Living up to Life

Leica
MICROSYSTEMS

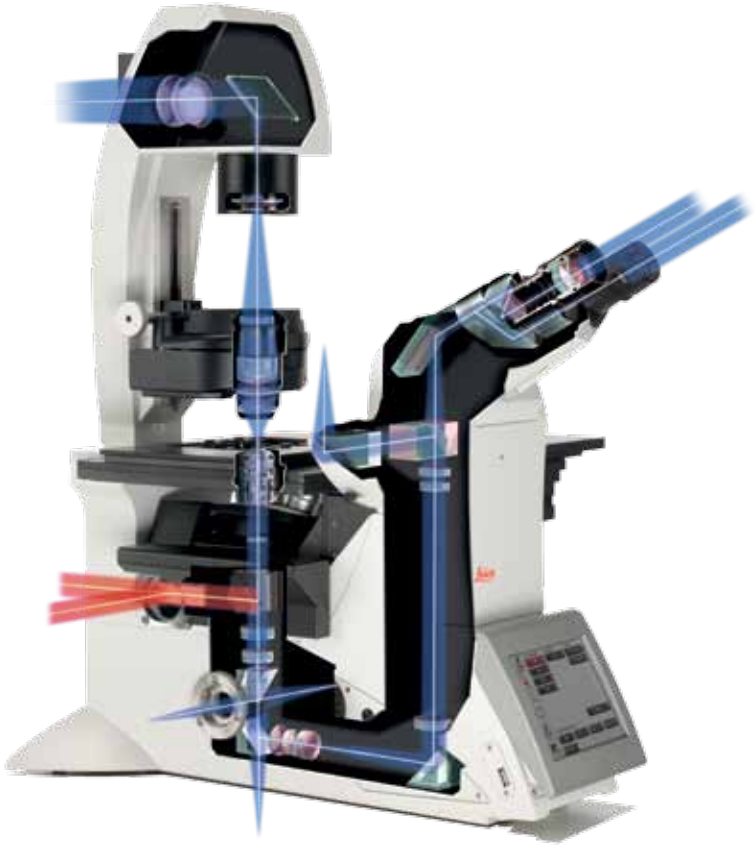
Leica DMi8

The modular system: Stands, components, accessories

JANUARY 2015

Leica DMi8

Modular system



Leica DMi8 – Introduction

The Leica DMi8 is the highly modular inverted research microscope. It is designed for all common microscope applications and techniques. All contrast methods such as brightfield, darkfield, phase contrast, differential interference contrast (DIC), fluorescence and modulation contrast are integral to the microscope and can be adapted or changed quickly and easily. Multiple illumination and imaging beam paths, as well as HCS optics, modular accessories and a comprehensive range of peripherals complement the Leica inverted research stands.

Basic stand
The basic stand is the solid core of the microscope. It can be equipped with various focusing systems, objective turrets, stage mounts, and mounts for transmitted and incident light units. All Leica DMi8 are available with or without fluorescence. All Leica DMi8 can be upgraded with an infinity port.
To control or to see the status of the Leica DMi8 and its components, several control elements like touch screens or function keys are attachable.
Camera ports with up to 19mm FOV are standard on the Leica DMi8

The system diagrams (see page 36) provide a good overview of this modular system. Thanks to its modular design principle, you can modify and/or extend your system to suit your requirements at any time. Ergonomic considerations were given a high priority in all of the stand designs, such as the convenient positioning of important controls and the availability of ergomodules or ergonomically designed components.

The functional and rugged design of the stands ensure ease of use and image stability for a wide range of applications up to the highest magnifications.
Optics of the highest quality ensure brilliant images with high contrast and resolution for any conceivable application.

Note:
A Leica DMi8 Microscope stand is defined as a combination of 11889xxx /11525xx article numbers such as:
- microscope body
- T-Houses (w/o Infinity Ports)
- optic carrier
- camera ports
- fluorescence module
- magnification changers
- transmitted light arms
- front modules
- etc.

11889xxx article numbers always come as an integral part of the aligned complete system. These articles are not possible to order as an individual component.

Dimensions and Technical Data

Compact Leica CTR electronics box

For indoor use only.	
Supply voltage:	100 – 240 VAC
Frequency:	50 / 60 Hz
Power consumption:	max. 150 VA
Fuses:	3.15 A, slow-blowing, Breaking capacity H, 250 VAC Size: 5x20 mm
Ambient temperature:	15° - 35°C
Relative humidity:	90% up to 30°C, non-condensing
Protection class:	I
Overvoltage category:	II
Pollution degree:	2

Advanced/Advanced+ Leica CTR electronics box

For indoor use only.	
Supply voltage:	100 – 240 VAC
Frequency:	50 / 60 Hz
Power consumption:	max. 290 VA
Fuses:	6.3 A, slow-blowing, Breaking capacity H, 250 VAC Size: 5x20 mm
Ambient temperature:	15° - 35°C
Relative humidity:	90% up to 30°C, non-condensing
Protection class:	I
Overvoltage category:	II
Pollution degree:	2

Leica DMi8 manual

For indoor use only.	
Supply voltage:	100 – 240 VAC
Frequency:	50 / 60 Hz
Power consumption:	max. 55 VA
Fuses:	1.6 A, slow-blowing, Breaking capacity H, 250 VAC Size: 5x20 mm
Ambient temperature:	15° - 35°C
Relative humidity:	90% up to 30°C, non-condensing
Protection class:	I
Overvoltage category:	II
Pollution degree:	2

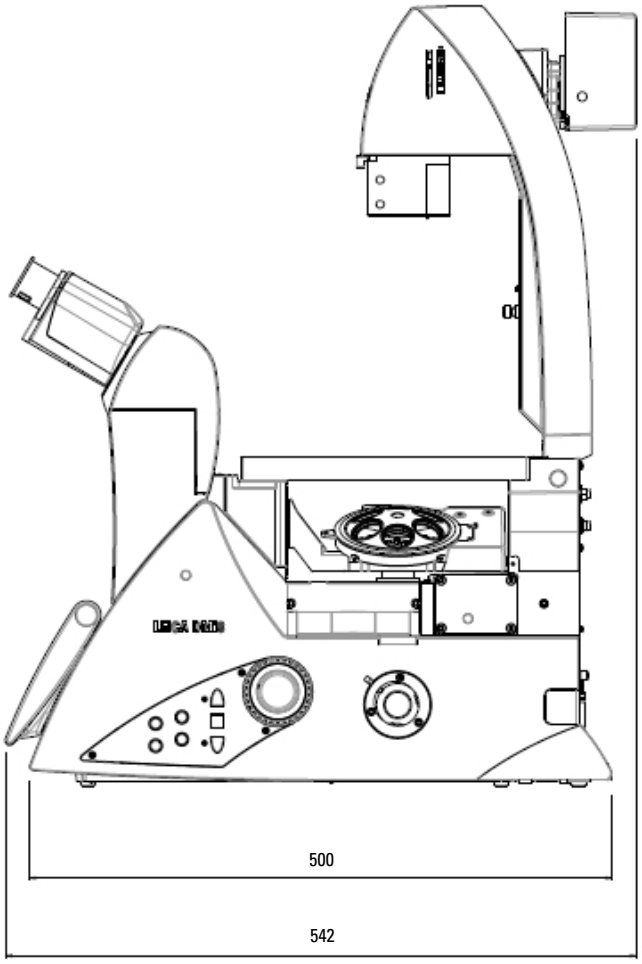
Leica DMi8 coded

For indoor use only.	
Supply voltage:	100 – 240 VAC
Frequency:	50 / 60 Hz
Power consumption:	max. 55 VA
Fuses:	1.6 A, slow-blowing, Breaking capacity H, 250 VAC Size: 5x20 mm
Ambient temperature:	15° - 35°C
Relative humidity:	90% up to 30°C, non-condensing
Protection class:	I
Overvoltage category:	II
Pollution degree:	2

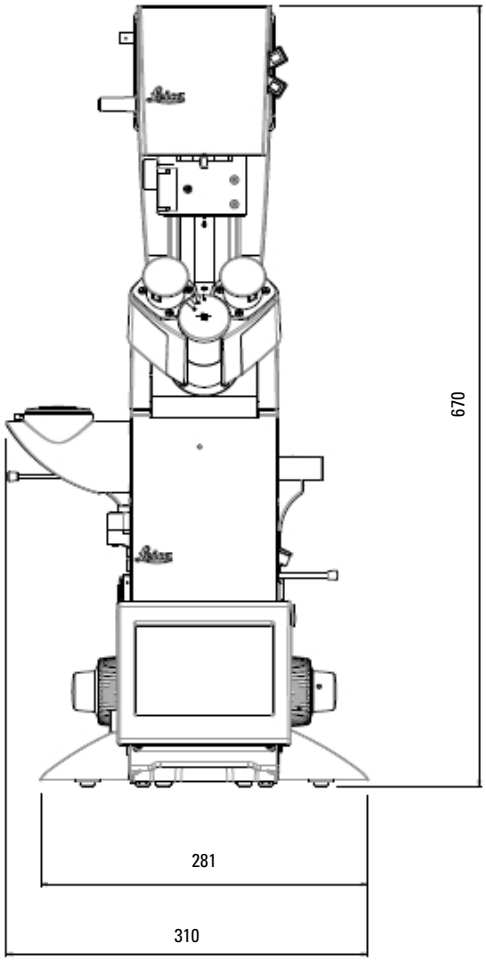
Leica DMi8 automated

For indoor use only.	
Supply voltage:	100 – 240 VAC (→ Leica CTR)
Frequency:	50 / 60 Hz (→ Leica CTR)
Power consumption:	see Leica CTR
Fuses:	see Leica CTR
Ambient temperature:	15° - 35°C
Relative humidity:	90% up to 30°C, non-condensing
Protection class:	I (→ Leica CTR)
Overvoltage category:	II (→ Leica CTR)
Pollution degree:	2 (→ Leica CTR)

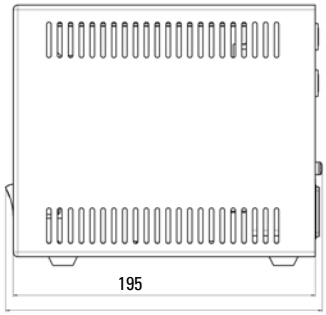
Leica DMi8 (with tiltable Transmitted Light arm)

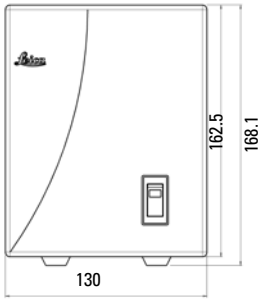


Weight: approx. 19 kg



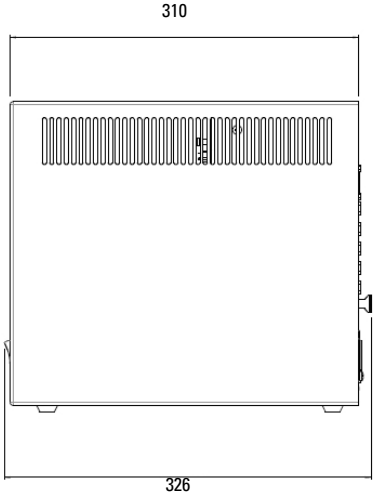
Leica CTR compact

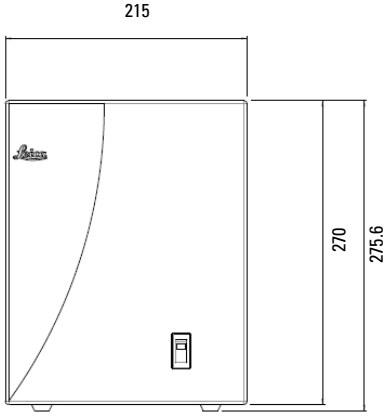




Weight: approx. 2 kg

Leica CTR Advanced/Advanced+





Weight: approx. 4 kg

Stands and Optic carriers

Fig. 1: Stand Leica DMi8

Stands

Leica DMi8 stand motorized and automated functions for
motorized side ports (no downgrade to coded side ports)
Upgradable from manual coded to fully automated.

