

Stands for USB microscopes

Application:

Ident. No. 080: Standard column stand with focussing facility via turning knob. 50 mm height adjustment. Holder on column rotatable by 360° with focussing facility.

Ident. No. 081: Column stand with articulated arm and focussing facility via turning knob. 200 mm height adjustment. Holder on column rotatable by 360° with focussing facility.

Ident. No. 083: Column stand with extension arm and focussing facility via turning knob. 200 mm height adjustment, 250 mm horizontal extension arm. Holder on column rotatable by 360° with focussing facility.

Ident. No. 085: Sturdy column stand with large boom arm, fast vertical adjustment and fine focus adjustment. 180 mm height adjustable, 150 mm horizontal extension arm incl. 150 mm extension, holder on column rotatable by 360°, focussing facility.

Ident. No. 087: Stable column stand. Base 155 x 220 mm, 182 mm height adjustable, 100 mm adjustment in Y axis and 90 mm adjustment in X axis, X and Y adjustment via toothed racks, Z adjustment via threaded rod

Technical data:

- Stand design: Column stand



Ident. No. 080
MS-34B stand



Ident. No. 081
MS-35B stand



Ident. No. 083
MS-36B stand



Ident. No. 085
RK-10A



Ident. No. 087

Model	MS-34B	MS-35B	MS-36B	RK-10A	MSAK890
Width x height x depth	75 x 130 x 115 mm	150 x 305 x 220 mm	150 x 305 x 220 mm	150 x 230 x 220 mm	150 x 240 x 220 mm
41613... Ident. No.	080	081	083	085	087

Prod. Gr. 4AC

Glass calibration standard

For USB handheld microscopes with DinoCapture software

Application:

For calibrating the USB microscope in conjunction with DinoCapture software

Execution:

- Scale lengths/graduations (in mm): 50/1 mm, 10/0.1 mm, 2/0.01 mm

41613...

Ident. No.

091

Prod. Gr. 412

KERN Stereo microscopes

incl. three interchangeable lenses

Application:

for simple viewing of mechanical components, electronic PCBs and for general surface inspections. Ideal for workshops and training facilities

Execution:

- Interchangeable lenses for 10x, 20x and 40x magnification
- binocular lens barrel with 45° viewing angle
- Rotatable eyepieces with dioptr adjustment
- LED reflected and transmitted lighting, individually dimmable

Advantage:

- 45° viewing angle for convenient and effortless work

Technical data:

- Eyepiece type: WF 10x/20
- Field of view figure: 20
- Lens tube type: Binoculars
- Stand design: Section pillar
- Incident light: LED spotlight
- Tripod plate width: 164 mm
- Transmitted light: LED
- Tripod plate depth: 202 mm
- Column height: 225 mm



41612...

Ident. No.

025

Prod. Gr. 412

KERN Stereo zoom microscope

Includes digital camera and image processing software

Application:

For viewing mechanical components, electronic PCBs and for general surface inspections in quality assurance, in production environments and in education. The digital camera with Microscope VIS image processing software can record images and video, measure, document and add information to viewed parts.

Execution:

- 7.5x to 45x magnification
- manual zoom with zoom factor 6.4 : 1
- Adjustable LED reflected and transmitted lighting
- Incident light: LED spot, single-headed and LED ring light, dimmable
- LED transmitted light, dimmable
- Trinocular lens barrel with 45° fixed viewing angle

41613... | Ident. No. 185

Prod. Gr. 412

- 3.1 megapixel digital camera, USB 2.0, CMOS 1/2"
- incl. C-Mount adapter, 1/2", 0.5x
- Rotatable eyepieces with dioptre adjustment on both sides

Advantage:

- Fully configured system, for fast documentation tasks
- Spatial depth in visual view
- User-friendly image processing software

Technical data:

- Model: OZL 464
- Lens tube type: Trinocular
- Eyepiece type: 10x wide field
- Pillar diameter: 32 mm
- Software: Microscope VIS



KERN Stereo zoom microscope

binocular or trinocular, with manual zoom

Application:

For viewing mechanical components, electronic PCBs and for general surface inspections in quality assurance, in production environments and in education.

Execution:

- 7.5x to 45x magnification
- Manual zoom with zoom factor 6.4: 1
- LED ring light, 3 W, dimmable
- Ident. No. 180:**
 - binocular lens barrel, with 45° viewing angle, rotatable eyepieces
 - widefield eyepieces, HSWF10x/23 mm
 - working distance 110 mm
 - visual field diameter 32.8 to 5.1 mm
- Ident. No. 185:**
 - Trinocular lens barrel, with 45° viewing angle, rotatable eyepieces
 - Light distribution 50:50
 - Widefield eyepieces, HSWF 10x/23 mm
 - Working distance 110 mm
 - Visual field diameter 32.8 to 5.1 mm

- C-Mount adapter, 0.5x, for mounting a USB digital camera

Advantage:

- Convenient and effortless work thanks to 45° inclination
- Clear and distortion-free images with Greenough lens system

Delivery:

Ident. No. 180: Stand with LED ring light, microscope head and holder, eyepieces, eye cups and dust cover

Ident. No. 185: Stand with LED ring light, microscope head and holder, eyepieces, eye cups, 0.5x C-Mount adapter and dust cover

Notes:

Ident. No. 185: Ideal for documentation tasks when used in conjunction with an optional digital camera and software.

