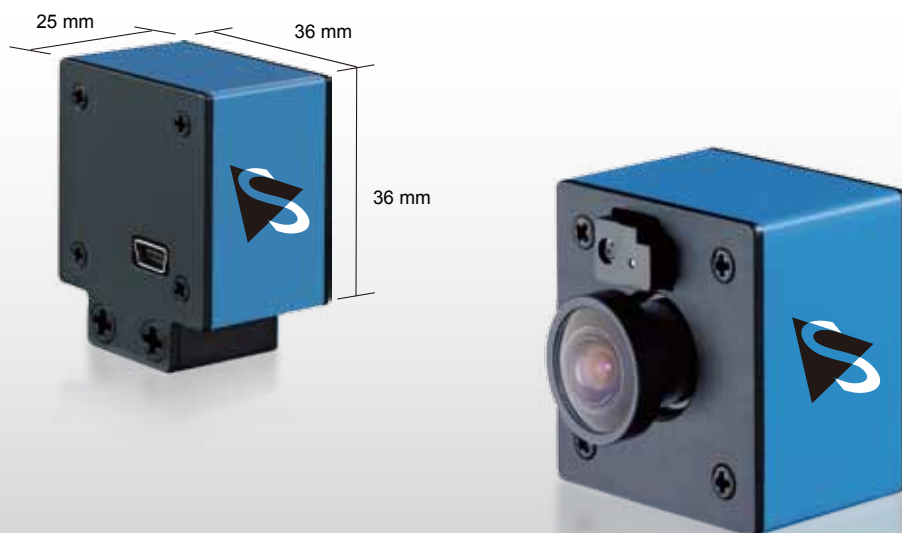


## The Imaging Source “AutoFocus” Series USB CMOS Cameras

### DMK 22AUC03-F / DFK 22AUC03-F



The Imaging Source DMK 22AUC03-F (monochrome) and DFK 22AUC03-F (color) wide VGA “AutoFocus” Series cameras are the perfect solution for many industrial automation, quality assurance, security, surveillance, and medical applications. Utilizing the Aptina MT9V024 CMOS sensor with selectable windows and high-speed readout capabilities, the accurate 125 micron stepper motor accepts a wide range of M12 lenses for a broad range of uses. The USB 2.0 protocol, the software driven automatic ‘One Push’ focus, and the small housing makes this camera both elegant and versatile.

The Imaging Source 22 series “AutoFocus” cameras are characterized by small housings, ‘One Push’ focus and very competitive prices.

#### Included :

- Camera, CS to C mount adapter and tripod mount
- Drivers compatible to WDM, DirectShow, DirectX®, TWAIN, ActivVisionTools, HALCON, VFW and LabVIEW® for Windows 7/8, Windows Vista, and Windows XP
- IC Capture camera control and acquisition software for Windows 7/8, Windows Vista, and Windows XP (32 and 64 bit versions)
- IC Imaging Control Software Development Kit (SDK) including a .NET component, an ActiveX component, and a C++ class library for Windows

#### Features :

- Motorized focus control (via software)
- Manual and automatic control
- For M12 lenses optimized
- Binning and ROI

#### Accessories :

- M12 lenses
- USB 2.0 cable (1.8m, 3m, 4.5m)

## Specification: DMK 22AUC03-F (Monochrome)

### GENERAL BEHAVIOR

#### Example Configurations

Resolution	Format	FPS	Sensitivity
744x480	1/3 "	76	4.8 V/lux-sec
640x480	1/3.5 "	87	4.8 V/lux-sec
320x240	1/7 "	150	4.8 V/lux-sec
Color format	Y800		
Dynamic range	8 bit		

### INTERFACE (OPTICAL)

IR cut filter	no
Sensor specification	MT9V024
Shutter	Global
Format	1/3 "
Resolution	H: 744, V: 480
Pixel size	H: 6.0 μm, V: 6.0 μm
Lens mount	M12x0.5

