

PRODUCT INNOVATIONS

FS70 Ergonomic High Power Microscope



FS70 Series Features:

- Erect Image Trinocular (50/50,100/100), Erect Image Tilting Trinocular (50/50)
- Mitutoyo Infinity Corrected Optics
- Siedentopf Design Trinocular Body Tube
- Widefield (FN=24) 10x Eyepieces
- Three Main Body Types
 - FS70Z - Main Body (Non-Laser) with 1X-2X Zoom Magnification Changer
 - FS70L - Main Body 1X for Three YAG Laser Wave lengths 1064/532/355nm*
 - FS70L4 - Main Body 1X for Two Wave Length Ranges 532/266nm*
- Brightfield Objective Magnification Selections from 1X to 200X
- Extra Long Working Distance Plan Apochromat Objectives
- Laser Cutting Objectives
- Long Working Distance Plan Objectives for IR, NIR, UV and NUV applications
- Differential Interference Contrast (DIC) Option for Non-laser Configurations
- Reverse 4X Nosepiece
- Optional Motorized 4X Centerable Nosepiece
- Six foot Cable Remote Intensity Control for Fiber Optic Illuminator
- Concentric Coarse and Fine Focus -0.1mm Rev /Fine Focus
- Manual Focus Block or Optional Motorized Focus Block
- Probe Station Ready with Choice of Focusing Blocks

*Mitutoyo assumes no responsibility whatsoever for the performance and/or safety of the laser system used with Mitutoyo microscopes.

Specifications

Model No. Order No.	FS70Z-S 378-185-2	FS70Z-THS 378-185-4	FS70L-S 378-186-2	FS70L-THS 378-186-4	FS70L4-S 378-187-2	FS70L4-THS 378-187-4
Focus adjustment	With concentric coarse and fine focusing wheels (right and left) (1.97" (50mm) travel range, 0.1mm/rev. for fine adjustment, .15" (3.8mm)/rev. for coarse adjustment)					
Trinocular tube	Erect image					
Image	Erect image					
Pupil distance	Siedentopf type, adjustment range: 2.01" - 2.99" (51 - 76mm)					
Field number	24					
Optical pass ratio	Fixed (eyepiece/ CCD camera=50/50)	Switchable (eyepiece/laser=100/0 or 0/100)				
Protective filter	-		Built-in laser beam filter			
Main unit	1x - 2x zoom (visible radiation)		1x (near-infrared - visible - near-ultraviolet radiation)		1x (visible and ultraviolet radiation)	
Tube lens (correction)	1x - 2x zoom (visible radiation)		1x (near-infrared - visible - near-ultraviolet radiation)		1x (visible and ultraviolet radiation)	
Applicable laser	-		1064/532/355nm YAG laser		532/266nm YAG laser	
Camera mount (Dove Tail Type: Part of Trinocular Tube)	Camera Mount accepts either 1x C-mount Video Adapter B or for 0.5x magnification use both 1x AND 0.5x C-mount Video Adapters.				Camera Mount with Green Filter Switch accepts either 1x C-mount Video Adapter B or for 0.5x magnification use both 1x AND 0.5x C-mount Adapters	
Illumination system	Reflective illumination for bright field (Koehler illumination, with aperture diaphragm)					
Light source	21V, 150W Fiber Optic Light Source: AC 100, 120, 220 and 240 VAC@50/60Hz					
Nosepiece	Reverse nosepiece, rotary type for bright field lens (with 4 mounts), detachable					
Objectives (optional)	M Plan Apo ⁻³ , M Plan Apo SL, G Plan Apo					
For observation	M Plan Apo ⁻³ , M Plan Apo SL, G Plan Apo					
For laser-cutting	-		MLCD Plan NIR ⁻⁴ , MLCD Plan NUV ⁻⁴		M Plan UV	
Loading weight on optical tube ⁻⁵	Approx. 29.70 lbs (13.5kg)					
Mass	14.5 lbs (6.6 kg)	16.5 lbs (7.5 kg)	14.1 lbs (6.4 kg)	15.8 lbs (7.2 kg)	14.7 lbs (6.7 kg)	16.5 lbs (7.5 kg)

