









## VIDEOSCOPE

# P1 & RUGGED

PRODUCT LINE











Our line of modular BIPOL P1 & Rugged video endoscopes allows you to choose between 2 main video units and a large number of interchangeable videoscope probes which can be either articulating or non articulating. With working length up to 30 meters, our videoscopes offer flexibility and durability for inspections of hard to reach areas in a large array of industries including aviation, railways, pharmaceutical, Power plants, nuclear, maintenance or locksmith industry among others.

## RUGGED

The bipol Rugged videoscope is a lightweight and robust remote visual inspection system.

#### Main Features

- 3.5" LCD screen 720x640pixels
- Digital zoom 8x
- Image rotation
- Mirror image
- Water and dust proof
- SD 32 GB card for image and video recording
- Long lasting rechargeable battery





Easy photo and video recording

The BIPOL Videoscope P1 is a high resolution lightweight and robust portable video endoscope.

#### Main Features

- Large 7" screen 800x480 pixels
- Text annotation
- SD 32 GB SD card for still images and video recording
- Waterproof (IP67) and drop poof (2m) robust construction
- Wireless handle in option
   Long lasting rechargeable battery
- Digital zoom 4x
- Optimized for Left and right handed users





## Rigid articulating video probes

#### Ø 6.0 & 8.0 mm | 2-way 180° Rigid articulated

The P1-2XR articulating video probe consists of a small diameter CMOS camera mounted on a rigid stainless steel sleeve that offers an excellent resolution of 400.000 pixels. It is Illuminated by 4 white LEDs and offers both advantages of rigid and articulated probes for a very precise inspection of cylinder walls, pistons, spark plugs, bottles, ceilings... A blocking lever allows the probe to hold on to a fixed position. Available in 2 focussing ranges.

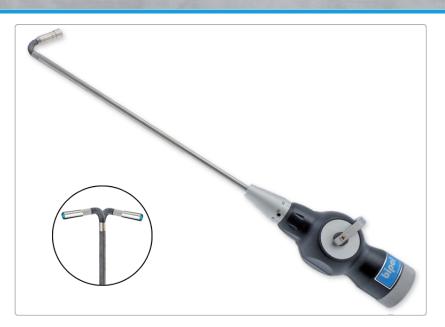
Short focussing: 20 to 70 mm Long focussing: 60 mm to infinity.

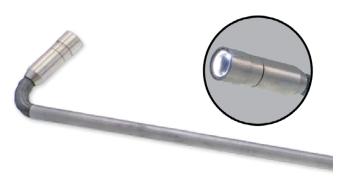
Field of view is of 67°. Probes are compatible with BIPOL P1 & Rugged videoscopes.

Technical Data	
Outer Diameter	6.0 & 8.0 mm
Working length	300, 450 & 700mm
Articulation	2WAY - 2 x 180°
Camera resolution	400.000 px
Field of view	67°
Focussing range	<b>CF</b> 20 - 70 mm & <b>LF</b> 60 mm to ∞
Number of LEDs	4 (6.0mm) 6 (8.0mm)
Housing	Stainless steel - Rigid
Bending radius	N/A
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C

#### Product advantages

- ✓ All-in-1 inspection of cylinders, pistons, valves in diesel and gas engines. Bottles inspection...
- √ High resolution with LED illumination
- √ 2-Way 180° articulation
- ✓ Available in 2 focussing ranges





Part No	Description
P1-2XR6-30	HD-RX Ø 6,0 x 300 mm - 0° - Field 67° CF - 2-way
P1-2XR6-45	HD-RX Ø 6,0 x 450 mm - 0° - Field 67° CF - 2-way
P1-2XR6-70	HD-RX Ø 6,0 x 700 mm - 0° - Field 67° CF - 2-way
P1-2XR6-30-LF	HD-RX Ø 6,0 x 300 mm - 0° - Field 67° LF - 2-way
P1-2XR6-45-LF	HD-RX Ø 6,0 x 450 mm - 0° - Field 67° LF - 2-way
P1-2XR6-70-LF	HD-RX Ø 6,0 x 700 mm - 0° - Field 67° LF - 2-way
P1-2XR8-45-CF	HD-RX Ø 8,0 x 450 mm - 0° - Field 67° CF - 2-way
P1-2XR8-70-CF	HD-RX Ø 8,0 x 700 mm - 0° - Field 67° CF - 2-way
P1-2XR8-45-LF	HD-RX Ø 8,0 x 450 mm - 0° - Field 67° LF - 2-way
P1-2XR8-70-LF	HD-RX Ø 8,0 x 700 mm - 0° - Field 67° LF - 2-way
ACCESSORIES	
P1-2XR-VAL	Carrying case for probe length 300 & 450 mm
P1-2XR-70-VAL	Carrying case for probe length 700 mm
P1-EXT-C	Curled extension cord 1m
B-EXT-F2	Flexible extension cable 2m
B-EXT-F3	Flexible extension cable 3m
B-EXT-F5	Flexible extension cable 5m
B-C-KIT	BIPOL cleaning kit (1 optical spray - 10 Cotton swabs - 1 towel)

## Articulating video probes HDX-E

#### Ø 4 & 6.0mm | 2-way 150° articulation

The HDX-E 2-way articulating video probe consists of a small diameter CMOS camera mounted on a flexible PVC covered hose that offers an excellent resolution of 380.000 pixels. Illuminated by 4 white LEDs, it allows 2-way 150° inspection of narrow spaces and holes. A blocking lever allows the probe to hold on to a fixed position. It is available in 2 focussing ranges:

Short focussing: 20 to 70 mm

long focussing: 70 mm to infinity.

Field of view is of 67°. Probes are compatible with BIPOL P1 & Rugged videoscopes.