• for research use only	11889113
• for regulated market (IVD, clinical use)	11889013

Leica DMi8 stand motorized and automated functions for
coded left side ports (no upgrade to motorized side ports)
Upgradable from manual coded to fully automated.

• for research use only	11889112
• for regulated market (IVD, clinical use)	11889012

Leica DMi8 stand manual coded functions for
coded left side ports.
Including coded nosepiece and manual focus.
Including power supply and lamp-module.
Including 1x tube lens.
Upgradable with manual coded components.

• for research use only	11889111
• for regulated market (IVD, clinical use)	11889011

Leica DMi8 stand manual functions for
manual left side ports.
Including manual nosepiece and manual focus.
Including power supply and lamp-module.
Including 1x tube lens.
Including all control elements
Upgradable with manual components.

– for research use only	11889110
– for regulated market (IVD, clinical use)	11889010

Optic Carrier

Optic carrier	11888032
Optic carrier for IMC	11888033
Optic carrier with Bottom Port	11888034
Optic carrier for IMC with Bottom Port	11888035

When choosing an “Optic carrier for IMC” you need to select an additional Front Module (see page 26)

C- Mount Adapter for Bottom Port (see page 30)

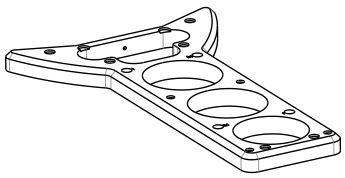


Fig. 2: Ergonomic height compensation plate

Ergonomic height compensation plate
A height compensation plate was developed to raise the viewing height by 23 mm or to raise the side camera ports for oversize cameras or spinning disks, or to use a microscope with an inactive bottom port on workbenches without openings. 11525200

Microscope Control-Elements and Microscope Function-Keys

Control Elements, left hand side of the microscope

Control left: Light	11889066
Control left: Light and shutter	11889067
Control left: Light, shutter and Fluor/TL buttons	11889068
Control left: Light, shutter, Fluor/TL buttons and diaphragms	11889069

Fig. 3: Control elements left hand side

Control Elements, right hand side of the microscope

Control right: empty	11889070
Control right: 4x function keys	11889071
Control left: 4x function keys an 3x focus keys	11889072

Fig. 4: Control elements right hand side

Control Elements, front of the microscope

Control front: empty	11889064
Control front: 6x status LED	11889063
Control front: 12x status LED	11889061
Control front: 6x function keys for objectives	11889062
Control front: 12x function keys for objective & fluorescence-cubes	11889060

Fig. 5: Touch-Screen

Touch-Screen

On site microscope, high resolution 6" touch-screen, tiltable and intensity adjustable	11889059

Leica STP4000

External, wired, high resolution 6" touch –screen, intensity adjustable without xyz-control	11525220

Leica STP8000

External, wired, high resolution 6" touch –screen, intensity adjustable, with xyz-controls for focus and motor stages, with 11 programmable function keys	11525113

Fig. 6: Leica STP8000

Leica SmartMove

x/y/z-Ergo control panel for electronic focus and motor stage. With 4 programmable function keys.	11525115

Fig. 7: Leica SmartMove

Leica CTR Boxes

Fig. 8: Leica CTR compact

Fig. 9: Leica CTR advanced

Fig. 10: Leica CTR advanced+

Power consumption of Leica CTR Boxes (see page 4).

Leica CTR compact
For all Leica DMi8 (11889012,11889013,11889112,11889119) without motorized stages, without high-speed and without objectives with motorized correction rings 11525206

Leica CTR advanced
For all Leica DMi8 (11889012,11889013,11889112,11889119) with 1 Master-Module incl. 1x serial, 2x USB, 3 x I²C, upgradable with 6x CTR boards for motorized stages, for high-speed sequencer or for objectives with motorized correction rings 11525207

Leica CTR advanced without lamp module
For all non motorized Leica DMi8 (11889010,11889011, 11889110,11889111) with 1 Master-Module incl. 1x serial, 2x USB, 3 x I²C, upgradable with 6x CTR boards. For motorized stages, for high-speed sequencer or for objectives with motorized correction rings 11525208

Leica CTR advanced +
For all Leica DMi8 (11889012,11889013,11889112,11889119) with 2 Master-Module incl. 1x serial, 4x USB, 8 x I²C, upgradable with 6x CTR boards for motorized stages, for high-speed sequencer or for objectives with motorized correction rings 11525209

CTR board XY basic
CTR Board xy basic,15 pins, to control 3-plate motor stages (rack and pinion) 11525210

CTR board XY advanced
CTR Board xy advanced, 25 pins, to control Scanning stages 11525211

CTR board MotCORR
CTR Board MotCORR to control 1 or 2 objectives with motorized correction rings 11525212

CTR board high speed sequencer
CTR Board HS/Sequencer to control high speed experiments with sequencer. 4x TTL, 1x Analog, 2x Sys/Camera 11525213

Cable adapter 15/25 pins
Using a 3-plate stage in combination with CTR Board xy advanced, 25 pins (11525211) 11505237

Tubes

The following applies to all tubes: Field of view 25 mm, eyepiece diameter 30 mm, a interpupillary distance range 55–75 mm and a viewing angle of 45° (Fixed) or 30–45° (Ergo)

Binocular fixed tube 11889025

Binocular ergonomic tube 11889026

Binocular ergonomic tube with Bertrand lens
(for observation of back focal plane) 11889031

Trinocular ergonomic tube
Binocular observation tube with side camera port and variable light path, 100% visual / 0% camera, and 50% visual / 50% camera 11889030

Trinocular ergonomic tube with Bertrand lens
Binocular observation tube with side camera port and variable light path, 100% visual / 0% camera, and 50% visual / 50% camera and Bertrand lens (for observation of back focal plane) 11889029

Trinocular ergonomic tube
Binocular observation tube with side camera port and variable light path, 100% visual / 0% camera, and 0% visual / 100% camera 11889028

Trinocular ergonomic tube with Bertrand lens
Binocular observation tube with side camera port and variable light path, 100% visual / 0% camera, and 0% visual 100% camera with Bertrand lens (for observation of back focal plane) 11880027

C- Mount Adapter for Top Port (see page 30)

Fig. 11: Trinocular ergonomic tube with Bertrand lens

Eyepieces

Eyepieces for eyeglass wearers are available with adjustable lenses (dioptric equalization from–6.8 to +4.2 or –6 to +5).
M eyepieces are designed to accommodate a variety of graticules. 10x eyepieces are standard. All eyepieces have removable or fold-down eyecups and can be used with or without eyeglasses.

Eyepieces with FOV 20
- Eyepiece HC PLAN 10x/20 BR. 11507801
- Eyepiece HC PLAN 10x/20 BR.M 11507802

Eyepiece with FOV 22
- Eyepiece HC PLAN S 10x/22 Br.M 11507807

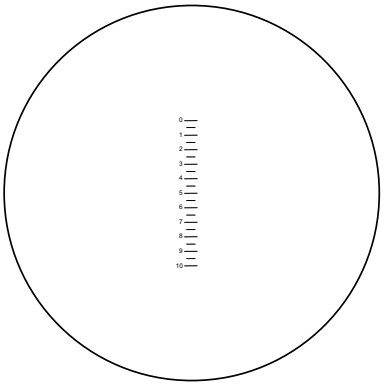
Eyepiece with FOV 25
- Eyepiece HC PLAN S 10x/25 Br.M 11507808

Special eyepieces with high magnification
- Eyepiece HC PLAN 12.5x/16 BR.M 11506515
- Eyepiece 16x/14B, adjustable 10445301
- Distance ring for eyepieces 16x/14B 11506808

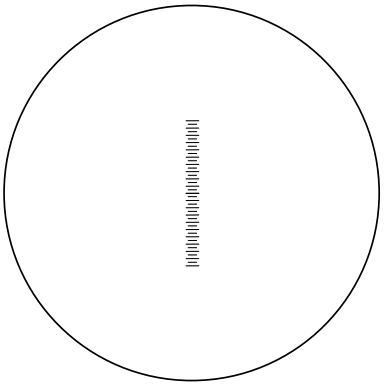
Fig. 12: Eyepiece HC PLAN 10x/20

Focusing and framing graticules

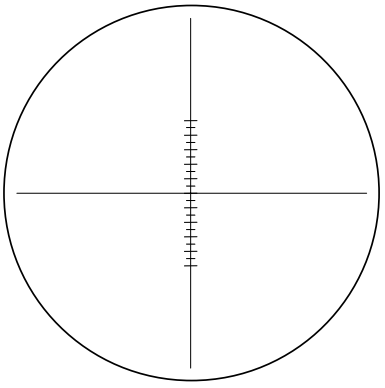
- Graticule 10 mm = 100 parts, D = 26 mm 11 506 950
- Graticule 10 mm = 200 parts, D = 26 mm 11 506 951
- Crosshair graticule, D = 26 mm 11 506 953
- Crosshair graticule with graduation 10 mm = 100 parts, D = 26 mm 11 506 952
- Graticule with grid 10 x 10 mm, 0.1 mm graduation, D = 26 mm 11 506 954
- Graticule with grid 10 x 10 mm, 1 mm graduation, D = 26 mm 11 506 955



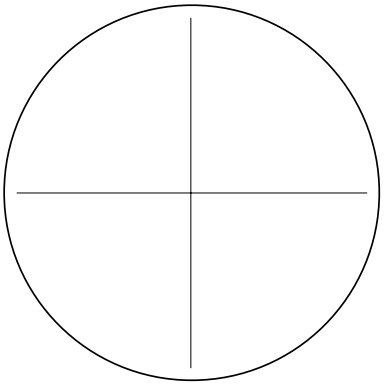
Graticule 11 506 950



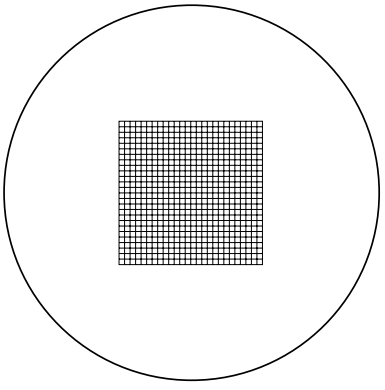
Graticule 11 506 951



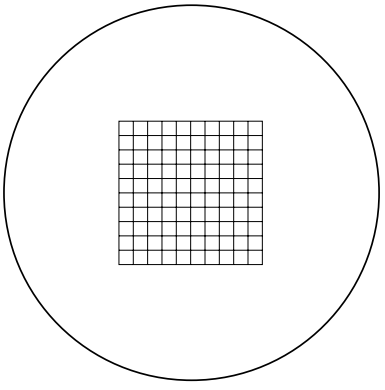
Graticule 11 506 952



Graticule 11 506 953



Graticule 11 506 954



Graticule 11 506 955

Observation and Documentation Ports

Camera ports for Leica DMi8 (11889010,11889110)

Manual left camera side port 100/0	11889043
Manual left camera side port 80/20	11889042
Manual left camera side port 100/0 with interlock	11889087

Camera ports for Leica DMi8 (11889011,11889111,11889012,1189112)

Coded left camera side port 100/0	11889045
Coded left camera side port 80/20	11889044
Coded left camera side port 100/0 with interlock	11889088

Camera ports for Leica DMi8 (11889013,11889113)

Motorized side port, left	11889046
You may select at least one and up to three different prisms from the following for this version:	
Side port prism, 100% left	11888259
Side port prism, 80% left	11888262
Side port prism, 50% left	11888264
Side port prism, dichroic 620nm, left	11888260
Motorized side port, left and interlock	11889077
Includes the prism 100% left.	
You may select no or one additional prism from the following for this version:	
Side port prism, 80% left	11888262
Side port prism, 50% left	11888264
Motorized side port, right	11889047
You may select at least one and up to three different prisms from the following for this version:	
Side port prism, 100% right	11888258
Side port prism, 80% right	11888261
Side port prism, 50% right	11888263
Motorized side port, right and interlock	11889078
Includes the prism 100% right. You may select no or one additional prism from	
Side port prism, 80% right	11888261
Side port prism, 50% right	11888263

