

Model 615F Semi-Flush Diaphragm Pressure Transducers and Transmitters



615F pressure transducers and transmitters are made from stainless steel, the transducers/transmitters possess flush diaphragm at the bottom of openly cylinder cavity facing the pressure media, able to measure pressures of gases, and diluted liquids, if installed the sensor horizontally or some sloped down, the sensor can be used to measure the viscous fluids or fluids with small grains. Because of its openly cylinder cavity on the front of sensor, the sensors can be used in non- food and beverage industries for pressure media in melt state (or very thick pressure media).

Based on BCM advanced metal foil strain gauge technology, the sensing elements of these 615F transducers and transmitters are BCM strain gauges, these strain gauges form a Wheatstone bridge on back of the diaphragm to sensing the deformation of the diaphragm, this deformation results from the pressure which act vertically to the diaphragm.

Model 615F pressure transducers and transmitters are mostly used as gauge pressure type, feature a wide measuring range from 0~16 bar to 0~1000 bar, the front male thread for pressure port is G1/2 or M20x1.5, with an accuracy up to 0.25%fso (fso = full scale output). Though the compensated temperature range is -10 ~ +60°C, the sensors can be used in the temperature range of -20 to 125°C.

Output signal of 615F pressure transducers are wheatstone bridge output signal in millivoltage, while 615F pressure transmitters have amplified signal, such as 4~20 mA or 0.5~10 Vdc. 80% shunt calibration signal is available for all 615F series products on request.

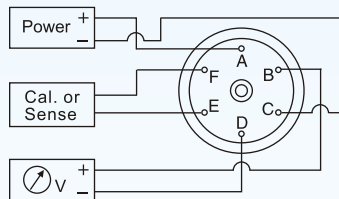
Features:

- pressure ranges: 0~16, ..., 0~1000 bar, gauge pressure
- output signal: 1mV/V ~ 2mV/V for transducers
4~20 mA, or 0.5~5 V or 0.5~10 V for transmitters
- measuring accuracy: 0.25%fso, 0.5%fso (standard)
- compensated temperature ranges: -10 ~ +60°C
- materials: 316L (pressure membrane); 316 (housing)
- construction: integrated construction, rigid and robust
- housing protection: IP 65 (connector); IP 66 (direct cable)
- internal shunt calibration: 80%fso, available on request

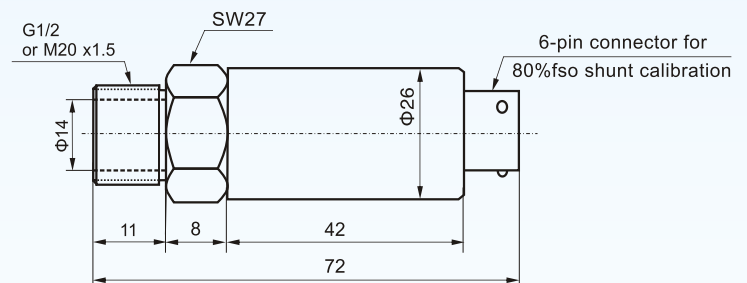


Electric connection:

(example of 6-pin connector for wheatstone bridge output signal with 80% self calibration function)



Dimensions:



BCM SENSOR TECHNOLOGIES BVBA

Model 615F Semi-Flush Diaphragm Pressure Transducers and Transmitters



Specifications:

pressure media		gases, diluted liquids, viscous fluids, compatible to 316L
measuring ranges & type	barG	0~16, 0~25, 0~40, 0~65, 0~100, 0~160, 0~250, 0~400, 0~650, 0~1000
overload pressure	%fs	150
output signal	transducers	1mV/V (range 0~16 bar), 1.5mV/V (range ≤ 0~25 bar), 2mV/V (others)
	transmitters	4~20 mA (2-wire, standard), 0,5~5 V (3-wire) or 0.5~10 V (3-wire)
combined error	%fso	0.25 (when used in a small temperature range), 0.5 (standard)
zero offset	%fso	±1
input & output resistance	transducers	350Ω±10% (standard); 1000Ω±10%
load resistance	transmitters	250~1150 Ω (for 4~20 mA output signal)
		> 5000Ω (for 0.5~5 V or 0.5~10 V output signal)
insulation resistance	MΩ	> 500 @ 100 Vdc
supply voltage	transducers	10 V (max. 12V)
	transmitters	12~36 V
temperature coefficient of ZERO	%fso/10°C	0.5
temperature coefficient of SPAN	%fso/10°C	0.5
long-term stability	%fso/year	< 0.15
compensated temperature range	°C	-10 ~ +60
media temperature range	°C	-20 ~ +125
internal shunt calibration	%fso	80 (available on request, with 6-pin connector or 6-core cable)
process connection	external thread	G1/2 (standard), M20x1.5
electrical connection	connector/cable	4-pin connector (standard), 4-core PVC shielded cable (1.5 meter length)
weight	gram	110

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

How to order: model - range - output - accuracy - process connection - electric connection - calibration - customer specific requests
ordering code example: 615F - 0~160 bar - 4~20mA - 0.5%fso - G1/2 - 6 pin connector - need calibration - see code C0116 requests.

BCM SENSOR TECHNOLOGIES BVBA