

FS70 MICROSCOPE

Ergonomic High-Power Microscope for Semiconductor Inspection

OPTICAL MEASURING





FS70Z



FS70L



FS70L4

SPECIFICATIONS

Model No. Order No.	FS70 378-184-1	FS70-TH 378-184-3	FS70Z 378-185-1	FS70Z-TH 378-185-3	FS70L 378-186-1	FS70L-TH 378-186-3	FS70L4 378-187-1	FS70L4-TH 378-187-3
Short base model No. Order No.	FS70-S 378-184-2	FS70-THS 378-184-4	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	50mm travel range with concentric coarse (3.8mm/rev) and fine (0.1mm/rev) focusing wheels (right / left)							
Image	Erect image							
Pupil distance	Siedentopf type, adjustment range: 2 - 3" / 51 - 76mm							
Field number	24							
Tilt angle	—	0° - 20°	—	0° - 20°	—	0° - 20°	—	0° - 20°
Optical pass ratio	50/50	100/0 or 0/100	50/50	100/0 or 0/100	100/0 or 0/100		100/0 or 0/100	
Protective filter	—		—		Built-in laser beam filter		Built-in laser beam filter	
Tube lens	1X		1X - 2X zoom		1X		1X	
Applicable laser	—		—		1064/532/355nm		532/266nm	
Camera mount	C-mount (using optional adapter B)				Use a laser with TV port.		C-mount receptacle (with green filter switch)	
Illumination system, optional	Reflective illumination for bright field (Koehler illumination, with aperture diaphragm) 12V 100W fiber optics, non-stepped adjustment, light guide length: 1.5m, power consumption 150W							
Objective, optional (for observation)	M Plan Apo, M Plan Apo SL, G Plan Apo							
Objective, optional (for laser-cutting)	—				MLCD Plan NIR, MLCD Plan NUV		M Plan UV	
Loading weight*	32lbs/14.5kg	30lbs/13.6kg	31lbs/14.1kg	29lbs/13.2kg	31lbs/14.2kg	30lbs/13.5kg	31lbs/13.9kg	29lbs/13.1kg
Mass (main unit)	13lbs/6.1kg	15.5lbs/7.1kg	14.5lbs/6.6kg	16.5lbs/7.5kg	14lbs/6.4kg	15.5lbs/7.2kg	14.5lbs/6.7kg	16.5lbs/7.5kg

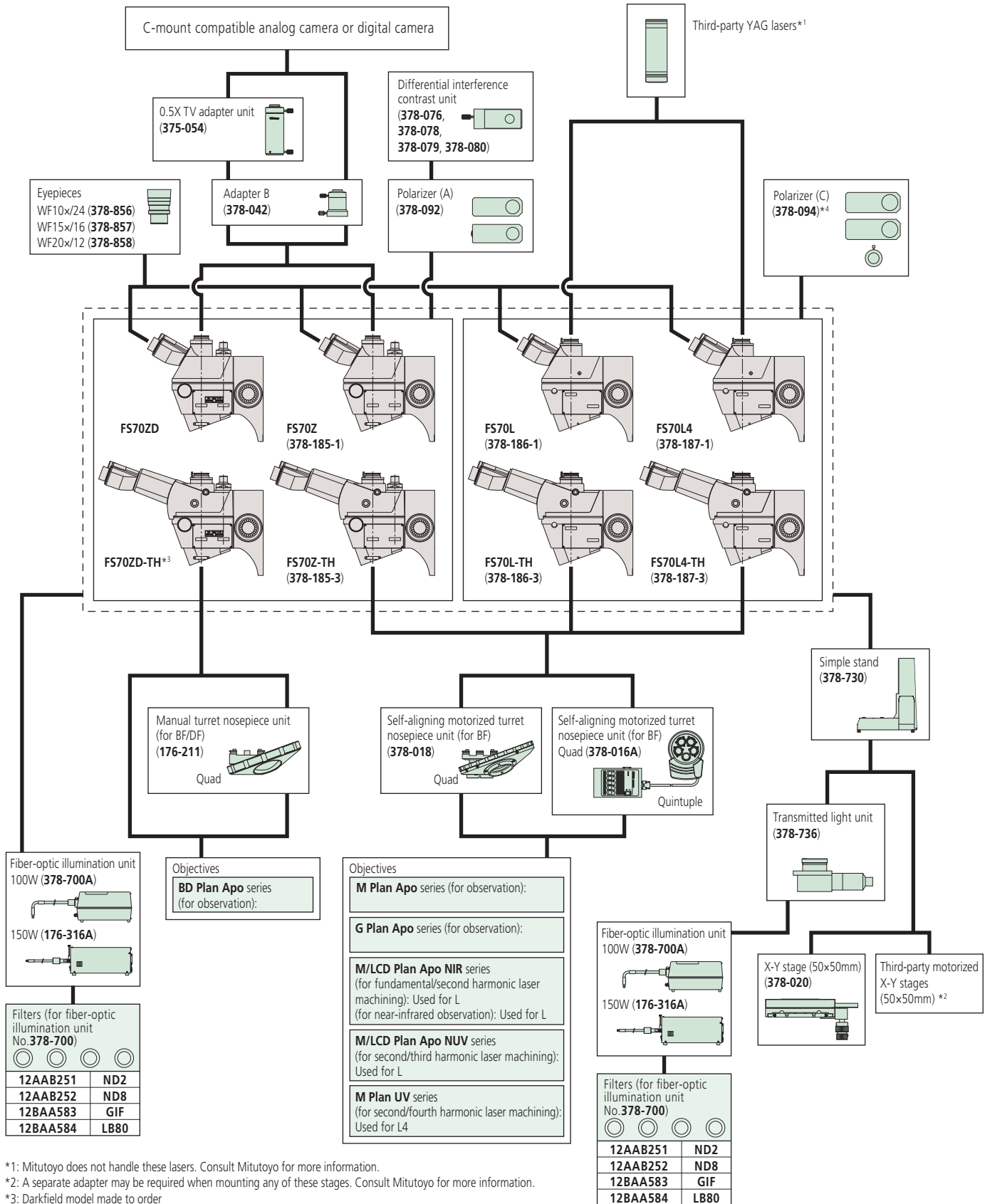
*Loading weight on optical tube excluding weight of objective lenses and eyepieces.