Fig. 13: Camera Ports

Motorized side port, right and left	11889048
You may select at least one and up to three different prisms from the following for this version:	
You have to select at least one right and one left prism!	
Side port prism, 100% right	11888258
Side port prism, 100% left	11888259
Side port prism, 80% right	11888261
Side port prism, 80% left	11888262
Side port prism, 50% right	11888263
Side port prism, 50% left	11888264
Side port prism, dichroic 620nm, left	11888260
Motorized side port, right and left and interlock	11889079
Includes the prism 100% left	
Includes the prism 100% right	
No other choice for more prisms	
No side port	
This version requires the port compensation module	11888256

C- Mount Adapter for side port (see page 30)

Laser Safety

Laser safety Kit for DMi8. All interlocks	
assembled in the microscope at factory site	11889086
Laser safety Hood for DMi8 with interlock	
to use in combination with a tiltable TL-arm and Condensers with free working distance not higher than 28 mm	11889065
UV protection Hood for DMi8 without interlock	
to use in combination with a tiltable TL-arm and Condensers with free working distance not higher than 28 mm	11522087

Focus and Objective Nosepiece

Manual Focus
Manual focus system with 12 mm travel range.
Tactile Coarse / Fine manual Focus Drive with
coarse and fine / knob on each side of the microscope 11889054

Motorized Focus
Motorized focus system with 12 mm travel range.
Tactile Coarse / Fine motorized Focus Drive with 4 gears and 5 sensitivity levels (0.05 µ; 0.1 µ; 0.7 µ; 1.5 µ; 5.0 µ). Electronic focus repositioning and electronic parfocality, with coarse / fine knob
on each side of microscope 11889055

Motorized Closed Loop Focus
Motorized closed loop focus system with encoded 12 mm travel range. Reproducibility < 20 nm bidirectional. Tactile Coarse / Fine motorized Focus Drive with 4 gears and 5 sensitivity levels (0.05 µ; 0.1 µ; 0.7 µ; 1.5 µ; 5.0 µ)
Electronic focus repositioning and electronic parfocality,
with coarse / fine knob on each side of microscope 11889056

Motorized Closed Loop Focus with AFC
Adaptive Focus Control (AFC) actively keeps the focus position over time. In combination with Closed Loop Focus system with encoded 12 mm travel range. Reproducibility < 20 nm bidirectional. Tactile Coarse / Fine motorized Focus Drive with 4 gears and 5 sensitivity levels (0.05 µ; 0.1 µ; 0.7 µ; 1.5 µ; 5.0µ)
Electronic focus repositioning and electronic parfocality,
with coarse / fine knob on each side of microscope. 11889073

Motorized Focus with AFC
Adaptive Focus Control (AFC) actively keeps the focus position over time.
Tactile Coarse / Fine motorized Focus Drive with 4 gears and 5 sensitivity levels (0.05 µ; 0.1 µ; 0.7 µ; 1.5 µ; 5.0 µ)
Electronic focus repositioning and electronic parfocality,
with coarse / fine knob on each side of microscope 11889074

Manual Coded Nosepiece
Coded 6-fold objective nosepiece
with 25 mm threads and 45 mm parfocal distance 11889049

Motorized Nosepiece
Motorized coded 6-fold objective nosepiece
with 25 mm threads and 45 mm parfocal distance 11889050

Spill Protection
For motorized nosepiece the spill protection seals the revolver against leakage. All liquids will be collected in recipient. 11525215

Fig. 14: Objective Nosepiece

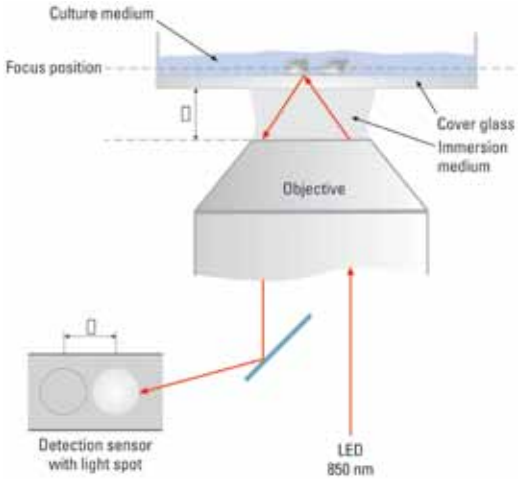


Fig. 15: Leica Adaptive Focus Control (AFC)

Fig. 16: Spill Protection

Objectives

Fig. 17: Objectives

Based on the Leica principle of infinity distance correction of optics, the microscope objectives are infinity corrected for tubelens systems with 200 mm reference focal lengths. The calibration length is 45 mm. The objectives are divided into 4 correction classes:

Objective	Class	Field of view performance
Achromatic	HI PLAN	up to 20
Planachromatic	NPLAN	up to 22
Semi-apochromatic	HC/X PLFLUOTAR	up to 25
Apochromatic	HC/X PL APO	up to 25

When selecting the objectives, consider the intended use with regard to specimen covering, etc. For more detailed explanations, please refer to the appendix of the objective list.
http://www.leica-microsystems.com/objectives

Tube lens and Magnification changer

Fixed 1x tube lens 11889023

Motorized magnification changer

including 1x tube lens at position 1 11889024

Magnification levels for motorized magnification changer
In addition to the 1x tube lens, one or two lenses must be installed on the disk of motorized magnification changer.
1.6x tube lens for motorized magnification changer 11888377
2.0x tube lens for motorized magnification changer 11888376

Manual Magnification Changer

for Eyepiece and Top Port. Find detailed information in the chapter Front-Modules (see page 26)

Front Module for IMC/IPH with integrated
manual 1.6 x Magnification changer (for manual stands, only) 11889075

Front Module for IMC/IPH with integrated
coded 1.6 x Magnification changer 11888076

T-Houses and Infinity Port

Every Leica DMi8 has to be combined with a T-House. The T-Houses determine the contrasting techniques, coupling devices, and modalities of the microscope. The T-House always acts as rest for stages and transmitted light arms.

Leica DMi8 T-House(0)
For Microscopes without fluorescence methods
to hold all different transmitted light arms 11889036

Leica DMi8 T-House(1) with one Infinity Port
Infinity Port for Microscopes with one external fluorescence module
to the rear and to hold all different transmitted light arms 11889037

Leica DMi8 T-House(2) with integrated manual Fluorescence Axis
with integrated manual fluorescence module including standard lamp-mount (e.g. for Hg lamp-house) to the rear, manual Shutter, Iris Field-Diaphragm, interface for optional manual Fluorescence Intensity Manager (FIM)
and to hold all different transmitted light arms. 11889038

Leica DMi8 T-House(3) with two Infinity Ports
Two infinity ports for Microscopes with 2 external in-coupling devices or fluorescence modules to the rear and left hand side and
to hold all different transmitted light arms. 11889039

Leica DMi8 T-House(4) as TIRF/GSD adapter
for microscopes with TIRF or GSD device and to hold
all different transmitted light arms. 11889040

Fig. 18: T-House

T-House Accessories

Attenuator
Manual attenuator with 5 positions for T-House(2)
with integrated manual Fluorescence Axis 11525205

T-House Splitter 50/50
Manual 50/50 splitter for T-House(3) for use of both
the infinity ports simultaneously 11525377

T-House Splitter 100/0
Manual 100/0 splitter for T-House(3) for use of both
the infinity ports consecutively and separately 11525388

Fluorescence Equipment

Epi-fluorescence with the Leica DMi8 series features a completely new incident illumination system and comes with

- manual or motorized 6 fold filter turret
- filter turret with fast, magnetic filter exchange
- filter turret with access panels on both sides
- fluorescence axis: manual, coded or motorized, external or integrated
- manual or motorized diaphragms
- manual or motorized FIM (optional)
- manual or motorized diaphragms
- external or integrated light guide adapter

The optional fast internal filter wheel (IFW) supports switching between up to 3 different excitation wavelengths within 50 ms. This permits extremely fast switching between different emissions without moving filter blocks when using a dual or a triple-pass filter block.

The Excitation Manager is available together with the fast internal filter wheel (IFW). It supports the tuning of emissions over 15 steps, two excitation wavelengths, a variety of intensities and the mixing of various colors.

The filter systems (cubes) have magnets to guide them into the fluorescence turret without tools. All cubes are designed to guarantee zero pixel shift and completely suppress stray light to ensure a dark background for the fluorescent image.

Always recommended:

Fluor-Protection Shield
for all the Leica DMi8 microscopes with Fluorescence Accessories for UV Protection. Mounted between stage and tube 11525114

Fig. 19: Fluorescence Turret

Fluorescence Turrets

Motorized 6-position fluorescence turret
Operation via function-keys at the microscope, touch-screen or software depending on the configuration 11 889 022

Manual coded 6-position fluorescence turret
Operated from both sides. The active filter position is indicted via LED at the front panel, touch Screen or software depending on the configuration 11 889 021

Manual 6-position fluorescence turret
only for Leica DMi8 11889010, 11889110
Manual 6-fold fluorescence turret. Operated from both sides. A color code indicates the active position 11889020

External Fluorescence Axis

The interface for external fluorescence axis are the Infinity Ports of T-House(1) and T-House(3)

Motorized external fluorescence-axis
The module includes
- internal filter wheel (IFW)
- light fiber connection
- motorized diaphragms
- slot for Leica fast external filter wheels 11889053

Motorized external fluorescence-axis
The module includes
- light fiber connection
- motorized diaphragms
- slot for Leica fast external filter wheels 11889052

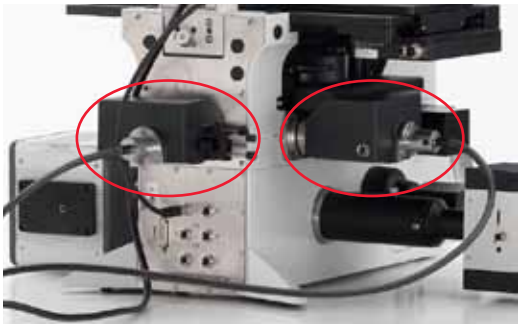


Fig. 20: Motorized external fluorescence axis

Manual external fluorescence-axis
The module includes
- light fiber connection
- access to field and aperture plane
- shutter and diaphragm
- interface for structured illumination (OptiGrid®)
- slot for fixed apertures and intensity attenuator 11889051

Aperture Slider
Manual aperture slider for manual external fluorescence axis with 6 openings (apertures) 11525203

Fig. 21: Manual external fluorescence axis

Internal Fluorescence Axis

The T-House (2) comes with the integrated internal fluorescence axis.

