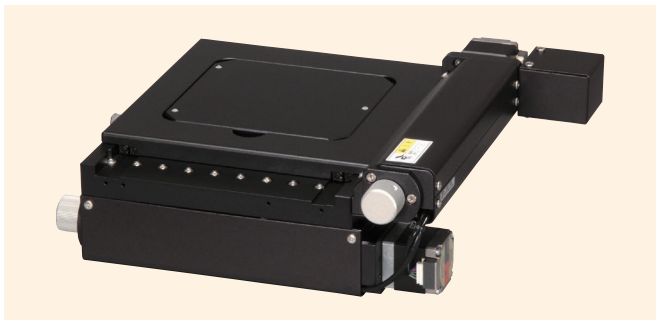


Micro Scanning Stages

◆ V-CR method

0.75 A/phase

0.75 A/phase motor



↑ TMSS-50C

Model number	Supported microscopes	
TMSS-50C-OA	OLYMPUS	BH2
TMSS-50C-OB	OLYMPUS	BX40, BX41M-LED, BX51, BX51M, BX60, BX61
TMSS-50C-NA	NIKON	OPTIPHOTO 100S, Eclipse ME600

*Models with -OA, -OB, or -NA at the end of the model number include an adapter to support use with microscopes.

Features

- Thin type lightweight stage with 50 mm x 50 mm travel amount.
- Thin and lightweight to support microscope applications without compromising accuracy.

Model number	TMSS-50C-OA	TMSS-50C-OB	TMSS-50C-NA
Model name	Micro Scanning Stage		
Travel direction	XY-axis double direction		
Travel amount	±25 mm		
Stage surface	155 mm x 155 mm		
Motor used	PK523HPA equivalent (5-wire type pentagonal wiring, 0.75 A/phase)		
Resolution	0.002 mm		
Feed screw specification	Ball screw		
Feed screw lead	1 mm		
Travel guide	V-groove and cross rollers		
Travel accuracy	Straightness (horizontal/vertical): 0.008 mm		
Positioning accuracy (1/10 stroke)	X axis: 0.005 mm, Y axis: 0.005 mm		
Positioning accuracy (full stroke)	X axis: 0.020 mm, Y axis: 0.010 mm		
Repeatability	±0.002 mm		
Lost motion	0.002 mm		
Load capacity	29.4 N (3 kgf)		
Mass	2.7 kg (excluding aluminum plate)		
Maximum speed (at 8,000 pps)	16 mm/s		
Main materials/surface treatment	Aluminum alloy/black satin anodized finish		
Home position sensor	Normally closed contact point (break contact, B contact) operation, photo sensor		
Limit sensor	Normally closed contact point (break contact, B contact) operation, photo sensor		
Applicable cables	TACB-STM-D3, TARC-STM-D3		
Standard accessories	Aluminum plate		



OLYMPUS Microscope Combination Example
The photo shows TMSS-300C.

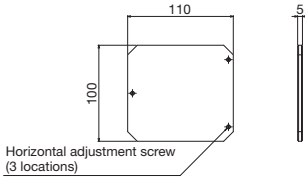


NIKON Microscope Combination Example
The photo shows TMSS-200C-NA.

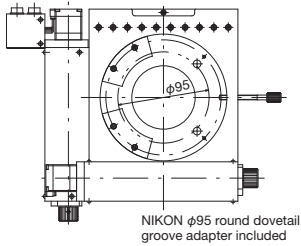


XY Stages for Microscopes ◀ Automated Products for Microscopes ▶

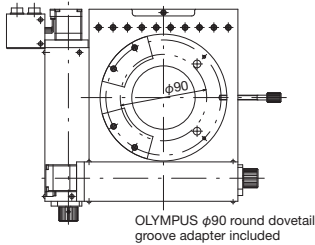
Product Appearance



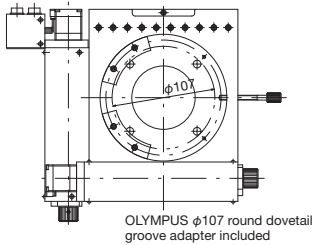
Aluminum plate



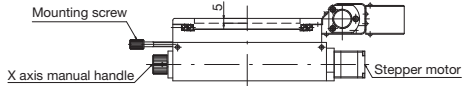
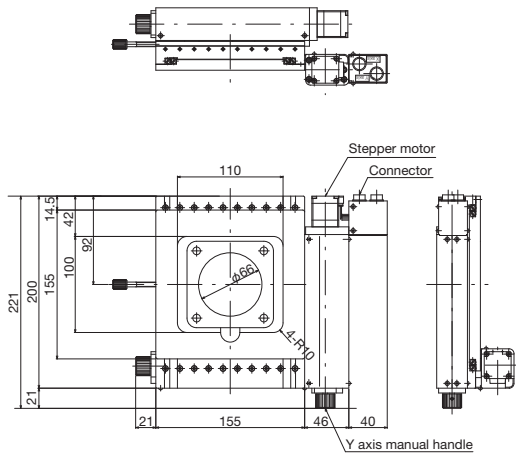
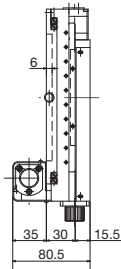
NIKON $\phi 95$ round dovetail groove adapter included



