



## Differential Pressure Transmitters General Instructions

### APPLICATION

For transmitting a fixed span 3 to 15 psig (21 to 103 kPa) pneumatic signal which is proportional to a differential pressure being sensed. The output signal can be used as an input for receiver-controllers or gauges for differential pressure indication.

### SPECIFICATIONS

**Transmitter:** Non-relay.

**Construction:** Zinc die-cast case, brass fittings.

**Sensed Medium:** Water, air, steam, oil.

**Maximum Static Pressure (any input):** 300 psig (2069 kPa).

**Zero Adjustment:** Output to  $3 \pm 1/4$  psig ( $21 \pm 2$  kPa) with input pressures equalized.

**Output Air Signal:** 3 to 15 psig (21 to 103 kPa), span fixed.

**Action:** Direct.

**Environment:**

**Ambient Temperature Limits,**

**Shipping and Storage** -40 to 140°F (-40 to 60°C).

**Operating** 40 to 120°F (4 to 49°C).

**Humidity,** 5 to 95% R.H., non-condensing.

**Locations,** NEMA Type 1 indoor only.

**Supply Air Pressure:** Clean, oil free, dry air required (reference EN-123).

**Nominal,** 20 psig (138 kPa).

**Maximum,** 30 psig (207 kPa).

**Connections:** 1/8" FNPT.

**Air Consumption for Sizing Air Compressor:** 0.024 scfm (11.3 ml/s) @ 20 psig (138 kPa).

**Air Capacity of Sizing Air Mains:** 48 scim (13.1 ml/s) @ 20 psig (138 kPa).

**Mounting:** In any position with integral bracket provided.

**Dimensions:** 2-11/16" high x 3-3/4" wide x 1-19/32" deep (68 mm x 95 mm x 40 mm).

### ACCESSORIES

AKS-6000 Series Stem mounted back connected receiver gauges

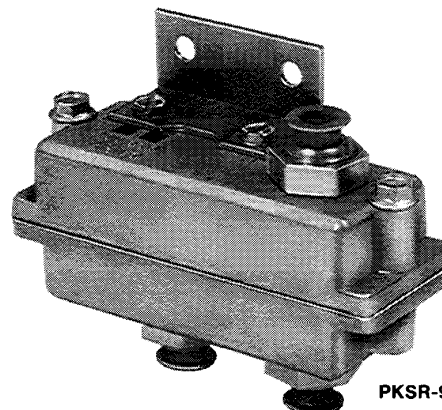
AKS-9000 Series Flush panel mounted with U clamp receiver gauges

AT-532-222-1-01 0.0075" (190.5 μm) restrictor tee for 1/4" plastic tube

**MAINTENANCE PARTS** None

### Table-1 SPECIFICATIONS.

Part Number	Differential Pressure Sensed psig (kPa)	Max. Differential Pressure psig (kPa)
PKSR-9001	0 to 50 (0 to 345)	85 (586)
PKSR-9002	0 to 100 (0 to 690)	150 (1034)



PKSR-9000 Series

### Table-2 COMPETITIVE CROSS REFERENCE.

Schneider Electric Part No.	Johnson Controls Part No.	Kreuter Part No.	Robertshaw Part No.
PSKR-9001	P-5210-1004*	TPC-1002	2302-051 (P502-50)
PKSR-9002	P-5210-1010*	TPC-1003	2302-101 (P502-100)

\*Replacement limited to air, water, steam, and oil applications.

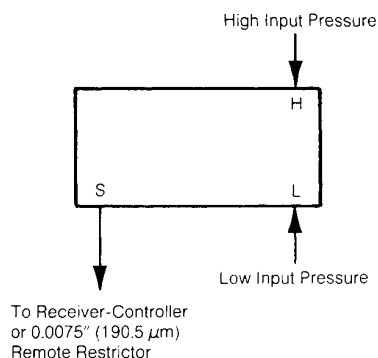


Figure-1 PKSR-900X Piping Connections.

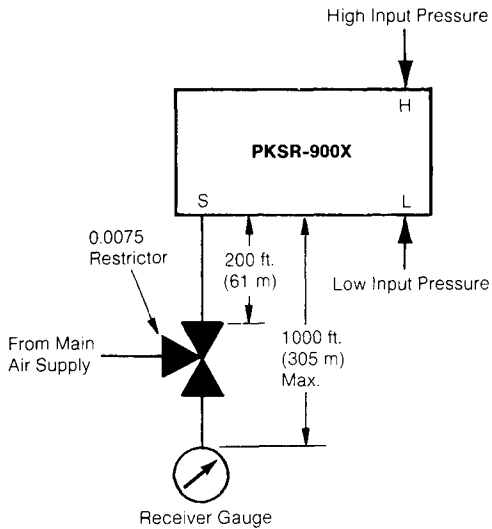


Figure-2 PSKR-900X for Indication Only.

