Living up to Life

Leica
MICROSYSTEMS

Leica TL3000 ST
Leica TL4000 BFDF
Leica TL4000 RC™/RCI™
Leica TL5000 Ergo

Technical Data

Bases

	Leica TL ST3000 transmitted light base	**Leica TL4000 BFDF transmitted light base**
Illumination source	Halogen lamp 12V/20W with the effective power of conventional 35W lamps	Illumination using external cold light sources with light cable
Illumination modes	Bright field, dark field on one side	Bright field, dark field
Control of the transmitted light	Position of the mirror can be shifted, the tilting angle of the mirror is then automatically regulated to the ideal transmitted light position	Fixed mirror, switchover between bright field and dark field position
Illuminated area	50 mm	40 mm
Control of the illumination	Control of the light intensity with potentiometer	Control of color temperature and light intensity with external light source; Direct activation possible with the Leica Application Suite (LAS) and Leica Application Suite Advanced Fluorescence (LAS AF) software
Filtering	Integrated filter holder for fitting with special daylight filter (10 447 400)	–
Accessories	Ergo accessories and numerous extra stages for the most challenging life science applications; Adapter for 120 mm transmitted light inserts	IsoPro™ xy stage with optimized image plane (image plane and illumination settings are retained); Ergo accessories and numerous extra stages for the most challenging life science applications; Adapter for 120 mm transmitted light inserts
Dimensions (W×H×D, in mm)	340×430×85	340×390×90

Leica TL4000 RC transmitted light base	**Leica TL4000 RCI transmitted light base**	**Leica TL5000 Ergo transmitted light base**
Illumination using external cold light sources with light cable	Halogen lamp 12V/20W with the effective power of conventional 35W lamps	LED light source with constant color temperature
Bright field, single-sided dark field, oblique light Relief Contrast System (RC™) with positive or negative relief contrast presentation for unstained phase specimens	Bright field, single-sided dark field, oblique light Relief Contrast System (RC™) with positive or negative relief contrast presentation for unstained phase specimens	Bright field, double-sided dark field, oblique light Relief Contrast System (RC™) with positive or negative relief contrast presentation for unstained phase specimens
360° rotatable mirror, position of the mirror adjustable, concave mirror side for use with lenses having a higher numerical aperture	360° rotatable mirror, position of the mirror on Z-shaft adjustable, concave mirror side for use with lenses having a higher numerical aperture	Via two diaphragm elements that form an aperture above the light source; this allows the light to be deflected directly or obliquely onto the specimen.
35 mm	35 mm	65 mm
Control of color temperature and light intensity with external light source; Direct activation possible with the Leica Application Suite (LAS) and Leica Application Suite Advanced Fluorescence (LAS AF) software	Separate control of color temperature and light intensity with CCIC technology, Activation with electronic potentiometers, Electronic shutter with memory function (after interruption of work, returns to the previously selected settings); Direct activation possible using Leica UMC hand control, Leica USB mouse and/or Leica Application Suite (LAS) and Leica Application Suite Advanced Fluorescence (LAS AF) software	Separate control of light intensity and aperture, Activation via two electronically read-out knobs, Memory function (after interruption of work, returns to the previously selected settings); Direct activation possible using Leica Application Suite (LAS) and Leica Application Suite Advanced Fluorescence (LAS AF) software possible
Integrated filter holder for fitting up to three filters (accessories) at the same time	Integrated filter holder for fitting up to three filters (accessories) at the same time	Integrated filter holder for fitting with one filter (accessory)
IsoPro™ xy stage with optimized image plane (image plane and illumination settings remain unchanged); Ergo accessories and numerous extra stages for the most challenging life science applications; Adapter for 120 mm transmitted light inserts	IsoPro™ xy stage with optimized image plane (image plane and illumination settings are retained); Ergo accessories and numerous extra stages for the most challenging life science applications; Adapter for 120 mm transmitted light inserts	Extra stages for the most challenging life science applications; Adapter for 120 mm transmitted light inserts
340×390×95	340×440×95	412×341×46

Accessories

Designation	4×/Universal stage	Adapter for 160× 110 mm accessories	Adapter for 120 mm stages	Leica MATS TL with control unit
Article number	10 447 392	10 447 391	10 447 276	10 447 275
Description	Additional universal stage; Standard delivery: base plate, magnetic guide rails with metric scale, two pairs of magnetic fasteners for a wide variety of specimen slides	Simple adaptation of Leica Live on Stage accessories for the most challenging life science applications	This adapter enables Petri dishes and other accessories with a diameter of 120 mm to be used	Precise heat distribution and excellent temperature stability at min. tolerances (± 0.2°C) enable temperature-sensitive experiments to be effectively carried out in a professional manner
Compatible with				
Incident light base 10 446 340	–	–	–	–
Incident light base 10 447 342	–	–	–	–
Incident light base 10 450 049	–	–	–	–
TL4000 ST	X	X	X	X
TL4000 BFDF / RC™/ RCI™ with xy stage (10 450 127 / 10450 218)	X	X	X	X
TL4000 BFDF / RC™/ RCI™ with standard stage (10 450 562)	X	X	X	X
TL5000 Ergo	X	X	X	X

