

Pivot Pins

Lock Nut with Extra Low Hex Socket Head

■ **Features:** Thinner shoulder design ensures use in limited spaces.



RoHS10

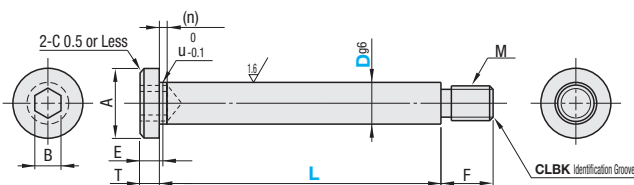
Type	M Material	H Hardness	S Surface Treatment	A Accessory
CLBK	EN 1.1191 Equiv.	40~45HRC	Black Oxide	Nut 1 pc.
CLBKH	EN 1.4301 Equiv.	-	-	MJIS-SWRCH
SCLBK	EN 1.4301 Equiv.	-	-	MEN 1.4301 Equiv.
SCLBKH	EN 1.4125 Equiv.	45~50HRC	-	-

There are identification grooves on the side of **CLBK** to be distinguished from Hardened Type.

Relief dimension under the shoulder is for reference.

For L Dimension, Standard Machining Tolerances (Class: Medium) is used.

This type may have centering holes depending on dimensions.



Part Number		L=0.1mm Increment	A	T	F	B	E	u	(n)	M (Coarse)	Unit Price											
Type	D										CLBK	CLBKH	SCLBK	SCLBKH								
CLBK CLBKH SCLBK SCLBKH	4	10.0~50.0	7	1.5	6	2	2	3.9	1.5	M3												
	5	10.0~60.0	9		9	2.5		4.9		M4												
	6	10.0~100.0	10					5.8		M5												
	8		13					7.8		M6												
	10	15.0~100.0	16	2.5	12	4	3	9.8		M8												
	12	15.0~200.0	18		16			11.8		M10												
	13	24			18			12.8		M12												
	14							25.0~200.0						13.8								
	15													14.8								
	16				30.0~200.0			24			6	4	15.8									
	20									19.8			M16									
	25									24.8												
			30																			

⚠ SCLBKH may be discolored by hardening.

Ordering Example
Part Number - L
CLBK15 - 120.3

Alterations
Part Number - L - (FC...etc.)
CLBK10 - 50.5 - FC8

	Thread Part Length	Thread Diameter	L Dimension Tolerance	Shoulder Diameter Cut
Alterations				
Code	FC	MC	LKC	HC
Spec.	Ordering Code FC4 FC=1mm Increment M(MC)≤FC≤M(MC)×3	Ordering Code MC3 MC (Selection Range) D 3 5 3 4 6 3 4 5 8 4 5 6 10 5 6 8 12 6 8 10 13-16 8 10 12 20 8 10 12 25 10 12 When ordering MC5 for D12, also specify Alteration FC. Not applicable to D4.	Ordering Code LKC Changes L dimension tolerance to ±0.05.	Ordering Code HC D=4~10 HC=A/2-1 D=12~25 HC=A/2-2

Pivot Pins

Tapped with Shoulder / Tapped, Hex Socket Head with Shoulder



RoHS10

Type	M Material	H Hardness	S Surface Treatment	D Tolerance (g6)
HCLBM	EN 1.1191 Equiv.	-	Black Oxide	6 -0.004 -0.012
HCLBHM		40~45HRC	-	8, 10 -0.005 -0.014
PHCLBM		-	Electroless Nickel Plating	12~18 -0.006 -0.017
PHCLBHM		40~45HRC	-	20~25 -0.007 -0.020
GHCLBM	EN 1.4301 Equiv.	-	Hard Chrome Plating: Plating Thickness 3µm or more	-
SHCLBM	EN 1.4301 Equiv.	-	-	-
SHCLBHM	EN 1.4125 Equiv.	45~50HRC	Hard Chrome Plating: Plating Thickness 3µm or more	-
GSHCLBHM	EN 1.4125 Equiv.	45~50HRC	Hard Chrome Plating: Plating Thickness 3µm or more	-

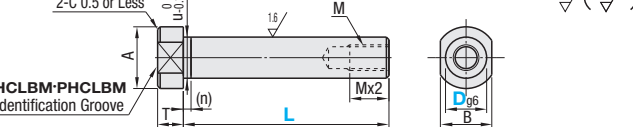
2-C 0.5 or Less

HCLBM-PHCLBM Identification Groove

For L Dimension, Standard Machining Tolerances (Class: Medium) is used.