## PRE-INSTALLATION

### Inspection

Visually inspect the carton for damage. If damaged, notify the appropriate carrier immediately. If undamaged, open the carton and visually inspect the device for obvious physical defects. Return damaged or defective products.

### Required Installation Items

- Piping diagrams
- Tools (not provided):  
3/32" Allen wrench  
Appropriate screwdriver for mounting screws  
Appropriate drill and drill bit for mounting screws
- Mounting screws, two (2) #10 are not provided.

## INSTALLATION

### Caution:

1. Installer must be a qualified, experienced technician.
2. Make all connections in accordance with the piping diagram.
3. Do not exceed ratings of the device.
4. Do not locate transmitter in areas subject to vibration, or corrosive atmosphere. NEMA Type 1 indoor only.

Transmitter may be mounted in any position in panel or wall locations.

1. Determine mounting location.
2. Drill mounting holes per dimensions shown in Figure 2 or use mounting plate as a template.
3. Secure transmitter with two (2) #10 screws (not provided).
4. Pipe transmitter in the system (See Figures 1 and 3).

## CALIBRATION

See Figure 2.

Make certain the transmitter has been properly piped into the system.

1. The output pressure measured at port B should be  $3 \pm 1/4$  psig ( $21 \pm 2$  kPa) with pressure to input ports H and L equalized. If not, use a 3/32" Allen wrench (TOOL-110) to turn the zero adjustment (CW to increase output) until output is obtained.
2. The transmitter has been calibrated. No other adjustments are possible.

## MAINTENANCE

Regular maintenance of the total system is recommended for sustained optimum performance.

**Caution:** Oil, dirt and/or water in the air supply will cause unwarranted damage to the transmitter.

## FIELD REPAIR

Do not field repair. Replace with a functional transmitter.

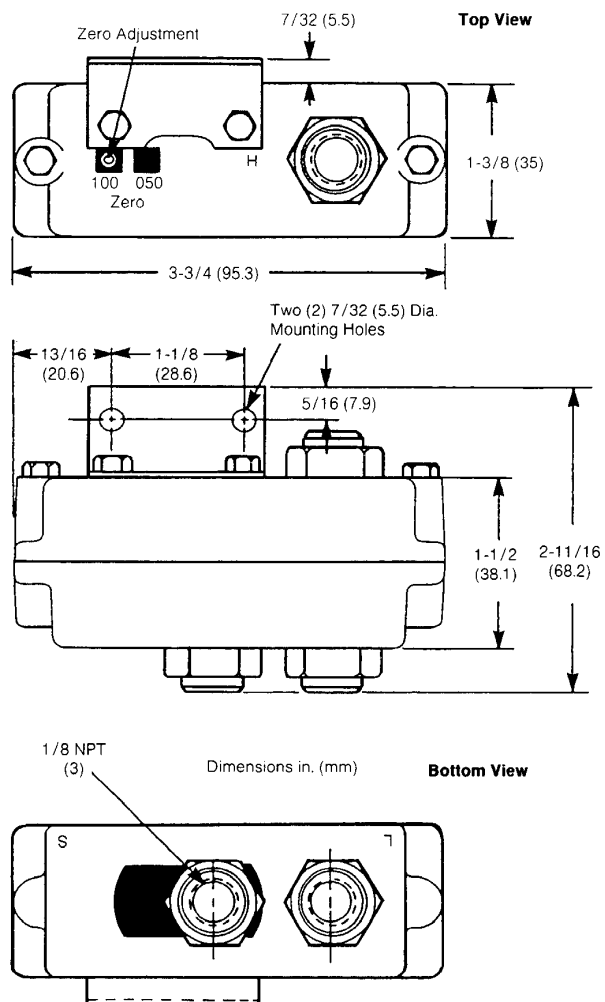


Figure-3 Mounting Dimensions and Zero Adjustment.

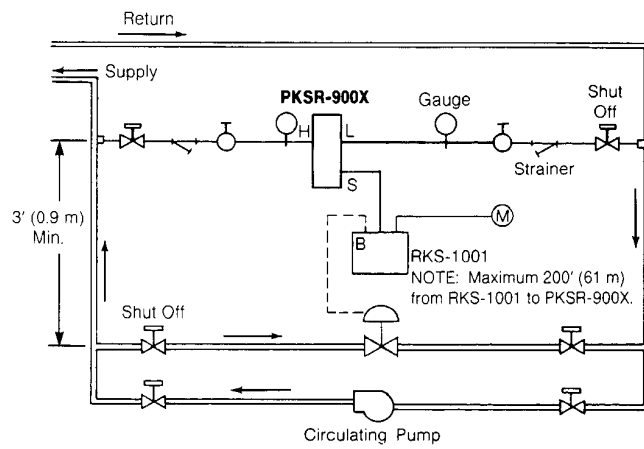


Figure-4 Typical PKSR-900X Hydronic Application.

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