Designation	ErgoRest™	Cup stage, 120 mm	Universal carrier, 120 mm	Analyzer
Article number	10 447 431	10 446 303	10 446 304	10 450 065
Description	The ErgoRest™ support enables even more precise working without fatigue; It can be engaged in two positions at the base	Petri dishes, and spatial objects such as plants and insects, can be attached to the surface and studied from all sides	The universal carrier enables specific devices to be assembled on the stands	Analyzer with revolving assembly for 80 mm planachromats and planapochromats
Compatible with				
Incident light base 10 446 340	–	X	X	X
Incident light base 10 447 342	–	X	X	X
Incident light base 10 450 049	–	X	X	X
TL4000 ST	X	X (with adapter 10 447 276)	X (with adapter 10 447 276)	X
TL4000 BFDF / RC™/ RCI™ with xy stage (10 450 127 / 10450 218)	X	X (with adapter 10 447 276)	X (with adapter 10 447 276)	X
TL4000 BFDF / RC™/ RCI™ with standard stage (10 450 562)	X	X (with adapter 10 447 276)	X (with adapter 10 447 276)	X
TL5000 Ergo	X	X (with adapter 10 447 276)	X (with adapter 10 447 276)	X

IsoPro™ xy stage	**Standard stage**	**Micromanipulation adapter**	**IsoPro™ adapter, 120 mm**
10 450 127 / 10 450 218	10 450 562	11 101 784	10 450 122
xy stages specifically designed for Leica transmitted light bases, the optical plane is identical to that of a standard stage; Control elements can be mounted left/right (manual version), very easy assembly, accuracy 2 µm	The standard stage is a low cost alternative to the xy stage; the large glass plate prevents fluids from penetrating, and at the same time serves as a resting surface for specimens that are not being examined	With this adapter, Leica stereomicroscopes can be used for micromanipulator applications such as ICSI, transfection, and electrophysiological experiments	Adapter for assembling xy stage 10 450 218 or 10 450 127 on incident light base 10 450 049
–	–	X	–
–	–	X	X
	–	X	X
–	–	X	–
X	X	X	–
X	X	X	–
–	–	X	–

