

DW 116 FB

MICRO-CONSUMPTION DIGITAL PRESSURE TRANSMITTER FAMILY

The DW 116 FB is a front-membrane piezoresistive pressure transmitter, which makes high-resolution measurement and accuracy possible. The device is a pressure transmitter with a field bus connection and low energy consumption that can be used in a universal wide pressure range.

The compact explosion-proof design makes it an ideal device for applications in gas industrial systems.



MAIN PROPERTIES

- Digital communication for precise measurements
- toleration of large temperature fluctuations
- hermetically sealed sensor electronics protected from external effects
- high accuracy, long-term stability, no hysteresis
- 0.1 bar ... 200 bar pressure range (covered with multiple sensor types)
- ultra low energy consumption optimized for battery-operated systems
- built-in temperature correction

CHARACTERISTICS

- RS 485 bus system half duplex communication
- G 1/4" technological connection
- ± 0,15 % FS accuracy class
- 16-bit resolution
- IP 67 electric protection
- Absolute and relative types
- 0.1 bar - 200 bar pressure measurement range
- 5 VDC feed voltage

OPERATION

The pressure transmitter can be used in two different modes, the individual modes can be chosen.

In the case of Mode 1, the feeding of the pressure transmitter is done, but it is waiting in sleep mode. If a data request message is received from the field controller, the transmitter is awakened, it performs the measurement, transmits the measured value **through the RS 485 line, and returns to sleep mode.**

In the case of Mode 2, the feeding of the pressure transmitter is done and it is waiting in sleep mode. It is awakened at preset intervals, it performs the measurement, transmits it to the controller, and returns to sleep mode. The process is repeated regularly. This mode provides greater autonomy to the field system, but is higher at the same time.

MODEL RANGE

The DW 116 FB pressure transmitter is available in different pressure ranges, basically 3 groups are differentiated, low, intermediate, and high pressure.

Absolute pressure transmitters: 3...200 bar abs.
Relative pressure transmitters: 0.1...30 bar rel.

APPLICABILITY

The DW 116 FB is typically applicable for gas industrial technological and accounting measurement.

Its advantages prevail where in addition to high accuracy, requirements also include ultra low consumption and explosion-proof design.