Technical Data	
Outer Diameter	4.0 & 6.0 mm
Working length	1,2 & 3 meters
Tip length	35 mm
Articulation	2-way (2x150°)
Camera resolution	380.000 px
Field of view	67°
Focussing range	CF 20 - 70 mm & LF 70 mm to ∞
Number of LEDs	4 (white)
Housing	PU flexible
Bending radius	50 mm
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C

#### **Product advantages**

- ✓ Inspect small and narrow openings. allows 360° inspection of target area
- √ 2-Way articulated probe with LED illumination
- √ Interchangeable probes
- √ Available in 2 focussing ranges





Part No	Description
P1-2XF4-1-CF	HDX-E Ø 4.0mm x 1 m - 0° - CF - 2-way
P1-2XF4-2-CF	HDX-E Ø 4.0mm x 2 m - 0° - CF - 2-way
P1-2XF6-1-CF	HDXE Ø 6,0 mm x 1 m - 0° - CF - 2-way
P1-2XF6-2-CF	HDXE Ø 6,0 mm x 2 m - 0° - CF - 2-way
P1-2XF6-3-CF	HDXE Ø 6,0 mm x 3m - 0° - CF - 2-way
P1-2XF6-1-LF	HDXE Ø 6,0 mm x 1 m - 0° - LF - 2-way
P1-2XF6-2-LF	HDXE Ø 6,0 mm x 2 m - 0° - LF - 2-way
P1-2XF6-3-LF	HDXE Ø 6,0 mm x 3m - 0° - LF - 2-way
P1-EXT-C	Curled extension cord 1m
B-EXT-F2	Flexible extension cable 2m
P1-MIR4-SET	Set Mirror 70° / Mirror 90° / Mirror 120° for probe HDX-E 4
P1-MIR5-SET	Set Mirror 90° / Magnet / Guide ball for probe HDX-E 6



## Articulating video probes HDX-E

#### Ø 4, 6.0 & 8.0 mm | 4-way 150° articulation

The HDX-E 4-way articulating video probe consists of a small diameter CMOS camera mounted on a flexible PVC covered hose that offers an excellent resolution of 380.000 pixels. Illuminated by 4 or 6 white LEDs, it allows panoramic 360° inspection of narrow spaces and holes. A blocking lever allows the probe to hold on to a fixed position. It is available in 2 focussing ranges:

Short focussing: 20 to 70 mm long focussing: 70 mm to infinity.

Field of view is of 67°. Probes are compatible with BIPOL P1 & Rugged videoscopes.

Technical Data	
Outer Diameter	4.0 - 6.0 & 8.0 mm
Working length	1, 2 & 3 meters
Tip length	35 mm
Articulation	4-way (4 x 150°)
Camera resolution	380.000 px
Field of view	67°
Focussing range	<b>CF</b> 20 - 70 mm & <b>LF</b> 70 mm to ∞
Number of LEDs	4 (white) - 6 for 8.0mm
Housing	PU flexible
Bending radius	50 mm
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C

#### Product advantages

- ✓ Inspect small and narrow openings. allows 360° inspection of target area
- ✓ 2-Way articulated probe with LED illumination
- ✓ Interchangeable probes
- ✓ Available in 3 diameters





Part No	Description
P1-4XF4-1-CF	HDXE Ø 4,0 mm x 1 m - 0° - CF - 4-way
P1-4XF6-1-CF	HDXE Ø 6,0 mm x 1 m - 0° - CF - 4-way
P1-4XF6-2-CF	HDXE Ø 6,0 mm x 2 m - 0° - CF - 4-way
P1-4XF6-3-CF	HDXE Ø 6,0 mm x 3 m - 0° - CF - 4-way
P1-4XF8-1-CF	HDX-E Ø 8.0mm x 1m - 0° - CF - 4-way
P1-4XF8-2-CF	HDX-E Ø 8.0mm x 2m - 0° - CF - 4-way
P1-4XF8-3-CF	HDX-E Ø 8.0mm x 3m - 0° - CF - 4-way
P1-4XF8-1-LF	HDX-E Ø 8.0mm x 1m - 0° - LF - 4-way
P1-4XF8-2-LF	HDX-E Ø 8.0mm x 2m - 0° - LF - 4-way
P1-4XF8-3-LF	HDX-E Ø 8.0mm x 3m - 0° - LF - 4-way
P1-EXT-C	Curled extension cord 1m
B-EXT-F2	Flexible extension cable 2m
P1-MIR4-SET	Set Mirror 70° / Mirror 90° / Mirror 120° for HDX-E 4
P1-MIR5-SET	Set Mirror 90° / Magnet / Guide ball for HDX-E 6
P1-MIR8-SET	Set Mirror 90° / Magnet / Guide ball for 4XF8

## Articulating video probes HR-X

#### Ø 4 & 6.0 mm | 2-way articulation

The bipol HR-X articulating video probe consists of a small diameter CMOS camera mounted on a flexible stainless steel hose that offers an excellent resolution of **720.000 pixels** (400.000 for the 4.0mm). The CMOS sensor offers a high sensitivity for improved video rendering. Illuminated by 4 white LEDs, it allows panoramic 360° inspection of narrow spaces and holes up to 10 meters.

Stainless steel sheathing for increased longevity. A blocking lever allows the probe to hold on to a fixed position. It offers a focussing range of 20 to 70 mm and a field of view of 67°

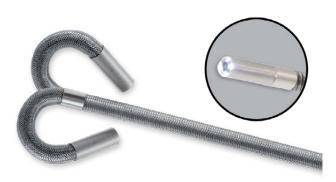
Probes are compatible with BIPOL P1 & Rugged videoscopes.

