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## 20X Mitutoyo BD Plan Apo Objective

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Mitutoyo Brightfield and Darkfield (BD) Infinity Corrected Objectives

Stock **#18-406** **1 In Stock**

⊖ 1 ⊕ £2,564.<sup>00</sup>

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### Product Downloads

#### General

378-834-7 **Model Number:**

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

Microscope Objective **Type:**

Infinity Corrected **Style:**

Manufacturer: Mitutoyo

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

## Physical & Mechanical Properties

Length excluding Threads (mm): 75.00

Maximum Diameter (mm): 44

Weight (g): 400

## Optical Properties

Compatible Cover Glass Thickness (mm): N/A

Focal Length FL (mm): 10.00

Magnification: 20X

Numerical Aperture NA: 0.42

Resolving Power ( $\mu\text{m}$ ): 0.7

Depth of Field ( $\mu\text{m}$ ): 1.60

Field of View, 24 Diameter Field Eyepiece (mm): 1.2

Working Distance (mm): 20

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 Apochromat 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