Leica Incident Light and Transmitted Light Stands

for Stereomicroscopes and Macroscopes
Technical Information

Leica

MICROSYSTEMS

Transmitted Light Stands: Performance Features

	Transmitted Light Stand TL ST	Transmitted Light Stand TL BFDF
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	Brightfield, darkfield on one side	Brightfield, darkfield
Transmitted light control	Mirror position can be adjusted; the tilting angle of the mirror is then automatically regulated to the ideal transmitted light position.	Fixed mirror, switchover between brightfield and darkfield position
Illuminated area	50mm	40mm
Illumination control	Control of the light intensity with potentiometer	Control of color temperature and light intensity using external light source Direct control using Leica Application Suite (LAS) software is possible
Filtering	Integrated filter holder for fitting with special daylight filters (10 447 400)	–
Accessories	Ergo accessories and numerous extra stages for the most challenging life science applications Adapter for 120mm transmitted light inserts	IsoPro™ cross-stage with optimized image level (image level and illumination settings remain unchanged) Ergo accessories and numerous extra stages for the most demanding life science applications Adapter for 120mm transmitted light inserts
Dimensions (W×H×D, in mm)	340×430×85	340×390×90

	Transmitted Light Stand TL RC™	Transmitted Light Stand TL RCI™
Illumination source	Illumination using external cold light sources with light cable	Halogen lamp 12V/20W with the effective power of conventional 35W lamps
Illumination modes	Brightfield, darkfield on one side, oblique lighting Relief Contrast System (RC™) with positive or negative relief contrast presentation for phase preparations without artificial coloring	Brightfield, darkfield on one side, oblique lighting Relief Contrast System (RC™) with positive or negative relief contrast presentation for phase preparations without artificial coloring
Control of the transmitted light	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
Illuminated area	35mm	35mm
Control of the illumination	Control of color temperature and light intensity using external light source Direct control using Leica Application Suite (LAS) software is possible	Separate control of color temperature and light intensity with CCIC technology, controlled by electronic potentiometer, electronic shutter with memory function (returns to previously selected settings after interrupting work) Direct control using Leica Manual Control UMC, Leica USB mouse and/or Leica Application Suite (LAS) software possible
Filtering	Integrated filter holder for fitting up to three filters (accessories) at the same time	Integrated filter holder for fitting up to three filters at the same time
Accessories	IsoPro™ cross-stage with optimized image level (image level and illumination settings remain unchanged) Ergo accessories and numerous extra stages for the most challenging life science applications Adapter for 120mm transmitted light inserts	IsoPro™ cross-stage with optimized image level (image level and illumination settings remain unchanged) Ergo accessories and numerous extra stages for the most challenging life science applications Adapter for 120mm transmitted light inserts
Dimensions (W×H×D, in mm)	340×390×95	340×440×95

Accessories

Designation	4×/Universal stage	Adapter for 160×110mm accessories	Adapter for 120mm stages
Article number	10 447 392	10 447 391	10 447 276
Description	Additional universal stage. Scope of delivery: Base Plate, magnetic guide rails with metric scale, two pairs of magnetic fixations for the most differing types of glass slide.	Simple adaptation of Leica Life on Stage accessories for the most challenging life science applications.	This adapter enables stages with a diameter of 120mm to be used on the new transmitted light stands.
Compatible with			
Incident light stand 10 446 340	–	–	–
Incident light stand 10 447 342	–	–	–
Transmitted light stand TL ST	X	X	X
Cross-stage	X	X	X
Standard stage	X	X	X

Designation	IsoPro™ adapter, ∅120mm	Leica ErgoRest™	Cup stage, ∅120mm
Article number	10 447 368	10 447 431	10 446 303
Description	Adapter for assembling cross-stage 10 446 353 on incident light stand 10 447 342.	The ErgoRest™ support enables even more precise working without fatigue. It can be notched in two positions on the base (for focusing/working on the specimen).	Petri dishes, and spatial objects such as plants and insects, can be attached to the surface and studied from all sides.
Compatible with			
Incident light stand 10 446 340	–	–	X
Incident light stand 10 447 342	X	–	X
Transmitted light stand TL ST	–	X	X (with adapter 10 447 276)
Cross-stage	–	X	X (with adapter 10 447 276)
Standard stage	–	X	X (with adapter 10 447 276)