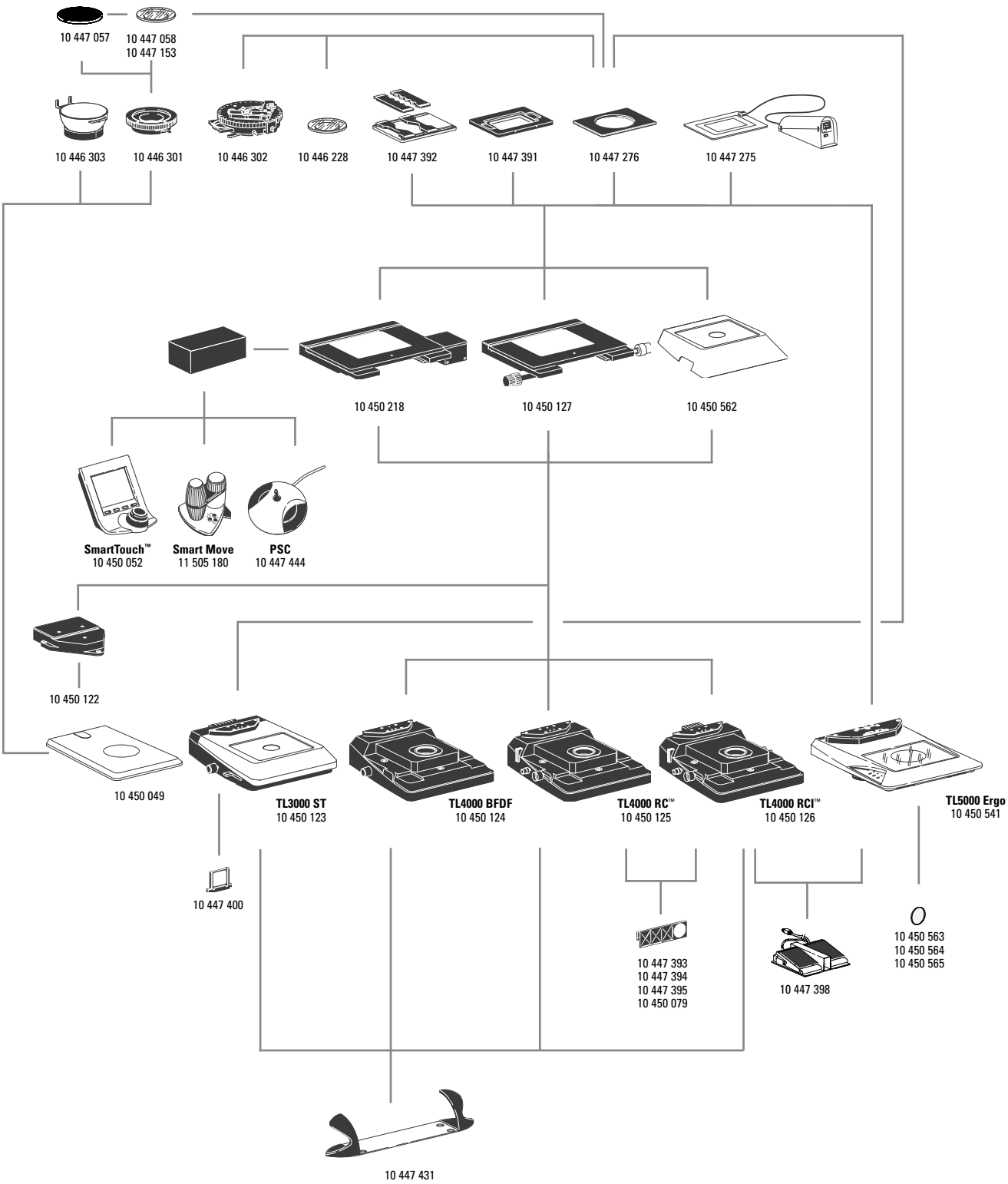
Glass insert with Pol, 120 mm	**Polarization stage, 120 mm**	**Polarization filter for TL5000 Ergo**	**Milk glass filter for TL5000 Ergo**
10 446 228	10 446 302	10 450 565	10 450 563
The polarization insert makes it possible to see and analyze the double refraction of light for materials such as crystals, stones, minerals, bones, polymers, glass, and crystalline fluids	The polarization stage increases precision and comfort when analyzing double-refracting materials due to its sensitive bearing and the scale for the angle of rotation	The polarization insert makes it possible to see and analyze the double refraction of light for materials such as crystals, stones, minerals, bones, polymers, glass, and crystalline fluids	
X	X	–	–
X	X	–	–
X	X	–	–
X (with adapter 10 447 276)	X (with adapter 10 447 276)	–	–
X (with adapter 10 447 276)	X (with adapter 10 447 276)	–	–
X (with adapter 10 447 276)	X (with adapter 10 447 276)	–	–
X (with adapter 10 447 276)	X (with adapter 10 447 276)	X	X

Accessories

Designation	**Green filter for TL5000 Ergo**	**Gliding stage, 120 mm**	**Daylight filter**	**Filters for TL RC™/ RCI™**
Article number	10 450 564	10 446 301	10 447 400	10 447 393
Description	The green filter is specially designed for applications in the area of in vitro fertilization	Specimens can be accurately displaced and turned. This gliding stage is used with the stage plate, black/white, a clear glass insert or a cup stage	Highly tempered daylight filter for the TL ST transmitted light base; Cuts off the UV and infrared spectrum and raises the color temperature	BG38 filter; The TL RC™ and TL RCI™ transmitted light bases can be equipped with up to three filters simultaneously
Compatible with				
Incident light base 10 446 340	–	X	–	–
Incident light base 10 447 342	–	X	–	–
Incident light base 10 450 049	–	X	–	–
TL4000 BFDF / RC™/ RCI™ with xy stage (10 450 127 / 10450 218)	–	X (with adapter 10 447 276)	X	X
TL4000 BFDF / RC™/ RCI™ with standard stage (10 450 562)	–	X (with adapter 10 447 276)	–	X
TL5000 Ergo	X	X (with adapter 10 447 276)	–	–

Filters for TL RC™/ TL RCI™	**Filters for TL RC™/ TL RCI™**	**Foot switch**
10 447 394	10 447 395	10 447 398
UV filter; The TL RC™ and TL RCI™ transmitted light bases can be equipped with up to three filters simultaneously	ND filter (neutral gray) The TL RC™ and TL RCI™ transmitted light bases can be equipped with up to three filters simultaneously	Foot switch for regulating the brightness and color temperature of the TL RCI™ transmitted light base and motorized components such as the Z6/Z16 APO A etc.
–	–	TL RCI™ transmitted light base
–	–	–
–	–	–
X	X	X
X	X	X
–	–	X

Assembly Diagram



System articles

INCIDENT LIGHT BASES

10 446 340	Transmitted light base for S series
10 446 341	Sub-base for transmitted light for S series incident light base
10 447 342	Medium incident light base for M series
10 450 049	Large incident light base for M series
10 450 123	TL3000 ST transmitted light base with integrated halogen illumination
10 450 124	TL4000 BFDF transmitted light base for external cold light sources
10 450 125	TL4000 RC™ transmitted light base with integrated halogen illumination
10 450 126	TL4000 RCI™ transmitted light base for external cold light sources
10 450 541	TL5000 Ergo transmitted light base with integrated LED illumination

