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## 50X Mitutoyo BD Plan Apo Objective

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Mitutoyo Brightfield and Darkfield (BD) Infinity Corrected Objectives

Stock **#18-407** **1 In Stock**

⊖ 1 ⊕ C\$6,055<sup>00</sup>

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### Product Downloads

### General

**Model Number:**  
378-835-7

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

**Type:**  
Microscope Objective

**Style:**  
Infinity Corrected

**Manufacturer:**

**Note:**

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

## Physical & Mechanical Properties

82.00 Length excluding Threads (mm):

44 Maximum Diameter (mm):

440 Weight (g):

## Optical Properties

N/A Compatible Cover Glass Thickness (mm):

4.00 Focal Length FL (mm):

50X Magnification:

0.55 Numerical Aperture NA:

0.5 Resolving Power ( $\mu\text{m}$ ):

0.90 Depth of Field ( $\mu\text{m}$ ):

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

13 Working Distance (mm):

435 - 655 Wavelength Range (nm):

95 Parfocal Length (mm):

N/A Immersion Liquid:

## Sensor

2/3" Maximum Sensor Format:

## Threading & Mounting

M40 x 36 TPI Mounting Threads:

## Environmental & Durability Factors

+5 to +40 Operating Temperature ( $^{\circ}\text{C}$ ):

## Regulatory Compliance

[Exempt](#) RoHS 2015:

[View](#) Certificate of Conformance:

[Contains SVHC\(s\)](#) REACH 241:

## 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