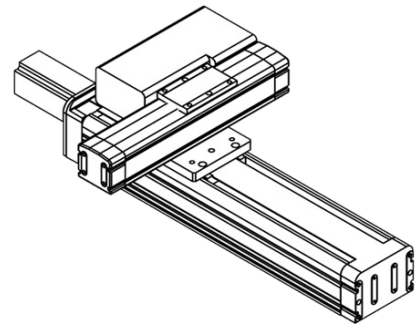


# NSK-RD-MS - XY Tables

FEATURES

- **Motorless Design**
- **X-Axis Stroke Length: 250-950mm**
- **X-Axis Screw Lead: 10 or 20mm**
- **Y-Axis Stroke Length: 100-500mm**
- **Y-Axis Screw Lead: 10mm**
- **Payload up to 20kg**
- **Combine Any X And Y Axis**
- **NEMA and Metric Motor Compatible**
- **Fully Covered Aluminum Casing with Belts to Eliminate Contaminates**
- **Optional Limit Sensor, Module Mounting Plates, and Motor Mounting Kits**

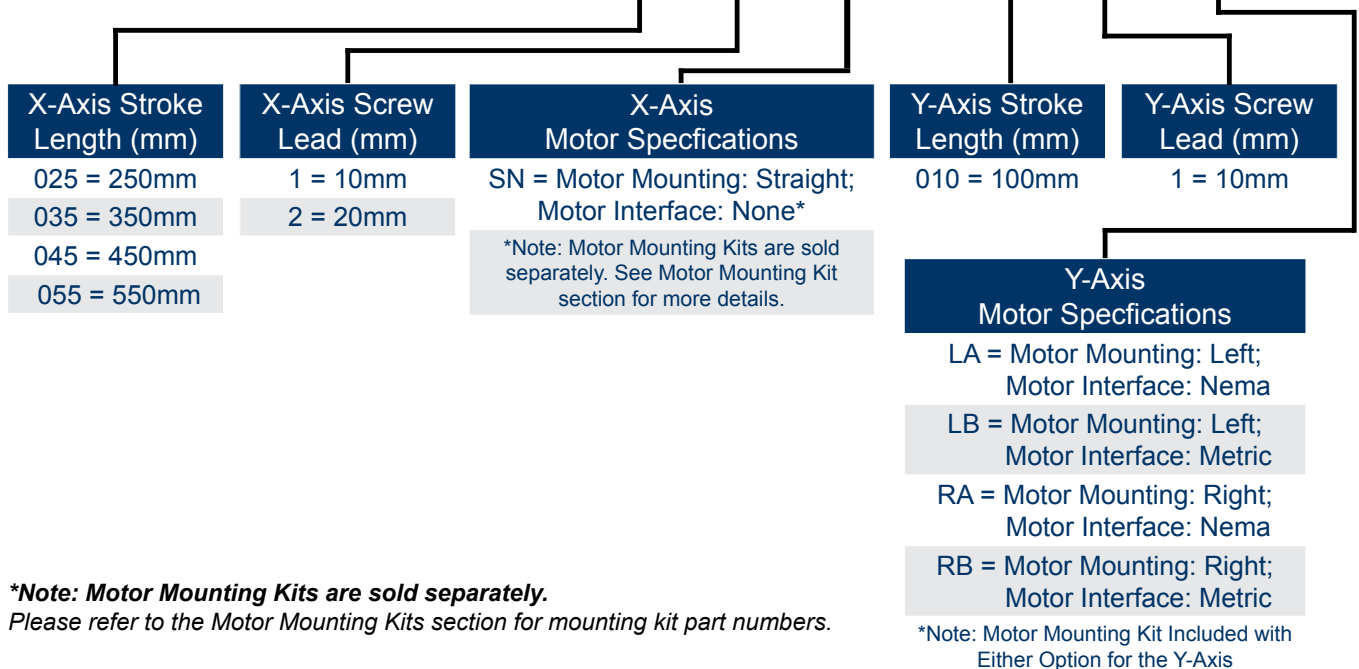


DESCRIPTION

Anaheim Automation offers a line of top-quality XY tables, supplied by one of the industry's leading manufacturers, NSK. These XY tables offer high precision, unsurpassed performance, and maintenance-free operation for as long as 5 years or 50,000km. The NSK-RD-MS series is offered in X-Axis stroke lengths up to 950mm