

The ultimate inspection tool that allows you to see into inaccessible places

Introducing the most revolutionary family of tools for diagnosis and exploration

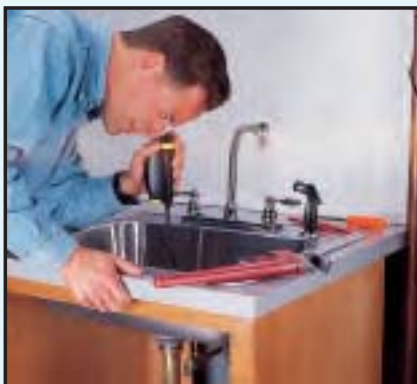
Available in 5 Cable Lengths up to 96"



Based on innovative new **fiberoptic technology**, the flexible cable of the **SDB (small diameter boroscope)** fits into holes as small as 1/4 inch diameter* – allowing you to look behind walls, down into drains, inside engines, or hundreds of places without costly demolition or disassembly!

SDB saves you time and money!

SDB (small diameter boroscope) will pay for itself over and over again in reduced labor costs. The amount of time you will save troubleshooting and problem-solving will make you **more productive and profitable** than ever before.



*DV-618 and DV-636 models have .23" diameter, flexible, non-obedient cable. All other models have .4" diameter, flexible, obedient cable.

High performance . . . real value!

The **high resolution lens** provides a **clear image** of objects as close as 3/4 inch and over one foot away while providing a wide 40 degree field of view. A powerful lamp illuminates dark crevices on demand with the push of a button conveniently located on the handle. The ergonomically designed handle is comfortable to hold and allows one-handed focusing and light activation.

Rugged and water resistant, **SDB** is made of high impact ABS and flexible cable sheathing that obediently stays in a set position. Adjust the cable into any position and it will stay fixed in place, until you decide to change it. This feature permits **one-handed operation** – freeing your other hand for work!

Features:

- Cable will reach deep into walls, drains, vents, engine blocks, etc.
- Powerful halogen lamp illuminates dark locations for clear viewing
- "Obedient" cable maintains its fixed position until readjusted*
- Flexible, omni-directional cable bends in every direction to allow precise viewing
- Pressure activated light switch is conveniently located but cannot be accidentally left "on"
- Integrated focus ring for smooth, continuous focusing
- Ergonomically designed, non-slip handle fits comfortably in one hand

Currently Used By:

- | | |
|---------------------------------|---------------|
| • Automotive & Diesel Mechanics | • Inspectors |
| • HVAC Repair | • Mechanics |
| • Plumbers | • Welders |
| • Electricians | • Carpenters |
| • Law Enforcement | • Home Owners |

Technical Specifications:

Model	Cable		Handle		Overall		Scope with Carrying Case Weight	Field of View	Optimal Viewing Distance		Lamp Volts	Power Source	Operating Pressure
	Length	Diameter	Length	Width	Length	Weight			Min.	Max.			
DV-100	18" 457.2mm	.4" 10.5mm	6" 152.4mm	1.43" 36.3mm	24" 609.6mm	8oz. 227g	1lb. 8.3oz. 689g	40°	.8" 20mm	**	2.7v	2 AA Batteries (not included)	2.9 avg. p/psi 3.2 max. p/psi
DV-618	18" 457.2mm	.23" 5.8mm	6" 152.4mm	1.43" 36.3mm	24" 609.6mm	5.4oz. 153g	1lb. 5.7oz. 615g	40°	.8" 20mm	**	2.7v	2 AA Batteries (not included)	2.9 avg. p/psi 3.2 max. p/psi
DV-300	36" 914.4mm	.4" 10.5mm	6" 152.4mm	1.43" 36.3mm	42" 1066.8mm	10oz. 284g	2lb. 9.7oz. 1182g	40°	.8" 20mm	**	2.7v	2 AA Batteries (not included)	2.9 avg. p/psi 3.2 max. p/psi
DV-636	36" 914.4mm	.23" 5.8mm	6" 152.4mm	1.43" 36.3mm	42" 1066.8mm	5.8oz. 165g	2lb. 5.5oz. 1063g	40°	.8" 20mm	**	2.7v	2 AA Batteries (not included)	2.9 avg. p/psi 3.2 max. p/psi
DV-480	48" 1219.2mm	.4" 10.5mm	6" 152.4mm	1.43" 36.3mm	54" 1371.6mm	11.5oz. 326g	5lb. 2268g	40°	.8" 20mm	**	2.7v	2 AA Batteries (not included)	2.9 avg. p/psi 3.2 max. p/psi
DV-720	72" 1828.8mm	.4" 10.5mm	6" 152.4mm	1.43" 36.3mm	78" 1981.2mm	16oz. 454g	5lb. 4.5oz. 2395g	40°	.8" 20mm	**	2.7v	2 AA Batteries (not included)	2.9 avg. p/psi 3.2 max. p/psi
DV-960	96" 2438.4mm	.4" 10.5mm	6" 152.4mm	1.43" 36.3mm	102" 2590.8mm	18oz. 510g	5lb. 6.5oz. 2452g	40°	.8" 20mm	**	2.7v	2 AA Batteries (not included)	2.9 avg. p/psi 3.2 max. p/psi

