

STANDARD PRODUCTS



FLASHER 900 VIDEO LINE



FLASHER 900 VIDEOENDOSCOPE

Portable expert probes with interchangeable distal tips, integrated image recording and joystick articulation control

FLASHER 900 videoendoscopic probes with 5 inch screen and interchangeable battery.

- Diameter 4 mm, up to 3 m length
- Diameters 6 mm and 8 mm, up to 8 m length
- Interchangeable axial and lateral viewing tips
- Joystick controlled orbital articulation
- Distal temperature alarm
- Impregnated tungsten braiding
- LED lighting

- 5-inch VGA screen
- Real-time JPEG and MPEG4 audio-video recording
- SD card memory
- Thumbnail or full screen image review
- Real-time zoom, image freeze and automatic shutter
- SVGA streaming output
- Universal thread mount
- AC or battery powering
- Removable battery, chargeable in probe

Equipment complies to standards CE



IMAGE PROCESSING FUNCTIONS

DIRECT FUNCTIONS

- Fixed image or motion video recording
- Thumbnail or full screen image review, tip articulation, variable zoom, boost, image freeze

MENU FUNCTIONS

- Title
- Video processor setting
- Date and time setting
- Mirror
- SD card formatting
- Light ON/OFF

ON-SCREEN INDICATIONS

- Date and time
- Comment
- Zoom, image freeze, data record
- Distal temperature alarm

SUPPLIED ACCESSORIES

- AC power supply ref. **AS900-01**
- Battery ref. **BW900-01**
- AC power charger ref. **CR-900-01**
- VGA cable length 2m with FLASHER 900 connector and VGA connector ref. **CAVG900-01**
- SD memory card
- Transport case ref. **VAFH-900** for FLASHER 900 probes - Dimensions : 56 x 44 x 24 cm

TECHNICAL FEATURES

MODEL

Vocation

Tip articulation

Probe sheathing

Screen

Sensor sizes

Autoshutter

Autoshutter reference point 15 positions

White balance

Image analysis surfaces

Blue level adjustment

Red level adjustment

Lighting

Variable zoom

Recording formats

Recording support

Video output

Switch

Powering

Weight (handle)

Weight (Ø4, Lgth 2m)

Maximum operating temperature (in air)

FLASHER 900

Industrial endoscopy

Orbital articulation

Impregnated tungsten

VGA 5 inch

Ø 4 mm 1/10 inch

Ø 6 mm 1/6 inch

Ø 8 mm 1/4 inch

Automatic

Fixed and autolock

Full/spot

15 positions

15 positions

LED

2 X

JPEG images

MPEG4 sequences

SD card

SVGA

ON/OFF button

AC and charger connector

Lithium-ion battery 7,8 Ah,

About 3 hours autonomy

1.670 kg

1.720 kg

Working length 0° to +100°C

Other parts 0° to +40°C

FLASHER 900 PROBES DIAMETER 4 MM

DIAMETER	REFERENCE	WORKING LENGTH	TIP ARTICULATION
4.0 mm	HSD-40-A2-200-S9	2 m	150°
	HSD-40-A2-300-S9	3 m	


FLASHER 900 PROBES DIAMETER 6 MM

DIAMETER	REFERENCE	WORKING LENGTH	TIP ARTICULATION
6.0 mm	HSD-60-A2-200-ST9	2 m	150°
	HSD-60-A2-300-ST9	3 m	
	HSD-60-A2-600-ST9	6 m	120°
	HSD-60-A2-800-ST9	8 m	90°

FLASHER 900 PROBES DIAMETER 8 MM


DIAMETER	REFERENCE	WORKING LENGTH	TIP ARTICULATION
8.4 mm	HSD-80-A2-200-ST9	2 m	150°
	HSD-80-A2-300-ST9	3 m	
	HSD-80-A2-600-ST9	6 m	120°
	HSD-80-A2-800-ST9	8 m	90°

INTERCHANGEABLE TIPS FOR FLASHER 900 PROBES DIAMETER 4 MM

PROBE Ø	TYPE	VIEWING	FOV	REFERENCE	FOCUSING	NUMBER	
4,00 mm	Standard	Axial	80°	TH40-A80 (1)	6 mm to 80 mm	AB41	
			120°	TH40-A120	4 mm to 60 mm	AB42	
		Lateral	80°	TH40-L80	4 mm to 80 mm	LB41	
			120°	TH40-L120	3 mm to 30 mm	LB42	


(1) Tip supplied with each probe diameter 4 mm

INTERCHANGEABLE TIPS FOR FLASHER 900 PROBES DIAMETER 6 MM

PROBE Ø	TYPE	VIEWING	FOV	REFERENCE	FOCUSING	NUMBER	
6.0 mm	Standard	Axial	50°	TV60B-A50-Y41	100 mm to infinite	A61	
				TV60B-A50-V82	50 mm to infinite	A62	
				TV60B-A50-K164	12 mm to 200 mm	A63	
			80°	TV60B-A80-N82 (2)	20 mm to infinite	A64	
				TV60B-A80-E164	3 mm to 20 mm	A65	
			100°	TV60B-A100-F106	5 mm to 120 mm	A66	
			120°	TV60B-A120-F70	4 mm to 190 mm	A67	
		Lateral	50°	TV60B-L50-V82	45 mm to infinite	L61	
				TV60B-L50-K164	9 mm to 200 mm	L62	
			80°	TV60B-L80-D164	1 mm to 20 mm	L63	
				TV60B-L80-N82	20 mm to infinite	L64	
			100°	TV60B-L100-F106	4 mm to 120 mm	L65	

