

# MEX5 - MEM5 Industrial Pressure Gauges DN 100

Corrosive atmospheres and fluids

Resistant to transient overpressure

Accuracy Class 1.0

Stainless steel sensing element (MEX)  
or monel (MEM)

Fully welded process connection

Sealed case can be filled with dampening fluid

Conform to EN 837-1 standard and Pressure Directive  
PED 97/23/CE

Approval Lloyd's Register

Pressure gauges intended for process industries such as chemical,  
petro-chemical, energy or gas industries.

These pressure gauges have been designed to satisfy requirements to operate  
in aggressive environments.



## Technical Data (20°C)

|                                             |                                                                                                                                                                                                                                              |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Measurement range</b>                    | <b>MEX</b> -1...0 to 0...1600 bar<br><b>MEM</b> -1... 0 to 0...600 bar                                                                                                                                                                       |
| <b>Working pressure</b><br>(-1 ... 600 bar) | Steady: 100% of full scale value<br>Fluctuating: 90% of full scale value<br>Short time: 130% of full scale value                                                                                                                             |
| (1000 ... 1600 bar)                         | Steady: 75% of full scale value<br>Short time: 100% of full scale value                                                                                                                                                                      |
| <b>Gauge working temperature</b>            | -20...70°C<br>The gauge may be used on fluid temperatures up to 200°C providing that the gauge temperature does not exceed 70°C.                                                                                                             |
| <b>Temperature error</b>                    | Additional error when temperature of the pressure element deviates from +20°C (68°F) ±0.4% for every 10°C (50°F) rising or falling. Percentage of span.                                                                                      |
| <b>Accuracy</b>                             | Class 1 (class 2.5 for 0.4 bar)                                                                                                                                                                                                              |
| <b>IP rating</b>                            | IP 65 (EN 60529)                                                                                                                                                                                                                             |
| <b>Case and bezel ring</b>                  | 1.4301 (AISI 304) st. steel, bayonet lock type. With blow-out disc at the top of the case.                                                                                                                                                   |
| <b>Connection</b>                           | <b>MEX</b> 1.4571 (316Ti) or 1.4404 (316L) st. steel, 22 mm square, G1/2 or 1/2NPT<br><b>MEM</b> Monel 400                                                                                                                                   |
| <b>Sensing element</b>                      | <b>MEX</b> P ≤ 2.5 bar and P ≥ 1000 bar: 1.4404 (316L) stainless steel, solid drawn tube.<br>2.5 < P < 1000 bar: 1.4571 (316Ti) st. steel, rolled welded tube.<br><b>MEM</b> Monel 400<br>Tube shape: < 60 bar : in C<br>≥ 60 bar : helicoil |
| <b>Movement</b>                             | Stainless steel with zero and overrange stops                                                                                                                                                                                                |
| <b>Window</b>                               | Glass, 4 mm thick                                                                                                                                                                                                                            |
| <b>Window gasket</b>                        | Elastomer                                                                                                                                                                                                                                    |
| <b>Dial</b>                                 | Aluminium alloy, black graduations and figures on white background.                                                                                                                                                                          |
| <b>Pointer</b>                              | Aluminium alloy, balanced, black painted.                                                                                                                                                                                                    |

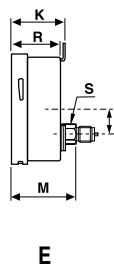
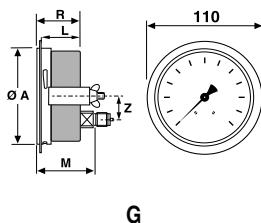
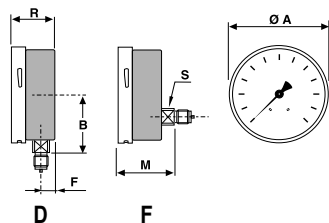
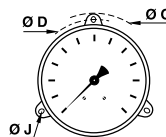
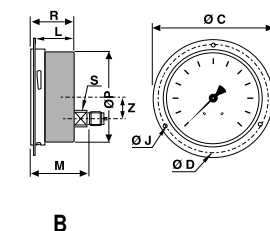
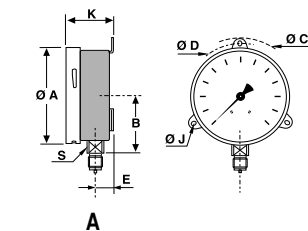
## Options

