

## Line Scan Camera SK4096CFD-L

CCD

monochrome



Digital camera with 120 MHz digital output and very high line frequency



### Sensor Characteristics

Sensor type:	CCD, Monochrome
Pixel number:	4096
Pixel size:	10 x 10 $\mu\text{m}^2$
Active sensor length:	41 mm
Pixel frequency:	120 / 60 MHz
Max. line frequency:	27.777 kHz
Min. integration time:	0.01 ms
Max. integration time:	20 ms
Spectral range:	400 - 1000 nm
Dynamic range:	1:2000 (rms)

### Mechanical data

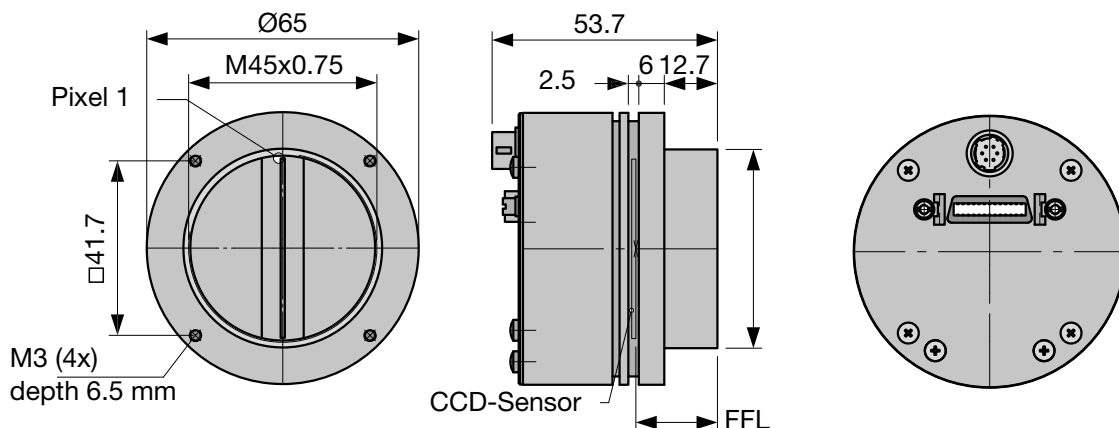
Case type:	AC3
Size:	$\varnothing 65$ mm x 53.7 mm
Mass:	0.2 kg
Lens mount:	M45x0.75
Flange focal length (FFL):	19.5 mm
Seat for bracket:	$\varnothing 47.5$ mm

### Functioning Features

Blooming protection:	x
Integration control:	x
Shading correction:	x (or by means of grabber)
Look-up table:	x (or by means of grabber)
Region of interest (ROI):	x (or by means of grabber)
Thresholding:	-
Temperature sensor:	x
External synchronization:	by means of grabber
Operating temperature:	+5 ... +45°C

### Connections

Interface:	Camera Link
	MDR-26, 26-pin, female
Video signals:	monochrome 8/12 Bit digital
Power supply:	+5/+15V DC, 5.0W
	Hirose 10A, 6-pin, male
External synchronization:	by means of grabber




## Features

- Extended Trigger Functions**  
 Direction of movement or slippage can be detected by using two external synchronization signals.
- Shading Correction Memory (SCM) and Look-Up Table (LUT) options**  
 The calibration data in the SCM automatically adjusts the line signal data directly in the camera after each exposure.  
 The LUT is a separate memory block that can also be used for postprocessing the line signal data, such as applying a Gamma function.

- Window-Function**  
 The line signal data to be transferred can be restricted to a defined section of the line sensor.
- The **Gains or Offsets** for all AD-converter channels can be **adjusted simultaneously**, simplifying handling.
- Integrated Temperature Sensor**

## Accessories





**Power supply unit PS051515**

Input: 100-240 VAC, 0.8 A, 50/60 Hz  
 IEC 60320 C14 coupler (for IEC C13 power cord)  
 Output: +5VDC, 2.5 A / +15VDC, 0.5 A / -15VDC, 0.3 A  
 Cable length: 1 m, with Lumberg connector KV60, female 6-pin

PS051515 **Order Code**

**Power cord IEC 60320 C13, 1.5 m, 10 A, 250 V AC**


PC150DE **Order Code**  
 DE = Europe / US = USA, Canada, Japan /  
 UK = United Kingdom

**Control cable SK9018...**

26-pin shielded cable, both ends with mini-ribbon connector (male 26-pin)

SK9018.x-MM **Order Code**  
 MM = connector both ends male  
 cable length 3 / 5 m or  
 length according to choice,  
 max. 10 m



**Power cable SK9015.x**

for GigE Vision™, CameraLink and externally supplied USB3 line scan cameras.