Designation	Daylight filter	Filter for TL RC™/RCI™	Filter for TL RC™/TL RCI™
Article number	10 447 400	10 447 393	10 447 394
Description	High-tempered daylight filter for the transmitted light stand TL ST. Cuts off the UV and infrared spectrum and raises the color temperature.	BG38 Filter The transmitted light stands TL RC™ and TL RCI™ can be fitted with up to three filters at the same time.	UV-Filter The transmitted light stands TL RC™ and TL RCI™ can be fitted with up to three filters at the same time.
Compatible with		Transmitted light stand TL RC™/RCI™	Transmitted light stand TL RC™/RCI™
Incident light stand 10 446 340	–	–	–
Incident light stand 10 447 342	–	–	–
Transmitted light stand TL ST	–	–	–
Cross-stage	X	–	–
Standard stage	–	–	–

Leica MATS TL with control unit	IsoPro™ cross-stage	Standard stage	Micromanipulation adapter
10 447 275	10 446 353	10 447 269	11 101 784
The precise heat distribution and excellent temperature stability of the Leica MATS TL thermo stage with minimum tolerances (< 0.2°C) allow experiments to be carried out on temperature-dependent specimens.	A cross-stage specifically designed for Leica transmitted light stands, the optical planee is identical as opposed to a standard stage. Control elements can be mounted left/right, very easy assembly, accuracy 2 µm.	The standard stage is a low-cost alternative to the cross-stage. The large glass plate prevents fluids from penetrating, and the same time serves as a resting surface for specimens that are not being used.	By means of this adapter, Leica stereomicroscopes can be used for the most challenging applications such as ICSI, transgenics, and electrophysiological experiments.
–	–	–	X
–	X (with adapter 10 447 368)	–	X
X	–	–	X
X	X	X	X
X	X	X	X

Universal carrier, ∅120mm	Glass stage plate with pol, ∅120mm	Polarization stage, ∅120mm	Gliding stage, ∅120mm
10 446 304	10 446 228	10 446 302	10 446 301
The universal carrier enables specific working devices to be assembled on the stands.	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.	Specimens can be accurately displaced and turned. This gliding stage is used with the stage plate, black/white, a clear glass stage plate or a cup stage.
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 (with adapter 10 447 276)	X (with adapter 10 447 276)	X (with adapter 10 447 276)	X (with adapter 10 447 276)

Filter for TL RC™/TL RCI™	Leica USB mouse	Footswitch
10 447 395	10 447 443	10 447 398
ND filter (neutral gray) The transmitted light stands TL RC™ and TL RCI™ can be fitted with up to three filters at the same time.	Five-button mouse with USB connection for use on the transmitted light stand TL RCI™ or PC (using Leica Application Suite software).	Footswitch for regulating the brightness and color temperature of the transmitted light stand TL RCI™ and motorized components of stereomicroscopes such as the MZ16 A, and macroscopes such as the Z6/Z16 APO A, etc.
Transmitted light stand TL RC™/RCI™	Transmitted light stand TL RCI™	Transmitted light stand TL RCI™
–	–	–
–	–	–
–	–	X
–	–	X
–	–	X

Leica Stereomicroscope Stands

11 101 784

10 446 303

10 446 304

10 446 228

10 446 301

10 446 302
10 382 130
10 361 719

10 447 392

10 447 391

10 447 276

10 447 275

10 445 615 (300mm)
10 446 100 (500mm)

10 447 106 (300mm)
10 447 185 (500mm)

10 446 176 (300mm)
10 447 041 (500mm)

10 446 353

10 447 269

10 447 368

10 446 340

10 446 341

10 447 342

10 447 400

10 446 350

10 446 351

10 447 390

10 447 393
10 447 394
10 447 395

10 446 352

10 447 398

10 447 431

10 447 443

Scope of Delivery

Incident light stands

10 446 340	Incident light stand for S-series
10 446 341	Transmitted light stand for incident light stand for S-series
10 447 342	Incident light stand for M-series
10 446 350	Transmitted light stand TL ST
10 446 351	Transmitted light stand TL BFDF
10 447 390	Transmitted light stand TL RC™ for external cold light sources
10 446 352	Transmitted light stand TL RCI™ with integrated halogen illumination