(2) Tip supplied with each probe diameter 6 mm

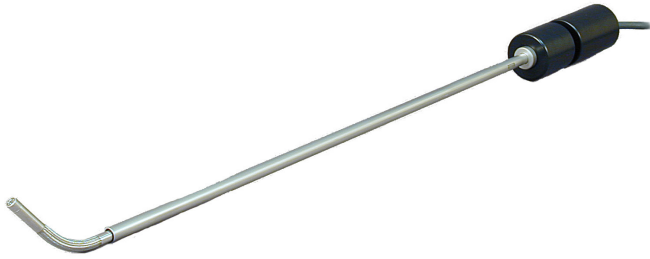
INTERCHANGEABLE TIPS FOR FLASHER 900 PROBES DIAMETER 8 MM

PROBE Ø	TYPE	VIEWING	FOV	REFERENCE	FOCUSING	NUMBER	
8.4 mm	Standard	Axial	20°	TV80-A20-M54	50 cm to infinite	A81	
			50°	TV80-A50-Y61	100 mm to infinite	A82	
				TV80-A50-V98	50 mm to infinite	A83	
			80°	TV80-A80-P93 (3)	25 mm to infinite	A84	
			120°	TV80-A120-H66	5 mm to 200 mm	A85	
		Lateral	50°	TV80-L50-Y61	100 mm to infinite	L81	
			80°	TV80-L80-P93	25 mm to infinite	L82	
			120°	TV80-L120-H66	4 mm to 200 mm	L83	

(3) Tip supplied with each probe diameter 8 mm

ACCESSORIES

RIGID GUIDE TUBES



PROBE Ø	TUBE Ø	W. LGTH	TOTAL LGTH	REFERENCE
4 mm	5.0 mm	30 cm	40 cm	TGR-040-050-030
		40 cm	50 cm	TGR-040-050-040
6 mm	8.0 mm	40 cm	50 cm	TGR-060-080-040
		100 cm	110 cm	TGR-060-080-100
8 mm	10.0 mm	40 cm	50 cm	TGR-080-100-040
		100 cm	110 cm	TGR-080-100-100

CENTERING DEVICES



CENTERING DEVICE	Ø 6 MM PROBE	Ø 8 MM PROBE
Ø 15 mm	CTV-60-150	CTV-80-150
Ø 38 mm	CTV-60-380	CTV-80-380
Ø 76 mm	CTV-60-760	CTV-80-760

FLEXIBLE ARTICULATING GUIDE TUBE



PROBE Ø	TUBE Ø	W. LGTH	TOTAL LGTH	REFERENCE
6 mm	12.70 mm	129 cm	154 cm	TGE-127-D2-129

RIGID ARTICULATING GUIDE TUBE



PROBE Ø	TUBE Ø	W. LGTH	TOTAL LGTH	REFERENCE
6 mm	13.0 mm	37 cm	60 cm	TGR-130-D1-037

MOUNTING ACCESSORIES



- Universal hinged arm with super clamp (from diameter 13 mm to 55 mm) and universal thread mount for video probe REF. BA143PS



- Swivel head with super clamp (from diameter 13 mm to 55 mm) and quick-lock attachment for video probe REF. VIDEO-HED

Designer of endoscopic tools since 1980, EFER ENDOSCOPY has an established reputation in the NDT world. In addition to a STANDARD PRODUCTS line covering all endoscopy and videoendoscopy applications fields in industrial environments, EFER ENDOSCOPY has developed a line of DEDICATED PRODUCTS allowing endoscopic implementation, in remote access locations, of measurement, micro-blending, and non-destructive testing procedures.

STANDARD PRODUCTS



- EASY videoscopes
- FLASHER videoscopes
- ARGUS video system
- PIKO video system
- JUMBO video system
- EXPLORATOR video system
- Video TURRETS
- OPTIC line
- ULTRA-VIOLET line

DEDICATED PRODUCTS



- Endo FPI system
- Endo Blast system
- Endo Blend system
- Blade erosion
- Nuclear fuel
- Heat exchangers
- Flat probes
- Endo rescue

Concepteur d'outils endoscopiques depuis 1980, EFER ENDOSCOPY jouit d'une réputation reconnue dans le monde du contrôle non destructif. Outre une gamme de PRODUITS STANDARD couvrant tous les champs d'application de l'endoscopie et de la vidéoendoscopie en milieu industriel, EFER ENDOSCOPY a en effet développé une gamme de PRODUITS DEDIES permettant de contrôler, par voie endoscopique, la mise en oeuvre, dans des zones difficiles d'accès, de méthodes de mesure, de micro-usinage et de contrôle non destructif.

PRODUITS STANDARD



- Vidéoscopes EASY
- Vidéoscopes FLASHER
- Système vidéo ARGUS
- Système vidéo PIKO
- Système vidéo JUMBO
- Système vidéo EXPLORATOR
- TOURELLES vidéo
- Gamme OPTIC
- Gamme ULTRA-VIOLET

PRODUITS DEDIES



- Ressuage endoscopique
- Nettoyage endoscopique
- Blending endoscopique
- Erosion d'aubes
- Combustible nucléaire
- Echangeurs de température
- Sabres vidéo
- Recherche de victimes



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GPS : LAT 43° 12'5". LONG 5° 35'33"