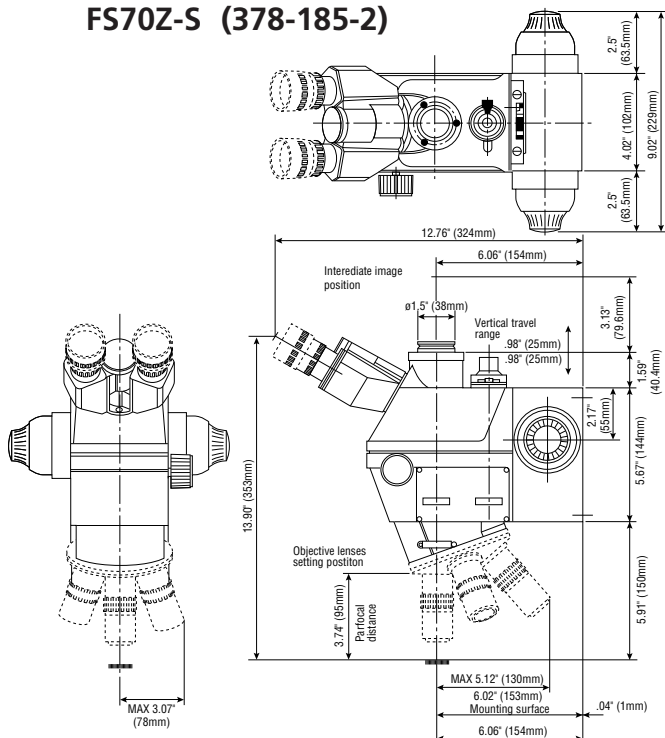
-1: When using the FS70L or -L4 with a laser system, refer to "Cautions in using microscope with YAG laser system".
 -2: Optional -3: M Plan Apo 1x should be used together with the the polarizer (378-092).
 -4: Select model depending on the type of laser wavelength. -5: Weight of objective lenses and eyepieces not included.

Optional Accessories:

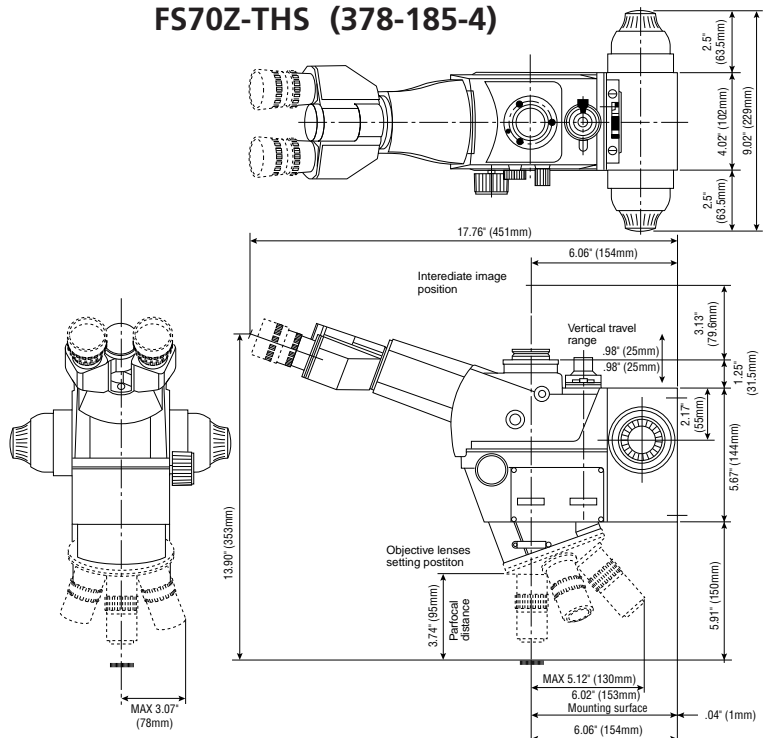
- Reflected Light X/Y Stage (378-025)
- Transmitted Light X/Y Stage (378-020)
- 0.5X "C" Mount (378-054)
- Plain Stand (378-031)
- 1X "C" Mount (378-042)

Finescope FS70 Zoom Models

FS70Z-S (378-185-2)