Stages

10 447 269	Standard stage for transmitted light stands TL BFDF (10 446 351), TL RC™ (10 447 390) and TL RCI™ (10 446 352)
10 446 353	Cross-stage for transmitted light stands TL BFDF (10 446 351), TL RCI™ (10 447 390), TL RC™ (10 446 352) and incident light stand (10 447 342, adapter 10 447 368 required)
10 447 368	Adapter between cross-stage IsoPro™ (10 446 353) and incident light stand (10 447 342)
10 447 275	Thermo stage Leica MATS TL with control unit
10 447 276	Adapter for stages with ∅120mm
10 447 391	Stage for 160×110mm accessories
10 447 392	Universal carriers for Petri dishes, glass slides (up to four) etc.
11 101 784	Column adapter for micromanipulation
10 446 301	Gliding stage, ∅120mm
10 446 302	Polarization stage, ∅120mm
10 382 130	Attachable mechanical stage for polarization stage
10 361 719	Sensitive-tint plate for rotatable polarization stage
10 446 303	Cup stage, ∅120mm
10 446 304	Universal carrier, ∅120mm
10 446 228	Glass insert with pol, ∅120mm

Focusing drives

10 445 615	Focusing drive with 300mm side-faced column for incident and transmitted light stands
10 446 100	Focusing drive with 500mm side-faced column for incident and transmitted light stands
10 447 106	Focusing drive, coarse/fine, with 300mm side-faced column for incident and transmitted light stands
10 447 185	Focusing drive, coarse/fine, with 500mm side-faced column for incident and transmitted light stands
10 446 176	Motorfocus drive with 300mm column and supply unit for incident and transmitted light stands
10 447 041	Motorfocus drive with 500mm column and supply unit for incident and transmitted light stands

Filters

|	
10 447 400	Daylight filter for transmitted light stand TL ST
10 447 394	BG38 filter for transmitted light stand TL RC™/RCI™
10 447 395	UV filter for transmitted light stand TL RC™/RCI™
10 447 393	Filter ND (gray filter) for transmitted light stand TL RC™/RCI™

Illumination

10 447 443	Leica USB mouse, a five-button mouse for connecting to transmitted light stand RCI™ or to a PC
10 447 398	Footswitch with CAN-bus connection

Ergo accessories

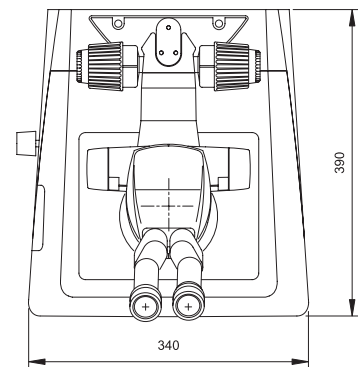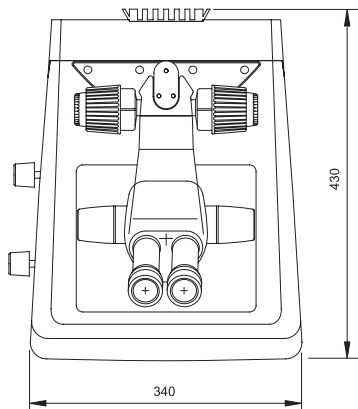|	
10 447 431	Leica ErgoRest™ (hand rest for working without fatigue)

