

# Pressure Sensors

## Plumbing and Mounting Considerations – Note #9

There are many types and sizes of tubing available to fit MICRO SWITCH pressure sensors. There are several methods for connecting the tubing to the plastic pressure ports. MICRO SWITCH supplies the following information as a service to the customer. However, the user is the best judge of the proper tubing and connecting methods for each application.

### Hoses/Tubing

**Vinyl** tubing can be used in room temperature, lower pressure (< 50 psig) applications. Vinyl is less expensive and should be used with hose clamps.

**Silicon** tubing is very flexible and resists temperature extremes. It should be used in lower pressure (<50 psig) applications. Hose clamps are recommended.

**Tygon** tubing is very flexible and is recommended for applications at room temperature and pressures below 50 psig. Hose clamps are recommended.

**Urethane** tubing, the most expensive, is not as flexible, but can withstand higher temperatures and pressures. Hose clamps are recommended, but may not be required.

### Hose Clamps

Tyton Corporation supplies two types of hose clamps called "SNAPPER." The natural acetyl type is recommended for most applications not exceeding 200°F air temperature or 180°F water temperature. The heat stabilized glass fiber compound type is good for 400°F continuously. Snappers are also stable in a wide variety of chemicals including salts, bases, alcohols, ethers, detergents, gasoline, lubricating oils and greases. Assorted clamp sizes are available.

Pipe clamps purchased locally in the plumbing department of hardware stores and cable ties from electrical distributors may also be used to attach the tubing to the plastic ports.

Mazzer Industries supplies Mazzer-Loc JG speed fittings that work well with the 20PC Series large flow-through sensors.

### Accessories

#### Add-on Ports

Imperial Eastman supplies many types and sizes of brass add-on ports for connecting to copper tubing.

#### Mounting Hardware

ITW FasTex supplies a wide variety of mounting connectors, nylon screws, rivets and push pins which can be used with the pressure sensor mounting brackets.

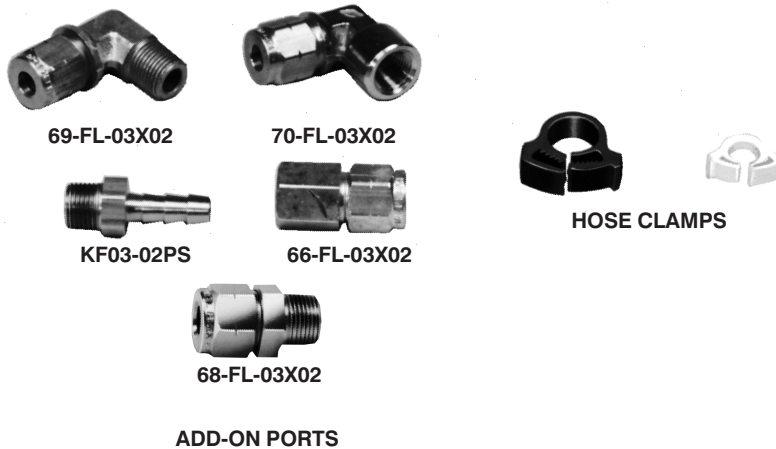


Table 2

#### Add-on Ports

68-FL-03X02	3/16" O.D. tube to 1/8" male pipe - male connector
69-FL-03X02	3/16" O.D. tube to 1.8" male pipe - male elbow
70-FL-03X02	3/16" O.D. tube to 1/8" female pipe - female elbow
KF03-02PS	3/16" I.D. hose to 1/8" male pipe - barbed port
KF04-02PS	1/4" I.D. hose to 1/8" male pipe - barbed port
66-FL-03X02	3/16" O.D. tube to 1/8" female pipe - female connector (Female connector is used in conjunction with barbed port)

### Hoses/Tubing

#### Norton Performance Plastics Corporation

P.O. Box 3660  
Akron, OH 44309-3660 USA  
(330) 798-9240

#### United States Plastics Corporation

1390 Neubrecht Road  
Lima, Ohio 45801 USA  
(419) 228-2242

#### Clippard Instrument Laboratory, Inc.

7390 Colerain Road  
Cincinnati, Ohio 45239 USA  
(513) 521-4261

### Hose Clamps/Accessories

#### Tyton Corporation

7930 North Faulkner Road  
P.O. Box 23055  
Milwaukee, WI 53223 USA  
(414) 355-1130

#### Imperial Eastman Acquisition Corporation

1151 Bryn Mawr  
Itasca, IL 60143 USA  
(630) 285-6100

#### Clippard Instrument Laboratory, Inc.

7390 Colerain Road  
Cincinnati, Ohio 45239 USA  
(513) 521-4261

#### Mazzer Industries, Inc.

125 Elmgrove Park  
Rochester, NY 14624  
(716) 247-0311

#### ITW Fastex

195 Algonquin Road  
Des Plaines, IL 60016-6197 USA  
(847) 299-2222