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
- Four Main Body Types:
 - FS70** - Main Body (Non-Laser) with 1X- tube lens
 - 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 Nonlaser 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

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

System diagram



*1: Mitutoyo does not handle these lasers. Consult Mitutoyo for more information.

*2: A separate adapter may be required when mounting any of these stages. Consult Mitutoyo for more information.

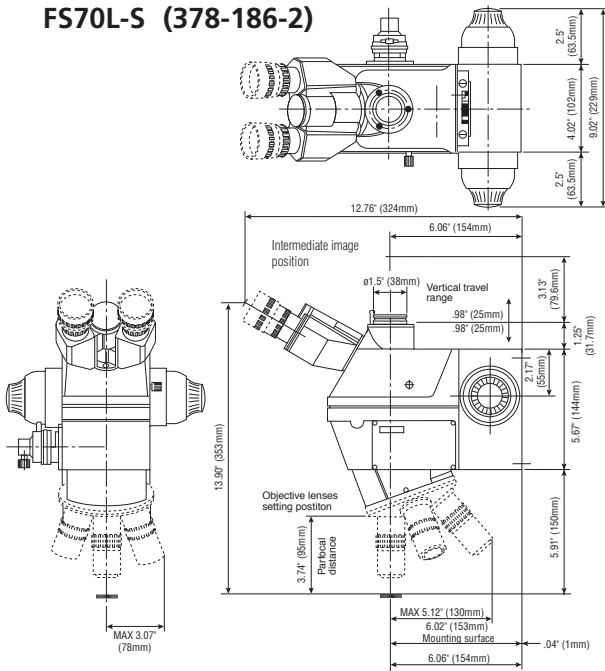
*3: Darkfield model made to order

*4: 378-093 for FS70-L

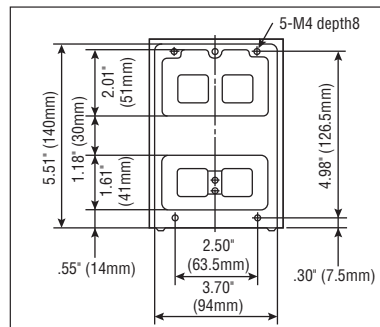
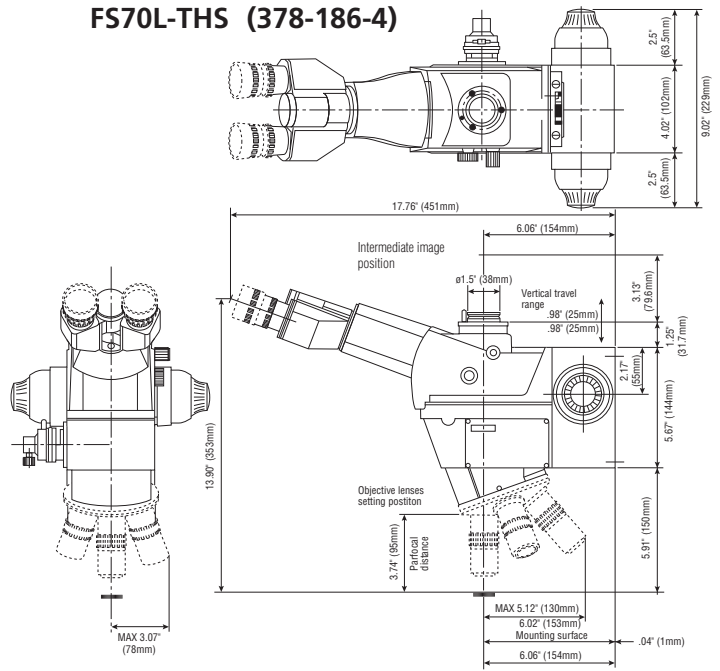
*See Finescope Price List for complete list of accessories

Finescope FS70L & FS70L4 for laser applications

FS70L-S (378-186-2)

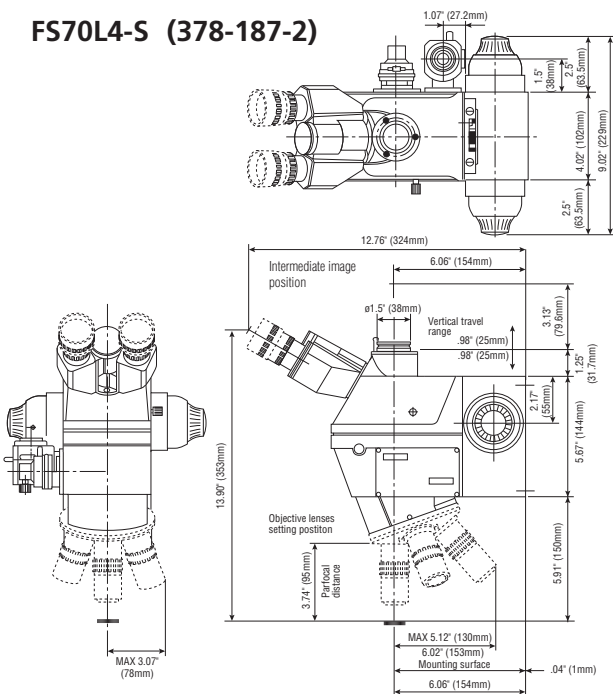


FS70L-THS (378-186-4)

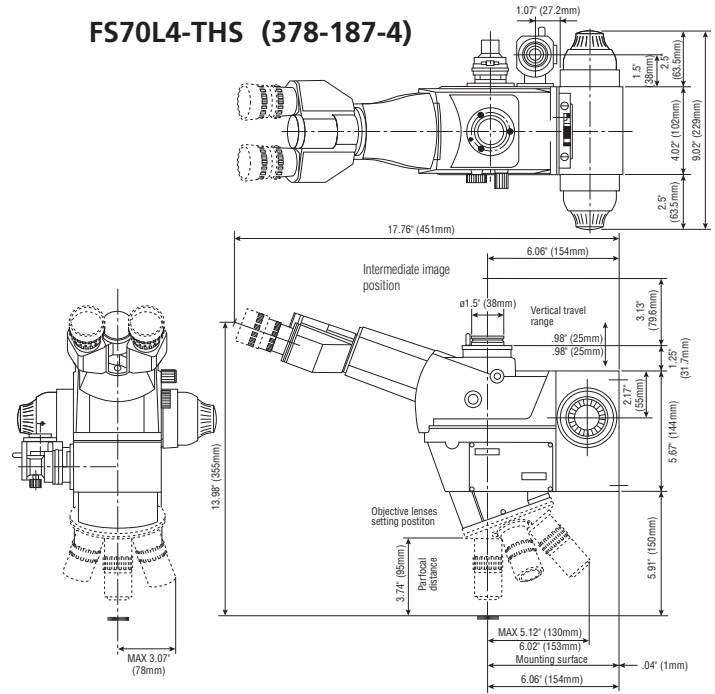


All models

FS70L4-S (378-187-2)



FS70L4-THS (378-187-4)





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