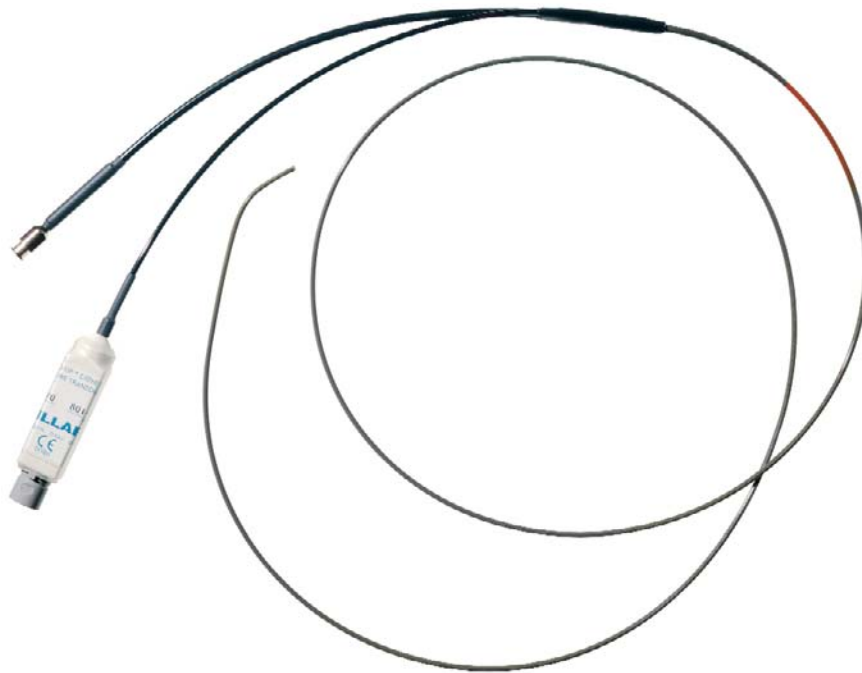




Cardiovascular Mikro-Tip Pressure Transducer Catheters



Sensors.Systems.Solutions.®

SINGLE PRESSURE SENSOR INTRAVASCULAR MIKRO-TIP PRESSURE CATHETERS

Millar Mikro-Tip® pressure intravascular catheters provide a simple, efficient and highly accurate method of measuring pressures in the heart or cardiovascular system. These reusable, thromboresistant Mikro-Tip catheters are ideal for high fidelity pressure measurement. Standard catheters range in size from 2 to 7 French and in length up to 140 cm. (All catheter images are enlarged to show sensor position.)



SPC-320



SPC-330



SPC-350



SPC-350S

For LA/LV Post Open-Heart Monitoring

The MPC-500 is a thromboresistant, low-cost reusable catheter designed for intraoperative placement. It can be used for post open-heart pressure monitoring. The MPC-500 provides accurate high fidelity pressure monitoring with no damping or danger of air embolism. (All catheter images are enlarged to show sensor position.)



MPC-500

Single Pressure Sensor Intravascular Mikro-Tip Pressure Catheters – Non-Lumen Models

| | MPC-500 | SPC-320 | SPC-330 | SPC-330A | SPC-340 | SPC-340S |
|--------------------------|---------------------|---------------------|---------------------|---------------------|-------------------------------|-------------------------------|
| Part Number | 807-1018 | 800-0509 | 800-1019 | 800-1029 | 800-2019 | 800-2019-1 |
| Catheter Material | Polyurethane | Polyurethane | Nylon | Nylon | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron |
| Effective Length | 70 cm | 140 cm | 65 cm | 130 cm | 120 cm | 120 cm |
| French Size | 5 | 2 | 3 | 3 | 4 | 4 |
| Number of Sensors | 1 | 1 | 1 | 1 | 1 | 1 |
| Sensor Location from Tip | Side mounted at tip | Side mounted at tip | Side mounted at tip | Side mounted at tip | Side mounted at tip | Side mounted at tip |
| Tip Characteristics | Straight | Straight | Straight | Straight | Curved | Straight |
| Connector Type | Viking | Viking | Viking | Viking | Viking | Viking |
| Reusable | Yes | Yes | Yes | Yes | Yes | Yes |
| Repairable | No | Yes | Yes | Yes | Yes | Yes |