*DV-618 and DV-636 models have .23" diameter, flexible, non-obedient cable. All other models have .4" diameter, flexible, obedient cable.

**Dependent upon ambient lighting conditions.

Accessories and Attachments

ProLite

Halogen Accessory Bulb



ProMag








Clip-On Magnetic Tip



ProView

Clip-On Mirror for 45° Viewing



Diameter 0.4" / 10.5mm		Diameter 0.23" / 5.8mm		Product Description	
DVW-45		DVW-45M		Clip-On 45° Mirror	
DM-1		DM-1M		Magnetic Tip	
DL-1000		DL-1000		Halogen Bulb	
DVK-45		DVK-45M		Halogen Bulb, Clip-On 45° Mirror	
DVKM-45		DVKM-45M		Halogen Bulb, Magnetic Tip, Clip-On 45° Mirror	



Order Today!

In Canada,



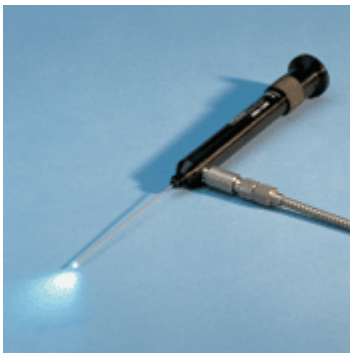
Made in the USA

Danatronics offers the same high performance and results as borescopes costing 10 times as much.

ZIBRA – BORESCOPES & FIBERSCOPES

Optical superiority, ease of use and value distinguish the MilliScope family of microborescopes. A tradition of leadership and innovation makes Zibra the instrument of choice for industrial-grade inspections.

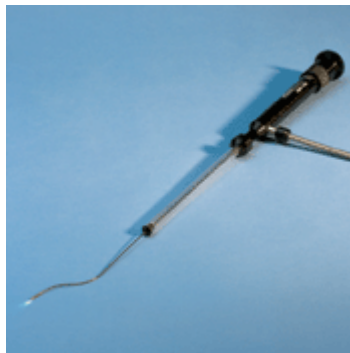
Rigid Shafts



The solid glass element inside a rigid **MilliScope** borescope transmits images without pixelating them. These high-grade instruments deliver maximum resolution through holes as narrow as 0.4 mm, and permit sharp focusing from the objective end.

Applications benefiting most from rigid borescopes are those that require the highest resolution with little flexure and straight insertion. The optical properties of the rigid **MilliScope** make it especially compatible with video microcameras.

Semi-rigid Shafts



The fiber optic image bundle inside a **Semirigid MilliScope** borescope transmits images pixel by pixel. The bundle is housed in a stiff tube, making the instrument more maneuverable than flexible scopes, yet more flexible and less prone to damage than rigid ones. And unlike rigids, a semirigid shaft can be made to any length and factory-formed to traverse unique part geometry's.