and Y-Axis stroke lengths up to 500mm, with payloads up to 20kg (stroke length and acceleration dependent). The X-Axis is mounted in a standard position, with a Y-Axis attached via the motor side plate with an L-Bracket on its side with either a right or left "S" slide. Screw leads are available in 10 and 20mm; optional sensor kits, module mounting plates, and motor mounting kits are available as customization options. Anaheim Automation is happy to assist in the selection, installation, and troubleshooting of these XY stages; contact one of our Applications Engineers for information.

ORDERING INFORMATION

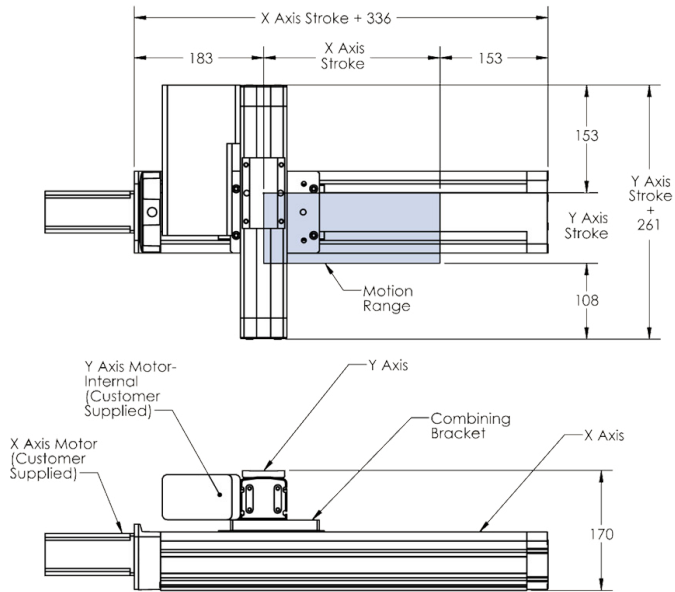
## NSK-RD-MS-0251-SN-0101-RA



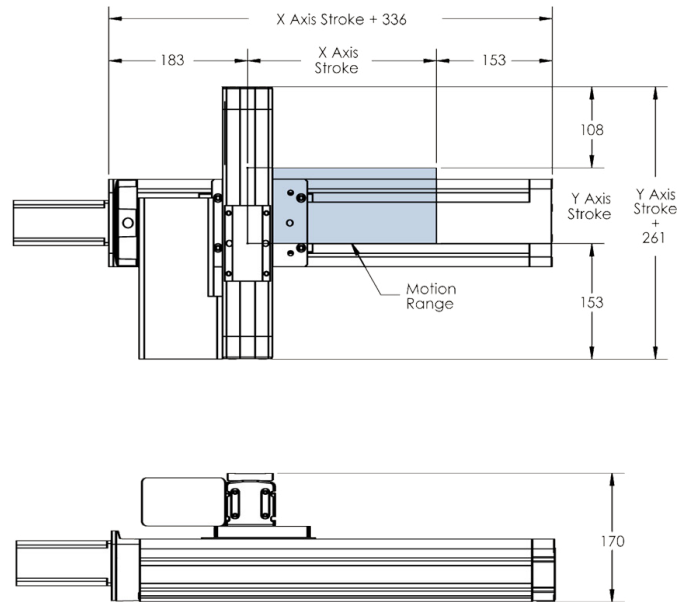
**\*Note: Motor Mounting Kits are sold separately.**  
 Please refer to the Motor Mounting Kits section for mounting kit part numbers.

