details [P.1307](#))  
 Range of guaranteed surface hardness for nitriding (Details [P.1308](#))



**C = designated dimension**

Ⓢ Nitriding may extend to the head as it is applied after dimension V and P machining.  
 Ⓢ To insert a stepped center pin, the following condition must be met:  
 the sleeve's recess diameter  $(D) \geq \text{the center pin's shaft diameter}(D) + 1.0$  (Details [P.1310](#))

**Order** **Part Number** — L — P — V — C — S  
 (D selection type) **ESNJ8 — 200.05 — V4.5 — C5.0 — S32**  
 (P designation type) **ESJB8 — 200.05 — P7.55 — V5.0 — C5.5 — S40** **Days to Ship** **Quotation**

**Alterations** **Part Number** — L — P — V — C — S — (KC · WKC...etc.)  
**ESNJ8 — 200.05 — V4.0 — C5.0 — S32 — KC4.5**  
**ESJB8 — 200.05 — P7.55 — V5.0 — C5.5 — S40 — HC11.5**

Alteration details [P.275](#)

Alterations	Code	Spec.	1Code
	KC	Single flat cutting (DorP)/2 ≤ KC < H/2	Quotation
	WKC	Two flats cutting (DorP)/2 ≤ WKC < H/2	
	KAC KBC	Varied width parallel flats cutting (DorP)/2 ≤ KAC < H/2 KBC = 0.1mm increments only KAC < KBC < H/2	
	RKC	Two flats (right angled) cutting (DorP)/2 ≤ RKC < H/2	
	DKC	Three flats cutting (DorP)/2 ≤ DKC < H/2	
	SKC	Four flats cutting (DorP)/2 ≤ SKC < H/2	
	KGC	Two flats (angled) cutting (DorP)/2 ≤ KGC < H/2 AG = 1° increments 0 < AG < 360	
	KTC	Three flats cutting at 120° (DorP)/2 ≤ KTC < H/2	

**Alterations** TC | TC = 0.1mm increments Ⓢ T/2 ≤ TC < T, T - TC ≤ Lmax. — L Ⓢ Dimensions L and (L - S) remain unchanged. |  |

HC | HC = 0.1mm increments Ⓢ (DorP) ≤ HC < H Ⓢ In relation to the diameter tolerance, alteration may create a straight piece with little diameter difference between the head and shaft. |  |

CW | Two-step recessing (Makes recess C into two-steps and widens it) CW = 0.1mm increments W = 5mm increments Ⓢ C + 0.5 ≤ CW ≤ C max. Ⓢ CW ≤ 13.5 Ⓢ 10 ≤ W ≤ L - S - 10, W ≤ 200 | Quotation |

CGX | CGX = 0.1mm increments Ⓢ 0.2 ≤ CGX ≤ 1.5 and CGX ≤  $\frac{D(P) - V}{2} - 0.1$  Ⓢ Available when L ≤ 300 Ⓢ Combination with RGX/CGZ/RGZ not available. |

RGX | RGX = 0.1mm increments Ⓢ 0.3 ≤ RGX ≤ 1.5 and RGX ≤  $\frac{D(P) - V}{2} - 0.1$  Ⓢ Available when L ≤ 300 Ⓢ Combination with CGX/CGZ/RGZ not available. |

CGZ | CGZ = 0.1mm increments Ⓢ 0.2 ≤ CGZ ≤ 1.0 and CGZ ≤  $\frac{D(P) - V}{2} - 0.1$  Ⓢ Available when L ≤ 300 Ⓢ Combination with CGX/RGX/RGZ not available. |

RGZ | RGZ = 0.1mm increments Ⓢ 0.5 ≤ RGZ ≤ 1.0 and RGZ ≤  $\frac{D(P) - V}{2} - 0.1$  Ⓢ Available when L ≤ 300 Ⓢ Combination with CGX/RGX/CGZ not available. |

## Shaft diameter (D) selection type

H	T	Part Number		L	V	C	Cmax.	S					
		Type	D										
8	6	ESNJ	4	40.00~200.00	—	—	3.0	20~100 (Ⓢ D4, D4.5 When V1.5~V1.9 20~40)					
			4.5	40.00~250.00									
9			5	40.00~300.00									
			5.5	40.00~300.00									
10			6	40.00~500.00					—	—	$C \geq V + 0.5$ (Ⓢ When L > 300 0.5mm increments)	4.0	L (L—Simin.) 40.00~60.00 20 60.01~ 30
			6.5										
11	7	40.00~500.00											
12	7.5	40.00~500.00											
13	8	ESJB	8	40.00~500.00	500.1~800.0	2.5~8.0	6.5	L (L—Simin.) 40.00~60.00 20 60.01~70.00 30 70.01~80.00 40 80.01~ 50					
			9						40.00~500.00				
			10						40.00~500.00				
			11						40.00~500.00				
			12						40.00~500.00				
			13						40.00~500.00				
			14						40.00~500.00				
			15						40.00~500.00				
16	40.00~500.00												
17	12	40.00~500.00	500.1~800.0	2.5~10.0	7.5	20~150							
20	15	40.00~500.00	500.1~800.0	2.5~12.0	8.5	20~150							
21	16	40.00~500.00	500.1~800.0	3.0~13.0	10.5	20~150							
25	20	40.00~500.00	500.1~800.0	3.0~16.0	17.0	20~150							

## Shaft diameter (P) designation 0.01mm increments type

H	T	Part Number		L	V	C	Cmax.	S					
		Type	No.										
8	6	ESJB	4	40.00~200.00	—	—	3.0	20~100 (Ⓢ No.4, No.4.5 When V1.5~V1.9 20~40)					
			4.5	40.00~250.00									
9			5	40.00~300.00									
			5.5	40.00~300.00									
10			6	40.00~500.00					—	—	$C \geq V + 0.5$ and $C \leq P - 1.5$ (Ⓢ When L > 300 0.5mm increments)	4.5	L (L—Simin.) 40.00~60.00 20 60.01~ 30
			6.5										
11	7	40.00~500.00											
12	7.5	40.00~500.00											
13	8	ESJB	8	40.00~500.00	500.1~800.0	2.5~8.0	6.5	L (L—Simin.) 40.00~60.00 20 60.01~70.00 30 70.01~80.00 40 80.01~ 50					
			9						40.00~500.00				
			10						40.00~500.00				
			11						40.00~500.00				
			12						40.00~500.00				
			13						40.00~500.00				
			14						40.00~500.00				
			15						40.00~500.00				
16	40.00~500.00												
17	12	40.00~500.00	500.1~800.0	2.5~10.0	7.5	20~150							
20	15	40.00~500.00	500.1~800.0	2.5~12.0	8.5	20~150							
21	16	40.00~500.00	500.1~800.0	3.0~13.0	10.5	20~150							
25	20	40.00~500.00	500.1~800.0	3.0~16.0	17.0	20~150							

Ⓢ V ≤ P - 2.0

**P** Price **Quotation**