OLYMPUS $\phi 90$ round dovetail groove adapter included

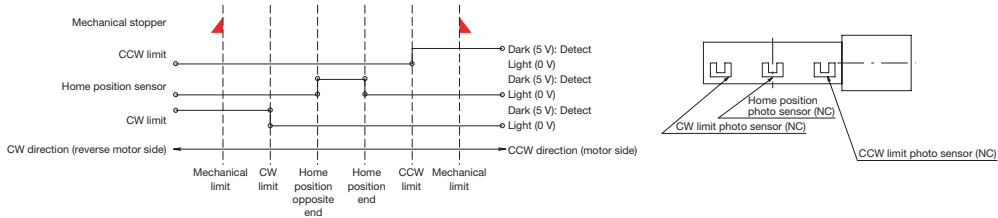


OLYMPUS $\phi 107$ round dovetail groove adapter included

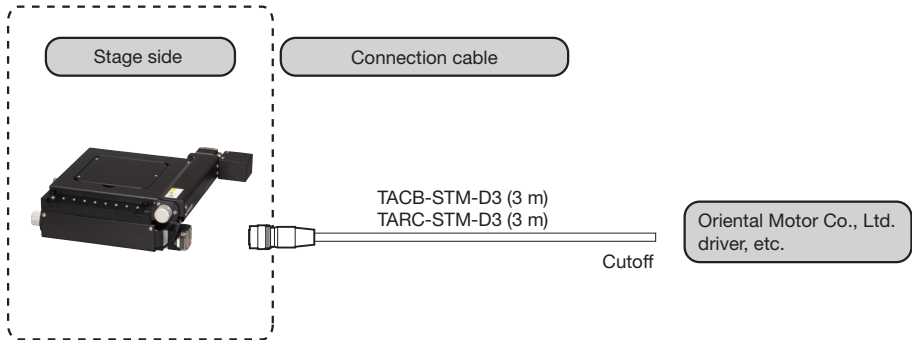


↑ TMS5-50C

◀ Sensor operating logic and timing chart



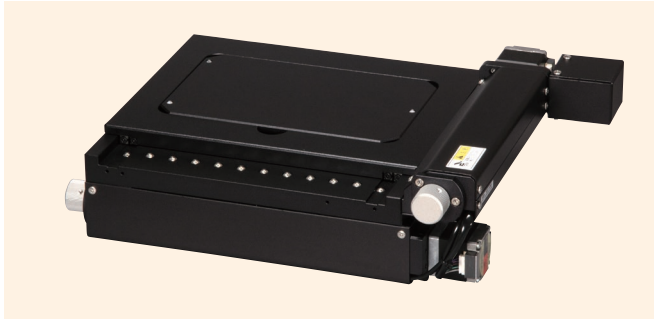
◀ Connection method: Connection cable and driver



Motorized Stages
Automated Products for Microscopes
Manual Stages
Microscope XY Stages

Micro Scanning Stages

◆ V-CR method **0.75 A/phase** 0.75 A/phase motor



↑ TMSS-50WC

Model number	Supported microscopes	
TMSS-50WC-OA	OLYMPUS	BH2
TMSS-50WC-OB	OLYMPUS	BX40, BX41M-LED, BX51, BX51M, BX60, BX61
TMSS-50WC-NA	NIKON	OPTIPHOTO 100S, Eclipse ME600

*Models with -OA, -OB, or -NA at the end of the model number include an adapter to support use with microscopes.

Features

- Thin type lightweight stage with 100 mm x 50 mm travel amount.
- Thin and lightweight to support microscope applications without compromising accuracy.

Model number	TMSS-50WC-OA	TMSS-50WC-OB	TMSS-50WC-NA
Model name	Micro Scanning Stage		
Travel direction	XY-axis double direction		
Travel amount	X axis: ±50 mm, Y axis: ±25 mm		
Stage surface	205 mm x 155 mm		
Motor used	PK523HPA equivalent (5-wire type pentagonal wiring, 0.75 A/phase)		
Resolution	0.002 mm		
Feed screw specification	Ball screw		
Feed screw lead	1 mm		
Travel guide	V-groove and cross rollers		
Travel accuracy	Straightness: (horizontal) 0.010 mm, (vertical) 0.015 mm		
Positioning accuracy (1/10 stroke)	X axis: 0.010 mm, Y axis: 0.005 mm		
Positioning accuracy (full stroke)	X axis: 0.040 mm, Y axis: 0.010 mm		
Repeatability	±0.002 mm		
Lost motion	0.002 mm		
Load capacity	29.4 N (3 kgf)		
Mass	3.3 kg (excluding aluminum plate)		
Maximum speed (at 8,000 pps)	16 mm/s		
Main materials/surface treatment	Aluminum alloy/black satin anodized finish		
Home position sensor	Normally closed contact point (break contact, B contact) operation, photo sensor		
Limit sensor	Normally closed contact point (break contact, B contact) operation, photo sensor		
Applicable cables	TACB-STM-D3, TARC-STM-D3		
Standard accessories	Aluminum plate		



