

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.

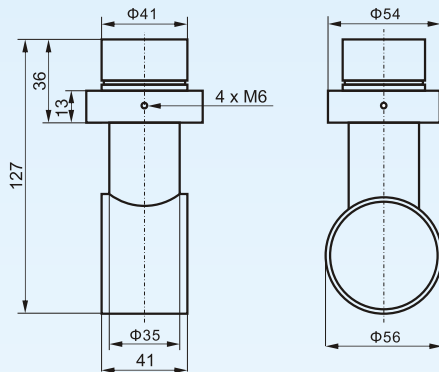
The measuring range of 157M module is from 0~6 kPa to 0~500 kPa, with the high accuracy up to 0.1%fso (fso = full scale output); while the system pressure measurement up to 100 bar, with the low system pressure effect down to 0.1%fso, and wide operating temperature range of -40 ~ +85 °C.



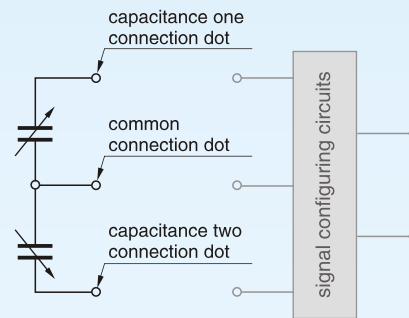
Features:

- high system pressure up to 100 bar
- stainless steel housing, 316L isolating diaphragm
- high accuracy of 0.1%fso, 0.25%fso
- solid, reliability and stability
- wide suitability and easy assembly
- operating temperature range of -40 ~ +85°C

Dimensions:



Electrical connections:



Specifications:

pressure ranges	kPa,D	0~6	0~32, 0~130, 0~500
overload pressure	bar	32, 100	100
system pressure	bar	32, 100	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)	
supply voltage (for mA output signal)	Vdc	12~32	
load resistance (for mA output signal)	Ω	250~1000	
combined error	%fso	0.1; 0.25 (standard)	
system pressure effect	%fso	0.1%/32 bar; 0.1%/100 bar; 0.25%/100 bar	0.1%/100 bar; 0.25%/100 bar
temperature coefficient of ZERO	%fso/10°C	0,1; 0.25 (standard)	0,05; 0.1(standard)
temperature coefficient of SPAN	%fso/10°C	0,1; 0.25 (standard)	0,05; 0.1(standard)
long-term stability	%fso/year	0.1; 0.2 (standard)	
fatigue life per circle		10 ⁻⁸	
operating temperature range	°C	-30 ~ +80 (standard); -40 ~ +85	
storage temperature range	°C	-40 ~ +90	
insulation resistance	MΩ	200 @ 100 Vdc	
electrical connection		3-pin connector (capacitance output signal); 2-wire (4~20 mA output signal)	

*: 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 & type - output - accuracy - system pressure & effect - temperature & effect - flanges - customer specific requests
ordering code example: 157M - 0~6 kPa - 4~20 mA - 0.1%fso - 32 bar, 0.1%fso - -30 ~ +80, 0.25%fso - need flanges - no specific requests

BCM SENSOR TECHNOLOGIES BVBA