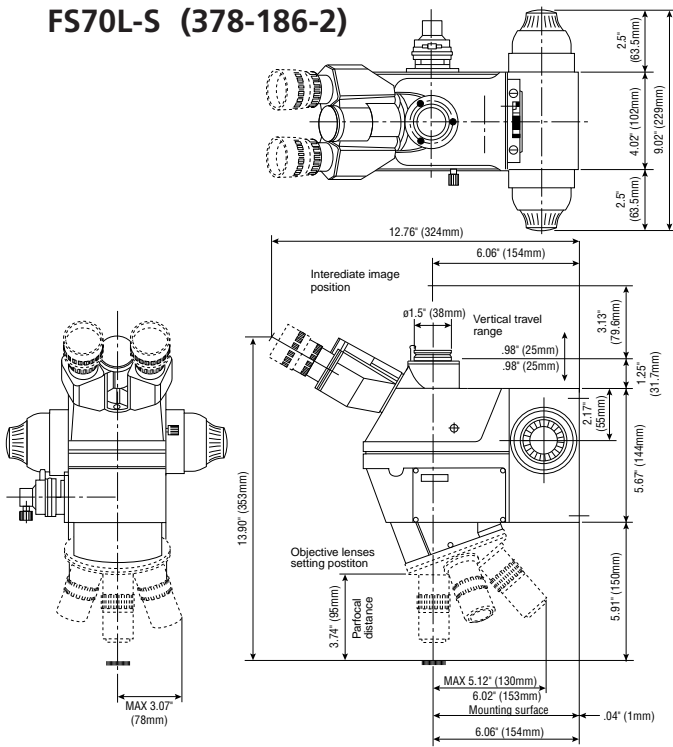


FS70Z-THS (378-185-4)

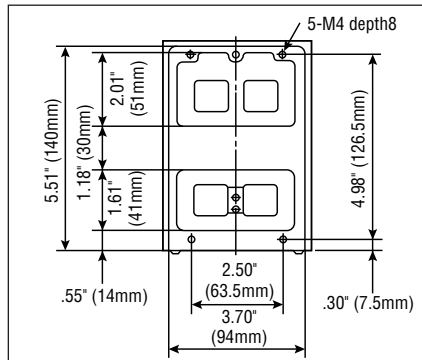
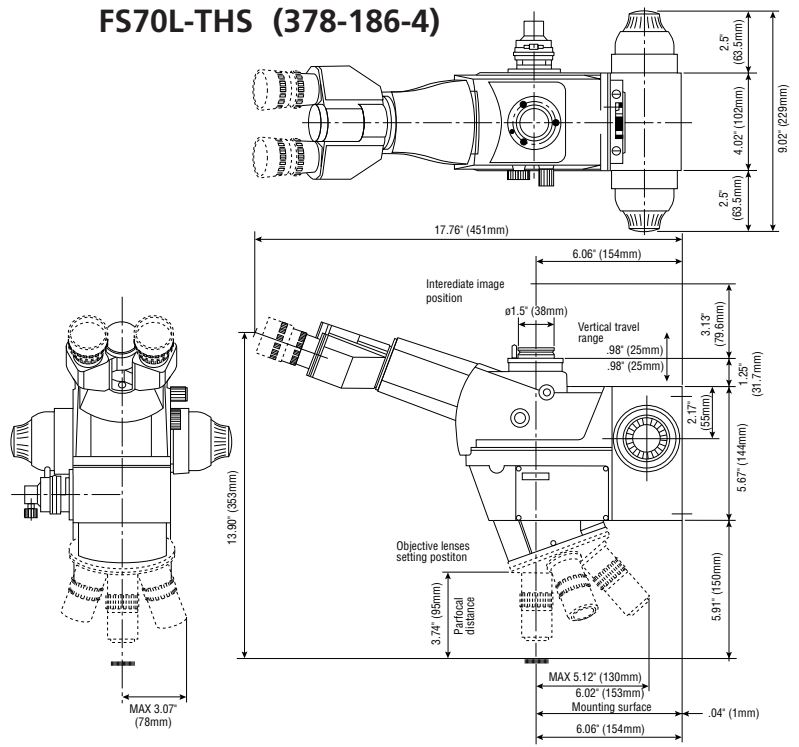