| | SPC-350 | SPC-350S | SPC-360 | SPC-360S | SPC-370 | SPC-370S |
|--------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Part Number | 800-4019 | 800-4019-1 | 800-5019 | 800-5019-1 | 800-6019 | 800-6019-1 |
| Catheter Material | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron |
| Effective Length | 120 cm | 120 cm | 120 cm | 120 cm | 120 cm | 120 cm |
| French Size | 5 | 5 | 6 | 6 | 7 | 7 |
| Number of Sensors | 1 | 1 | 1 | 1 | 1 | 1 |
| Sensor Location from Tip | Side mounted at tip | Side mounted at tip | Side mounted at tip | Side mounted at tip | Side mounted at tip | Side mounted at tip |
| Tip Characteristics | Curved | Straight | Curved | Straight | Curved | Straight |
| Connector Type | Viking | Viking | Viking | Viking | Viking | Viking |
| Reusable | Yes | Yes | Yes | Yes | Yes | Yes |
| Repairable | Yes | Yes | Yes | Yes | Yes | Yes |

NOTE: Viking connectors are round with 4 pins.

NOTE: The MPC-500 is non-repairable and warranted for 30 days against defects in materials and workmanship.

SINGLE PRESSURE SENSOR INTRAVASCULAR MIKRO-TIP PRESSURE CATHETERS WITH LUMEN

Slow-Speed Injection and Sampling

Approved for Human Use. Millar manufactures and markets a line of Mikro-Tip pressure catheters with a lumen for fluid sampling or slow-speed injection; all are available in sizes from 5 to 7 French. (All catheter images are enlarged to show sensor and lumen position.)



High-Speed Injection

Millar manufactures and markets two models of single sensor catheters for high-speed injection. The lumen has two laterally opposed side openings on the SPC-471A. The SPC-474A has an open-end pigtail extension for use with a .032 inch (.8 mm) guide wire. Typical injections rates of radiopaque contrast dye (Renografin 76) at 1200 psi (8274 kPa) are 10 to 15 ml/sec. The SPC-471A injection lumen side openings are located 1 cm from the tip, and the model SPC-474A injection lumen is located 1 cm from the pigtail attachment. (All catheter images are enlarged to show sensor and lumen position.)



Single Pressure Sensor Intravascular Mikro-Tip Pressure Catheters With Lumen

| | SPC-450 | SPC-450S | SPC-470 | SPC-471A | SPC-474A |
|--|-----------------------------------|-----------------------------------|-----------------------------------|--|---|
| Part Number | 801-1019 | 801-1019-1 | 801-3019 | 802-2019 | 802-2059 |
| Catheter Material | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron |
| Effective Length | 120 cm | 120 cm | 120 cm | 115 cm | 120 cm |
| French Size | 5 | 5 | 7 | 7 | 7 |
| Sensor Location from Tip | Side mounted at tip | Side mounted at tip | Side mounted at tip | Side mounted at tip | Side mounted at tip, proximal to pigtail |
| Tip Characteristics | Curved | Straight | Curved | Curved | Straight |
| Lumen Type | Sampling/ Slow speed injection | Sampling/ Slow speed injection | Sampling/ Slow speed injection | High speed injection | High speed injection/ Guide wire |
| Lumen I.D. | 0.4 mm | 0.4 mm | 0.7 mm | 1.0 mm | 0.9 mm |
| Flow Rate (H ₂ O) | 4 ml/minute @ 1 atmosphere | 4 ml/minute @ 1 atmosphere | 25 ml/minute @ 1 atmosphere | 15 ml/second @ 1200 psi (8274 kPa) | 15 ml/second @ 1200 psi (8274 kPa) |
| Flow Rate Radiopaque Contrast Dye (Renografin-76) | No | No | No | 10-15 ml/second @ 1000 psi (6895 kPa) | 10-15 ml/second @ 1000 psi (6895 kPa) |
| Guide Wire | No | No | No | No | .032 inch (.8 mm) |
| Pigtail | No | No | No | No | Yes |
| Connector Type | Viking | Viking | Viking | Viking | Viking |
| Reusable | Yes | Yes | Yes | Yes | Yes |
| Repairable | Yes | Yes | Yes | Yes | Yes |

NOTE: Viking connectors are round with 4 pins.

Non-Invasive Pulse Tonometer

The SPT-301 is a hand-held wand probe equipped with a Mikro-Tip pressure sensor at the tip, designed for non-invasive recording of pulse pressure wave contours. The high frequency response ensures accurate reproduction of pulsatile waveforms.



SPT-301

Non-Invasive Pulse Tonometer

| Model Number | Part Number | Size | Material | Cable Length | Connector Type |
|--------------|-------------|------------------------------------|-----------------|--------------|----------------|
| SPT-301 | 808-1019 | 1/4 inch diameter 6 inch length | Stainless Steel | 150 cm | Viking |

NOTE: Viking connectors are round with 4 pins.