Technical Data	
Outer Diameter	4 & 6.0 mm
Working length	1, 2,3,5 & 10 meters
Tip length	25mm
Articulation	2-way 2 x 180° (100° for 5&10m)
Camera resolution	720.000 px (400.000 for 4.0mm)
Field of view	67°
Focussing range	CF 20 - 70 mm
Number of LEDs	4 (white)
Housing	Stainless steel braid
Bending radius	50 mm
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C

#### Product advantages

- ✓ Inspect small and narrow openings. allows 360° inspection of target area
- √ High resolution with LED illumination
- √ 2-way articulation with blocking lever
- ✓ Articulated inspection up to 10 meters





Part No	Description
P1-2XF4-1-HR	HR-X Ø 4,0 mm x 1 m - 0° - CF - 2-way
P1-2XF4-2-HR	HR-X Ø 4,0 mm x 2 m - 0° - CF - 2-way
P1-2XF6-1-HR	HR-X Ø 6,0 mm x 1 m - 0° - CF - 2-way
P1-2XF6-2-HR	HR-X Ø 6,0 mm x 2 m - 0° - CF - 2-way
P1-2XF6-3-HR	HR-X Ø 6,0 mm x 3 m - 0° - CF - 2-way
P1-2XF6-5-HR	HR-X Ø 6,0 mm x 5 m - 0° - CF - 2-way
P1-2XF6-10-HR	HR-X Ø 6,0 mm x 10 m - 0° - CF - 2-way
P1-EXT-C	Curled extension cord 1m
B-EXT-F2	Flexible extension cable 2m



## Articulating video probes HR-X

#### Ø 8-10-12&16 mm - 2-way articulation

The bipol HR-X articulating video probe consists of a small diameter CMOS camera mounted on a flexible stainless steel hose that offers an excellent resolution of 720.000 pixels. The CMOS sensor offers a high sensitivity for improved video rendering. Illuminated by powerful white LEDs, it allows panoramic 360° inspection of narrow spaces and holes up to 10 meters. Stainless steel sheathing for increased longevity. A blocking lever allows the probe to hold on to a fixed position. It offers a long focussing range of 80mm to infinity and a field of view of 90°

Probes are compatible with BIPOL P1 & Rugged videoscopes.

Technical data	
Outer Diameter	8,10,12 & 16 mm
Working length	1,2,3,5 & 10m
Articulation	2-way (2x180°) (100° for 5&10m)
Camera resolution	720.000 px
Field of view	90°
Focussing range	LF 80mm to ∞
Number of LEDs	6 (8mm) 2 (10mm) - 3 (12mm) 4 (16mm)
Housing	Stainless steel braid
Bending radius	80 mm
Protection Rate	IP57 - Water - Oils - Jet fuel
Operating temperature	-20°C to +60°C
Storage temperature	-20°C to +60°C

#### Product advantages

- ✓ Articulation 2-way with blocking lever
- ✓ High resolution 720.000 px
- √ Powerfull LED illumination
- √ Length up to 10 meters





Part Number	Description
P1-2XF8-1-HR	HR-X Ø 8mm x 1 m
P1-2XF8-2-HR	HR-X Ø 8mm x 2 m - 0° - LF - 2-way
P1-2XF8-3-HR	HR-X Ø 8mm x 3 m - 0° - LF - 2-way
P1-2XF8-5-HR	HR-X Ø 8mm x 5 m - 0° - LF - 2-way
P1-2XF8-10-HR	HR-X Ø 8mm x 10 m - 0° - LF - 2-way
P1-2XF10-1-HR	HR-X Ø 10mm x 1 m - 0° - LF - 2-way
P1-2XF10-2-HR	HR-X Ø 10mm x 2 m - 0° - LF - 2-way
P1-2XF10-3-HR	HR-X Ø 10mm x 3 m - 0° - LF - 2-way
P1-2XF10-5-HR	HR-X Ø 10mm x 5 m - 0° - LF - 2-way
P1-2XF10-10-HR	HR-X Ø 10mm x 10 m - 0° - LF - 2-way
P1-2XF12-5-HR	HR-X Ø 12mm x 5 m - 0° - LF - 2-way
P1-2XF12-10-HR	HR-X Ø 12mm x 10 m - 0° - LF - 2-way
P1-2XF16-5-HR	HR-X Ø 16mm x 5 m - 0° - LF - 2-way
P1-2XF16-10-HR	HR-X Ø 16mm x 10 m - 0° - LF - 2-way
P1-EXT-C	Curled extension cord 1m
B-EXT-F2	Flexible extension cable 2m

## BIPOL P1-2XF9-IR videoscope probe

#### Ø 9.0mm | 2-way 180° articulation IR

The P1-2XF9-IR articulating video probe consists of a small diameter CMOS camera mounted on a flexible stainless steel hose that offers an excellent resolution of **420.000 pixels**. The Infrared sensor allows inspections of dark areas in total discretion. Illuminated by 4 IR LEDs, Stainless steel sheathing for increased durability. A blocking lever allows the probe to hold on to a fixed position. Delivered with focussing range of 60mm to infinity and a field of view of 67° Probes are compatible with BIPOL P1 & Rugged videoscopes.

Technical Data	
Outer Diameter	9.0 mm
Working length	1, 2 & 3 meters
Articulation	2WAY - 2 x 180°
Camera resolution	420.000 px
Field of view	67°
Focussing range	60mm to ∞
Number of LEDs	4 infrared
Housing	Stainless steel braid
Bending radius	50 mm
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C

#### Product advantages

- ✓ Inspect hard to reach dark areas for detection of hidden merchandise
- √ High resolution with IR 940 nm illumination
- ✓ 2-way 180° articulation with blocking lever





10 Order	
Part No	Description
P1-2XF9-1-IR	Infrared video probe IR Ø 9,0 mm x 1 M - 0 $^{\circ}$ - Field 67 $^{\circ}$ LF - 2-way
P1-2XF9-2-IR	Infrared video probe IR Ø 9,0 mm x 2 M - 0 $^{\circ}$ - Field 67 $^{\circ}$ LF - 2-way
P1-2XF9-3-IR	Infrared video probe IR Ø 9,0 mm x 3 M - 0 $^{\circ}$ - Field 67 $^{\circ}$ LF - 2-way
P1-EXT-C	Curled extension cord 1m
B-EXT-F2	Flexible extension cable 2m





## BIPOL P1-39-HR videoscope probe

#### Ø 3.9mm | Flexible high sensitivity FOV 110°

The P1-F39-HR video probe consists of a small diameter CMOS camera mounted on a flexible PVC covered hose that offers an excellent resolution of 400.000 pixels. Illuminated by 4 white LEDs, it allows inspection of narrow spaces and holes in many different field of activities.

