

Videoscope PCE-VE 1500-22190



Videoscope PCE-VE 1500-22190

Videoscope for visual inspection of hard to reach areas

camera cable with only 2.2 mm diameter / cable length 1 m / camera arranged laterally

Camera head bendable by motor in all directions / protection degree IP67

High quality videoscope with very small camera diameter

Due to its small camera diameter, the PCE-VE 1500-22190 allows detailed inspections without time-consuming disassembly even in very confined spaces and small access openings. Due to the robust construction of camera and endoscope cable, the high IP 67 protection rating and the temperature resistance up to 80 degrees Celsius, the videoscope can be used in many cases even during operation and without time-consuming preparations. The flexible camera cable, which is only 2.2 mm thick, is about one meter long, from the front edge of the camera head to the rubber coating in the connection area on the motor block. This allows the PCE-VE 1500-22190 to inspect the inner surfaces of narrow pipelines and ducts and complicated components that can only be accessed through very small boreholes.

The real-time image displayed by the videoscope on the 7-inch display not only allows the user to check the object condition at the particular location, but also provides good orientation when the endoscope cable moves. LEDs located next to the camera can be switched on in steps to improve the visibility of the displayed area. Brightness, contrast and resolution of the display can be adjusted to the respective situation via the corresponding function menu. The camera is not installed in the direction of the cable axis, but at a 90-degree angle to it. The highest image sharpness is achieved for the objects in the range of 5 to 50 mm distance.

The position and field of view of the side-mounted camera can be changed by rotating, sliding or retracting the camera cable. In the places where there is enough space, the camera head of this videoscope can also be bent in any free direction with the aid of a motor-assisted joystick. The maximum bending radius is 23 mm with a bending angle of 90 degrees. In order not to impair the mobility of the camera head, care must be taken to ensure that the bent endoscope cable is not subjected to excessive stress. If the cable encounters resistance, it should not be pushed, pulled or twisted further in this direction, but relieved.

Functional range and equipment of the PCE-VE 1500 series

The models of the PCE-VE 1500 series are based on the same basic device and differ only in the camera unit. If required, the same basic unit can be used with different camera cables. These can be connected, locked and released very easily. This means that different areas can be conveniently viewed and documented during the inspection with the same videoscope. The user therefore does not have to purchase an additional basic device and also has less effort on site and when merging and evaluating the image data.

A videoscope of this series, complete with camera unit and battery, weighs only a little more than two kilograms and can be held comfortably with one hand. The joystick and almost all function keys can be operated with the same hand, while the endoscope cable is carefully moved to the desired location with the other hand. To improve working conditions during longer inspections, the videoscope is equipped with attachment points for tripod and shoulder strap.

Subject to change

Motor and joystick

One of the special features of this series is the motor-assisted bending of the camera head. The motor block, camera cable and camera form a single unit that can be used to control the bending of the movable camera head via the joystick on the handheld unit. By bending the camera head, the camera's viewing direction can be easily directed to other locations near the current camera position.

Touchscreen functions

The videoscope allows direct comparison of live images with previously stored images via the picture in picture function. The touchscreen makes it easy to rotate and mirror the images and to insert markers and comments. It also provides very convenient and quick access to the menu functions. Sections of the displayed image can be digitally enlarged very easily on the touchscreen. This works by double-tapping the area of the image or pulling it apart with two fingers. The zoomed section can also be moved with the finger. This allows each image to be checked very precisely on the videoscope and compared with a selected template.

Any coloured markings can be drawn onto the saved image at the desired points simply by using the finger on the touchscreen. The modified image can then be saved with the old name or under a new name. In addition, the video endoscope offers a choice of fixed and configurable image stamps and a log function that can be used to generate reports and save them in PDF format.

Characteristics of the PCE-VE 1500-22190

- ▶ Length of endoscope cable approx. 1 m,
- ▶ Camera diameter 2.2 mm
- ▶ Camera orientation lateral
- ▶ Image resolution 160,000 pixels
- ▶ Angle of view of the camera 120 °
- ▶ Focus of camera at distance 5 ... 50 mm
- ▶ Bending radius of the camera head at 90° 23 mm

Features of the PCE-VE 1500 series

- Motorized 360° 4-way articulation with joystick
- ▶ Adjustable illumination of the camera field of view
- ▶ 7-inch large touch screen
- ▶ Digital zoom eightfold
- ▶ Image on the display can be rotated and mirrored
- ▶ Picture-in-picture function for comparison of details
- ▶ Marking and labelling functions
- ▶ Interfaces: USB-A, USB-C, mini HDMI, audio, WiFi, SD memory card slot
- ▶ Storage format for images JPG, for videos MP4

Subject to change



Specifications

Diameter	Ø2.2mm / 0.08"
Cable length	1 m / 3.2 ft
Camera direction	90°
Resolution	160,000 pixels
Focusing range	5 ... 50 mm / 0.19 ... 1.96"

Further specifications

Material camera head	titanium alloy
Material camera hose	braided tungsten
Material camera lens	glass
Field of view	120°
Illuminance	50,000 lux
Bending direction	360° (4-way camera head)
Bending angle	190°
Display	7" LCD touchscreen
Display resolution	1920 x 1200 pixels
Image format	JPG
Video format	MP4
Image resolution	1280 x 720 pixels
Video resolution	1280 x 720 pixels
Digital magnification	8 times
Memory (internal)	16 GB
Memory (external)	expandable up to 128 GB for ca. 285,000 pictures or 1500 minutes of video recording
Interface	Mini HDMI, USB-A, USB-C (only for data transfer) audio interface, WiFi
Power consumption (endoscope)	10 W
Operating time	>3 hours
Battery	7.4 V (4 x 18650), 6400 mAh, removable
Battery (charging)	12 VDC, 3 A
Mains adapter	primary: 100 ... 240 VAC 50/60 Hz, 1.5 A secondary: USB-C (PD) 65 W maximum 5 VDC, 3 A 9 VDC, 3 A 12 VDC, 3 A 15 VDC, 3 A 20 VDC, 3.25 A PPS1: 3.6 ... 11 VDC, 3 A PPS2: 3.6 ... 20 VDC, 3 A

More information

More product info



Similar products



Subject to change

Operating conditions (hand-held device)	5 ... 50 °C / 41 ... 122 °F, <92 % RH, non-condensing
Operating conditions (endoscope cable)	5 ... 80 °C / 41 ... 176 °F, <92 % RH, non-condensing
Storage conditions	5 ... 63 °C / 41 ... 145 °F, <92 % RH, non-condensing
Dimensions	366 x 194 x 137 mm / 14.4 x 7.6 x 5.3"
Weight	handset weight: 1017 g / 35.8 oz endoscope cable with electric motor: ca. 600 g / 21.1 oz battery 550 g / 19.4 oz

Subject to change