

NEW Vacuum Compatible Motorized Stages

VCMS

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Piezo Stage

Precision Linear MS

High Speed MS

Motorized Goniometer

Motorized Rotation

Multiaxis Motorized

Industrial Robot

Controller & Driver & Cable

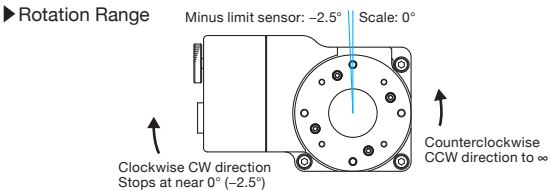
Custom-Built MS

Motorized stages fitted with a limit sensor compatible with vacuum environments.

- Linear system has a long travel between 35 – 200mm, and is as compact as the conventional SGSP series.
- Rotation stages are low-profile, but offer high load capacity due to □42mm motor.



Guide



- Homing of rotation motorized stages is performed using the CW limit sensor as the origin sensor.
- Origin detection is adjusted so that the stage stops at 0 degree when homing is performed in the MINI system at half step.

Specifications			
Part Number		NEW VCMS-120YAW	
Mechanical Specifications	Travel or Rotation Range		Counterclockwise CCW direction to ∞, Clockwise CW direction stops at near 0 degree (-2.5°)
	Table Size [mm]		φ120
	Feed Screw [mm]		Worm and worm wheel
	Positioning Slide		Crossed roller
	Stage Material		Aluminum / Stainless steel
	Finish		None
	Weight [kg]		1.7
Accuracy Specifications	Resolution	(Full)	0.005°
		(Half)	0.0025°
	MAX Speed		20°/sec
	Positional Repeatability		0.02°
	Load Capacity [N]		98.0 (10.0kgf)
Sensor	Lost Motion		0.05°
	Sensor Part Number		GN-STM35A-1 (Metrol Co., Ltd.)
	Limit Sensor		Vacuum touch sensor (NORMAL OPEN)
	Origin Sensor		None
	Proximity Origin Sensor		None

Motor / Sensor Specifications		
Motor	Type	Vacuum compatible 5-phase stepping motor 0.75A/phase (Oriental Motor Co., Ltd.)
	Motor Part Number	PK543V-NB (□42mm)
	Step Angle	0.72°
Sensor	Power Voltage	DC5 – 24V
	Current Consumption	10mA (Max 20mA)
	Control Output	Mechanical
	Output Logic	NORMAL OPEN

Compatible Driver / Controller		
Control System	Compatible Driver	SD-5M, SD-55M, SD-514MSC, SD-5151, SD-525M
	Compatible Controller	ASC-PS,ASC-01, ASC-102, ASC-02, ASC-702, ASCG-101, ASC-302GS, ASC-304GS, ESC-M/ESC-S

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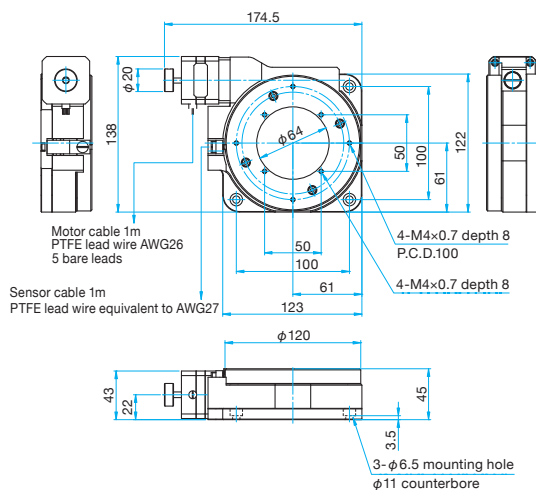
VCMS



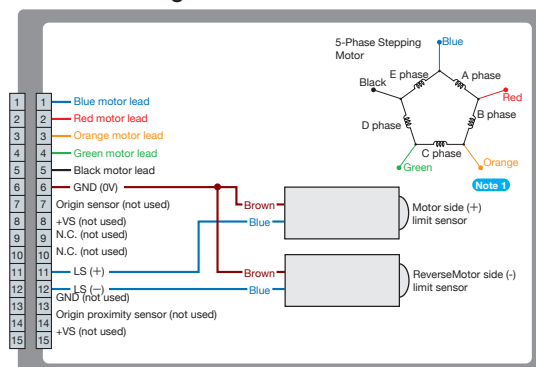
Outline Drawing

VCMS-120YAW

Hexagon socket head cap screw M6x10...3 screws



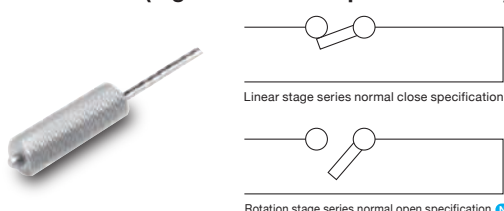
Connection Diagram



Note 1 Rotation stages are not fitted with a + limit sensor.

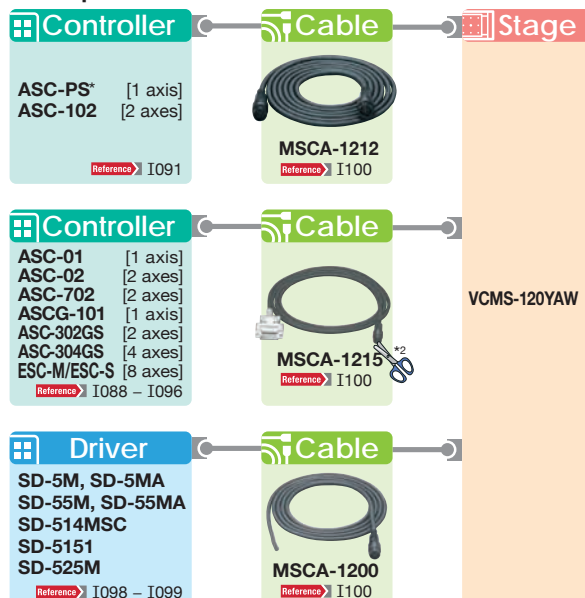
Note 2 Motor cables and sensor cables are bare wires.

Limit Sensor (high vacuum compatible switch)



Note 3 Set the controller of vacuum compatible motorized rotation stages to normal open.

Compatible Controllers / Drivers and Cables



* PASC-PS will be discontinued in September 2012, and will be replaced by ASC-01.

*2 Make the cable into bare wire specification after purchase.

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