

USB 3.0

- Robust cable connections
- Hot-pluggable
- Perfect for movable setups

monochrome**Schäfter + Kirchhoff**

Line Scan Camera SK2048U3SD

Digital camera with large dynamic range and high line frequency, anti blooming and integration control. Gain and offset adjustable by PC.



Specifications

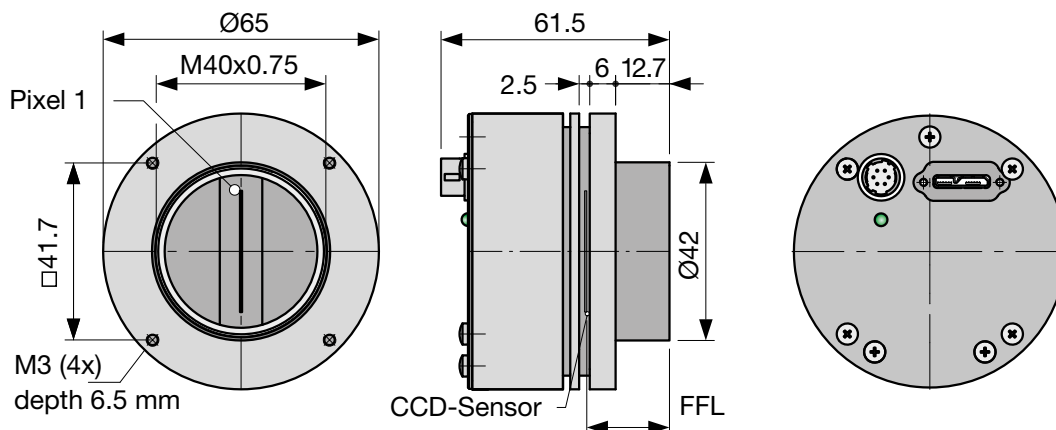
Sensor type:	CCD Monochrome Sensor	min. exposure time:	0.01 ms
Pixel number:	2048	max exposure time:	20 ms
Pixel size:	14 x 14 μm^2	Video signals:	monochrome 8/12 Bit digital
Pixel distance:	14 μm	Signal in/out:	USB 3.0
Active sensor length:	28.7 mm	Power supply:	USB (450 mA)
max. pixel frequency:	30 MHz	Size:	$\varnothing 65 \text{ mm} \times 54 \text{ mm}$
max. line frequency:	14.3 kHz	Case type:	AT2
Anti blooming:	x	Mass:	0.2 kg
Integration Control:	x	Lens mount:	M40x0.75
Shading correction:	x	Seat for bracket:	$\varnothing 42 \text{ mm}$
Threshold mode:	x	Flange focal length:	19.5 mm
Spectral sensitivity:	400 - 1000 nm	Operating temperature:	+5 ... +45°C
Dynamic range:	1:2000 (rms)		

Dimensions

AT2

Lens mount:
Seat for bracket:
Flange focal length:

M40x0.75
 $\varnothing 42 \text{ mm}$
FFL = 19.5 mm



Software

Software


SK91USB3-WIN **Order Code**

SDK from Schäfter + Kirchhoff including the **SKLineScan** operating program, as well as API, C++ class library and examples.

Operating systems:
Windows 7 / 8.1 / 10 - x64 and x86

SK91USB3-LV VI **Order Code**

VI-Library for LabVIEW®, requires **SK91GigE-WIN**

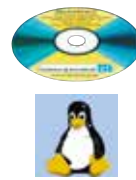


Software

SK91USB3-LX **Order Code**

SDK from Schäfter + Kirchhoff including the **SKLineScan** operating program, as well as libraries and examples.

Operating systems:
Linux kernel 3.13 or higher, compiled for Debian or openSUSE



Accessories


USB 3.0 cable SK9020.x

Camera connector: USB 3.0 plug, type micro-B, with safety lock screws

PC connector: USB 3.0 plug, type A (also fits into a USB 2.0 type A socket)

SK9020.x **Order Code**

└── 1 = 1 m cable length
└── 3 = 3 m cable length (standard)




External synchronization cable SK9026...

for line scan cameras with USB3.0 interface.