Finescope FS70L & FS70LS for laser applications

FS70L-S (378-186-2)

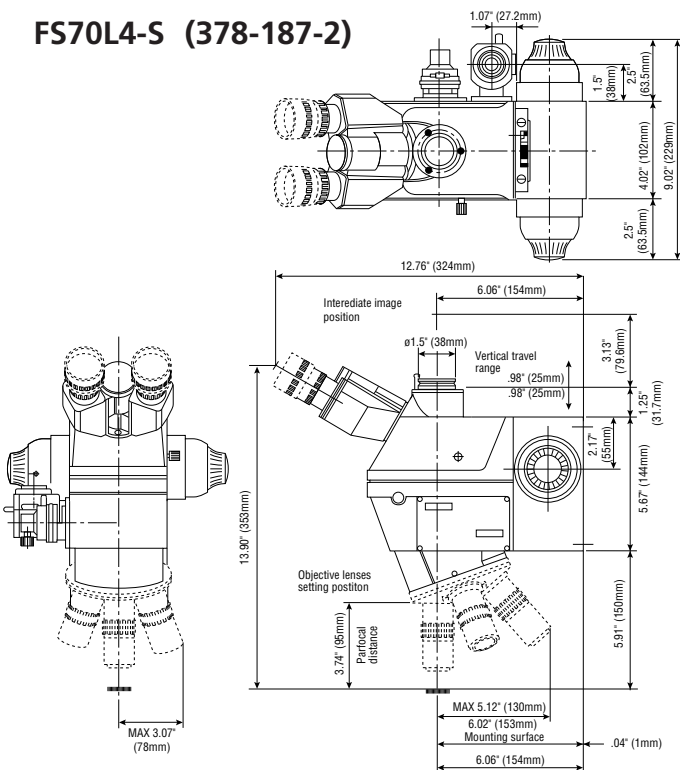


FS70L-THS (378-186-4)

