

# Model 616F

## Flush Diaphragm Pressure Transducers and Transmitters



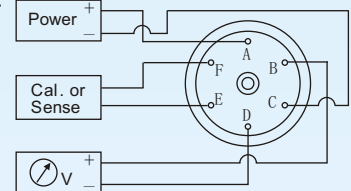
Based on BCM metal-foil strain gauge technology, model 616F pressure transducers and transmitters are designed for gauge pressure (relative pressure) application in food- and beverage-industries, or gauge pressure application for pressure media in melt state (or very thick pressure media). Made from 316L stainless steel with rigid and robust construction, 616F series pressure transducers and transmitters are suitable for application in harsh environment.

The 616F pressure transducers are made of Wheatstone bridge circuit output signal in mV, while 616F pressure transmitters have amplified signal, such as 4~20 mA or 0.5~10 Vdc. With a measuring accuracy 0.5%fso (fso = full scale output), both 616F pressure transducers and transmitters possess a low temperature coefficients (less than 0.05%fso/°C) for both Zero and Span in the compensated temperature range -10 ~ +60 °C. The 80% shunt calibration signal is available for all 616F series products on request.



### Electric connection:

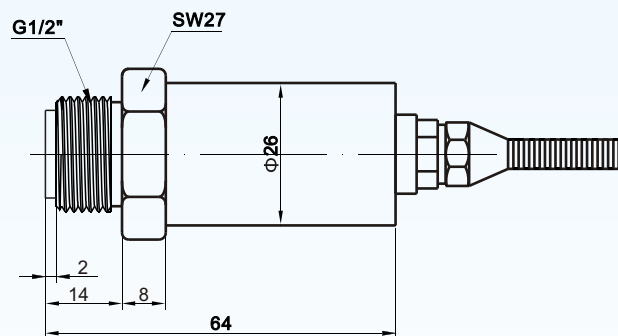
(example of 6-pin connector for wheatstone bridge output signal with 80% self calibration function)



### 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: 0.05%fso, 0.1%fso, 0.25%fso (standard), 0.5%fso
- compensated temperature ranges: -10 ~ +60 °C
- materials: 17-4PH SS (pressure membrane); 316 SS (housing)
- construction: integrated construction, rigid and robust
- housing protection: IP 65 (connector); IP 66 (direct cable)
- internal shunt calibration: 80%fso, available on request

### Dimensions:



BCM SENSOR TECHNOLOGIES BVBA

# Model 616F

## Flush Diaphragm Pressure Transducers and Transmitters



### Specifications:

pressure media		viscous fluid or fluid with grains, compatible to 316L
measuring ranges & type	barG	0~16, 0~25, 0~40, 0~60, 0~100, 0~160, 0~250, 0~400, 0~600, 0~1000
overload pressure	%fs	150
output signal	transducers	1mV/V (range 0~16 bar), 1.5mV/V (range 0~25 bar), 2mV/V (other ranges)
	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 (standard) , 0.5
zero offset	%fso	±1
input & output resistance	transducers	350Ω±10% (standatd); 1000Ω±10% (for wheatstone bridge output signal)
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/°C	0.05
temperature coefficient of SPAN	%FSO/°C	0.05
long-term stability	%FSO/year	< 0.15
compensated temperature range	°C	-10 ~ +60
media temperature range	°C	-20 ~ +85
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, other thread available on request
electrical connection	connector/cable	4-pin connector (standard), 4-core PVC shielded cable (1.5 meter length)
weight	gram	96

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: 616F - 0~160 bar - 4~20mA - 0.5%fso - G1/2 - 6 pin connector - 80%FS shunt calibration



**BCM SENSOR TECHNOLOGIES BVBA**

ISO9001 Certified Company

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

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

website: [www.bcmsensor.com](http://www.bcmsensor.com)  
 email: [sales@bcmsensor.com](mailto:sales@bcmsensor.com)