MilliScope SR's high resolution image bundle transmits images with outstanding clarity and brightness. Insertion shafts as narrow as 0.4 mm diameter are available. Focal distance is factory-set to accommodate user need. Distal focus is optional, and allows dynamic adjustment of tip-to-target focal distance. Semirigids work well with video displays when properly coupled to a video microcamera..

Flexible Shafts



The flexible **MilliFlex** borescope uses a fiber optic image bundle to transmit images pixel by pixel. The bundle is wrapped in a flexible sheath, allowing it to travel through winding passages. Insertion shafts as narrow as 0.4 mm diameter are available.

The **MilliFlex** captures images of outstanding clarity and brightness. Bundles up to 50,000 pixels are available in virtually any length. Like **MilliScope SR**, **MilliFlex's** focal distance is factory-set to accommodate user need. Distal focus is optional, and works best in applications without severe curves. Flexible scopes work well with video displays when properly coupled to a video microcamera.

See reverse side for more 'Milli' scopes and accessories



OTHER SERVICES....

- **SPECIALS**
- **SYSTEMS**
- **REPAIRS**

Detachable-tip Flexible & Rigid



MilliScope II is a detachable-tip borescope engineered for high-cycle inspections, and for procedures requiring numerous distal configurations. This modular instrument accepts dozens of available tips, allowing rapid replacement upon wear or breakage. New tips simply slide into place and fasten with a click.

Where several borescope configurations are required to inspect a single part or assembly, **MilliScope II** saves money and bench space. By swapping tips rather than scopes, an operator can keep the same video front-end for all inspection procedures.

The detachable-tip configuration is a natural choice for field work. Rather than carry several cases with several instruments, a field inspector can stow one **MilliScope II** and several tips in a single travel case.

MilliScope II accepts a 1/2-in. video Microcamera or eyepiece via a C-mount flange. An integral light guide swivels at the body for easy left- or right-hand operation. **MilliScope II** accepts a variety of light guide adapters, allowing it to interface with most light sources.

Hybrid Designs

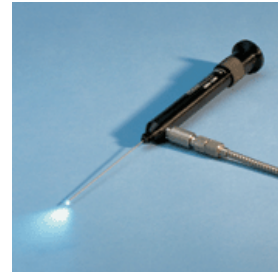


A flexible, armored cable connects the **MilliWand's** handheld probe to a direct video instrument body. The innovative design (shown below) separates bulky video and lighting equipment from dirty, crowded inspection areas, and is ideal for bench top work. Small and lightweight, the probe is highly maneuverable, improving navigation and reducing the risk of accidental tip damage. The probe tip may be semirigid or flexible. The cable connecting the probe to the instrument body is typically one meter in length.

FOVIScope (not shown) is a high-magnification (100X to 200X) needle borescope used to inspect fiber optic connectors. Versions are available with insertion shafts pointing forward and 90 degrees to the side. To improve field portability **FOVIScope** is generally packaged with a portable light source, battery belt, digital video recorder, LCD and/or heads-up display.

Optional Viewing Optics

Ocular Eye Piece



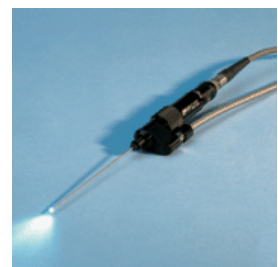
The integral eyepiece of an ocular scope is ideal for viewing images directly with the naked eye. To use an ocular scope with a camera, a camera-to-DIN eyepiece adapter is required.

Direct Video



Specify a direct video borescope if your application requires optimum video performance. Direct video boscopes have a flange that accepts a C-mount camera or eyepiece.

Microcamera



Specify a microcamera borescope if you perform video-based inspections and require a slim instrument profile. Microcamera scopes have internal threads that accept a standard 7mm, 12mm, or 17mm lipstick microcamera.

Email your requirements to
info@spectrum-instruments.com

Danatronics DF series of Industrial Fiberscopes

Danatronics is pleased to offer our DF Series of Industrial Fiberscopes with fiber optic image bundle technology and 2 or 4 way articulation.



