Transonic® AU-Series COnfidence Flowprobes®

Continuous Blood Flow Measurements

COnfidence Perivascular Flowprobes are customized for adult and pediatric cardiac output measurements and for measurement of volume flow in other great arteries and veins where a compact Flowprobe is needed.

- Measures volume flow, not velocity;
- Small Flowprobe footprint; slim profile;
- Now available in miniature 4 mm and 6 mm sizes;
- Quick, measurements, seconds after Flowprobe is applied.

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COnfidenceFowprobes(CV-275-fly)Rev C 2016

COnfidence

Continuous Measurements i

High Accuracy Cardiac Output Measurements

COnfidence Perivascular Flowprobes® measure cardiac output with highest accuracy, enhanced reliability and greater ease of use.

The Flowprobe's slim, ergonomic footprint allows the Probe to fit in tight anatomical sites such as the great vessels in adults, pediatrics, and even neonates where a small Probe footprint is needed. It can also be used on short vein segments such as the portal vein.

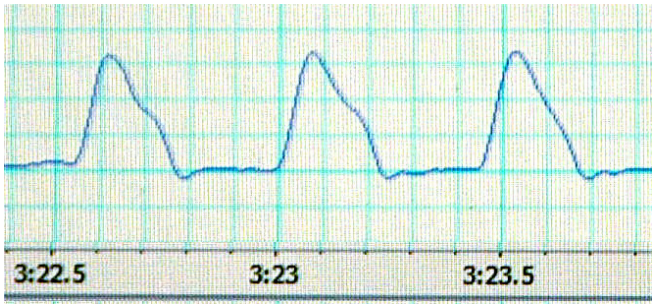

Fig. 1: Representative pediatric aortic trace.

Courtesy of G. Pantolos, PhD, F. Pigula, MD
University of Louisville, Louisville, KY

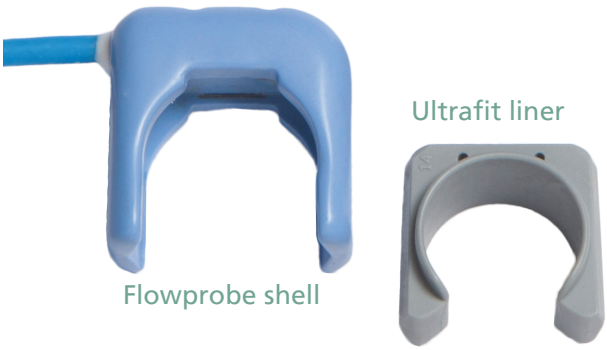

Fig. 2: COnfidence Flowprobe® components consist of a Flowprobe shell (left), and an Ultrafit liner (right) that fits within the shell to cushion and protect the vessel during measurement.

COnfidence Flowprobes® consist of a Flowprobe shell and a single-use soft, flexible Ultrafit liner. This novel concept for ultrasonic signal coupling enables immediate, accurate beat-to-beat flow measurements with a minimum of ultrasonic coupling gel. The form-fitting Ultrafit Liner slips into the transducer shell to encircle the vessel and keep the vessel in place. The liner cushions and protects the vessel during a flow measurement, particularly when longer measurements are needed. Liners are incrementally sized for optimal fit on the target vessel.

Sterilization

The COnfidence Flowprobe® shell is ethylene oxide and Sterris sterilizable. Ultrafit Liners are single use

Look for this steam label on sterilizable Flowprobes.

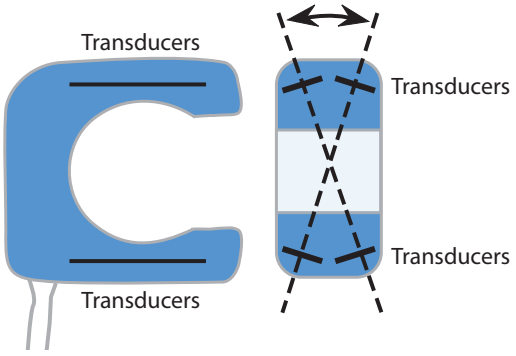

Fig. 3: Theory of Operation: two pair of transducers positioned on the opposite sides of the vessel alternately transmit in upstream and downstream directions. Positional sensitivity is eliminated by the use of custom designed crystals and the X-beam pattern of ultrasonic illumination.

Flowprobes®

Many Flowprobe Sizes to Meet Your Application Needs

Fig 4: COnfidence Flowprobes® (-AU-Series), designed with four transducers, provide highly accurate measurements in vessels with highly turbulent flows such as the ascending aorta. The Flowprobe's slim, ergonomic profile creates a minimal footprint that fits in tight anatomical sites. The soft, pliable liner cushions and protects the vessel. Available in 17 sizes from 4 mm to 36 mm.

Miniature 4 & 6 mm Flowprobes

New miniature 4mm and 6 mm COnfidence Flowprobes offer unprecedented flow measurement capability during congenital heart defect (CHD) repairs in young children. The cables are specially oriented to allow for extended measurements in difficult CHD anatomical sites.

Fig 5: 6 mm, on the left, and 4 mm COnfidence Flowprobe on the right.

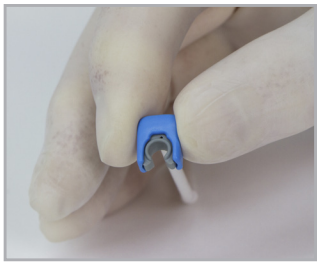

Fig 6: 4 mm COnfidence Flowprobe.

Fig. 6: Two COnfidence Flowprobes® fitted with Ultrafit liners.

- The probe's round opening conforms to the vessel to assure easy alignment.
- Four transducers enable accurate flow measurement in highly dynamic and irregular flow profiles such as in the arch of the ascending aorta.
- Designed without a handle, COnfidence Flowprobes® may be left in place for extended intraoperative measurements and then easily removed via an attached ring shown on the right.

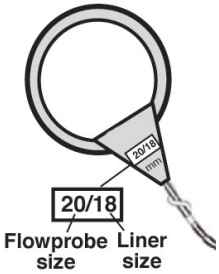

Fig. 5: COnfidence Flowprobe® ring.

AU-Series COnfidence Flowprobe® Specifications

CONFIDENCE FLOWPROBE® SPECIFICATIONS			
AU-SERIES PROBE CATALOG #	LINER SIZE diameter (mm)	VESSEL SIZE outer diameter (mm)	MAXIMUM FLOW (L/min)
HQE 4AU	4	3 - 4	2
HQE 6AU	6	5 - 6	5
HQx 8AU	8	6 - 8	10
HQx 10AU	10	8 - 10	10
HQx 12AU	12	9 - 12	20
HQx 14AU	14	11 - 14	20
HQx 16AU	16	13 - 16	50
HQx 20AU	18, 20	15 - 20	50
HQx 24AU	22, 24	18 - 24	100
HQx 28AU	26, 28	22 - 28	100
HQx 32AU	30, 32	26 - 32	200
HQx 36AU	34, 36	30 - 36	200

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Transonic Systems Inc. is a global manufacturer of innovative biomedical measurement equipment. Founded in 1983, Transonic sells "gold standard" transit-time ultrasound flowmeters and monitors for surgical, hemodialysis, pediatric critical care, perfusion, interventional radiology and research applications. In addition, Transonic provides pressure and pressure volume systems, laser Doppler flowmeters and telemetry systems.

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