

[See all 11 Products in Family](#)

TECHSPEC® f/2.0, Visible, 2.2mm HEO Series M12 Lens



Stock #58-840 **15 In Stock**

MRP ₹15,854

i Price inclusive of all taxes

ADD TO CART

| Volume Pricing | |
|----------------|-------------------------------|
| Qty 1-49 | ₹15,854 each |
| Qty 50+ | ₹12,476 each |
| Need More? | Request Quote |

Product Downloads

General

HEO Series **Product Family:**

M12 Imaging Lens **Type:**

No **IR Cut Filter:**

Meets IEC IPX7 and IPX9K **Imaging Lens Type:**

Physical & Mechanical Properties

| | |
|-------|-------------------------------|
| Fixed | Iris Option: |
| 16.40 | Length (mm): |
| 21 | Maximum Diameter (mm): |
| 21 | Outer Diameter (mm): |
| 4 | Weight (g): |

Optical Properties

Horizontal Field of View @ Max Sensor Format:
1685.1mm - 128.9°

Field of View at Max Sensor Format:
Horizontal: 1683.4mm - 128.8°
Vertical: 905.7mm - 96.5°
Diagonal: 5360.6mm - 162.9°

Horizontal Field of View, 1/3" Sensor:
1,685.1mm - 128.9°

Horizontal Field of View, 1/4" Sensor:
905.3mm - 96.6°

Maximum Image Circle (mm):
6.00

Numerical Aperture NA, Object Side:
0.0013

Resolution, On-Axis:
100 lp/mm @20% Contrast

Number of Elements (Groups):
7(6)

Wavelength Range (nm):
425 - 675

Focal Length FL (mm):
2.20

Working Distance (mm):
400 - ∞

Aperture (f/#):
f/2

Distortion (%):
-79.53 @ Full Field

Back Focal Length BFL (mm):
2.23 - 2.22

Coating Specification:
425 - 625nm BBAR

Entrance Pupil Position (mm):
4.56

Object Space Principal Plane (mm):
6.28

Image Space Principal Plane (mm):
1.15

Maximum Distortion (%):
-79.53

Exit Pupil Position (mm):
-7.52

Lens Wavelength Range:
VIS

Sensor

Maximum Sensor Format:
1/3"

Pixel Size (µm):
5.00

Threading & Mounting

Filter Thread:
N/A

Mount:
S-Mount (M12 x0.5)

Environmental & Durability Factors

Environmental Rating:
IPX7 and IPX9K

Type of Ruggedization:

Regulatory Compliance

Certificate of Conformance:

[View](#)

Country of Origin:

China

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

- Up to 1/2", S-Mount Lens
- Up to 1.2 MegaPixels, 5µm Pixel Size Sensors
- Meets IEC Ingress Protection Ratings of IPX7 and IPX9K
- 2.2mm to 8mm Focal Length

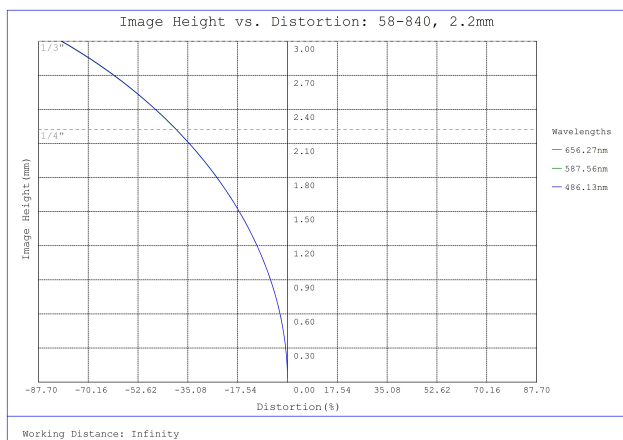
TECHSPEC® HEO Series M12 Lenses integrate high performance optics into a sealed, ruggedized enclosure. Designed to meet IEC Ingress Protection Codes IPX7 and IPX9K, these lenses withstand exposure to water up to 1 meter depth for 30 minutes and operate in close-range high-pressure, high-temperature water spray downs. Threaded for M12 x0.5, these lenses are optimized for 1/3" and 1/2" sensor formats. Each HEO Series Lens is waterproof, dustproof, and fog proof with the ability to be hermetically sealed to a camera. TECHSPEC® HEO Series M12 Lenses are ideal for harsh environment applications, such as automotive. Prescription data is available by submitting a [Request for Prescription Form](#)

