

Flexible Microflex

Our Microflex range offers a resolution range of 3,000 to 50,000, depending on the diameters, allowing excellent quality of vision.

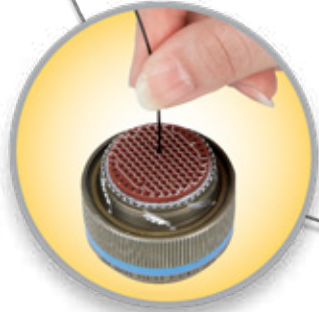
As standard, we deliver models with a standard detachable 32mm ISO eyepiece with adjustable focus and optionally, 1 C-Mount ring, allowing a direct C-mount camera connection.

In the special applications range, our Microflex have fixed eyepieces without focusing. The depth of field range allows comfortable inspection in small apertures. For video applications use our optional lens coupler.

We can also study specific models according to your applications.

Semi-rigid Microflex

Quickly and easily inspect cooling holes inside turbine blades, cannulas, catheters, needles, trocars, valves in medical devices, and many other micro manufactured parts. Use it with our Endo-Lux-T light (60 Watts) source for optimal results.



Standard Range

Detachable eyepiece with adjustable focus.



Adjustable focusing ring.

Description	Diameter	Working length	Number of pixels	Field of vision	Direction of vision	Depth of field	Bending radius	Tube construction	Working temperatures
MF-037-20	0.37 mm	200 mm	3 000	55°	0°	3 - 25 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-037-100	0.37 mm	1 000 mm	3 000	55°	0°	3 - 25 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-05-60	0.50 mm	600 mm	3 500	55°	0°	3 - 25 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-05-100	0.50 mm	1 000 mm	3 500	55°	0°	3 - 25 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-10-100	1.00 mm	1 000 mm	10 000	55°	0°	3 - 25 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-10-150	1.00 mm	1 500 mm	10 000	55°	0°	3 - 25 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-10-200	1.00 mm	2 000 mm	10 000	55°	0°	3 - 25 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-12-80	1.20 mm	800 mm	30 000	55°	0°	3 - 25 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-12-120	1.20 mm	1 200 mm	30 000	55°	0°	3 - 25 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-20-100	2.00 mm	1 000 mm	50 000	55°	0°	3 - 25 mm	25 mm	Flexible (black Polyimide)	0 - 65°C

To order

Part No	Description
MF-037-20	Flexible Microflex Ø 0,37 mm x 200 mm - 0°
MF-037-100	Flexible Microflex Ø 0,37 mm x 1.000 mm - 0°
MF-05-60	Flexible Microflex Ø 0,5mm x 600 mm - 0°
MF-05-100	Flexible Microflex Ø 0,5mm x 1.000 mm - 0°
MF-10-100	Flexible Microflex Ø 1,0mm x 1.000 mm - 0°
MF-10-150	Flexible Microflex Ø 1,0mm x 1.500 mm - 0°
MF-10-200	Flexible Microflex Ø 1,0mm x 2.000 mm - 0°
MF-12-80	Flexible Microflex Ø 1,2mm x 800 mm - 0°
MF-12-120	Flexible Microflex Ø 1,2mm x 1.200 mm - 0°
MF-20-100	Flexible Microflex Ø 2,0mm x 1.000 mm - 0°
618 000 105	Camera lens coupler / Microflex Cmount 27mm
MF-VAL	Waterproof case with space for fiberscopes and video documentation.



MF-35-15 shown with P1 monitor, FV35HQ camera & LED handle LED-RA

Range for special applications.

Fixed eyepiece without adjustable focus.



ISO eyepiece 32mm

Description	Diameter	Working length	Number of pixels	Field of vision	Direction of vision	Depth of field	Bending radius	Tube construction	Working temperatures
MSR-09-30-0	0.90 mm	300 mm	10 000	55°	0°	4-12 mm	N/A	Semi rigid metal	0 - 65°C
MSR-09-30-90	0.90 mm	300 mm	10 000	55°	90°	4-12 mm	N/A	Semi rigid metal	0 - 65°C
MSR-09-06-0	0.90 mm	600mm	10 000	55°	0°	4-12mm	N/A	Semi rigid metal	0 - 65°C
MSR-09-60-90	0.90 mm	600 mm	10 000	55°	90°	4-12 mm	N/A	Semi rigid metal	0 - 65°C
MF-07-50-90	0.70 mm	500 mm	10 000	55°	90°	4-12 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-07-100-90	0.70 mm	500 mm	10 000	55°	90°	4-12 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-09-100	0.90 mm	1 000 mm	10 000	55°	0°	4-12 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-09-100-90	0.90 mm	1 000 mm	10 000	55°	90°	4-12 mm	25 mm	Flexible (black Polyimide)	0 - 65°C
MF-15-120	1.50 mm	1 200 mm	30 000	55°	0°	4-12 mm	30 mm	Flexible (black Polyimide)	0 - 65°C
MF-15-120-90	1.50 mm	1 200 mm	30 000	55°	90°	4-12 mm	30 mm	Flexible (black Polyimide)	0 - 65°C