Leica DMi8 T-House(2) and integrated manual Fluorescence Axis
with integrated manual fluorescence module including standard lamp-mount (e.g. for Hg lamp-house) to the rear, manual shutter, iris field-diaphragm, interface for optional manual Fluorescence Intensity Manager (FIM) and to hold all different transmitted light arms. 11889038

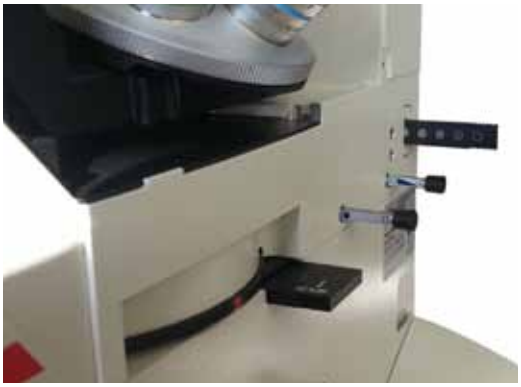


Fig. 22: Manual internal fluorescence axis

Light Sources, Lamp Housings, Supply Units for fluorescence

External Light Sources

Fig. 23: Leica EL6000

Leica EL6000

• External light source	11504115
• Liquid light guide, 2 m	11504116
• Cable for shutter control Leica EL6000 I²C	11500336
• 1-inch fiber optics adapter for lamp mounts necessary when using T-House(2)	11504117

Chroma Photofluor II

• External Light source	11504183
• Liquid light guide	11504184
• 1-inch fiber optics adapter for lamp mounts necessary when using T-House(2)	11504117

Fig. 24: Lamp housing 106z – Hg 100 W (6 lens)

Lamp housing 106z – Hg 100 W (6-lens)

(In combination with T-House(2) only), with centerable lamp mount for Hg 100 W lamp, with 1.5 m power cable, without burner.
6-lens, achromatic 1-inch collector, with heat-absorbing filter

• left hand operation	11504106
• right hand operation	11504114

Lamp housing 106z – Xe 75 W (6-lens)

(In combination with T-House(2) only) with centerable lamp mount for Xe 75 W lamp,with 1.5 m power cable, without burner. 6-lens, achromatic 1-inch collector.
With heat-absorbing filter, face protection, protective gloves 11504105

Lamps and burners

• High-pressure mercury burner Hg 100 W/2	11500321
• Lamp HXP R120/45C-Vis for Leica EL6000	11504120
• High-pressure xenon burner Xe 75 W	11500139

Supply units

Supply unit Hg 100 W

With power supply cord, automatic switching to power supply voltage 90 V–250 V 50/60 Hz with operating hours display. 11500334

Supply unit Xe 75 W

With power supply cord, automatic switching to power supply voltage 90 V–250 V 50/60 Hz with operating hours display. 11500335

Fig. 25: Leica SFL4000

LED light sources (not available in the US)

• Leica SFL100, 365nm	11504196
• Leica SFL100, 470nm	11504138
• Leica SFL100, 530nm	11504195
• Leica SFL4000	11504139

External Filter Wheel EFW

Fast external Filter wheel slider
to insert in an external fluorescence axis of Leica DMi8.
The slider comes without filter set. 11525361

Cable connection
for a fast external filter wheel.
For each EFW a connecting cable is necessary.
Cable EXT - I²C, 200 cm 11504132
Cable EXT - I²C, 50 cm 11525217

External Holder for 2 EFW slider
External device to hold one or two external filter wheels (EFW) 11640266

Lightguide coupler.
1-inch fiber optics adapter for lamp mounts necessary when using T-House(2) including light guide coupler for one Leica DMi8 EFW 11504121

C-Mount - 0.7x HC for EFW. This c-mount can hold one
Leica DMi8 EFW slider for emission application 11541545

C-Mount – 1,3x HC for EFW. This c-mount can hold one
Leica DMi8 EFW slider for emission application 11541547

EFW Filter Sets
for the sliders

- Triple-Band Set: Filter cube Set D/F/TX-P 11525347
- Fura2-Set: Filter cube Set FURA 2 11525348
- CFP/YFP/mCherry Filter cube Set C/Y mC-P 11525349
- FRET-Sedat (2 Wheels): Filter cube set C/Y FRET 11525350
- Quad-Sedat (2 Wheels): Filter cube Set QUAD-S 11525353
- Neutral Density (ND) set
  – External Fluorescence Intensity Manager 11504129

Fig. 26: Leica External Filterwheel (EFW)

Transmitted Light Axis

The transmitted light illumination unit essentially consists of an illumination source and condenser carrier. Excellent light utilization is ensured by the LED Lamp in replaceable Leica lamp housings. Optimal and homogeneous illumination is a prerequisite for all transmitted light contrast methods.

Fig. 27: Fixed basic transmitted light arm

Fixed basic transmitted light arm
Basic fixed transmitted light arm including LED illumination, condenser base and aperture diaphragm. To hold S50/0.50 and S80/0.30 condenser lenses.
With:
- 70 cm cable (11889010,1189110,11889011,11889111) 11525105
- 185 cm cable (11889012,1189112,11889013,11889113) 11525116

Tilting manual transmitted light axis
With integrated tilting mechanism for specimen clearance, integrated manual filter magazine for 2 replaceable filter positions (one preconfigured with manual shutter), Condenser Quick-Changer for all manual condensers, lamp housing adapter for LED, integrated duct for the lamp housing cable:
- without Field Diaphragm 11525106
- with manual Field Diaphragm 11525107
- with manual Field Diaphragm for Atomic Force App. 11525108

Fig. 28: Tilting transmitted light arm

Tilting manual coded transmitted light axis
with integrated tilting mechanism for specimen clearance, integrated manual filter magazine for 2 replaceable filter positions (one preconfigured with manual shutter), Condenser Quick-Changer for all coded/motorized condensers, lamp housing adapter for LED, integrated duct for the lamp housing cable
- without Field Diaphragm 11525109
- with manual Field Diaphragm 11525110

Tilting motorized transmitted light axis
with integrated tilting mechanism for specimen clearance, integrated manual filter magazine for 2 replaceable filter positions (one preconfigured with manual shutter), Condenser Quick-Changer for all coded/motorized condensers, lamp housing adapter for LED, integrated duct for the lamp housing cable
- with motorized Field Diaphragm 11525111

Fig. 29: LED lamp house

LED Light Sources (for transmitted light)

LED lamp house
- 70 cm cable 11525100
- 185 cm cable 11525102

LED lamp house with TTL shutter
- 70 cm cable 11525101
- 185 cm cable 11525103
- 285 cm cable 11525104

Transmitted Light Axis Filters

Light filter Ø 40 mm, unframed
for tilting light axis.
2 transmitted light filters can be swung in on the tiltable transmitted light illumination arms. A broad selection of filters is available to optimize illumination for observation and documentation. All illumination arms come with a light stop pre-installed in one position. Users can replace it with one of the following filters, however.

• DLF, daylight filter	11521577
• Panchromatic green filter	11521582
• Neutral filter N 16 (6.3%)	11521579
• Neutral filter N 4 (25%)	11521580
• Neutral filter N 2 (50%)	11521581
• Green filter VG 9, narrow band filter	11521583

Transmitted Light Filters

Ø 32 mm in holder with handle

• Panchromatic green filter for black/white photography	11512077
• VG 9, green filter for contrast enhancement (B/W)	11563122
• IL 546 nm (Polarization microscopy, interferometry)	11563155
• Neutral filter N2 (50%)	11543092
• Neutral filter N4 (25%)	11543093
• Neutral filter N16 (6.3%)	11543184
• Polarizer	11505087
• Lambda plate	11513908
• Quarter lambda plate	11513570
• Polarizer with protective filter	11513711

Fig. 30: Filter with handle

Ø 32 mm without holder
to be placed on the condenser.

• DLF, daylight filter		11504046
• ALF, artificial light filter		11504047
• Panchromatic green filter		11504011
• Green filter VG 9		11504004
• Neutral gray filter N16	6.3% transmission	11504005
• Neutral gray filter N4	25% transmission	11504006
• Neutral gray filter N2	50% transmission	11504007
• Diffusion filter N		11504012
• Interference green filter VSS 546		11504010
• Blue glass filter BG 20		11504009

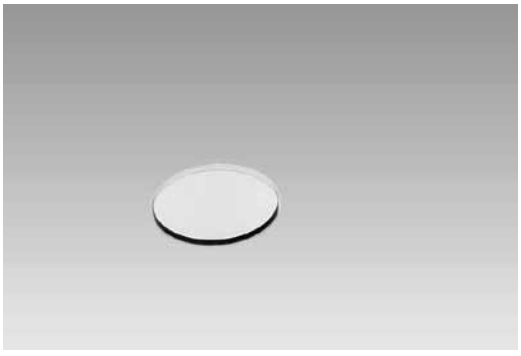


Fig. 31: Transmitted light filter

Condensers and Accessories

A variety of condensers are available for the Leica DMi8

Three different types of condenser systems are available.

Type 1:
This condenser system features a 7-position condenser disk to accommodate light rings, IC prisms or slit diaphragms (3 positions with diameter 23 mm and 4 positions with diameter 32 mm) and mount for a polarizer.
Incl. height adjustment and field diaphragm adjustment, if suitable.
Incl. adjustment tools and tool-box.
Available as motorized and manual coded version.

Type 2:
This condenser system features a 5-position condenser disk to accommodate light rings, IC prisms or slit diaphragms (2 positions with diameter 23 mm and 3 positions with diameter 43 mm), and mount for a polarizer.
Available manual version

Type 3:
This condenser system features a 3-position condenser slider to accommodate light rings, or slit diaphragms condenser Slider for IMC.
Available manual version

Type 1 and 2 are used in combination with the tilting transmitted light axis.
Type 3 is used in combination with the fixed transmitted light axis.

All the condenser bases can be individually equipped with different condenser lenses.

The condensers
- can be used for Brightfield, Phase-Contrast, Polarization. There are exceptions for IMC, IPH and DIC
- Additional features
  – aperture diaphragm
  – mount for interchangeable condenser heads

S70 Condenser System (Type 1)

Fig. 32: Condenser S70/0.30

The motorized S70/0.30 condenser features a free working distance of 70 mm, a numerical aperture of 0.30 and is particularly suitable for specimens in high-volume containers. Including motorized aperture diaphragm.
Possibility to mount motorized polarizer.
Contrasting Techniques: BF, PH, Pol, DIC
Magnifications: 4x up to 40x

Motorized S70/0.30 with fixed condenser head

• Motorized condenser base incl. head S70/0.30	11525370
• Light ring set for phase contrast S70/0.30	11521506
• Motorized polarizer holder including polarizer	11522120

S23 or S28 Condenser System (Type1)

The manual/coded or motorized S28/0.55 or S23/0.53 condensers feature a free working distance of 28 mm or 23 mm, a numerical aperture of 0.55 or 0.53 and are particularly suitable for thicker specimens (living cells) for highest resolution. This condenser is also suitable for dark field contrast at objective apertures of up to 0.40. Suitable inserts are available for this condenser for integrated modulation contrast / integrated phase contrast.
Including motorized or manual aperture diaphragm.
Possibility to mount motorized or manual polarizer
Contrasting Techniques: BF, PH, DF, Pol, DIC, IMC, IPH
Magnifications: 4x up to 100x.