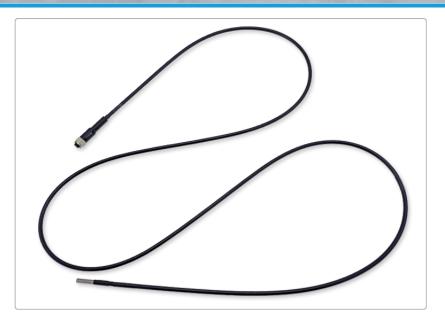
It is available with a focussing range of 10 to 50 mm and a field of view of  $110^{\circ}$ 

Probes are compatible with BIPOL P1 & Rugged videoscopes.

Technical Data	
Outer Diameter	3.9 mm
Working length	1,2,3,5,10,20 & 30 meters
Camera resolution	400.000 px
Field of view	Extra large 110°
Focussing range	10-50 mm
Number of LEDs	4 (white)
Housing	PU flexible
Bending radius	50 mm
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C

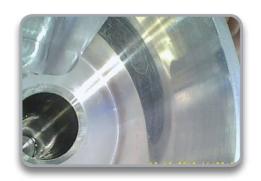
### Product advantages

- ✓ Inspect small and narrow openings up to 30 meter length
- ✓ High resolution with LED illumination
- ✓ Interchangeable probes
- ✓ Available in stock





Part No	Description
P1-F39-1-HR	HR Ø 3,9 mm x 1 M - 0° - Field 110° CF
P1-F39-2-HR	HR Ø 3,9 mm x 2 M - 0° - Field 110° CF
P1-F39-3-HR	HR Ø 3,9 mm x 3 M - 0° - Field 110° CF
P1-F39-5-HR	HR Ø 3,9 mm x 5 M - 0° - Field 110° CF
P1-F39-10-HR	HR Ø 3,9 mm x 10 M - 0° - Field 110° CF
P1-F39-20-HR	HR Ø 3,9 mm x 20 M - 0° - Field 110° CF
P1-F39-30-HR	HR Ø 3,9 mm x 30 M - 0° - Field 110° CF





## BIPOL P1-F4-5 videoscope probe

#### Ø 4.0 & 5.0 mm | Flexible FOV 67°

The P1-F4 F5 video probe consists of a small diameter CMOS camera mounted on a flexible PVC covered hose that offers an excellent resolution of 300 or 400.000 pixels. Illuminated by 4 white LEDs, it allows inspection of narrow spaces and holes in many different field of activities.

It is available with a focussing range of 20 to 70 mm and a field of view of  $67^{\circ}$ 

It accepts a set of mirrors 70°, 90° & 120° available in option

Probes are compatible with BIPOL P1 & Rugged videoscopes.

Technical Data	
Outer Diameter	4.0 mm - 5.5 mm
Working length	1,2,3,5,10 & 30 meters
Camera resolution	300.000 px (4.0mm) 400.000 px (5.5mm)
Field of view	67°
Focussing range	CF 20-70 mm
Number of LEDs	4 (white)
Housing	PU flexible
Bending radius	50 mm
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C

#### Product advantages

- ✓ Inspect small and narrow openings up to 30 meter length
- ✓ High resolution with LED illumination
- ✓ Interchangeable probes
- √ Side mirrors in option
- ✓ Available in stock





#### To order

Part No	Description
P1-F4-1	flexible video probe Ø 4,0 mm x 1 m - 0 $^{\circ}$ CF
P1-F4-2	flexible video probe Ø 4,0 mm x 2 m - 0 $^{\circ}$ CF
P1-F4-3	flexible video probe Ø 4,0 mm x 3 m - 0 $^{\circ}$ CF
P1-F4-5	flexible video probe Ø 4,0 mm x 5 m - 0 $^{\circ}$ CF
P1-F4-10	flexible video probe Ø 4,0 mm x 10 m - $0^{\circ}$ CF
P1-F4-30	flexible video probe Ø 4,0 mm x 30 m - $0^{\circ}$ CF
P1-MIR4-SET	Set Mirror 90° / Magnet / Guide ball for probe 4,0mm

Part No	Description
P1-F55-1	flexible video probe Ø 5,5 mm x 1 m - 0 $^{\circ}$ CF
P1-F55-2	flexible video probe Ø 5,5 mm x 2 m - 0 $^{\circ}$ CF
P1-F55-3	flexible video probe Ø 5,5 mm x 3 m - 0 $^{\circ}$ CF
P1-F55-5	flexible video probe Ø 5,5 mm x 5 m - 0 $^{\circ}$ CF
P1-F55-10	flexible video probe Ø 5,5 mm x 10 m - 0 $^{\circ}$ CF
P1-F55-20	flexible video probe Ø 5,5 mm x 20 m - 0° CF
P1-F55-30	flexible video probe Ø 5,5 mm x 30 m - 0° CF
P1-MIR5-SET	Set Mirror 90° / Magnet / Guide ball for probe 5,5 $\&$ 5,8mm



### BIPOL HR GM videoscope probe

#### Ø5.5 mm | Metal braided high resolution

The HR-GM video probe consists of a small diameter CMOS camera mounted on a semi flexible stainless steel hose that offers an excellent resolution of 720.000 pixels and a high sensitivity video sensor. It results in a exceptional image quality for such small diameter. Illuminated by 4 powerful white LEDs, it allows inspection of pipes and tube, heat exchangers, serpentines.