### INTERFACE (ELECTRICAL)

Supply voltage	4.5 to 5.5 VDC
Current consumption	approx. 250 mA at 5 VDC

### INTERFACE (MECHANICAL)

Dimensions	H: 36 mm, W: 36 mm, L: 25 mm
Mass	50 g

### ADJUSTMENTS (MANUAL)

Shutter	1/10,000 to 1/4 s
Gain	0 to 18 dB

### ADJUSTMENTS (AUTOMATIC)

Shutter	1/10,000 to 1/4 s
Gain	0 to 18 dB

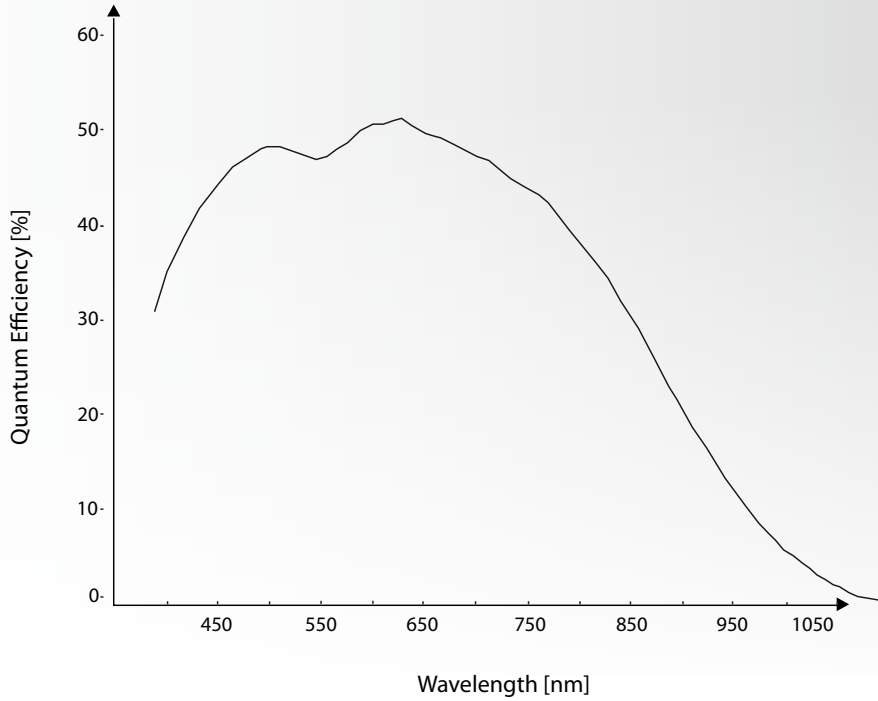
### ENVIRONMENTAL

Max. temperature (operation)	-5 °C to 45 °C
Max. temperature (storage)	-20 °C to 60 °C
Max. humidity (operation)	20 % to 80 % non-condensing
Max. humidity (storage)	20 % to 95 % non-condensing