STAGES

10 450 562	Standard stage for TL4000 BFDF (10 450 124), TL4000 RC™ 10 450 125) and TL4000 RCI™ (10 450 126) transmitted light bases
10 361 719	Sensitive-tint plate for Pol rotating stage
10 382 130	Attachable mechanical stage for polarization stage
10 447 057	Stage plate b/w, 120 mm
10 447 058	Clear glass insert, 120 mm
10 447 153	Matte glass insert, 120 mm
10 446 228	Glass insert with pol, 120 mm
10 446 301	Gliding stage, 120 mm
10 446 302	Polarization stage, 120 mm
10 446 303	Cup stage, 120 mm
10 446 304	Universal carrier, 120 mm
10 447 275	Leica MATS TL thermal stage with control unit
10 447 276	Adapter for stages with 120 mm
10 447 391	Table for 160×110 mm accessories
10 447 392	Universal carrier for Petri dishes, specimen slides (up to four), etc.
10 450 127	xy stage for TL4000 BFDF (10 450 124), TL4000 RC™ (10 450 125), TL4000 RCI™ (10 450 126) transmitted light bases and incident light base (10 450 049, adapter 10 450 122 required)
10 450 218	Motorized xy stage for TL4000 BFDF (10 450 124), TL4000 RC™ (10 450 125), TL4000 RCI™ (10 450 126) transmitted light bases and incident light base (10 450 049, adapter 10 450 122 required)
10 450 052	SmartTouch™, external control unit with integr. touchscreen for status control and control of all settings and functions
11 505 180	Leica SmartMove control unit for Leica IsoPro™ motorized mechanical stage
10 447 444	Leica PSC control unit for Leica IsoPro™ motorized mechanical stage
11 101 784	Column adapter for micromanipulation

FOCUSING DRIVE WITH 300 MM PROFILE COLUMN FOR INCIDENT AND TRANSMITTED LIGHT BASES

10 450 172	Focusing drive with 500 mm profile column for incident and transmitted light bases
10 450 299	Focusing drive, coarse/fine, with 300 mm profile column for incident and transmitted light bases
10 450 300	Focusing drive, coarse/fine, with 500 mm profile column for incident and transmitted light bases
10 450 128	Focusing drive, coarse/fine
10 450 504	Focus drive, coarse/fine, with 420 mm profile column
10 450 505	Focus drive, coarse/fine, with 620 mm profile column
10 450 502	Motorized focus with 420 mm profile column
10 450 503	Motorized focus with 620 mm profile column

FILTERS

10 447 400	Daylight filter for TL3000 ST transmitted light base
10 450 079	Daylight filter for TL4000 RC™ / RCI™ transmitted light base
10 447 393	ND filter (neutral density filter) for TL4000 RC™/ RCI™ transmitted light base
10 447 394	BG38 filter for TL4000 RC™/ RCI™ transmitted light base
10 447 395	UV filter for TL4000 RC™/ RCI™ transmitted light base
10 450 563	Milk glass filter for TL5000 Ergo
10 450 564	Green filter for TL5000 Ergo
10 450 565	Polarization filter for TL5000 Ergo

ILLUMINATORS

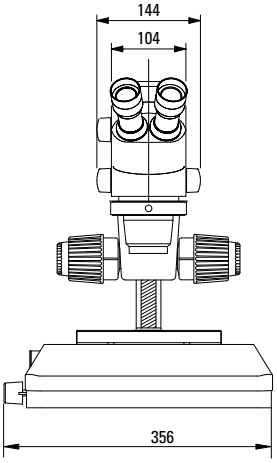
10 447 398	Foot switch with CAN-bus connection

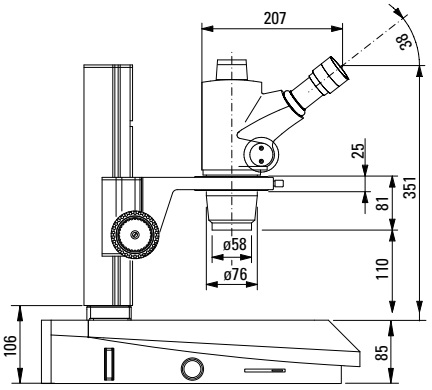
ERGONOMIC ACCESSORIES

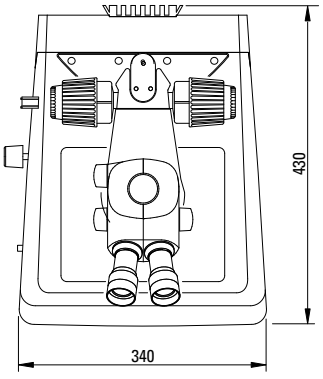
10 447 431	Leica ErgoRest™ (handrest for fatigue-free work)