The probe is metal braided to allow long distance inspection. It is available with a close focussing range (20-70mm) and a field of view of 67°.

Probes are compatible with BIPOL P1 & Rugged videoscopes.

Technical Data	
Outer Diameter	5.5 mm
Working length	1,2,3,5,10,20 & 30 meters
Camera resolution	720.000 px
Field of view	67°
Focussing range	CF 20-70 mm
Number of LEDs	4 (white)
Housing	Stainless steel semi flexible
Bending radius	80 mm
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C

#### Product advantages

- ✓ Inspect small and narrow openings up to 30 meter length
- ✓ High resolution with LED illumination
- ✓ Metal braided probe for long distance inspection
- √ High sensitivity CMOS sensor
- ✓ Available in stock





10 order	
Part No	Description
P1-FGM55-1	Semi flexible video probe Ø 5,5 mm x 1 m - 0° CF
P1-FGM55-2	Semi flexible video probe Ø 5,5 mm x 2 m - 0° CF
P1-FGM55-3	Semi flexible video probe Ø 5,5 mm x 3 m - 0° CF
P1-FGM55-5	Semi flexible video probe Ø 5,5 mm x 3 m - 0° CF
P1-FGM55-10	Semi flexible video probe Ø 5,5 mm x 10 m - 0° CF
P1-FGM55-20	Semi flexible video probe Ø 5,5 mm x 20 m - 0° CF
P1-FGM55-30	Semi flexible video probe Ø 5,5 mm x 30 m - 0° CF
P1-FGM55-30	Semi flexible video probe Ø 5,5 mm x 30 m - 0° CF
P1-MIR5-SET	Set Mirror 90° / Magnet / Guide ball for probe 5,5 & 5,8mm
P1-EXT-C	Curled extension cord 1m

### BIPOL HR GM videoscope probe

#### Ø 8 & 10 mm | Metal braided high resolution

The HR-GM video probe consists of a small diameter CMOS camera mounted on a semi flexible stainless steel hose that offers an excellent resolution of 720.000 pixels and a high sensitivity video sensor. It results in a exceptional image quality for such small diameter. Illuminated by 6 (8mm version) or 9 (10mm version) powerful white LEDs, it allows inspection of pipes and tube, heat exchangers, serpentines.

The probe is metal braided to allow long distance inspection. It is available with a focussing range of 80mm to inifinty and a field of view of 90°.

Probes are compatible with BIPOL P1 & Rugged videoscopes...

Technical Data	
Outer Diameter	8.0 & 10.0 mm
Working length	1,2,3,5,10,20 & 30 meters
Camera resolution	720.000 px
Field of view	90°
Focussing range	LF 80mm to ∞
Number of LEDs	8mm : 6 Leds 10mm : 9 Leds
Housing	Stainless steel semi flexible
Bending radius	80 mm
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C

#### Product advantages

- ✓ Inspect small and narrow openings up to 30 meter length
- ✓ High resolution with LED illumination
- ✓ Metal braided probe for long distance inspection
- √ High sensitivity CMOS sensor





Part No	Description
P1-FGM8-5	Video Probe semi-flex BIPOL HR-GM Ø 8,0 mm x 5 m - 0° LF
P1-FGM8-10	Video Probe semi-flex BIPOL HR-GM Ø 8,0 mm x 10 m - 0° LF
P1-FGM8-20	Video Probe semi-flex BIPOL HR-GM Ø 8,0 mm x 20 m - 0° LF
P1-FGM8-30	Video Probe semi-flex BIPOL HR-GM Ø 8,0 mm x 30 m - 0° LF
P1-FGM10-5	Video Probe semi-flex BIPOL HR-GM Ø 10,0 mm x 5 m - 0° LF
P1-FGM10-10	Video Probe semi-flex BIPOL HR-GM Ø 10,0 mm x 10 m - 0° LF
P1-FGM10-20	Video Probe semi-flex BIPOL HR-GM Ø 10,0 mm x 20 m - 0° LF
P1-FGM10-30	Video Probe semi-flex BIPOL HR-GM Ø 10,0 mm x 30 m - 0° LF
P1-EXT-C	Curled extension cord 1m



## BIPOL P1-SR videoscope probes

#### Ø 5.8 - 8.0 - 10 - 12 & 16 mm | Semi rigid

The P1-SR video probe consists of a small diameter CMOS camera mounted on a semi rigid flexible PVC covered hose that offers an excellent resolution of 400 or 720.000 pixels. Illuminated by white LEDs, they allow inspection of narrow spaces and holes in many different field of activities.

They are available in 5 diameters. Diameters 12 & 16mm are delivered with stronger LEDs that allow long distance inspections (50cm+) of dark areas.

Probes are compatible with BIPOL P1 & Rugged videoscopes.

