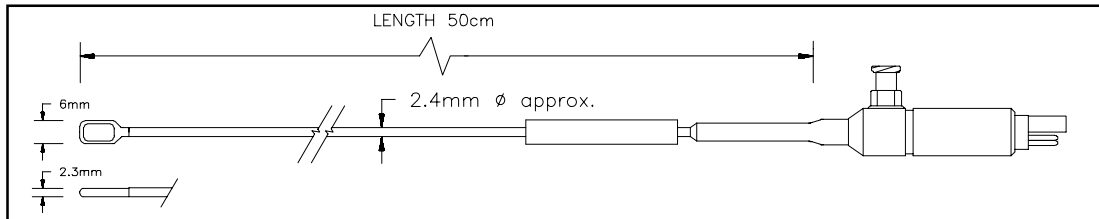


## Intracranial Catheter Tip Pressure Transducer (ICT/B)

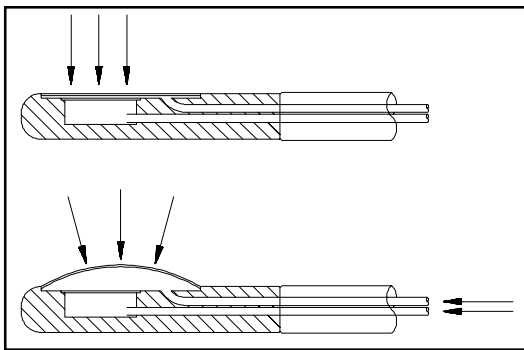
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The ICT/B is one of a range of catheter tip transducers manufactured by Gaeltec. It is designed for measuring intracranial pressure by the epidural method.

A significant feature of the ICT/B is the ability to check the zero drift of the ICT/B and pressure monitor in-vivo. Not only does this allow for accurate measurements, but also allows moving the patient with the ICT/B in the epidural space and reconnection to another monitor quickly.



There is a flat silicone rubber membrane, or balloon, covering the pressure sensing diaphragm. Two internal tubes connect the two sides of the diaphragm to a female luer fitting on the connector shell. By introducing approximately 0.2 to 0.3ml of air, the pressure in these tubes will be greater than the ICP being measured. The exact amount of air is not critical, subject to the permitted maximum. When this air is injected, the pressure will cause the balloon to be lifted from the surface of the sensor and the same pressure will be applied to the back of the sensor. The strain gauge senses equal pressure above and below which is equivalent to having zero pressure applied. Thus by injecting a small volume of air, one undeflects the pressure sensor and checks the zero of the transducer and amplifier.



Sterilisation is by means of cold aqueous solutions of detergent (e.g. Cidex) or by ethylene oxide gas. Do not use sodium hypochlorite solution.

### SPECIFICATIONS

**Sensor housing:** Titanium 2.3mm thick 6mm wide

**Catheter:** 50cm silicone rubber 2.4mm  $\varnothing$

**Sensor:** Metal diaphragm with directly deposited resistive strain gauges

**Excitation:** 5V AC r.m.s. maximum or 1V DC maximum

**Bridge resistance:** 1.5k $\Omega$  nominal

**Sensitivity:** 5 $\mu$ V/V/mmHg

**Linear pressure range:** 0 - 100mmHg

**Compensated temperature range:** 15 - 40°C

**Temperature coefficient of zero:** < 0.05%FS/C°

**Zero drift:** < 1mmHg in 24 hours

**Temperature coefficient of sensitivity:** < 0.2%/C°

**Linearity and hysteresis error:** <  $\pm$ 1%FS BSL

**Maximum balloon inflation volume:** 0.4ml of air

**Overpressure:** 1200mmHg

**Connector:** 6 pin Lemo 2 series

NOTE : All specifications are subject to modification without notice. (98/6)

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