Fig. 33: S28 condenser

Manual S28/0.55 with fixed condenser head

• Coded manual condenser base with fixed mount	11525373
• Condenser head S28/0.55	11505234
• Light ring set for PH and DF contrast S23–S28	11521505
• Manual polarizer holder including polarizer	11522103

Manual S28/0.55 with manually movable condenser head

• Coded manual condenser base with movable mount	11525374
• Condenser head S28/0.55	11505234
• Light ring set for PH and DF contrast S23–S28	11521505
• Manual polarizer holder including polarizer	11522103

Motorized S28/0.55 with fixed condenser head

• Motorized condenser base with fixed mount	11525372
• Condenser head S28/0.55	11505234
• Light ring set for PH and DF contrast S23–S28	11521505
• Motorized polarizer holder including polarizer	11522120

Motorized S28/0.55 with motorized condenser head

• Motorized condenser base with movable mount	11525371
• Condenser head S28/0.55	11505234
• Light ring set for PH and DF contrast S23–S28	11521505
• Motorized polarizer holder including polarizer	11522120

Manual S23/0.53 with fixed condenser head

• Coded manual condenser base with fixed mount	11525373
• Condenser head S23/0.53	11521500
• Light ring set for PH and DF contrast S23–S28	11521505
• Manual polarizer holder including polarizer	11522103

Manual S23/0.53 with manually movable condenser head

• Coded manual condenser base with movable mount	11525374
• Condenser head S23/0.53	11521500
• Light ring set for PH and DF contrast S23–S28	11521505
• Manual polarizer holder including polarizer	11522103

Motorized S23/0.53 with fixed condenser head

• Motorized condenser base with fixed mount	11525372
• Condenser head S23/0.53	11521500
• Light ring set for PH and DF contrast S23–S28	11521505
• Motorized polarizer holder including polarizer	11522120

Fig. 34: S28 condenser head

Motorized S23/0.53 with motorized condenser head

• Motorized condenser base with movable mount	11525371
• Condenser head S23/0.53	11521500
• Light ring set for PH and DF contrast S23–S28	11521505
• Motorized polarizer holder including polarizer	11522120

Fig. 35: Condenser base for S1–S28

S1 Condenser System (Type1)

The two manual/coded or motorized S1 condensers feature a free working distance of 1 mm, a numerical aperture of 0.90 dry or 1.40 oil and are particularly suitable for highest resolution and magnifications of up to100x.
This condenser is also suitable for dark field contrast at objective apertures of up to 0.70. Including motorized or manual aperture diaphragm.
Possibility to mount motorized or manual polarizer.
Contrasting Techniques: BF, PH, DF, Pol, DIC
Magnifications: 1.25 up to 100x

Manual S1/0.90 or S1/1.40 with fixed condenser head

• Coded manual condenser base with fixed mount	11525373
• Spacer ring for condenser head S1	11521502
• Condenser head S1/0.90 dry	11505150
or	
• Condenser head S1/1.40 oil (no phase contrast)	11551004
• Light ring set for PH and DF contrast S1	11521504
• Manual polarizer holder including polarizer	11522103

Fig. 36: Light rings

Manual S1/0.90 or S1/1.40 with movable condenser head

• Coded manual condenser base with movable mount	11525374
• Spacer ring for condenser head S1	11521502
• Condenser head S1/0.90 dry	11505150
or	
• Condenser head S1/1.40 oil (no phase contrast)	11551004
• Light ring set for PH and DF contrast S1	11521504
• Manual polarizer holder including polarizer	11522103

Motorized S1/0.90 or S1/1.40 with fixed condenser head

• Motorized condenser base with fixed mount	11525372
• Spacer ring for condenser head S1	11521502
• Condenser head S1/0.90 dry	11505150
or	
• Condenser head S1/1.40 oil (no phase contrast)	11551004
• Light ring set for PH and DF contrast S1	11521504
• Motorized polarizer holder including polarizer	11522120

Motorized S1/0.90 or S1/1.40 with motorized condenser head

• Motorized condenser base with movable mount	11525371
• Spacer ring for condenser head S1	11521502
• Condenser head S1/0.90 dry	11505150
or	
• Condenser head S1/1.40 oil (no phase contrast)	11551004
• Light ring set for PH and DF contrast S1	11521504
• Motorized polarizer holder including polarizer	11522120

S70 Condenser System (Type 2)

The manual S70/0.30 condenser features a free working distance of 70 mm, a numerical aperture of 0.30 and is particularly suitable for specimens in high-volume containers. Including manual aperture diaphragm
Possibility to mount manual polarizer
Contrasting Techniques: BF, PH, Pol, DIC
Magnifications: 4x up to 40x

Manual S70/0.30 with fixed condenser head

• Manual condenser base incl. head S70/0.30	11525089
• Light ring set for phase contrast S70/0.30	11522090
• Manual polarizer in round insert	11522094
• 32/43 mm adapter for Wollaston prisms	11522093
• Spare disc for manual S40 or S70 condenser	11522092

Fig. 37: Condenser S40/0.50

S40 Condenser System (Type 2)

The manual S40/0.50 condenser features a free working distance of 40 mm, a numerical aperture of 0.50 and is particularly suitable for specimens in high-volume containers. Including manual aperture diaphragm
Possibility to mount manual polarizer
Contrasting Techniques: BF, PH, Pol, IMC, IPH
Magnifications: 4x up to 63x

Manual S40/0.50 with fixed condenser head

• Manual condenser base incl. head S40/0.50	11525088
• Light ring set for phase contrast S70/0.30	11522091
• Manual polarizer in round insert	11522094
• Spare disc for manual S40 or S70 condenser	11522092

Fig. 38: Condenser heads and spacer ring

S80 Condenser System (Type 3)

For fixed transmitted light arm. The manual S80/0.30 condenser features a free working distance of 80 mm, a numerical aperture of 0.30 and is particularly suitable for specimens in high-volume containers. A 4-position slider accommodates light rings. Including manual aperture diaphragm.

S80/0.30 fixed condenser head

• Manual condenser lens S80/0.30	11521251
• 4 Position Slider for BF PH0,PH1 and PH2	11521255

S40 Condenser System (Type 3)

For fixed transmitted light arm. The manual S40/0.45 condenser features a free working distance of 40 mm, a numerical aperture of 0.45 and is particularly suitable for specimens in high-volume containers. A 4-position slider accommodates light rings. Including manual aperture diaphragm.

S40/0.45 fixed condenser head

• Manual condenser lens S40/0.45	11521252
• 4 Position Slider for BF PH0,PH1 and PH2	11521253

Fig. 39: Condensers S40/S80

Integrated Phase Contrast (IPH) and Integrated Modulation Contrast (IMC)

Fig. 40: IMC Slider

Not all stand versions are ready for IMC. Prerequisites are:
- Optic Carrier with IMC optics
- Front Module
- S23, S28 or S40 Condenser in combination with tiltable TL arm
- S40 or S80 Condenser in combination with fixed TL arm (no IPH)

Front-Modules
The Front Module is an interface in the microscope stand for the modulation contrast or phase contrast slider. The 2 front modules are identical, but one features an additional manual magnification changer.
The manual magnification changer affects the top camera port and is not available in combination with the motorized magnification changer.

• Front Module for IMC/IPH	11888384
• Front Module for IMC/IPH with integrated manual 1,6 x Magnification changer (for manual stands, only)	11889075
• Front Module for IMC/IPH with integrated coded 1,6 x Magnification changer	11889076

Fig. 41: Condenser Modulators

Integrated phase contrast
(only in combination with tiltable TL-arm)
Phase rings must be placed in the phase contrast slider for the different back focal planes of the objectives. For the back focal planes of the objectives, please refer to the objective list, see
http://www.leica-microsystems.com/objectives

• IPH Module for Phase rings	11522065
• Phase Contrast Ring B	11522080
• Phase Contrast Ring C	11522064
• Light ring (set) for S23/S28	11521505
• Light ring (set) for S40 (5 – 63x incl. 32x)	11522091

Fig. 42: IPH Slider

Integrated modulation contrast
(in combination with fixed TL-arm)
Modulators have been placed in the modulation contrast slider for the different back focal planes of the objectives. For the back focal planes of the objectives, please refer to the objective list
http://www.leica-microsystems.com/objectives.

The S40 condensers requires:

• IMC Condenser Slider S40/0.45	11525119
• IMC Condenser Slider S80/0.30	11525120

• Slider for modulation Contrast for objectives with back focal planes B, C or D	11522152

For IMC with in combination with fixed TL-arm no Polarizer is required

Integrated modulation contrast
(in combination with tiltable TL-arm)
Modulators have been placed in the modulation contrast slider for the different back focal planes of the objectives. For the back focal plane of the objectives, please refer to the objective list
http://www.leica-microsystems.com/objectives.

A bright-field share can be added to the modulation contrast via the polarizer, reducing the relief contrast.

- Slider for modulation Contrast for objectives with back focal planes B and C 11522075

The S23 and S28 condensers require inserts:
- IMC S23/28 Condenser Modulators Complete Set 11522074
- IMC S23/28 Condenser Modulator for 5x (Ø 23 mm) 11522108
- IMC S23/28 Condenser Modulator for 10x (Ø 23 mm) 11522109
- IMC S23/28 Condenser Modulator for 20x (Ø 32 mm) 11522110
- IMC S23/28 Condenser Modulator for 32x (Ø 32 mm) 11522127
- IMC S23/28 Condenser Modulator for 40x (Ø 32 mm) 11522111
- IMC S23/28 Condenser Modulator for 63x (Ø 32 mm) 11522112

The S40 condensers require inserts:
- IMC S40 Condenser Modulators Complete Set 11522113
- IMC S40 Condenser Modulator for 5x (Ø 23 mm) 11522099
- IMC S40 Condenser Modulator for 10x (Ø 23 mm) 11522095
- IMC S40 Condenser Modulator for 20x (Ø 43 mm) 11522096
- IMC S40 Condenser Modulator for 32x (Ø 43 mm) 11522126
- IMC S40 Condenser Modulator for 40x (Ø 43 mm) 11522097
- IMC S40 Condenser Modulator for 63x (Ø 43 mm) 11522098

- Adapter 32/43 mm for Wollaston Prisms 11522093

A polarizer is required for IMC

For motorized condenser (Type1)
- Motorized polarizer holder including polarizer for S23/28 condenser 11522120

For manual condenser (Type 1)
- Manual polarizer holder including polarizer for S23/28 condenser 11522103

For manual condenser (Type 2)
- Manual polarizer in round insert for S40 condenser 11522094

Focusing telescope

A focusing telescope is required when adjusting phase contrast, modulation contrast or differential interference contrast in order to view the rear focal plane of the objective.
The following tubes:
- Binocular ergonomic tube with Bertrand lens
- Trinocular ergonomic tube with Bertrand lens

are already equipped with a focusing telescope.

- Focusing telescope 11 505 070

Fig. 43: Focusing telescope

Fig. 44: Polarizer and Analyzer

Transmitted Light Polarization Contrast

A revolving polarizer and an analyzer are required for transmitted light polarization contrast. Low-strain objectives (marked with a P in the objective list) enhance the quality of the polarization contrast.

A polarizer is required for Polarization Contrast

For motorized condenser (Type1)

- Motorized polarizer holder including polarizer for S23/28 condenser 11522120

For manual condenser (Type 1)

- Manual polarizer holder including polarizer for S23/28 condenser 11522103

For manual condenser (Type 2)

- Manual polarizer in round insert for S40 condenser 11522094

Analyzer ICT/P

The analyzer is located below the objective turret. To insert the analyzer, remove the cover for the unused objective DIC disk opening.
(Component of stand 11-020-437-101-013)

- On slider 30 x 5 mm, fixed orientation 11522046

Alternatively for stands with fluorescence axis:

Analyzer Block

This analyzer is built into an empty fluorescence filter block and can be rotated into the beam path using a motorized fluorescence disk.
The swing direction is fixed at 0° (east-west). 11525300

Transmitted Light Differential Interference Contrast (DIC)

For transmitted light differential interference contrast a revolving polarizer, a fixed analyzer and a set of Wollaston prisms are required. The Leica DMi8 features both manual and motorized polarizer, analyzer, objective and condenser prism functions. The illumination-side IC prisms are inserted in the condenser disk and objective-side IC prisms in the objective prism disk.
The Leica DMi8 realizes DIC at working distances of up to 70 mm (S70 condenser). Objectives with magnifications from 5x to 100x can be used for DIC depending to the condenser.
Fast (automatic) switching between DIC, brightfield and phase contrast is possible at all times without the need for DIC prisms to remain in the beam path. For valid combinations of prisms, condensers and objectives, please refer to the objective list. http://www.leica-microsystems.com/objectives
Coded objective turrets recognize the installed objectives. The motorized objective prism disk selects the correct objective prism and sets the bias. The analyzer is automatically positioned in the beam path by the fluorescence disk. In addition, the luminous intensity, aperture diaphragm – and in the case of a motorized transmitted light axis, the field diaphragm – are automatically set to the required values. The condenser head automatically swings in and out as necessary. The user can adjust and overwrite the preset values at any time. Note: The S40 Condenser is not designed for DIC.

