

TECHSPEC[®] 75mm DG Series Fixed Focal Length Lens



75mm Focal Length, #54-691

Stock **#54-691** 20+ In Stock

-

1

+

S\$918^{.41}

ADD TO CART

Volume Pricing	
Qty 1+	S\$918.41 each
Need More?	Request Quote

Product Downloads

SPECIFICATIONS

General	
DG Series	Series:
Fixed Focal Length Lens	Type:
Traditional Double-Gauss Style Lens	Imaging Lens Type:

Physical & Mechanical Properties	
Variable	Iris Option:
116.20	Length (mm):
47.5	Maximum Diameter (mm):
47.5	Outer Diameter (mm):
436	Weight (g):
3.5	Maximum Rear Protrusion (mm):
Optical Properties	
Horizontal Field of View @ Max Sensor Format: 55.4mm - 13.2°	
Field of View at Max Sensor Format: Horizontal: 53mm - 13.2° Vertical: 39.7mm - 9.9° Diagonal: 66.2mm - 16.4°	
Horizontal Field of View, 4/3" Sensor: 55.4mm - 13.2°	
Horizontal Field of View, 1.1" Sensor: 45.4mm - 10.8°	
Horizontal Field of View, 1" Sensor: 40.9mm - 9.8°	
Horizontal Field of View, 2/3" Sensor: 28.1mm - 6.7°	
Horizontal Field of View, 1/1.8" Sensor: 23.0mm - 5.5°	
Horizontal Field of View, 1/2" Sensor: 20.5mm - 4.9°	
Horizontal Field of View, 1/2.5" Sensor: 18.5mm - 4.4°	
Horizontal Field of View, 1/3" Sensor: 15.3mm - 3.7°	
Horizontal Field of View, 1/4" Sensor: 11.5mm - 2.8°	
Maximum Image Circle (mm): 21.60	
Numerical Aperture NA, Object Side: 0.0316	
Number of Elements (Groups): 6 (4)	
Focal Length FL (mm): 75.00	
Working Distance (mm): 250 - ∞	
Aperture (f/#): f/4 - f/30	
Coating: λ/4 MgF ₂	
Coating Specification: λ/4 MgF ₂	
Entrance Pupil Position (mm): 31.44	
Object Space Principal Plane (mm): 39.65	
Image Space Principal Plane (mm): -30.62	
Maximum Distortion (%): 0.16	
Exit Pupil Position (mm): -39.84	
Lens Wavelength Range: VIS	
Sensor	
Maximum Sensor Format: 4/3"	
Pixel Size (μm): 2.74	
Threading & Mounting	

Filter Thread:	
M49.0 x0.75 (Female)	
Mount:	
C-Mount	
Environmental & Durability Factors	
Storage Temperature (°C):	
-20 to +60	
Regulatory Compliance	
RoHS 2015:	
Exempt	
REACH 201:	
Compliant	
Certificate of Conformance:	
View	

PRODUCT DETAILS

- Up to 4/3", C-Mount Lens
- Up to 9 MegaPixels, 2.8µm Pixel Size Sensors
- Double Gauss (DG) Lens with low distortion and high performance
- 18mm to 75mm Focal Length

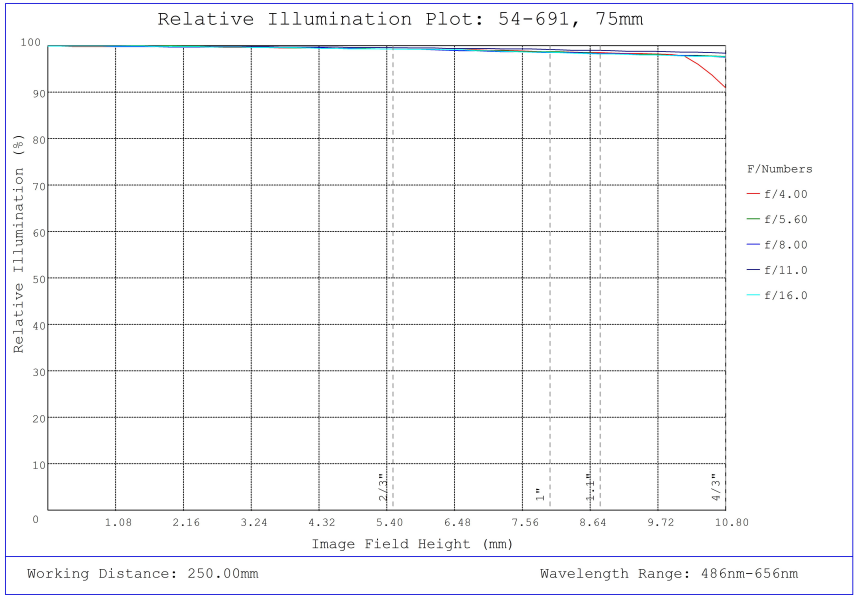
TECHSPEC® DG Series Fixed Focal Length Lenses utilize a Double Gauss design to provide high-performance, low distortion, compact size, and exceptional value, while exceeding the performance of typically available fixed focal length lenses. These lenses feature a mechanical design that allows the focusing movement to be motorized by the user, yields image resolution greater than 100 lp/mm, and have a standard C-Mount. For most applications, the camera-lens combination can be attached to workstations using the 1/4-20 mount provided on the camera. TECHSPEC® DG Series Fixed Focal Length Lenses include focus ring, manual iris, and set screws to facilitate a low profile integration in machine vision applications. Typical applications for the DG Series lenses include machine vision, assembly-line integration, and measurement and image analysis.

