

# Model 132F Gauge Pressure Transmitters With Flush Diaphragm



## Features

- metal foil strain gauge technology, only for gauge pressure measurement
- mono-block construction of the wetted parts
- flush diaphragm
- very small thermal errors (0.005%fs/°C) for span and zero
- pressure ranges from 0~16 bar to 0~600 bar
- selectable output of 4~20 mA (standard), 0.5~4.5V (ratiometric), or 0.5~5V (or 10V)
- 0.5% fs accuracy
- excellent shock and vibration resistance
- wetted parts made from 17-4PH stainless steel
- available in many type of pressure connection threads and electrical interfaces

## Applications

- hygienic applications
- hydraulics and pneumatics
- mechanical engineering
- machine tools
- process control systems



## Description

132F-series pressure transmitters are made of metal foil strain gauge technology. These transmitters are designed with a flush diaphragm for hygienic applications. A working pressure acts on the metal diaphragm, under which a full-bridge circuit formed by a metal foil diaphragm strain gauge is bonded. The pressure deforms the diaphragm, hence breaks the balance of the bridge circuit. The output signal of the bridge circuit, which is proportional to the working pressure, is processed further to fit application purpose by a signal conditioning circuit.

The pressure ranges of 132F transmitters starts from 0~16 bar and ends at 0~600 bar. A number of standard output signals, such as 4~20 mA current loop or voltage output of 0.5~4.5V or 0.5~5V (or 10V), are available when order. The measuring accuracy of 132F transmitters is 0.5%fs (fs=full scale). Thanks to BCM's advanced stain gauge technology, model 132F transmitters provide good long-term stability (<0.2%fs/year), thermal characteristics (<0.005%fs/°C), and excellent shock and vibration resistance.

The wetted parts of the 132F transmitters are of a mono-block construction. That is, the diaphragm and the wetted parts are made from one stainless steel block. As a result, the pressure is completely stopped by the diaphragm in the wetted parts. No rubber O-ring is needed for sealing. This unique feature allows the 132F transmitters to have long service life with minimal maintenance. By means of a flush diaphragm, model 132F transmitter is designed to measure gauge pressures of media in paste form or with grains. The all-stainless steel (SS) construction allows 132F transmitters to have a compatibility of pressure media with SS 17-4PH. Typical applications of 132F transmitters include hygienic applications, hydraulics and pneumatics, mechanical engineering, machine tools.

**BCM SENSOR TECHNOLOGIES BVBA**

# Model 132F Gauge Pressure Transmitters With Flush Diaphragm



## Technical data

parameters	units	specifications
pressure medium		gases or dilute fluids compatible with the material of wetted parts
pressure range	barG	0~16, ~25, ~40, ~60, ~100, ~160, ~250, ~400, ~600, ~1000
	barA	NA*
	barSG	NA
overload pressure	%fs	150
burst pressure	%fs	200
output signal		4~20 mA (standard), 0.5~4.5 V (ratiometric), 0.5~5 V, 0.5~10 V
accuracy	%fs	±0.5
long-term stability	%fs/year	< 0.2
power supply (V <sub>sup</sub> )	Vdc	15, ..., 36
response time (10...90%)	ms	<1
load resistance for current loop	Ω	≤(V <sub>sup</sub> -12)V/0.02mA
load resistance for voltage output	kΩ	> 5
storage temperature range	°C	-40 ~ +125
operating temperature range	°C	-40 ~ +125
compensated temperature range	°C	-10 ~ +60
temp. coefficient of span	%fs/°C	± 0.005
temp. coefficient of zero	%fs/°C	± 0.005
vibration resistance (20, ..., 2000 Hz)	g	10
seal		mono-block wetted part
transmission fluid		NA
material of diaphragm		17-4PH
material of wetted parts		17-4PH
material of electronics housing		304 SS
mechanical interface		G1/2, others refer to the drawings of mechanical interface
electrical interface		refer to the drawings of electrical interface
environment protection	IP rating	IP 65, IP 66
unit weight	g	~ 300

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

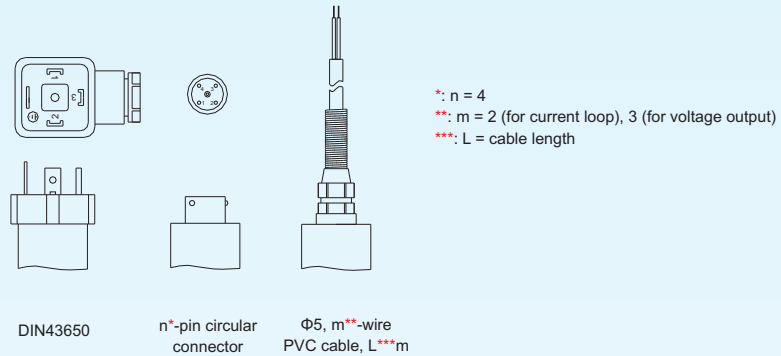
\*: NA = not available or not applicable

**BCM SENSOR TECHNOLOGIES BVBA**

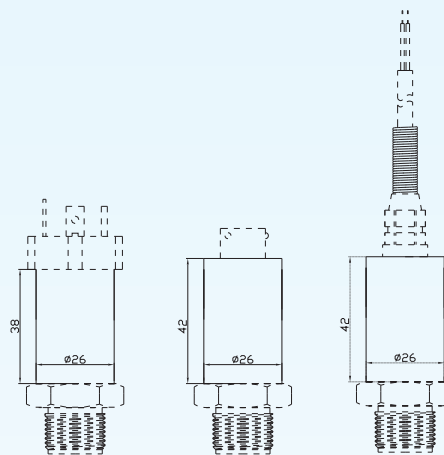
# Model 132F Gauge Pressure Transmitters With Flush Diaphragm

## Dimensions

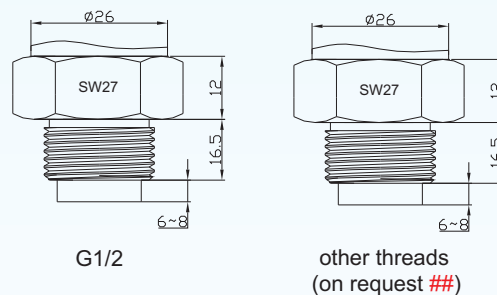
### electrical interface#



### electronics housing (case)



### mechanical interface#



#: The mechanical interfaces and the electrical interfaces listed below can be combined freely.

##: Other types of interfaces are available on request and to be confirmed in case of order.