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**Type A**



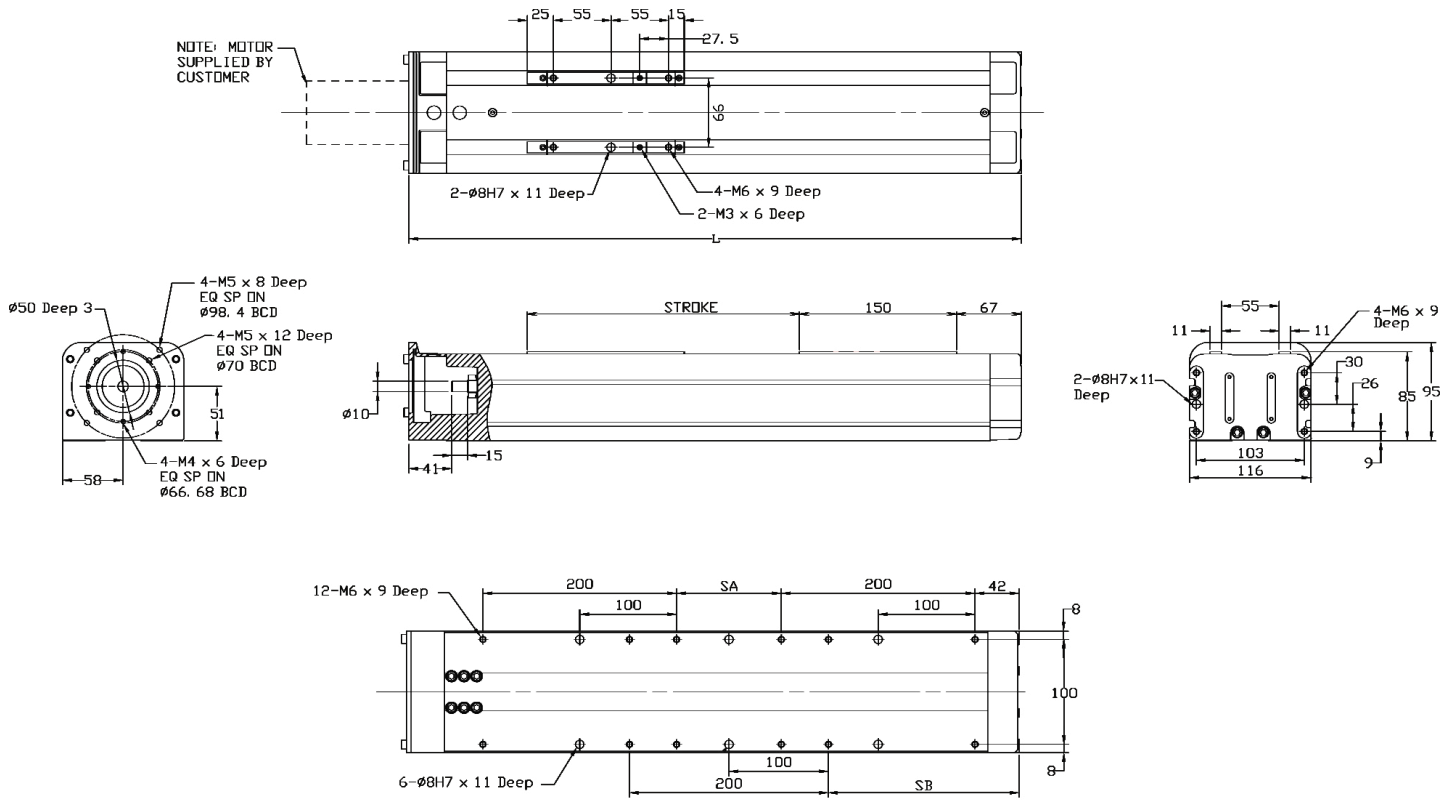
**Type B**



\*Units are in mm

Transportable Mass Table (kg)					
Acceleration (m/s <sup>2</sup> )	Y-Axis Stroke Length (mm)				
	100	200	300	400	500
4.9	20	20	20	20	20
9.8	20	20	20	20	20

