



Linear Array Transducer Type 8670 for BK Medical Ultrasound Scanners

Product Data

USES

- Small part, including
 - breast scanning
 - testis scanning
 - penile Doppler
- Musculoskeletal scanning
- Peripheral vascular scanning
- Interventional procedures
- Contrast Imaging with Pro Focus 2202*

BENEFITS

- Combine outstanding image quality in near field with excellent penetration for deeper views
- Very high resolution gives excellent image detail
- Excellent Doppler sensitivity
- Easy to use, with integrated control button on handle
- Dedicated puncture and biopsy guide
- Expanded sector for a wider field of view**



8670 linear array transducer

General Description

Type 8670 is a linear array transducer designed for use with BK Medical's 2202 and 1202 ultrasound scanners.

Applications

8670 is a multifrequency linear array transducer specifically designed for small part scanning including testis, penile Doppler, breast and musculoskeletal, and for vascular procedures.

8670 has a large footprint and is ergonomically designed to make it as easy to use as possible. With 8670, the image can be enlarged by using trapezoid scanning. The control button on the transducer handle lets you start and stop scanning or freeze the image.

Interventional Procedures

The UA1246 stainless steel puncture attachment is designed for interventional procedures. It is used with the UA0028 needle cartridge and accepts needles with an internal bore diameter of 0.7-2.7mm.

UA1269 is a stainless steel puncture attachment designed for interventional procedures with the 8670 only. It gives a puncture angle of 30°, 45° or 60° and accepts needles with an internal bore diameter of 0.6-2.4 mm.

The ultrasound scanner superimposes a puncture line on the scan image to help you guide the needle precisely to its target.

Multifrequency Imaging

8670 transmits at 6, 7.5, 9 and 12 MHz, giving you an excellent combination of scanning depths and high resolution. 8670 is optimized for both tissue harmonic and contrast imaging (Pro focus 2202 only).

Cleaning and Disinfection

The 8670 and puncture attachments UA1246 and UA1269, can be disinfected by immersion in the solutions listed under Specifications. The puncture attachment can also be autoclaved.

Sterile transducer covers are available.

Safety

8670 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 scanner, Type B requirements are met.

* In the USA, contrast-enhanced ultrasound has not been market cleared by the FDA, with the exception of only select cardiac imaging applications.

** B-mode image field with expanded sector/trapezoid is 60 mm at 5 cm depth.

Specifications 8670

<p>OPERATIONAL FACILITIES Built-in control button</p> <p>SAFETY When used with BK Medical's ultrasound scanners, this transducer complies with Safety Standard EN60601-1 (IEC60601-1) Type B</p> <p>FREQUENCY RANGE 8670: 4-12MHz</p> <p>ENVIRONMENTAL Operating pressure 700-1060 hPa (normal atmospheric pressure) Operating temperature +10 to +40°C (+50 to +104°F) Storage temperature -25 to +70°C (-13 to +158°F)</p>	<p>Watertight immersion time Max 15 hours per 24 hours Watertight immersion temperature Max +40°C (+104°F) Resistance to chemicals during disinfection: Immersion for less than 10 minutes in each hour in: ■ Chlorhexidine gluconate (5-20%)</p> <p>Immersion in the following solutions, following manufacturer's instructions (but not exceeding maximum watertight immersion time specified for this transducer): ■ Glutaraldehyde (2-3.4% in water) ■ Wiping with ethanol (70% in water)</p> <p>The following disinfectants can also be used: ■ Korsolex® Basic ■ Korsolex® Extra</p>	<p>■ Cidex® OPA</p> <p>POWER SUPPLY Internally from scanner</p> <p>CABLE LENGTH 2.2m (7.2ft)</p> <p>TRADEMARKS ■ Korsolex is a registered trademark of Bode Chemie GmbH. ■ Cidex OPA is a registered trademark of Advanced Sterilization Products (ASP), a Johnson & Johnson Company.</p>
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	Units	8670							
		2202				1202			
Center frequency	MHz	6	7.5	9	12	6	7.5	9	12
Doppler frequency	MHz	5-7.5							
Contrast frequency	MHz	4				-			
Number of elements		128							
Transverse plane aperture	mm	4							
Transverse focal length (typical)	mm	20							
Image plane aperture	mm	28.8							
Image plane focal length	mm	Variable							
Axial resolution (measured at 25 mm)*	mm	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.2
Lateral resolution (measured at 20 mm)*	mm	0.8	0.7	0.5	0.6	0.5	0.5	0.5	0.4
Image field	mm	38.4							
Basic scanning modes		B, M, Doppler, CFM, Tissue Harmonic Imaging, Contrast Imaging**				B, M, Doppler, CFM, Tissue Harmonic Imaging			
Penetration depth*	mm	108	97	83	58	109	97	79	64
Dynamic focus extension	mm	0-70							
Frame rate (max)	mm	165							
Contact surface (acoustic)	mm	38.4 x 4							
Contact surface (overall)	mm	45 x 14							
Total dimensions (W x L x H)	mm	52 x 91 x 16							
Weight (approximate)	g	130							
Applications (typical)		Small part Musculoskeletal Pediatric Peripheral vascular							

