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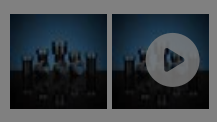
TECHSPEC® 8mm F



- 1 +

€80,00

ADD TO CART

Volume Pricing	
Qty 1-49	€80,00 each
Qty 50+	€64,00 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

STEP:step | PDF Drawing:pdf | IGES:igs | Zemax | eDrawing:eprt | EO Spec Sheet

General

Product Family:	Blue Series	**Type:**	M12 Imaging Lens
IR Cut Filter:	Yes	**Special Type of Lens:**	IR-Cut Filter

Physical & Mechanical Properties

Iris Option:	Fixed	**Length (mm):**	12.30
Maximum Diameter (mm):	14	**Outer Diameter (mm):**	14
Weight (g):	3		

Optical Properties

Horizontal Field of View @ Max Sensor Format:	34.2°	**Field of View at Max Sensor Format:**	Horizontal: 92.8mm - 34.2° Vertical: 68.9mm - 25.7° Diagonal: 117.5mm - 42.6°
Horizontal Field of View, 1/3" Sensor:	94.0mm - 34.2°	**Horizontal Field of View, 1/4" Sensor:**	69.8mm - 25.7°
Maximum Image Circle (mm):	6.00	**Numerical Aperture NA, Object Side:**	0.0032
Number of Elements (Groups):	5(5)	**Wavelength Range (nm):**	400 - 700
Focal Length FL (mm):	8.00	**Working Distance (mm):**	150 - ∞
Aperture (f/#):	f/8	**Distortion (%):**	-3.63 @ Full Field

Back Focal Length BFL (mm):	8.8 - 8.6	**Coating Specification:**	λ/4 MgF_2 @ 550nm
Entrance Pupil Position (mm):	5.04	**Object Space**	8.13
Image Space Principal Plane (mm):	0.94		
Exit Pupil Position (mm):	-4.09	**Lens Wavelength Range:**	VIS (IR-Cut Filter)

Sensor

Maximum Sensor Format:	1/3"	**Pixel Size (µm):**	1.40

Threading & Mounting

Filter Thread:	N/A	**Mount:**	S-Mount (M12 x 0.5)

Regulatory Compliance

RoHS 2015:	**Compliant**	**Certificate of Conformance:**	**View**
Reach 247:	**Compliant**		

Product Details

- Up to ½", S-Mount Lens
- Up to 5 MegaPixels, 1.4µm Pixel Size Sensors
- High Resolution Board Camera Lens Optimized for Close WD
- 2mm to 35mm Focal Length
- **Ruggedized Designs** Also Available

TECHSPEC® Blue Series M12 Lenses feature high resolution performance, along with the same great versatility of our **TECHSPEC® Green Series M12 Lenses**. Each lens consists of several precision glass elements mounted in a compact, aluminum housing. These lenses can connect to C-Mount cameras using the M12 x 0.5 Adapter for C-Mount Cameras (**#53-675**) or the M12 x 0.5 C-Mount Adapter with Rubber O-Ring (**#59-241**) for vibration-sensitive environments. TECHSPEC® Blue Series M12 Lenses are ideal for automotive, industrial, and medical imaging application. 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

Focal Length	A	B	C*	D
2.0mm	18.0mm	21.7mm	2.26mm	4.75mm
3.0mm	14.0mm	17.1mm	4.8 - 4.7mm	5.8mm
4.0mm	14.0mm	19.7mm	6.1 - 6.0mm	4.4mm
5.0mm	14.0mm	14.6mm	4.0 - 3.9mm	3.7mm

6.0mm	14.0mm	14.1mm	6.9 - 6.8mm	4.5mm
8.0mm	14.0mm	12.3mm	8.8 - 8.6mm	3.7mm
10.0mm	14.0m			3.7mm
12.5mm	15.0m			4.8mm
17.5mm	14.0mm	20.7mm	5.8 - 4.9mm	7.6mm
25.0mm	18.0mm	30.0mm	8.5 - 6.5mm	11.5mm
35.0mm	18.0mm	29.5mm	18.72 - 14.0mm	14.5mm

*Specified for Optimized Working Distance of 150 - 250mm.

Accessories

Note: Compatible accessories for individual stock numbers may vary. If unsure about which accessories work with your products, please contact us **here**.

	Title	Compare	Stock Number	Price	Buy
MORE+	M12 Lock Nut, 10 Pack		#16-788	€116,00 Request Quote	20+ In Stock 1
MORE+	M12 Lock Nut		#64-102	€16,50 Request Quote	20+ In Stock 1
MORE+	M12 Lens Holder for Camera Boards		#66-382	€12,00 Request Quote	20+ In Stock 1
MORE+	C-Mount to M12 Lens Adapter w/Oring		#59-241	€46,75 Request Quote	3 In Stock 1
MORE+	C-Mount to M12 Lens Adapter		#53-675	€32,75 Request Quote	20+ In Stock 1

Related Products

C, S, and T-Mount Extensions Tubes

#63-975 - 16mm, S-Mount Ring Mount, ¼-20 Tapped Hole
€65,00

Qty

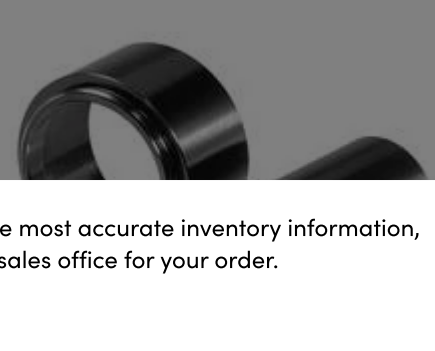
Frequently Purchased Together

#34-552 – English Ball Point Hex Driver Set
€112,00

Qty

#
M
€59,50

Qty



€27,00

Qty

#83-951 – 8mm FL f/8, Blue Series M12 Lens
€81,00

Qty

Resources

Media Type

- Application Note
- Video
- Published Article
- FAQ
- Glossary
- Technical Tool

APPLICATION NOTE
Anti-Reflection (AR) Coatings

APPLICATION NOTE
An Introduction to Optical Coatings

VIDEO
Wavelength and f#

APPLICATION NOTE
Understanding Focal Length and Field of View

APPLICATION NOTE
Introduction to Modulation Transfer Function

WEBINARS
Choosing the Right Machine Vision Lens

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