## Specification: DFK 22AUC03-F (Color)

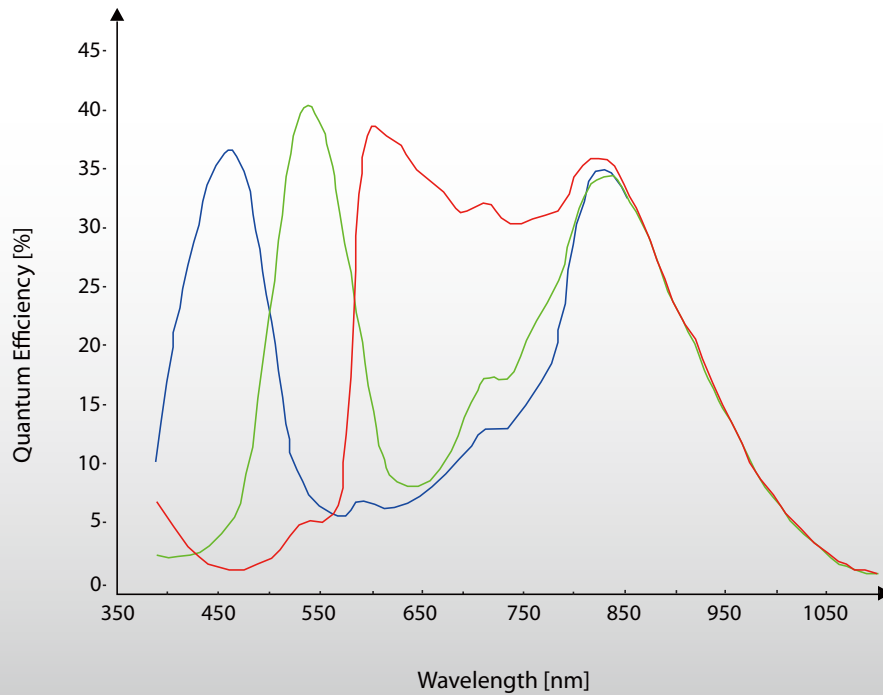
GENERAL BEHAVIOR			
Example Configurations			
Resolution	Format	FPS	Sensitivity
744x480	1/3 "	76	4.8 V/lux-sec
640x480	1/3.5 "	87	4.8 V/lux-sec
320x240	1/7 "	150	4.8 V/lux-sec
Color format	Y800		
Dynamic range	8 bit		
INTERFACE (OPTICAL)			
IR cut filter	no		
Sensor specification	MT9V024		
Shutter	Global		
Format	1/3 "		
Resolution	H: 744, V: 480		
Pixel size	H: 6.0 $\mu\text{m}$ , V: 6.0 $\mu\text{m}$		
Lens mount	M12x0.5		
INTERFACE (ELECTRICAL)			
Supply voltage	4.5 to 5.5 VDC		
Current consumption	approx. 250 mA at 5 VDC		
INTERFACE (MECHANICAL)			
Dimensions	H: 36 mm, W: 36 mm, L: 25 mm		
Mass	50 g		
ADJUSTMENTS (MANUAL)			
Shutter	1/10,000 to 1/4 s		
Gain	0 to 18 dB		
ADJUSTMENTS (AUTOMATIC)			
Shutter	1/10,000 to 1/4 s		
Gain	0 to 18 dB		
ENVIRONMENTAL			
Max. temperature (operation)	-5 °C to 45 °C		
Max. temperature (storage)	-20 °C to 60 °C		
Max. humidity (operation)	20 % to 80 % non-condensing		
Max. humidity (storage)	20 % to 95 % non-condensing		

## Monochrome Spectral Response Curve



Sensor: Micron MT9V024 M - courtesy of Aptina Deutschland GmbH

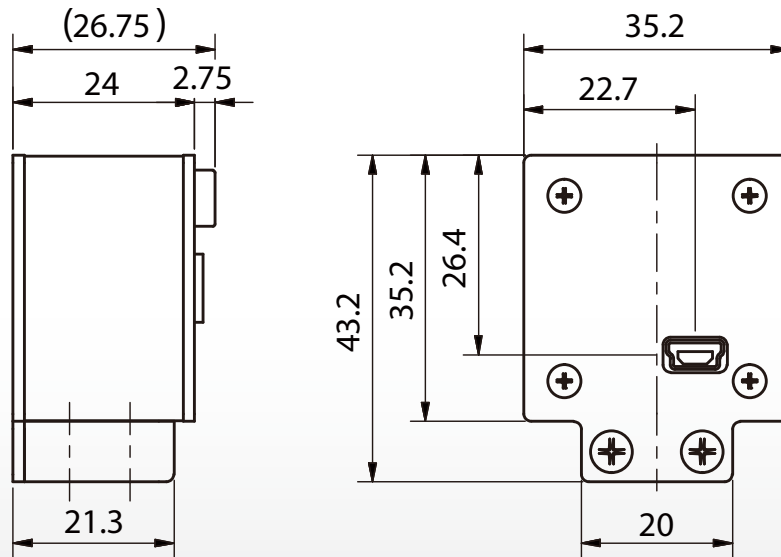
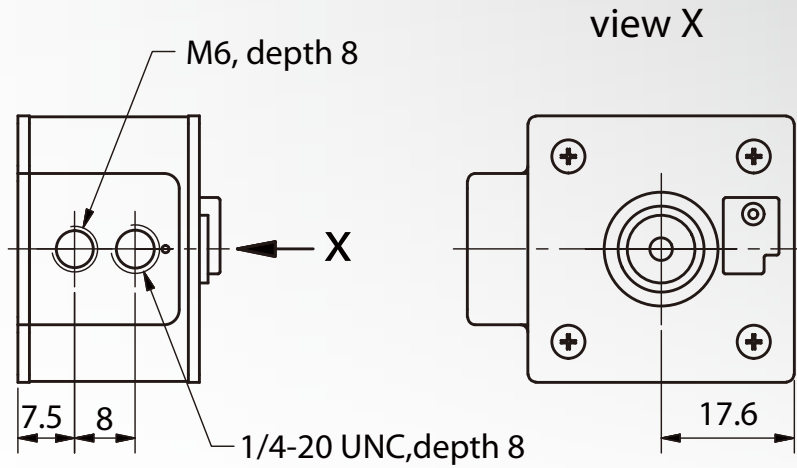
## Color Spectral Response Curve



