

[Motorized] XY-Axes Linear Ball Slide

Motorized Stage Technical Support Center
 Optical Scientific Technology (OST) Division Suruga Seiki Co. Ltd. (MSUMI Group) Japan
 TEL: 0120-343-559 (Toll-free number for Japan only)
 FAX: 0120-343-588
 E-mail: e-ost@suruga.co.jp
 Office Hours: From Monday through Friday (Except for Holidays)
 From 11:00-14:00, 15:00-19:00

Cad Data Folder Name: 28_Stage

Features: Integrated Linear Ball Guides with high accuracy and rigidity. Orthogonality is within 5µm. Capable of highly accurate two axes positioning as well as full stroke moves.

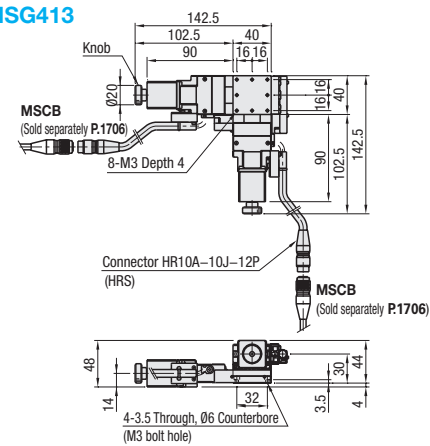
XY-Axis Motorized Stages

*The products shown here is cover position R type.

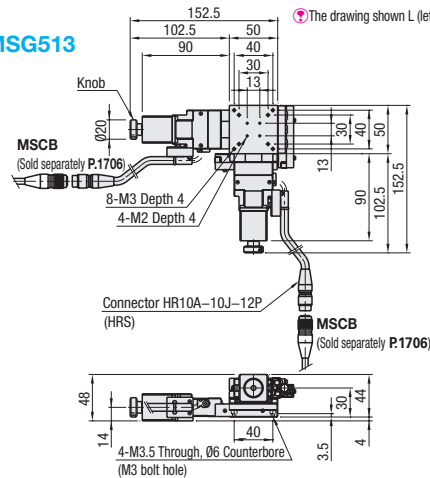
RoHS

For electrical specifications, connector pin assignments, wiring diagram, and a timing chart, see P.1702
 For the controller and Handset Terminal, see P.1706