Linear Guide Moment Capacities <sup>2</sup>		
Rolling Moment (Nm)	Pitching Moment (Nm)	Yawing Moment (Nm)
70	120	120

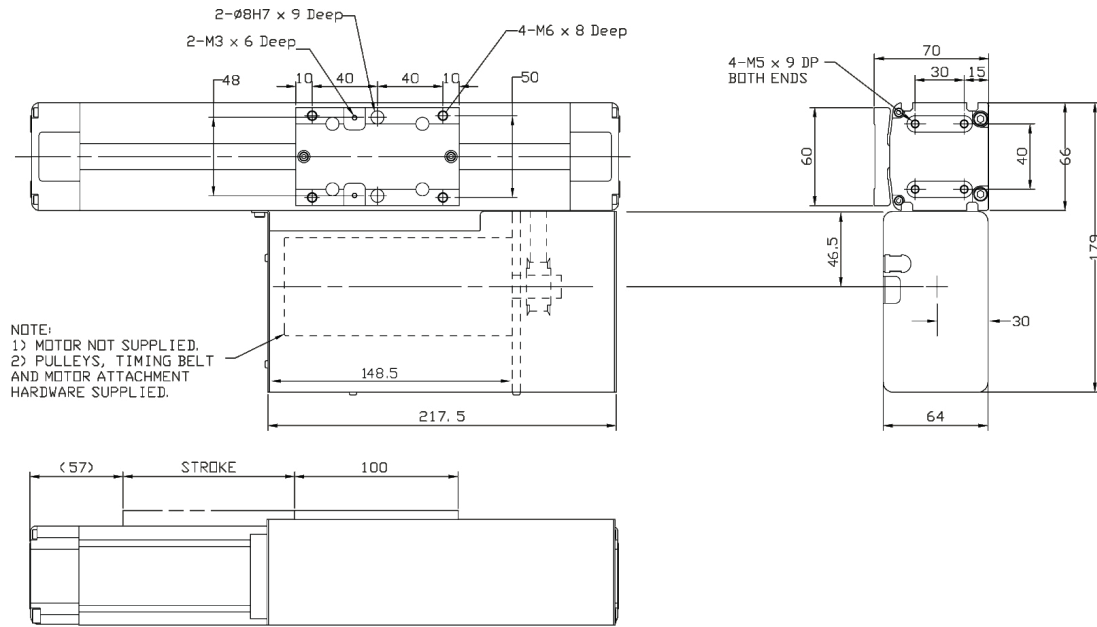


Note: Maximum input torque is 3.8 N-m  
 1) If your payload exceeds listed value call NSK.  
 2) The individual moment capacities are defined as the value at which the fatigue life is 10,000 km when that moment acts continuously on the linear guide.

RM MODULE DIMENSIONS							
	STROKE LENGTHS						
	250	350	450	550	750	950	
SA	70	170	270	370	570	770	
SB	177	227	277	327	427	527	
L	586	686	786	886	1086	1286	

**Linear Guide Moment Capacities<sup>2</sup>**

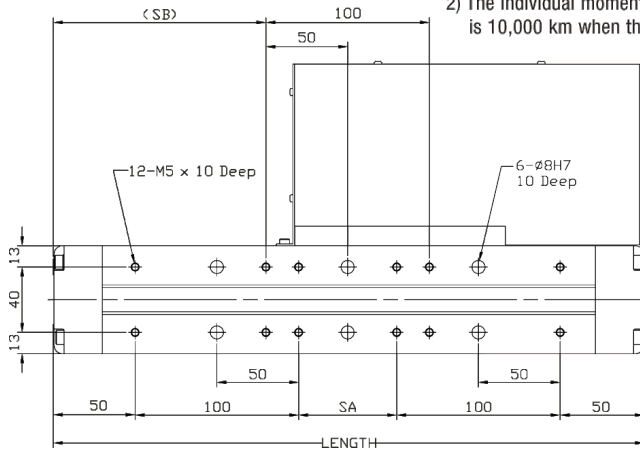
Rolling Moment (Nm)	Pitching Moment (Nm)	Yawing Moment (Nm)
32	24	24



Note: Maximum input torque is 1.9 N-m

1) If your payload exceeds listed value call NSK.

