

Linear Locks / Simplified Linear Locks

Note that, for some of the types shown here, order might be unable to be received by the MISUMI Indonesia offices.

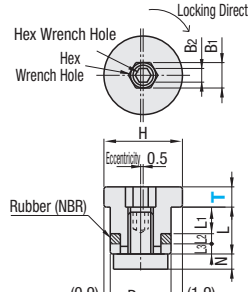
Linear Guide Lock Plates / Linear Guide Lock Units / Linear Guide Taper Locks

These linear locks press the rail strongly onto the datum plane to correct bending and avoid misalignment by external force. See below for application examples and mounting dimensions.



Linear Locks

RoHS 10



Hex Wrench Hole
Hex Wrench Hole
Locking Direction
Rubber (NBR)
D₁₇ (0.9)
D₁₇ (1.9)

Applicable Linear Guides (Recommendation)

Type	H	T1.4	T1.8	T3.5	T5
Miniature Standard Rail (C-VALUE included)	6	-	-	-	-
	8	-	-	-	-
	10	-	-	-	-
	13	-	-	-	-
	16	-	-	-	-
	20	-	-	-	-
Miniature Wide Rail (C-VALUE included)	6.5	-	-	-	-
	9	-	-	-	-
	12	-	-	-	-
	14	-	-	-	-
	16	-	-	-	-
	24	-	-	-	-
Medium/Heavy Load	28	-	-	-	-
	30	-	-	-	-
	33	-	-	-	-
	36	-	-	-	-
	42	-	-	-	-
	45	-	-	-	-

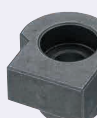
Type	H	T1.4	T1.8	T3.5	T5
C-VALUE Medium/Heavy Load	24	-	-	-	-
	28	-	-	-	-
	30	-	-	-	-
	33	-	-	-	-
	40	-	-	-	-
	42	-	-	-	-
C-VALUE Medium/Heavy Load	24	-	-	-	-
	28	-	-	-	-
	30	-	-	-	-
	33	-	-	-	-
	36	-	-	-	-
	42	-	-	-	-

Part Number

Type	T	H	D ₁₇	L	N	L ₁	L ₂	L ₃	B ₁	B ₂	D ₁	F (min)	W	Mass (g)	Unit Price (1 ~ 9 pcs)	Unit Price (10 ~ 200 pcs)	Unit Price (10 ~ 50 pcs)	Unit Price (10 ~ 50 pcs)
LLT	1.4	12.8	10	-0.013	8	2.5	5	1.4	1.6	5	10	11	6.5	90	1.8	7		
	1.8			-0.028										120	2.5	7		
	3.5			-0.034										190	3.9	8		
	5	14.8	12	-0.034	9		6				12	12	7.5	270	5.5	14		

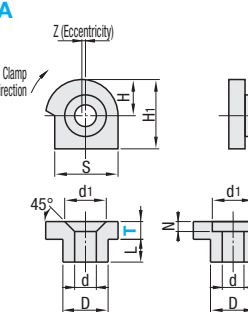
For orders larger than indicated quantity, please request a quotation.

These linear locks come with mounting screws to be inserted. See below for application examples and mounting dimensions.



Simplified Linear Locks

RoHS 10



LLTA
LLTA 2
LLTA3, 5, 7
Z (Eccentricity)
Clamp Rotating Direction
d₁
d
D

Applicable Linear Guides (Recommendation)

Type	H	T2	T3	T5	T7
Miniature Standard Rail (C-VALUE included)	6	-	-	-	-
	8	-	-	-	-
	10	-	-	-	-
	13	-	-	-	-
	16	-	-	-	-
	20	-	-	-	-
Miniature Wide Rail (C-VALUE included)	6.5	-	-	-	-
	9	-	-	-	-
	12	-	-	-	-
	14	-	-	-	-
	16	-	-	-	-
	24	-	-	-	-
Medium/Heavy Load	28	-	-	-	-
	30	-	-	-	-
	33	-	-	-	-
	36	-	-	-	-
	42	-	-	-	-
	45	-	-	-	-