Sensor: Micron MT9V024 C - courtesy of Aptina Deutschland GmbH

## DMK 22AUC03-F / DFK 22AUC03-F

### Dimensional Diagram (USB port at the back)

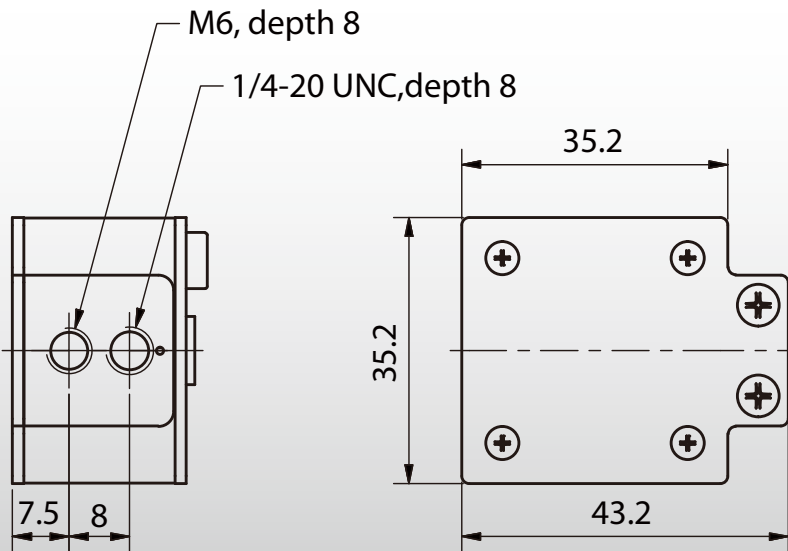
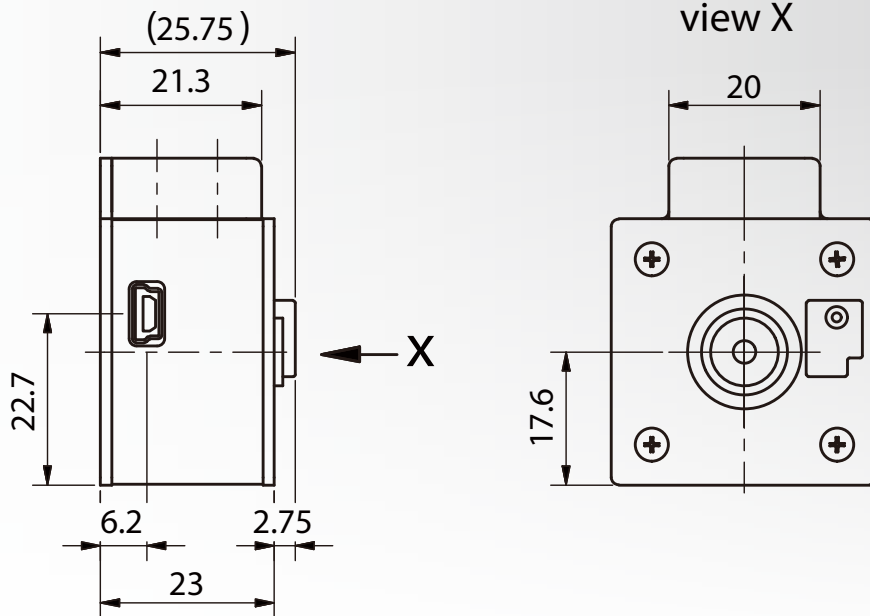


Dimensions : mm  
 Tolerances : DIN ISO 2768m



## DMK 22AUC03-F / DFK 22AUC03-F

### Dimensional Diagram (USB port at the side)



Dimensions : mm  
Tolerances : DIN ISO 2768m



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All weights and dimensions are approximate. Unless otherwise specified the lenses shown in the context of cameras are not shipped with these cameras.