From Eye to Insight

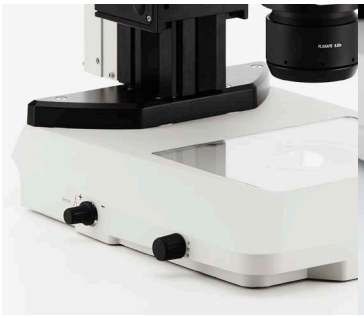
Leica MICROSYSTEMS

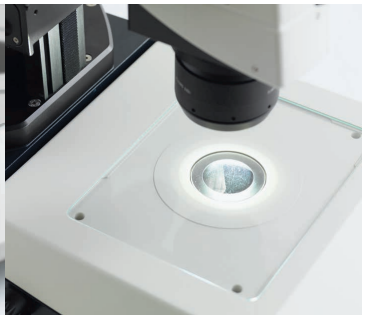
Leica TL Bases

TECHNICAL INFORMATION

TL3000 Ergo
TL5000 Ergo
TL4000 BFDF

BASES





	TL3000 Ergo transmitted light base	**TL5000 Ergo transmitted light base**	**TL4000 BFDF transmitted light base**
Illumination source	LED light source with constant color temperature	LED light source with constant color temperature	Illumination using external cold light sources with light guide
Illumination modes	Bright field, one-sided Rottermann Contrast and one-sided dark field	Bright field, double-sided dark field, oblique light Relief Contrast System (RC) with positive or negative relief contrast presentation for unstained phase specimens	Bright field, dark field
Control of the transmitted light	One knob to move a contrasting element in front of the LED. The shaped light is reflected by a parabolic mirror through the sample.	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.	Fixed mirror, switchover between bright field and dark field position
Illuminated area	65 mm	65 mm	40 mm
Control of the illumination	The coded light source can be controlled with the potentiometer. LAS and LAS X software can control the lamp and the intensity. One can also use a SmartTouch. A footswitch can be used to switch the lamp quickly. Direct activation possible using LAS and LAS X 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 LAS and LAS X software	Control of color temperature and light intensity with external light source; Direct activation possible with the LAS and LAS X software
Filtering	Several filter inlays are available. Filters are placed under the glass plate. Currently we offer clear glass, frosted glass, polarization, green and halogen conversion filter.	Several filter inlays are available. Filters are placed under the glass plate. Currently we offer clear glass, frosted glass, polarization, green and halogen conversion filter.	–
Accessories	Adapter for 120 mm transmitted light inserts, scanning stage, MATS TPX heating insert, cell culture incubation, manual and motorized scanning stages	Extra stages for the most challenging life science applications; Adapter for 120 mm transmitted light inserts, MATS TPX heating insert	Scanning stages 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)	340×70×371	412×46×341	340×90×390

ACCESSORIES

Designation	**Adapter for 120 mm stages**	**MATS TPX with control unit**
Article number	10 447 276	11 533 269
Description	To mount accessories with 120 mm diameter (e.g. cup stage, oil gliding stage, pol rotation stage)	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. External feedback electrode, unbreakable glass
Compatible with		
Incident light base 10 446 340	–	–
Incident light base 10 447 342	–	–
Incident light base 10 450 049	–	–
TL3000 Ergo	X	X
TL5000 Ergo	X	X
TL4000 BFDF	X	X

Designation	**Cup stage, ∅ 120 mm**	**Large rotatable cup stage, ∅ 120 mm**	**LED3000 BLI**
Article number	10 446 303	33 000 600	10 450 661
Description	Petri dishes, and spatial objects such as plants and insects, can be attached to the surface and studied from all sides, requires adapter 10 447 276	The large rotating cup stage can be used to tilt samples and turn them to study them easily from all sides	Backlight illumination for IL bases 120 mm ∅, 36 LEDs, 77 mm ∅ for the backlight 6,000 K color temperature, size: 220 × 170 mm, control of illumination with inductive touch panel. Coded, usage as stand-alone device possible
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
TL3000 Ergo	X (with adapter 10 447 276)	X (with adapter 10 447 276)	–
TL5000 Ergo	X (with adapter 10 447 276)	X (with adapter 10 447 276)	–
TL4000 BFDF	X (with adapter 10 447 276)	X (with adapter 10 447 276)	–

