

# TC16M012-K

Telecentric lens for 45.72 mm detectors, magnification 3.00 x, M58x0.75 FD 12.96-mount

## SPECIFICATIONS

Magnification	(x)	3.00
Image circle Ø	(mm)	43.3

### Object field of view

with APS-H KAI-16050 32.4 mm diagonal w x h 26.93 x 17.95	(mm x mm)	8.98 x 5.98
with CHR70 38 mm diagonal w x h 31.0 x 21.99	(mm x mm)	10.33 x 7.33
with 8k x 5 µm detector	(mm)	13.60
Full frame 35 mm, 43.3 mm diagonal w x h 36.0 x 24.00	(mm x mm)	12.00 x 8.00
with CMV50000 45.72 mm diagonal w x h 36.43 x 27.62	(mm x mm)	12.14 x 9.21

### Optical specifications

Working distance (1)	(mm)	57.8
wF/# (2)		18
Telecentricity typical (max) (3)	(deg)	< 0.03 (0.05)
Distortion typical (max) (4)	(%)	< 0.03 (0.05)
Field depth (5)	(mm)	0.2
CTF@ 50 lp/mm	(%)	> 30

### Mechanical specifications

Mount (6)		M58x0.75 FD12.96
Phase adjustment (7)		
Length (8)	(mm)	412.3
Diameter	(mm)	64
Mass	(g)	1188

Last update: 2020-07-16

## 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.



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.



COE HR AS series

29 MP, 48MP and 71MP area scan cameras for high-speed applications

<a href="#">COE29MUSB3IR-K</a>	Area scan camera CCD, USB3, 6576 x 4384 monochrome, 35mm, 2fps, IR Cut filter, K mount
<a href="#">COE29CUSB3IR-K</a>	Area scan camera CCD, USB3, 6576 x 4384 color, 35mm, 2fps, IR cut, IR Cut filter, K mount
<a href="#">COE29MUSB3IR-F</a>	Area scan camera CCD, USB3, 6576 x 4384 monochrome, 35mm, 2fps, IR Cut filter, F-mount
<a href="#">COE29CUSB3IR-F</a>	Area scan camera CCD, USB3, 6576 x 4384 color, 35mm, 2fps, IR cut, IR Cut filter, F-mount
<a href="#">COE29MCLIR-K</a>	Area scan camera CCD, Camera Link, 6576 x 4384 monochrome, 35mm, 4fps, IR Cut filter, K mount
<a href="#">COE29CCLIR-K</a>	Area scan camera CCD, Camera Link, 6576 x 4384 color, 35mm, 4fps, IR Cut filter, K mount
<a href="#">COE29MCLIR-F</a>	Area scan camera CCD, Camera Link, 6576 x 4384 monochrome, 35mm, 4fps, IR Cut filter, F-mount
<a href="#">COE29CCLIR-F</a>	Area scan camera CCD, Camera Link, 6576 x 4384 color, 35mm, 4fps, IR Cut filter, F-mount
<a href="#">COE29MUSB3SK-K</a>	Area scan camera CCD, USB3, 6576 x 4384 monochrome, 35mm, 2fps, skylight/glass filter, K mount