Part Number	Description
MSR-09-30-0	Semi rigid Microflex Ø 0,90 mm x 300 mm - 0°
MSR-09-30-90	Semi rigid Microflex Ø 0,90 mm x 300 mm - 90°
MSR-09-60-0	Semi rigid Microflex Ø 0,9mm x 600 mm - 0°
MSR-09-60-90	Semi rigid Microflex Ø 0,9mm x 600 mm - 90°
MF-07-050-90	Microflex flexible Ø 0,7mm x 500 mm - 90°
MF-07-100-90	Microflex flexible Ø 0,7mm x 1000 mm - 90°
MF-09-100	Microflex flexible Ø 0,9mm x 1.000 mm - 0°
MF-09-100-90	Microflex flexible Ø 0,9mm x 1.000 mm - 90°
MF-15-120	Microflex flexible Ø 1,5mm x 1.200 mm - 0°
MF-15-120-90	Microflex flexible Ø 1,5mm x 1.200 mm - 90°
618 000 102	F:35 Adjustable focal lens coupler - C-Mount
MF-VAL	Waterproof case with space for fiberscope and video documentation.



LED-R handle

Portable high intensity source with white LED lamp. LED life is approximately 50,000 hours under normal use. Supplied with its charger with battery level indicator and rechargeable. Li-ion battery (approximately 500 charge cycles).

Technical data

LED output	10 Watts (80,000 lux)
Intensity adjustment	Adjustable to 5 levels
Dimensions	Ø 24 mm x 140 mm
Weight with battery	130 gr
Battery	Li-Ion 2400 mHa 3.7V - type 18650
Average runtime	3-4 hours
Durée de vie LED	50 000 heures

To order

Part No	Description
LED-R	Bipol LED-R battery handle with rechargeable battery
LED-R-BAT	Spare battery LED-R
LED-R-BAT-CH	LED-R Spare battery charger



Mini LED light handle

Portable light source with ACMI connection and LED light. 2 AA batteries (supplied). Adjustable illumination.

Technical data

Illumination	10,000 to 55,000 lux (Min-max)
Dimensions	Ø 25 mm x 170 mm
Weight with batteries	120 gr
Average runtime	2-7 hours depending on the use

To order

Part No	Description
605 000 565	Mini LED light handle with 2 AA batteries



LED-RA portable light source

Ultra-high-performance portable source with white LED lamp and continuously adjustable lighting. Bulb life is 50,000 hours. Rechargeable battery and wall/table support included. Compatible with portable video applications.

Technical data

Illumination	15,000 to 180,000 lux (Min-max)
Dimensions	Ø 31mm x 150mm
Weight with batteries	148 gr
Battery	Rechargeable 3.7V, 220mAh Li-Ion
Average runtime	2-7 hours depending on the use

To order

Part No	Description
605 000 570	Rechargeable RA LED handle & adjustable lighting. Comes with charging wall bracket.
605 000 571	Original streamlight battery for LED-RA



Endo-Lux-T table light source

Our Endo-lux T is a compact and powerful (80 watts) table light source with LED technology.

It comes with a continuous light adjustment (20 levels) and a standard RIWO output. It is compatible with video and photo applications and can be connected to our rigid endoscopes, fiberscopes.

Technical data	
LED output	80 Watts
Illumination	800,000 lux
Light intensity	20 levels adjustable
Color temperature	5,000 - 7,000 k
Cable connection	RIWO
Power	110V-220V / 50 Hz-60Hz
Dimensions	355x315x120mm
Weight	5,2 kgs (11,46 lbs)
LED Lamp runtime	50,000 hours

To order

Part No	Description
Endo-Lux-T	Bipol table light source Endo-lux T - 80 Watts - RIWO - bi tension 110/220 VA
Endo-Lux-C	Light cable SUPERFLEX Ø 4 x 1900mm Steel sheathing with outer PVC sheathing connection RIWO-STORZ/ACMI.



Endo-Lux-C

Mini table light source ARC35 LED

Compact Mini Light Source

Intensity variation by cat's eye. Supplied with transformer 110-220 VA -50/60 Hz. Incorporated sound ventilation. Lighting by LED lamp (life 50,000 hours). 12V power supply that allows mobile use on site with the kit battery bag.

Technical data	
Color temperature	5,700 K - 6,500 K Nominal
Illumination	250,000 lux max
Dimensions	127 x 90 x 68 mm
Power	12 V/DC
Weight	0.45 kg (1.0 lbs)
Working temperatures	5°C to 40°C
LED runtime	50,000 hours

To order

Part No	Description
604 000 204	ARC 35 LED mini light source
604 000 206	Portable battery kit ARC24 (Battery / Pouch / connecting cables)
604 000 218	Portable Lighting Kit (Arc 35/Battery/Light Cable in Case)



Endocamera CCD color FV35 HQ

Compact high-resolution video camera specially developed for endoscopy video applications.

