# Model 451S **Low Pressure Transmitters with Display** for Medical Application



Model 451S series is a low pressure transmitter, which is developed to measure low pressure down to 0.2 mbar. It features a dedicated design with a 3 ½ LCD display with backlight. The backlight allows 451S series transmitters to be used in dark. The V-shaped pressure inlet is for pneumatic connection through a hose. This inlet can be either in radial direction (as shown) or axial direction. A 1/4 NPT connector is used as electrical interface to ensure IP 67 protection.

The 451S series is found a precision transmitter of high stability for a number of measuring ranges, spanning from 0~0.2 mbar to 0~10 bar. Its output signal is conditioned to 4~20 mA current loop, or 0~5 Vdc with the accuracy of 0.5%fs (fs = full scale).

The 451S series transmitters are ideal devices which can be installed for industrial automation and sanitary applications, and the pressure medium is limited to dry and non-corrosive gases.

### **Features:**

measuring ranges: 0.2bar, ..., 0~10bar

output signal: 4~20mA, 0~5V

accuracy: 0.5%fs

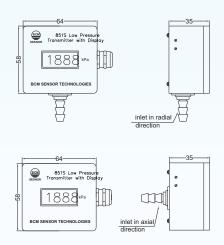
pressure inlet direction: radial (standard), axial

filed display: 3½ LCD with backlight

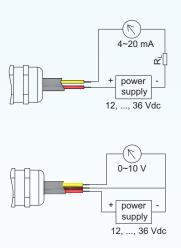
housing material: aluminum alloy



#### **Dimensions:**



### **Electrical connections:**



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### **Technical Data:**

Parameter	Units	Specifications
medium		dry and non-corrosive gases
measuring ranges	bar	0~0.2,, ~10
pressure type		gauge
overload	%fs	200
output signal		4~20mA, 0~5V
accuracy	%fs	≤ ±0.5
long-term stability	%fs/year	≤ ±0.5
short-term stability	%fs/4h	≤ ±0.3
power supply	Vdc	15,, 24
load resistance	Ω	250,, 1150
operating temp. range	°C	-20~+85
compensated temp. range	°C	0~+60
temp. coefficient of zero	%fso/°C	≤ ±0.05
temp. coefficient of span	%fso/°C	≤ ±0.05
pressure interface	inlet	Ф6mm V-shaped inlet
direction of inlet		radial (standard), axial
electrical interface	connector+cable	1/4NPT connector with PVC shielded cable of 1.5m
display		3½ LCD with backlight (light blue for current output, yellow for voltage output)
environment protection		IP67
housing material		aluminum alloy

The listed specifications and dimensions are subject to change without prior notice.

How to order: model-range&type-output-accuracy-inlet direction-customized specifications

ordering code example: 451S-0.2barG-4/20mA-0.5%fs-axial



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