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**TECHSPEC® f/2, 12mm Focal Length Green Series M12 Lens**



12mm Focal Length, #54-854

Stock **#54-854 2 In Stock**

- 1 + MRP ₹8,648

● Price inclusive of all taxes

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Volume Pricing	
Qty 1-49	₹8,648 each
Qty 50+	₹6,876 each
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**General**

Green Series

**Product Family:**

M12 Imaging Lens

**Type:**

No

**IR Cut Filter:**

Standard Lens

**Imaging Lens Type:**

## Physical & Mechanical Properties

Fixed	Iris Option:
19.50	Length (mm):
16	Maximum Diameter (mm):
16	Outer Diameter (mm):
6	Weight (g):

## Optical Properties

Horizontal Field of View @ Max Sensor Format:  
80.5mm - 30.1°

Field of View at Max Sensor Format:  
Horizontal: 80.5mm - 30.1°  
Vertical: 60mm - 22.7°  
Diagonal: 101.5mm - 37.5°

Horizontal Field of View, 1/2" Sensor:  
80.5mm - 30.1°

Horizontal Field of View, 1/2.5" Sensor:  
72.7mm - 27.4°

Horizontal Field of View, 1/3" Sensor:  
60.0mm - 22.7°

Horizontal Field of View, 1/4" Sensor:  
44.9mm - 17.1°

Resolution:  
150 lp/mm @ 20% Contrast

Maximum Image Circle (mm):  
8.00

Numerical Aperture NA, Object Side:  
0.0191

Number of Elements (Groups):  
5(5)

Wavelength Range (nm):  
400 - 700

Focal Length FL (mm):  
12.00

Working Distance (mm):  
150 - ∞

Aperture (f/#):  
f/2

Distortion (%):  
-2.2 @ Full Field

Back Focal Length BFL (mm):  
7.1 - 6.75

Coating Specification:  
M4 MgF<sub>2</sub> @ 580nm

Entrance Pupil Position (mm):  
7.50

Object Space Principal Plane (mm):  
10.41

Image Space Principal Plane (mm):  
-3.73

Maximum Distortion (%):  
-2.2

Exit Pupil Position (mm):  
-7.56

Lens Wavelength Range:  
VIS

## Sensor

Maximum Sensor Format:  
1/2"

Pixel Size (µm):  
8.30

## Threading & Mounting

Filter Thread:  
N/A

Mounting Threads:  
M12 x 0.5

Mount:

## Regulatory Compliance

Compliant

RoHS 2015:

View

Certificate of Conformance:

Compliant

REACH 241:

China

Country of Origin:

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

Optimized Working Distance: 150 - 250mm

- Up to 1/2", S-Mount Lens
- Up to 0.4 MegaPixels, 8.3µm Pixel Size Sensors
- Board Camera Lens Optimized for Close WD and Finite Conjugate
- 6mm to 25mm Focal Lengths

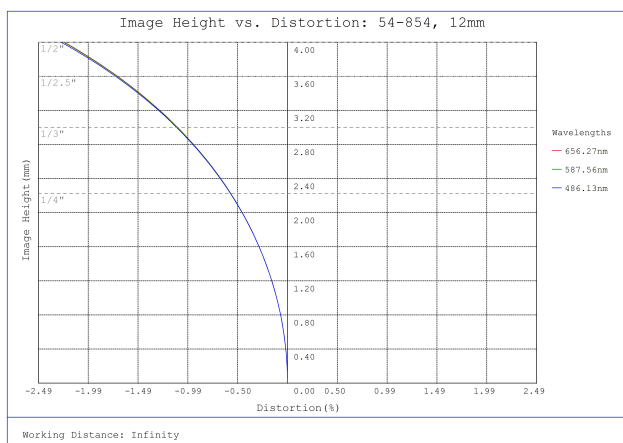
TECHSPEC® Green Series M12 Lenses designed for use in compact and board level cameras provide excellent image quality in a small, versatile package. Optimized to cover 1/3" and 1/2" sensor formats and weighing only a few grams, these machine vision lenses meet the most demanding space and weight restrictions. Each lens is threaded for M12 x0.5, except the 25.0mm focal length option ([#54-855](#)). TECHSPEC® Green Series M12 Lenses are ideal for wide angle and close focus applications, large area inspect for the automotive, forensic, pharmaceutical, and food industries. Prescription data is available by submitting a [Request for Prescription Form](#).

