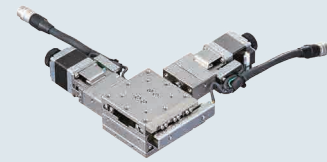


[Motorized] Linear Ball Slide

XY-Axis

Positioning Stages

XY-Axis Motorized Stages

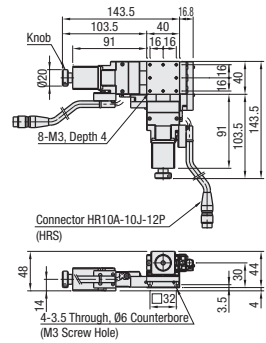


The photo shows the R Cover Position for Type Nos. 413, 513, 615 and 715.

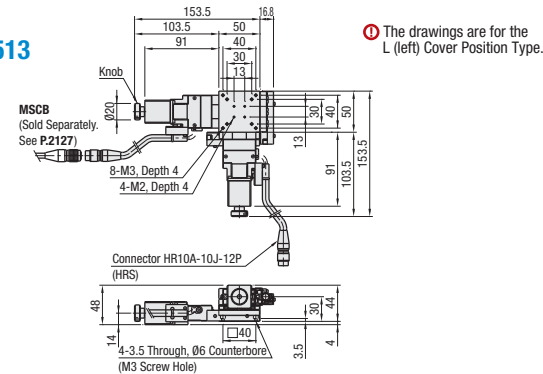
Material: 440C Stainless Steel
Surface Treatment: Electroless Nickel Plating
Accessories: XYMSG413/513/430/530: SCB3-8, 4 pcs
 XYMSG615/715/650/750: SCB4-8, 4 pcs

For Controllers, Handset Terminals, see P.2127.
 The Hex Wrench dedicated for tightening XY-bottom axis is included with.

XYMSG413

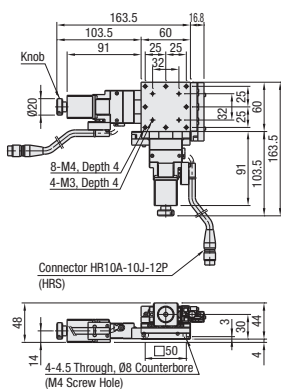


XYMSG513

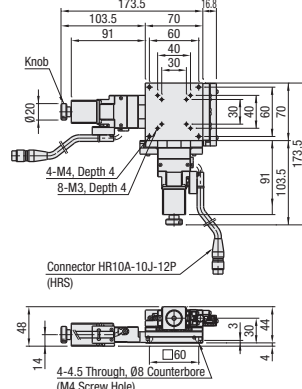


The drawings are for the L (left) Cover Position Type.

