

MC3-03X

Variable macro lens, C-mount

SPECIFICATIONS

Optical specifications

Detector type		up to 2/3"
Wavelength range	(nm)	450 - 650
F/#		5.5 - 3.0
wF/# (1)		6 - 21
Distortion		< 0.07

Magnification ranges

No spacers		from 0.1x to 0.9x
One spacer		from 0.7x to 1.6x
Two spacers		from 1.4x to 2.3x
Three spacers		from 2.1x to 3.0x

Mechanical specifications

Diameter	(mm)	28.00
Length with no spacers	(mm)	50.5
Mass	(g)	60
Spacer weight	(g)	19
Mount		C

Last update: 2021-06-22

NOTES

1. Working distance: distance between the front end of the mechanics and the object.
2. Working F-number: the real F-number of a lens in operating conditions.
3. At the borders of the field depth the image can be still used for measurement but, to get a perfectly sharp image, only half of the nominal field depth should be considered. Pixel size used for calculation is 3.45 µm.

COMPATIBLE PRODUCTS

Despite the efforts made to generate an error-free compatibility list, we always recommend to consult the Opto Engineering® technical support department before purchasing a compatible product. Opto Engineering® shall not be liable for any damage or malfunctioning caused by the incorrect selection of a compatible product.



LTFBFC series

Continuous flat side-emitting LED backlights

LTPVR100-00-1-W-24V	Flat side-emitting LED backlight, 100X100 mm illumination area, white, 24V
LTPVR100-00-1-R-24V	Flat side-emitting LED backlight, 100X100 mm illumination area, red, 24V
LTPVR100-00-1-G-24V	Flat side-emitting LED backlight, 100X100 mm illumination area, green, 24V
LTPVR100-00-1-B-24V	Flat side-emitting LED backlight, 100X100 mm illumination area, blue, 24V



LTLADC series

Continuous LED low angle direct ring lights

LTZZO170-75-3-W24V	LED low angle ring light, 3 LED rows, outer diameter 175 mm, 75°, white, 24V
LTZZO170-75-3-R-24V	LED low angle ring light, 3 LED rows, outer diameter 175 mm, 75°, red, 24V
LTZZO170-75-3-G-24V	LED low angle ring light, 3 LED rows, outer diameter 175 mm, 75°, green, 24V
LTZZO170-75-3-B-24V	LED low angle ring light, 3 LED rows, outer diameter 175 mm, 75°, blue, 24V



LTRNOB series

LED ring illuminators - oblique type



All product specifications and data are subject to change without notice to improve reliability, functionality, design or other. Photos and pictures are for illustration purposes only.

LTRN075R45	Ring LED illuminator, inner diameter 28 mm, oblique type, red 630 nm
LTRN075G45	Ring LED illuminator, inner diameter 28 mm, oblique type, green 525 nm
LTRN075B45	Ring LED illuminator, inner diameter 28 mm, oblique type, blue 470 nm
LTRN075W45	Ring LED illuminator, inner diameter 28 mm, oblique type, white



LTBRDC series

Continuous LED bar lights

LTZPFL120-00-6-R-24V	LED bar light, 6 LED rows, 120X26.3 illumination area, red, 24V
LTZPFL120-00-6-G-24V	LED bar light, 6 LED rows, 120X26.3 illumination area, green, 24V
LTZPFL120-00-6-B-24V	LED bar light, 6 LED rows, 120X26.3 illumination area, blue, 24V
LTZPFL120-00-6-W-24V	LED bar light, 6 LED rows, 120X26.3 illumination area, white, 24V



