

# Model 160M Silicon Piezoresistive Differential Pressure Modules with System Pressure Measurement Function



**SENSOR**

Made of silicon piezoresistive technology by means of MEMS, 160M differential pressure modules are in mass production. The module has integrated functions to measure the differential pressure, system pressure and media temperature at same time. With the characteristics of all stainless steel housing, 316L isolating diaphragm and standard assembly ports, reliability and stability at measuring pressure of liquids and gases, 160M modules are key element to produce differential pressure transmitters which are widely used in oil chemical industry, electric station, metallurgy and many other fields.

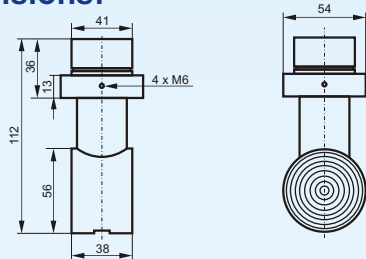
The differential pressure measuring range of 160M module is from 0~0.4 bar to 0~10 bar. The measuring accuracy is up to 0.25 %fso (fso = full scale output); The system pressure can be as large as 160 bar, while the system pressure effect of is kept low at 0.5 %fso/100bar for differential pressure measurement. This module can be used to measure the media temperature ranges from -30 to +80 °C.

## Features:

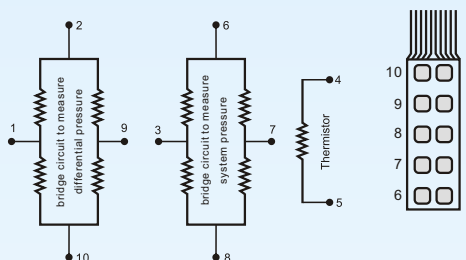


- integrated functions for measuring the differential pressure, the system pressure and the media temperature
- stainless steel housing, 316L isolating diaphragm
- high accuracy of 0.25 %fso; (0.5 %fso for 0~0.4 bar)
- solid, reliability and stability
- constant voltage 5V or constant current 0.5~1.5 mA excitation
- temperature measurement range of -30 ~ +80 °C.

## Dimensions:



## Electrical connection:



## Specifications:

pressure ranges	differential pressure (bar)	0~0.4	0~1, 0~4, 0~10
	system pressure (bar)	0~50	0~160
overload pressure	%fs	200	
output signal	mV	≥50 (both diff. & system pressure bridge)	
zero offset voltage	mV	≤20 (diff. bridge); ≤30 (system bridge)	
excitation	voltage/current	4~6 V constant voltage, or 0.5~1.5 mA constant current	
accuracy (for diff. & system pressure)	%fso	0.25 (standard)*, 0.5	
system pressure effect to diff. pressure	%fso/100 bar	0.5, 1.0(standard)	
bridge resistance	kΩ	5±20% (diff. pressure bridge); 10±20% (system pressure bridge)	
insulation resistance	MΩ	100 @ 100 Vdc	
resistance of thermistor	kΩ	25±20%, >15 Ω/°C.	
media temperature range	°C	-30 ~ +80	
storage temperature range	°C	-40 ~ +90	
temperature coefficient of ZERO	%fso/10°C	± 1	
temperature coefficient of SPAN	%fso/10°C	± 0.5	
long-term stability	%fso/year	0.1; 0.2 (standard)	
Fatigue life	circle	10 <sup>8</sup>	

The listed specifications are subject to change without prior notice.

\*: for differential pressure range of 0~0.4 bar, the accuracy is 0.5 %fso.

## How to order:

model-diff. pressure range,accuracy-system pressure range,accuracy, system pressure effect to diff.-excitation - need flanges or no - customer specific requests

ordering code example: 160M-0~0.4bar,0.25%fso-100bar,0.25%fso,0.5%fso-current-need flanges

**BCM SENSOR TECHNOLOGIES BVBA**



ISO9001 Certified Company