

RoHS Compliant

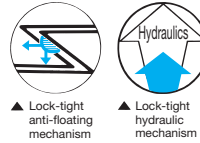
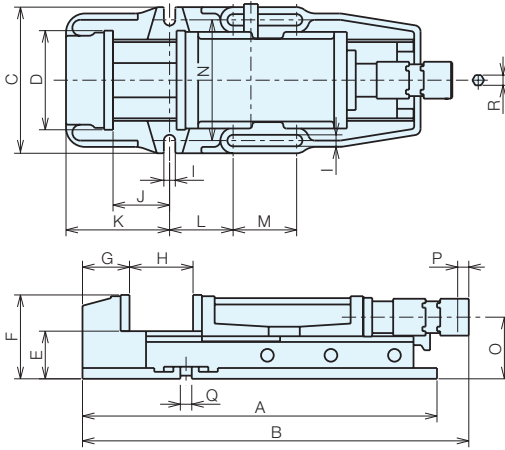


No.E-9475

# Lock-Tight Hydraulic Machine Vises MK III

**Accessories** Special Mounting bolt set - Compatible T-slot width 18 mm ... 2 sets  
 Standard guide block (2 pieces per set) compatible groove width 18 mm ... 1 set  
 Handle ... 1 piece

- The total length is 125 mm shorter and the weight is 7 kg lighter than the conventional type. Furthermore, offers a mis-operation prevention mechanism where the hydraulic and manual switch is toothed.
- Made of ductile cast iron, minimizing bending and breakage during tightening.
- Sliding parts have been flame heat treated (HRC45) and offer excellent wear resistance.
- The hydraulic pump is finished as a pump that is capable of powerful clamping with low trouble from over 300,000 operational tests.
- The optimal jaw opening from 3 positions is obtained by adjusting the position where opening and closing starts.
- High accuracy that surpasses the former JIS standards 0 grade.



## Size Chart

No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
<b>LTH3P150S</b>	558	507-807	210	156	75	132	74	0-300	18	89	163	100	100	190	97	17.5	18	14

## Specifications

No.	Jaw Width	Jaw Depth	Jaw Opening	Standard Guide Block Width	Clamping force kN	Weight (kg)	LTH3P		LTH3P-G (Matched Specification)	
							Order No.	No.	Order No.	No.
<b>LTH3P150S</b>	156	57	300	18	40	41	<b>967819</b>	<b>LTH3P150S</b>	<b>968833</b>	<b>LTH3P150SG</b>

## Clamping Method

### (1) Clamping method by hydraulic pressure

- With the matching parts of the switching collar and socket separated, rotate the handle in the clockwise direction.
- The jaw plates touch the workpiece, and the internal clutch engages with a clamping force of approximately 10 kN.
- After the clutch has engaged, only the handle and socket rotate, and the hydraulic clamping operation is performed.

### • Clamping force and handle operation (after the clutch is engaged)

Handle Operation (Rotation)	1	2	3	4
Clamping Force (kN)	12	20	30	40

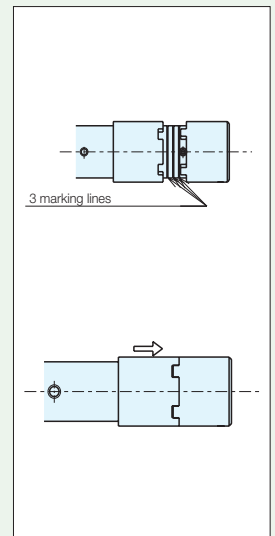
- The clamping stroke by hydraulic pressure is approximately 1.8 mm.

### (2) Clamping method by screw

- Slide the switching collar towards the socket side, and with the switching collar and socket interlocked, rotate the handle in the clockwise direction. (While interlocked, the clutch does not operate).
- Clamping by screw has a maximum of approximately 10 kN.