ACCESSORIES

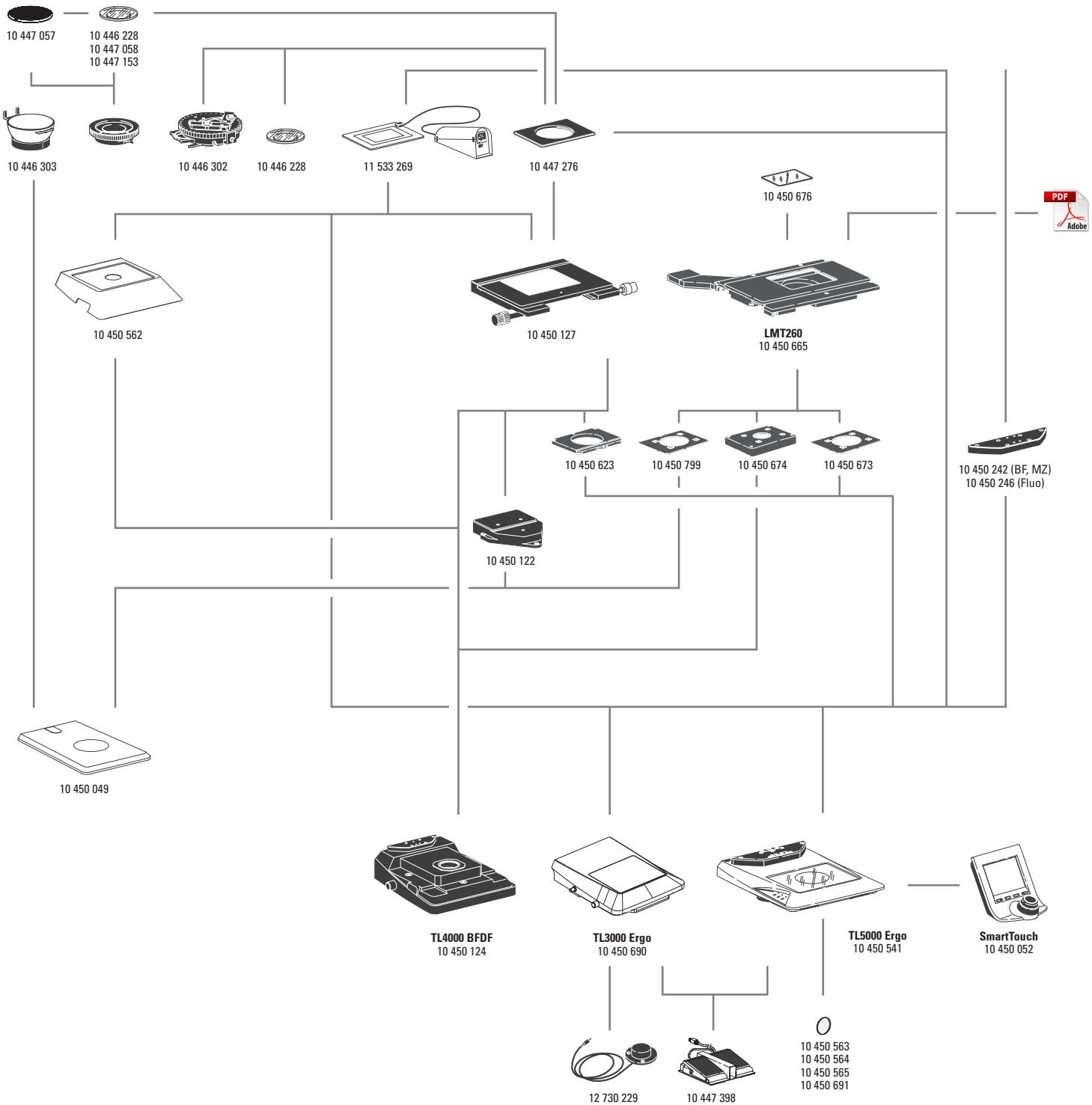
Designation	IsoPro xy stage	Standard stage	Micromanipulation adapter NL-17	Micromanipulation adapter NL-16-2
Article number	10 450 127 / 10 450 218	10 450 562	11 532 874	11 532 833
Description	xy stages specifically designed for Leica transmitted light bases, the optical plane is identical to that of 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 stereo microscopes can be used for micromanipulator applications such as ICSI, transfection, and electrophysiological experiments	Adapter for micromanipulators with different layout
Compatible with				
Small incident light base 10 446 340	–	–	–	X
Medium incident light base 10 447 342	–	–	–	X
Large incident light base 10 450 049	X (with adapter 10 450 122)	–	–	X
TL3000 Ergo	X (with adapter 10 450 623)	–	X	X
TL5000 Ergo	X (with adapter 10 450 623)	–	X	X
TL4000 BFDF	X	X	X	X