Our **DF Series** is designed to be used as is or combined with the **ForeEyes™ 2020-C** to display and record all inspections. By utilizing a brilliant white LED on the handle of the articulating fiberscope, your system can be totally battery operated to allow you the freedom to inspect in the most remote locations.

Danatronics offers a complete line of video inspection products to satisfy the most difficult applications while being mindful of your budget. Contact us or one of our many world-wide sales representatives for more information.

In Canada Spectrum Instruments Ltd
www.spectrum-instruments.com
1-800-778-3428

or an Authorized Spectrum Distributor nearest you

Model	Diameter	Working Length	Articulation	Direction of View	Side View Prism Tip	Field of View
2mm						
DF2-2-040	2.4mm (0.094 in)	40cm (1.3 ft)	2-way	0° Forward	No	40°
DF2-2-070	2.4mm (0.094 in)	70cm (2.3 ft)	2-way	0° Forward	No	40°
DF2-2-100	2.4mm (0.094 in)	1.0m (3.3 ft)	2-way	0° Forward	No	40°
DF2-2-130	2.4mm (0.094 in)	1.3m (4.3 ft)	2-way	0° Forward	No	40°
3mm						
DF2-3-100	3.5mm (0.138 in)	1.0m (3.3 ft)	2-way	0° Forward	No	50°
DF2-3-130	3.5mm (0.138 in)	1.3m (4.3 ft)	2-way	0° Forward	No	50°
DF2-3-150	3.5mm (0.138 in)	1.5m (4.9 ft)	2-way	0° Forward	No	50°
4mm						
DF2-4-100*	4.0mm (0.157 in)	1.0m (3.3 ft)	2-way	0° Forward	Yes	50°
DF2-4-130*	4.0mm (0.157 in)	1.3m (4.3 ft)	2-way	0° Forward	Yes	50°
DF2-4-150*	4.0mm (0.157 in)	1.5m (4.9 ft)	2-way	0° Forward	Yes	50°
6mm						
DF2-6-100	6.0mm (0.236 in)	1.0m (3.3 ft)	2-way	0° Forward	Yes	60°
DF2-6-150	6.0mm (0.236 in)	1.5m (4.9 ft)	2-way	0° Forward	Yes	60°
DF2-6-200	6.0mm (0.236 in)	2.0m (6.6 ft)	2-way	0° Forward	Yes	60°
DF2-6-300	6.0mm (0.236 in)	2.75m (9.0 ft)	2-way	0° Forward	Yes	60°
6mm						
DF4-6-100	6.0mm (0.236 in)	1.0m (3.3 ft)	4-way	0° Forward	Yes	60°
DF4-6-150	6.0mm (0.236 in)	1.5m (4.9 ft)	4-way	0° Forward	Yes	60°
DF4-6-200	6.0mm (0.236 in)	2.0m (6.6 ft)	4-way	0° Forward	Yes	60°
DF4-6-300	6.0mm (0.236 in)	2.75m (9.0 ft)	4-way	0° Forward	Yes	60°
8mm						
DF4-8-100	8.0mm (0.315 in)	1.0m (3.3 ft)	4-way	0° Forward	Yes	55°
DF4-8-150	8.0mm (0.315 in)	1.5m (4.9 ft)	4-way	0° Forward	Yes	55°
DF4-8-200	8.0mm (0.315 in)	2.0m (6.6 ft)	4-way	0° Forward	Yes	55°
DF4-8-300	8.0mm (0.315 in)	2.75m (9.0 ft)	4-way	0° Forward	Yes	55°
DF4-8-450	8.0mm (0.315 in)	4.5m (14.8 ft)	4-way	0° Forward	Yes	55°
DF4-8-600	8.0mm (0.315 in)	6.0m (19.7 ft)	4-way	0° Forward	Yes	55°

* All DF Series standard industrial flexible Fiberscopes incorporate high resolution fiber-optic image bundles. The three 4mm models are available with standard quality fiber-optic bundles or ultra high resolution fiber-optic bundles. Specifications for the DF Series are subject to change for product improvement without notice.