DIC Turret

- Manual DIC objective system prism disk,4 positions 11522123
- Manual coded DIC objective system prism disk, 4 positions 11525117
- Motorized coded DIC objective system prism, disk 4 positions 11525118

A polarizer is required for Differential Interference Contrast

For motorized condenser (Type1)

- Motorized polarizer holder including polarizer for S23/28 condenser 11522120

For manual condenser (Type 1)

- Manual polarizer holder including polarizer for S23/28 condenser 11522103

For manual condenser (Type 2)

- Manual polarizer in round insert for S40 condenser 11522094

Analyzer ICT/P

The analyzer is located below the objective turret. To insert the analyzer, remove the cover for the unused objective DIC disk opening. (Component of stand 11-020-437-101-013)

- On slider 30 x 5 mm, fixed orientation 11522046

Alternatively for stands with fluorescence axis:

Analyzer Cube

This analyzer is built into an empty fluorescence filter cube and can be rotated into the beam path using a motorized fluorescence disk.
The swing direction is fixed at 0° (east-west). 11525300

Wollaston prisms

Objective prisms

- IC objective prism B1 11555007
- IC objective prism C 11555009
- IC objective prism C1 11522038
- IC objective prism C2 11522039
- IC objective prism D 11555010
- IC objective prism D1 11555056
- IC objective prism E 11555046

Condenser prisms (Ø 23 mm)

- IC condenser prism K3 11521594
- IC condenser prism K11 11521545

Condenser prisms (Ø 32 mm)

- IC condenser prism K2 11555016
- IC condenser prism K3 11555017
- IC condenser prism K4 11555018
- IC condenser prism K5 11555019
- IC condenser prism K6 11521521
- IC condenser prism K7 11521522
- IC condenser prism K8 11521523
- IC condenser prism K9 11555030
- IC condenser prism K10 11521524
- IC condenser prism K11 11521529
- IC condenser prism K16 11522037
- IC condenser prism K17 11555091

For the manual S70 condensers turrets with 43 mm openings a 32/43 adapter is necessary for each of the prisms (max 3)

Reducing diameter adapter 32/43 11522093

Fig. 45: Motorized DIC objective prism disk

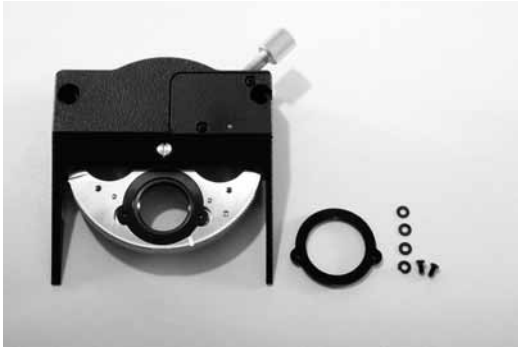


Fig. 46: Manual DIC objective prism disk

Fig. 47: DIC condenser prisms

Fig. 48: Objective prism D

C-Mount Adapter

You can adapt analog and digital cameras to all ports with documentation output. The C and B-mount adapters are aligned to the dimensions of the holder thread. The various fixed and variable magnification factors allow adjustment of the rendering of the microscopic image on the camera chip. In order to display the largest possible portion of the field of view on the monitor, the magnification factor of the adapter must fit the chip size of the camera. If the magnification is too low, there will be a lack of uniformity to the illuminated area (shading) and/or vignetting.

	Recorded picture diagonal in mm with				
	1-inch camera	2/3-inch camera	1/2-inch camera	1/3-inch camera	Order No.
Without zoom magnification, for 1-chip cameras only:					
C-mount adapter 1x HC	16	11	8	6	11541510
C-mount adapter 0.7x HC	–	15.7	11.4	7.8	11541543
C-mount adapter 0.55x HC	–	–	14.5	10.9	11541544
C-mount adapter 0.35x HC	–	–	–	17.1	11541512
With variable magnification level (Vario TV adapter) for 1–3 chip cameras:					
C-mount 0.32–1.6x HC	–	–	19*–5	18–3.8	11541517
Without variable magnification level, for 1-3 chip cameras:					
C-mount adapter 1x	–	–	16	12	11543706
B-mount adapter 1x	–	–	16	12	11543702
C-mount adapter -0.7x for EFW					11541545
C-mount adapter 1x for sCMOS					11541546
C-mount adapter -1.3x for EFW					11541547

* available beginning with Vario factor 0.42 x!

Fig. 49: TV adapter

Stages and Specimen Holders

A wide range of specimen stages are available. The most popular are:
- Fixed stage (248x204 mm) normal, heatable / temperature controlled
- Fixed micromanipulation stage (248x112 mm) heatable / temperature controlled
- Manual or motorized 3-plate stages
- Scanning stage
- Linear Motor Stage

A complete description of the stage portfolio, with inserts frames and accessories can be found in the **Live on stage Brochure**. Here a list of components:

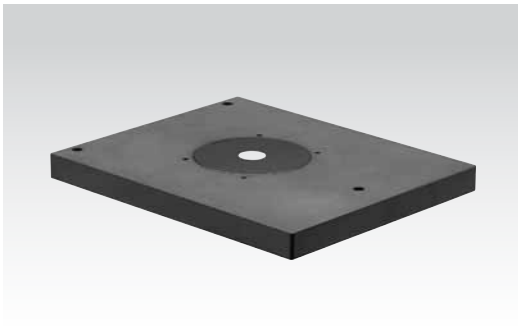


Fig. 50: Fixed stage

Fixed stage (248 x 204 mm) 11522078
88 mm Inserts with different openings for fixed stages, slim 3-plates stages and 160 x 110 mm plates.
- Insert with 5 mm opening 11522083
- Insert with 10 mm opening *) 11522084
- Insert with 20 mm opening 11522085
- Insert with 40 mm opening 11522086
- Glass Heating Insert (Tokaihit MATS) 11532456

*) Insert with 10 mm opening is already included in stages 11522078 • 11522015 • 11522020 • 11522069

Fig. 51: Fixed heating stage

Fixed Heating Stage (248 x 212 mm) 11533025

Fixed Cooling Stage (248 x 212 mm) 11522013

Fig. 52: Fixed cooling stage

Object guide for fixed regular stages
(for 11522078, 11522012 and 11522013)
Attachable object guides for all regular fixed stages measuring 248 mm x >200 mm to accommodate a variety of application inserts. 11522 014

Inserts
for attachable object guide 11 522 014
- Holder for tissue culture plates (136 x 92 mm) 11520584
- Holder for Terasaki Plates, 60 or 72 wells 11520585
- Holder for flasks, bottles or plankton chambers 11520586
- Holder for flasks, bottles or plankton chambers 11520587
- Holder-Titer Trays, 96 or 120 wells 11520589
- Holder for Petri Dish Ø 88 mm / height 16 mm 11520590
- Holder for slides 76 mm x 26 mm 11520593
- Holding frame for plankton chamber with a basic area (102.5 x 28–50.5 mm) 11520595
- Universal Holding frame M for Petri dishes (24–68 mm) or glass slides 11533041
- for UthermolTM Counting chambers 11532494
- Universal Holding frame MX for large Petri dishes (87-92 mm) and multiwells 11520689
- Universal Holding frame M-Duo for 1 or 2 Petri dishes (24-56mm) and/or 1 glass slides 11531798
- Heatable Universal Holding frame MH 2000* for various dishes (24–68 mm) or microscopy-slides 11533045
- Heatable Universal Holding frame MH-L 2000* for microscopy-slide sized vessels 11533046
- Heatable Universal Holding frame MH-R 2000* for round dishes (24-68 mm) 11533047
- Cooling Insert X Universal Mounting frame KX 11532510

Fig. 53: Universal holding frame M

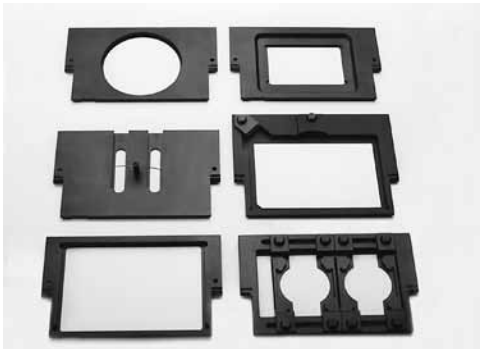


Fig. 54: Various inserts for attachable mechanical stage

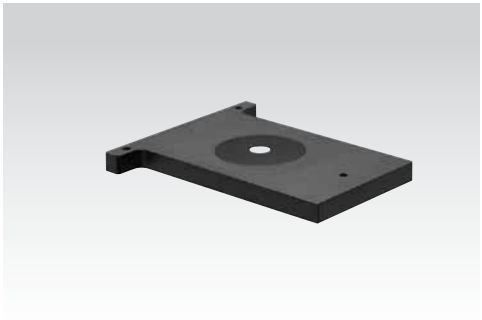


Fig. 55: Fixed micromanipulation stage

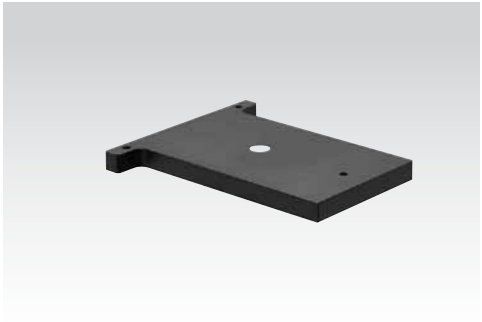


Fig. 56: Heating micromanipulation stage

Slim Fixed Stage (248 x 112 mm)	11522015
Slim Fixed Heating Stage (248 x 112 mm)	11533026
Slim Fixed Cooling Stage (248 x 112 mm)	11522017
Object guide for slim fixed stages	11522018
Inserts for attachable object guide	11522018
• Holding frame for Petri dishes with Ø 30 mm	11522042
• Holding frame for Petri dishes with Ø 50 mm	11522043
• Holding frame for glass slides 76 mm x 26 mm	11522044
3-plate-stage with rack and pinion	
• Manual	11522076
• Motorized	11522068
Slim 3-plate-stage with rack and pinion	
• Manual	11522077
• Motorized	11522069
Rotating Gliding Stage	11533156
Scanning Stage 127 x 83	11522100
SCAN Plus IM 130 x 85	11525407
LMT200 ITK Linear Motor Stage 120 x 80	11525376

Inserts
for the manual 3-Plate stage 11522076,
for the motorized 3-Plate stage 11522068,
for the Scanning stages 11522100, 11522129 11532536,
for Linear Motor stage 11525376

• Holder for slides 3" x 1" (76 x 26 mm)	11531433
• Glass stage plate with 20 mm round opening	11522045
• Holder for Micro-Titer Trays 96 or 120 wells (tray size: 127 x 85 mm)	11531434
• Holder for Terasaki Trays 60 or 72 wells (tray size: 56 x 82 mm)	11531435
• Holder for Hamax Trays (tray size: 93 x 66 mm)	11531436
• Holder for Petri Dish Ø 36 mm	11531437
• Holder for Petri Dish Ø 54 mm	11531438
• Holder for Petri Dish Ø 65 mm	11531439
• Holder for Petri Dish Ø 88.5 mm	11531440
• Adjustable Universal Holder for Petri dishes (20-68 mm) or glass slides	11531441
• Universal Mounting frame K for Petri dishes (24–68 mm) or glass slides (with depressions at sides for micromanipulation)	11600234
• Universal insert frame KX for Petri dishes 87–92 mm or multiwells	11532338
• Universal Mounting frame K-Duo for 1 or 2 Petri dishes and/or 1 glass slide	11532514
• Mounting frame for 88 mm round inserts	11522063
• Metal Plate for 88 mm inserts lowered by 4 mm	11600237
• Heatable Universal Holding frame KH 2000 for	

various dishes (24-68 mm) or microscopy-slides 11533048
- Heatable Universal Holding frame KH-L 2000 for microscopy-slide sized vessels (47 x 11 mm opening) 11533049
- Heatable Universal Holding frame KH-R 2000 for round dishes (24–68 mm) 11533050
- Heating Insert P 2000 for round dishes (24-68 mm) Compatible with incubator S-2. Round opening (32 mm). Cover with glass element for DIC 11533027
- Heating Insert P 2000 for Lab-Tek™–type. Compatible with incubator S-2. Rectangular opening (46 x 21 mm). Cover with glass element for DIC 11533080

Both Heating Inserts P are available as non heated versions

- Insert N for Lab-Tek™ type 11533037
- Cooling Insert X Universal Mounting frame KX Especially for cooling down to 0°C. Round opening (8 mm) and especially suited for micromanipulation 11532510

Accessories for scanning stages

- Cable for scanning stage to XY-advanced board 11525218

Stage micrometer

- Transmitted light 2 mm = 200T, glass carrier with scale 1 scale interval = 10 µm 11513106
- Incident light 10 mm = 100T for overview objectives (e.g. 1.25) 11519963

Control Units for Heating Stages and Incubators CO_2 Incubation

See the **Live on Stage Brochure** for complete description.

