

EOD V

Flexible Endoscope Search Kit



FEATURES

- High resolution glass fiber image guides with excellent light transmission
- 2-way tip deflection available in 2.5mm, 3.5mm, 4mm, 6mm & 8mm diameter
- Integrated light guide
- Tungsten braid outer covering for tough industrial use
- Clever lever controls to allow single hand operation tip deflection
- Digital image capture (requires optional adapter & SX600 digital camera)
- Water, dust and shock resistant
- Ultralite High Intensity LED Light Source

APPLICATIONS

- Remote visual inspection (RVI)
- Research & development
- Aircraft and ship inspection & maintenance
- Turbine blade and wave guide inspection
- UV curing and crack detection (NDT)
- Examination of internal structures without teardown, or for 'machine vision' applications
- (EOD/IEDD) search, explosive and hazardous area inspection



Optional SX600 Digital Camera with optional endoscope adapter



The EOD V Flexible Endoscope Search Kit is designed for the observation of internal cavities and hard to reach areas in machinery and components such as turbines, castings, engines & pipelines etc which cannot be viewed from the outside or with direct line of sight.

The articulating section can move up or down in a single plane on a 2-way articulating flexible endoscope (fiberscope), and then be locked in a precise location. The flexible part (flexible body and articulating section) is hermetically sealed and water-resistant.

The EOD V Flexible Endoscope can be supplied in different lengths and different diameters. The working length, diameter should be based upon individual requirements with consideration of the geometric parameters of the article or object to be inspected, viewed or checked.

When used with the special Endoscope Adapter & Ricoh SX600 Digital Camera the EOD V Flexible Endoscope becomes a true "Videoscope", providing outstanding images with record capability.

TECHNOLOGY

The endoscope (fiberscope) has a flexible part to facilitate insertion into the area to be viewed. The articulating section significantly simplifies guiding the flexible portion through complicated bends. A sharp well-defined bright image is viewed due to high quality light fibers and a high-resolution optical system.

The flexible metal cable used to protect the light guide and the stainless steel and tungsten sheathing used over the flexible body increase the flexible endoscope's strength and durability. ■

TECHNICAL SPECIFICATIONS

Diameter	6mm (2.5, 3.5, 4.0, 8.0mm optional)
Length	1000mm (1500, 2000, 2750mm optional)
Tip Deflection	2 Way
Forward Viewing	0°
Field of View	60° (6mm diameter)
Resolving power of opt. system for operating distance of 15mm	2.5mm -1 (6mm diameter)
Range of operating distance	5 to 50mm (6mm diameter)
Length of housing	284mm
Length of articulating section	45 mm (6mm diameter)
Range of articulating section angular deviation	± 120° (6mm diameter)
Min. radius of the flexible body bend	40mm (6mm diameter)
Light guide length	1500 mm
Weight of flexible endoscope, not more than	1Kg
Overall size of case L x W x H	480 x 410 x 160mm
Outer covering	Tungsten braid sheathing
Battery	NiMH Battery Pack 24V 2.4Ahr in cordura case with 35W 20 cell mains charger
Light Source	Ultralite High Intensity LED Light Source, Fan cooled 24VDC 65Watts with 300 Lumen white light output
Power Supply	24V out 110/240V in
Typical operating time	1 hour with LED Light Source
Lamp Life	10,000 hours (virtually everlasting)
Case	Supplied in a shock resistant carry case
Environmental Parameters – Flexible Insertion Tube & Articulation section	
Air temperature of operation	-10°C to +80°C
Water temperature of operation	0°C to +30°C
Range of pressure in air	1 to 1.3 atmospheres
Range of pressure in water	1 to 1.3 atmospheres
Flexible portion is stable in a water solution of	5% NaCl
Head Section (handle) and light guide	
Air temperature of operation	-10°C to +50°C
Range of pressure in air	1 to 1.3 atmospheres
Water resistant	to light splashes or drops hitting the device

PRODUCT CODES

EOD V Flexible Endoscope Search Kit - Full Systems

3-299-083	EOD V Flexible Endoscope with Focussing Eyepiece, Diameter 6mm. Length 1000mm with 2-way tip deflection (2 x 120°) featuring single hand operation lever control. With built in objective Forward View (0°) with 60° field of view. Image fiber: High-resolution glass fiber image guide. Outer covering: tungsten braid sheathing. Water and petrol resistant. With attached light guide. Ultralite High Intensity LED Light Source. Fan cooled 24VDC 65Watts with 300 Lumen white light output. With manual intensity control and coupling optics for optimum light efficiency. Supplied with power supply 24V out 110/240V in. NiMH Battery Pack 24V 2.4Ahr in cordura case with 35W 20 cell mains charger.
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EOD V Flexible Endoscope Search Kit - Accessories & Upgrades

3-299-084	2x Endoscope Entry Tools EET.0 straight angle tool ideal for lifting floor boards & EET.90 right angle tool ideal for window/seal entry of vehicle car doors
3-299-091	Endoscope Adapter for Ricoh SX600 Digital Camera with 37mm filter thread. With quick clutch adapter fitting for direct connection to 32mm endoscope eyepieces.
3-299-092	Ricoh SX600 Digital Camera, Lightweight, water, dust and shock resistant ideal for industrial and outdoor use. 10 Mega Pixels, 5x Optical Zoom, ISO 3200 Low Light Sensitivity, 2.7" LCD screen, Flash range of 10m, battery good for 360 shots.

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