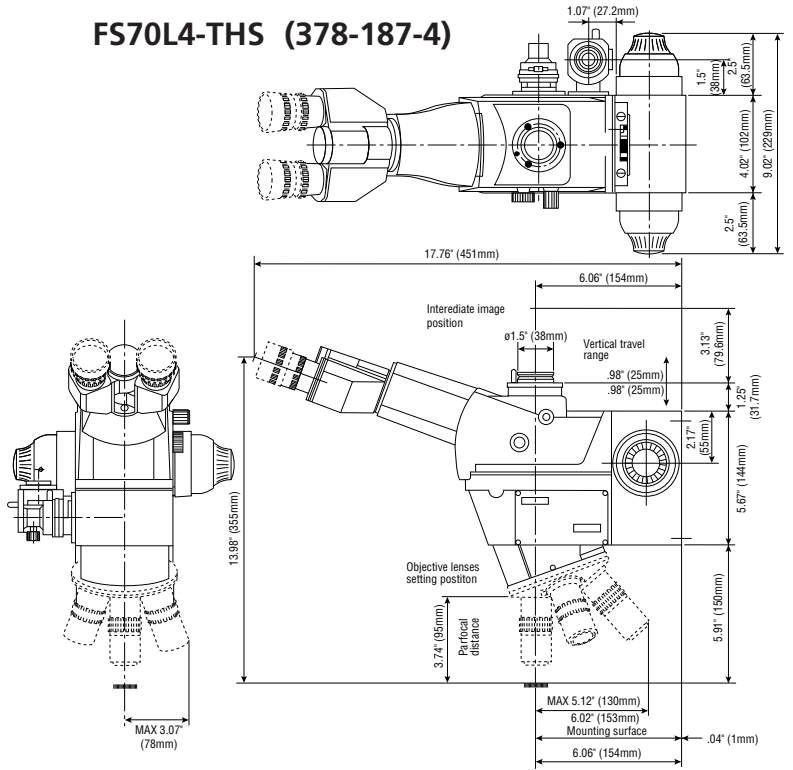


All models

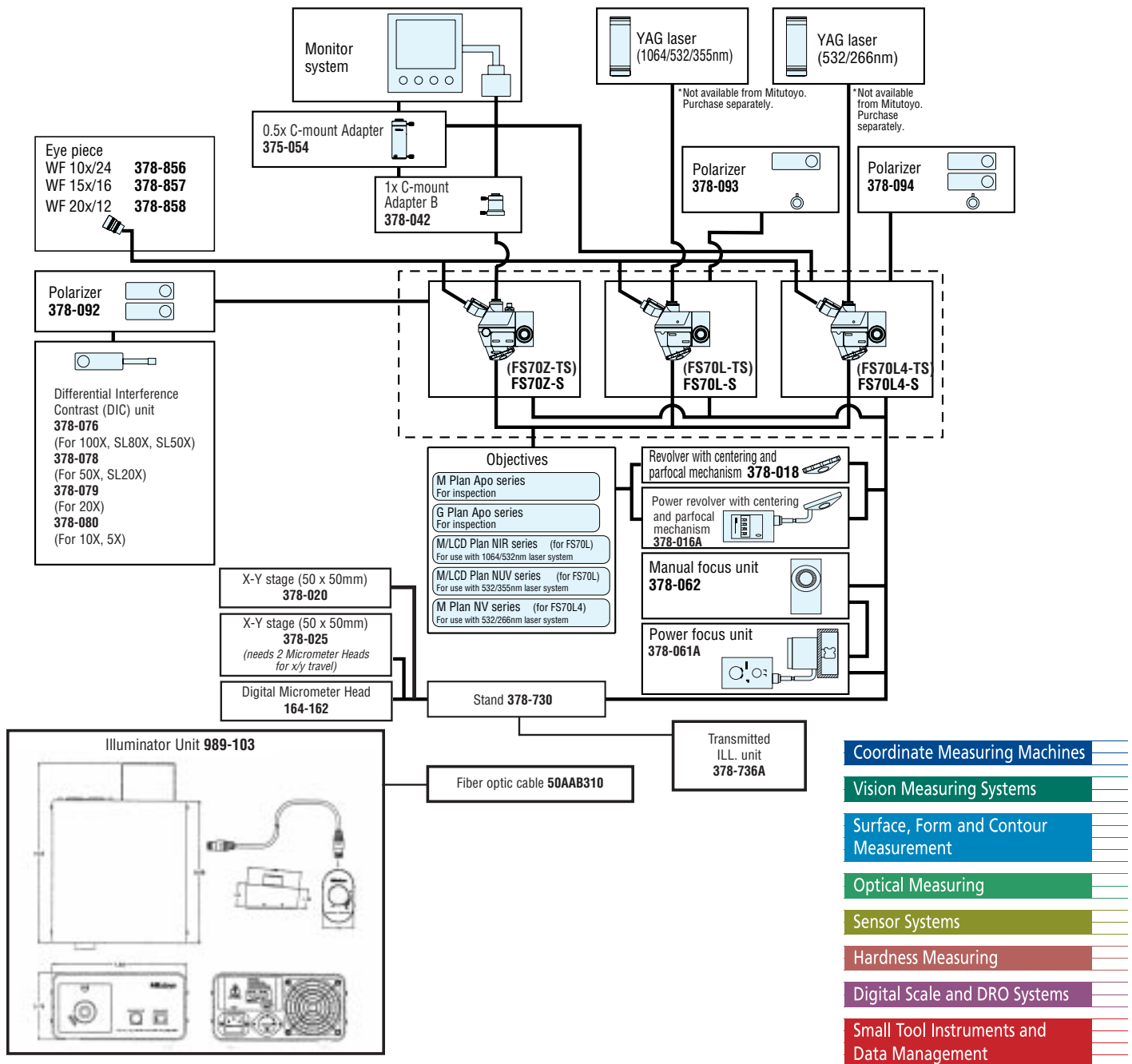
FS70L4-S (378-187-2)



FS70L4-THS (378-187-4)



System Configuration



- Coordinate Measuring Machines
- Vision Measuring Systems
- Surface, Form and Contour Measurement
- Optical Measuring
- Sensor Systems
- Hardness Measuring
- Digital Scale and DRO Systems
- Small Tool Instruments and Data Management

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