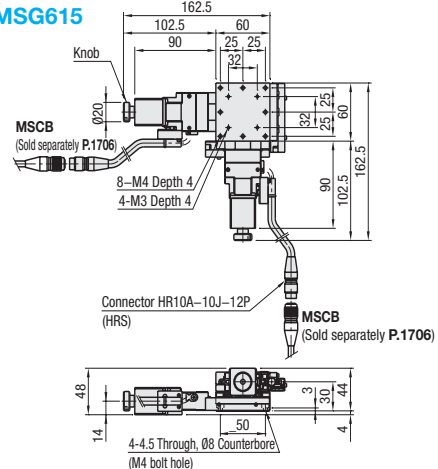
XYMSG413



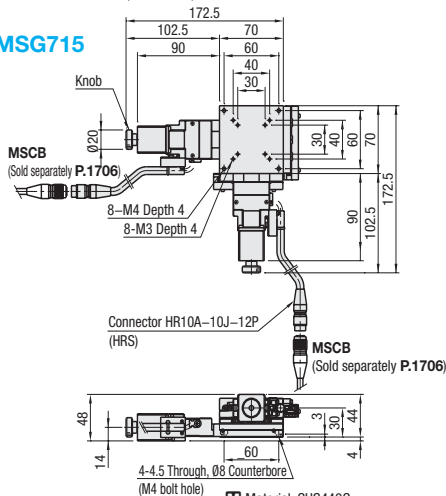
XYMSG513



XYMSG615



XYMSG715



Material: SUS440C
 Surface Treatment: Electroless Nickel Plating

Part Number	Sensor				Stage (mm)	Travel Distance (mm)	Weight (kg)	Positioning Accuracy	Motion Straightness	Pitching	Yawing	Load Capacity (N)	Accessory (4 pcs.)		Unit Price
	Type	No.	Cover Position	Logic									Type	M-L Qty. 1-4	
XYMSG	413	L R	A (All N.C.)	5	40x40	13	1.0	6µm or less	1µm or less	15° or less	10° or less	93.1	SCB3-8	67,431	
	513				50x50		1.2					92.1	SCB3-8	69,979	
	615	L R	C (Limit Switches are N.C. Home Sensor is N.O.)	24	60x60	15	1.7	91.1	SCB4-8	70,889					
	715				70x70		1.8	89.2	SCB4-8	75,166					

Product images above are all for cover position R, and the drawings are all for cover position L type. For orders larger than indicated quantity, please request a quotation.

Order Example: Part Number - Sensor
 XYMSG413 - RA5

Delivery 9 Days

24VDC sensors cannot be operated from the MSCTL102 controller.
 If the 5V sensors are selected, applying voltages exceeding 5V will damage the sensors.

[Common Specifications] The accuracy specifications below are certified for: Single axis horizontal mounting orientation.

Feed Screws	Ball Screw Ø6, Lead 1	Repeatability	Less than ±0.5µm
Guides	Linear Ball Guide	Lost Motion	Less than 1µm
Resolution*1	2µm/Pulse (Full) 1µm/Pulse (Half)	Backlash	Less than 0.5µm
MAX Speed*2	10mm/sec (Pulse Rate: 5kHz)	Motion Orthogonality	Within 5µm/Full Stroke

*1 Stage travel per one pulse.
 *2 Max. speed capable with our controller (MSCTL102) driving in Full Step mode, stage loaded at a max load capacity. (The value changes depending on the driver and controller used, or the load.)

[Motorized] Z-Axis Linear Ball Slide

Motorized Stage Technical Support Center
 Optical Scientific Technology (OST) Division Suruga Seiki Co. Ltd. (MSUMI Group) Japan
 TEL: 0120-343-559 (Toll-free number for Japan only)
 FAX: 0120-343-588
 E-mail: e-ost@suruga.co.jp
 Office Hours: From Monday through Friday (Except for Holidays)
 From 11:00-14:00, 15:00-19:00

Cad Data Folder Name: 28_Stage

Features: Z-Axis Stage with integrated Linear Ball Guides, with high accuracy and rigidity.

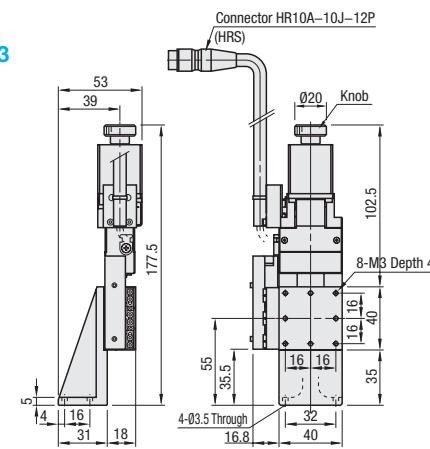
Z-Axis Motorized Stages

*The products shown here is cover position R type.

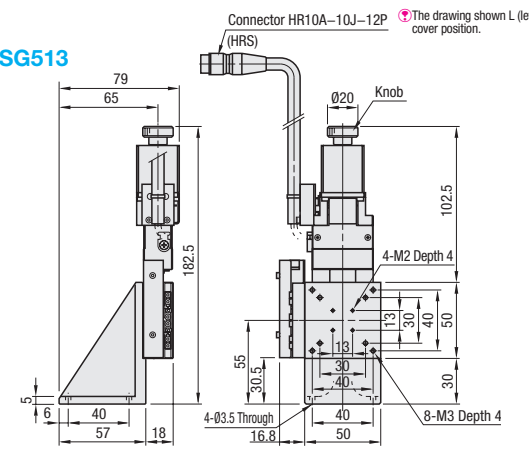
RoHS

For electrical specifications, connector pin assignments, wiring diagram, and a timing chart, see P.1702
 For the controller and Handset Terminal, see P.1706

