



SX80 & **SX100**



Stereo Zoom Microscope

for advanced inspection, analysis and subject modification

- High optical quality CMO stereo microscope, designed to be affordable
- **SX80**: x8 - x64 standard zoom magnification range (x256 max.)
- **SX100**: x8 - x80 standard zoom magnification range (x320 max.)
- Modular system with optional extras for tailored configurations
- Long-life, true colour LED illumination

The SX80 and SX100 incorporate over 50 years of proven optical experience in a high quality CMO-series stereo zoom microscope. Designed with high quality optics, the modular SX80 and SX100 deliver superb image quality at a competitive price, with a wide array of options providing complete flexibility.

Vision Engineering's SX80 and SX100 deliver value, performance and flexibility and with long working distances are ideal for a wide range of both industrial and life science applications.

Superior Optical Performance

- Precision optics deliver high resolution, flat field and high contrast images with long working distances and large depth of field
- Plan achromat objectives with magnification up to x320[†]
- Coarse and/or fine focus (optional)
- Double iris diaphragm for increased depth of field (optional)
- 22mm Field Number (standard) eyepieces with eyepiece dioptre setting
- Click stop zoom indexing

[†] SX100 with x2.0 objective and x20 eyepieces

SX80 Overview

The SX80 provides high quality stereo viewing, ideal for both industry and life sciences, with an extra-long working distance for assembly, manipulation, re-work, dissection, or simple inspection tasks.

With an 8:1 zoom ratio, the SX80 has a standard magnification range of x8 - x64 (x256 max.) allowing fast and accurate viewing of all subjects. A compact, modular design allows accessories to be added to the configuration, without loss of clarity and contrast through the common main objective.

Eyepieces	Objective Lens	Zoom Range	Working Distance
x10/22 F.N.	x0.5	x4 - x32	130mm
x10/22 F.N.	x1.0	x8 - x64	78mm
x10/22 F.N.	x2.0	x16 - x128	32.5mm
x15/16 F.N.	x0.5	x6 - x48	130mm
x15/16 F.N.	x1.0	x12 - x96	78mm
x15/16 F.N.	x2.0	x24 - x192	32.5mm
x20/13 F.N.	x0.5	x8 - x64	130mm
x20/13 F.N.	x1.0	x16 - x128	78mm
x20/13 F.N.	x2.0	x32 - x256	32.5mm

- High optical quality CMO stereo microscope, designed to be affordable
- **SX80:** x8 - x64 standard magnification range (x256 max.)
- **SX100:** x8 - x80 standard magnification range (x320 max.)
- Modular system with optional extras for tailored configurations
- Long-life (6,000 hours), true colour LED illumination



SX100 Overview

The high precision optics of the SX100 provide a 10:1 zoom ratio and a standard magnification range of x8 - x80 (x320 max.), providing high performance stereo magnification, whilst maintaining a long working distance at higher magnification.

With coarse and fine adjustment, the SX100 has been designed to provide users with advanced capabilities for critical examination, allowing operators to switch between inspection and modification tasks, allowing for parts to be reworked accurately to pass stringent quality standards.

Eyepieces	Objective Lens	Zoom Range	Working Distance
x10/22 F.N.	x0.5	x4 - x40	130mm
x10/22 F.N.	x1.0	x8 - x80	78mm
x10/22 F.N.	x2.0	x16 - x160	32.5mm
x15/16 F.N.	x0.5	x6 - x60	130mm
x15/16 F.N.	x1.0	x12 - x120	78mm
x15/16 F.N.	x2.0	x24 - x240	32.5mm
x20/13 F.N.	x0.5	x8 - x80	130mm
x20/13 F.N.	x1.0	x16 - x120	78mm
x20/13 F.N.	x2.0	x32 - x320	32.5mm

All SX80 and SX100 objectives lenses are plan achromat.



Bench stand, compact and versatile.

- Stable, low-profile base optimises ergonomics, maximising operator comfort.
- Built-in transformer with intensity adjustment for both reflective and transmitted LED illumination.
- Fine focus option for enhanced precision and control.



Boom stand, ideal for larger specimens.

- Stable platform base, or for mounting directly to the user's work surface.
- Enhanced freedom of movement.
- Large viewable area.



Double arm boom stand, for enhanced flexibility.

- Designed specifically for applications requiring extended reach, without compromising stability.
- Multi-point adjustability allows precise positioning and alignment.

Accessories

Image Capture & Archive

Photo tube option permits the use of digital or video camera.

Modular multimedia solutions are available for image archiving, acquisition, processing, analysis and documentation.



LED Ringlight



For use with bench stand variant, where additional surface illumination is required (standard option with articulated arm and boom mount variants).

Floating Stage

For use with bench stand models, the floating stage provides smooth sample control, ideal for inspection tasks.



Polarisation Set

Polarising filters can be accommodated with bench stand variant.

Tilttable Head

The tilttable head can be inclined between 0° and 35°, increasing operator comfort with increased freedom of head movement.

Double Iris Diaphragm

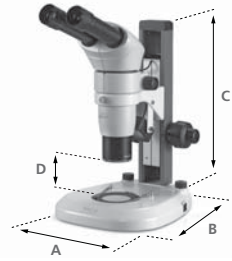
Enabling the size of the internal numerical aperture to be changed on both optical paths, for greater depth of field throughout the zoom range.



Technical Data

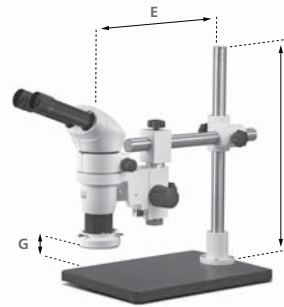
Specification		
Measuring Stage	SX80	SX100
Optical System	CMO (Common Main Objective)	
Total Magnification	x4 - x256	x4 - x320
Zoom Ratio	8:1	10:1
Observation Tube Inclination	0.8° - 64°	0.8° - 80°
Tiltable Observation Tube	20°	
Interpupillary Distance	55mm - 75mm	
Objectives	Plan Achromatic 0.5x, 1x, 2x.	
Eyepieces	WF10x F.N.22; WF15x F.N.16; WF20x F.N.12	
Working Distance	Refer to table on page 2	
Stands:	Bench stands with built in transmitted and in reflected LED illumination, available with either:	
Bench Stand -	<ul style="list-style-type: none"> ▪ Coarse focusing ▪ Coarse & fine focusing 	
Boom Stand -	Ideal for large specimens	
Double Arm Boom Stand -	Ideal for applications requiring extended reach.	

Dimensions



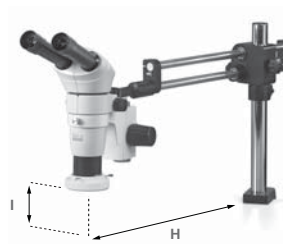
Bench Stand:

- A = 240mm
- B = 290mm
- C = 340mm
- D = 215mm max. (less working distance)



Boom Mount:

- E = 275mm max.
- F = 395mm
- G = 285mm max. (less working distance)



Double Arm Boom Mount:

- I = 950mm max.
- H = 640mm max. (less working distance)

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