



Linear Array Transducer Type 8811 for BK Medical Ultrasound Scanners

Product Data

USES

- Small part scanning
- Musculoskeletal scanning
- Peripheral vascular scanning

BENEFITS

- Very high frequency gives superb near field images with high resolution
- Wide image field
- Broad bandwidth
- Dynamic transducer focusing
- Dedicated puncture and biopsy guide
- Built-in control button
- Compatible with modern sterilization methods



8811 linear array transducer with UA1239 puncture guide mounted

General Description

Type 8811 is a linear array transducer designed for use with BK Medical's 2202 and 1202 ultrasound scanners.

8811 can be used for spectral, steerable and CFM Doppler studies.

Applications

8811 is a linear array transducer with multifrequency capability. It is ergonomically designed to make it as easy to use as possible.

The 8811 has a focal range of 2 to 54mm with a 50mm scan field. It is ideal for peripheral vascular, musculoskeletal and small part studies.

Interventional Procedures

The UA1239 puncture attachment is designed for interventional procedures. It gives a puncture angle of 30°, 45° or 60° and the possibility of using 0.9mm (20 gauge), 1.3mm (18 gauge) or 2.1mm (14 gauge) needles.

The ultrasound scanner superimposes puncture lines on the scan image, making biopsies and interventional procedures easy and precise.

Multifrequency Imaging

8811 transmits at 6, 9 and 12MHz. It can be used for tissue harmonic imaging.

Doppler sensitivity is optimized at all depths, because the Doppler frequency changes with the B-mode frequency.

Cleaning and Disinfection

8811 can be disinfected by immersion in the solutions listed under Specifications or it can be processed with STERIS SYSTEM 1®*.

The UA1239 puncture attachment can be autoclaved. Sterile transducer covers are available.

Safety

8811 is designed and tested in accordance with EN60601-1 (IEC60601-1), "Medical Electrical Equipment, General Requirements for Safety." When used with BK Medical's ultrasound scanners, Type BF requirements are met.

* STERIS SYSTEM 1 is not market cleared in the USA

Specifications 8811

<p>OPERATIONAL FACILITIES Built-in control button</p> <p>SAFETY The transducer complies with Safety Standard EN60601-1 (IEC60601-1) Type BF</p> <p>FREQUENCY RANGE 5-12MHz (depending on scanner)</p> <p>ENVIRONMENTAL Operating pressure 700-1060 hPa (normal atmospheric pressure) Operating temperature +10 to +40°C (+50to +104°F) Storage temperature -25 to +70°C (-13 to +158°F) Watertight immersion temperature Max +40°C (+104°F)</p>	<p>Watertight immersion time Max 15 hours per 24 hours</p> <p>Resistance to chemicals during disinfection Immersion for less than 10 minutes in each hour in: <ul style="list-style-type: none"> ■ Chlorhexidine gluconate (5-20%) Immersion in the following solutions, following manufacturer's instructions (but not exceeding maximum watertight immersion time specified for this transducer): <ul style="list-style-type: none"> ■ Glutaraldehyde (2-3.4% in water) ■ Wiping with ethanol (70% in water) The following disinfectants can also be used: <ul style="list-style-type: none"> ■ Korsolex® Basic ■ Korsolex® Extra ■ Cidex® OPA </p>	<ul style="list-style-type: none"> ■ The STERIS SYSTEM 1® process can be used*. <p>POWER SUPPLY Internally from scanner</p> <p>CABLE LENGTH 2.2m (7.2ft)</p> <p>TRADEMARKS <ul style="list-style-type: none"> ■ Korsolex is a registered trademark of Bode Chemie GmbH. ■ STERIS SYSTEM 1 is a registered trademark of STERIS Corporation. ■ Cidex OPA is a registered trademark of Advanced Sterilization Products (ASP), a Johnson & Johnson Company. * STERIS SYSTEM 1 is not market cleared in the USA</p>
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	Units	Scanner Type					
		2202			1202		
Center frequency	MHz	6	9	12	6	9	12
Doppler frequency	MHz	5 - 6 - 7.5					
Number of elements		192					
Radius of curvature	mm	Linear					
Transverse plane aperture	mm	4					
Transverse focal length (typical)	mm	15					
Transverse focal beam width typical)	mm	1.1	1	1	-		
Image plane aperture	mm	16.6					
Image plane focal length	mm	Variable					
Image plane focal beam width (typical)*	mm	1.2	1	1	-		
Axial resolution (typical)*	mm	0.5	0.4	0.3	-		
Axial resolution (measured at 25 mm)**	mm	-			0.4	0.4	0.4
Image field	mm	50					
Basic scanning modes		B, M, Doppler, CFM, Tissue Harmonic Imaging					
Penetration depth (typical)*	mm	85	75	65	-		
Penetration depth**	mm	-			77	62	48
Focal range	mm	2-54					
Lateral resolution (measured at 15 mm)**	mm	-			0.4	0.3	0.4
Frame rate (max)	Hz	>200					
Contact surface (acoustic)	mm	50 x 4					
Contact surface (overall)	mm ²	57 x 10					
Total dimensions	mm	66 x 22 x 100					
Weight (approximate)	g	98					
Applications (typical)		Small part Musculoskeletal Peripheral vascular					

