



## AIR PRESSURE SENSORS, SURGE DAMPENERS A300 SERIES, RPS, SD-01, 21121, 60681

### DESCRIPTION

#### Static Pressure Sensors

The **A-300-K Series** sensors are used with pressure transmitters and pressure switches to sense duct pressures. Two sensors are required to monitor pressure across coils, filters, blowers, etc. **A-301-K** and **A-302-K** have four radial sensing holes and 4" (10.2 cm) insertion depth. The **A-308-K** should be used only where accuracy is not critical. All mount in a 3/8" hole in the duct. If the interior of the duct is not accessible, an optional **A-345-K** flange mounting kit may be used.

#### Room Static Pressure or Total Pressure Sensor Kit

The versatile **Model 60681** Pressure Sensing Kit is used for monitoring static pressure (aspiration) or total pressure (impact). The kit includes a 7" (17.8 cm) universal sensing probe, adjustable mounting flange, 1/4" adapter, and 3' (0.9 m) length of tubing (1/4" ID x 3/8" OD). For total (impact) pressure applications, install the curved tip opening facing into the air stream or away from the air stream for vacuum applications.

#### Total Pressure Sensor

The **Model 21122 (4")** and **21123 (8")** sensors are used primarily for proving air flow in ducts. The opening in the tip of the 4" (10.2 cm) aluminum tube faces upstream and senses impact (total) pressure. The "-112" models accept 1/8" to 1/4" ID flexible tubing.

#### Outdoor Static Pressure Sensor

The **A-306-K** Outdoor Static Pressure Sensor provides an outdoor pressure signal for reference in building pressurization applications. The **A-306-K** includes the sensor, 50' (15.24m) of vinyl tubing, mounting bracket, and hardware.

#### Room Static Pressure Sensor

The **Model RPS** is a stainless steel, wall-mounted room static pressure sensor. It mounts directly to the wall or to a standard electrical box. The **Model RPS-W** is a white plastic, wall-mounted room static pressure sensor, and the **Model RPS-I** is ivory. The RPS sensors have a 100 micron stainless steel breather vent.

#### Filter Kit

The **Model A-605** Filter Kit includes an aluminum surface mounting bracket and screws, two 5 ft lengths of 1/4" aluminum tubing, two static pressure tips, and two plastic vent valves.

#### Surge Dampener

Surge Dampener **Model SD-01** absorbs rapid pressure fluctuations to provide steady pressure outputs. The dampener has two independent channels - one for the low pressure tubing and one for the high pressure tubing. Surge dampeners are typically used with outdoor pressure sensors, which are subject to wind gusts, and isolation rooms, clean rooms, or operating rooms where opening or closing doors creates sudden pressure changes.



RPS-W



60681

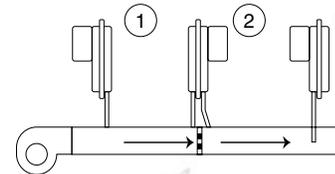


A-300 Series

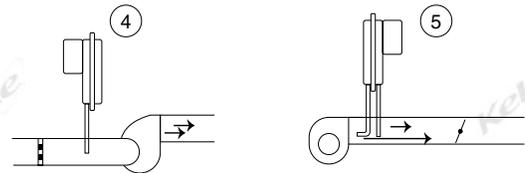


RPS & SD-01

### APPLICATION



1. Positive static pressure increases as the filter gets dirty.
2. Differential across filter changes as filter gets dirty.
3. Flow is reduced as filter gets dirty.



4. Negative pressure increases as the filter gets dirty.
5. Fan operation and true air flow: varying amounts of static pressure. Probes must be perpendicular to air flow.

### ORDERING INFORMATION

MODEL	DESCRIPTION
60681	Static or total pressure sensing kit
A-301-K	Duct static pressure tip, 1/4" compression
A-302-K	Duct static pressure tip, 1/4" barb
A-308-K	Duct static pressure fitting, 1/4" barb
A-345-K	Flange mounting kit (1 required for each A-301-K or A-302-K)
A-3145K	A-301-K duct static pressure tip, 1/4" compression with A-345-K mounting flange
A-3245K	A-302-K duct static pressure tip, 1/4" barb with A-345-K mounting flange
A-3845K	A-308-K duct static pressure fitting, 1/4" barb with A-345-K mounting flange
21122	4" aluminum impact tube, 1/4" OD connection
21122-112	6" aluminum impact tube for 1/8" thru 1/4" ID flexible plastic tubing
21123	8" aluminum impact tube, 1/4" OD connection
21123-112	8" aluminum impact tube for 1/8" thru 1/4" ID flexible plastic tubing
A-306-K	Outdoor air static pressure kit
A-605	Mounting kit for air filter application. Includes aluminum surface mounting brackets with screws, two 5 ft. lengths of 1/4" aluminum tubing, two static pressure tips and two plastic vent valves.
RPS	Stainless steel room pressure sensor, 1/4" barb
RPS-I	Ivory plastic room pressure sensor, 1/4" barb
RPS-W	White plastic room pressure sensor, 1/4" barb
SD-01	Surge dampener
B-137	1/4" barb adapter for #21122 and #21123 (standard pack-50)