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

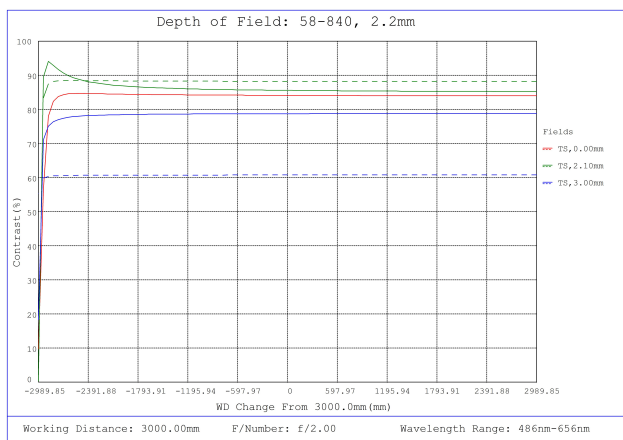
Edmund Optics has created multiple product families of our TECHSPEC® M12 S-Mount Lenses, which are designed to provide high resolution. These high performance lenses feature precision glass designs in a metal housing and have optimized specifications between each product family to meet your application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

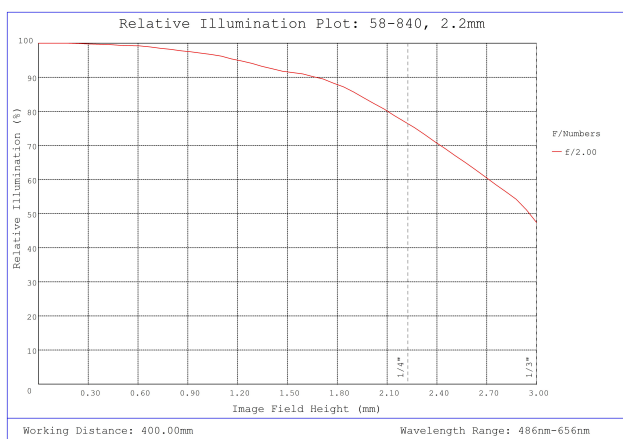
Technical Information



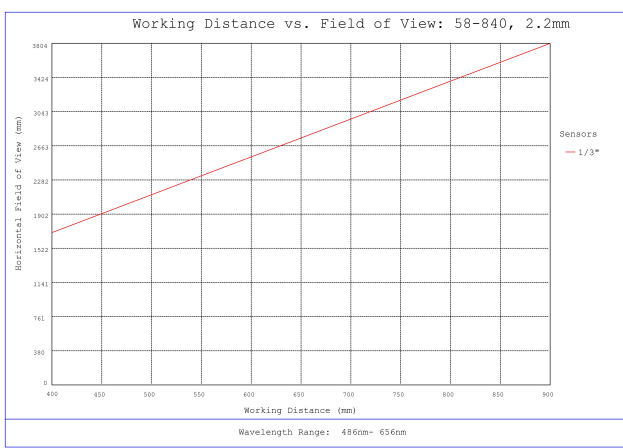
#58-840, f/2.0, Visible, 2.2mm HEO Series M12 Lens, Distortion Plot



