

NEW Aluminum Crossed Roller Guide Motorized Stage | **ACMS** Stage size □40/□50/□60/□70mm **RoHS**

Application Systems

Machine Vision

Manual Positions

Motion Control Products

Optical & Mirror Holder

FA Parts

Measurement & Control

FA Electrical Parts

Tool & Measure

Cleanroom & AntiStatic

Index

Piezo Stage

Precision Linear MS

High Speed MS

Motorized Goniometer

Motorized Rotation

Multiaxis Motorized

Industrial Robot

Controller & Driver & Cable

Custom-Built MS

Motorized crossed roller stages that combine compactness, low-profile and high durability.



- Linear motorized stages fitted with anti-creep crossed roller guide and special nut-shape ball screw configuration, offering low-profile and high durability.
- Aluminum is used as a main material to achieve light-weight, compact and slim body, effective for space-saving.

Guide

- ▶ A spacer is required when fixing the stage on a vibration isolator bench. It can be purchased separately. [Reference](#) F053
- ▶ After purchasing two X axis stages, to assemble them into an XY axis stage, assembly adjustment cost and performance inspection cost will be charged separately (10,000 JP Yen).
- ▶ Contact our International Sales Division if you desire to change motors, etc. Or, use the motorized stage system question sheet. [Reference](#) I085

Specifications			NEW ACMS40-10C	NEW ACMS50-10C	NEW ACMS60-15C	NEW ACMS70-15C
Part Number			NEW ACMS40-10C	NEW ACMS50-10C	NEW ACMS60-15C	NEW ACMS70-15C
Opposite Model			NEW ACMS40-10CR	NEW ACMS50-10CR	NEW ACMS60-15CR	NEW ACMS70-15CR
Mechanical Specifications	Travel [mm]		10	10	15	15
	Table Size [mm]		40×40	50×50	60×60	70×70
	Feed Screw [mm]		Ball screw diameter φ4mm, 1mm lead	Ball screw diameter φ4mm, 1mm lead	Ball screw diameter φ4mm, 1mm lead	Ball screw diameter φ4mm, 1mm lead
	Positioning Slide		Crossed roller	Crossed roller	Crossed roller	Crossed roller
	Stage Material		Aluminum	Aluminum	Aluminum	Aluminum
	Finish		Black anodized	Black anodized	Black anodized	Black anodized
	Weight [kg]		0.33	0.37	0.48	0.53
Accuracy Specifications	Resolution	(Full) [μm/pulse]	2	2	2	2
		(Half) [μm/pulse]	1	1	1	1
	MAX Speed [mm/sec]		10	10	10	10
	Positioning Accuracy [μm]		6	6	6	6
	Positional Repeatability [μm]		1	1	1	1
	Load Capacity [N]		29.4 (3.0kgf)	49 (5.0kgf)	49 (5.0kgf)	49 (5.0kgf)
	Moment Stiffness [°/N·cm]		1.5	1.5	0.5	0.5
	Lost Motion [μm]		1	1	1	1
	Backlash [μm]		1	1	1	1
	Parallelism [μm]		30	30	30	30
	Running Parallelism [μm]		10	10	10	10
	Pitch [°]		25	25	20	20
Yaw [°]		25	25	20	20	
Sensor	Sensor Part Number	Micro photo sensor: GP1S097HCZ (Sharp Corporation): Limit sensor, origin sensor				
	Limit Sensor	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)	
	Origin Sensor	Equipped (NORMAL OPEN)	Equipped (NORMAL OPEN)	Equipped (NORMAL OPEN)	Equipped (NORMAL OPEN)	
	Proximity Origin Sensor	None	None	None	None	

Motor / Sensor Specifications		
Motor	Type	5-phase stepping motor 0.75A/phase (Oriental Motor Co., Ltd.)
	Motor Part Number	C9863-90215P (□28mm)
	Step Angle	0.72°
Sensor	Power Voltage	DC+5V - +24V
	Current Consumption	60mA or lower (20mA or lower per sensor)
	Control Output	NPN open collector output 50mA
	Output Logic	When shaded: Output transistor OFF (no conduction): Limit sensor When shaded: Output transistor OFF (conduction): Origin sensor

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

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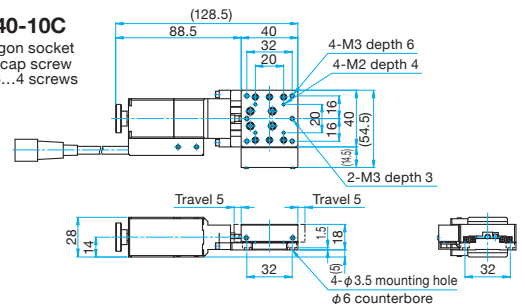
RoHS



