Precision Pivot Pins

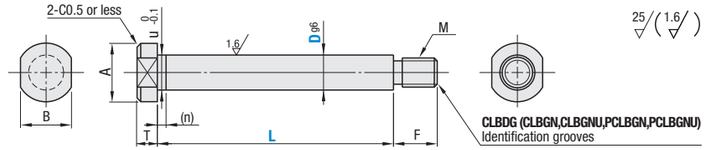
Lock Nut with Flange

Precision Pivot Pins – Lock Nut with Flange

RoHS10

D Tolerance (g6)	
4–6	-0.004 -0.012
8, 10	-0.005 -0.014
12–18	-0.006 -0.017
20–30	-0.007 -0.020

Type: L Dimension Selectable	L Dimension Configurable: Standard Nut	L Dimension Configurable: U Nut	Material	Hardness	Surface Treatment	Accessory (1 Pc.): Standard Nut	Accessory (1 Pc.): U Nut
CLBDG	CLBGN	CLBGNU	1045 Carbon Steel or Equivalent	—	Black Oxide	Material SWRCH Carbon Steel	Material 1018 Carbon Steel (UNUTK)
CLBDGH	CLBGHN	CLBGHNU		40~45 HRC min.			
—	PCLBGN	PCLBGNU		—	Electroless Nickel Plating	Material 304 Stainless Steel	Material 304 Stainless Steel (UNUTS)
	PCLBGHN	PCLBGHNU		40~45 HRC min.			
	GCLBGN	—		Plating Hardness 750 HV min.	Hard Chrome Plating	Material SWRCH	Material 1018 Carbon Steel (UNUTK)
SCLBDG	SCLBGN	SCLBGNU	304 Stainless Steel Equivalent	—	—	Material 304 Stainless Steel	Material 304 Stainless Steel (UNUTS)
—	SCLBGHN	SCLBGHNU	440C Stainless Steel Equivalent	45~50 HRC min.			



- For details of U nut specifications, please refer to **P.2433**.
- **CLBDG** has identification grooves on the side in order to distinguish it from Hardened Type. (**CLBGN**, **CLBGNU**, **PCLBGN** and **PCLBGNU** may also have identification grooves.)
- Relief dimension under the shoulder is for reference.
- This type may have centering holes depending on dimensions.
- For L Dimension, Standard Machining Tolerances (Class: Medium) are used.

L Dimension Selectable

Part Number Type	D	L Selection	A	B	T	F	u	(n)	M (Coarse Thread)	Included Nut
Hardened CLBDG CLBDGH Stainless Steel SCLBDG	4	10 12 14 15 16 18 20 22 24 25 30	7	5	3	6	3.9	1.5	M3	M3 x 0.5
	5		9	7	4		4.9		M4	M4 x 0.7
	6	15 16 18 20 22 24 25 30	10	8	5	9	5.8		M5	M5 x 0.8
	8	15 16 18 20 22 24 25 30 35 40 45 50	13	10			7.8		M6	M6 x 1.0
	10	18 20 22 24 25 30 35 40 45 50	16	13		12	9.8		M8	M8 x 1.25
	12	22 24 25 30 35 40 45 50	18	14		16	11.8		M10	M10 x 1.5

L Dimension Configurable

Part Number Type	D	L 0.1 mm Increment	A	B	T	F	u	(n)	M (Coarse Thread)	Attached Nuts
Standard Nut CLBGN CLBGHN PCLBGN PCLBGHN GCLBGN SCLBGN SCLBGHN U Nut CLBGNU CLBGHNU PCLBGNU PCLBGHNU SCLBGNU SCLBGHNU	4	5.0–50.0	7	5	3	6	3.9	1.5	M3	M3 x 0.5
	5	5.0–60.0	9	7	4		4.9		M4	M4 x 0.7
	6	10.0–100.0	10	8	5	9	5.8		M5	M5 x 0.8
	8		13	10			7.8		M6	M6 x 1.0
	10		16	13		12	9.8		M8	M8 x 1.25
	12	15.0–200.0	18	14		16	11.8		M10	M10 x 1.5
	13	20.0–200.0	24	21		18	12.8		M12	M12 x 1.75
	14						13.8			
	15						14.8			
	16	20.0–200.0					15.8			
	17						16.8			
	18					24	17.8			
	20		27	23			19.8		M16	M16 x 2.0
	22						21.8			
	25		30	27			24.8			
	30	40.0–200.0	35	32		30	29			