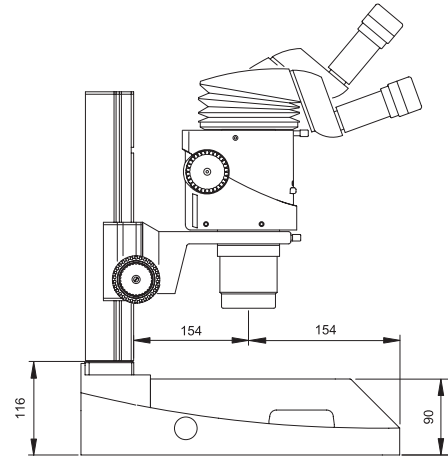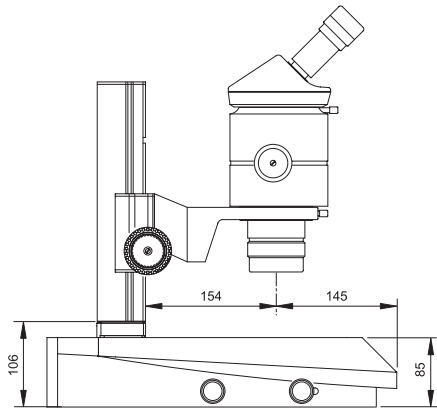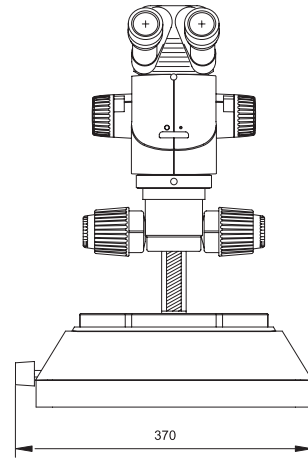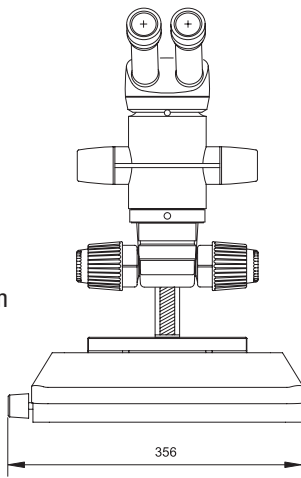# Incident Light Stand Dimensions

Dimensions in mm
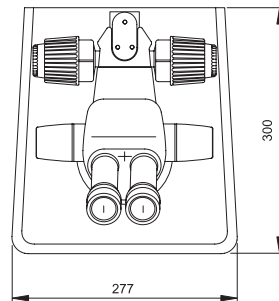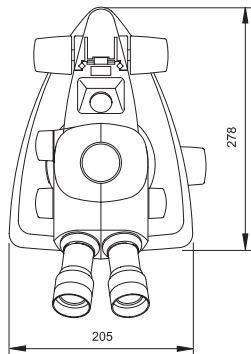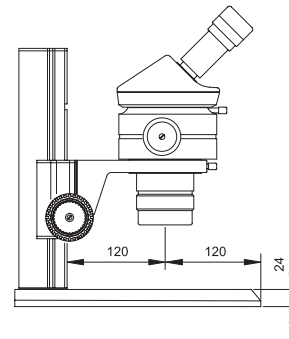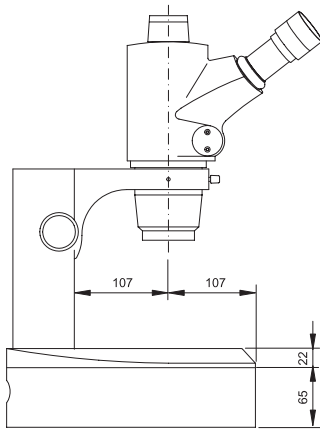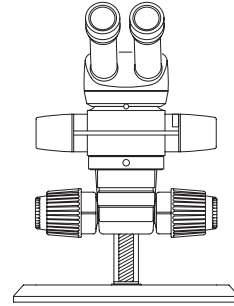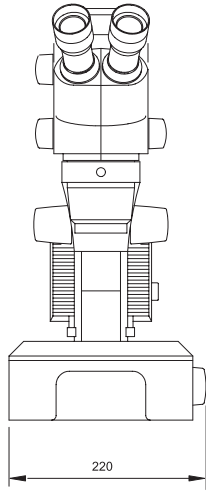
Incident light stand **10 446 340**
with Sub-base for
transmitted light **10 446 341**

Incident light stand **10 447 342**

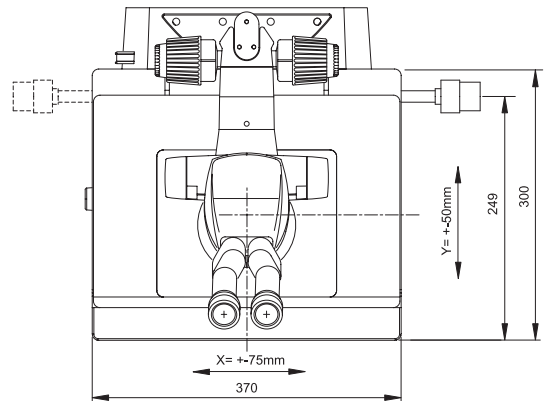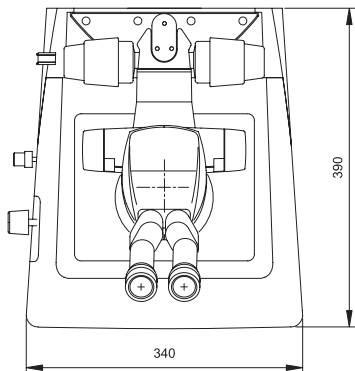# Transmitted Light Stands TL ST and TL BFDF Dimensions