Dimensions of Leica TL3000 ST

with Leica S6 D stereomicroscope

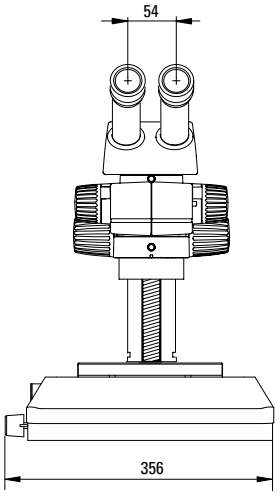


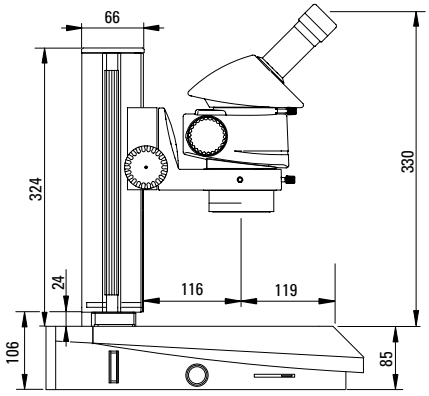


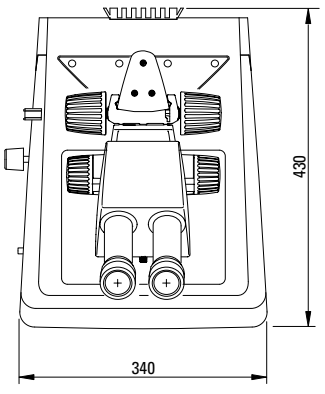


Dimensions of Leica TL3000 ST

with Leica M60 stereomicroscope

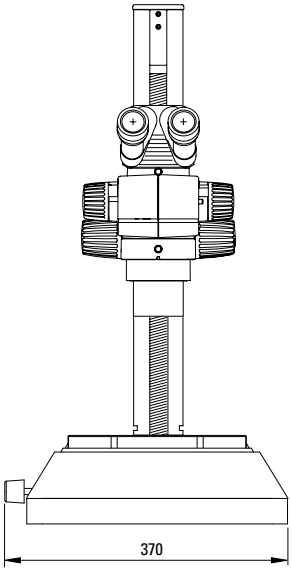


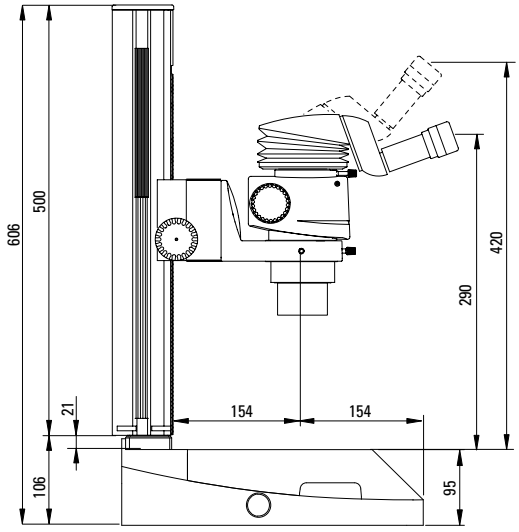


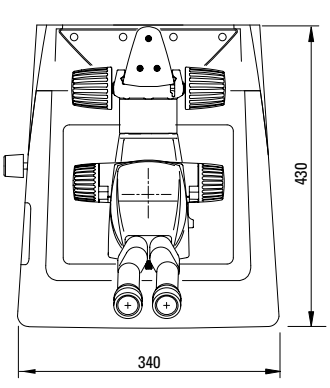


Dimensions of Leica TL4000 BFDF

with Leica M80 stereomicroscope

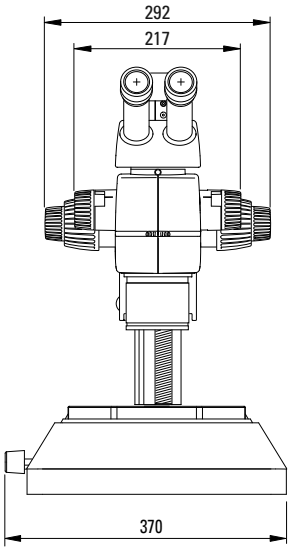


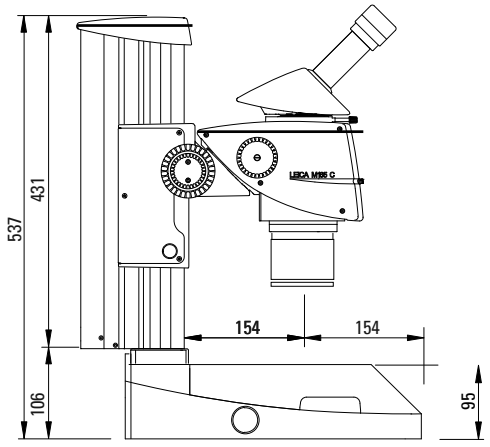


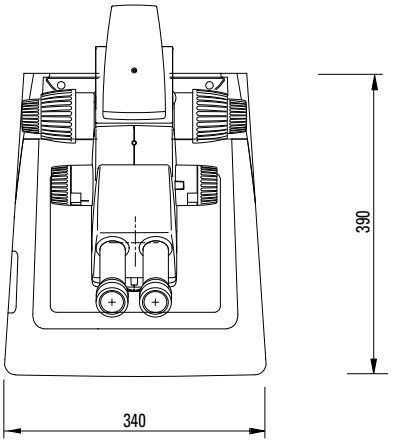


