Model 132C Ceramic Pressure Transmitters with Flush Diaphragm



Description

The 132C is a general-purpose pressure transmitter base on the BCM ceramic pressure sensor. The 132C features a flush diaphragm process connection and is specially designed for measurement of viscous fluids or media containing solids.

The 131C consists of a ceramic diaphragm, stainless steel or PVDF wetted part, and stainless steel housing. With numerous options of process connection and electrical interface, the model can be fitted into most common systems. Available pressure reference includes gauge, absolute, and sealed gauge.

By selecting proper electrical interface, the 132C is able to reach the environmental protection rating up to IP67.

Due to its compact and rugged design, this model is suitable for applications of processing and control operations such as hydraulics, pneumatics, test equipment, liquid level measurement, compressor and pump control, etc.



Features

- high chemical resistance
- measuring ranges: 1, ..., 100 bar
- flush diaphragm
- selectable output:
 - 4~20 mA (standard), 0.5~4.5 V ratiometric and others.
- wide choice of process connection and electrical interface
- protection rating up to IP67

Applications

- chemical industry
- medical instrument
- · hydraulics and pneumatics
- liquid level measurement
- process control

BCM SENSOR TECHNOLOGIES BVBA

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Technical data

Parameters	Units	Specifications				
pressure medium		scous fluid or fluid with particles compatible with the material of wetted parts				
	barG	0~1, ~2.5, ~4, ~6, ~10, ~16, ~25, ~40, ~60, ~100				
pressure range	barA	NA*				
	barSG	NA				
proof pressure	%fs	200				
burst pressure	%fs	300				
output signal		4~20 mA (standard), 0.5~4.5 V (ratiometric), 0.5~5 V, 0.5~10 V				
accuracy	%fs	$\leq \pm 0.5$				
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	≤ (V _{sup} -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	-20 ~ +85				
temp. coefficient of span	%fso/°C	$\leq \pm 0.03$				
temp. coefficient of zero	%fso/°C	$\leq \pm 0.03$				
vibration resistance (20,, 2000 Hz)	g	10				
seal (O-ring)		fluorine rubber				
transmission fluid		NA				
material of diaphragm		ceramic (96% Al2O3)				
material of wetted parts		316L SS (standard), PVDF				
material of electronics housing		304 SS				
mechanical interface		G3/4, others refer to the drawings of mechanical interface				
electrical interface		refer to the drawings of electrical interface				
environment protection	IP rating	IP65, IP66				
unit weight	g	~ 300				

*: NA = not available or not applicable

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

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DIN43650



Dimensions

electrical interface#



n*-pin circular

connector

Φ5. m**-wire

PVC cable, L***m

*: n = 4 **: m = 2 (for current loop), 3 (for voltage output) ***: L = cable length

electronics housing (case)



mechanical interface#



#: The mechanical interfaces and the electrical interfaces listed below can be combined freely. ##: Other types of interfaces, which is equivalent or larger than G3/4, are available on request and to be confirmed in case of order.

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Ordering Information

pos. 2	: ranges ar	nd types										
1 bar		10 bar, G		100 bar, 0	G	G: gauge	pressure					
1.6 bar		16 bar, G										
2.5 bar		25 bar, G										
4 bar		40 bar, G 60 bar, G										
o bar		· · · · ·	1									
	-	pos. 3: output signal 4~20 mA (standard) 0.5~4.5 V (ratiometric) 0.5~5 V 0.5~10 V pos. 4: accuracy										
	4~20 mA											
		0.5%fs										
			-	pos. 5: supply power								
			24 V (15,	5,, 36 Vdc) 5 V (for o/p = 0.5~4.5 V) pos. 6: filling fluid								
				-		"NA", pos.6 can be omitted from the ordering code.						
			pos. 7: material (wetted parts) 316L: 316L stainless steel									
					PVDF: po	PVDF: polyvinylidene fluoride pos. 8: mechanical interface						
						G3/4	others: refer to drawings of mechanical interface					
							pos. 9: electrical interface For available connections, refer to drawings of electrical interface For cable, code = diameter(Φ)/number of conductors/cable jacke /cable length					
							5.7/4/PV	$C/L^{**} = \Phi 5.7 \text{ mm},4\text{-conductors shielded, PVC, L m}$				
								pos. 10:	environment protection			
								IP65 IP66				
									pos. 11: customized spec's			
									"(*)" is necessary only if any customize parameter is required, otherwise it neglectable.			
				pos. 6	pos. 7		pos. 9	pos. 10	pos. 11			

*: NA = not available or not applicable;

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

example: 132C-16barG-4/20mA-0.5%fs-PVDF-G3/4-DIN43650-IP65



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