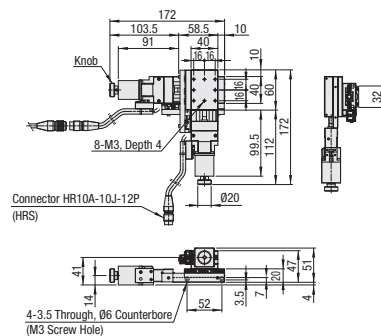
XYMSG615



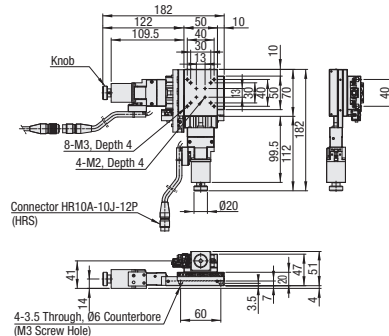
XYMSG715



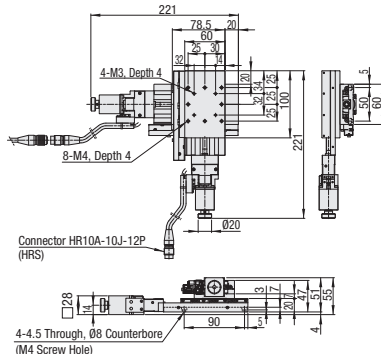
XYMSG430



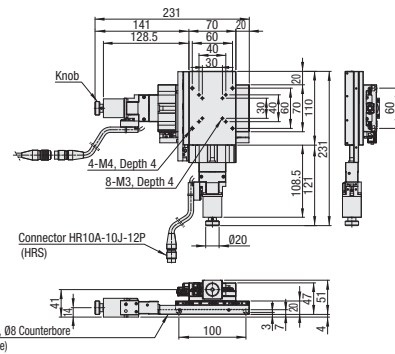
XYMSG530



XYMSG650



XYMSG750



[Motorized] Linear Ball Slide

XY-Axis, continued

Positioning Stages

Part Number	Sensor				Motor	Cable	Mechanical Standards				Accuracy Standards					
	Type	No.	Cover Position	Logic			Voltage (V)	Stage Surface (mm)	Travel Distance (mm)	Weight (kg)	Load Capacity (M)	Unidirectional Positioning Accuracy (for a single axis/stage horizontally placed)	Moment Rigidity (N/cm)			Rolling
XYMSG	413	L (Standard)	R (Reversed)	A (All N.C.) B (All N.O.) C (Limit Switches are N.C.; Home Sensor is N.O.)	5*1 24*1	N (Cable not included separately sold) M*2 (For motor with brake) P*2 (For αSTEP) U*2 (For Servo Motor) Ⓢ (For combination of motors and cables, see the table below.)	40 x 40	13	1.0	93.1	6μm	0.22	0.17	0.12	15"	10"
	513						50 x 50		1.2	92.1		0.14	0.1	0.06		
	615						60 x 60		1.7	91.1		0.08	0.07	0.03		
	715						70 x 70	1.8	89.2	0.03		0.03	0.01			
	430						40 x 60	30	1.4	90.5		0.24	0.18	0.26	20"	15"
	530						50 x 70		1.7	88.5		0.12	0.13	0.1		
	650						60 x 100		2.5	84.4		0.05	0.05	0.05		
750	70 x 110	50	2.7	82.7	0.03	0.03	0.03									

*1 24VDC sensors cannot be operated from the MSCTL102/112 controller. When selecting 5V for voltage configuration, applying over 5V voltage will cause breakage.

*2 For motor options MA and PA, the amp is included in the set. For motor option UA, the amp is included in the set. With motor option MA, only cable option M is selectable. With motor option PA, only cable option P is selectable. With motor option UA, only cable option U is selectable. In all three cases, cable option N (no cable) is not selectable.

*3 The value is for C Type of Motor.

*4 Accuracy specifications are for single axis (horizontal orientation) configuration.

Common Specifications

Feed Screws	Ball Screw Ø6, Lead 1
Guides	Linear Ball Guide
Resolution*1	2 μm/Pulse (Full) 1 μm/Pulse (Half)
Positioning Repeatability	Within ±0.5 μm
Lost Motion	1m or less
Backlash	0.5m or less
Parallelism	15m or less

*1 Stage travel per one pulse.

*2 Accuracy specifications are for single axis (horizontal orientation) configuration.

Motor/Cable Application Table

Motor	Cable
C, D, E	N (Not Provided)
MA	M
PA	P
UA	U

For the cable for C, F or G, see MSCB on P.2127.

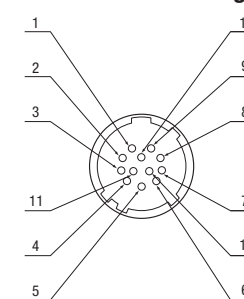
Max speed

Motor	(mm/sec)	Motor	(mm/sec)
C	10	MA	15
D	25	PA	35
E	20	UA	50

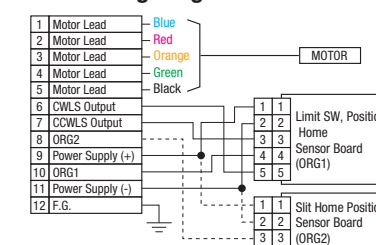
Note that the speed and positioning time will vary depending on the usage conditions. The values shown here are MISUMI's reference values. Operation at these values is not guaranteed.

Part Number Example: XYMSG413 - LA5 - C - M

Connector Pin Arrangement

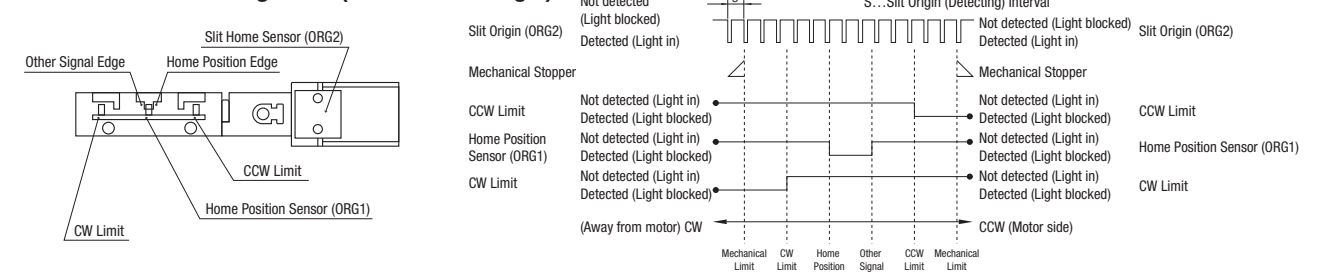


Connecting Diagram



*The dotted line connections are not functional when a standard cable is used.

Included Sensor Timing Chart (For A Sensor Logic)



Travel Distance	Reference Position	Mechanical Limit	CW Limit	Other Signal Edge	Home	CCW Limit	Mechanical Limit
13	Homing	8	7.5	2	0	6.5	7
15	Homing	9	8.5	2	0	7.5	8
30	Homing	16.5	16	2	0	15	15.5
50	Homing	26.5	26	2	0	25	25.5
All Types					Slit Home Position (Detecting) Interval S=1		

- Homing Routine Above: When MSCTL102/112 controller is used and when the Homing Routine Type 3 (see below) is executed.
 - The coordinates shown are design values. There may be approx. ±0.5mm misalignment on the physical dimensions.
 - For recommended homing method, see XMSG (P.2122).