Dimensions of Leica TL4000 BFDF

with Leica M165 C stereomicroscope

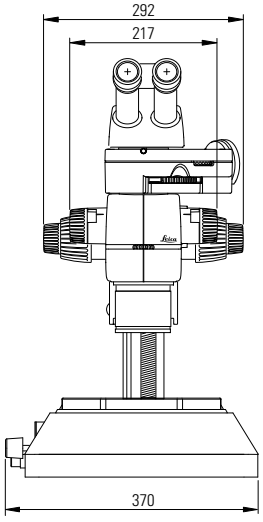


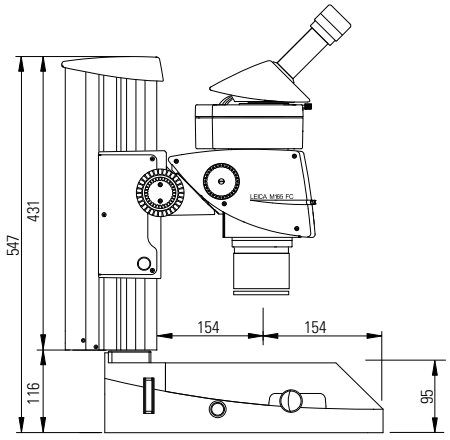


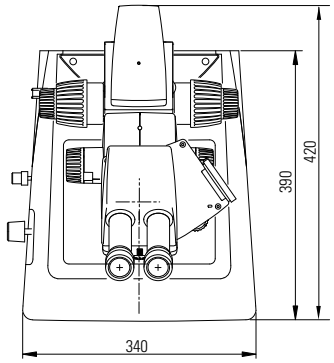


Dimensions of Leica TL4000 RC™

with Leica M165 FC stereomicroscope

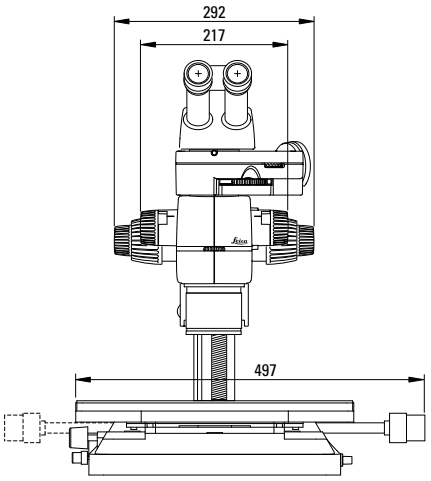


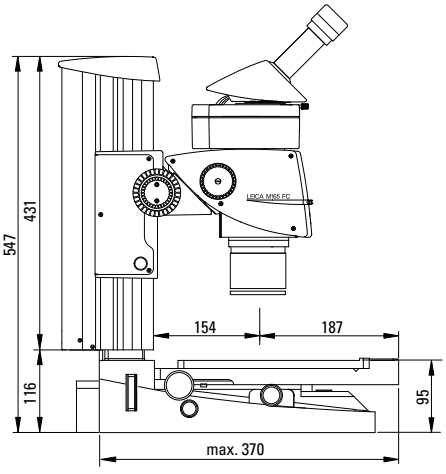


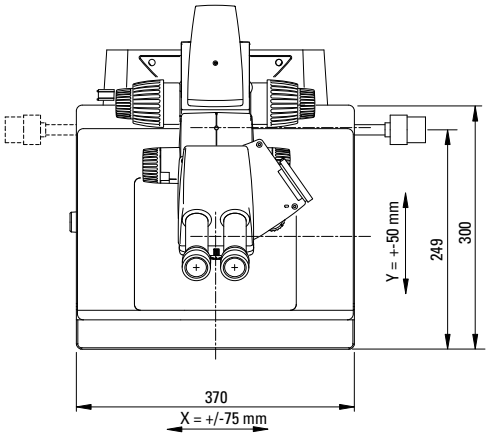


Dimensions of Leica TL4000 RC™

with Leica M165 FC stereomicroscope and manual xy stage

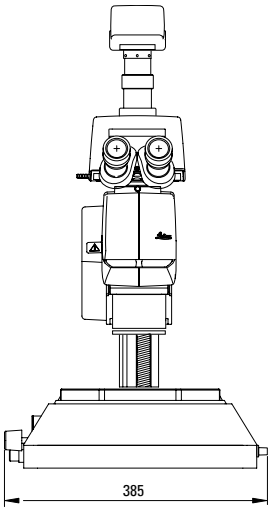


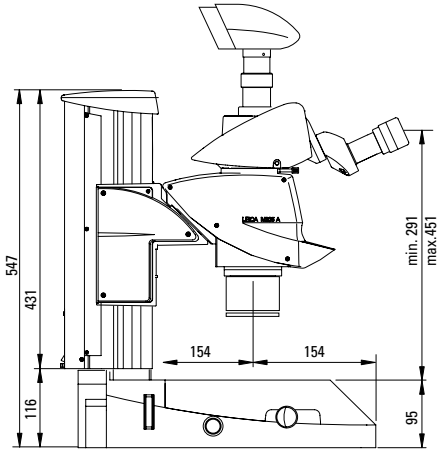


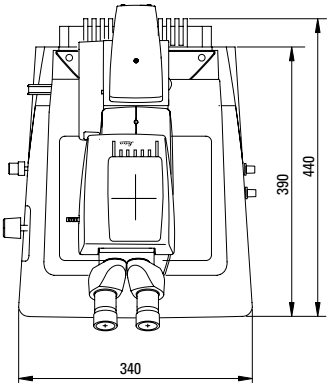


