



# Endorectal Biplane Transducer Type 8808e for BK Medical Ultrasound Scanners

## Product Data

### USES

- Transrectal scanning of the prostate
- Transrectal puncture of the prostate
- Transperineal puncture
- Spectral and CFM Doppler examinations
- Tissue harmonic imaging

### BENEFITS

- Superior resolution
- Simultaneous biplane visualization
- Built-in control buttons
- Specially designed built-in transrectal biopsy guide for easier biopsies
- Sterile-packed single-use biopsy guide
- Transperineal puncture guide
- Compatible with modern sterilization methods



Fig. 1 Biplane transducer 8808e assembled for transrectal puncture



Fig. 2 Simultaneous Biplane Biopsy Guide UA1326

### General Description

Type 8808e is a biplane transducer designed for use with BK Medical's Flex Focus 1202 and Pro Focus 2202 UltraView ultrasound scanners. It has two convex arrays, one for transverse scanning and one for sagittal scanning.

### Applications

The 8808e is designed for transrectal scanning. It has a dynamic focus extension of 3 to 58 mm in both planes and a sector angle of 126°.

The 8808e is particularly useful for transrectal puncture. The advantage of viewing both the sagittal and transverse planes is that the needle is visible throughout the puncture and biopsy procedures. The transducer includes a simultaneous biplane feature that enables both planes to be visualized live at the same time.

### Interventional Procedures

#### Transrectal Biopsy

Transrectal puncture and biopsy can be performed using simultaneous biplane scanning, where both the sagittal and transverse planes are visualized live at the same time, the advantage is that the needle is visible in both planes throughout the puncture and biopsy procedures. Use reusable biopsy guide UA1326 or sterile-packed single-use UA1322-S.

The biopsy guides have an internal diameter of 1.6mm (17 gauge).

#### Transperineal Biopsy

The metal puncture attachment UA1324 is designed for transperineal puncture and biopsy. It consists of a needle guide and a mounting ring with a locking clamp.

The needle guide has nine parallel guide channels spaced 5mm apart, each with an internal diameter of 2.1mm (14 gauge). The guide channels are angled at 0° to the transducer's longitudinal axis and 90° to its transverse axis. The needle guide can be adjusted 70mm lengthwise with respect to the mounting ring, using the adjustment screw.

### Multifrequency Imaging

The transducer transmits at 5, 6, 8 and 10 MHz. It can be used for tissue harmonic imaging with the Flex Focus and Pro Focus ultrasound scanners.

### Cleaning and Disinfection

The 8808e can be disinfected by immersion in the solutions listed under Specifications. The puncture attachments can be disinfected by immersion and can be autoclaved. Single-use biopsy guides are also available.

Sterile transducer covers are available.

### Safety

The 8808e is designed and tested in accordance with EN 60601-1 (IEC 60601-1), "Medical Electrical Equipment, General Requirements for Safety." When used with BK Medical's ultrasound scanners, Type BF requirements are met.

## Specifications 8808e

<p><b>SAFETY:</b> Complies with Type BF requirements of EN60601-1 (IEC 60601-1)</p> <p><b>FREQUENCY RANGE:</b> 5-10 MHz</p> <p><b>OPERATIONAL FACILITIES:</b> Two built-in control buttons</p> <p><b>ENVIRONMENTAL:</b> <b>Operating pressure:</b> 700-1060 hPa (normal atmospheric pressure) <b>Operating temperature:</b> +10 to +40°C, (+50 to +104°F) <b>Storage temperature:</b> -25 to +70°C, (-13 to +158°F) <b>Watertight immersion temperatures:</b> Max. +40°C (+104°F) <b>Watertight immersion time:</b> Max. 15 hours per 24 hours</p>	<p><b>Resistance to chemicals during disinfection:</b> Immersion for less than 10 minutes in each hour in:</p> <ul style="list-style-type: none"> <li>■ Chlorhexidine gluconate (5-20%)</li> <li>■ Tristel®</li> <li>■ Korsolex® Basic</li> <li>■ Korsolex® Extra</li> <li>■ PeraSafe®</li> </ul> <p>Immersion in the following solutions, following manufacturer's instructions (but not exceeding maximum watertight immersion time specified for this transducer):</p> <ul style="list-style-type: none"> <li>■ Glutaraldehyde (2-3.4% in water)</li> <li>■ Cidex OPA™</li> </ul> <ul style="list-style-type: none"> <li>■ Wiping with ethanol or isopropanol (70% in water)</li> </ul> <ul style="list-style-type: none"> <li>■ The 8808e can be processed using STERIS SYSTEM 1® *</li> </ul>	<p><b>POWER SUPPLY:</b> Internally from scanner</p> <p><b>CABLE LENGTH:</b> 2.2m (7.2ft)</p> <p><b>TRADEMARKS:</b></p> <ul style="list-style-type: none"> <li>■ STERIS and STERIS SYSTEM 1* are registered trademarks of STERIS Corporation.</li> <li>■ Tristel is a registered trademark of Tristel Pharmaceutical.</li> <li>■ Korsolex is a registered trademark of Bode Chemie GmbH.</li> <li>■ PeraSafe is a registered trademark of Antec International.</li> <li>■ Cidex OPA is a registered trademark of Advanced Sterilization Products (ASP), a Johnson &amp; Johnson Company.</li> </ul> <p>* STERIS SYSTEM 1 is not market cleared in the USA</p>
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	Units	1202 ††				2202 †			
Scanning planes		Transverse and Sagittal				Transverse and Sagittal			
Center frequency	MHz	5	6	8	10	5	6	8	10
Doppler frequency	MHz	5 - 6 - 7.5				5 - 6 - 7.5			
Tissue Harmonic frequency	MHz	8				8			
Number of elements		2 x 96				2 x 96			
Radius of curvature	mm	9.7				9.7			
Transverse plane aperture	mm	5				5			
Transverse focal length (typical)	mm	25				25			
Image plane aperture	mm	19.6				19.6			
Image plane focal length	mm	variable				variable			
Axial resolution*	mm	0.6(T), 0.3(S)	0.5(T), 0.3(S)	0.5(T), 0.3(S)	0.5(T), 0.3(S)	0.5	0.4	0.4	0.4
Lateral resolution** (measured at 25 mm)	mm	0.3(T), 0.3(S)	0.3(T), 0.3(S)	0.2(T), 0.3(S)	0.2(T), 0.3(S)	1	1	0.8	0.8
Image field		126°				126°			
Basic scanning modes		B, M, Doppler, CFM, Tissue Harmonic Imaging				B, M, Doppler, CFM, Tissue Harmonic Imaging			
Penetration depth**	mm	83(T), 83(S)	72(T), 75(S)	62(T), 65(S)	53(T), 54(S)	105	104	97	83
Focal range	mm	3-58				3-58			
Frame rate (max)	Hz	>200				>200			
Contact surface (acoustic)	mm	5 x 20				5 x 20			
Total dimensions	mm	320 x 32				320 x 32			
Size of handle	mm	135 x 32				135 x 32			
Weight (approximate)	g	250				250			
Applications (typical)		Transrectal				Transrectal			