DUAL PRESSURE SENSOR INTRAVASCULAR MIKRO-TIP PRESSURE CATHETERS

Millar manufactures and markets a line of dual pressure sensor catheters for simultaneous high fidelity pressure measurements. These catheters are suitable for measuring pressure gradients across a valve, between chambers, or across a vascular stenosis. The catheters are made of Polyurethane material (some include a woven Dacron braid), are thromboresistant, and range in size from 2.5 to 7 French. (All catheter images are enlarged to show sensor position.)



SPC-721



SPC-771

Dual Pressure Sensor Intravascular Mikro-Tip Pressure Catheters – Non-Lumen Models

| | SPC-721 | SPC-751 | SPC-771 | SPC-771S | SPC-771 | SPC-771S |
|--------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Part Number | 803-0509 | 803-1009 | 803-4019 | 803-4019-1 | 803-4019-2 | 803-4019-3 |
| Catheter Material | Polyurethane | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron |
| Effective Length | 135 cm | 120 cm | 120 cm | 120 cm | 120 cm | 120 cm |
| French Size | 2.5 | 5 | 7 | 7 | 7 | 7 |
| Number of Sensors | 2 | 2 | 2 | 2 | 2 | 2 |
| Sensor Location from Tip | First at tip, second 5 cm proximal | First at tip, second 3 cm proximal | First at tip, second 5 cm proximal | First at tip, second 5 cm proximal | First at tip, second 3 cm proximal | First at tip, second 3 cm proximal |
| Tip Characteristics | Straight | Curved | Curved | Straight | Curved | Straight |
| Connector Type | Viking | Viking | Viking | Viking | Viking | Viking |
| Reusable | Yes | Yes | Yes | Yes | Yes | Yes |
| Repairable | Yes | Yes | Yes | Yes | Yes | Yes |

NOTE: Viking connectors are round with 4 pins.

DUAL PRESSURE SENSOR INTRAVASCULAR MIKRO-TIP PRESSURE CATHETERS WITH LUMEN

These dual pressure sensor catheters incorporate a lumen for sampling/slow-speed injection, slow-speed injection/guide wire, or high-speed injection/guide wire. The model SPC-784A for high-speed injection has two laterally opposed lumen side openings and an open-end pigtail extension for use with a guide wire.



SPC-760



SPC-780C



SPC-784A

Dual Pressure Sensor Intravascular Mikro-Tip Pressure Catheters with Lumen

| | SPC-760 | SPC-770 | SPC-780C | SPC-784A |
|--|---------------------------------------|---------------------------------------|---------------------------------------|--|
| Part Number | 804-1019 | 804-2019 | 804-6219 | 804-8009 |
| Catheter Material | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron | Polyurethane/ Woven Dacron |
| Effective Length | 120 cm | 120 cm | 120 cm | 120 cm |
| French Size | 6 | 7 | 8 | 8.5 |
| Number of Sensors | 2 | 2 | 2 | 2 |
| Sensor Location from Tip | First at tip, second 5 cm proximal | First at tip, second 5 cm proximal | First at tip, second 5 cm proximal | First at tip, proximal to pigtail and lumen, second 5 cm proximal |
| Tip Characteristics | Curved | Curved | Straight | Straight |
| Lumen/Type | Sampling/Slow-speed injection | Sampling/Slow-speed injection | Slow-speed injection/Guide wire | High-speed injection/Guide wire |
| Flow Rate (H ₂ O) | 5 ml/minute @ 1 atmosphere | 25 ml/minute @ 1 atmosphere | 55 ml/minute @ 1 atmosphere | 9 ml/second @ 1200 psi (8274 kPa) |
| Flow Rate Radiopaque Contrast Dye (Renografin-76) | No | No | No | 10 ml/second @ 1000 psi (6895 kPa) |
| Lumen Inside Diameter | 0.5 mm | 0.7 mm | 0.8 mm | 1.1 mm |
| Guide Wire | No | No | .032 inch | .038 inch |
| Pigtail | No | No | Yes | Yes |
| Connector Type | Viking | Viking | Viking | Viking |
| Reusable | Yes | Yes | Yes | Yes |
| Repairable | Yes | Yes | Yes | Yes |

NOTE: Viking connectors are round with 4 pins.

Accessories

Millar Instruments offers a selection of Pressure Control Units and cables that interface Millar Mikro-Tip® catheter pressure transducers to physiological monitors. All accessories are sold separately.



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