Part Number Type	D	CLBGN	CLBGHN	PCLBGN	PCLBGHN	GCLBGN	SCLBGN	SCLBGHN	CLBGNU	CLBGHNU	PCLBGNU	PCLBGHNU	SCLBGNU	SCLBGHNU
		Available Types: Standard Nut							U Nut					
Standard Nut CLBGN CLBGHN PCLBGN PCLBGHN GCLBGN SCLBGN SCLBGHN U Nut CLBGNU CLBGHNU PCLBGNU PCLBGHNU SCLBGNU SCLBGHNU	4	•	•	•	•	•	•	•	—	—	—	—	—	—
	5	•	•	•	•	•	•	•	•	•	•	•	•	•
	6	•	•	•	•	•	•	•	•	•	•	•	•	•
	8	•	•	•	•	•	•	•	•	•	•	•	•	•
	10	•	•	•	•	•	•	•	•	•	•	•	•	•
	12	•	•	•	•	•	•	•	•	•	•	•	•	•
	13	•	•	•	•	•	•	•	•	•	•	•	•	•
	14	•	•	•	•	•	•	•	•	•	•	•	•	•
	15	•	•	•	•	•	•	•	•	•	•	•	•	•
	16	•	•	•	•	•	•	•	•	•	•	•	•	•
	17	•	•	•	•	•	•	•	•	•	•	•	•	•
	18	•	•	•	•	•	•	•	•	•	•	•	•	•
	20	•	•	•	•	•	•	•	•	•	•	•	•	•
	22	•	•	•	•	•	•	•	•	•	•	•	•	•
	25	•	•	•	•	•	•	•	•	•	•	•	•	•
	30	•	•	•	•	•	—	•	•	•	•	•	—	•

- SCLBGHN and SCLBGHNU may be discolored by hardening.

Part Number Example

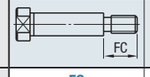
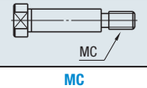
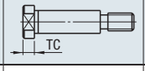
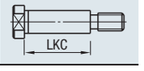
Part Number	-	L
SCLBDG8	-	30
CLBGHN15	-	120.3

Part Number Alterations

Part Number - L - (FC / MC / TC / LKC)

CLBGHN15 - 120.3 - FC20 - MC10

- Applicable to L Dimension Configurable Type.

Alterations	Thread Part Length	Thread Diameter	Shoulder Thickness	L Dimension Tolerance
				
Code	FC	MC	TC	LKC
Spec.	**Ordering Code:** FC4 - FC = 1 mm Increment - M(MC)≤FC≤M(MC) x3	**Ordering Code:** MC3 D / MC (Selection Range): 5: 3; 6: 3 4; 8: 3 4 5; 10: 4 5 6; 12: 5 6 8; 13–18: 6 8 10; 20 / 22: 8 10 12; 25: 10 12 - Not applicable for D4 and D30. - MC3 is not available for U Nut Type. - For D12, MC5, please also use alteration FC	**Ordering Code:** TC3 - TC = 0.5 mm Increment - 2≤TC≤5	**Ordering Code:** LKC Changes L dimension tolerance to ±0.05.

Precision Pivot Pins

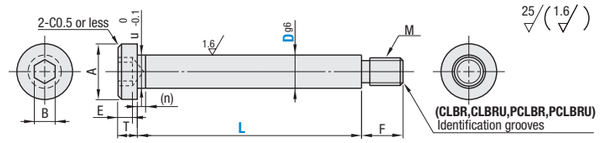
Lock Nut with Hex Socket Head

Precision Pivot Pins – Lock Nut with Hex Socket Head

RoHS10

D Tolerance (g6)	
4–6	-0.004 -0.012
8, 10	-0.005 -0.014
12–18	-0.006 -0.017
20–25	-0.007 -0.020