Order Today!
978-777-0081
www.danatronics.com
sales@danatronics.com

FOREEYES 2020 Now AVAILABLE WITH SMALL (6-8 MM) DIAMETER VIDEOPROBES

DZ SERIES VIDEOSCOPIES; ADVANCED, PORTABLE AND ECONOMICAL

From Danatronics, a global manufacturer of industrial Remote Visual Inspection (RVI) and Ultrasonic Testing (U.T.) equipment, comes an advanced and portable Videoscope system that directly interfaces with the ForeEyes 2020 portable video inspection and recording unit.



For more information, call us at

613-831-0007 or email

info@spectrum-instruments.com

or visit www.spectrum-instruments.com

■ It's PORTABLE

The ForeEyes 2020 weighs 1.51 lbs (.68 kg), operates for four hours, and can display and record the equivalent to 40 full-length movies with narration, thanks to its built in 20 GB hard drive and 3.5 inch color TFT, or optional 3.8 inch display offered with 80 GB for 4 times the memory.

■ It's EASY TO USE

A single cable connects DZ Series Videoscopes to the ForeEyes 2020. The ForeEyes can be used with its unique carrying pouch and configured as a chest harness allowing one hand free to climb ladders and control the articulation of the Videoscopes. Best of all, the Videoscopes are interchangeable; any DZ Series Videoscope can be used with the ForeEyes.

■ It's ROBUST

The DZ Series Videoscope handpiece chassis is made of metal. Insertion tubes are sheathed with hard wearing tungsten braid.

■ It's ADVANCED

The latest in CCD (Charge-coupled device) solid-state camera and Metal-Halide lamp technology provide bright, high resolution images on the large TFT-LCD display. A built in hard drive video image storage and a USB port make image and audio recording simple.

■ It's AFFORDABLE

Ask your local sales representative for prices and we're sure you'll agree, It's Affordable!