2) The individual moment capacities are defined as the value at which the fatigue life is 10,000 km when that moment acts continuously on the linear guide.


**RS MODULE DIMENSIONS**

	STROKE LENGTHS				
	100	200	300	400	500
SA	60	160	260	360	460
SB	130	180	230	280	330
L	360	460	560	660	760



**Note: The Y-Axis Module comes pre-installed with a Metric or NEMA motor mount based on Y-Axis Motor Specifications. See Ordering Information Section.**



**NSK-XY-P5584RM - 60mm Frame Metric Motor Mounting Kit**

- 60mm Frame Metric Motor Plate
- 60mm Frame Metric Motor Mounting Nut Plate
- Motor Shaft Pulley, 14mm ID
- Timing Belt
- Qty 4, M5 x 14 Socket Head Cap Screw

**NSK-XY-P5585RM - NEMA 23 Motor Mounting Kit**

- NEMA 23 Motor Plate
- NEMA 23 Motor Mounting Nut Plate
- Motor Shaft Pulley, 1/4" ID, 3/8" ID
- Timing Belt
- Qty 4, M4 x 14 Socket Head Cap Screw

**Note: The X-Axis Module does not come installed with a Metric or NEMA motor mount based on X-Axis Motor Specifications. Choose from of the options below.**

**NSK-XY-P5586RM - NEMA 23 1/4" Motor Kit**

- NEMA 23 Motor Adapter Ring
- Jaw Type Shaft Coupling, 10mm x 1/4" x 47.6mm
- Disk Type Shaft Coupling, 10mm x 1/4" x 44.5mm
- Qty 4, M4 x 8 Socket Head Cap Screw

**NSK-XY-P5718RM - NEMA 34 1/2" Motor Kit**

- NEMA 34 Motor Adapter Ring
- Jaw Type Shaft Coupling, 10mm x 1/2" x 47.6mm
- Disk Type Shaft Coupling, 10mm x 1/2" x 44.5mm
- Qty 4, M5 x 16 Socket Head Cap Screw

**NSK-XY-P5587RM - NEMA 34 3/8" Motor Kit**

- NEMA 34 Motor Adapter Ring
- Jaw Type Shaft Coupling, 10mm x 3/8" x 47.6mm
- Disk Type Shaft Coupling, 10mm x 3/8" x 44.5mm
- Qty 4, M5 x 16 Socket Head Cap Screw

**NSK-XY-P5717RM - NEMA 23 3/8" Motor Kit**

- NEMA 23 Motor Adapter Ring
- Jaw Type Shaft Coupling, 10mm x 3/8" x 47.6mm
- Disk Type Shaft Coupling, 10mm x 3/8" x 44.5mm
- Qty 4, M4 x 8 Socket Head Cap Screw