† Only available on Pro Focus UltraView

†† Not available on Flex Focus 400 Anesthesia

\* Transverse axial resolution measured at 27.7 mm and Sagittal axial resolution measured at 25 mm.

\*\* Measurements according to IEC/TS 61390 and JIS T 1501. Penetration depth is measured at 0.7dB/cm/MHz and recalculated corresponding to a realistic tissue attenuation of 0.5 dB/cm/MHz.

For definitions of terms, refer to Acoustic Output Measurement Standard for Diagnostic Ultrasound Equipment, AIUM/NEMA, 2004.

## Ordering Information 8808e

### ACCESSORIES INCLUDED

UA1325: Dummy channel bracket

### ACCESSORIES AVAILABLE

UA1324: Perineal puncture attachment (bore diameter 2.1 mm; angle of insertion 0° to the long axis of the transducer)

UA1326: Simultaneous biplane biopsy guide, reusable (bore diameter 1.6 mm; angle of insertion 19° to the long axis of the transducer)

UA1322-S: Simultaneous biplane biopsy guide, sterile-packed single-use (pack of 18), (bore diameter 1.6 mm; angle of insertion 19° to the long axis of the transducer)

QZ0040: Single-use cleaning brush for needle guide

KE4300: Carrying case

### TRANSDUCER COVERS

UA0008: Sterile cable covers (pack of 24) CIV-Flex™

UA0032: Transducer cover (pack of 25) Latex

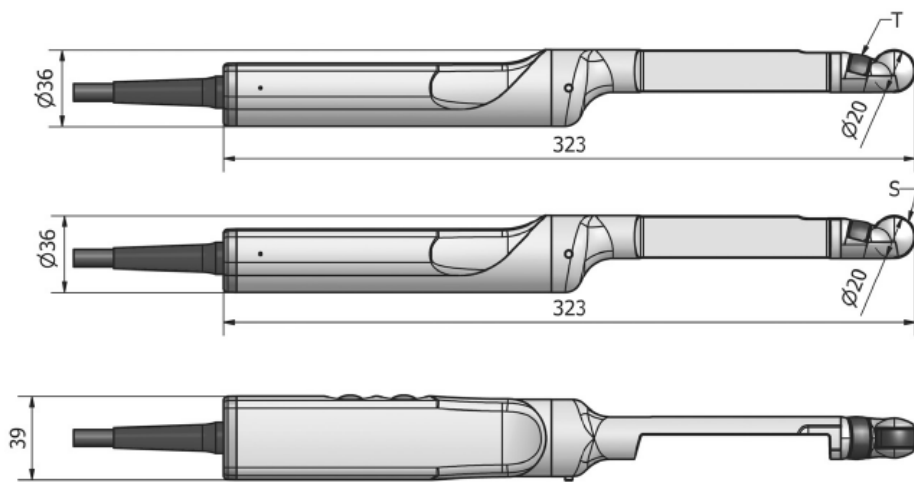
UA0069: Latex covers (pack of 24)

### TRADEMARK:

CIV-Flex is a trademark of CIVCO Medical Systems Co., Inc.

## Technical Drawings

All measurements are in mm.



### Perineal Puncture guide UA1324

- Weight: 125g
- Dimensions: 101 x 95 x 50mm
- Material: stainless steel AISI303



### Simultaneous Biplane Biopsy Guide UA1326

- Weight: 21g
- Dimensions: 116 x 42 x 28mm
- Material: PEI (Ultem), stainless steel AISI304 and XCR12Ni17.7



### Dummy channel bracket UA1325

- Weight: 11g
- Dimensions: 110 x 24 x 28mm
- Material: PEI (Ultem) and stainless steel XCR12Ni17.7



### Simultaneous Biplane Biopsy Guide UA1322-S

- Weight: 14g
- Dimensions: 120 x 45 x 28mm
- Material: ABS (Terlux), Stainless steel AISI304 and XCR12Ni17.7