Type	H	T2	T3	T5	T7
C-VALUE Medium/Heavy Load	24	-	-	-	-
	28	-	-	-	-
	30	-	-	-	-
	33	-	-	-	-
	40	-	-	-	-
	42	-	-	-	-
C-VALUE Medium/Heavy Load	24	-	-	-	-
	28	-	-	-	-
	30	-	-	-	-
	33	-	-	-	-
	36	-	-	-	-
	42	-	-	-	-

Part Number

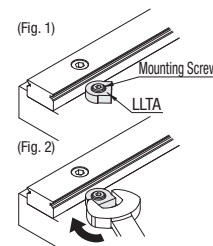
Type	T	L	D ₁₇ -0.01 -0.06	H	H ₁	S	Z	d	d ₁	N	Mounting Hole Dimension	Mass (g)	Mounting Screw	Unit Price (1 ~ 9 pcs)	Unit Price (10 ~ 150 pcs)
LLTA	2	2.8	5	4	8	7	0.4	2.4	4.6	-	5	4	3	1.2	
	3	3.8	7	6	12	11	0.5	3.4	6.2	2	7	6	4	2.4	
	5	4.8	9	7	14	13	0.5	4.5	8	3	9	7	5	3.8	
	7	5.8	11	8	18	14	0.5	5.5	9.5	4	11	8	6	5.8	

For orders larger than indicated quantity, please request a quotation.

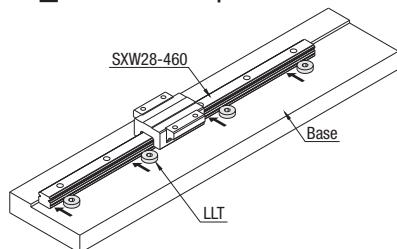
Ordering Example
Part Number
LLT5
LLTA7

LLTA (Simplified Linear Locks) Mounting Procedures

- (1) Drill holes for mounting linear locks on the base (Refer to Mounting Hole Dimensions).
- (2) Temporarily tighten the rail screws.
- (3) Insert the mounting screws in LLTA and temporarily tighten (Fig. 1).
- (4) Turn the LLTA shoulder clockwise with a wrench and press the rail onto the datum plane (Fig. 2).
- (5) Fully tighten the rail screws.
- (6) Fully tighten the LLTA mounting screws.



Example
Linear Lock Example

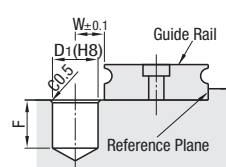
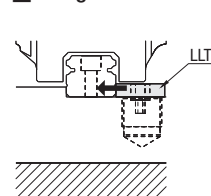


Press the rail onto the datum plane by turning the linear locks.

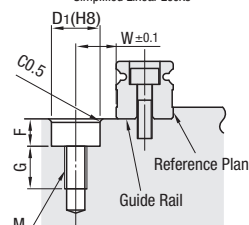
Mounting Hole Dimensions (Reference)

Linear Locks

Enlarged View



Simplified Linear Locks

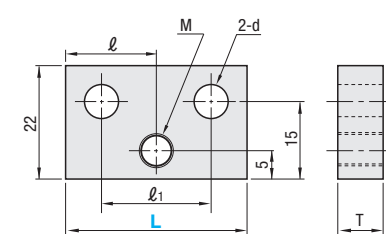


This plate secures the table and the datum plane of blocks to avoid misalignment from external force.



Linear Guide Lock Plates

RoHS 10



LLPU
Type: S45C Equivalent
Surface Treatment: Electroless Nickel Plating

Part Number

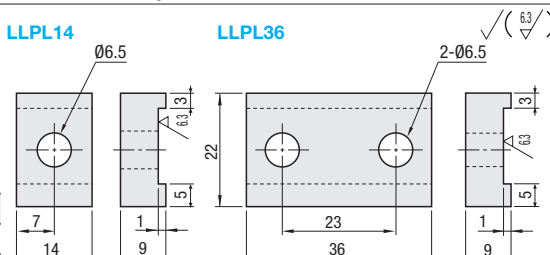
Type	L	T	ℓ	ℓ ₁	d	M	Unit Price (1 ~ 9 pcs)	Volume Discount Rate (10 ~ 50 pcs)	Volume Discount Rate (51 ~)
LLPU	23	6	11.5	11	5.5	5			To Be Quoted on WOS
	28		14.0	15					
	33		16.5	20					
	43	9	21.5	30					

This plate secures the rail and the pedestal to avoid misalignment from external force.