*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.

** In the USA, contrast-enhanced ultrasound has not been market cleared by the FDA, with the exception of only select cardiac imaging applications. For definition of terms, refer to Acoustic Output Measurement Standard for Diagnostic Ultrasound Equipment, AIUM/NEMA 2004.

Ordering Information 8670

ACCESSORIES AVAILABLE

- UA1246: Puncture attachment (bore diameter 0.7-2.7 mm; angle of insertion 45° to the image axis)
- UA1269: Puncture attachment (bore diameter 0.6-2.4 mm; angle of insertion 30°, 45° and 60° to the image axis (for 8670 with 2202 and 1202 only)
- UA0028: Needle cartridges
- KE4300: Carrying case

TRANSDUCER COVERS

- UA0009: CIV-Flex™ sterile, latex-free (pack of 24)
- UA0004: Sterile cable cover, latex-free (pack of 24)
- UA0071: CIV-Flex™ sterile, Latex-free,

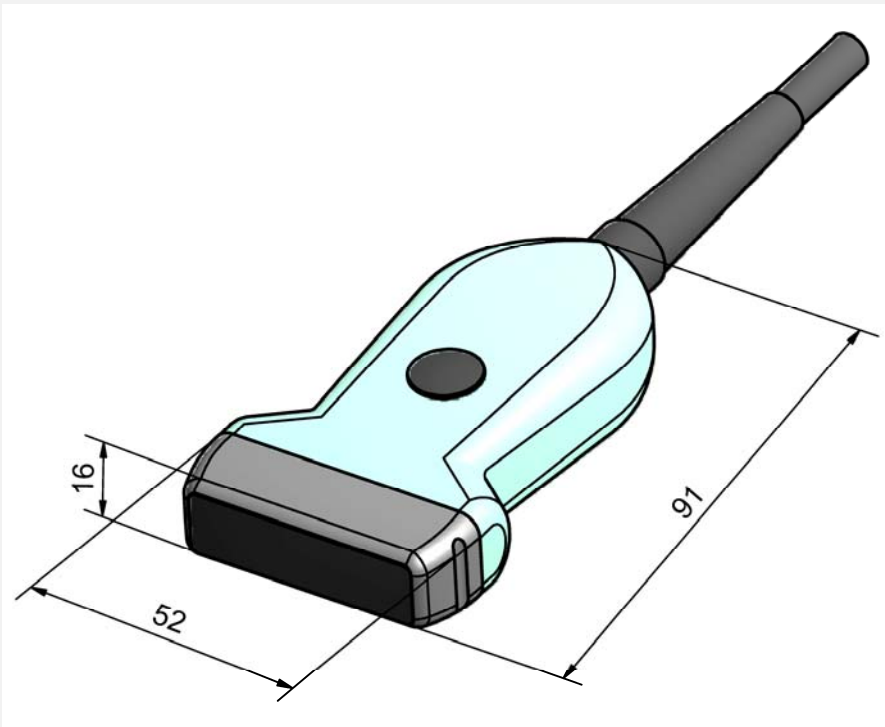
8.9 x 91.5 cm, telescopically folded (24 pcs)

- UA0074: NeoGuard® sterile, latex-free, 20.3 x 244 cm with SurgiTip 6cm, telescopically folded (12 pcs)

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

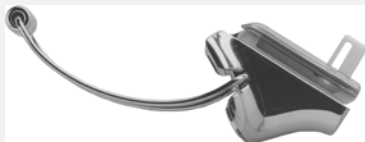
8670 Technical Drawings

All measurements are in mm



UA1246

- Weight: 37 g
- Dimensions: 20 x 30 x 80 mm
- Material: stainless steel AISI303



UA1269

- Weight: 60 g
- Dimensions: 39 x 87 x 35 mm
- Material: stainless steel AISI302 and AISI303