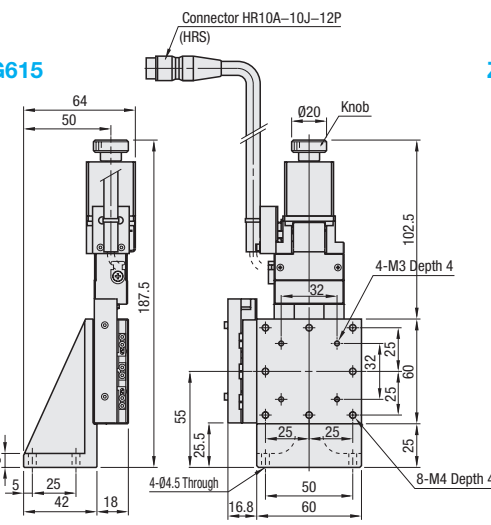
ZMSG413



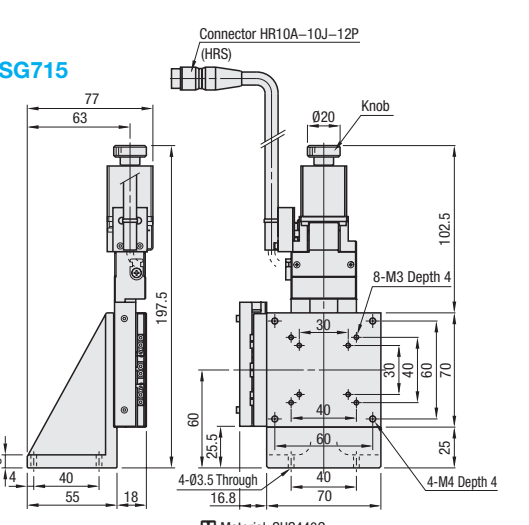
ZMSG513



ZMSG615



ZMSG715



Material: SUS440C
 Surface Treatment: Electroless Nickel Plating

Part Number	Sensor				Stage (mm)	Travel Distance (mm)	Weight (kg)	Positioning Accuracy	Motion Straightness	Pitching	Yawing	Load Capacity (N)	Accessory (4 pcs.)		Unit Price
	Type	No.	Cover Position	Logic									Type	M-L Qty. 1-4	
ZMSG	413	L R	A (All N.C.)	5	40x40	13	0.6	6µm or less	1µm or less	15° or less	10° or less	49.0	SCB3-8	35,854	
	513				50x50		0.8						38,038		
	615	L R	C (Limit Switches are N.C. Home Sensor is N.O.)	24	60x60	15	0.9	38,448							
	715				70x70		1.2	41,496							

Product images above are all for cover position R, and the drawings are all for cover position L type. For orders larger than indicated quantity, please request a quotation.

Order Example: Part Number - Sensor
 ZMSG413 - RA5

Delivery 9 Days

24VDC sensors cannot be operated from the MSCTL102 controller.
 If the 5V sensors are selected, applying voltages exceeding 5V will damage the sensors.

[Common Specifications] The accuracy specifications below are certified for: Single axis horizontal mounting orientation.

Feed Screws	Ball Screw Ø6, Lead 1	Repeatability	Less than ±0.5µm
Guides	Linear Ball Guide	Lost Motion	Less than 1µm
Resolution*1	2µm/Pulse (Full) 1µm/Pulse (Half)	Backlash	Less than 0.5µm
MAX Speed*2	10mm/sec (Pulse Rate: 5kHz)		

*1 Stage travel per one pulse.
 *2 Max. speed capable with our controller (MSCTL102) driving in Full Step mode, stage loaded at a max load capacity. (The value changes depending on the driver and controller used, or the load.)