Dimensions in mm

356

370

154   145

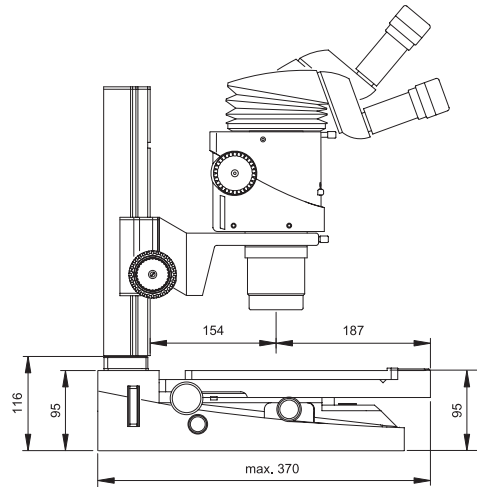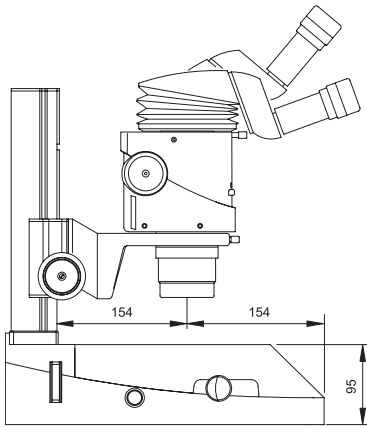106   85

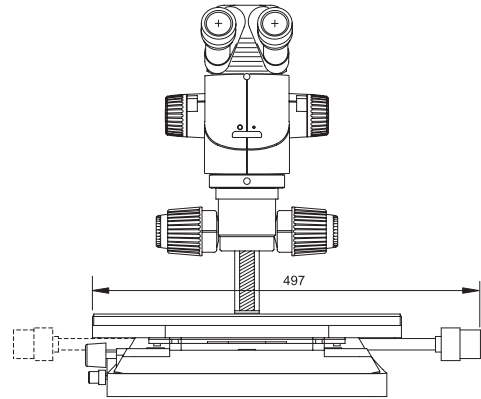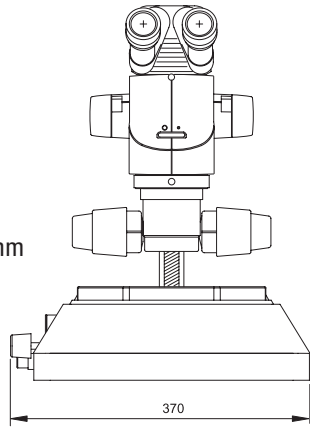154   154

116   90

430

340

390

340

Transmitted light stand TL ST

Transmitted light stand TL BFDF
with standard stage 10 447 269

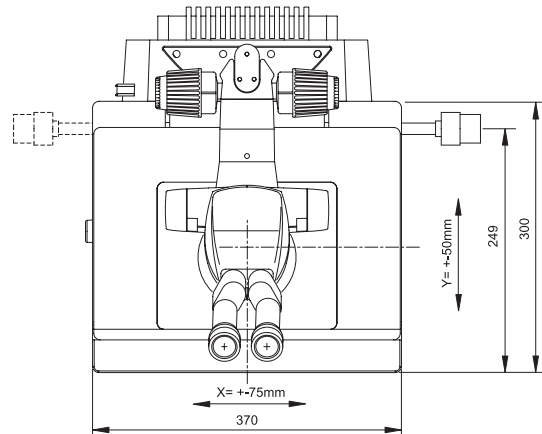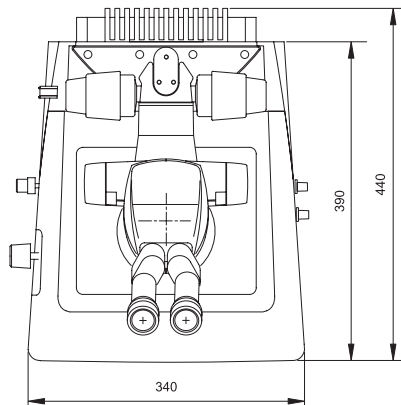# Transmitted Light Stand TL RC™ Dimensions