**Note:** Compatible [TECHSPEC M12 Imaging Lens Accessories](#) available.

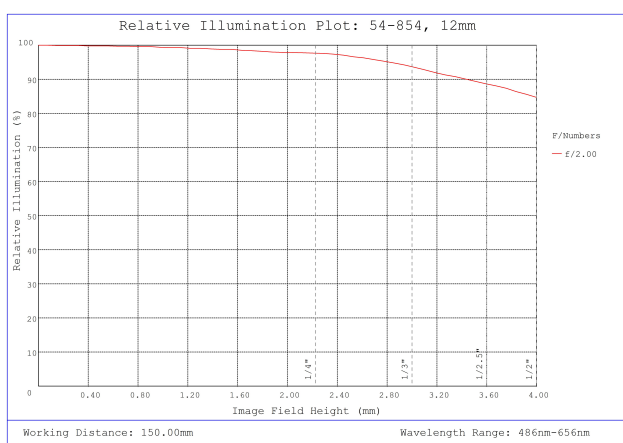
Edmund Optics has created multiple product families of our TECHSPEC® M12 S-Mount Lenses, which are designed to provide high resolution. These high performance lenses feature precision glass designs in a metal housing and have optimized specifications between each product family to meet your application needs.

- **Blue Series M12 Lenses:** High resolution finite conjugate designs optimized for machine vision working distances.
- **Rugged Blue Series M12 Lenses:** Stabilized ruggedization versions of our Blue Series M12 Lenses, utilizing the same optics.
- **Green Series M12 Lenses:** Finite conjugate designs optimized for machine vision working distances.
- **Red Series M12 Lenses:** Infinite conjugate designs optimized for high resolution performance out to infinity.
- **HEO Series M12 Lenses:** Harsh Environment Optics (HEO) sealed versions of our Red Series M12 Lenses.
- **Liquid Lens M12 Lenses:** Integrated liquid lens for fast electronic focus.

