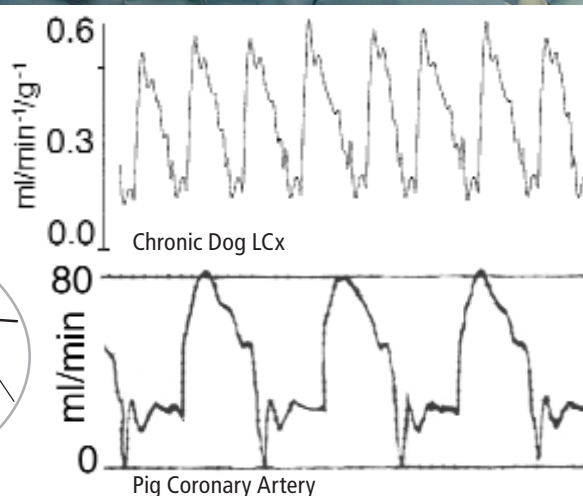
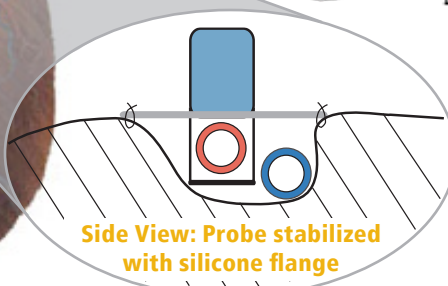
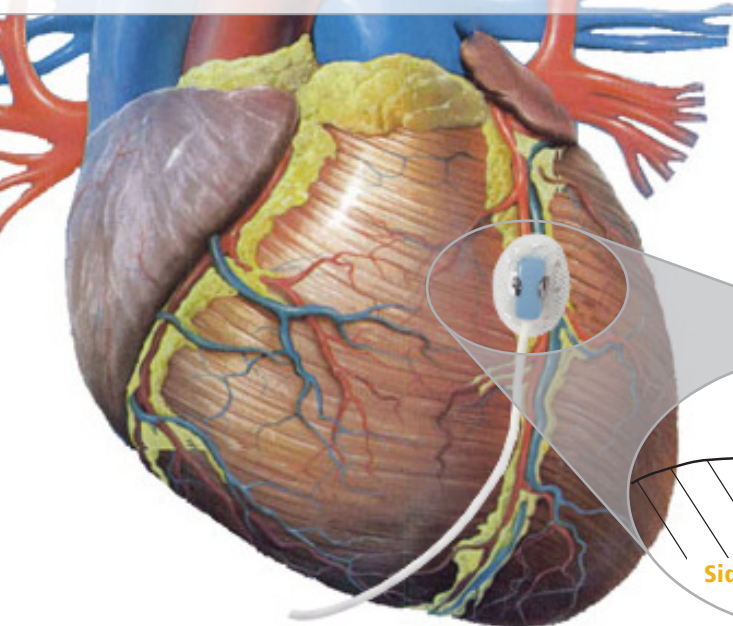


Coronary Artery Blood Flow Measurements

Continuous High Resolution Volume Flow Measurements for Acute & Chronic Applications Using PS-Series & PR-Series Flowprobes



Accurate Repeatable Validated

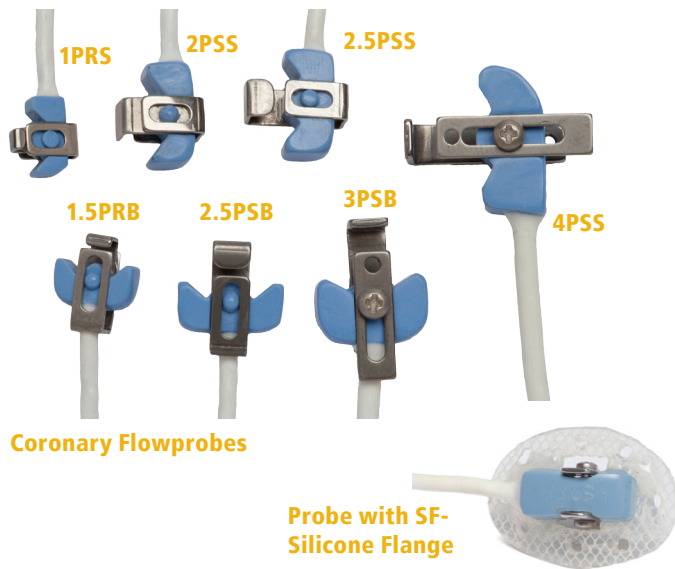
- Acute & chronic myocardial hibernation & ischemia models
- Experimental revascularization
- CABG patency & techniques
- Stunned myocardium
- Gold standard flow measurement for new myocardial perfusion assessment technologies
- Non-constrictive Flowprobes
- Direct volume flow in mL/min

