

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.

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Technical data

parameters	units	specifications				
pressure medium		gases or dilute fluids compatible with the material of wetted parts				
	barG	0~16, ~25, ~40, ~60, ~100, ~160, ~250, ~400, ~600, ~1000				
pressure range	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 _{sup})	Vdc	15,, 36				
response time (1090%)	ms	<1				
load resistance for current loop	Ω	≤(Vsup-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.

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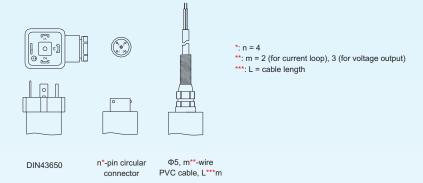
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^{*:} NA = not available or not applicable

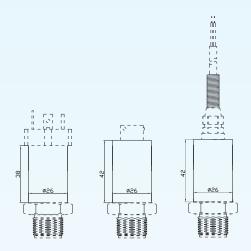


Dimensions

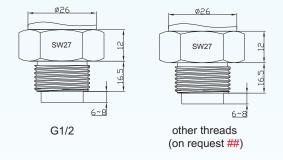
electrical interface#



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.

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Ordering Information

position	(pos.) 1:	model								
132F										
	pos. 2: r	anges and	d types							
	16 bar, G 25 bar, G 40 bar, G 60 bar, G		100 bar, G 160 bar, G 250 bar, G 400 bar, G 600 bar, G		1000 bar, G: gauge					
		pos. 3: o	utput sigi							
		4~20 mA	0.5~4.5 V	(ratiometric	0.5~5 V 0.5~10 V					
			pos. 4: a	ccuracy						
			0.5 %fs							
				pos. 5: s	supply pov	wer				
				24 V (15,.	, 36 Vdc)	`	$p = 0.5 \sim 4.5$	5 V)		
						illing fluid				
					NA*. In ca	se of "NA",	pos.6 can b	e omitted fro	m the order	ring code.
						pos. 7: r	naterial (\	wetted par	ts)	
						17-4PH: 1	7-4PH stair	nless steel		
							pos. 8: ı	mechanica	l interfac	е
							G1/2	others: ref	er to the dra	awings of mechanical interface
								pos. 9: e	lectrical i	nterface
								For cable	For available connections, refer to drawings of electrical interfactor cable, code = diameter(Φ)/number of conductors/cable jacker/cable length 5.7/4/PVC/L** = Φ5.7 mm,4-conductors shielded, PVC, L m	
									pos. 10:	environment protection
									IP 65 IP 66	
									00	pos. 11: customized spec's
										When any customized spec's are required, the customer needs to add "C" as the last parameter in the ordering code, and specifies the wished spec's on his order clearly.
										The customized spec's needs to be confirmed in advance by BCM's sales representative.
										Code "C" can be omitted if no customized spec's are required.
pos.1	pos. 2	pos. 3	pos. 4	pos. 5	pos. 6	pos. 7	pos. 8	pos. 9	pos. 10	pos. 11

^{*:} NA = not available or not applicable;

example: 132F-160barG-4/20mA-0.5%fs-17-4PH-G1/2-DIN43650-IP65-C



ISO9001 Certified Company

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^{**:} L = cable length. This value is a customized value.