Dimensions of Leica TL4000 RCI™

with Leica M205 A stereomicroscope

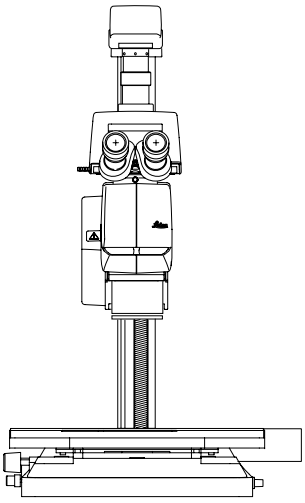


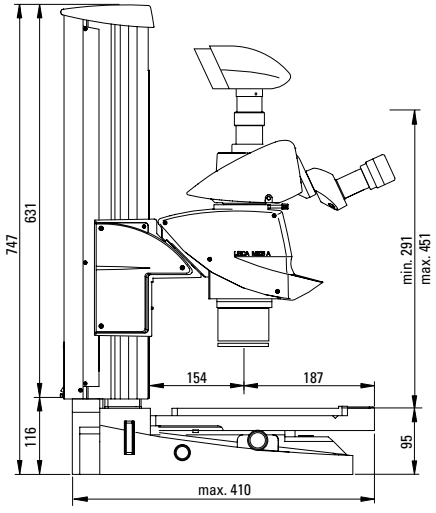


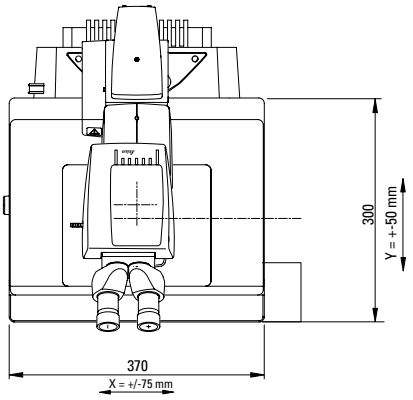


Dimensions of Leica TL4000 RCI™

with Leica M205 A stereomicroscope and manual xy stage

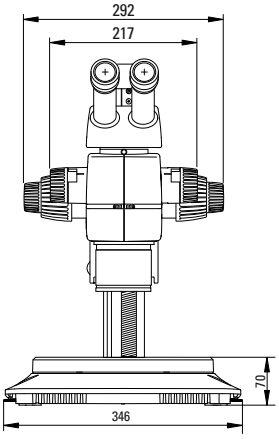


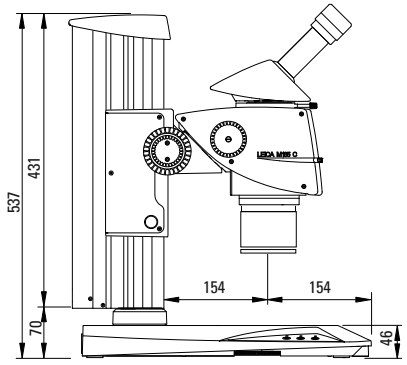


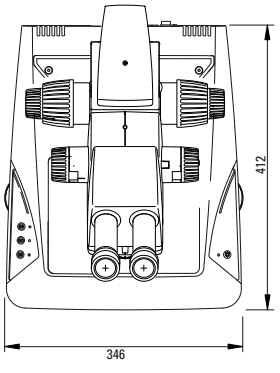


Dimensions of Leica TL5000 Ergo

with Leica M165 C stereomicroscope

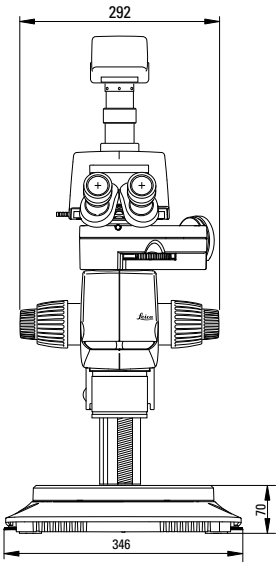


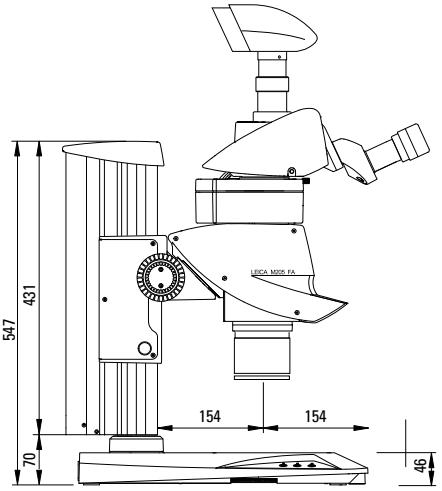