Shielded cable with Hirose plug HR10A, female 6 pin (camera side), and Phoenix 4 pin connector incl. terminal block.

SK9024.x **Order Code**

└── cable length 3 / 5 m
Other lengths on request




USB 3.0 active extension cable USB3.EXT.AA10

External power supply +5VDC, length 10 m

Connectors:
1x socket USB3.0 socket, type A,
1x plug Power in, 5VDC,
1x plug USB3.0, type A (also fits a USB2.0 type A socket)

USB3.EXT.AA10 **Order Code**




Adapter cable for sync signals CAB-ADSync-BNC-1

BNC/SMA (3x) to Line Scan Camera Synchronization Cable SK9016/SK9024/SK9026.

Shielded cable, length 0.25 m

Connectors:
1x Phoenix 4-pin connector
3x SMA plug (Line Sync A, Line Sync B, Frame Sync)
3x adapter SMA socket (outside threading) to BNC-plug

CAB-ADSync-BNC-1 **Order Code**




USB 3.0 active extension cable USB3.EXT.A2A...

Hybrid cable (copper/fiber), power supply by another USB-connection, cable length up to 100 m on request.

Connectors:
USB3.0 plug and socket, with locking screws

USB3.EXT.A2Ax **Order Code**

└── 20 = 20 m cable length
└── 30 = 30 m
└── 50 = 50 m
other lengths up to 100 m on request



M1 Mounting Bracket SK5105

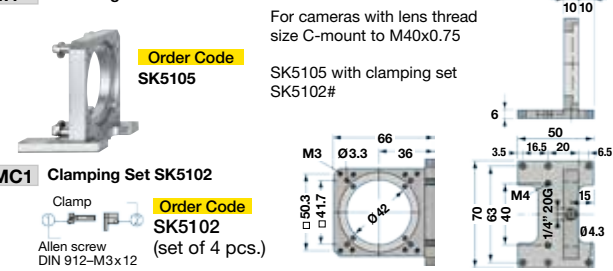
For cameras with lens thread size C-mount to M40x0.75

Order Code SK5105

SK5105 with clamping set SK5102#

MC1 Clamping Set SK5102

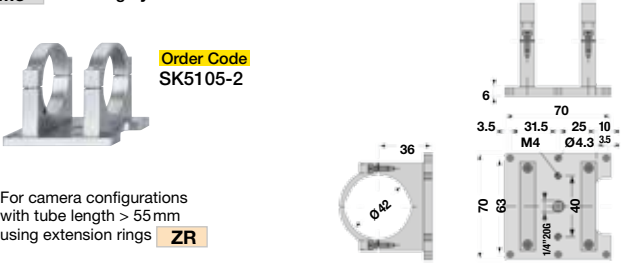
Clamp **Order Code SK5102** (set of 4 pcs.)
Allen screw DIN 912-M3x12



M3 Mounting System SK5105-2

Order Code SK5105-2

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

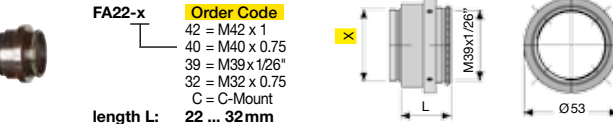


FA1 Focus adapter FA22...

FA22-x **Order Code**

42 = M42 x 1
40 = M40 x 0.75
39 = M39 x 1/26"
32 = M32 x 0.75
C = C-Mount

length L: 22 ... 32 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

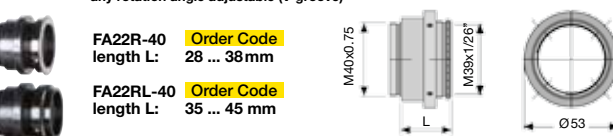


FA2 Focus adapter L-Mount (M39x1/26" Leica)

any rotation angle adjustable (V-groove)

FA22R-40 **Order Code**
length L: 28 ... 38 mm

FA22RL-40 **Order Code**
length L: 35 ... 45 mm



ZR Extension rings L-Mount (M39x1/26" Leica)

attachment threads M39x1/26" male/female

ZR 10 **Order Code**

10 = Length 10 mm
15 = Length 15 mm
20 = Length 20 mm
50 = Length 50 mm