* Values measured in water

** Measurements according to IEC/TS 61390 and JIS T 1501.

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

Ordering Information 8811

ACCESSORIES AVAILABLE

UA1239: Puncture attachment (bore diameter up to 2.1 mm; angle of insertion 30°, 45° and 60° to the image axis)
UA1404: Leakage testing kit
KE4300: Carrying case

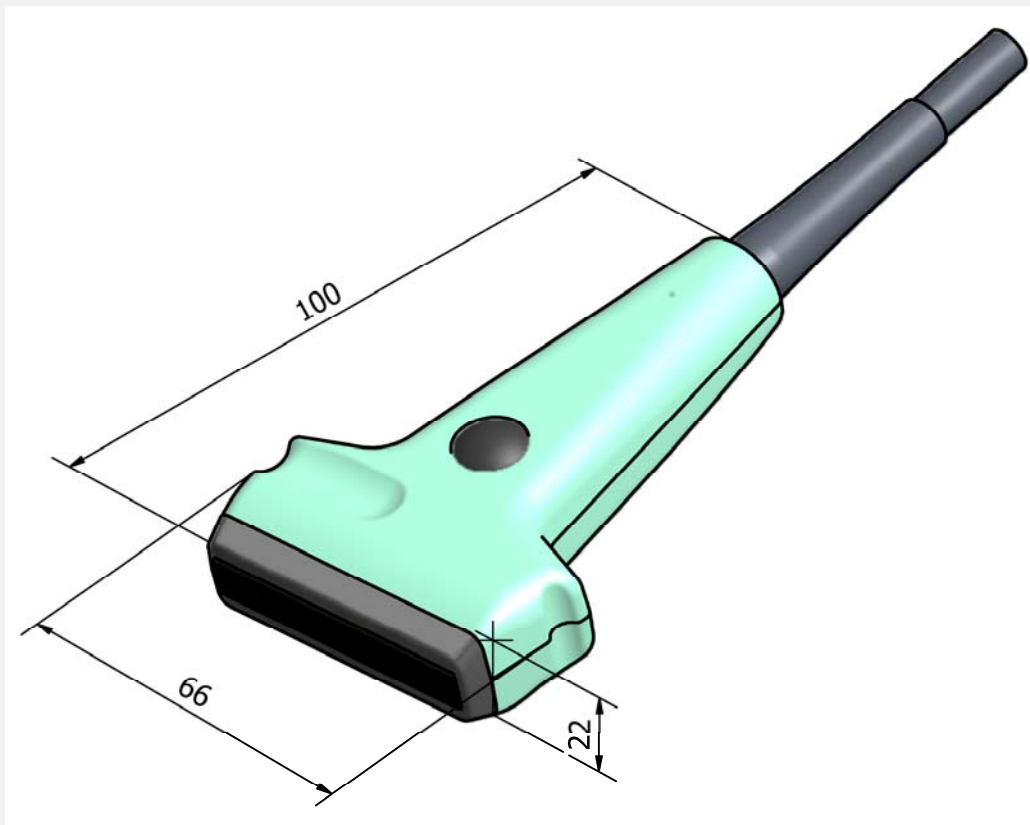
TRANSDUCER COVERS

UA0007: CIV-Flex™ sterile (pack of 24)
UA0070: CIV-Flex™ sterile, Latex-free (pack of 24)
UA0074: NeoGuard® sterile, latex-free, 20.3 x 244 cm with SurgiTip 6cm, telescopically folded (12 pcs)

CIV-Flex and NeoGuard are trademarks of CIVCO Medical Instruments Co., Inc.

8811 Technical Drawings

All measurements are in mm



UA1239

- Weight: 60 g
- Dimensions: 38 x 25 x 100 mm
- Material: stainless steel AISI302 and AISI303

