

Surge Damper

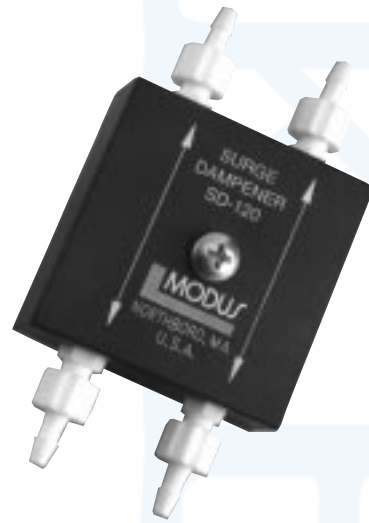
GENERAL

The surge damper, when used with Modus capacitive pressure transmitters, absorbs rapid pressure fluctuations in high or low pressure lines and steadies the output signal. Three models are offered with time delays of: 15, 30 and 60 seconds. The time delay is defined as the elapsed time for the output signal to reach 90% of the steady-state value after a step change in pressure of 0.1 inches of water occurs in the low or high pressure line. Each surge damper has two independent channels.

Typical applications are smoothing out airflow signals and room pressure signals which may vary suddenly when doors are opened or closed. The use of a surge damper is recommended when pressure is displayed on a digital panel meter and the least significant digit must be stabilized.

For best performance, both the high and low pressure ports of the transmitter should be connected to the surge damper. The time delay specifications of 15, 30 and 60 seconds assume that both ports are connected to the surge damper. The time delay is based on tubing length of approximately one foot between the damper and the measuring instrument. The time delay may be increased by increasing the length of tubing between the measuring instrument and the surge damper.

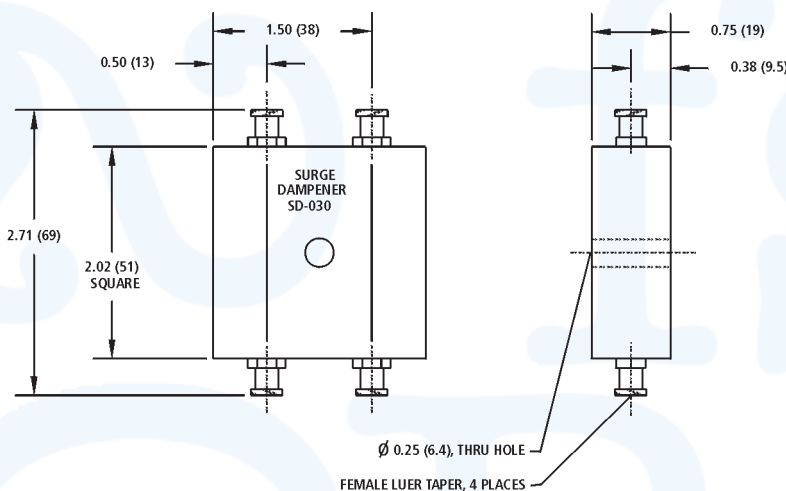
Each surge damper includes a kit consisting of 3 different types of barb fittings to accommodate tubing ranging from 1/8" to 7/32" I.D. (3 to 6 mm I.D.), and a #10x1" lg. sheet metal screw for installation on a wall, if desired. This surge damper is easily installed.



ORDERING INFORMATION

Model Number

SD-015	15 second time delay
SD-030	30 second time delay
SD-060	60 second time delay



DIMENSIONS ARE IN INCHES (MILLIMETERS)

MODEL A

Static Pressure Fittings

DESCRIPTION

These pressure fittings are used with pressure transmitters, switches, manometers and gages to measure static pressure drops across air filters, cooling coils, blower inlets, discharge outlets, etc. The angled tips shown have 4" insertion depth. Each sensor has 4 radially drilled .040" holes. All, except model A-303, mount in a 7/16" hole in a duct. For portable use, a magnet holds model A-303 in place.