Designation	Glass insert with pol, ∅ 120 mm	Polarization stage, ∅ 120 mm
Article number	10 446 228	10 446 302
Description	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 rotatable pol insert is needed to analyze double refractive materials. It can be centered to the optical axis of the microscope. Due to it's sensitive bearing and the scale it is partially matched for quantitative polarization. A rotatable lambda plate and a x/y object guide are available as accessories.
Compatible with		
Incident light base 10 446 340	X	X
Incident light base 10 447 342	–	–
Incident light base 10 450 049	–	–
TL3000 Ergo	X (with adapter 10 447 276)	X (with adapter 10 447 276)
TL5000 Ergo	X (with adapter 10 447 276)	X (with adapter 10 447 276)
TL4000 BFDF	X (with adapter 10 447 276)	X (with adapter 10 447 276)

Designation	Oil-gliding stage, ∅ 120 mm	Footswitch	Footswitch
Article number	10 446 301	10 447 398	12 730 229
Description	Specimens can be accurately displaced and turned. This gliding stage is used with the stage plate, black/white, a clear glass insert, a pol insert, or a cup stage	Footswitch for regulating the brightness of the transmitted light base of the TL3000 Ergo / TL5000 Ergo and motorized components of the stereo microscopes	This footswitch can be used to shutter the TL3000 Ergo light. Length of cord 2.5 m
Compatible with			
Incident light base 10 446 340	X	–	–
Incident light base 10 447 342	X	–	–
Incident light base 10 450 049	X	–	–
TL3000 Ergo	X (with adapter 10 447 276)	X	X
TL5000 Ergo	X (with adapter 10 447 276)	X	–
TL4000 BFDF	X (with adapter 10 447 276)	–	–

Designation	Milk glass filter for TL3000 Ergo and TL5000 Ergo	Green filter for TL3000 Ergo and TL5000 Ergo	Polarization filter for TL3000 Ergo and TL5000 Ergo	Halogen conversion filter for TL3000 Ergo and TL5000 Ergo
Article number	10 450 563	10 450 564	10 450 565	10 450 691
Description		The green filter is specially designed for applications in the area of in vitro fertilization	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	This insert reduces the blue peaks and improves contrast for c. elegans and IVF
Compatible with				
Incident light base 10 446 340	–	–	–	–
Incident light base 10 447 342	–	–	–	–
Incident light base 10 450 049	–	–	–	–
TL3000 Ergo	X	X	X	X
TL5000 Ergo	X	X	X	X
TL4000 BFDF	–	–	–	–

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

TRANSMITTED LIGHT BASES

10 450 690	TL3000 Ergo transmitted light base with integrated LED illumination
10 450 541	TL5000 Ergo transmitted light base with integrated LED illumination
10 450 124	TL4000 BFDF transmitted light base for external cold light sources

STAGES

10 450 562	Standard stage for TL4000 BFDF (10 450 124)
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
11 533 269	MATS TPX thermal stage with control unit
10 447 276	Adapter for stages with ∅ 120 mm
10 447 391	Table for 160×110 mm accessories
10 450 127	xy stage for TL4000 BFDF (10 450 124), transmitted light base, and incident light base (10 450 049, adapter 10 450 122 required)
10 450 665	LMT260 xy scanning stage
10 450 052	SmartTouch, external control unit with integr. touchscreen for status control and control of all settings and functions
11 532 874	Narishige Adapter for MM

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

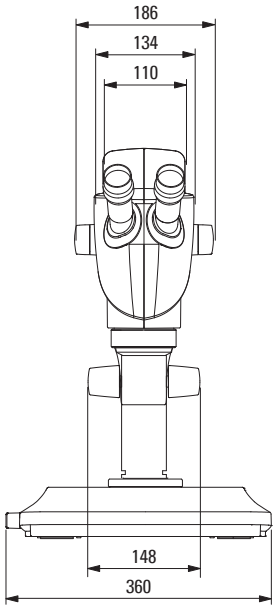
10 450 563	Milk glass filter for TL5000 Ergo
10 450 564	Green filter for TL5000 Ergo
10 450 565	Polarization filter for TL5000 Ergo
10 450 691	Halogen conversion filter

