

M21-M31-M41-M61 Pressure gauges with electrical contacts

M21/M31 - Differential pressure

M41 - Relative pressure with strong overpressure

M61 - Pression Absolue

Gauges with bellows Ø 150 mm

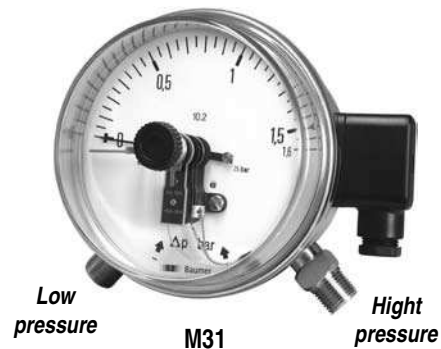
For corrosive fluids and atmospheres

Dry contacts (CES)

Electrical part conforms to Low Voltage Directive DBT 73/23/CE

Based upon the **MZ** (M21) - **MX** (M31) - **ME** (M41) - **MA** (M61) gauges of which they share all characteristics, they are fitted with electrical contact blocks allowing the following control functions:

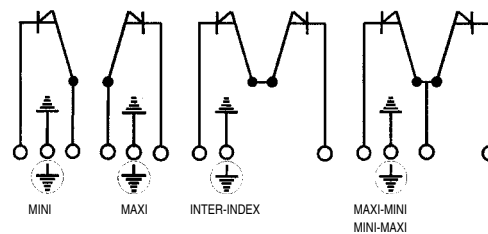
- single : min and max
- dual : min-max and max-min



Specifications (20°C)

| | |
|--|--|
| Measurement range | See table on next page |
| Accuracy | ± 3 % |
| Gauge working temperature | -20...70°C The gauge may be used on fluid temperatures up to 200°C providing that the gauge temperature does not exceed 70°C. |
| Protection rating | IP 65 according NF EN 60529. |
| Sensing element | Two 1.4404 (AISI 316L) stainless steel bellows. Balance effect by high tensile leaf spring; mechanical start and end-of-travel stops to withstand full static pressure. |
| Connections and parts in contact with process fluid | 1.4301 (AISI 304) Stainless steel. Thread: G 1/2 or 1/2 NPT. |
| Case and bezel ring | 1.4301 (AISI 304) Stainless steel. bayonet lock type. |
| Window | Transparent polycarbonate domed with watertight index adjustment knob. |
| Window gasket | Elastomer. |
| Movement | Stainless steel. |
| Dial | Aluminium alloy, rubber zero stop, black graduations and figures on white background.. |
| Pointer | Aluminium alloy, black painted. |
| Electrical connection | Terminal block. M20x1.5 cable gland Ø 7 a 13 mm cable. |

Block diagram showing the contact block control functions:



Characteristics of electrical contacts and relays AREB: see data sheet A21.33

Options

- Contacts material : palladium silver, gilded contacts
- Oxygen application **Code 0765**
- Special threads ≤ G 1/2 or 1/2 NPT.
- Restrictor screw **Code 0771**
- Index regulation by a protected system **Code 0758**

Ordering details - M21/M31/M41/M61

| | | Mxxxxxxxx | | | | | |
|--|--------------------|-----------|--|--|--|----|---|
| Family | 1 Digit | | | | | | |
| Pressure gauges | | M | | | | | |
| Type | 2 Digit | | | | | | |
| M21 | | 2 | | | | | |
| M31 | | 3 | | | | | |
| M41 | | 4 | | | | | |
| M61 | | 6 | | | | | |
| Type of contacts | 3 Digit | | | | | | |
| CES | | 1 | | | | | |
| Control functions | 4 Digit | | | | | | |
| Mini (4002) | | 1 | | | | | |
| Maxi (4001) | | 2 | | | | | |
| Inter-index open (4021) | | 3 | | | | | |
| Mini-maxi (4021) | | 4 | | | | | |
| Maxi-mini (4012) | | 7 | | | | | |
| Inter-index closed (4012) | | 8 | | | | | |
| Type of mounting and connection position* | 5 Digit | | | | | | |
| bottom connection, back flange | | A | | | | | |
| back connection, front flange (except M21) | | B | | | | | |
| bottom connection, front flange | | C | | | | | |
| bottom connection | | D | | | | | |
| back connection, back flange (except M21) | | E | | | | | |
| back connection (except M21) | | F | | | | | |
| * Option Stainless steel case and bezel ring 1.4404 (316L) | | | | | | | |
| change A with 1, B with 2, C with 3, D with 4, E with 5 and F with 6 | | | | | | | |
| Hydraulic connection | 6 Digit | | | | | | |
| G 1/4 | | 2 | | | | | |
| G1/2 | | 3 | | | | | |
| 1/4 NPT | | 5 | | | | | |
| 1/2 NPT | | 6 | | | | | |
| Unit of measurement | 7 Digit | | | | | | |
| bar | | B | | | | | |
| kPa | | D | | | | | |
| Measurement ranges | 8...9 Digit | | | | | | |
| See measurement ranges codified on tables (previous page) | | | | | | xx | |
| Static pressure or overpressure | 10 Digit | | | | | | |
| See static or overpressure scale on tables (previous page) | | | | | | | x |