OLYMPUS Microscope Combination Example
The photo shows TMSS-300C

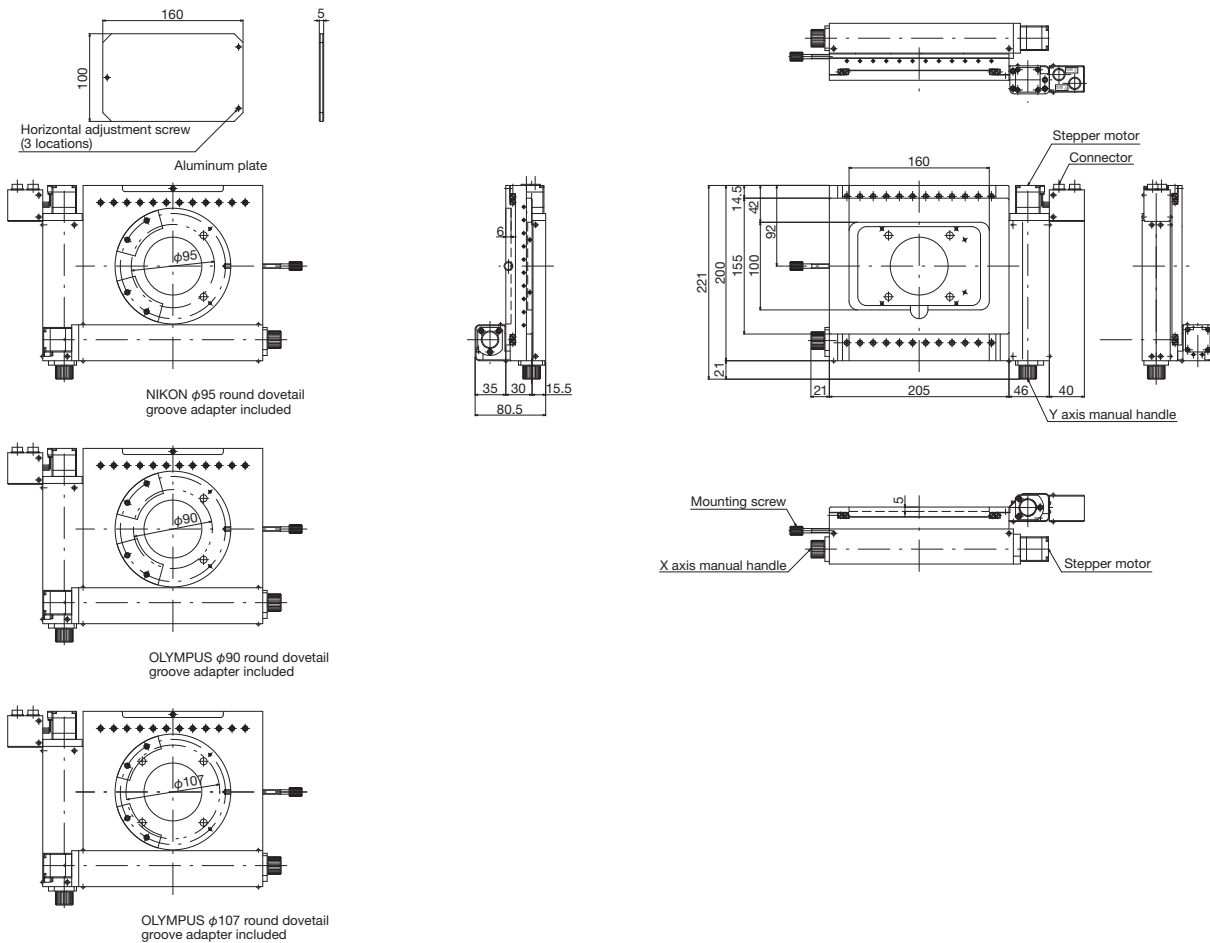


NIKON Microscope Combination Example
The photo shows TMSS-200C-NA



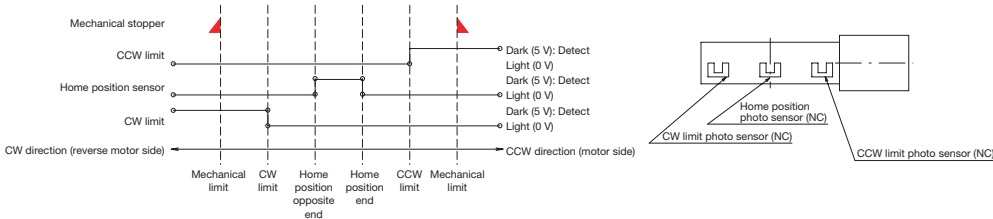
XY Stages for Microscopes ◀ Automated Products for Microscopes ▶

Product Appearance

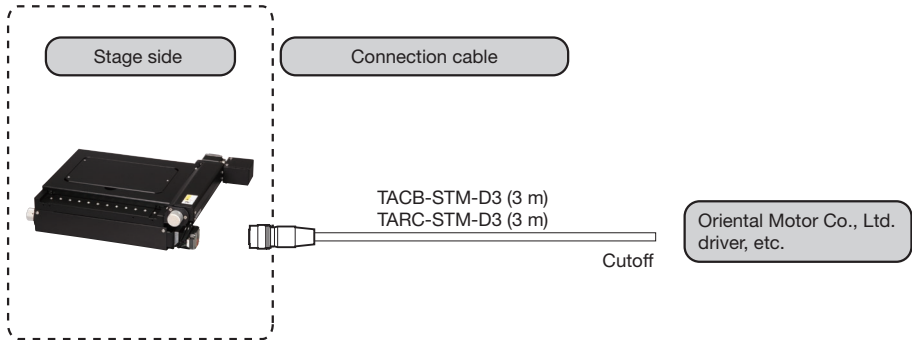


↑ TMSS-50WC

◆ Sensor operating logic and timing chart



◆ Connection method: Connection cable and driver



Motorized Stages

Automated Products for Microscopes

Manual Stages

Microscope XY Stages

Micro Scanning Stages

◆ V-CR method **0.75 A/phase** 0.75 A/phase motor



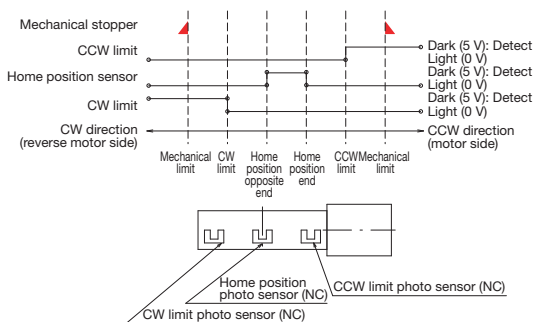
↑ TMSS-100C

Features

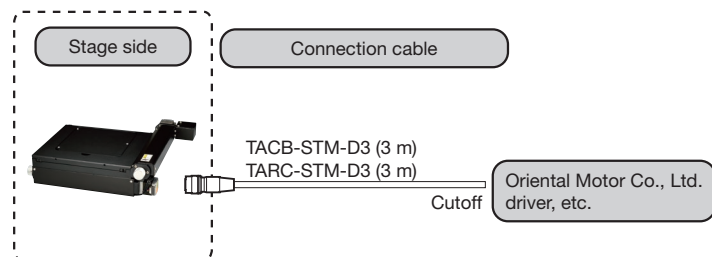
- Thin type lightweight stage that supports 4-inch objects with 100 mm x 100 mm travel amount.
- Thin and lightweight to support microscope applications without compromising accuracy.