|                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supplementary blow-out back (30 mm dia). <b>Code 0760</b>                                                                                                                                                                                                                                                                                                                             |
| 1.4404 (AISI 316L) stainless steel sensing element with solid drawn tube. <b>Code 0816</b>                                                                                                                                                                                                                                                                                            |
| Window material : safety laminated glass <b>Code 0751</b> , polycarbonate <b>Code 0753</b> or polymethacrylate (plexiglass). <b>Code 0752</b>                                                                                                                                                                                                                                         |
| Micrometer adjustable pointer (P ≥ 1.6 bar). <b>Code 0678</b>                                                                                                                                                                                                                                                                                                                         |
| Oxygen application. <b>Code 0765</b>                                                                                                                                                                                                                                                                                                                                                  |
| Laboratory cleanliness <b>Code 0835</b> or nuclear cleanliness. <b>Code 0838</b>                                                                                                                                                                                                                                                                                                      |
| Overrange protection device:<br><b>RAS1</b> : accuracy Class 1 (≤ 600 bar). <b>Code 0191</b><br>Overrange between 1.2 and 3 times the scale ( <b>MEX</b> )<br>1.2 and 1.5 times the scale ( <b>MEM</b> )<br><b>RAS2</b> : accuracy Class 2 (≤ 1000 bar). <b>Code 0192</b><br>Overrange between 1.4 and 5 times the scale ( <b>MEX</b> )<br>1.3 and 2.5 times the scale ( <b>MEM</b> ) |
| Dashpot mechanical dampening. <b>Code 0655</b><br>Scale 0-1 bar ; 0 -1.6 bar ; 0 - 2.5 bar - Pressure ± 1.6 %.<br>Scale P > 2.5 bar - Pressure ± 1 %.<br>This device can, in certain cases, replace the BH version.                                                                                                                                                                   |
| Pointer adjustable by friction (all pressures). <b>Code 0679</b>                                                                                                                                                                                                                                                                                                                      |
| Special threads.                                                                                                                                                                                                                                                                                                                                                                      |
| Restrictor screw Ø 0,5. <b>Code 0771</b>                                                                                                                                                                                                                                                                                                                                              |
| ATEX version CE II 2 GDc - I M2c : glass window model only. <b>Code 0078</b>                                                                                                                                                                                                                                                                                                          |



**Baumer**

## Dimensions - Types of mounting



Weight (kg) :  
filled : 0.810  
unfilled : 0.510

|   | [mm] |
|---|------|
| A | 101  |
| B | 67   |
| C | 134  |
| D | 118  |
| E | 21.5 |
| F | 17   |
| J | 5.5  |
| K | 54.5 |
| L | 44.5 |
| M | 64   |
| P | 99   |
| R | 50.5 |
| S | 22   |
| Z | 31.5 |

Panel cut-outs for types B and G = Ø 102 mm

## Ordering Details - MEX5

| MEX5xxxxxx                                                                                                                          |                         |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <b>Model</b>                                                                                                                        | <b>1' ... 3' digit</b>  |
| All Stainless steel Pressure Gauge                                                                                                  | MEX                     |
| Pressure gauge with monel sensing element (1)                                                                                       | MEM                     |
| <b>Dimension nominal</b>                                                                                                            | <b>4' digit</b>         |
| 100 mm                                                                                                                              | 5                       |
| <b>Type of mounting*</b>                                                                                                            | <b>5' digit</b>         |
| Bottom connection, 3 back lugs fixing                                                                                               | A                       |
| Back connection, front flange                                                                                                       | B                       |
| Bottom connection                                                                                                                   | D                       |
| Back connection, 3 back lugs fixing                                                                                                 | E                       |
| Back connection                                                                                                                     | F                       |
| Back connection with clamp                                                                                                          | G                       |
| * Option Stainless steel case and bezel ring inox 1.4404 (316L) change A with 1, B with 2, D with 4, E with 5, F with 6 et G with 7 |                         |
| <b>Hydraulic connection</b>                                                                                                         | <b>6' digit</b>         |
| G1/4                                                                                                                                | 2                       |
| G1/2                                                                                                                                | 3                       |
| G3/8                                                                                                                                | J                       |
| 1/2NPT                                                                                                                              | 6                       |
| M20x1.50                                                                                                                            | 9                       |
| <b>Liquid filling</b>                                                                                                               | <b>7' digit</b>         |
| Dry                                                                                                                                 | 0                       |
| BH1                                                                                                                                 | 1                       |
| BH3 (silicone)                                                                                                                      | 3                       |
| <b>Unit of measurement</b>                                                                                                          | <b>8' digit</b>         |
| bar                                                                                                                                 | B                       |
| kPa                                                                                                                                 | D                       |
| psi                                                                                                                                 | H                       |
| <b>Pressure range</b>                                                                                                               | <b>9' ... 10' digit</b> |
| See data sheet                                                                                                                      | xx                      |