Dimensions in mm

370

497

154   154

95

154   187

116   95   95

max. 370

390

340

Y= +-50mm   249   300

X= +-75mm

370

Transmitted light stand TL RC™
with standard stage 10 447 269

Transmitted light stand TL RC™
with IsoPro™ cross-stage

Transmitted Light Stand TL RCI™ Dimensions

Dimensions in mm

385

497

154   154

95

154   187

116   95

max. 410

390   440

340

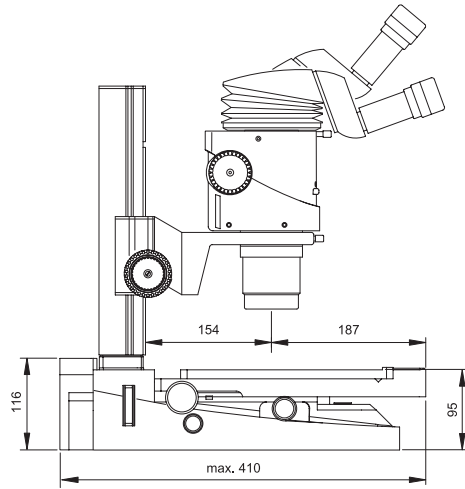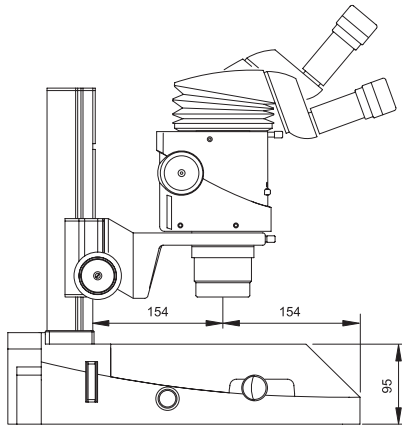Y= +-50mm   249   300

X= +-75mm

370
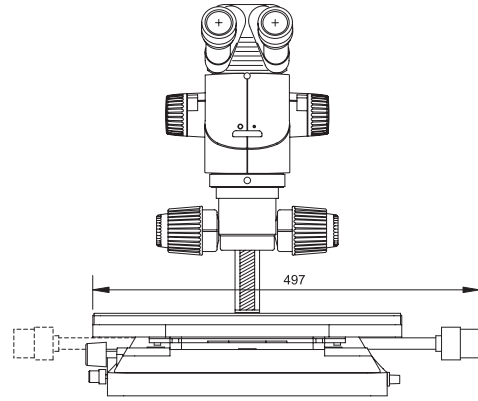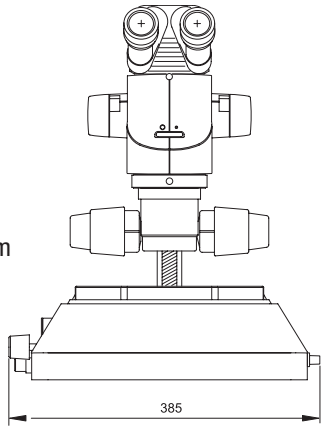
Transmitted light stand TL RCI™
with standard stage 10 447 269

Transmitted light stand TL RCI™
with IsoPro™ cross-stage

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and representatives of Leica Microsystems in more than 100 countries.

In accordance with the ISO 9001 certificate, Leica Microsystems (Switzerland) Ltd, Business Unit Stereo & Macroscope Systems has at its disposal a management system that meets the requirements of the international standard for quality management. In addition, production meets the requirements of the international standard ISO 14001 for environmental management.

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Innovative technologies in our surgical microscopes offer new therapeutic approaches in microsurgery.

● Semiconductor Equipment
Our automated, leading-edge measurement and inspection systems and our E-beam lithography systems make us the first choice supplier for semiconductor manufacturers all over the world.

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