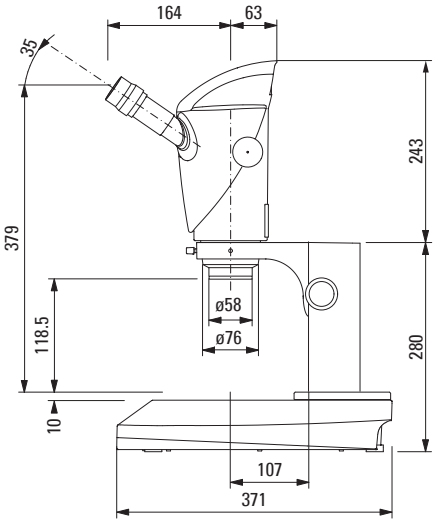
ILLUMINATORS

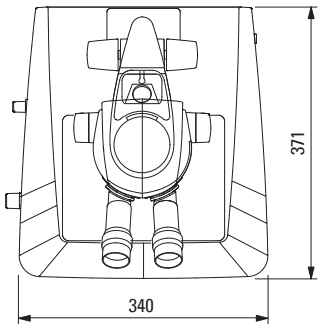
10 447 398	Footswitch with CAN-bus connection

DIMENSIONS TL3000 ERGO

with S9 i stereo microscope

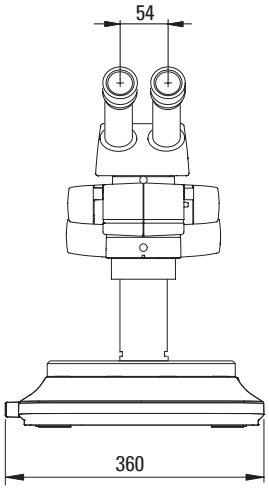


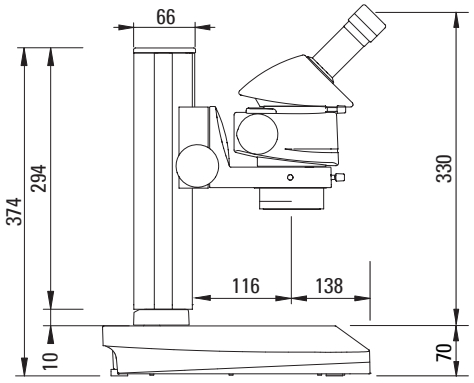


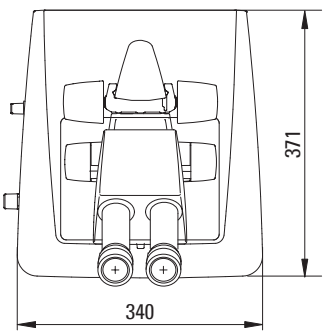


DIMENSIONS TL3000 ERGO

with M60 stereo microscope

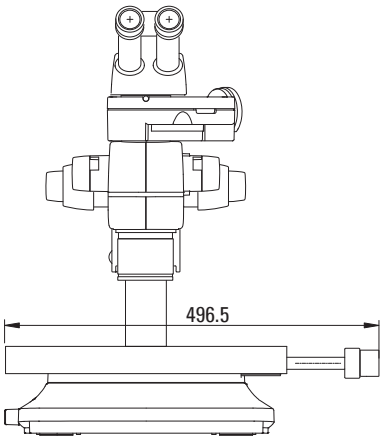


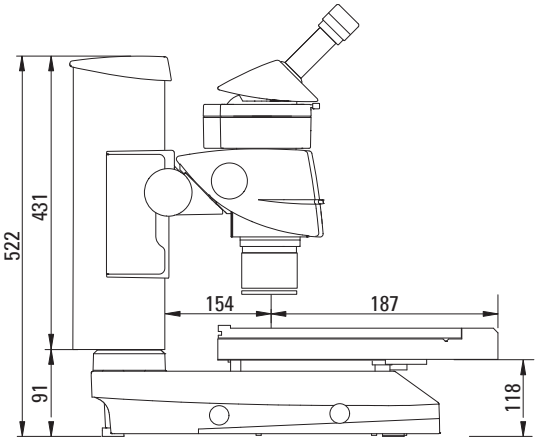


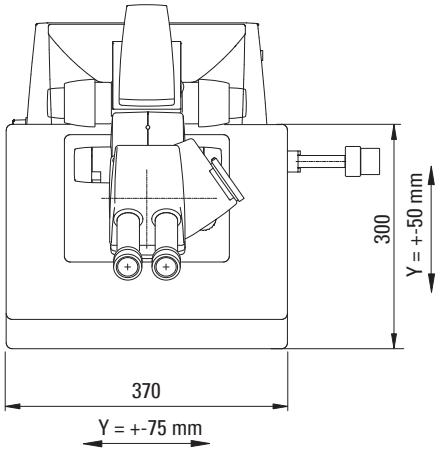


DIMENSIONS TL3000 ERGO