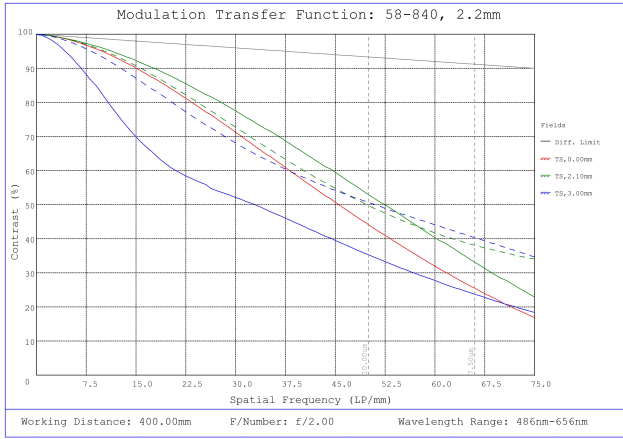
#58-840, f/2.0, Visible, 2.2mm HEO Series M12 Lens, Depth of Field Plot, 3000mm Working Distance, f2



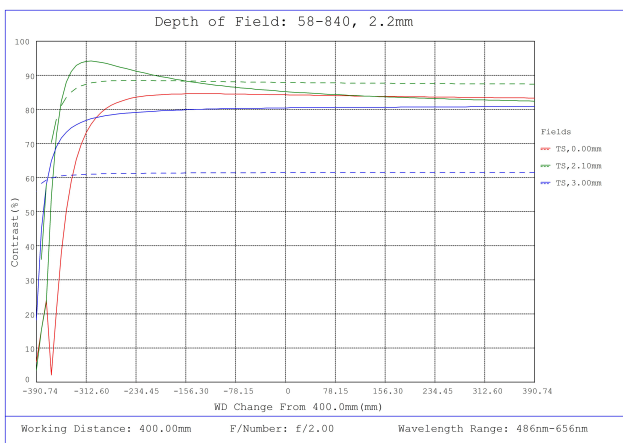
#58-840, f/2.0, Visible, 2.2mm HEO Series M12 Lens, Relative Illumination Plot



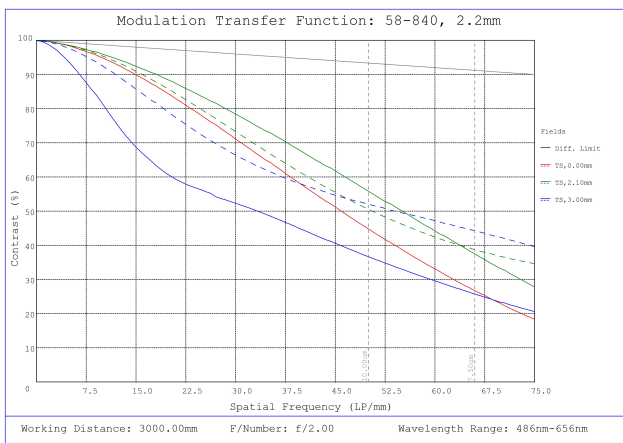
#58-840, f/2.0, Visible, 2.2mm HEO Series M12 Lens, Working Distance versus Field of View Plot



#58-840, f/2.0, Visible, 2.2mm HEO Series M12 Lens, Modulated Transfer Function (MTF) Plot, 400mm Working Distance, f2



#58-840, f/2.0, Visible, 2.2mm HEO Series M12 Lens, Depth of Field Plot, 400mm Working Distance, f2



#58-840, f/2.0, Visible, 2.2mm HEO Series M12 Lens, Modulated Transfer Function (MTF) Plot, 3000mm Working Distance, f2

| Focal Length | A | B | C | D |
|--------------|--------|--------|-------|-------|
| 2.2mm | 21.0mm | 16.4mm | 2.2mm | 5.4mm |
| 3.6mm | 14.0mm | 14.1mm | 4.5mm | 4.5mm |
| 8.0mm | 14.0mm | 15.0mm | 8.7mm | 4.0mm |



