

PROCESS PRESSURE TRANSMITTER – BF2

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



rotronic

TECHNICAL INFORMATION

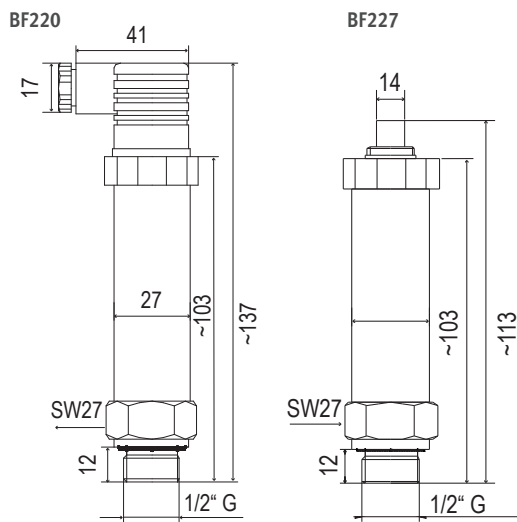
Measurement of Process Pressure

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) | | | |
| | PIN | Description | Wire Color (Internal) |
| | V+ | Power supply + | Black |
| | Out - | Analog output - | Red |
| | nc | Not connected | |
| | PE | Ground | |

| BF227 2-Wire/RS-485 | | | |
|---------------------|---------|------------------|-----------------------|
| 7-Pin Plug | | | |
| | PIN | Description | Wire Color (Internal) |
| | V+ | Power supply + | Black |
| | Out - | Analog output - | Red |
| | RS-485B | Digital output + | White |
| | RS-485A | 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 ½” 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 ±2 K (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 |