Model A-305 is used where a very low actuation or sensing point is required or where response time is critical. Model A-307 and A-308 are suitable for use in low velocity systems or where the need for accuracy is less critical.

ORDER INFORMATION

- A-301** - Static pressure tip for 1/4" metal tubing
- A-301-SS** - Same as A-301 in stainless steel
- A-302** - Static pressure tip for 1/8", 5/32", 3/16" ID flexible clear plastic tubing
- A-305** - Static pressure tip for low resistance applications furnished with two hex jam nuts two mounting washers for duct mounting and 1/8" NPT pressure connection



- A-305-SS** - Same as A-305 in stainless steel
- A-307** - Static pressure fitting for 1/4" OD metal tubing
- A-308** - Static pressure fitting for 1/8", 5/32", 3/16" ID flexible clear plastic tubing or 1/4" OD polyethylene tubing
- A-345** - Flange for mounting A-301, A-302, A307, A 308, or 1/8" dia. pitot tube when the interior of the duct is not accessible. Aluminum plate with gasket and sheet metal screws

Pitot Tubes

DESCRIPTION

Pitot tubes are made of stainless steel. They are furnished with an air velocity calculator, velocity chart, and instructions.

ORDERING INFORMATION

Standard Type, 5/16" dia. (temperature to 1500°F)

Model	Length
160-8	8"
160-12	12"
160-18	18"
160-24	24"
160-36	36"
160-48	48"
160-60	60"

For Standard Type Only

- Suffix-P- Integral packing gland mounting stainless steel with NPT male and graphite seal (Teflon may be substituted)
- A-372- Reducing type bushing stainless steel 3/4" to 1/2"
- A-373- Reducing type bushing stainless steel 1" to 1/2"
- Suffix-CF- Integral compression fitting adapter, solid brass, 1/8" male pipe thread
- A-158- Split flange and gasket assembly for mounting tube on duct
- A-374- Compression union for connecting pitot tube to metal tubing. Two required

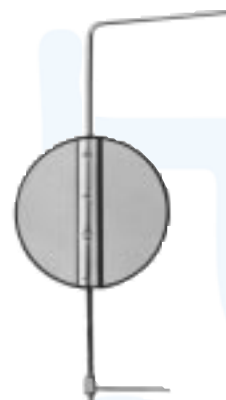
Pitot Tubes

Pocket Type, 1/8" dia. (temperature to 800°F)

Model	Length
3" tip	
166-6	6"
166-12	12"
1.5" tip	
167-6	6"
167-12	12"

For Pocket Type Only:

- Suffix-CF- Integral compression fitting adapter, solid brass 1/8" male pipe thread and split ferrule
- A-345- Flange for mounting the pitot tube when the interior of the duct is not accessible. Aluminum plate with gasket and sheet metal screws



MODEL FF-1

In-Line Air Filters

DESCRIPTION

Modus 0.1 micron disposable filter insures many years of trouble free operation for transmitters and switches where air contains petroleum based oil and dirt. Replacement is indicated when a red color appears on the surface of the filter tube. Unit is not recommended where chemical and solvent resistance is required.



Model FF-1 In Line Air Filter

ORDERING INFORMATION

MODEL FF-1

Fittings

DESCRIPTION

The following fittings are made of white nylon. They are suitable for 1/8" and 5/32" ID flexible clear plastic tubing or 1/4" OD polyethylene tubing.



1/8" NPT Adapter



Tee

ORDERING INFORMATION

1/8" NPT Adapter

Model Description

FA-10 Pkg of 10

FA-50 Pkg of 50

FA-100 Pkg of 100

ORDERING INFORMATION

Tee

Model Description

FT-10 Pkg of 10

FT-50 Pkg of 50

FT-100 Pkg of 100



Union

ORDERING INFORMATION

Union

Model Description

FU-10 Pkg of 10

FU-50 Pkg of 50

FU-100 Pkg of 100