with M165 FC stereo microscope and manual xy stage

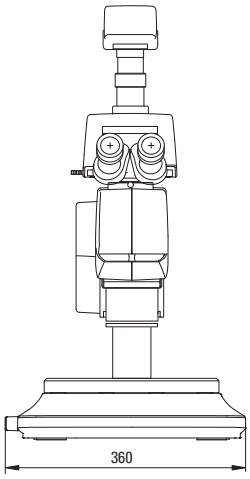


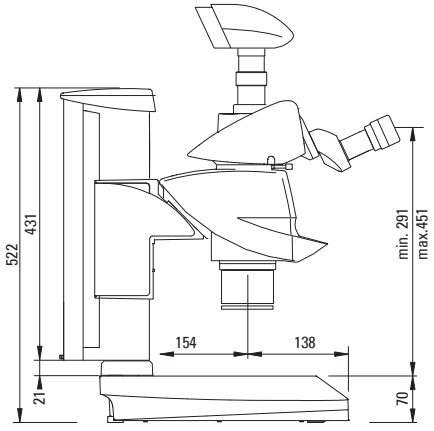


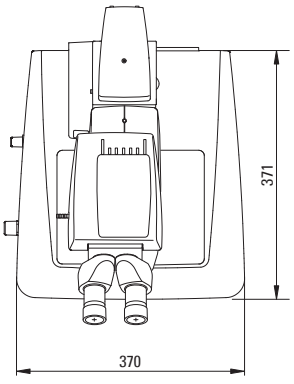


DIMENSIONS TL3000 ERGO

with M205 A stereo microscope

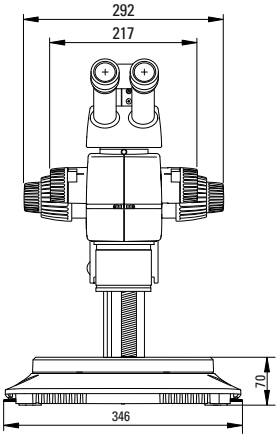


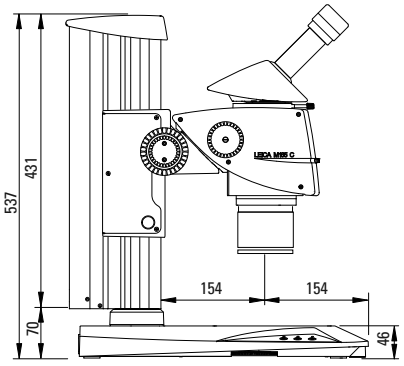


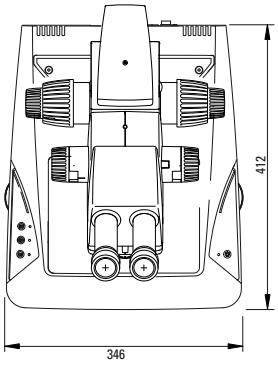


DIMENSIONS TL5000 ERGO

with M165 C stereo microscope

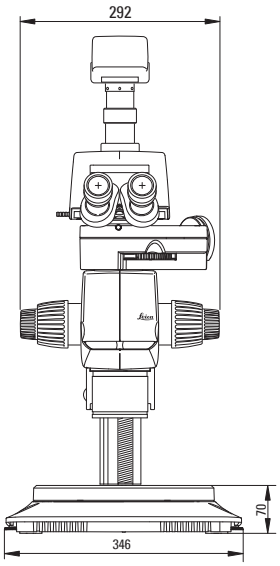


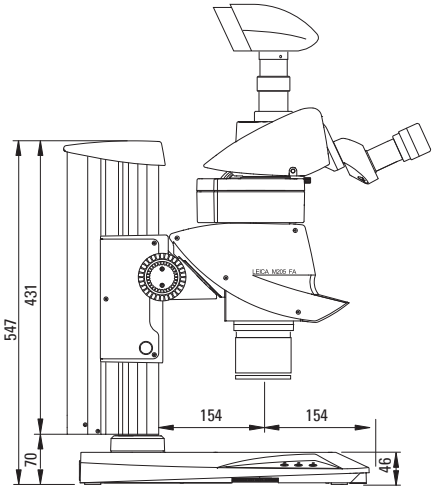


