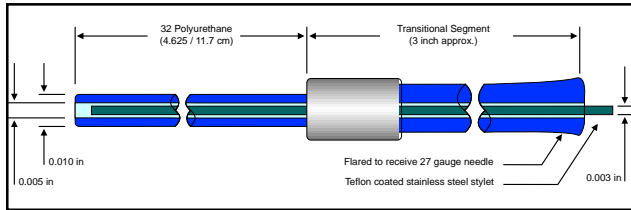


## Cannulae and Catheters

### Intrathecal Catheter System

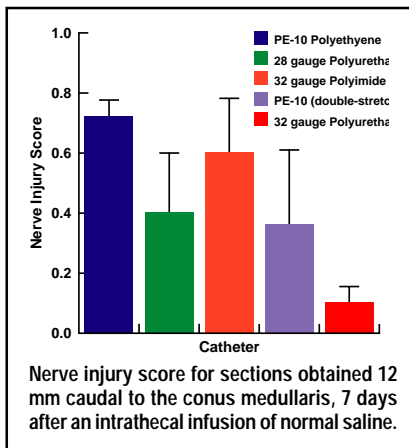


This 32 gauge Intrathecal Catheter is the key component of a delivery system specifically developed for use in the rat and other small research animals. A significant advancement over the standard polyethylene-based products generally used for such research, its material and size combine to produce a minimally reactive device, thereby reducing catheter-induced histopathology that could obscure other observations. Functional studies might also benefit from these properties as subclinical nerve injury could potentially alter the behavioral response to an intrathecal agent.

While studying the effects of intrathecally-injected anesthetics, researchers at the University of California at San Francisco encountered morphologic changes apparently induced by the implanted catheter. Micor was approached for its assistance in identifying a material that could reduce the nerve damage that was observed. These efforts suggested that 32 gauge polyurethane had the desired properties. Accordingly, a study was conducted comparing catheters composed of this material versus polyethylene or polyamide. Although sensory function did not differ significantly, nerve injury was substantially lower in animals implanted with 32 gauge polyurethane catheters.<sup>1</sup>

This material is now incorporated into a commercially available device, the 32 gauge Intrathecal Catheter System. This system contains an 11.7 cm (4.6 in) catheter, a bonded connection assembly, and a stylet to facilitate placement.

- Reduces catheter-induced histo-pathology
- 32 Gauge
- Polyurethane catheter material causes substantially less nerve injury compared to other catheter materials
- For delivery of drugs to the brain
- Ideal for rats and other small animals



Micro-Cannula

### Micro-Cannula

This Micro-Cannula has been designed for quick and easy insertion into the arteries and veins of small animals such as rats, mice and hamsters. The Cannula tip is contoured for easy insertion and is fitted with an adjustable shoulder or barb for 'tie-in' to the animal to prevent accidental removal. The stainless steel trochar aids in vascular penetration and allows for a maximum range of cannula manipulation during insertion.

- For insertion in very small blood vessels
- Can be used with radio labeled compounds

The Micro-Cannula tubing is made from a perfluorocarbon material that is biocompatible.

This Micro-Cannula has been utilized effectively for the rapid cannulation of hamster carotid and femoral arteries and for the cannulation of mouse carotid arteries. It has also been used as an 'indwelling' catheter during experiments spanning an entire day.

Projected uses include the injection of small amounts of expensive radio-labeled compounds or monoclonal antibodies intra-arterially, for more effective distribution to vital organs. It can also be used to inject drugs directly into the circulation or to measure pressure in the femoral artery without compromising blood flow to the brain.

### Specifications

Tip Size:	
OD	0.4 mm (0.016 in)
ID	0.2 mm (0.008 in)

Catalog No.	Product
CGS 8775.64	Micro-Cannula, pkg. of 1, non-sterile

Catalog No.	Product
CGS 8774.64	Intrathecal Catheter System, 32 Gauge, pkg. of 1, sterile