Technical data:

- Eyepiece type: HSWF 10x/23
- Pillar diameter: 25 mm



Ident. No. 180



Ident. No. 185

Lens tube type				Binoculars	Trinocular
Stereo zoom microscope				180 ○	185 ○
Digital camera	41614...	USB 2.0 digital camera 3.1 MP	Ident. No.	-	340 ○
	41614...	USB 3.0 digital camera 3.1 MP	Ident. No.	-	350 ○
	41614...	USB 3.0 digital camera 5.1 MP	Ident. No.	-	360 ○
	41614...	HDMI/USB 2.0 digital camera 2 MP	Ident. No.	-	370 ○

Prod. Gr. 412



Macroscope incl. column stand

pixel-fox® basic package incl. high-performance zoom lens

Application:

Ideal for basic inspections, quick image comparisons for quality control and overviews of large objects in industry and research environments. A perfect solution for all macroscopic recordings and their applications. Includes full pixel-fox® 7.0 imaging suite for recording, measuring, saving and documenting images.

Execution:

- MS-50D zoom macro lens
- 7x to 45x magnification
- Manual zoom, adjustable from both sides and with a 6.4:1 zoom factor
- Focussing drive with basic and fine adjustment, and 20 mm cylindrical column mount

- Ring light illumination with 45 LEDs, dimmable
- Free working distance 94 mm
- incl. C-Mount adapter, 0.7x, for mounting the pixel-fox digital camera
- incl. full imaging suite with 4.92 MPix digital camera and pixel-fox® 7.0 software

Advantage:

- Short, time-saving and precise work processes
- Quick access to results
- Quick documentation and communication

Technical data:

- Stand design: Column stand
- Min./max. zoom magnification: 0.7x-4.5x
- Working distance: 94 mm



41611...

Ident. No.

800

Prod. Gr. 486



Digital camera and image processing software pixel-fox®

Full package for recording, measuring, saving and documenting images

Application:

Full imaging suite for recording, measuring, saving and documenting images. Ideal for industry, quality assurance, laboratories, research & development and education. Functions such as precise definition of measuring points, scalable scale bars, labelling (arrows and text), on-screen ruler, online preview of measured values, crosshairs etc. simplify use.

Execution:

- Digital camera with 4.92 megapixel resolution
- C-Mount 1/2" thread for attaching to all microscopes, macrosopes, endoscopes etc. equipped with this standardised adapter
- USB 3.0 port for very fast data transfer
- Multilingual (English, German, French, Italian, Spanish, Polish)
- Clear graphical user interface
- Storable image formats: jpg, bmp, png file and pixel-fox format on hard disk or network drive
- Recording software for parameterisation of meaningful images

- 2D image measurement of the recorded images
- Measuring functions: Sections, radii, surfaces, angles, perpendiculars, etc.
- Extensive additional functions for the precise definition of measurement points

Advantage:

- Documentation in the form of an Excel report
- Calibration via the included lens micrometer
- All measurements stored in pixel-fox format can be edited retrospectively

Notes:

For computers without a USB 3.0 interface, this can be retrofitted via a PCI plug-in card!

Technical data:

- Resolution (pixels): 4.92 Mpix
- USB data transmission: USB 3.0
- Calibration standard: Includes



41614...

Ident. No.

210

Prod. Gr. 412



Mini-PC for microscope workstations

incl. 21.5 inch monitor, keyboard and mouse

Application:

Mini PC with pre-installed Windows 10 Home 64-bit operating system and installed pixel-fox® software, incl. 21.5-inch monitor, keyboard and mouse. In combination with a stereo microscope and a digital camera software, forms a perfect microscope workstation with low space requirements.

Execution:

- Intel Atom Z8300 "Cherry Trail" Quadcore CPU (64-bit)
- Intel HD Graphics (gen. 8, max. 4k resolution)
- 2 GB RAM memory
- 32 GB internal SSD storage

- Windows 10 Home 64-bit operating system
- WiFi, 802.11b/g/n/ac (2.4/5 GHz)
- Bluetooth 4.0
- Connections: 1 x HDMI 1.4, 1 x USB 3.0, 3 x USB 2.0, 1 x LAN RJ45, 1 x Audio out 3.5 mm, 1 x micro SD card slot
- Dimensions (W x D x H): 158 x 120 x 33 mm
- weight: 360g

Notes:

For image recording and processing, you will also need the pixel-fox 7.0® basic package (article number 41614210), which is included with the digital camera!