Technical Data	
Outer Diameter	5.5 - 8.0-10-12-16 mm
Working length	1,2 & 3 meters
Camera resolution	400.000 px (5.5 & 8.0 mm) 720.000 px (10-12-16 mm)
Field of view	67° (5.5 & 8.0mm) 90° (10-12-16mm)
Focussing range	CF 20-70 mm (5.5 & 8.0mm) LF 80 mm to ∞ (10-12-16mm)
Number of LEDs	4 (5.5mm) 6 (8.0mm) 9 (10mm) 2 Super LEDs (12mm) 4 Super LEDs (16mm)
Housing	PU semi rigid
Bending radius	50 mm
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C

#### Product advantages

Flex and Stay sheathing for better control of videoscope probe

High resolution with strong LED illumination

Available in stock





Part No	Description
P1-SR58-1	Semi rigid video probe Ø 5,5 mm x 1 m - 0° - CF
P1-SR58-2	Semi rigid video probe Ø 5,5 mm x 2 m - 0° - CF
P1-SR58-3	Ø 5,5 mm x 3 m - 0° - CF
P1-SR8-1	Semi rigid video probe Ø 8,0 mm x 1 m - 0° - CF
P1-SR8-2	Semi rigid video probe Ø 8,0 mm x 2 m - 0° - 0° - CF
P1-SR8-3	Semi rigid video probe Ø 8,0 mm x 3 m - 0° - 0° - CF
P1-SR10-1	Semi rigid video probe Ø 10,0 mm x 1 m - 0° - LF
P1-SR10-2	Semi rigid video probe Ø 10,0 mm x 2 m - 0° - LF
P1-SR12-1	Semi rigid video probe Ø 12,0 mm x 1 m - 0° - LF
P1-SR12-2	Semi rigid video probe Ø 12,0 mm x 2 m - 0° - LF
P1-SR16-1	Semi rigid video probe Ø 16,0 mm x 1 m - 0° - LF
P1-SR16-2	Semi rigid video probe Ø 16,0 mm x 2 m - 0° - LF
P1-MIR5-SET	Set Mirror 90° / Magnet / Guide ball for probe 5,5 & 5,8mm
P1-MIR8-SET	Set Mirror 90° / Magnet / Guide ball for probe 8,0mm

## BIPOL P1-R39 videoscope probe

#### Ø 3.9mm | Rigid with removable mirror tubes

The P1-R39 videoscope probe is a rigid probe specially designed to meet the needs of inspection of small spaces such as engines cylinders, valves, pistons, wall cavities, complex mechanical parts.

It is available with optional removable and 360° rotative mirror tubes with direction of visions of 70°-90° & 120° retro. Resolution of **300.000 pixels** allows excellent image quality. It is Illuminated by 4 white LEDs. Focussing range is 20-70mm and field of view of 67°

Probes are compatible with BIPOL P1 & Rugged videoscopes.

Technical Data	
Outer Diameter	3.9 mm
Working length	302 - 430 & 550 mm
Camera resolution	300.000 px
Field of view	67°
Focussing range	20-70 mm
Number of LEDs	4 (white)
Housing	Stainless steel rigid tube
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C

	120°
V	90°
	70°

Removable and rotative mirror tubes DoV 70° 90° & 120°



To order				
Part No	Description			
P1-R39-30	Rigid videoscope Probe BIPOL Ø 3,9mm x 302 mm 0°			
P1-R3930-MT70	Stainless steel rotative mirror tube 70° for P1-R39-30			
P1-R3930-MT90	Stainless steel rotative mirror tube 90° for P1-R39-30			
P1-R3930-MT120	Stainless steel rotative mirror tube 120° for P1-R39-30			
P1-R3930-MTSET	Stainless steel rotative mirror tube 70°-90°&120° for P1-R39-30			
P1-R39-43	Rigid videoscope Probe BIPOL Ø 3,9mm x 430 mm 0°			
P1-R3943-MT70	Stainless steel rotative mirror tube 70° for P1-R39-43			
P1-R3943-MT90	Stainless steel rotative mirror tube 90° for P1-R39-43			
P1-R3943-MT120	Stainless steel rotative mirror tube 120° for P1-R39-43			
P1-R3943-MTSET	Stainless steel rotative mirror tube 70°-90°&120° for P1-R39-43			
P1-R39-55	Rigid videoscope Probe BIPOL Ø 3,9mm x 552 mm 0°			
P1-R3955-MT70	Stainless steel rotative mirror tube 70° for P1-R39-55			
P1-R3955-MT90	Stainless steel rotative mirror tube 90° for P1-R39-55			
P1-R3955-MT120	Stainless steel rotative mirror tube 120° for P1-R39-55			
P1-R3955-MTSET	Stainless steel rotative mirror tube 70°-90°&120° for P1-R39-55			
P1-R39-VAL	Aluminium carrying case for BIPOL rigid probe $\emptyset$ 3,9mm (302-430 & 550mm)			

Mirror tubes must be ordered with videoscope probe at time of purchase. If ordered later, video probe must be sent back for adjustment.



## BIPOL P1-R55 videoscope probe

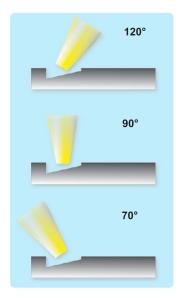
#### Ø 5.5mm | Rigid with removable mirror tubes

The P1-R55 videoscope probe is a rigid probe specially designed to meet the needs of inspection of small spaces such as engines cylinders, valves, pistons, wall cavities, complex mechanical parts.

It is available with optional removable and 360° rotative mirror tubes with direction of visions of 70°-90° & 120° retro. Resolution of **300.000 pixels** allows excellent image quality. It is Illuminated by 4 white LEDs. Focussing range is 20-70mm and field of view of 67°

Probes are compatible with BIPOL P1 & Rugged videoscopes.

