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# 10X Mitutoyo BD Plan Apo Objective

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Mitutoyo Brightfield and Darkfield (BD) Infinity Corrected Objectives

Stock **#18-405** **1 In Stock**

⊖ 1 ⊕ £1,160<sup>00</sup>

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## Product Downloads

### General

378-833-7 **Model Number:**

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

Microscope Objective **Type:**

Infinity Corrected **Style:**

Mitutoyo **Manufacturer:**

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

## Physical & Mechanical Properties

61.00 **Length excluding Threads (mm):**

44 **Maximum Diameter (mm):**

350 **Weight (g):**

## Optical Properties

N/A **Compatible Cover Glass Thickness (mm):**

20.00 **Focal Length FL (mm):**

10X **Magnification:**

0.28 **Numerical Aperture NA:**

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

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

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

34 **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