

Model 157M Silicon Capacitive Differential Pressure Modules



Made of silicon capacitive technology by means of MEMS, 157M silicon capacitive differential pressure modules are in mass production. With the characteristics of all stainless steel housing, 316L isolating diaphragm and standard assembly ports, reliability and stability at measuring the differential pressure of liquids and gases. 157M modules are key elements to produce differential pressure transmitters, which are widely used in oil chemical industry, water-electricity, metallurgy etc.

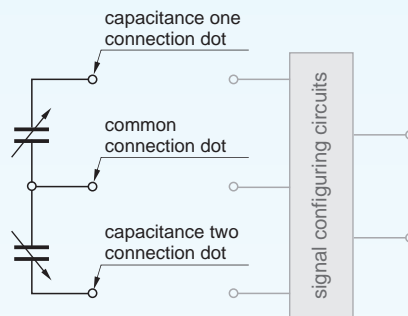
The measuring range of 157M module is from 0~60 mbar to 0~5000 mbar, with the high accuracy of 0.25%fs (fs = full scale); while the system pressure is up to 100 bar.



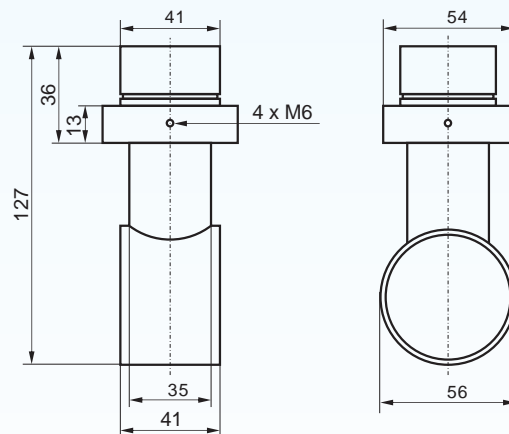
Features:

- high system pressure up to 100 bar
- stainless steel housing, 316L isolating diaphragm
- high accuracy of 0.25%fs
- solid, reliability and stability
- wide suitability and easy assembly
- operating temperature range of -40 ~ +85°C

Electrical connections:



Dimensions:



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Model 157M

Silicon Capacitive Differential Pressure Modules



Specifications:

pressure medium		gases or dilute-liquids, including the oil chemical media, which are compatible to the diaphragm and flange materials.	
measuring ranges	mbar	0~60	0~320, 0~1300, 0~5000
differential overload pressure	bar	32	100
system pressure	bar	32	100
basic capacitance	pF	50 ± 10	
capacitance output signal	pF	≥ 10 ± 2	
capacitance zero offset	pF	≤ 5	
configured output signal*	mA	4~20 (2-wire)	
accuracy	%FS	± 0.25	
hysteresis	%FS	± 0.05	
system pressure effect	%FS	± 0.5	
power supply (for current loop)	Vdc	24 (recommended), 12, ..., 32	
long-term stability	%FS/year	± 0.1, ± 0.2 (standard)	
fatigue time	cycles	10 ⁸	
load resistance (for current loop)	Ω	250~1000	
insulation resistance	MO	200 @ 100 Vdc	
storage temperature range	°C	-40 ~ +90	
operating temperature range	°C	-30 ~ +80 (standard); -40 ~ +85	
temperature coefficient of span	%FS/°C	± 0.01, ± 0.025 (standard)	± 0.005, ± 0.01 (standard)
temperature coefficient of zero	%FS/°C	± 0.01, ± 0.025 (standard)	± 0.005, ± 0.01 (standard)
electrical interface		3-pin connector (capacitance output signal); 2-wire (4~20 mA output signal)	
diaphragm material		316L SS (standard), option: hastelloy-C, monel	
pressure port material		316 SS	
housing material		316 SS	
unit weight	gram	1300	

*:157M modules can be configured to 4~20 mA output signal with electronic circuitry.
The listed specifications are subject to change without prior notice.

How to order: model - range - output - accuracy - system pressure & effect - temperature & effect - flanges - customized requests (if any)
ordering code example: 157M-0~60mbar-4~20mA-0.25%fs-32bar, 0.5%fs-(-30~+80),0.25%fs-need flanges



BCM SENSOR TECHNOLOGIES BVBA

ISO9001 Certified Company

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