Model 160M Silicon Piezoresistive Differential Pressure Modules

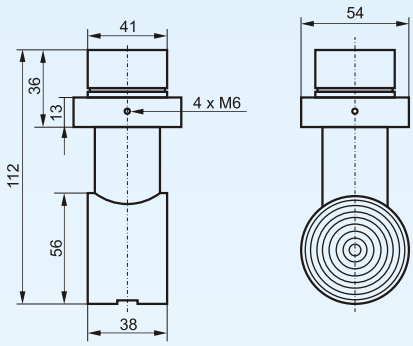
Made of silicon piezoresistive technology by means of MEMS, 160M differential pressure modules are in mass production. The module is multi-functions to measure the differential pressure, system pressure and media temperature at same time. With the characteristics of all stainless steel housing, 316L 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, water-electricity, metallurgy etc.

The differential pressure measuring range of 160M module is from 0~40 kPa to 0~1000 kPa, with the high accuracy up to 0.25%fso (fso = full scale output); while the system pressure measurement up to 160 bar, with the low system pressure effect of 0.5%fso/100bar to differential pressure; and the wide temperature measurement of -30 ~ +80 °C.

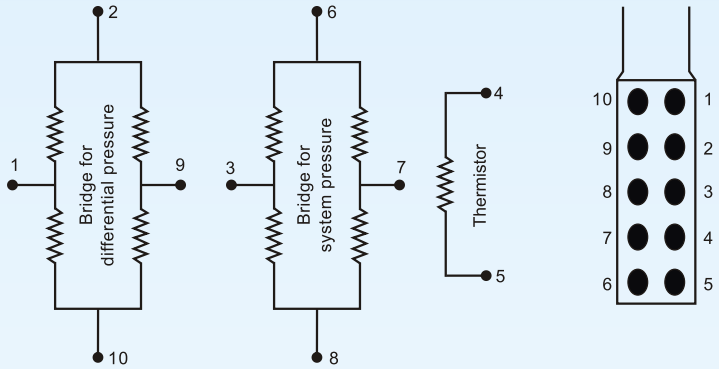
Features:

- high system pressure up to 160 bar
- stainless steel housing, 316L isolating diaphragm
- high accuracy of 0.25%fso, 0.5%fso
- 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 connections:



Specifications:

pressure ranges & type	kPa,D	0~40, 0~100, 0~400, 0~1000
	barA	0~100, 0~160
overload pressure (diff.)	%fs	200
output signal	mV	⩾50 (both diff. & system pressure bridge)
zero offset voltage	mV	⩽20 (diff. bridge); ⩽30 (system bridge);
combined error	%fso	0.25 (standard); 0.5 for both diff. & system pressure
system pressure effect to diff. pressure	%fso	0.5%/100 bar; 1.0%/100 bar
temperature coefficient of ZERO	%fso/10°C	1
temperature coefficient of SPAN	%fso/10°C	0.5
excitation	voltage/current	5V constant voltage, or 0.5~1.5 mA constant current
bridge resistance	kΩ	5 ± 20% (diff. pressure bridge); 10 ± 20% (system pressure bridge)
long-term stability	%fso/year	0.25
fatigue life per circle		10^{-8}
compensated temperature range	°C	0 ~ 70
media temperature range	°C	-30 ~ +80
storage temperature range	°C	-40 ~ +90
insulation resistance	MΩ	100 @ 100 Vdc
resistance of thermistor	kΩ	25 ± 20%, >15 Ω/°C.

The listed specifications are subject to change without prior notice.

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 - 0~40 kPa, 0.25%fso - 100 bar, 0.25%fso, 0.5%fso - current - need flanges - no specific requests

BCM SENSOR TECHNOLOGIES BVBA

Industriepark, Brechtsebaan 2
B-2900 Schoten - Antwerpen, BELGIUM

Tel.: +32-3-238 6469
Fax: +32-3-238 4171

website: www.bcmsensor.com
email: sales@bcmsensor.com