COE-G series

GenICam® PoE C-mount cameras

COE-013-M-POE-030-IR-C	Area Scan camera PYTHON 1300, CMOS, Global shutter, 1280 x 1024, 1.3 MP, 4.8 pix, 1/2", mono, 90 fps, GigE, POE, C - mount, Glass filter
COE-013-C-POE-030-IR-C	Area Scan camera PYTHON 1300, CMOS, Global shutter, 1280 x 1024, 1.3 MP, 4.8 pix, 1/2", color, 90 fps, GigE, POE, C - mount, Infrared cut filter
COE-023-M-POE-050-IR-C	Area Scan camera PYTHON 2000, CMOS, Global shutter, 1920 x 1200, 2.3 MP, 4.8 pix, 2/3", mono, 51 fps, GigE, POE, C - mount, Glass filter
COE-023-C-POE-050-IR-C	Area Scan camera PYTHON 2000, CMOS, Global shutter, 1920 x 1200, 2.3 MP, 4.8 pix, 2/3", color, 51 fps, GigE, POE, C - mount, Infrared cut filter
COE-032-M-POE-040-IR-C	Area Scan camera IMX265, CMOS, Global shutter, 2048 x 1536, 3.1 MP, 3.45 pix, 1/1.8", mono, 37.5 fps, GigE, POE, C - mount, Glass filter
COE-032-C-POE-040-IR-C	Area Scan camera IMX265, CMOS, Global shutter, 2048 x 1536, 3.1 MP, 3.45 pix, 1/1.8", color, 37.5 fps, GigE, POE, C - mount, Infrared cut filter
COE-050-M-POE-023-IR-C	Area Scan camera MT9P031, CMOS, Rolling shutter, 2592 x 1944, 5 MP, 2.2 pix, 1/2.5", mono, 14 fps, GigE, POE, C - mount, Glass filter
COE-050-M-POE-050-IR-C	Area Scan camera IMX264, CMOS, Global shutter, 2448 x 2048, 5 MP, 3.45 pix, 2/3", mono, 23.5 fps, GigE, POE, C - mount, Glass filter
COE-050-C-POE-050-IR-C	Area Scan camera IMX264, CMOS, Global shutter, 2448 x 2048, 5 MP, 3.45 pix, 2/3", color, 23.5 fps, GigE, POE, C - mount, Infrared cut filter
COE-106-M-POE-031-IR-C-2	Area Scan camera MT9J003, CMOS, Rolling shutter, 3840 x 2748, 10.6 MP, 1.67 pix, 1/2.3", mono, 11 fps, GigE, POE, C - mount, Glass filter
COE-106-C-POE-031-IR-C	Area Scan camera MT9J003, CMOS, Global shutter, 3840 x 2748, 10.6 MP, 1.67 pix, 1/2.3", color, 7 fps, GigE, POE, C - mount, Infrared cut filter



mvBlueCOUGAR series



GigE / Dual GigE cameras with Smart Features

RT-mvBC-X104i	Camera with interface GigE (1GB/s), sensor size 1/1.8", mpixel 3.19, resolution 2064 x 1544, sensor name IMX265, sensor type CMOS
RT-mvBC-XD104h	Camera with interface Dual GigE (2GB/s), sensor size 1/1.8", mpixel 3.19, resolution 2064 x 1544, sensor name IMX252, sensor type CMOS
RT-mvBC-X105	Camera with interface GigE (1GB/s), sensor size 1/2.5", mpixel 5.04, resolution 2592 x 1944, sensor name MT9P031, sensor type CMOS
RT-mvBC-X105b	Camera with interface GigE (1GB/s), sensor size 2/3", mpixel 5.07, resolution 2464 x 2056, sensor name IMX264, sensor type CMOS
RT-mvBC-XD105a	Camera with interface Dual GigE (2GB/s), sensor size 2/3", mpixel 5.01, resolution 2448 x 2048, sensor name IMX250, sensor type CMOS
RT-mvBC-X1010	Camera with interface GigE (1GB/s), sensor size 1/2.3", mpixel 10.66, resolution 3856 x 2764, sensor name MT9J003, sensor type CMOS



COE-U series

GenICam® C-mount USB3 cameras

COE-013-M-USB-030-IR-C	Area Scan camera PYTHON 1300, CMOS, Global shutter, 1280 x 1024, 1.3 MP, 4.8 pix, 1/2", mono, 210 fps, USB 3.0, C - mount, Glass filter
COE-013-C-USB-030-IR-C	Area Scan camera PYTHON 1300, CMOS, Global shutter, 1280 x 1024, 1.3 MP, 4.8 pix, 1/2", color, 90 fps, USB 3.0, C - mount, Infrared cut filter
COE-050-M-USB-050-IR-C	Area Scan camera IMX264, CMOS, Global shutter, 2448 x 2048, 5 MP, 3.45 pix, 2/3", mono, 35 fps, USB 3.0, C - mount, Glass filter

COE-050-C-USB-023-IR-C Area Scan camera AR0521, CMOS, Rolling shutter, 2592 x 1944, 5 MP, 2.2 pix,
1/2.5", color, 31 fps, USB 3.0, C - mount, Infrared cut filter



mvBlueFOX3-2 series

USB3 cameras with Smart Features

[RT-mvBF3-2032a](#) USB3 Vision camera with Sony Pregius CMOS sensor IMX265

[RT-mvBF3-2032](#) USB3 Vision camera with Sony Pregius CMOS sensor IMX252

[RT-mvBF3-2051a](#) USB3 Vision camera with Sony Pregius CMOS sensor IMX264

[RT-mvBF3-2051](#) USB3 Vision camera with Sony Pregius CMOS sensor IMX250

[RT-mvBF3-2064](#) USB3 vision camera with Sony Pregius CMOS sensor IMX178
