

Metal Collar

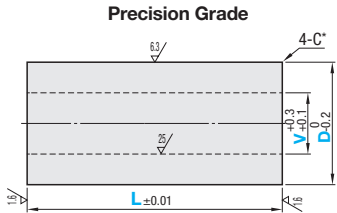
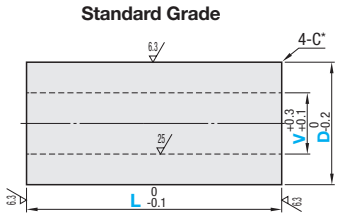
Hardened Type - Standard Grade / Precision Grade, L Dimension Configurable / Dimension Configurable



Part Number				Material	Surface Treatment	Hardness
L Dimension Configurable		Dimension Configurable				
Standard Grade	Precision Grade	Standard Grade	Precision Grade			
NCLCH	ASH	FNCLCH	FAS	S45C Equivalent	-	45~50HRC
NCLBH	ASC	FNCLBH	FASC		Black Oxide	
NCLMH	PASC	FNCLMH	FPASC		Electroless Nickel Plating	
-	-	FNCSK	FASK	SKS3 Equivalent	-	55HRC~
		FNCSKB	FASKB		Black Oxide	
		FNCSKM	FASKM		Electroless Nickel Plating	
NCLSSH	SASCH	FNCLSH	FSASCH	SUS440C Equivalent	-	45~50HRC

Depending on thickness and length, S45C Hardened Type may be less than 45HRC.
Stainless Steel Hardened Type may be discolored due to hardening.

* D=16 or Less: C0.1 ~ 0.2
D=16.5 or More: C0.5 or Less



L Dimension Configurable, Standard Grade / Precision Grade

Part Number		D Selection	L 0.1mm Increment	Unit Price								
Type	V			Standard Grade				Precision Grade				
				NCLCH	NCLBH	NCLMH	NCLSSH	ASH	ASC	PASC	SASCH	
Standard Grade NCLCH NCLBH NCLMH NCLSSH	2	4 5 6 8 10	10.0~ 16.0									
	3	5 6 8 10 12	10.0~ 25.0									
			25.1~ 50.0									
	4 5 6	(6) 8 10 12 13 14 15 16 ⚠(6)→Applicable to V4.	10.0~ 25.0									
			25.1~ 50.0									
			10.0~ 25.0									
			25.1~ 50.0									
	8 10 12	(10) (12) (13) (14) 15 16 ⚠(10)→Applicable to V8. ⚠(12 13 14)→Applicable to V8, 10.	10.0~ 25.0									
			25.1~ 50.0									
			50.1~ 75.0									
			75.1~ 100.0									
	Precision Grade ASH ASC PASC SASCH	8 10 12 15 16 20	(20) 25 ⚠(20)→Not applicable to V20.	10.0~ 25.0								
25.1~ 50.0												
50.1~ 75.0												
75.1~ 100.0												
8 10 12 15 16 20 25		30 35	10.0~ 25.0									
			25.1~ 50.0									
			50.1~ 75.0									
			75.1~ 100.0									
10 12 15 16 20 25 30		40 50 60	10.0~ 25.0									
			25.1~ 50.0									
			50.1~ 75.0									
			75.1~ 100.0									

Ordering Example
Part Number NCLCH10 - D 20 - L 50.5

Dimension Configurable, Standard Grade / Precision Grade

Part Number	V 0.5mm Increment (V3 or More)	D	L 0.1mm Increment	Unit Price													
				Standard Grade								Precision Grade					
				FNCLCH	FNCLBH	FNCLMH	FNCSK	FNCSKB	FNCSKM	FNCLSH	FAS	FASC	FPASC	FASK	FASKB	FASKM	FSASCH
Standard Grade FNCLCH FNCLBH FNCLMH FNCSK FNCSKB FNCSKM FNCLSH	(Selection) 2.0 2.6	(0.5mm Increment)	4.0~10.0	10.0~ 25.0													
				25.1~ 50.0													
				50.1~ 75.0							-	-	-	-	-	-	-
			75.1~ 100.0				-	-	-		-	-	-	-	-	-	-
			10.0~20.0	10.0~ 25.0													
				25.1~ 50.0													
				50.1~ 75.0													
			75.1~ 100.0														
			21~30	10.0~ 25.0													
				25.1~ 50.0													
				50.1~ 75.0													
			75.1~ 100.0														
		(0.5mm Increment)	31~40	10.0~ 25.0													
				25.1~ 50.0													
				50.1~ 75.0													
			75.1~ 100.0														
			41~50	10.0~ 25.0													
				25.1~ 50.0													
				50.1~ 75.0													
			75.1~ 100.0														
			51~60	10.0~ 25.0													
				25.1~ 50.0													
				50.1~ 75.0													
			75.1~ 100.0														
		(1mm Increment)	61~80	10.0~ 25.0													-
				25.1~ 50.0													-
				50.1~ 75.0													-
			75.1~ 100.0														-
		(1mm Increment)	81~100	10.0~ 25.0													-
				25.1~ 50.0													-
				50.1~ 75.0													-
			75.1~ 100.0														-

⚠Machining Limits of Collar Thickness and Overall Length
Length 10.0≤L≤50.0 → (D-V)/2≥1
50.1≤L≤100.0 → (D-V)/2≥3
⚠Machining Limits of Collar Thickness and Overall Length (Material: SKS3)
4≤D≤10 → V≤D-2
10.5≤D≤30 → V≤D-4
31≤D≤60 → V≤D-6
⚠Machining Limits of V and Overall Length
L≤Vx8

Ordering Example
Part Number FNCLCH - V10.5 - D19.5 - L50.5

Alterations
Part Number FNCLBH - V10.5 - D30 - L30.5 - VKC

⚠Not applicable to L Dimension Configurable Type.

Alteration	Code	Spec.
I.D. Tolerance 	VKC	Changes the I.D. Tolerance to H7. Ordering Code VKC Machining Conditions ⚠6≤D≤40 V≥3 L≤40 ⚠When V<5, L≤Vx4 ⚠When V≥5, L≤Vx3 Thickness Conditions D D-V 6~15 D-V≥3 15.5~18 D-V≥4 18.5~20 D-V≥5 21~40 D-V≥6