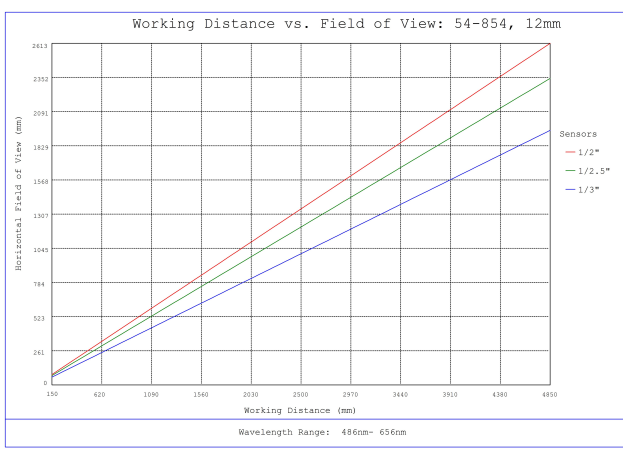
## Technical Information



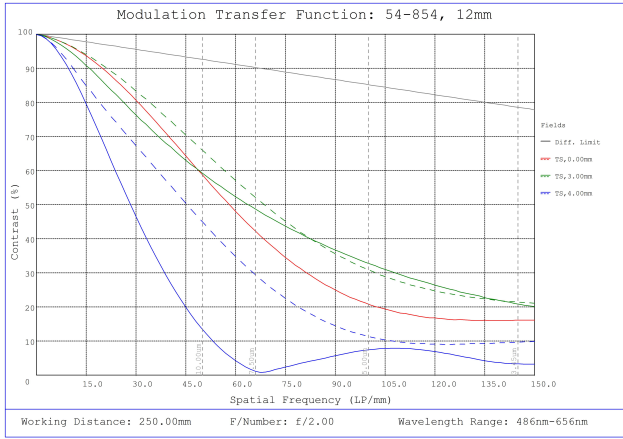
#54-854, f/2, 12mm Focal Length Green Series M12 Lens, Distortion Plot



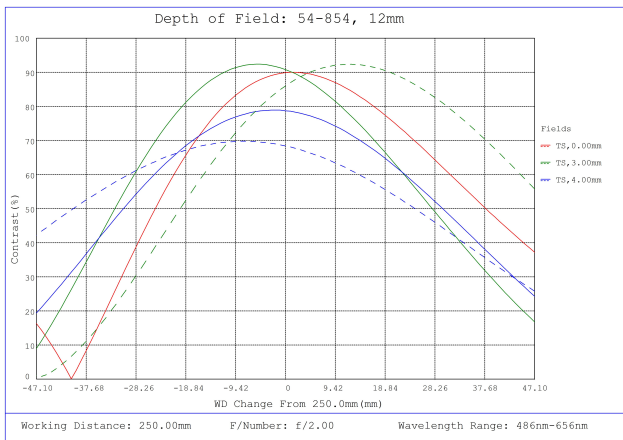
#54-854, f/2, 12mm Focal Length Green Series M12 Lens, Relative Illumination Plot



#54-854, f/2, 12mm Focal Length Green Series M12 Lens, Working Distance versus Field of View Plot

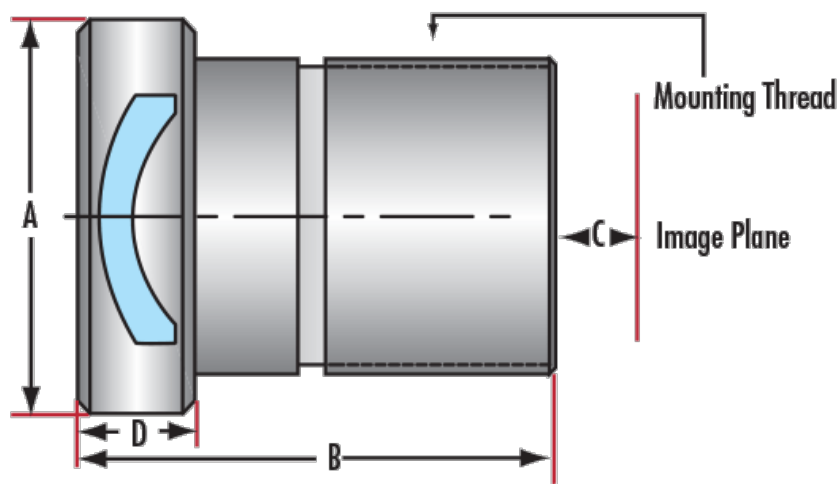


#54-854, f/2, 12mm Focal Length Green Series M12 Lens, Modulated Transfer Function (MTF) Plot, 250mm Working Distance, f2



#54-854, f/2, 12mm Focal Length Green Series M12 Lens, Depth of Field Plot, 250mm Working Distance, f2

Focal Length	A	B	C**	D	Mounting Thread
6.00	14.0	11.70	4.0 - 3.9	3.5	M12 x 0.5
8.00	14.0	20.40	8.9 - 8.7	6.0	M12 x 0.5
12.00	16.0	19.50	7.1 - 6.75	6.0	M12 x 0.5
25.00	18.0	24.40	12.6 - 11.9	9.0	M16 x 0.5



\*\*Minor adjustment required to match WD limits.