Shielded cable with Hirose plug HR10A, female 6-pin (camera side), and Lumberg SV60, male 6-pin connector (power supply unit side).

SK9015.x **Order Code**  
 cable length 0.2 / 1.5 m

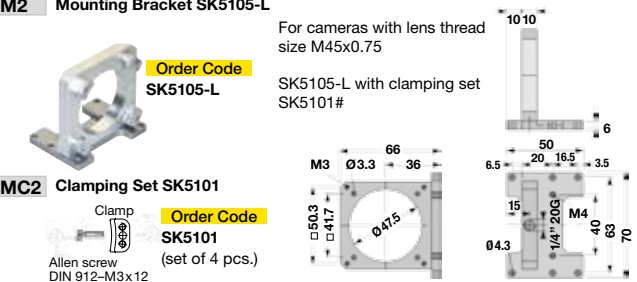
**M2 Mounting Bracket SK5105-L**

For cameras with lens thread size M45x0.75

SK5105-L with clamping set SK5101#

**MC2 Clamping Set SK5101**

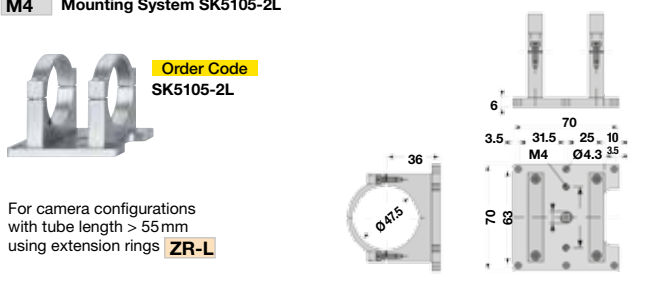
Clamp **Order Code** SK5101 (set of 4 pcs.)  
 Allen screw DIN 912-M3x12



**M4 Mounting System SK5105-2L**

**Order Code** SK5105-2L

For camera configurations with tube length > 55 mm using extension rings **ZR-L**

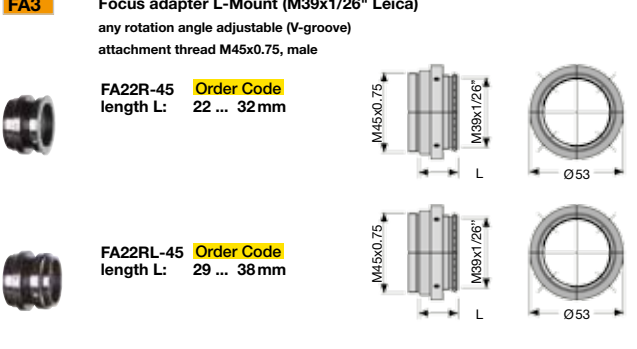


**FA3 Focus adapter L-Mount (M39x1/26° Leica)**

any rotation angle adjustable (V-groove)  
 attachment thread M45x0.75, male

**FA22R-45** **Order Code**  
 length L: 22 ... 32 mm

**FA22RL-45** **Order Code**  
 length L: 29 ... 38 mm

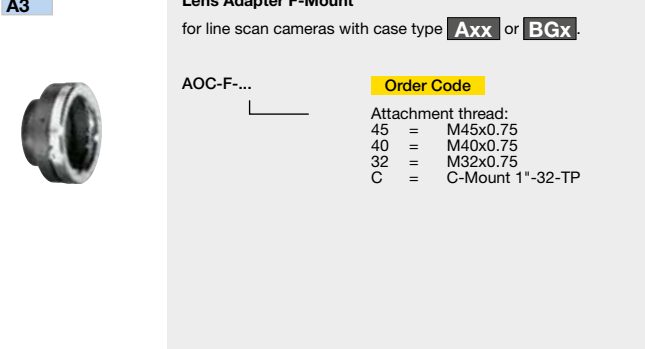


**A3 Lens Adapter F-Mount**

for line scan cameras with case type **Axx** or **BGx**

AOC-F-... **Order Code**

Attachment thread:  
 45 = M45x0.75  
 40 = M40x0.75  
 32 = M32x0.75  
 C = C-Mount 1"-32-TP



**ZR-L Extension rings M45x0.75**

attachment threads M45x0.75 male/female

**ZR-L.25** **Order Code**

15 = Length 15 mm  
 25 = Length 25 mm  
 60 = Length 60 mm  
 87 = Length 87 mm