COE29CUSB3SK-K	Area scan camera CCD, USB3, 6576 x 4384 color, 35mm, 2fps, skylight/glass filter, K mount
COE29MUSB3SK-F	Area scan camera CCD, USB3, 6576 x 4384 monochrome, 35mm, 2fps, skylight/glass filter, F-mount
COE29CUSB3SK-F	Area scan camera CCD, USB3, 6576 x 4384 color, 35mm, 2fps, skylight/glass filter, F-mount
COE29MCLSK-K	Area scan camera CCD, Camera Link, 6576 x 4384 monochrome, 35mm, 4fps, skylight/glass filter, K mount
COE29CCLSK-K	Area scan camera CCD, Camera Link, 6576 x 4384 color, 35mm, 4fps, skylight/glass filter, K mount
COE29MCLSK-F	Area scan camera CCD, Camera Link, 6576 x 4384 monochrome, 35mm, 4fps, skylight/glass filter, F-mount
COE29CCLSK-F	Area scan camera CCD, Camera Link, 6576 x 4384 color, 35mm, 4fps, skylight/glass filter, F-mount
COE50MUSB3IR-K	Area scan camera CMOS, USB3, 7920 x 6004, monochrome, 6.8fps, IR Cut filter, K mount
COE50CUSB3IR-K	Area scan camera CMOS, USB3, 7920 x 6004, color, 6.8fps, IR Cut filter, K mount
COE50MUSB3IR-F	Area scan camera CMOS, USB3, 7920 x 6004, monochrome, 6.8fps, IR Cut filter, F-mount
COE50CUSB3IR-F	Area scan camera CMOS, USB3, 7920 x 6004, color, 6.8fps, IR Cut filter, F-mount
COE50MCLIR-K	Area scan camera CMOS, Camera Link, 7920 x 6004, monochrome, 27.3fps, IR Cut filter, K mount
COE50CCLIR-K	Area scan camera CMOS, Camera Link, 7920 x 6004, color, 27.3fps, IR Cut filter, K mount
COE50MCLIR-F	Area scan camera CMOS, Camera Link, 7920 x 6004, monochrome, 27.3fps, IR Cut filter, F-mount
COE50CCLIR-F	Area scan camera CMOS, Camera Link, 7920 x 6004, color, 27.3fps, IR Cut filter, F-mount
COE50MUSB3SK-K	Area scan camera CMOS, USB3, 7920 x 6004, monochrome, 6.8fps, skylight/glass filter, K mount
COE50CUSB3SK-K	Area scan camera CMOS, USB3, 7920 x 6004, color, 6.8fps, skylight/glass filter, K mount
COE50MUSB3SK-F	Area scan camera CMOS, USB3, 7920 x 6004, monochrome, 6.8fps, skylight/glass filter, F-mount
COE50CUSB3SK-F	Area scan camera CMOS, USB3, 7920 x 6004, color, 6.8fps, skylight/glass filter, F-mount
COE50MCLSK-K	Area scan camera CMOS, Camera Link, 7920 x 6004, monochrome, 27.3fps, skylight/glass filter, K mount
COE50CCLSK-K	Area scan camera CMOS, Camera Link, 7920 x 6004, color, 27.3fps, skylight/glass filter, K mount
COE50MCLSK-F	Area scan camera CMOS, Camera Link, 7920 x 6004, monochrome, 27.3fps, skylight/glass filter, F-mount
COE50CCLSK-F	Area scan camera CMOS, Camera Link, 7920 x 6004, color, 27.3fps, skylight/glass filter, F-mount
COE71MUSB3IR-K	Area scan camera CMOS, USB3, 10000 x 7094, monochrome, 3fps, IR Cut filter, K mount
COE71CUSB3IR-K	Area scan camera CMOS, USB3, 10000 x 7094, color, 3fps, IR Cut filter, K mount
COE71MUSB3IR-F	Area scan camera CMOS, USB3, 10000 x 7094, monochrome, 3fps, IR Cut filter, F-mount
COE71CUSB3IR-F	Area scan camera CMOS, USB3, 10000 x 7094, color, 3fps, IR Cut filter, F-mount
COE71MCLIR-K	Area scan camera CMOS, Camera Link, 10000 x 7094, monochrome, 3fps, IR Cut filter, K mount
COE71CCLIR-K	Area scan camera CMOS, Camera Link, 10000 x 7094, color, 3fps, IR Cut filter, K mount
COE71MCLIR-F	Area scan camera CMOS, Camera Link, 10000 x 7094, monochrome, 3fps, IR Cut filter, F-mount
COE71CCLIR-F	Area scan camera CMOS, Camera Link, 10000 x 7094, color, 3fps, IR Cut filter, F-mount
COE71MUSB3SK-K	Area scan camera CMOS, USB3, 10000 x 7094, monochrome, 3fps, skylight/glass filter, K mount
COE71CUSB3SK-K	Area scan camera CMOS, USB3, 10000 x 7094, color, 3fps, skylight/glass filter, K mount
COE71MUSB3SK-F	Area scan camera CMOS, USB3, 10000 x 7094, monochrome, 3fps, skylight/glass filter, F-mount
COE71CUSB3SK-F	Area scan camera CMOS, USB3, 10000 x 7094, color, 3fps, skylight/glass filter, F-mount
COE71MCLSK-K	Area scan camera CMOS, Camera Link, 10000 x 7094, monochrome, 3fps, skylight/glass filter, K mount
COE71CCLSK-K	Area scan camera CMOS, Camera Link, 10000 x 7094, color, 3fps, skylight/glass filter, K mount

COE71MCLSK-F Area scan camera CMOS, Camera Link, 10000 x 7094, monochrome, 3fps, skylight/glass filter, F-mount

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COE71CCLSK-F Area scan camera CMOS, Camera Link, 10000 x 7094, color, 3fps, skylight/glass filter, F-mount

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COE HR AS-X series

20MP, 26MP and 29MP area scan cameras for high-speed applications

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COE-260-M-10GIGE-100-IR-F HR Area Scan camera PYTHON 25K, CMOS, 5120 x 5120, 26 MP, 4.5 pix, APS-H, Gray, 10GigE, 40 fps, F - mount, Glass filter

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COE-260-M-10GIGE-100-IR-I HR Area Scan camera PYTHON 25K, CMOS, 5120 x 5120, 26 MP, 4.5 pix, APS-H, Gray, 10GigE, 40 fps, M58x0.75 - mount, Glass filter

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COE-290-M-GIGE-110-IR-F-A HR Area Scan camera KAI29050-B1, CCD, Global shutter, 6576 x 4384, 29 MP, 5.5 pix, 35 mm, Gray, GigE, 4 fps, F - mount, Glass filter

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COE-290-M-GIGE-110-IR-F-B HR Area Scan camera KAI29050-B2, CCD, Global shutter, 6576 x 4384, 29 MP, 5.5 pix, 35 mm, Gray, GigE, 4 fps, F - mount, Glass filter

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COE-290-M-GIGE-110-IR-I-A HR Area Scan camera KAI29050-B1, CCD, Global shutter, 6576 x 4384, 29 MP, 5.5 pix, 35 mm, Gray, GigE, 4 fps, M58x0.75 - mount, Glass filter

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COE-290-M-GIGE-110-IR-I-B HR Area Scan camera KAI29050-B2, CCD, Global shutter, 6576 x 4384, 29 MP, 5.5 pix, 35 mm, Gray, GigE, 4 fps, M58x0.75 - mount, Glass filter

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COE-290-C-GIGE-110-IR-F-B HR Area Scan camera KAI29050-B2, CCD, Global shutter, 6576 x 4384, 29 MP, 5.5 pix, 35 mm, Color, GigE, 4 fps, F - mount, Infrared cut filter

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COE-290-C-GIGE-110-IR-I-B HR Area Scan camera KAI29050-B2, CCD, Global shutter, 6576 x 4384, 29 MP, 5.5 pix, 35 mm, Color, GigE, 4 fps, M58x0.75 - mount, Infrared cut filter

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