Model number	TMSS-100C
Model name	Micro Scanning Stage
Travel direction	XY-axis double direction
Travel amount	±50 mm
Stage surface	205 mm x 183 mm
Motor used	PK523HPA equivalent (5-wire type pentagonal wiring, 0.75 A/phase)
Resolution	0.002 mm
Feed screw lead	1 mm
Travel guide	V-groove and cross rollers
Travel accuracy	Straightness: (horizontal) 0.010 mm, (vertical) 0.015 mm
Positioning accuracy (1/10 stroke)	X axis: 0.010 mm, Y axis: 0.010 mm
Positioning accuracy (full stroke)	X axis: 0.040 mm, Y axis: 0.040 mm
Repeatability	±0.002 mm
Lost motion	0.003 mm
Load capacity	29.4 N (3 kgf)
Mass	3.5 kg (excluding aluminum plate)
Maximum speed (at 8,000 pps)	16 mm/s
Main materials/surface treatment	Aluminum alloy/black satin anodized finish
Home position sensor	Normally closed contact point (break contact, B contact) operation, photo sensor
Limit sensor	Normally closed contact point (break contact, B contact) operation, photo sensor
Applicable cables	TACB-STM-D3, TARC-STM-D3
Standard accessories	Aluminum plate

◆ Sensor operating logic and timing chart



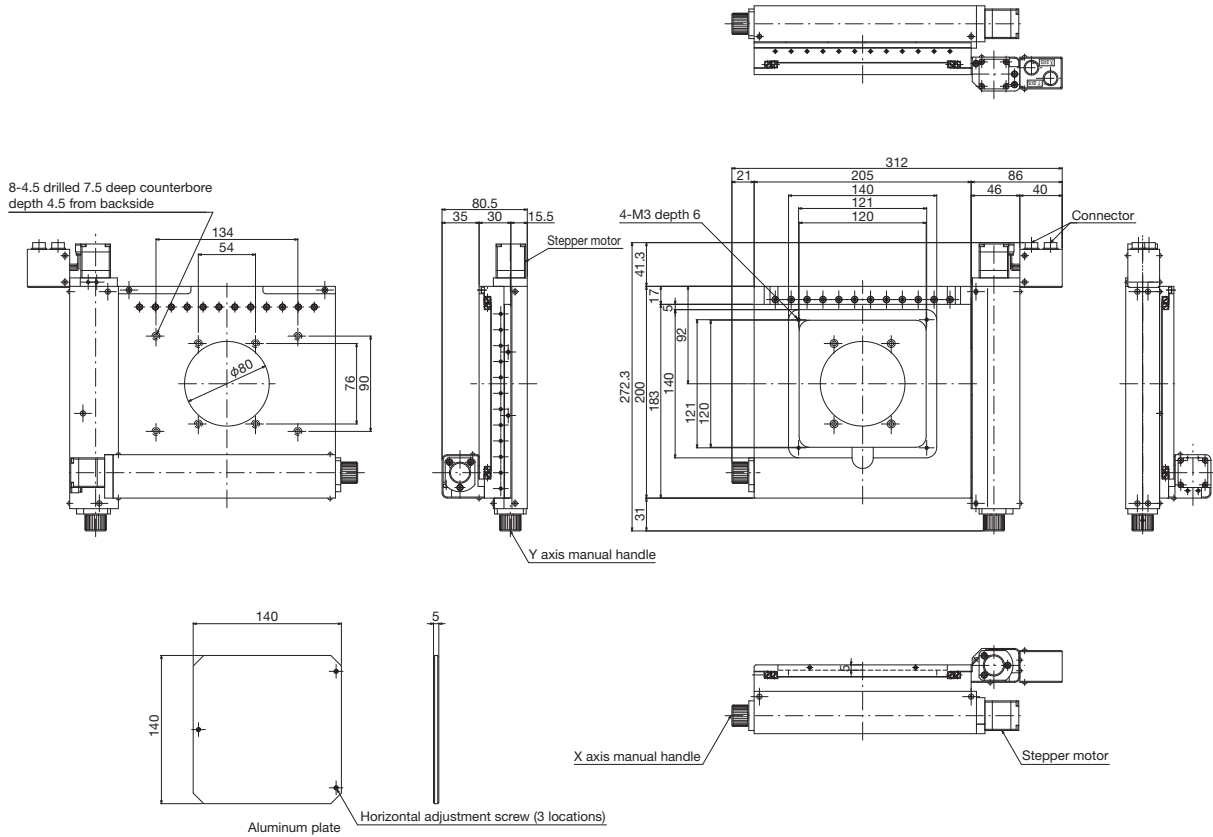
◆ Connection method: Connection cable and driver





XY Stages for Microscopes ◀ Automated Products for Microscopes ◀

Product Appearance



↑ TMSS-100C

Motorized Stages
Automated Products for Microscopes
Manual Stages
Microscope XY Stages

Micro Scanning Stages

V-CR method

0.75 A/phase

0.75 A/phase motor



↑ TMSS-150C

Model number	Supported microscopes	
TMSS-150C	OLYMPUS	MX50, MX61, MX61L, MX63, MX80
	NIKON	OPTIPHOTO 150, Eclipse L150
TMSS-150C-OA	OLYMPUS	MX40, MX51
TMSS-150C-NA	NIKON	ECLIPSE LV150/LV150A
TMSS-150C-NB	NIKON	ECLIPSE LV100D
TMSS-150C-NC	NIKON	ECLIPSE L200/L200A

*Models with -OA, -NA, -NB, or -NC at the end of the model number include an adapter to support use with microscopes.

Microscope Combination Example

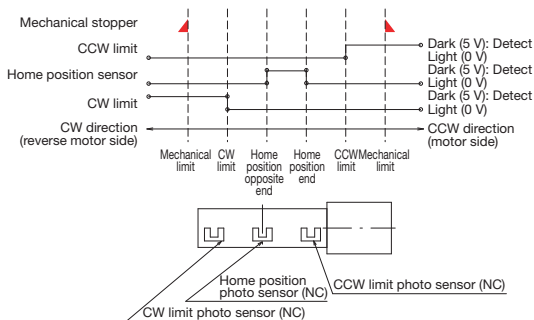


Features

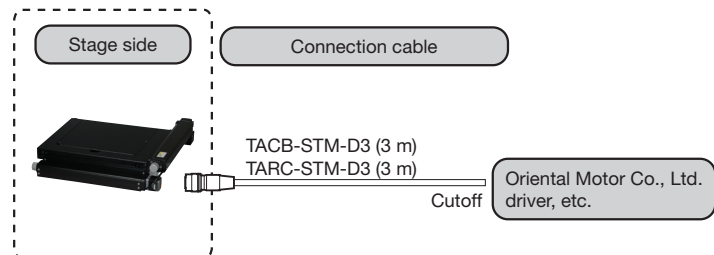
- Thin type lightweight stage that supports 6-inch objects with 150 mm x 150 mm travel amount.
- Thin and lightweight to support microscope applications without compromising accuracy.