Note: [Industrial Boom Stands](#) are recommended for building vibration-free workstations.

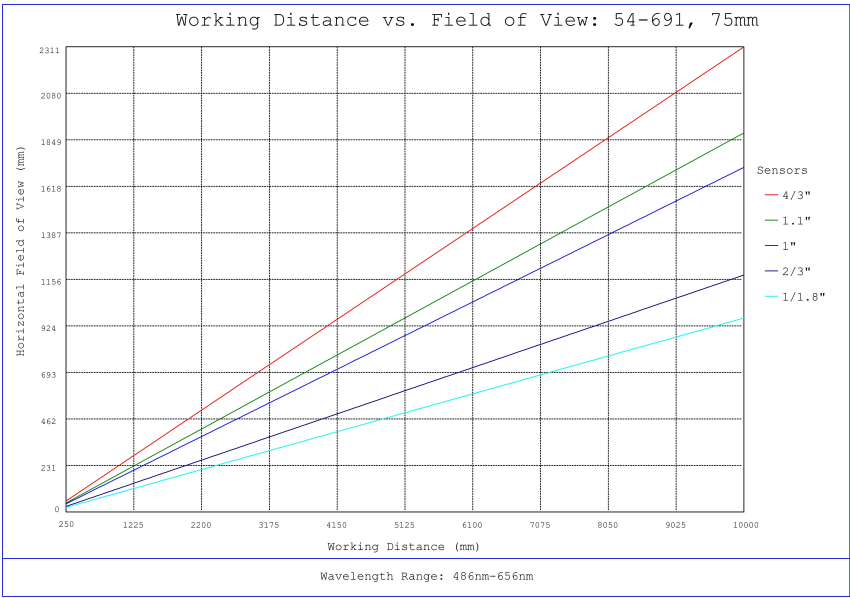
TECHNICAL INFORMATION



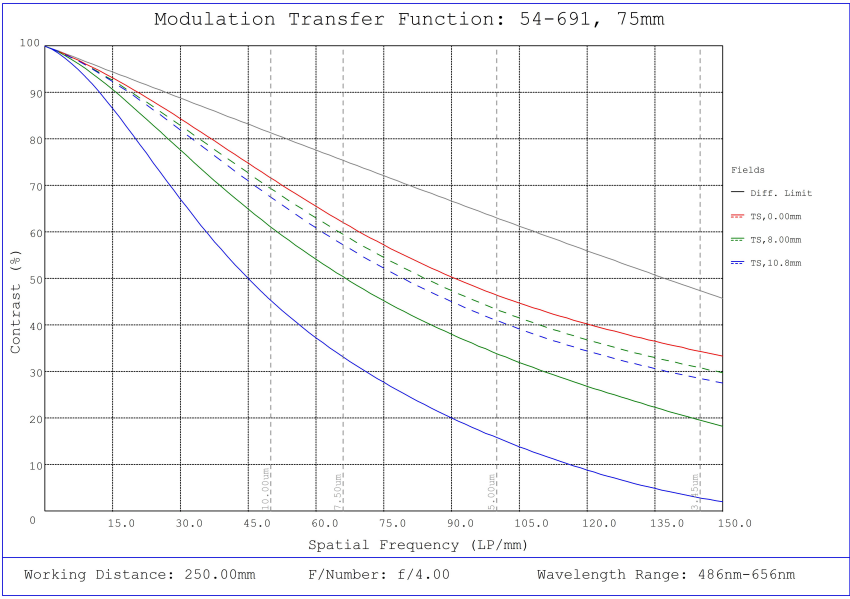
#54-691, 75mm DG Series Fixed Focal Length Lens, Distortion Plot



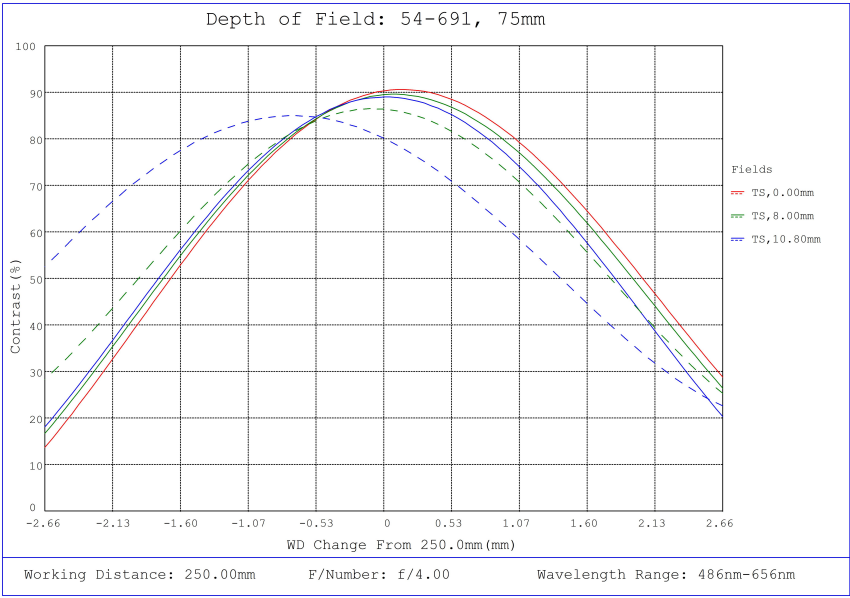
#54-691, 75mm DG Series Fixed Focal Length Lens, Relative Illumination Plot