**NSK-XY-P5588RM - 60mm Frame Metric Motor Kit**

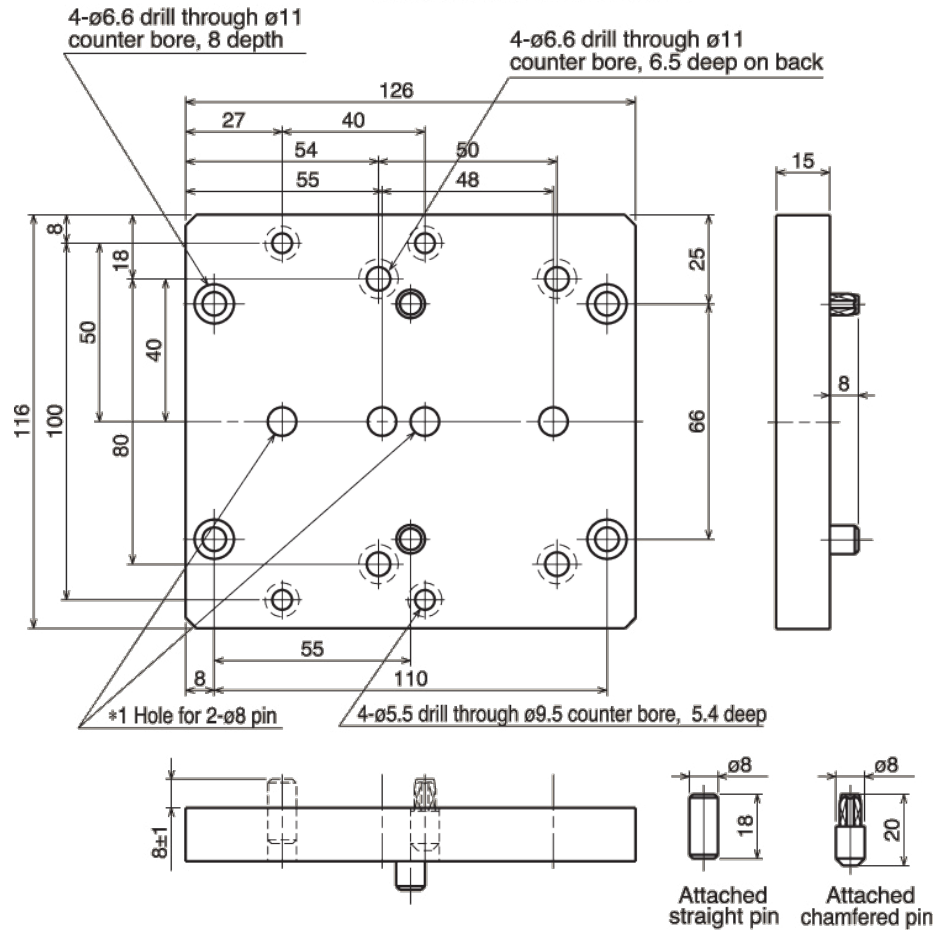
- Jaw Type Shaft Coupling, 10mm x 14mm x 47.6mm
- Disk Type Shaft Coupling, 10mm x 14mm x 44.5mm
- Qty 4, M5 x 16 Socket Head Cap Screw

# Combining Bracket

- Brackets used for combining modules into 2-Axis mechanism
- Combining Brackets contain dowel pins to ensure a high reproducibility of assembly accuracy

## NSK-XY-P175DMS-1

1) Use a plastic hammer or similar tool to drive in the straight pin and chamfered pin into the bracket. For the chamfered pin, please note orientation and install as shown.



About 0.6kg

**Accessories:**

- Straight pin ----- 1 pc.  
 Chamfered pin ----- 1 pc.  
 Hexagon socket head cap screw M5  $\times$ 18 ----- 4 pcs.  
 Hexagon socket head cap screw M6  $\times$ 16 ----- 8 pcs.