Fig. 57: Screw cap

Fig. 58: DIC cover

Fig. 59: Analyzer opening cover

Fig. 60: Camera port cover

Accessories

Immersion oil, 10 ml
Free of natural fluorescence as per ISO 8036/1, refraction index $n_e^{23} = 1.5180 \pm 0.005$, dispersion $v_e^{23} = 44 \pm 2$ 11513859

Immersion oil, 20 ml
as per ISO 8036/1, refraction index $n_e^{23} = 1.5180 \pm 0.005$, dispersion $v_e^{23} = 44 \pm 2$ 11513860

Immersion oil, 250 ml
as per ISO 8036/1, refraction index $ne_e^{23} = 1.5180 \pm 0.005$, dispersion $v_e^{23} = 44 \pm 2$ 11513861

Stage micrometer
Transmitted light 2 mm = 200 parts 11513106

Stage micrometer
Incident light 1 mm = 100 parts 11563011

Focusing telescope dia. 30.0 mm 11505070

Hg 100 W/2 burner 11500321

Xe high-pressure burner 11500139

Screw cap for empty objective positions
Component of stand 11 020-422-570-000

Cover for unused objective DIC disk opening
Component of stand 11 090-144-020-058

Dust and light protection cover for polarizer opening
Component of stand 11 020-437-101-013

Dust and light protection cover for camera port openings
Component of stand 11 020-387-556-009

Digital Image Documentation

Leica digital camera system DC
Monochrome and color digital cameras for all applications
(see www.leica-microsystems.com)

Fig. 61: Leica DFC Microscope Camera

Software

Leica LAS X
(see www.leica-microsystems.com)

Micromanipulators

Micromanipulator (for right side of microscope)	11520137
Micromanipulator (for left side of microscope)	11520138
Large baseplate for Leica DMi8 to assemble the microscope and manipulators	11525214
• Extension for Leica DMi8	11521630
• Single instrument holder	11520142
• Dual instrument holder	11520143
• 3 instrument sleeves	11520145

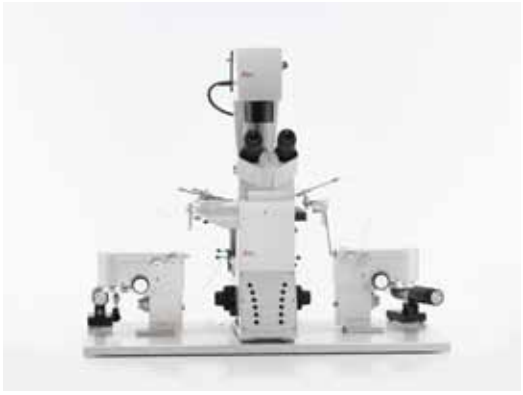


Fig. 62: Leica DMi8 with mechanical micromanipulators

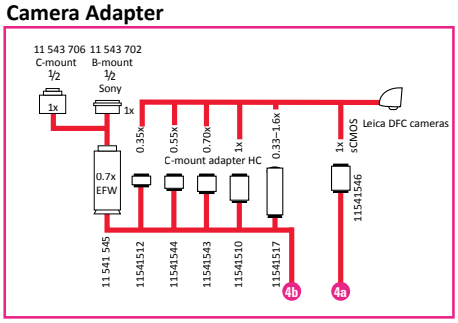
While additional micromanipulation accessories such as microtools, pullers, grinders, microforges and anti-vibration stages are not a part of the Leica program, they can be supplied by your Leica distributor on request. Information can be provided on the adaptation of non-Leica micromanipulation tools for in-vitro fertilization, microinjection, microdissection or patch clamping.

Anti-vibration

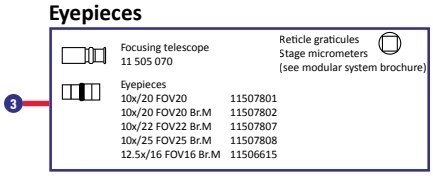
Large antivibration table for Leica DMi8	11525405
System Desk	11640255

System overview Leica DMi8 Automated

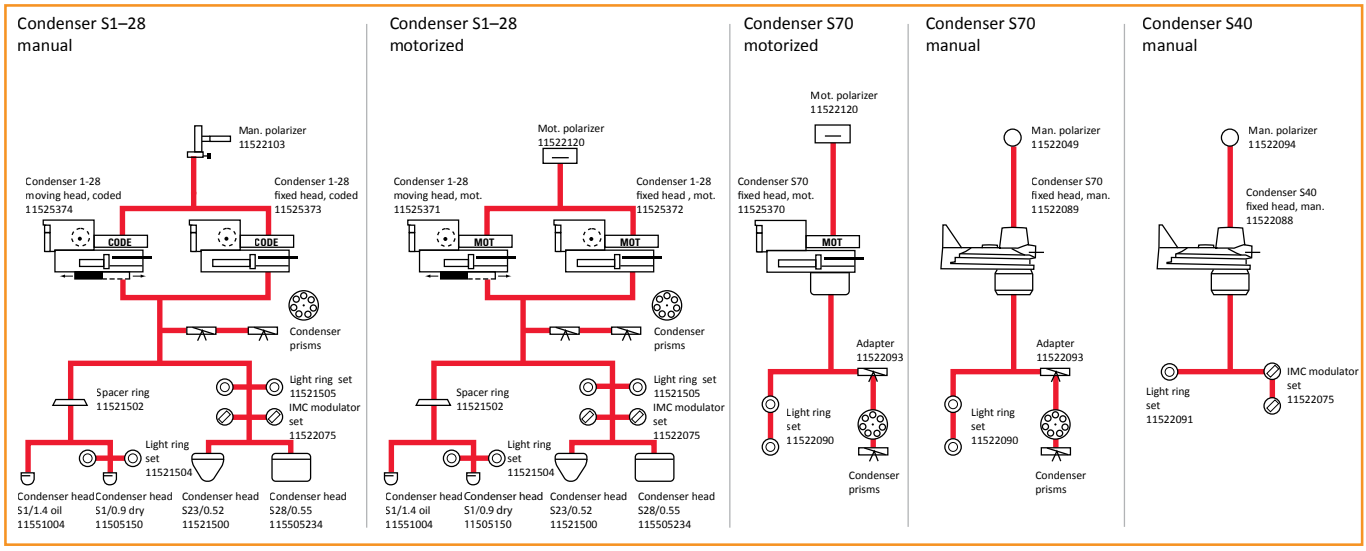
Camera Adapter



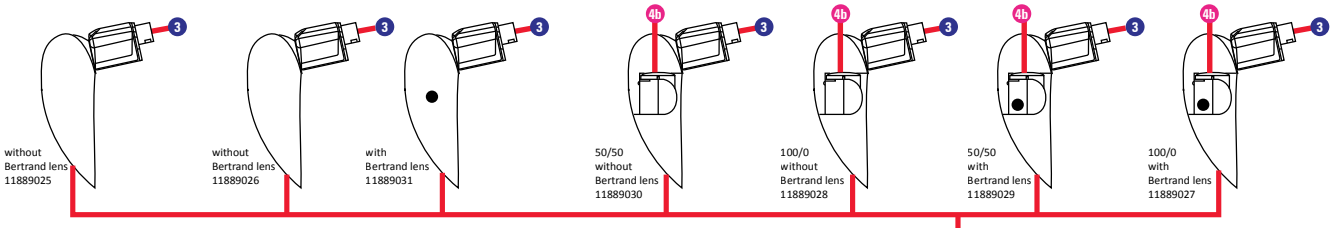
Eyepieces



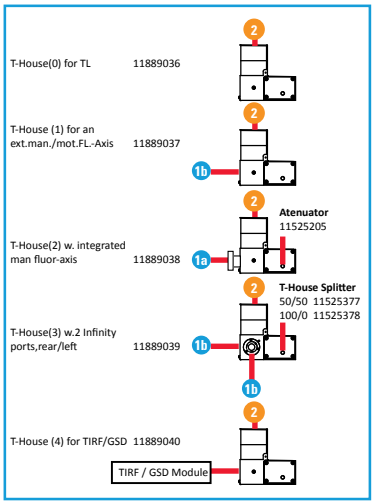
2a Condensers



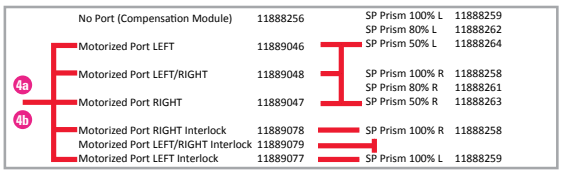
Bino FixTube / Bino ErgoTubes / Trino ErgoTubes



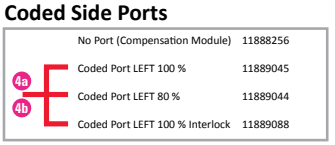
1 T-House



Mot. Side Ports



Coded Side Ports



2 Transmitted-Light Arms

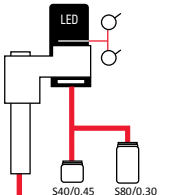
LED Lamp House

LED w/o Shutter 11525100
LED with Shutter 11525101

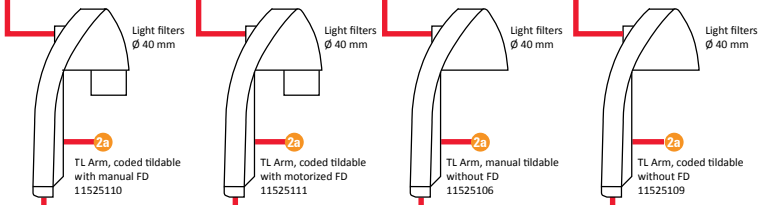
If a mot. Stage is connected via CTR
LED w/o Shutter 11525102
LED with Shutter 11525103

TL Arm, fixed manual

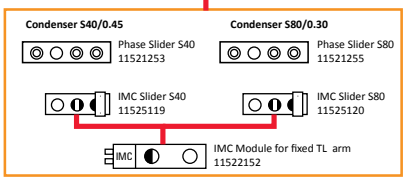
Basic TL with short cable 11525105
Basic TL with long cable 11525116



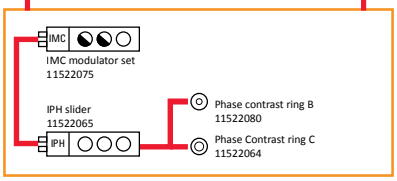
TL Arm Tiltable



Slider Fixed TL Arm



IMC-/IPH-Systems TL Arm Tiltable

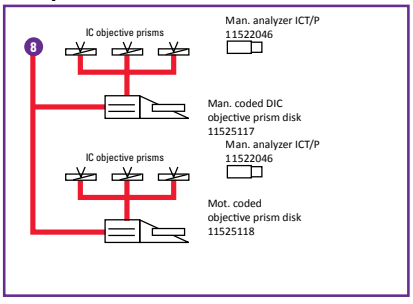


Lasersafety

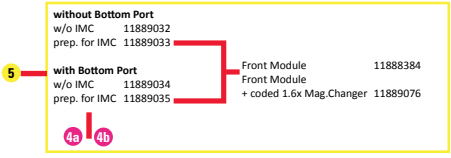
Lasersafety Kit 11889086
Lasersafety Hood with Interlock 11889065