### (3) Combination of clamping by screw and clamping by hydraulic pressure

- When clamping workpieces that deform easily and workpieces where the workpiece surface is a cast surface, perform clamping using the screw and then perform clamping using hydraulic pressure.
- Perform the clamping operation by screw as shown in (2) and then perform clamping by hydraulic pressure as shown in (1).
- The clamping force is (clamping force by screw) + (clamping force by hydraulic pressure).
- For workpieces where large deformation may occur, check that the workpiece is securely fixed after clamping.



Jig Set-up Systems (Q-lock)

Base Elements

Clamp Units

Clamping Parts

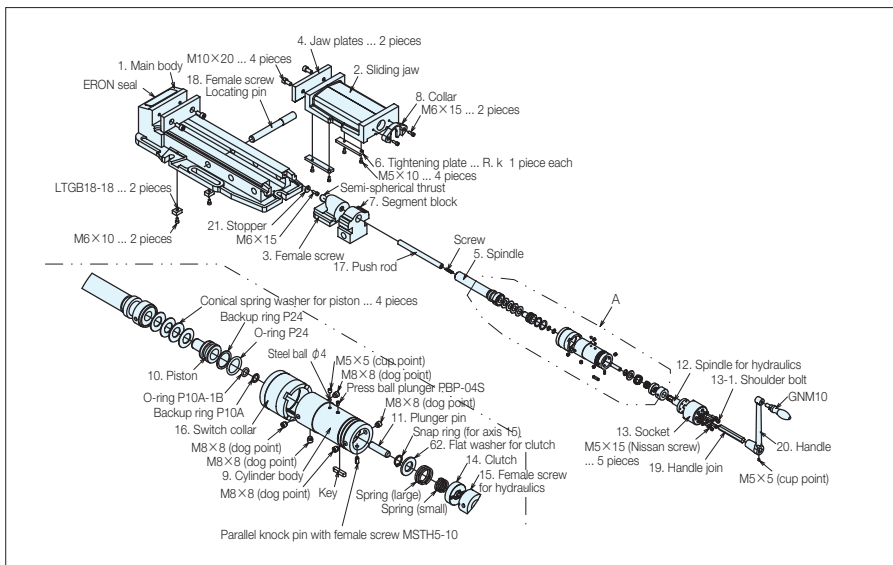
Mechanical Parts

Machine Vises

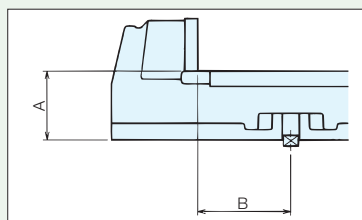
Surface Plates and Measurement Instruments

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Parts Details



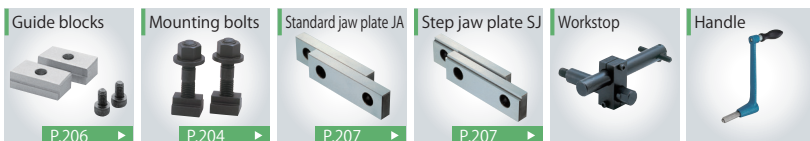
When ordering parallel products A and B align within 0.01 no matter how many pieces  
 Order multi-jaw specification products (suffix G)  
 When ordering, specify the groove width of the machine you are using.  
 Can only be manufactured when newly purchasing Matched specification products.



Hydraulic Unit

Compatible Models	Order No.	No.
LTH3P-150S	969390	LTH3P150S-ASSY

Reference Pages



Accuracy Standards (Static Accuracy)

No.	Inspection Points (per 100 mm)	Former JIS Standard (O Grade)	Nabeya SPEC
1	Parallelism between bottom surface of main body and sliding surface	0.015	0.010
2	Perpendicularity between jaw plate and sliding surface (smaller than right angle)	0.030	0.015
3	Perpendicularity between T-slot and jaw plate surface of stationary jaw side.	0.015	0.015
4	Parallelism between T-slot and jaw plate surface of stationary jaw side.	0.015	0.015
(Clamping Accuracy)			
5	Parallelism between top surface of clamped test block and bottom surface of main body	0.020	0.015
6	Lift-up of top surface of test block when clamped	0.030	0.015

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