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20X Mitutoyo Plan Apo NIR Infinity Corrected Objective

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20X Mitutoyo Plan Apo NIR Infinity Corrected Objective, #46-404

Stock **#46-404** **2 In Stock**

- 1 +

MRP **₹4,44,978**

Price inclusive of all taxes

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General

Model Number:
378-824-16

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

Type:
Microscope Objective

Style:
Infinity Corrected

Manufacturer:
Mitutoyo

Note:
Example Application: cutting and trimming of semiconductor wafer and circuits

Physical & Mechanical Properties

Length excluding Threads (mm):
75.00

Maximum Diameter (mm):
34

Weight (g):
300.00

Optical Properties

Compatible Cover Glass Thickness (mm):
N/A

Design Wavelength DWL (nm):
532, 1064

Horizontal Field of View, 1/2" Sensor:
0.32mm

Horizontal Field of View, 2/3" Sensor:
0.44mm

Focal Length FL (mm):
10.00

Magnification:
20X

Numerical Aperture NA:
0.40

Resolving Power (µm):
0.7

Depth of Field (µm):
1.70

Field of View, 18 Diameter Field Eyepiece (mm):
0.9

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

Working Distance (mm):
20.0

Wavelength Range (nm):
480 - 1800

Parfocal Length (mm):
95

Immersion Liquid:
N/A

Sensor

Maximum Sensor Format:
2/3"

Threading & Mounting

Mounting Threads:
M26 x 36 TPI

Environmental & Durability Factors

Operating Temperature (°C):
-5 to +45

Operating Humidity:
20 - 80%

Regulatory Compliance

RoHS 2015:
Exempt

Certificate of Conformance:
View

REACH 241:
Contains SVHC(s)

Country of Origin:
Japan

Imported By:
Edmund Optics India Private Limited
267, Greystone Building, Second Floor,
6th Cross Rd, Binnamangala,
Stage 1, Indiranagar, Bengaluru,
Karnataka, India 560038
Phone: +91- 80-6845 0000

Product Details

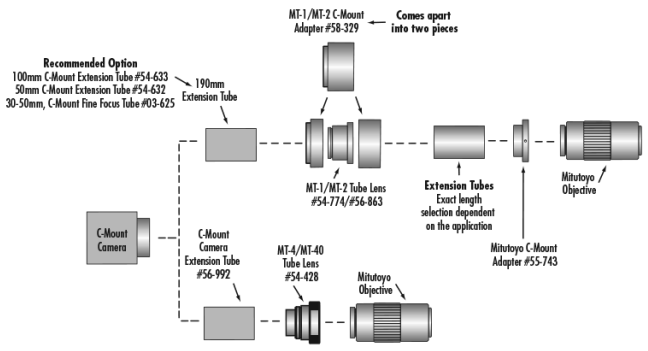
- Ideal for Bright Field Imaging in UV, Visible, and NIR Spectral Regions
- Excellent Performance at Nd:YAG Laser Lines
- Broad Spectral Ranges

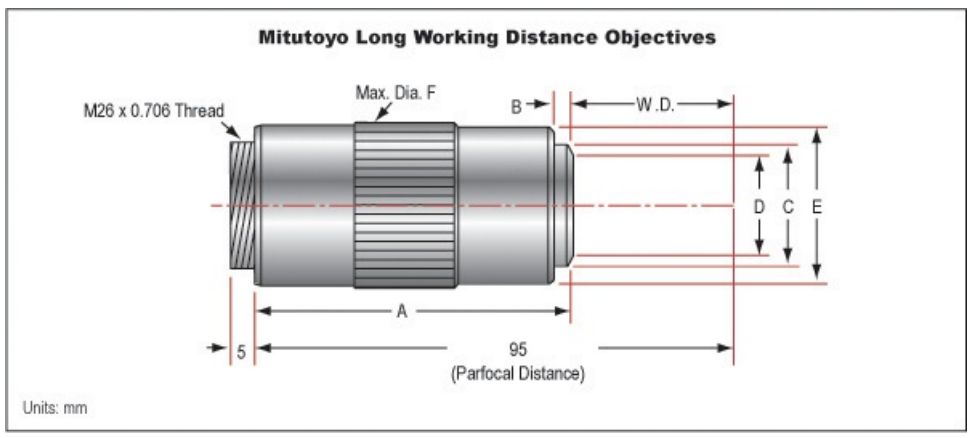
Mitutoyo NIR, NUV, and UV Infinity Corrected Objectives combine the benefits of the standard **M Plan Apo and M Plan Apo SL series objectives** with enhanced spectral ranges. The NIR objectives are corrected from 480 to 1800nm and feature enhanced transmission of the fundamental and second harmonic of Nd:YAG lasers for laser cutting applications. The NUV and UV series of objectives also have excellent performance at the second, third, and fourth Nd:YAG harmonics of 532nm, 355nm, and 266nm respectively. Mitutoyo NIR, NUV, and UV Infinity Corrected Objectives are ideal for applications that require a significant distance between the objective lens and the object such as semiconductor inspection, machine vision, and defect detection. The HR series offers an increased numerical aperture, providing smaller spot sizes and higher resolution.

Accessory Tube Lenses

Accessory Tube Lenses and **C-Mount Thread Adapters** can be used to adapt the Mitutoyo objectives to additional configurations.

Technical Information





Dimensions (mm)

Stock No.	M Plan NIR	A	B	C	D	E	F	W.D.
#46-402	5X NIR	57.50	-	23.80	23.00	32.20	34.00	37.50
#46-403	10X NIR	64.50	1.00	25.20	24.80	32.20	34.00	30.50
#46-404	20X NIR	75.00	-	-	-	32.20	34.00	20.00
#46-405	50X NIR	78.00	-	-	-	32.20	34.00	17.00
#46-406	100X NIR	83.00	-	25.00	24.60	32.20	34.00	12.00
#56-982	50X NIR HR	85.00	-	-	-	37.00	39.00	10.00
#56-983	100X NIR HR	85.00	-	-	-	37.00	39.00	10.00
#89-350	20X NIR B	69.50	-	-	-	37.00	37.00	25.50
#89-351	50X NIR B	69.50	-	-	-	37.00	37.00	25.50
#37-550*	20X NIR LCD	75.02	-	-	-	32.20	34.00	20.35
Stock No.	**M Plan NUV**	**A**	**B**	**C**	**D**	**E**	**F**	**W.D.**
#86-176	10X NUV	64.50	-	25.20	24.80	32.20	34.00	30.50
#46-407	20X NUV	78.00	-	-	-	32.20	34.00	17.00
#46-408	50X NUV	80.00	-	-	-	32.20	34.00	15.00
#46-409	100X NUV	84.00	1.80	25.00	24.00	32.20	34.00	11.00
#86-177	50X NUV HR	85.00	-	-	-	37.00	39.00	10.00
Stock No.	**M Plan UV**	**A**	**B**	**C**	**D**	**E**	**F**	**W.D.**
#86-175	10X UV	75.00	-	-	-	32.20	34.00	20.00
#56-320	20X UV	80.00	-	-	-	32.20	34.00	15.00
#56-321	50X UV	83.00	-	-	-	32.20	34.00	12.00
#56-322	80X UV	85.00	-	22.70	-	32.20	34.00	10.00

*LCD 20X parfocal length is 95.37

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