Model number	TMSS-150C	TMSS-150C-OA	TMSS-150C-NA	TMSS-150C-NB	TMSS-150C-NC
Model name	Micro Scanning Stage				
Travel direction	XY-axis double direction				
Travel amount	±75 mm				
Stage surface	280 mm x 230 mm				
Motor used	PK523HPA equivalent (5-wire type pentagonal wiring, 0.75 A/phase)				
Resolution	0.002 mm				
Feed screw lead	1 mm				
Travel guide	V-groove and cross rollers				
Travel accuracy	Straightness: (horizontal) 0.010 mm, (vertical) 0.015 mm				
Positioning accuracy (1/10 stroke)	X axis: 0.010 mm, Y axis: 0.010 mm				
Positioning accuracy (full stroke)	X axis: 0.030 mm, Y axis: 0.030 mm				
Repeatability	±0.002 mm				
Lost motion	0.003 mm				
Load capacity	49 N (5 kgf)				
Mass	5.1 kg (excluding aluminum plate)				
Maximum speed (at 8,000 pps)	16 mm/s				
Main materials/surface treatment	Aluminum alloy/black satin anodized finish				
Home position sensor	Normally closed contact point (break contact, B contact) operation, photo sensor				
Limit sensor	Normally closed contact point (break contact, B contact) operation, photo sensor				
Applicable cables	TACB-STM-D3, TARC-STM-D3				
Standard accessories	Aluminum plate				

◆ Sensor operating logic and timing chart



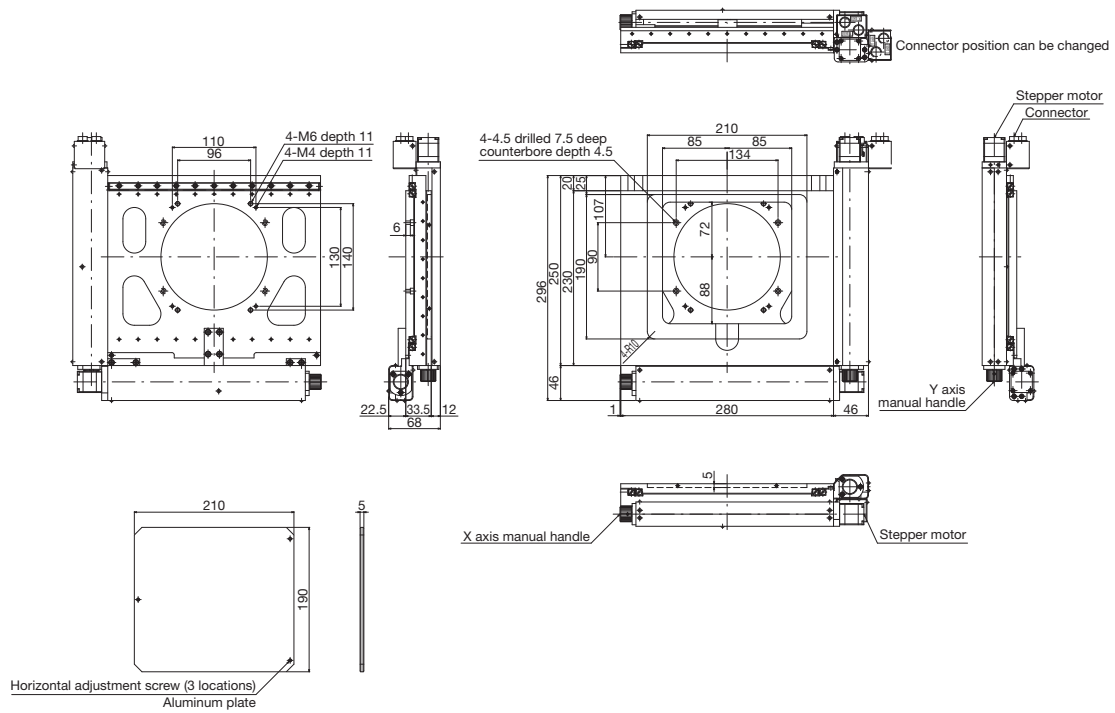
◆ Connection method: Connection cable and driver