Technical Data	
Outer Diameter	5.5 mm
Working length	302 - 430 & 550 mm
Camera resolution	400.000 px
Field of view	67°
Focussing range	20-70 mm
Number of LEDs	4 (white)
Housing	Stainless steel rigid tube
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C



Removable and rotative mirror tubes DoV 70° 90° & 120°



To order Part No	Description
P1-R55-30	Rigid videoscope Probe BIPOL Ø 5,5mm x 302 mm 0°
P1-R5530-MT70	Stainless steel rotative mirror tube 70° for P1-R55-30
P1-R5530-MT90	Stainless steel rotative mirror tube 90° for P1-R55-30
P1-R5530-MT120	Stainless steel rotative mirror tube 120° for P1-R55-30
P1-R5530-MTSET	Stainless steel rotative mirror tube 70°-90°&120° for P1-R55-30
P1-R55-43	Rigid videoscope Probe BIPOL Ø 5,5mm x 430 mm 0°
P1-R5543-MT70	Stainless steel rotative mirror tube 70° for P1-R55-43
P1-R5543-MT90	Stainless steel rotative mirror tube 90° for P1-R55-43
P1-R5543-MT120	Stainless steel rotative mirror tube 120° for P1-R55-43
P1-R5543-MTSET	Stainless steel rotative mirror tube 70°-90°&120° for P1-R55-43
P1-R55-55	Rigid videoscope Probe BIPOL Ø 5,5mm x 552 mm 0°
P1-R5555-MT70	Stainless steel rotative mirror tube 70° for P1-R55-55
P1-R5555-MT90	Stainless steel rotative mirror tube 90° for P1-R55-55
P1-R5555-MT120	Stainless steel rotative mirror tube 120° for P1-R55-55
P1-R5555-MTSET	Stainless steel rotative mirror tube 70°-90°&120° for P1-R55-55
P1-R55-VAL	Aluminium carrying case for BIPOL rigid probe Ø 5,5mm (302-430 & 550mm)

Mirror tubes must be ordered with videoscope probe at time of purchase. If ordered later, video probe must be sent back for adjustment.

## BIPOL P1-EXT-P videoscope probe

#### Ø 28 mm | Video pole camera 1.2-4m

The P1-EXT-P is a rigid pole extension camera. It can extend from 1,2 to 4 meters. A 28mm camera with 400.000 pixels resolution is mounted on the top of the pole. A gooseneck coating allows to position precisely the camera in any direction. the focussing range is 70mm to infinity and the field of view 67°

70mm to infinity and	the field of view 67°
Pole is compatible wit	th BIPOL P1 & Rugged videoscope
Technical Data	
Outer Diameter	28 mm
Working length	1.2 to 4.0 meters
Field of view	67°
Focussing range	70 mm to infinity
Number of LEDs	12 (White)
Housing	Rigid
Bending radius	N/A
Protection Rate	IP67 - Water - Oils -Jet fuel

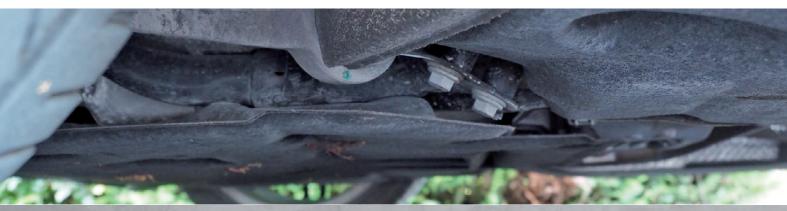
## Operating temperature -20°C to +70°C Storage temperature -20°C to +70°C

Part No	Description
P1-EXT-P	Video extension pole 1,2 to 4 meters
P1-EXT-CW	28mm white LED camera for P1-EXT-P
P1-EXT-CIR	28mm infrared camera for P1-EXT-P
P1-EXT-VAL	Waterproof carrying case for P1 extension pole
P1-EXT-SAC	Carrying bag for P1-EXT-P pole camera











## BIPOL P1-Cwel14 videoscope probe

#### Ø 14mm | 3bar waterproof

The P1-Cwel14 semi rigid video probe is a high resolution 400.000 pixels camera. Its 3bar waterproof construction allows inspection of wells and pipes up to 30 meter deep. Illuminated by 8 powerful white LEDs. It is available with a focussing range of 70 mm to infinity and a field of view of 67°. Fiberglas semi rigid sheathing with reel.

Probe is compatible with BIPOL P1 & Rugged videoscopes.

Technical Data	
Outer Diameter	14 mm
Working length	30 meters
Resolution	400.000 px
Field of view	67°
Focussing range	70 mm to infinity
Number of LEDs	8 (white)
Housing	Glas fiber semi rigid on reel
Bending radius	150 mm
Protection Rate	IP67 - Water - Oils -Jet fuel
Operating temperature	-20°C to +70°C
Storage temperature	-20°C to +70°C







## BIPOL P1-C28 Pipe inspection probe

#### Ø 28 mm x 30 meters

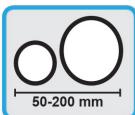
The P1-C28 camera is a probe specially designed for the inspeciton of pipes, tubes and sewages. a 28mm camera with 400.000 pixels resolution is mounted on a semi rigd fiberglas 30 meter long cable. A stainless steel reel allows to easely rewind the cable after use. The focussing range is 70mm to infinity and the field of view 67°

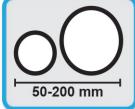
It is compatible with BIPOL P1 & Rugged videoscopes.

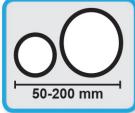
Technical Data			
Outer Diameter	28 mm		
Working length	30 meters		
Field of view	67°		
Focussing range	70 mm to infinity		
Number of LEDs	12 (White)		
Housing	Semi rigid fiberglas		
Bending radius	190		
Protection Rate	IP67 - Water - Oils -Jet fuel		
Operating temperature	-20°C to +70°C		
Storage temperature	-20°C to +70°C		

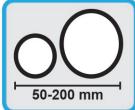
















#### to order

**Part No** 

P1-C28 Video probe BIPOL Cam28 Ø 28mm x 30 m on reel P1-C28-CA

Detachable camera head Ø 28mm for Cam28

Detachable camera head Ø 28mm for Cam28 with P1-C28-CATR

transmitter 512 Hz

P1-C28-LOC 512 Hz Locator for Cam28-CATR camera head

P1-C28-P Protection cover for Ø 28mm camera

P1-C28-PL Glas Dome Ø 28mm

P1-C28-W4 4 wheels roller for C28 camera ( for Ø 100-150mm) P1-C28-W8 8 wheels roller for C28 camera ( for Ø 150-200mm)