Mini-PC for
microscope
workstations

41614...

Ident. No.

290

Software
pixel-fox

41614...

Ident. No.

210

Prod. Gr. 486



LED ring light and LED transmitted light

LED illumination for microscopes

Application:

For even, shadow-free and homogeneous illumination of objects.

Execution:

- LED ring light with 40 LEDs and continuous brightness control
- Control unit with two connectors for two lighting units (LED ring light and LED transmitted light)
- Ident. No. 676:** Without segment control
- Ident. No. 682:** With segment control

Advantage:

- Ident. No. 682:** Selectable segments: Full circle, half circle, 2 opposite quarter circles, quarter circle and rotation

Delivery:

Control unit and power supply unit

Technical data:

- Outer diameter: 94 mm
- Internal diameter: 66 mm
- Number of LEDs: 40 PCS
- Colour temperature: 5000 K
- Lamp type: LED



Ident. No. 676

Segment control system	No	Yes
41613... Ident. No.	676 ○	682 ●

Prod. Gr. 412



Swan neck light

LED Hi-Power spot, 2 arms

Application:

For flexible and pinpoint incident light tasks in microscopy. The LED HI-Power Spot can be fixed directly to the stand via an adapter and is therefore suitable for individual, space-saving applications.

Execution:

- Flexible gooseneck arms
- Two high-quality LED HI-Power Spots
- Spotlights can be switched separately
- Control unit with continuous brightness control

Advantage:

- Homogeneous, neutral white light, continuously dimmable, ripple and flicker-free

- Brightness comparable to one 150 W halogen light source

Delivery:

LED Hi-Power Spot, 2 arms, control unit and power supply unit

Technical data:

- Number of arms: 2 PCS
- Arm length: 480 mm
- Colour temperature: 5000 K
- Lamp type: LED



2-arm LED Hi-Power spot fitted on a round column stand

41613... Ident. No.	761 ●
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Prod. Gr. 412



Adapter

For LED Hi-Power spot with 2 arms

Application:

For attaching LED Hi-Power Spot lamps to round column stands with diameters of 25, 30, 32, 35 mm

41613... Ident. No.	765 ●
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Prod. Gr. 412



LED cold light source

lighting unit without bulb for microscopes

Application:

For a broad range of lighting applications in microscopy. Allows the highest possible light intensities to be focussed on a surface. Sensitive objects are also protected against intense heat.

Execution:

- Robust metal housing
- Infinitely variable brightness regulation
- ESD connector
- Ident. No. 637:**
 - Electronic shutter function

- Remote control via USB and foot switch (toggle standby, toggle presets, dimming)
- All settings (brightness/shutter/strobe parameters) can be easily configured

Advantage:

- High light density over a small surface
- Ideal for small object fields, e.g. 40x magnification

Technical data:

- Lamp type: LED
- ESD bush: Yes
- Min./max. nominal voltage: 100 / 240 V/DC



Ident. No. 635



Ident. No. 637

Model	F1	F3000
Colour temperature (K)	5500	5800
Life time of illuminant (h)	50000	30000
Input voltage (V/DC)	24	12
41613... Ident. No.	635 ●	637 ○

Prod. Gr. 412

PHOTONIC Gooseneck illuminator

Fibre optic light guide, 2-arm

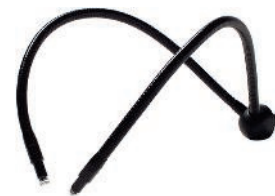
Application:

2-arm gooseneck illuminator. In combination with a PHOTONIC LED cold light source, ideal for flexible, pinpoint incident lighting tasks in microscopy. The LED HI-Power Spot can be fixed directly to the stand via an adapter and is therefore suitable for individual,

space-saving applications.

Technical data:

- Number of arms: 2 PCS
- Arm length: 550 mm



41613... | Ident. No. 640

Prod. Gr. 412

PHOTONIC Split ring light with front focusing element

For LED cold light source

Application:

Split ring light with focussing attachment for even, shadow-free and homogeneous illumination of objects. Incl. ring adapter diameter 66/58 mm

Technical data:

- Outer diameter: 94 mm
- Internal diameter: 66 mm
- Active optical fibre diameter: 9 mm

**Execution:**

- Fibre optic cable length 750 mm

41613... | Ident. No. 645

Prod. Gr. 412

PHOTONIC Polarisation filter

For split ring light

Application:

Polarisation filter for suppressing unwanted

reflections

41613... | Polarisation filter for LED ring light | Ident. No. 691

Prod. Gr. 412



Applications rebound hardness testing devices

Application:

Hardness testing of solid materials $G > 5$ kg ($G < 5$ kg on stable base) such as steel, cast materials (e.g. grey iron, spheroidal graphite iron), aluminium cast alloys, brass, bronze, wrought copper alloys. Forged, rolled and cast materials.