



Food and Beverage Industry

Features

- Measuring ranges from 1 bar to 600 bar
- Absolute, gauge and sealed gauge
- Accuracy: $\pm 0.25\%$ FSO or 0.5% FSO
- Calibrated and temperature compensated
- Flush diaphragm construction
- Piezoresistive pressure sensor design
- Variety of Pressure & Electrical connections
- Output 4...20mA, 0...10V, 0...5V and others

Product Overview

RIB300 is made from high-quality Silicon piezoresistive chip. All process connections of the flush pressure transmitter are made of stainless steel, fully welded and isolate the process medium from the pressure measuring instrument via a positive seal.

The RIB300 is precision engineered to fit food, pharmaceutical and chemical liquid pressure measurement.

A wide range of process connection and electrical connection options are available to meet almost requirement.

Applications

- Process control systems
- Food and beverage
- Medical
- Papermaking

Standard Pressure Ranges

| NOMINAL PRESSURE | GAUGE | SEALED GAUGE | ABSOLUTE |
|------------------|-------|--------------|----------|
| 0...1 BAR | • | | • |
| 0...1,6 BAR | • | | • |
| 0...2,5 BAR | • | | • |
| 0...4 BAR | • | | • |
| 0...6 BAR | • | | • |
| 0...10 BAR | • | • | • |
| 0...16 BAR | • | • | • |
| 0...25 BAR | • | • | |
| 0...60 BAR | | • | |
| 0... 100 BAR | | • | |
| SPECIAL RANGE | | | |

Other pressure ranges available. Please consult the factory.

Performance Specification

Performance Specification

General

| | |
|----------------|-----------|
| Pressure Range | 0÷600 bar |
| Over pressure | 1.5xFS |

Environmental

| | |
|-------------------------------|--|
| Operating Temperature Range | -20÷+85°C (standard), 20÷+100°C on request |
| Compensated Temperature Range | -10÷+70°C |
| Storage Temperature Range | -40÷+125°C |
| Vibration | 10g [20...2000 Hz] |
| Shock | 100g [10ms] |
| Cycles | 10x10 ⁵ [cycles] |

Electrical @25°C(77°F)

| | | | | | |
|-----------------------|---|------------|------------|------------|----------------------------|
| Output signal | 4...20mA | 0...5Vdc | 1...5Vdc | 0...10Vdc | 0,5...4,5Vdc [ratiometric] |
| Power supply (Vs) | 12...36Vdc | 12...36Vdc | 12...36Vdc | 15...36Vdc | 5Vdc |
| Load Resistance | <(Vs-12)/0.02A (For current output), >10kΩ (For voltage output) | | | | |
| Insulation Resistance | 100MΩ@50Vdc | | | | |

Physical Specification

| | |
|---------------------|--|
| Media Compatibility | All media compatible with 316L stainless steel |
| Housing | 304 Stainless Steel |
| Diaphragm | 316L Stainless Steel |
| Seal ring | Viton or NBR |
| Oil filling | Silicone Oil |
| Protection | IP65 (Standard) |
| Net Weight | Approx. 285 g |

| Parameter | Minimum | Typical | Maximum | Unit | notes |
|---------------------|---------|---------|---------|-----------|-------|
| Accuracy | 0.1 | 0.25 | 0.5 | %FSO | 1,2 |
| Temp Coeff-Zero | | ±1.5 | ±2 | %FSO | 3 |
| Temp Coeff-Span | | ±1.5 | ±2 | %FSO | 3 |
| Long-Term Stability | | ±0.2 | ±0.3 | %FSO/year | 1 |

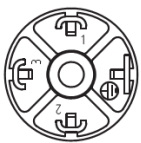
Notes

- All values measured at 25°C(77°F)
- Including non-linearity, hysteresis and repeatability.
- 10°C to 70°C(14°F to 158°F) with reference to 25°C (77°F).

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

Connection Diagrams

Connector DIN43650



| | 2 wire [current] | 3 wire [voltage] |
|---------|------------------|------------------|
| Supply+ | 1 | 1 |
| Signal+ | 2 | 3 |
| Gnd | - | 2 |

Cable outlet



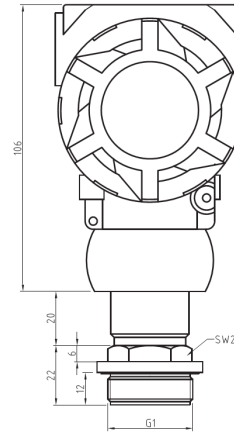
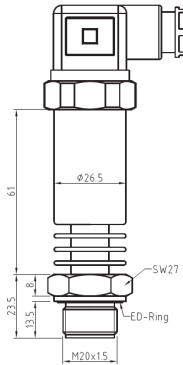
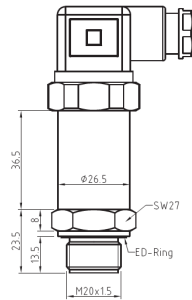
| | 2 wire [current] | 3 wire [voltage] |
|---------|------------------|------------------|
| Supply+ | red | red |
| Signal+ | black | green |
| Gnd | - | black |

Dimensions (in mm)

Connector DIN43650
Operating Temperature
Range -40 to +85°C

Connector DIN43650
Operating Temperature
Range -40 to +150°C

2088 housing
Operating Temperature
Range -40 to +85°C



RIB300 Ordering Information

| Option 1: Model | | | | | | | |
|---------------------------------|---|------------------|----|----|---|----|---|
| RIB300 | Flush Diaphragm Pressure Transmitter | | | | | | |
| Option 2: Pressure Range | | | | | | | |
| 0010 | 0...1 bar 0250 0...25 bar | | | | | | |
| 0016 | 0...1,6 bar 0400 0...40 bar | | | | | | |
| 0025 | 0...2,5 bar 0600 0...60 bar | | | | | | |
| 0040 | 0...4 bar 1000 0...100 bar | | | | | | |
| 0060 | 0...6 bar Cxxx Customized Range | | | | | | |
| 0100 | 0...10 bar | | | | | | |
| 0160 | 0...16 bar | | | | | | |
| Option 3: Pressure type | | | | | | | |
| G | Gauge | | | | | | |
| A | Absolute | | | | | | |
| S | Sealed Gauge | | | | | | |
| Option 4: Output Signal | | | | | | | |
| 42 | 4...20 mA | | | | | | |
| 05 | 0...5 Vdc | | | | | | |
| 15 | 1...5 Vdc | | | | | | |
| 10 | 0...10Vdc | | | | | | |
| 45 | 0,5...4,5 [Ratiometric] | | | | | | |
| Option 5: Accuracy | | | | | | | |
| 02 | 0.25% FSO | | | | | | |
| 05 | 0.50% FSO | | | | | | |
| Option 6: Electrical Connection | | | | | | | |
| D | Connector DIN43650, Operating Temperature Range: -40 to +85°C | | | | | | |
| H | Cable outlet with PVC-cable, lenght 1,5 m | | | | | | |
| M | M12x1,4 pin | | | | | | |
| - | - | | | | | | |
| Option7: Mechanical Connection | | | | | | | |
| M2 | M20x1.5(male) | N2 1/2 NPT(male) | | | | | |
| G2 | G1/2 (male) | P2 PT1/2 (male) | | | | | |
| G10 | G1 (male) | Nx Customizes | | | | | |
| RIB300 | 0010 | G | 42 | 02 | D | G2 | Examples of Ordering Code: RIB300-0010-G-42-02-D-G2 |