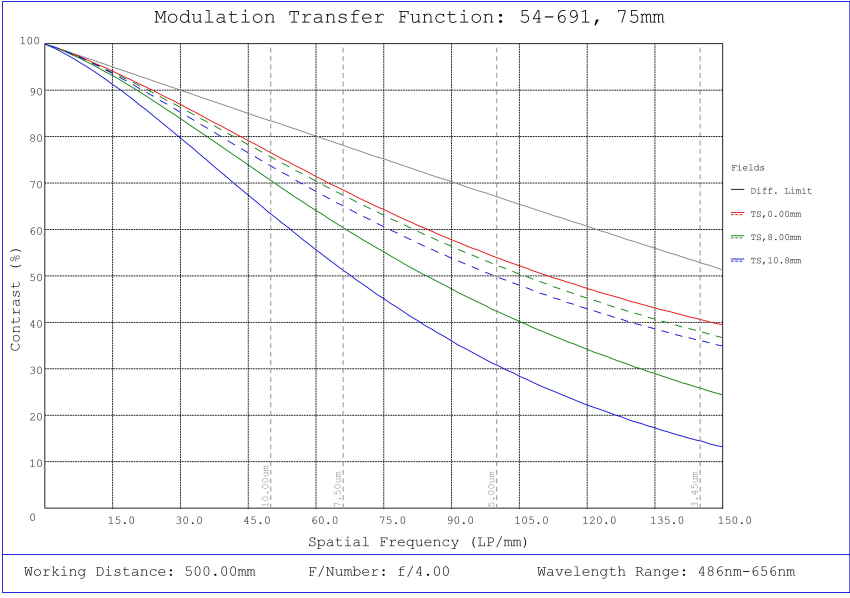
#54-691, 75mm DG Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



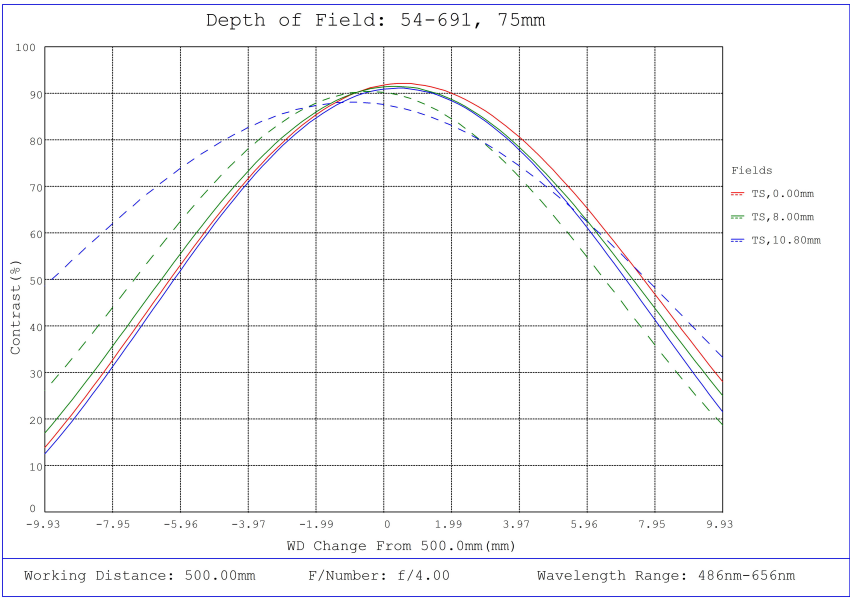
#54-691, 75mm DG Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 250mm Working Distance, f4



#54-691, 75mm DG Series Fixed Focal Length Lens, Depth of Field Plot, 250mm Working Distance, f4



#54-691, 75mm DG Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f4



#54-691, 75mm DG Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f4

Dimensions							
FL (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Filter Thread (Dia. x Pitch)
18	48.0	32.3	4.6	40.0	-	2.5	M30.5 x 0.5
25	39.0	40.0	5.8	34.7	30.7	2.2	M30.5 x 0.5
35	45.0	50.1	11.6	40.0	42.1	0	M37.0 x 0.75
50	47.5	69.0	10.6	40.0	40.8	0	M39.0 x 0.5
75	54.0	116.2	19.2	46.0	67.7	0	M49.0 x 0.75

COMPATIBLE CAMERAS