Laser Safety musts:
a) Sideport 0/100 % only
b) Condensers S1, S23 or S28 only
c) Tildable TL-Arm

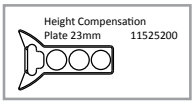
DIC systems



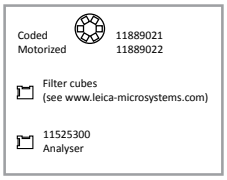
Optic Carrier



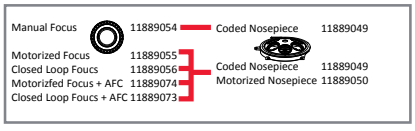
Ergonomic Base Plate



Fluo Turret

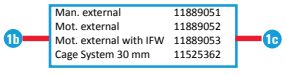


6 Focus

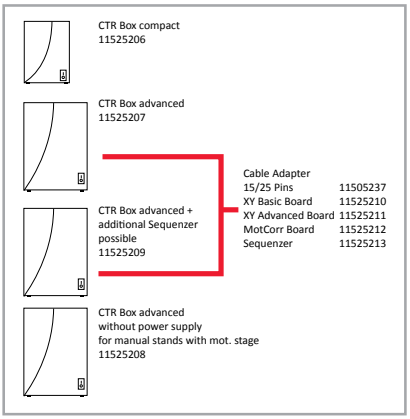


Nosepiece

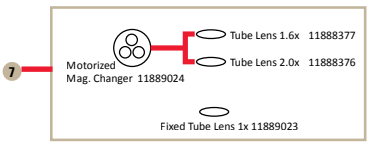
Fluo Axis



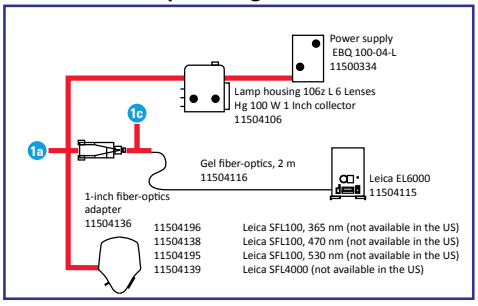
CTR Boxes



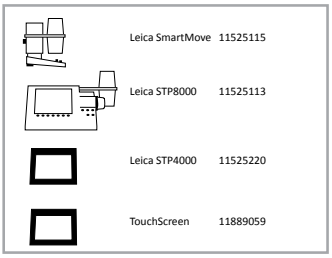
Tube Lens/Mag.Changer



Fluorescence lamp housings

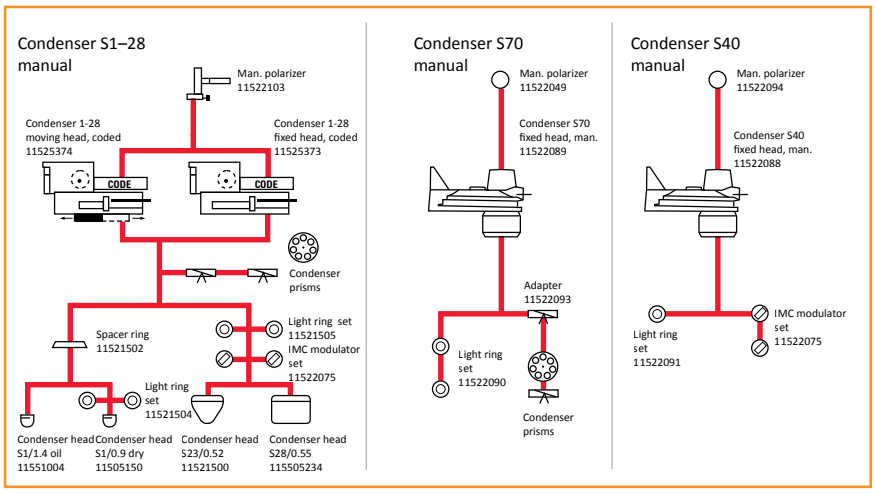


Controll Elements

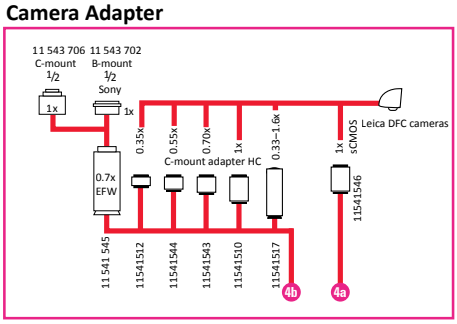


System overview
Leica DMi8
Coded/Manual

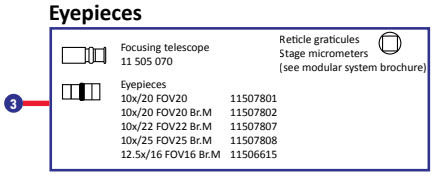
2a Condensers



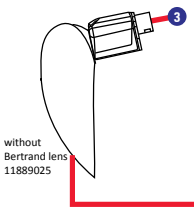
Camera Adapter



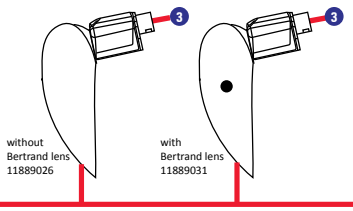
Eyepieces



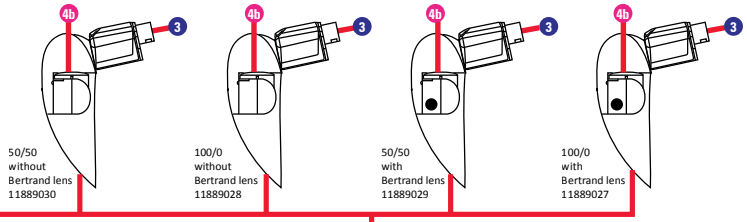
Bino FixTube



Bino ErgoTubes



Trino ErgoTubes

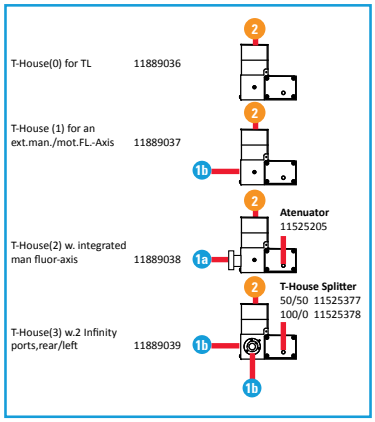


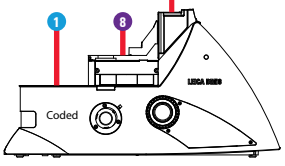
Lasersafety

Lasersafety Kit 11889086
Lasersafety Hood with Interlock 11889065

Laser Safety musts:
a) Sideport 0/100 % only
b) Condensers S1, S23 or S28 only
c) Tildable TL-Arm

1 T-House

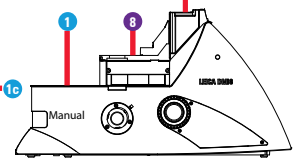




Leica DMi8 Coded Base Stand IVD 11889011
Leica DMi8 Coded Base Stand RUO 11889111
incl. Tube Lens, Power Supply, Manual Focus, Coded Nosepiece

Fluo Axis

1b Man. external Fluo Axis 11889051
Cage System 30 mm 11525362 1c



Leica DMi8 Base Stand Manual IVD 11889010
Leica DMi8 Base Stand Manual RUO 11889110
incl. Tube Lens, Front Element, Power Supply,
Manual Focus, Manual Nosepiece

Optic Carrier

without Bottom Port
w/o IMC 11889032
prep. for IMC 11889033
Front Module 11888384
Front Module
+ coded 1.6x Mag.Changer 11889076

Optic Carrier

without Bottom Port
w/o IMC 11889032
prep. for IMC 11889033
Front Module 11888384
Front Module
+ man 1.6x Mag.Changer 11889075

Coded Fluo Turret

Coded 11889021

Filter cubes
(see www.leica-microsystems.com)
11525300
Analyser

Manual Fluo Turret

Manual 11889020

Coded Side Ports

4a No Port (Compensation Module) 11888256
4b Coded Port LEFT 80 % 11889044
Coded Port LEFT 100 % 11889045
Coded Port LEFT 100 % Interlock 11889088

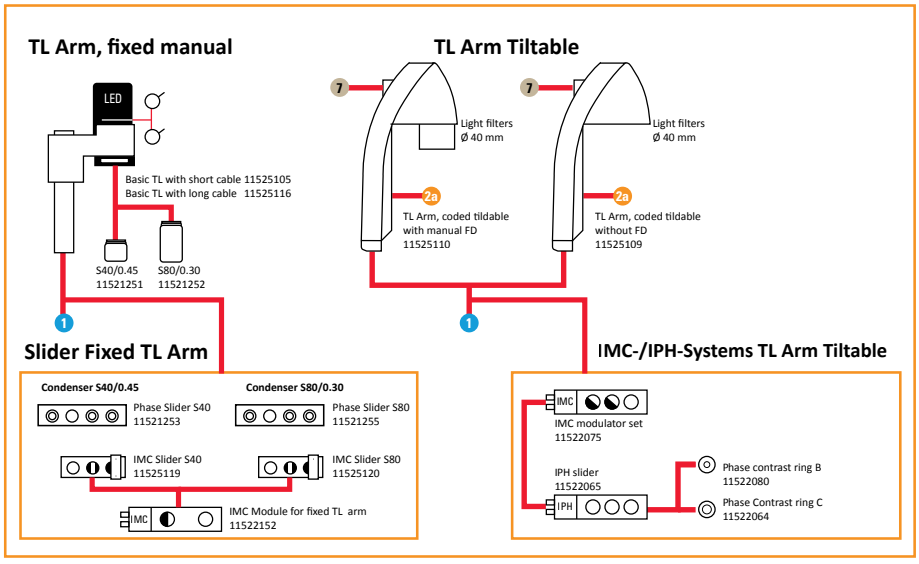
Ergonomic Base Plate

Height Compensation
Plate 23mm 11525200

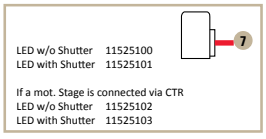
Manual Side Ports

4a No Port (Compensation Module) 11888256
4b Man. Port LEFT 80 % 11889042
Man. Port LEFT 100 % 11889043
Man. Port LEFT 100 % Interlock 11889087

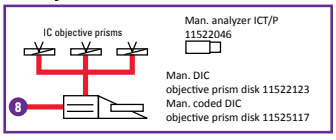
2 Transmitted-Light Arms



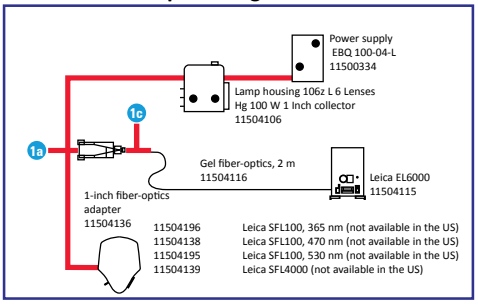
LED Lamp House



DIC systems



Fluorescence lamp housings



www.leica-microsystems.com

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Leica Microsystems operates globally in three divisions, where we rank with the market leaders.

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The Leica Microsystems Life Science Division supports the imaging needs of the scientific community with advanced innovation and technical expertise for the visualization, measurement, and analysis of microstructures. Our strong focus on understanding scientific applications puts Leica Microsystems' customers at the leading edge of science.

INDUSTRY DIVISION

The Leica Microsystems Industry Division's focus is to support customers' pursuit of the highest quality end result. Leica Microsystems provide the best and most innovative imaging systems to see, measure, and analyze the microstructures in routine and research industrial applications, materials science, quality control, forensic science investigation, and educational applications.

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