

Low price motorized stages fitted with integrated extended contact bearings and precision ground screws.



- Cost-effective motorized stages achieved by integrated structure in which guides are directly processed on the main body.

Guide

- If you desire to mount this product on an XY or Z axis stage, or to change the motor, contact our Sales Division.

Application System

Machine Vision

Manual Positions

Motion Control Products

Optical & Mirror Holder

Optomechanics

Holders

Factory Automation Parts

Measurement & Control

FA Electrical Parts

Laser

Tools & Clean Parts

Nanometer Stages

Precision Linear Motorized Stages

High Speed Motorized Stages

Motorized Goniometer

Multiaxis Motorized Stages

Motorized Rotation Stages

Industrial Robot

Controller & Driver & Cable

Custom-Built Motorized Stages

Specifications

Part Number	TSDM40-15X		TSDM60-20X-0B
Mechanical Specifications	Travel (mm)	15	20
	Stage Size (mm)	40x40	60x60
	Feed Screw (mm)	Precision ground screw φ5, 0.5 lead	
	Positioning Slide	Extended Contact Ball Guide	
	Stage Material	Steel	
	Finish	Super black chrome	
	Weight (kg)	0.35	0.6
Accuracy Specifications	Resolution	(Full) (μm/pulse)	1
		(Half) (μm/pulse)	0.5
	MAX Speed (mm/sec)	5	5
	Positioning Accuracy (μm)	20	20
	Positional Repeatability (μm)	10	10
	Load Capacity (N)	29.4(3.0kgf)	39.2(4.0kgf)
	Moment Stiffness / Pitch (N·cm)	0.4"	0.2"
	Moment Stiffness / Yaw (N·cm)	0.4"	0.2"
	Moment Stiffness / Roll (N·cm)	0.4"	0.2"
	Lost Motion (μm)	10	10
	Backlash (μm)	10	10
	Parallelism (μm)	50	50
	Running Parallelism (μm)	10	10
Pitch	20"	20"	
Yaw	20"	20"	
Sensor	Sensor Part Number	Micro photo sensor : GP1S092HCPI(Sharp Corporation)	Micro photo sensor : PM-L25(SUNX Co., Ltd.)
	Limit Sensor	Equipped (NORMAL CLOSE)	
	Origin Sensor	None	
	Proximity Origin Sensor	None	

Motor / Sensor Specifications

Motor	Type	5-phase stepping motor 0.35A/phase (Oriental Motor Co., Ltd.)
	Motor Part Number	PK513PB-C9(□20mm)
	Motor Step Angle	0.72°
Sensor	Power Voltage	DC5 - 24V±10%
	Current Consumption	TSDM40-15X : 40mA or lower (20mA per sensor) TSDM60-20X : 30mA or lower (15mA or lower per sensor)
	Control Output	NPN open collector output DC30V or lower, 50mA
	Output Logic	When shaded: Output transistor OFF (no conduction)

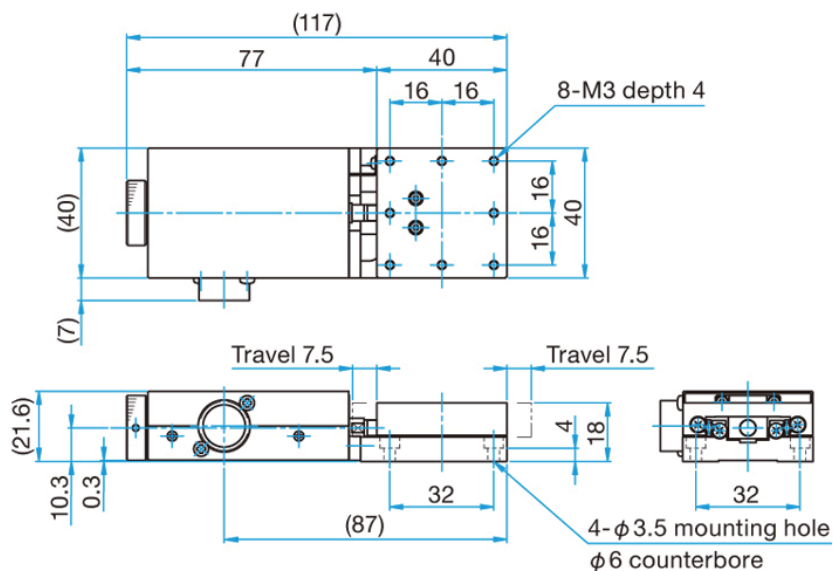
Compatible Driver / Controller

Control System	Compatible Driver	SG-5MA, SG-514M5C
	Compatible Controller	PAT-001, GSC-01, SHOT-102, GSC-01, SHOT-702 GIP-101, SHOT-302GS, SHOT-304GS, HIT-M · HIT-S

Outline Drawing

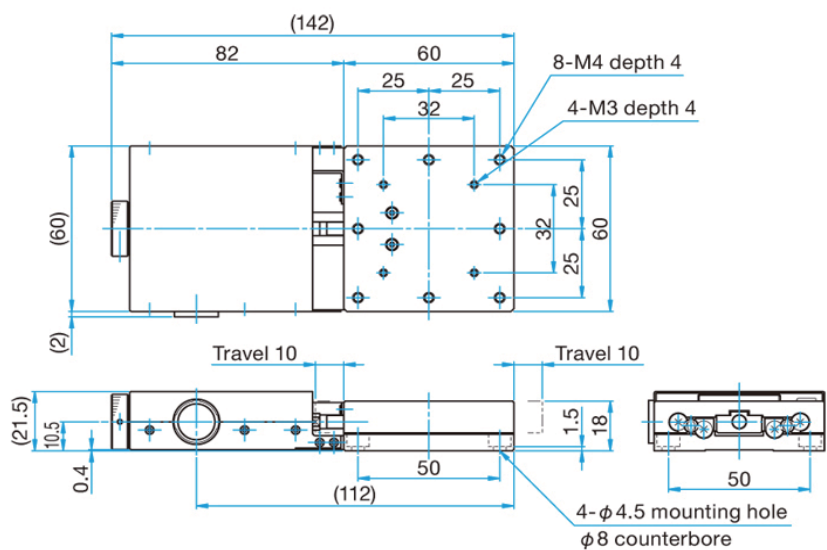
TSDM40-15X

Hexagon socket head cap screw M3x8...4 screws



TSDM60-20X/TSDM60-20X-0B

Hexagonal socket head cap screw M4x6...4 screws



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