ForeEyes™ 2020 Technical Specifications

Display Unit	<ul style="list-style-type: none"> ■ 3.5 in (87.5 mm) color TFT-LCD — Optional 3.8 in (96.25 mm) for 80 GB model ■ 320 x 240 color pixels, 262,000 color combinations ■ Anti-glare screen ■ Convenient hand strap ■ Backlight brightness adjustment High/Low ■ Adjustable Contrast, Color, Hue ■ NTSC (60 Hz.) or Pal (50 Hz.) ■ Chest Harness included with collapsible sunshade ■ Camera probe light control On/Off, 16 variable adjustment for SnakeEye camera ■ Camera/Power interface port ■ Video I/O port for heads-up display and external monitors 			
Cameras	<table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ■ CCD camera ■ 1.2 in (3.0 cm) diameter ■ Removable ■ Sensitivity 10 lux ■ Resolution 512 x 492 ■ Field of view 46 degrees ■ 4 White light LEDs ■ Waterproof to 100 ft (33m) </td> <td style="vertical-align: top; padding-left: 20px;"> <p>OPTIONAL</p> <p>DZ series available in 6-8mm diameter in 1.5m, 2.0m, 3.0m and 6.0m with 2 or 4-way articulation. Longer videoprobes also available in 6m, 8m, 12m, and 15m with no articulation. From the remote tip to the handpiece, all DZ series scopes will withstand immersion in water, mineral and synthetic lubricating oils and hydraulic fluids, aviation fuel, kerosene, gasoline and diesel fuel.</p> <p><i>Other smaller diameter fiberscopes also available</i></p> </td> </tr> </table>	<ul style="list-style-type: none"> ■ CCD camera ■ 1.2 in (3.0 cm) diameter ■ Removable ■ Sensitivity 10 lux ■ Resolution 512 x 492 ■ Field of view 46 degrees ■ 4 White light LEDs ■ Waterproof to 100 ft (33m) 	<p>OPTIONAL</p> <p>DZ series available in 6-8mm diameter in 1.5m, 2.0m, 3.0m and 6.0m with 2 or 4-way articulation. Longer videoprobes also available in 6m, 8m, 12m, and 15m with no articulation. From the remote tip to the handpiece, all DZ series scopes will withstand immersion in water, mineral and synthetic lubricating oils and hydraulic fluids, aviation fuel, kerosene, gasoline and diesel fuel.</p> <p><i>Other smaller diameter fiberscopes also available</i></p>	
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Power System	<p>Up to 4 hours continuous operation for both units</p> <ul style="list-style-type: none"> ■ Rechargeable Li-Ion for pocket recorder ■ Rechargeable batteries for ForeEyes alkaline "AA"* ■ Battery fast charger ■ AC adapter ■ Low Battery indicator for pocket recorder and ForeEyes 2020 <p><i>* battery for 1.2" CCD camera only</i></p>			
Camera Adapters/Lights	<table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ■ Standard wand is 18 in (45.7 cm) length ■ 90 degree one way articulation </td> <td style="vertical-align: top; padding-left: 20px;"> <ul style="list-style-type: none"> ■ Sure-grip handle ■ 4 LED's </td> </tr> </table>	<ul style="list-style-type: none"> ■ Standard wand is 18 in (45.7 cm) length ■ 90 degree one way articulation 	<ul style="list-style-type: none"> ■ Sure-grip handle ■ 4 LED's 	
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C-Mount Camera	<ul style="list-style-type: none"> ■ Interfaces ForeEyes 2020 to fiberscopes and borescopes for smaller diameter applications 			
Attachments	<table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ■ 4 ft (1.2 m) flexible cable available up to 100 feet* (33 m) for SnakeEye camera </td> <td style="vertical-align: top; padding-left: 20px;"> <ul style="list-style-type: none"> ■ Carrying case ■ Video I/O cable </td> <td style="vertical-align: top; padding-left: 20px;"> <ul style="list-style-type: none"> ■ 20-IC-DZ-6 6 ft. interfacing cable ■ 20-IC-DZ-10 10 ft. interfacing cable </td> </tr> </table> <p><i>*Extended cables available in 30 feet and 100 feet — Maximum length depends on camera voltage Sideview Tip adapters and metal halide light source available Telescopic expandable wands available in 2 to 4 feet, 4 to 7 feet and 8 to 15 feet</i></p>	<ul style="list-style-type: none"> ■ 4 ft (1.2 m) flexible cable available up to 100 feet* (33 m) for SnakeEye camera 	<ul style="list-style-type: none"> ■ Carrying case ■ Video I/O cable 	<ul style="list-style-type: none"> ■ 20-IC-DZ-6 6 ft. interfacing cable ■ 20-IC-DZ-10 10 ft. interfacing cable
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General - ForeEyes	<ul style="list-style-type: none"> ■ Total system weight — 1.51 lbs (.68 kg) ■ Power requirements: AC Nominal input: 100-240 V, DC nominal input: 12V ■ System operating temperature -32°F to 122°F ■ 0°C to 50°C ■ Video input/output- NTSC, PAL 			
ForeEyes Connectors	<ul style="list-style-type: none"> ■ Video In/Out — NTSC or PAL ■ CCD Camera Input, quick release ■ Microphone connector 			
General - Pocket Recorder	<ul style="list-style-type: none"> ■ Record up to 80 hours of Video Inspection to document all your critical video needs ■ Ideal for monitoring fatigue cracks, corrosion or for insurance purposes. Files can be sent back to the ForeEyes 2020 for (in the field comparisons) ■ Store the equivalent of up to 40 full-length movies with narration ■ Enjoy up to 4 hours of recording/video playback on the color LCD while on the go ■ Store and view up to 200,000 JPEG photos ■ Download and store files to/from a PC <p><i>These specifications correspond to the 20GB model, additional recording and storage available on optional 80GB version.</i></p>			
Warranty	<ul style="list-style-type: none"> ■ One Year on parts and labor under recommended use for electronics; 90 days for all cameras 			