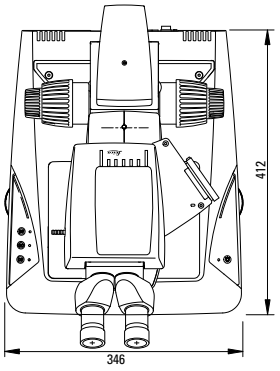


Dimensions of Leica TL5000 Ergo

with Leica M205 FA stereomicroscope

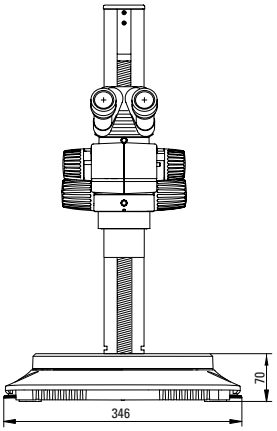


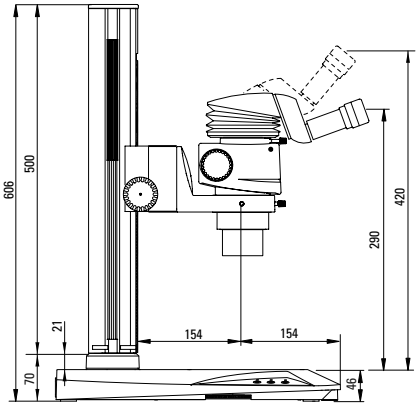


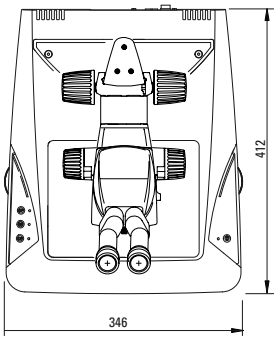


Dimensions of Leica TL5000 Ergo

with Leica M80 stereomicroscope

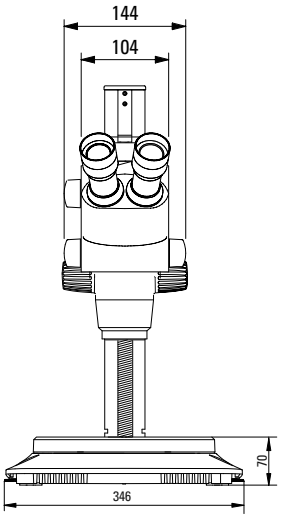


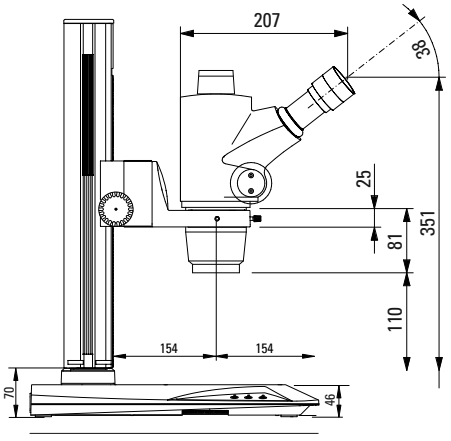


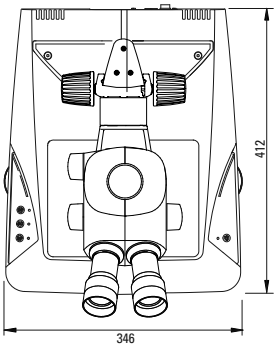


Dimensions of Leica TL5000 Ergo

with Leica S8 APO stereomicroscope and manual xy stage







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