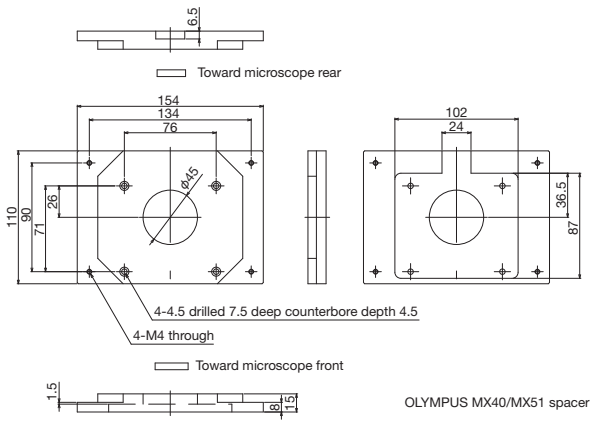


XY Stages for Microscopes ◀ Automated Products for Microscopes ▶

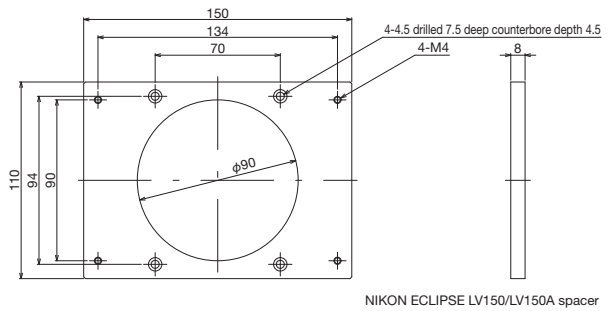
Product Appearance



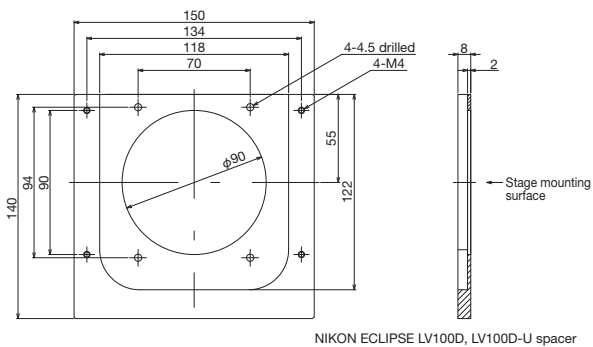
↑ TMSS-150C



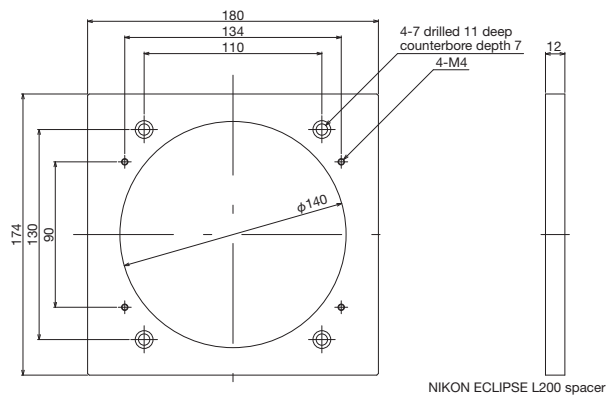
↑ TMSS-150C-OA spacer



↑ TMSS-150C-NA spacer



↑ TMSS-150C-NB spacer



↑ TMSS-150C-NC spacer

- Motorized Stages
- Automated Products for Microscopes
- Manual Stages
- Microscope XY Stages

Micro Scanning Stage

V-CR method **0.75 A/phase** 0.75 A/phase motor



↑ TMSS-200C

Model number	Supported microscopes	
TMSS-200C	OLYMPUS	MX50, MX61, MX61A, MX61L, MX80
	NIKON	OPTIPHOTO 200
TMSS-200C-NA	NIKON	ECLIPSE L200/L200A/L200D/L200N/L200ND

*Models with -NA at the end of the model number include an adapter to support use with microscopes.

Microscope Combination Example

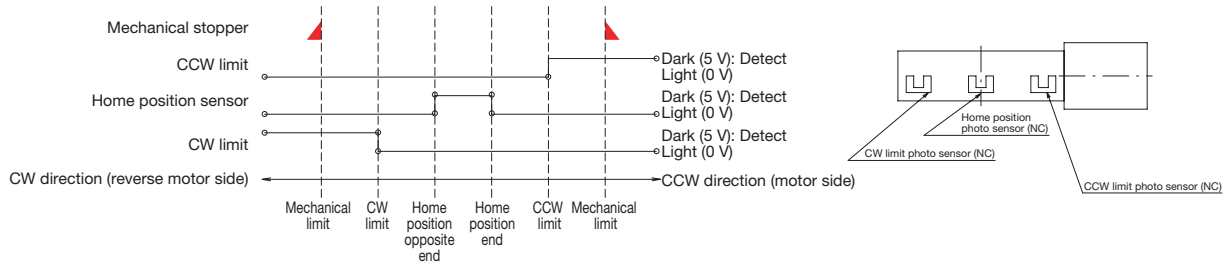


Features

- Thin type lightweight stage that supports 8-inch objects with 200 mm x 200 mm travel amount.
- Thin and lightweight to support microscope applications without compromising accuracy.

Model number	TMSS-200C	TMSS-200C-NA
Model name	Micro Scanning Stage	
Travel direction	XY-axis double direction	
Travel amount	±100 mm	
Stage surface	355 mm x 305 mm	
Motor used	PK523HPA equivalent (5-wire type pentagonal wiring, 0.75 A/phase)	
Resolution	0.002 mm	
Feed screw specification	Ball screw	
Feed screw lead	1 mm	
Travel guide	V-groove and cross rollers	
Travel accuracy	Straightness: (horizontal) 0.010 mm, (vertical) 0.025 mm	
Positioning accuracy (1/10 stroke)	X axis: 0.015 mm, Y axis: 0.015 mm	
Positioning accuracy (full stroke)	X axis: 0.060 mm, Y axis: 0.050 mm	
Repeatability	±0.002 mm	
Lost motion	0.003 mm	
Load capacity	49 N (5 kgf)	
Mass	7.3 kg (excluding aluminum plate)	
Maximum speed (at 8,000 pps)	16 mm/s	
Main materials/surface treatment	Aluminum alloy/black satin anodized finish	
Home position sensor	Normally closed contact point (break contact, B contact) operation, photo sensor	
Limit sensor	Normally closed contact point (break contact, B contact) operation, photo sensor	
Applicable cables	TACB-STM-D3, TARC-STM-D3	
Standard accessories	Aluminum plate	