Transonic® is the *in vivo* measurement standard for coronary artery blood flow measurements against which all other technologies are compared. Coronary blood flow research with Transonic® Flowprobes laid the foundation for clinical surgical procedures and pharmaceutical therapies developed for the successful treatment of coronary artery disease. Visit www.transonic.com to search our extensive list of application specific references.



Application Recommendations for LAD, LCx Coronary Artery

Low zero offset and stable baseline make Transonic® the technology of choice for coronary occlusion models. High resolution waveforms are unaffected by electromagnetic noise. Non-magnetic MRI safe Flowprobes can be ordered. Transonic® surgical Flowprobes are now used widely during CABG surgery, both off (beating heart) and on CPB.



ACUTE OPEN-CHEST

- Choose a close fitting Probe for ease in maintaining acoustic coupling
- Use Transonic® approved coupling gel for signal transmission (Surgilube; NALCO superabsorbant)
- Stabilize Probe on beating heart with silicone coronary flange (also holds gel in place)

CHRONIC IMPLANT

- Choose a loose fitting Probe, so that vessel fills 75%-85% of Probe lumen
- Choose "side" cable configuration for seating Probe in position on vessel; provide strain relief loop in cable
- Specify silicone coronary flange for stabilization on myocardium
- Choose preferred chronic style connector & cable length for protocol
- Tissue ingrowth provides excellent signal coupling within 3 - 5 days

See surgical protocol RL-1-sp for more details.

FLOWPROBE RECOMMENDATIONS							
APPLICATION	WEIGHT (KG)	LAD	LCx	SF-SILICONE FLANGE	CABLE LENGTH	CONNECTOR	CALIBRATION
Pig: Acute	25 - 35	MA-2.5PSB	MA-3PSB	optional	WC100 (1 m)	CRA10	GA- acute
Pig: Chronic	25 - 35	MC-2.5PSS MC-3PSS	MC-3PSS	suggested	WC50 (50 cm)	CM4B, CRS10, CS12	GC- chronic
Piglet: Acute	1.8 - 4	MA-1PRB		optional	WC60 (60 cm)	CRA10	GA- acute
Dog: Acute	10 - 15	MA-1.5PRB		optional	WC100 (1 m)	CRA10	GA- acute
	18 - 25	MA-2PSB	MA-2.5PSB				
Dog: Chronic	8 - 12	MC-1.5PRB		suggested	WC40 (40 cm)	CM4B, CS12, CB12	GC- chronic
	16 - 25	MC-2PSS	MC-2.5PSS				
Sheep: Acute	35 - 45		MA-3PSB	optional	WC100 (1 m)	CRA10	GA- acute
	50 - 60		MA-4PSB				
Sheep: Chronic	35 - 45		MC-3PSS	suggested	WC60 (60 cm)	CRS10, CS12	GC- chronic
	50 - 60		MC-4PSS				
Baboon: Chronic	10 - 15	MC-2.5PSS		suggested	WC75 (75 cm)	CM4B, CS12	GC- chronic

All recommendations are based on vessel diameter estimates. Probe choice will depend on surgical approach, species and weight. MA-probes are configured for standard acute application. Order MC-probes for any customization or chronic configuration options. See Perivascular Flowprobe Flyer (RL-26-fly) for complete ordering information.

