

PROCESS PRESSURE TRANSMITTER – BF2



THORNE &
DERRICK
INTERNATIONAL

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RELIABLE MEASUREMENT OF PROCESS PRESSURE

- Compact and robust construction
- Piezo-resistive steel sensor
- Zero and range adjustable with internal potentiometer
- RS-485
- Compatible to software SW21
- IP protection IP63/IP65



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MEASUREMENT SOLUTIONS

TECHNICAL INFORMATION

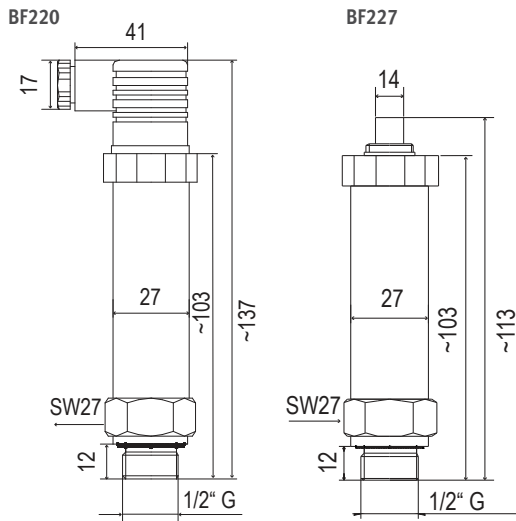
Measurement of Process Pressure

Pressure transmitters measure the pressure of neutral gases and nitrogen in piping and closed containers. The pressure of the medium being measured acts on a pressure cell, which converts the pressure into an electronic signal.

Field of Application

The process pressure transmitters are ideal for measurement of absolute pressure in applications with fast temperature changes and in compressed air, HVAC and pneumatic systems.

Dimensions (mm)



Terminal Assignment / Connection Diagram

BF220 2-Wire			
Hirschman Plug (DIN 43650)			
Diagram	PIN	Description	Wire Color (Internal)
	V+	1 Power supply +	Black
	Out-	2 Analog output -	Red
	nc	3 Not connected	
	PE	Ground	

BF227 2-Wire/RS-485			
7-Pin Plug			
Diagram	PIN	Description	Wire Color (Internal)
	V+	1 Power supply +	Black
	Out-	2 Analog output -	Red
	RS-485B	5 Digital output +	White
	RS-485A	4 Digital input -	Yellow

Technical Data	BF220	BF227
Device type	Process pressure transmitter	
Parameters	Absolute pressure	
Housing material	Stainless steel (1.4878)	
Diaphragm	Stainless steel (1.4404)	
IP protection	IP65	IP63
Mounting position	90° to pressure pipe (max. 30° inclination)	
Dimensions	137 x 41 x 27 mm	113 x 14 x 27 mm
Weight	Approx. 220 g	Approx. 235 g
Pressure connection	G 1/2" male thread	
Seal ring	Viton	
Electrical connections	Hirschmann (DIN 43650)	7-pin
Power supply	15...30 VDC	10...28 VDC
Range of application	-30...80 °C	-40...80 °C
Storage conditions	-30...80 °C	-40...80 °C
CE / EMC compatibility	EMC Directive 2004/108/EC, EN 61326	

Absolute Pressure Measurement		
Measurement principle	Piezo-resistive steel sensor	
Measurement range	0...10 bar	
Pressure resistance	15 bar	
Medium	Air and non-aggressive gases	
Accuracy at 20°C ±2K (linearity, hysteresis, repeatability, deviation of start and end value of the measurement range)	±0.25 % FS max.	±0.25 % FS max.
TK zero	±0.03 %FS/K	
TK range	±0.03 %FS/K	
Long-term stability	±0.2 % full scale / year	
Outputs		
Analog	4...20 mA	4...20 mA
Digital	-	RS-485
Permissible load	<750 Ω	<900 Ω

Would you like more information? You can find a complete, up-to-date overview of our probes on the internet at www.rotronic.com.

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