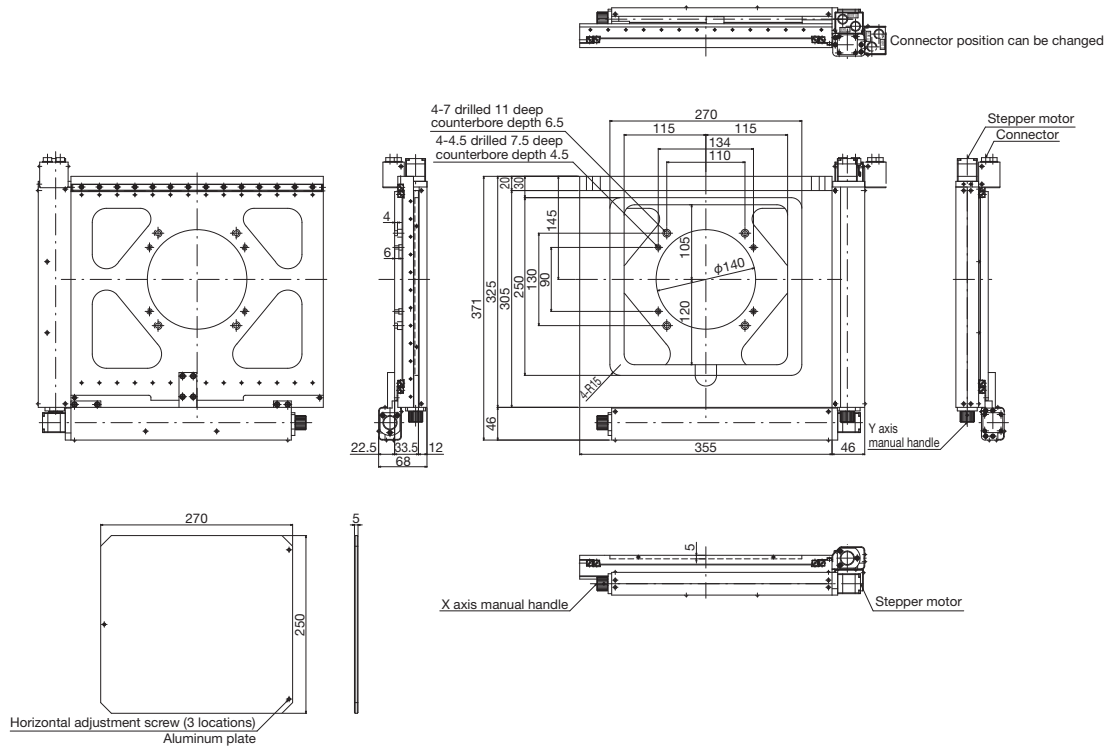
◆ Sensor operating logic and timing chart



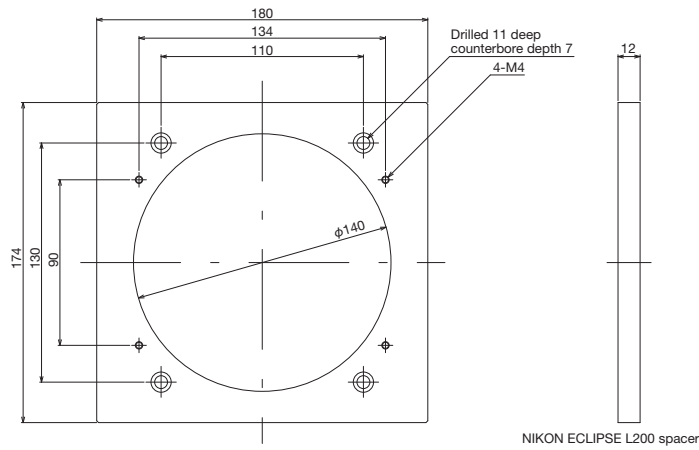


XY Stages for Microscopes ◀ Automated Products for Microscopes ▶

Product Appearance

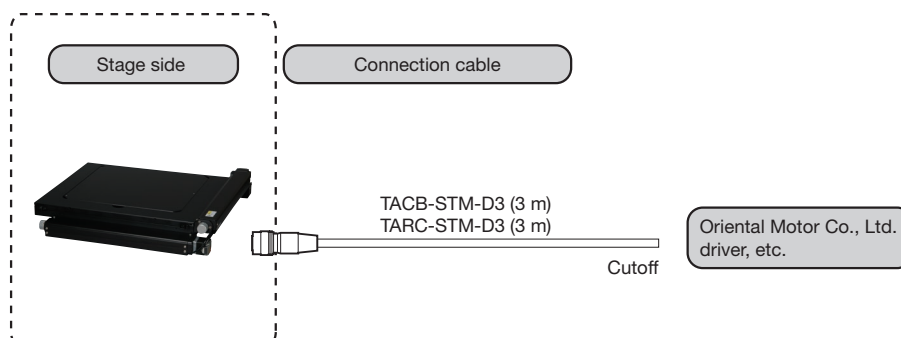


↑ TMSS-200C



↑ TMSS-200C-NA spacer

◆ Connection method: Connection cable and driver



Motorized Stages
Automated Products for Microscopes
Manual Stages
Microscope XY Stages

Micro Scanning Stage

V-CR method

0.75 A/phase

0.75 A/phase motor



↑ TMSS-300C

Model number	Supported microscopes	
TMSS-300C	OLYMPUS	MX61A, MX61L, MX80
TMSS-300C-NA	NIKON	OPTIPHOTO 300, Eclipse L300/L300D

*Models with -NA at the end of the model number include an adapter to support use with microscopes.

Microscope Combination Example

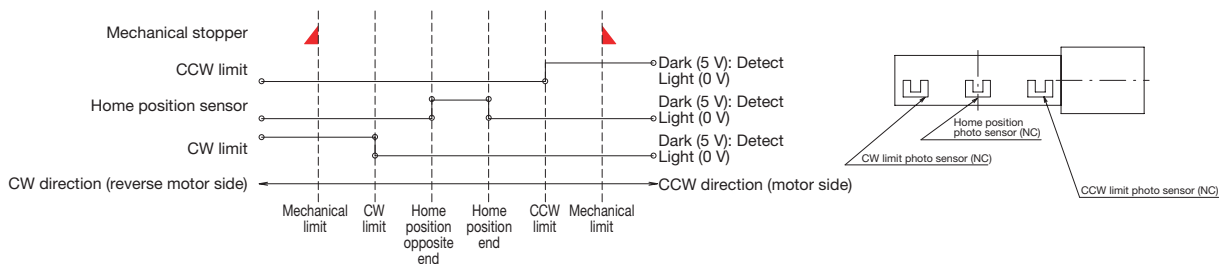


Features

- Thin type lightweight stage with 300 mm x 300 mm travel amount.
- Thin and lightweight to support microscope applications without compromising accuracy.