There are identification grooves on the side of **HCLBM** and **PHCLBM** to be distinguished from Hardened Type.

Relief dimension under the shoulder is for reference.



Part Number		L=0.1mm Increment	A	B	u	T	(n)	M (Coarse)	Unit Price							
Type	D								HCLBM	HCLBHM	PHCLBM	PHCLBHM	GHCLBM	SHCLBM	SHCLBHM	GSHCLBHM
HCLBM HCLBHM PHCLBM PHCLBHM GHCLBM SHCLBM SHCLBHM GSHCLBHM	6	15.0~100.0	10	8	5.8	5	1.5	M 3								
	8	15.0~100.0	13	10	7.8			M 5								
	10	20.0~100.0	16	13	9.8			M 6								
	12	20.0~200.0	18	14	11.8			M 8								
	13	25.0~200.0	24	21	12.8											
	14				13.8											
	15	14.8			M10											
	16	15.8														
	17	16.8						M12								
	18	17.8														
	20	19.8			M16											
	22	35.0~200.0	27	23				21.8								
	25		30	27				24.8								

⚠ SHCLBHM and GSHCLBHM may be discolored by hardening.



RoHS10

Type	M Material	H Hardness	S Surface Treatment	D Tolerance (g6)
CLBRM	EN 1.1191 Equiv.	-	Black Oxide	6 -0.004 -0.012
CLBRHM		40~45HRC	-	8, 10 -0.005 -0.014
PCLBRM		-	Electroless Nickel Plating	12~18 -0.006 -0.017
PCLBRHM		40~45HRC	-	20~25 -0.007 -0.020
GCLBRM	EN 1.4301 Equiv.	-	Hard Chrome Plating: Plating Thickness 3µm or more	-
SCLBRM	EN 1.4301 Equiv.	-	-	-
SCLBRHM	EN 1.4125 Equiv.	45~50HRC	-	-

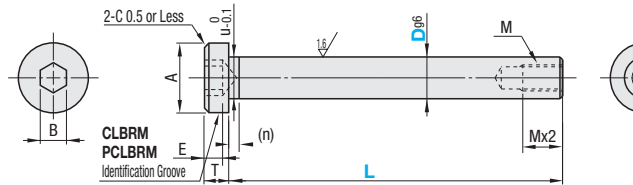
2-C 0.5 or Less

CLBRM-PCLBRM Identification Groove

For L Dimension, Standard Machining Tolerances (Class: Medium) is used.

There are identification grooves on the side of **CLBRM** and **PCLBRM** to be distinguished from Hardened Type.

Relief dimension under the shoulder is for reference.



Part Number		L=0.1mm Increment	A	T	B	E	u	(n)	M (Coarse)	Unit Price						
Type	D									CLBRM	CLBRHM	PCLBRM	PCLBRHM	GCLBRM	SCLBRM	SCLBRHM
CLBRM CLBRHM PCLBRM PCLBRHM GCLBRM SCLBRM SCLBRHM	6	15.0~100.0	10	5	3	2	5.8	1.5	M 3							
	8	20.0~100.0	13		5	3	7.8		M 5							
	10	25.0~100.0	16		6	4	9.8		M 6							
	12	25.0~200.0	18				11.8		M 8							
	13	30.0~200.0	24		8	5	12.8									
	14						13.8									
	15	14.8														
	16	15.8					M10									
	17	16.8					M12									
	18	17.8														
	20	19.8														
	22	40.0~200.0	27		10	6	21.8		M16							
	25	55.0~200.0	30		12	8	24.8									

⚠ SCLBRHM may be discolored by hardening.

Ordering Example
Part Number - L
HCLBHM8 - 35.8
SCLBRHM10 - 50.5

Alterations
Part Number - L - (MC, TC, LKC, HC)
HCLBHM10 - 50.5 - TC3

	Thread Diameter	Shoulder Thickness	L Dimension Tolerance	Shoulder Diameter Cut
Alterations				
Code	MC	TC	LKC	HC
Spec.	Ordering Code MC3 MC (Selection Range) D 2.6 8 3 4 10 12 4 5 13-15 5 6 16-18 6 8 20 8 10 25 10 12 FC=0.5mm Increment 2≤TC≤4.5 Not available for Tapped, Hex Socket Head with Shoulder Type.	Ordering Code TC3 TC=0.5mm Increment 2≤TC≤4.5 Not available for Tapped, Hex Socket Head with Shoulder Type.	Ordering Code LKC Changes L dimension tolerance to ±0.05.	Ordering Code HC D=6~8 HC=A/2-1 D=10~25 HC=A/2-2