Equipped with a 1/2" sensor and an automatic electronic shutter, it allows the inspection of places with changing brightness. Very light (about 160 gr) with its shockproof housing, it will be ideal in workshop application, Research & Development or even in external maintenance intervention.

The video coupler (option) is compatible with all our rigid and flexible endoscopes.

Our FV35-HQ endocamera is compatible with our Rugged (3.5") and P1 (7") videoscopes.

The TVSCOPE adapter allows it to be connected to an external monitor.

Dust proof and shock resistant



(Coupler in option)

Technical data

CCD sensor	1/2" SONY
Resolution	800 TVL
White balance	Automatic
Video signal	PAL / NTSC
Power	12 DVC - unique cable
Connection	Integrated Video coupler
Dimensions	Ø50 mm x 90 mm
Weight	160 gr (without cable)
Working temperatures	0°C to + 40°C

Part No	Description
618 000 184	Bipol FV35 HQ endocamera C-MOUNT
618 000 181	Bipol FV35 HQ endocamera C-MOUNT (with video coupler F:35) - P1 Rugged connection.
Compatible accessories	
P1	P1 videoscope - 7" screen.
B-Rugged	Rugged videoscope - 3.5" screen.
TV-SCOPE	External Monitor Connection Kit (livré avec alimentation 12V secteur)



Industrial Monitor

19"

P1 videoscope



7"

Rugged videoscope



3.5"

Our FV35 HQ camera can be used with either our portable videoscopes P1 & Rugged or with a workbench monitor.

C-Mount Video coupler

Our video coupler allow you to connect an endoscope to a C-Mount CCD camera to view live images on a monitor. It offers an extra wide field of view and is available in 35mm focal length.

Designation	Focal length	Mount	Part No
Coupler F: 35mm	Adjustable	C-Mount / ISO 32mm	618 000 102



USB-HDM camera

Very high resolution compact video camera (2304x1536 px) specially developed for video endoscopy uses.

The camera can be used with any laptop that has a USB port. The supplied visualization software is very easy to use and has many adjustable parameters.

Equipped with a 1/3" sensor and an automatic electronic shutter, it allows the inspection of places with changing light.

The camera has a dedicated HDMI output to be connected to an industrial monitor (cable supplied).

In this configuration, the camera is powered on mains.



Technical data

CCD sensor	1/3.2" 3MP couleur CMOS
Resolution	2304 x 1536 px
White balance	Automatic
Signal Vidéo/Sortie	USB 3.0 / HDMI
Frame rate	HDMI: 1080i 60fps USB: 720p 30fps
HDMI recording	8GB Micro SD card
Power	USB charger - 5V (for HDMI connection) USB use: self-powered
Connection	C-Mount
Dimensions	Ø 40 mm x 100 mm
Weight	75 gr
Working temperature	+4°C to + 50°C

Supplied with USB cable / HDMI cable / 8GB Micro SD card and dedicated image processing software (photo & video recording, digital zoom, measurement grid, image annotation)



To order

Part No	Description
618 000 175	3MP USB-HDMI Bipol camera with F:35 Vario coupler
618 000 176	Bipol USB-HDMI 3MP camera only

BIPOL video coupler

Our video coupler connects an endoscope to a C-Mount CCD camera to view live images on a monitor.

It offers an extra wide field of vision. Compatible with all our CCD cameras.

Part No	Description
618 000 102	C-Mount video coupler with adjustable focus



Magic arm articulated holder

Articulated holder with central locking lever to be mounted on a bench thanks to its clamp.

Compatible with Rugged & P1 videoscopes.

To order

Part No	Description
618 000 106	Magic arm articulated holder with clamp
618 000 111	Additional clamp (for videoscope holder)



Industrial video monitors

Our professional industrial video monitors have been specially developed to meet the needs of video control in technical endoscopy and fibroscopy. Excellent contrast and high definition (1280x1024 pixels) will allow you to view on screen the interior of your parts in a great comfort of use without visual fatigue. Numerous inputs allow you to connect a variety of devices to these monitors. In addition to two BNC ports, you also have a VGA input and an HDMI input.

To order

Part No	Description
619 000 012	Industrial Monitor 19"



Storage cases

P1-VID. Carrying case specially designed to allow easy and safe transport of our cameras and accessories. Accepts as standard our 3 different video cameras, the LED-R portable lighting stick as well as a P1 or Rugged monitor.

VAL-RIG2X. Aluminum case with footprints for 2 endoscopes (up to 435 mm) & LED-R light source.

Part No	Description
VAL-RIG2X	Aluminum case with footprint for 2 rigid endoscopes (max length 435mm) & portable LED-R source.
P1-VID	Video carrying case with foam.