Model number	TMSS-300C	TMSS-300C-NA
Model name	Micro Scanning Stage	
Travel direction	XY-axis double direction	
Travel amount	±150 mm	
Stage surface	460 mm x 405 mm	
Motor used	PK525HPA equivalent (5-wire type pentagonal wiring, 0.75 A/phase)	
Resolution	0.002 mm	
Feed screw specification	Ball screw	
Feed screw lead	1 mm	
Travel guide	V-groove and cross rollers	
Positioning accuracy (1/10 stroke)	X axis: 0.040 mm, Y axis: 0.040 mm	
Positioning accuracy (full stroke)	X axis: 0.120 mm, Y axis: 0.100 mm	
Repeatability	±0.002 mm	
Lost motion	0.003 mm	
Load capacity	49 N (5 kgf)	
Mass	10.3 kg (excluding aluminum plate)	
Maximum speed (at 8,000 pps)	16 mm/s	
Main materials/surface treatment	Aluminum alloy/black satin anodized finish	
Home position sensor	Normally closed contact point (break contact, B contact) operation, photo sensor	
Limit sensor	Normally closed contact point (break contact, B contact) operation, photo sensor	
Applicable cables	TACB-STM-D3, TARC-STM-D3	
Standard accessories	Aluminum plate	

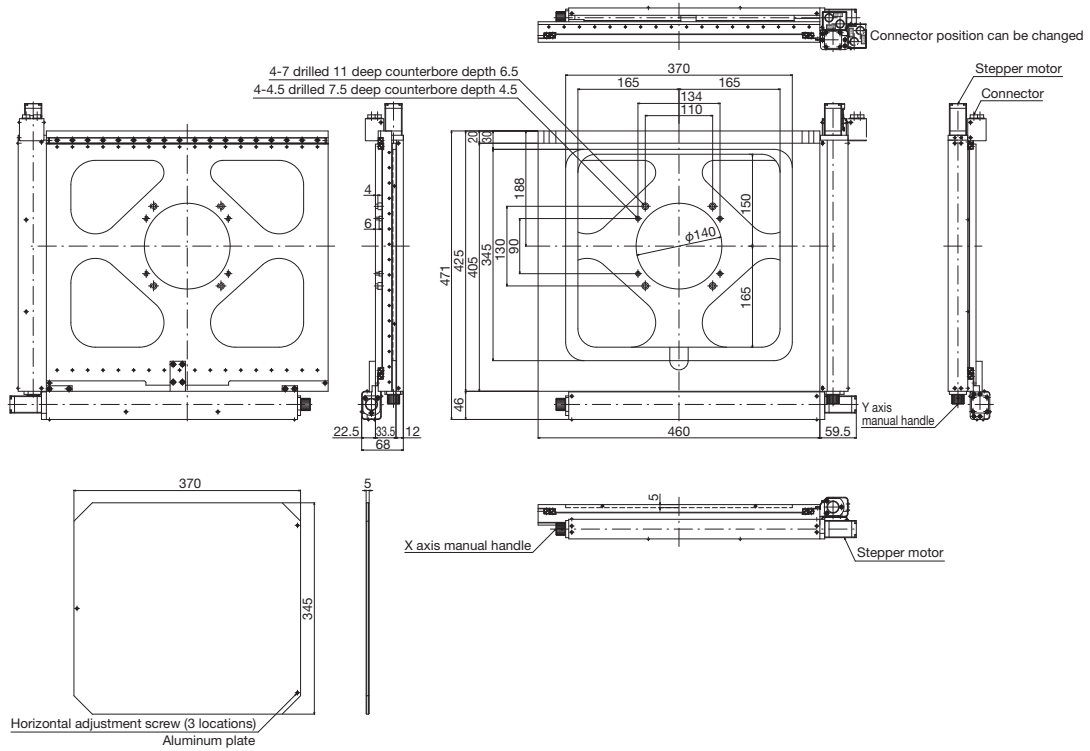
◆ Sensor operating logic and timing chart



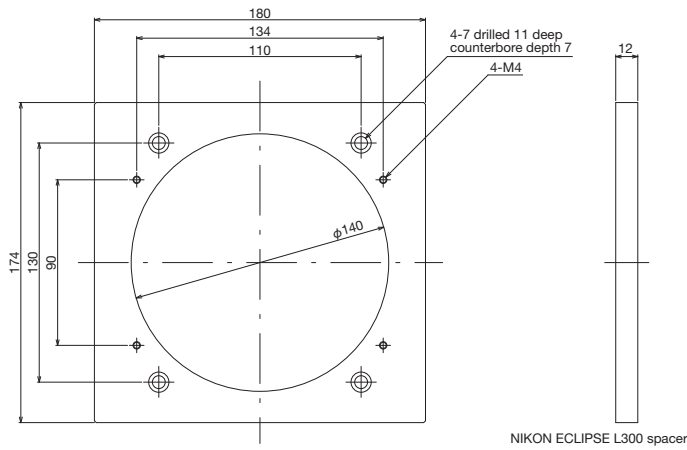


XY Stages for Microscopes ◀ Automated Products for Microscopes ▶

Product Appearance

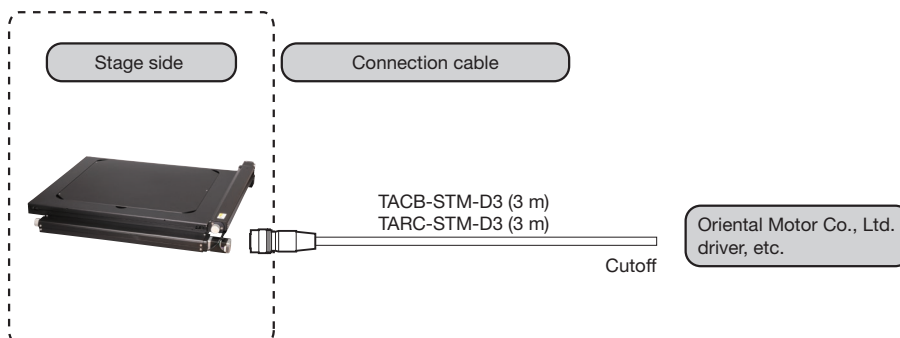


↑ TMSS-300C



↑ TMSS-300C-NA included spacer

◆ Connection method: Connection cable and driver



Motorized Stages
Automated Products for Microscopes
Manual Stages
Microscope XY Stages