P1-C28-VAL Carrying case for Cam28





P1-C28-PL





## Videoscopes P1 & Rugged | compatible video probes

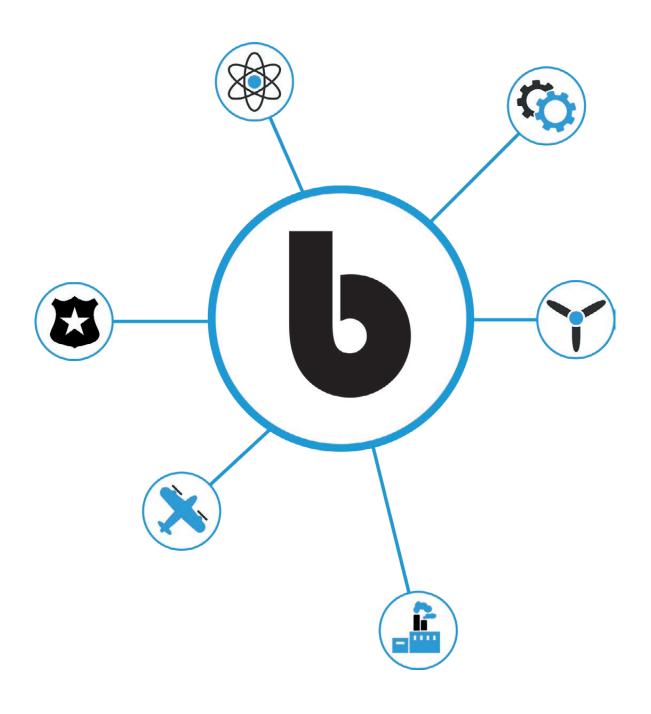
Video Probe type	Part No	Ø mm	Working length (m)	Field of view	Direction of vision	Focussing range mm	Articulation	Resolution pixels
ARTICULATING VIDEO PRO	BES							
2-way articulating probe PVC covering	P1-2XF4	4,0	1 & 2	67°	0°	20-70	2x150°	300.000
	P1-2XF6	6,0	1,2 & 3	67°	0°	20-70 / 70-∞	2x150°	380.000
4-way articulating probe	P1-4XF6	6,0	1,2 & 3	67°	0°	20-70	4x150°	380.000
PVC covering	P1-4XF8	8,0	1,2 & 3	67°	0°	20-70 / 70-∞	4x150°	380.000
2-way articulating probe -	P1-2XF4-ES	4,0	1 & 2	90°	0°	20-70	2x160°	300.000
Short tip - PVC covering	P1-2XF6-ES	6,0	1 & 2	67°	0°	20-70	2x160°	380.000
2-way articulating probe high	P1-2XF4-HR	4,0	1 & 2	67°	0°	20-70	2x180°	400.000
sensitivity - metal braided	P1-2XF6-HR	6,0	1,2 & 3	67°	0°	20-70	2x180°	450.000
2-way articulating probe infrared <i>metal braided</i>	P1-2XF9-IR	9,0	1,2 & 3	67°	0°	60-∞	2x180°	420.000
2 WAY rigid articulating	P1-2XR6	6,0	300,450 & 700 mm	67°	0°	20-70	2x180°	400.000
probes	P1-2XR8	8,0	450 & 700 mm	67°	0°	20-70 / 60-∞	2x180°	400.000
NON ARTICULATING VIDEO	O PROBES							
High sensitivity Probe PVC covering	P1-F39-HR	3,9	1,2,3,5,10, 20 & 30	110°	0°	10-50	-	400.000
Flexible probe	P1-F4	4,0	1,2,3,5 & 10	67°	0°	20-70	-	300.000
PVC covering	P1-F55	5,5	1,2,3,5 & 10	67°	0°	20-70	-	400.000
	P1-SR55	5,5	1,2 & 3	67°	0°	20-70	-	400.000
	P1-SR8	8,0	1,2 & 3	67°	0°	20-70	-	400.000
Semi rigid probe PVC covering	P1-SR10	10,0	1 & 2	67°	0°	80-∞	-	720.000
. v = 0010g	P1-SR12	12,0	1 & 2	67°	0°	80-∞	-	720.000
	P1-SR16	16,0	1 & 2	67°	0°	80-∞	-	720.000
High sensitivity Probe stainless steel braided	P1-FGM	5,5	1,2,3,5,10, 20 & 30	67°	0°	20-70	-	720.000
High sensitivity Probe stainless steel braided	P1-FGM	8,0	1,2,3,5,10, 20 & 30	67°	0°	80-∞	-	720.000
High sensitivity Probe stainless steel braided	P1-FGM	10,0	1,2,3,5,10, 20 & 30	67°	0°	80-∞	-	720.000
Pigid vidoossono probo	P1-R39	3.9	302, 430 & 550 mm	67°	0°	20-70	-	300.000
Rigid videoscope probe	P1-R6	6.0	302, 430 & 550 mm	67°	0°	20-70	-	400.000
SPECIALTY VIDEO PROBE	S							
Pipe inspection probe	P1-CWel14	14	30	67	0°	70-∞	-	400.000
Pipe inspection probe	P1-C28	28	30	67	0°	70-∞	-	400.000
Extension video Pole	P1-EXT-P	28	1.2 - 4m	70	0°	80-∞	-	400.000



■ Short focussing CF (10-50mm or 20-70mm)
For close range inspection of details and narrow spaces

Our video probes are available in 2 focussing ranges

■ Long focussing LF (60/70/80 mm to infinity)
For panoramic inspection of larger areas and larger volumes.



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## bipol

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