Outline Drawing

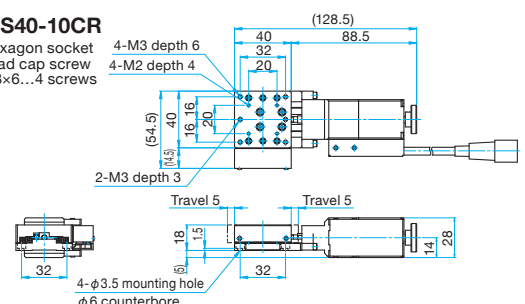
ACMS40-10C

Hexagon socket head cap screw M3x6...4 screws



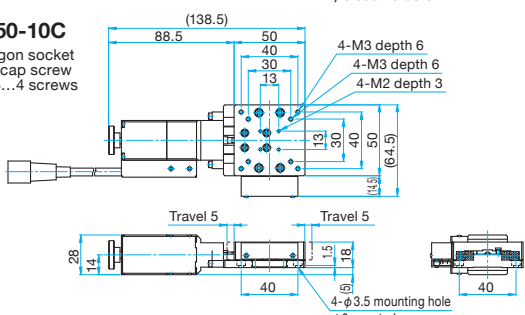
ACMS40-10CR

Hexagon socket head cap screw M3x6...4 screws



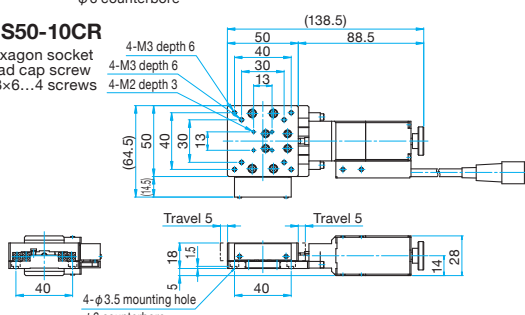
ACMS50-10C

Hexagon socket head cap screw M3x6...4 screws



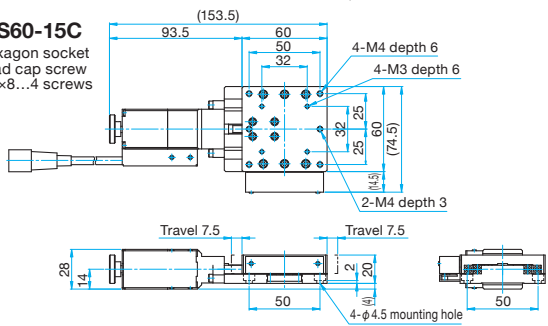
ACMS50-10CR

Hexagon socket head cap screw M3x6...4 screws



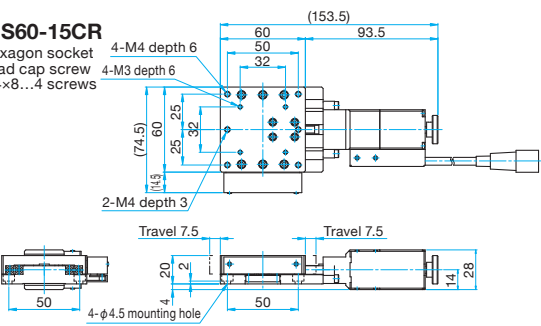
ACMS60-15C

Hexagon socket head cap screw M4x8...4 screws



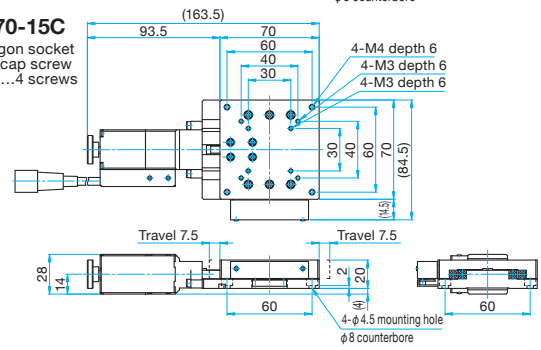
ACMS60-15CR

Hexagon socket head cap screw M4x8...4 screws



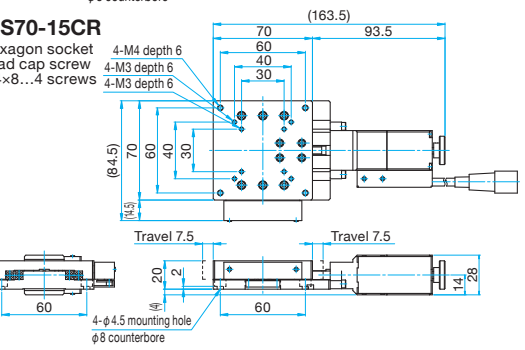
ACMS70-15C

Hexagon socket head cap screw M4x8...4 screws

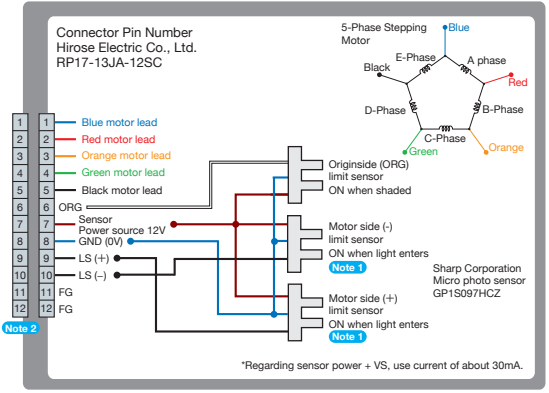


ACMS70-15CR

Hexagon socket head cap screw M4x8...4 screws

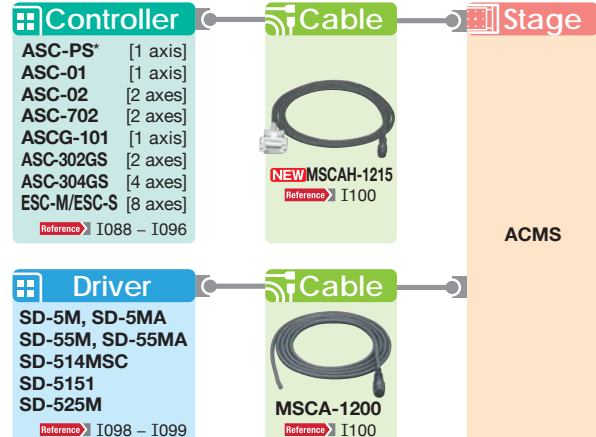


Connection Diagram



Note 1 The motor side limit sensor is the + direction limit sensor. Motorized stages are not fitted with proximity origin sensors.
Note 2 Compatible cable connector: Hirose Electric Co., Ltd. RP17-13PA-12PC/RP17-PC-122

Compatible Controllers / Drivers and Cables



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

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