Type: Standard Nut	Type: U Nut	Material	Hardness	Surface Treatment	Accessory (1 Pc.): Standard Nut	Accessory (1 Pc.): U Nut
CLBR	CLBRU	1045 Carbon Steel or Equivalent	—	Black Oxide	Material SWRCH	Material 1018 Carbon Steel (UNUTK)
CLBRH	CLBRHU		40~45 HRC min.			
PCLBR	PCLBRU		—	Electroless Nickel Plating	Material 304 Stainless Steel	Material 304 Stainless Steel (UNUTS)
PCLBRH	PCLBRHU		40~45 HRC min.			
GCLBR	GCLBRU		Plating Hardness 750 HV min.	Hard Chrome Plating	SWRM Low Carbon Steel	Material 1018 Carbon Steel (UNUTK)
SCLBR	SCLBRU	304 Stainless Steel	—	—	Material 304 Stainless Steel	Material 304 Stainless Steel (UNUTS)
SCLBRH	SCLBRHU	440C Stainless Steel Equivalent	45~50 HRC min.			
GSCLBR	GSCLBRU		45~50 HRC min. Plating Hardness 750 HV min.	Hard Chrome Plating		



- For details of U nut specifications, please refer to **P.2433**.
- **CLBR**, **CLBRU**, **PCLBR** and **PCLBRU** may have identification grooves on the side in order to distinguish them from Hardened Type.
- Relief dimension under the shoulder is for reference.
- This type may have centering holes depending on dimensions.
- For L Dimension, Standard Machining Tolerances (Class: Medium) are used.

Part Number Type: Standard Nut	Part Number Type: U Nut	D	L 0.1 mm Increment	A	T	F	B	E	u	(n)	M (Coarse Thread)	Included Nuts
CLBR	CLBRU	4	10.0–50.0	7	5	6	2.5	2	3.9	1.5	M3	M3 x 0.5
CLBRH	CLBRHU	5	10.0–60.0	9					4.9		M4	M4 x 0.7
PCLBR	PCLBRU	6	10.0–100.0	10		9	3		5.8		M5	M5 x 0.8
PCLBRH	PCLBRHU	8	10.0–100.0	13			5	3	7.8		M6	M6 x 1.0
GCLBR	GCLBRU	10		16		12	6	4	9.8		M8	M8 x 1.25
SCLBR	SCLBRU	12	10.0–200.0	18		16			11.8		M10	M10 x 1.5
SCLBRH	SCLBRHU	13	20.0–200.0	24		18	8	5	12.8		M12	M12 x 1.75
GSCLBR	GSCLBRU	14							13.8			
		15							14.8			
		16	20.0–200.0						15.8			
		17							16.8			
		18				24			17.8			
		20		27			10	6	19.8		M16	M16 x 2.0
		22	20.0–200.0						21.8			
		25		30			12	8	24.8			

- SCLBRH, SCLBRHU. GSCLBR and GSCLBRU may be discolored by hardening.

D	CLBR	CLBRH	PCLBR	PCLBRH	GCLBR	SCLBR	SCLBRH	GSCLBR	CLBRU	CLBRHU	PCLBRU	PCLBRHU	GCLBRU	SCLBRU	SCLBRHU	GSCLBRU
	Available Types: Standard Nut								U Nut							
4	•	•	•	•	•	•	•	•	—	—	—	—	—	—	—	—
5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
10	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
12	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
13	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
14	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
15	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
17	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
18	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
22	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
25	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

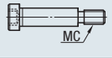
Part Number Example

Part Number	-	L
CLBR15	-	120.3

Part Number Alterations

Part Number - L - (FC / MC / LKC / HC)

CLBR10 - 50.5 - FC8

Alterations	Thread Part Length	Thread Diameter	L Dimension Tolerance	Shoulder Diameter Cut
				
Code	FC	MC	LKC	HC
Spec.	**Ordering Code:** FC4 - FC = 1 mm Increment - M(MC)≤FC≤M(MC)x3	**Ordering Code:** MC3 D / MC (Sel. Range): 5: 3; 6: 3 4; 8: 3 4 5; 10: 4 5 6; 12: 5 6 8; 13–18: 6 8 10; 20, 22: 8 10 12; 25: 10 12 - Not applicable to D4. - MC3 is not available for U Nut Type. - For D12, MC5, please also use alteration FC	**Ordering Code:** LKC Changes L dimension tolerance to ±0.05.	**Ordering Code:** HC – D=4–8 HC=A/2-1 – D=10–25 HC=A/2-2