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2X Mitutoyo BD Plan Apo Objective

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Mitutoyo Brightfield and Darkfield (BD) Infinity Corrected Objectives

Stock **#18-402** **3 In Stock**

⊖ 1 ⊕ C\$1,806⁰⁰

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General

Model Number:
378-831-13

Compatible Tube Lens Focal Length (mm):
Focal Length: 200mm

Type:
Microscope Objective

Style:
Infinity Corrected

Manufacturer:

Mitutoyo

Note:

#18-653 or #18-652 are required for darkfield operation.

Physical & Mechanical Properties

Length excluding Threads (mm):

61.00

Maximum Diameter (mm):

44

Weight (g):

340

Optical Properties

Compatible Cover Glass Thickness (mm):

N/A

Focal Length FL (mm):

100.00

Magnification:

2X

Numerical Aperture NA:

0.06

Resolving Power (μm):

5

Depth of Field (μm):

91.00

Field of View, 24 Diameter Field Eyepiece (mm):

12

Working Distance (mm):

34

Wavelength Range (nm):

435 - 655

Parfocal Length (mm):

95

Immersion Liquid:

N/A

Sensor

Maximum Sensor Format:

2/3"

Threading & Mounting

Mounting Threads:

M40 x 36 TPI

Environmental & Durability Factors

Operating Temperature ($^{\circ}\text{C}$):

+5 to +40

Regulatory Compliance

RoHS 2015:

[Exempt](#)

Certificate of Conformance:

[View](#)

REACH 241:

[Contains SVHC\(s\)](#)

Product Details

- Ideal for Brightfield and Darkfield Microscopy Applications
- Long Working Distances and High Numerical Apertures
- Plan Achromat Design

Mitutoyo Brightfield and Darkfield (BD) Infinity Corrected Objectives offer long working distances with high numerical apertures. The high-quality plan apochromatic design allows these objectives to maintain high numerical apertures and contrast while correcting chromatic aberration in the visible wavelength region. These objectives feature M40 x 36 TPI mounting threads. Mitutoyo Brightfield and Darkfield (BD) Infinity Corrected Objectives are optimized for both brightfield and darkfield illumination for applications including surface inspection and advanced life science microscopy.

Technical Information

Mitutoyo BD Plan Apo Objectives
Typical Transmission



Stock No.	BD Plan Apo	A	B	C	D	E	F	W.D.
#18-402	2X	61.0	4.0	40.0	37.0	42.0	44.0	34.0
#18-403	5X	61.0	4.0	40.0	37.0	42.0	44.0	34.0
#18-404	7.5X	61.0	4.0	40.0	37.0	42.0	44.0	34.0
#18-405	10X	61.0	4.0	40.0	37.0	42.0	44.0	34.0
#18-406	20X	75.0	7.0	40.0	32.0	42.0	44.0	20.0
#18-407	50X	82.0	8.5	40.0	32.0	42.0	44.0	13.0
#18-408	100X	89.0	10.0	40.0	31.5	42.0	44.0	6.0
Stock No.	BD Plan Apo SL	A	B	C	D	E	F	W.D.
#18-409	20XSL	64.5	7.5	40.0	31.0	42.0	44.0	30.5
#18-410	50XSL	75.0	7.0	40.0	32.0	42.0	44.0	20.0
Stock No.	BD Plan APO HR	A	B	C	D	E	F	W.D.
#18-411	50XHR	89.9	4.8	40.0	32.0	42.0	44.0	5.2
#18-412	100XHR	93.7	4.7	40.0	32.0	42.0	44.0	1.3



Units: mm