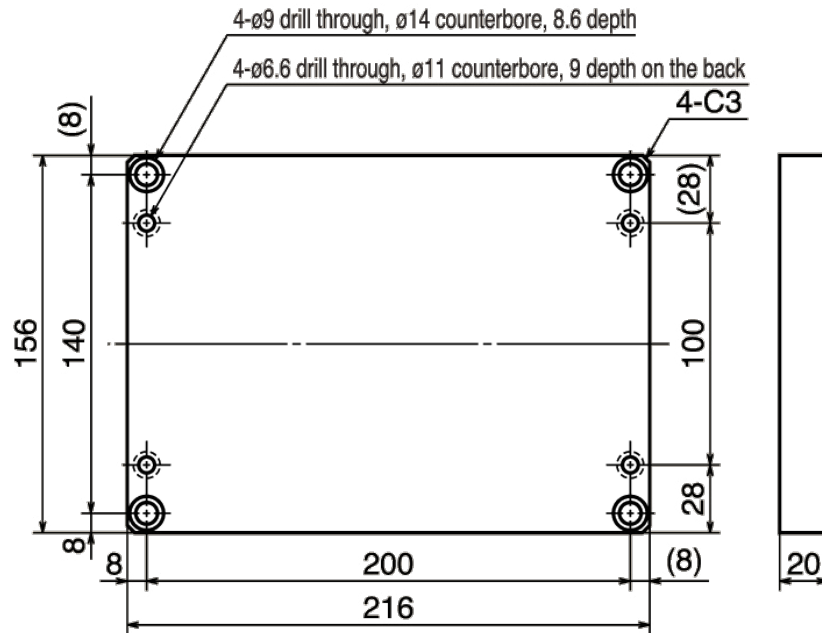
# Accessories: Mounting Plates and Limit Sensor Kit



ACCESSORIES - MOUNTING PLATES AND LIMIT SENSOR KIT

- Plates are used for mounting the module in a “top down manner”
- Two mounting plates are required per fixed module
- Part Number designates a quantity of one mounting plate

## NSK-XY-P170M-1

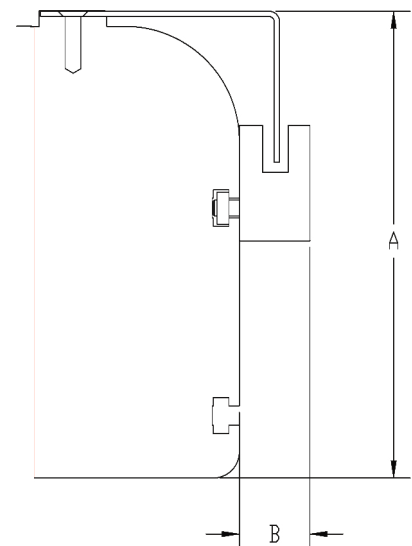


### Limit Sensor Kit:

**RM Module: NSK-XY-L3543RM**

**RS Module: NSK-XY-L3544RM**

- Qty 1 - Module Limit Sensor Flag (S or M)
- Qty 3 - Limit Sensor (Omron EE-SX672A)
- Qty 3 - Limit Sensor Cable with Connector, 2m long (Omron EE-1010-R2M)
- Qty 3 - Limit Sensor T-Slot
- Qty 6 - M3 x 8 Socket Head Cap Screw
- Qty 1 - M3 x 6 Flat Head Screw



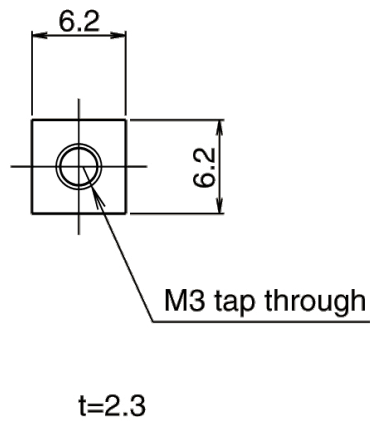
### MODULE CROSS SECTION

	Dimension A	Dimension B
RS MODULE	70mm	14mm
RM MODULE	85mm	14mm

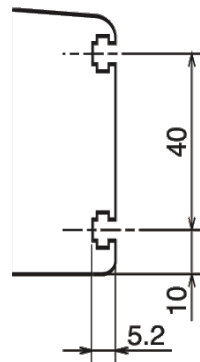
# Accessories: Square Nut

## Square Nut: NSK-XY-P170M3-1

- This nut is used to secure accessories to the side of the module
- Nuts are supplied in sets of 4



**RS Module**



**RM Module**