Linear Guide Lock Plates

RoHS 10

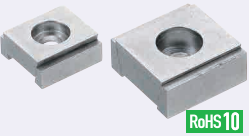


LLPL14
LLPL36
LLPL
Type: S45C Equivalent
Surface Treatment: Electroless Nickel Plating

Part Number

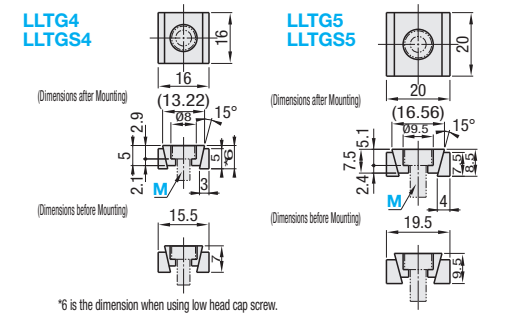
Type	Nominal	Unit Price (1 ~ 9 pcs)	Volume Discount Rate (10 ~ 150 pcs)	Volume Discount Rate (151 ~)
LLPL	14			To Be Quoted on WOS
	36			

Linear Guide Lock Units



Linear Guide Lock Units

RoHS 10



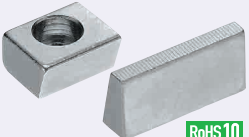
LLTG4
LLTG5
LLTG4
LLTG5
Type: S45CD
Surface Treatment: Electroless Nickel Plating
SUS304

Part Number

Type	M	(Recommendation) Tightening Torque (N·m)	Rail Clamp Force (kN)	LLTG Unit Price (1 ~ 9 pcs)	Volume Discount Rate (10 ~ 100 pcs)	LLTGS Unit Price (1 ~ 9 pcs)	Volume Discount Rate (10 ~ 50 pcs)
LLTG LLTGS	4	2	3.2				
	5	8	9				

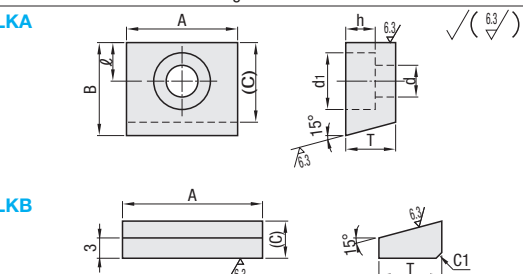
LLTG components are held together by elastic adhesive. Install as shipped.

By strongly pressing the rails or blocks on datum surfaces to avoid misalignment from external force.



Linear Guide Taper Locks

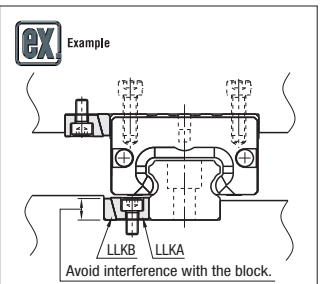
RoHS 10



LLKA
LLKB
Type: S45C
Surface Treatment: Electroless Nickel Plating
Equivalent

Part Number

Type	No.	A	B	T	(C)	ℓ	d	d ₁	h	Unit Price (1 ~ 9 pcs)	Volume Discount Rate (10 ~ 100 pcs)	Volume Discount Rate (101 ~)
LLKA	5	20	16	9	13.6	7	5.5	9.5	5.5			To Be Quoted on WOS
	6	22	18	11	15.1	7.5	6.5	11	6.5			
LLKB	5	20	-	9	5.41	-	-	-	-			
	6	22	-	11	5.95	-	-	-	-			



Avoid interference with the block.

Part Number
LLPU23
LLTG4
LLKA6