| code | bar      | kPa         | code | psi         |
|------|----------|-------------|------|-------------|
| 57   | -0.4 + 0 | -40 + 0     | 57   |             |
| 58   | -0.6 + 0 | -60 + 0     | 58   |             |
| 59   | -1 + 0   | -100 + 0    | 59   | -30"Hg+ 0   |
| 72   | -1 + 0.6 | -100 + 60   | 73   | -30"Hg+ 15  |
| 74   | -1 + 1.5 | -100 + 150  | 75   | -30"Hg+ 30  |
| 76   | -1 + 3   | -100 + 300  | 76   | -30"Hg+ 60  |
| 77   | -1 + 5   | -100 + 500  | 77   | -30"Hg+ 100 |
| 79   | -1 + 9   | -100 + 900  | 79   | -30"Hg+ 150 |
| 81   | -1 + 15  | -100 + 1500 | 81   | -30"Hg+ 220 |
| 82   | -1 + 24  | -100 + 2400 | 82   | -30"Hg+ 300 |
| 11   | 0 + 0.4  | 0 + 40      | 11   | 0 + 6       |
| 12   | 0 + 0.6  | 0 + 60      | 12   | 0 + 10      |
| 15   | 0 + 1    | 0 + 100     | 15   | 0 + 15      |
| 16   | 0 + 1.6  | 0 + 160     | 16   | 0 + 20      |
| 18   | 0 + 2.5  | 0 + 250     | 18   | 0 + 30      |
| 19   | 0 + 4    | 0 + 400     | 19   | 0 + 60      |
| 20   | 0 + 6    | 0 + 600     | 20   | 0 + 100     |
| 22   | 0 + 10   | 0 + 1000    | 22   | 0 + 160     |
| 24   | 0 + 16   | 0 + 1600    | 24   | 0 + 200     |
| 26   | 0 + 25   | 0 + 2500    | 26   | 0 + 300     |
| 27   | 0 + 40   | 0 + 4000    | 27   | 0 + 400     |
| 29   | 0 + 60   | 0 + 6000    | 29   | 0 + 600     |
| 31   | 0 + 100  | 0 + 10000   | 31   | 0 + 1000    |
| 33   | 0 + 160  | 0 + 16000   | 33   | 0 + 1500    |
| 35   | 0 + 250  | 0 + 25000   | 35   | 0 + 3000    |
| 38   | 0 + 400  | 0 + 40000   | 38   | 0 + 6000    |
| 39   | 0 + 600  | 0 + 60000   | 39   | 0 + 10000   |
| 41*  | 0 + 1000 | 0 + 100000  | 41*  | 0 + 15000   |
| 42*  | 0 + 1600 | 0 + 160000  | 42*  | 0 + 20000   |

\* Working pressure steady: 75% of full scale value

(1) Monel mode (MEM) is not workable in code 41, 42, 1D, 57 et 58

Some products of the range MEX5 are one day delivery time (ex-works) : **consult us**

### Uncoded options:

| PNEUMATIC RECEIVER | 0.2 - 1 bar<br>3-15 psi |
|--------------------|-------------------------|
| 0 - 10 lin.        |                         |
| 0 - 10 √           |                         |
| 0 - 100 lin.       |                         |
| 0 - 100 √          |                         |