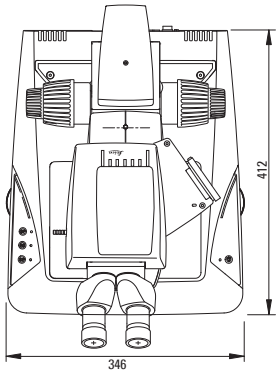


DIMENSIONS TL5000 ERGO

with M205 FA stereo microscope

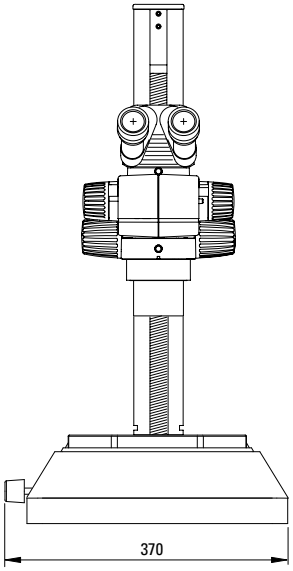


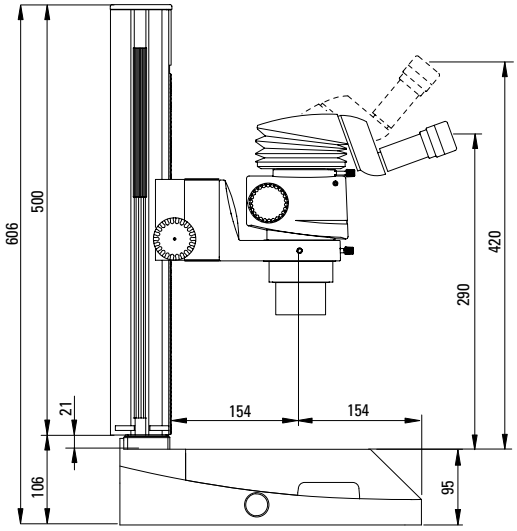


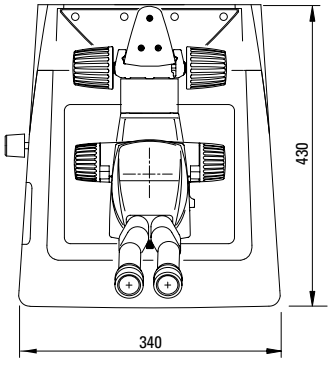


DIMENSIONS TL4000 BFDF

with M80 stereo microscope

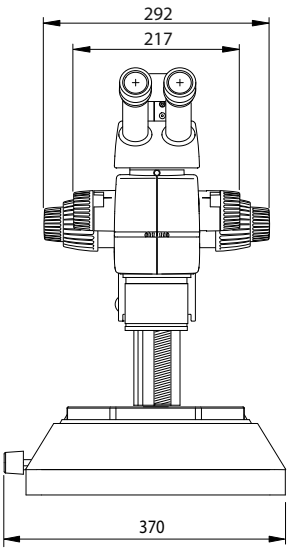


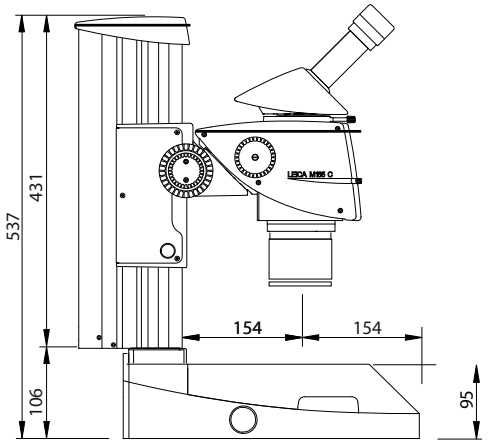


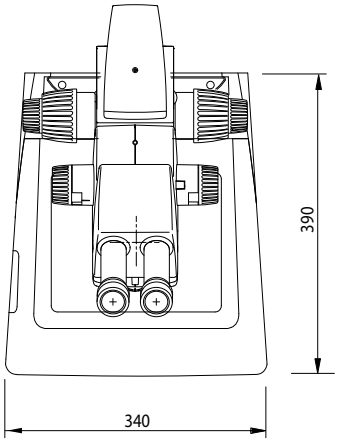


DIMENSIONS TL4000 BFDF

with M165 C stereo microscope







CONNECT
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