



BOURDON
The Original by Baumer

EN-837



Main Features

- For corrosive gasses and liquids
- Class 1 according to EN 837-1
- Wetted parts Stainless steel (MJX) or Monel (MMJ)
- Option : liquid-filled for applications with pulsations or vibrations
- Option : case material 1.4404 (316L) for aggressive atmosphere

Applications

- Food & Beverage
- Laboratory & Medical
- Oil & Gas / Chemical
- Water & Waste water
- Energy
- Transportation & Logistics
- Machinery

Technical Data

| | |
|---------------------|---|
| Nominal size | 150 mm |
| Measurement range | MJX : -1 ... 0 to 0 ... 1600 bar MMJ : -1 ... 0 to 0 ... 600 bar |
| Pressure limitation | |
| Ranges ≤ 600 bar | Steady : 100% of full scale value Fluctuating : 90% of full scale value Short time : 130% of full scale value |
| Ranges ≥ 1000 bar | Steady : 75% of full scale value Fluctuating : 65% of full scale value Short time : 100% of full scale value |
| Accuracy | Class 1 (according EN837-1) |
| Protection rating | IP 65 (EN 60529) |
| Process Connection | MJX : Stainless steel 1.4404 (AISI 316L) MMJ : Monel 400 |
| Bourdon tube | MJX : Stainless steel 1.4404 (AISI 316L) MMJ : Monel 400 |
| Case | Stainless steel 1.4301 (AISI 304) Option : Stainless steel 1.4404 (AISI 316L) |

| | |
|---------------|---|
| Bezel ring | Stainless steel 1.4301 (AISI 304) Option : stainless steel 1.4404 (AISI 316L) |
| Movement | Stainless steel |
| Window | Laminated safety glass |
| Window gasket | Elastomer |
| Dial | Aluminium, white |
| Pointer | Aluminium, black |
| Temperature | Ambient : -20 ... +70°C Medium : -40 ... +200°C (not filled) For liquid filled version see ordering details. The case temperature must not exceed +70°C Storage : -40 ... +70°C |
| Thermal drift | ± 0.4% F.S. / 10 K (reference : 20°C) |
| Baffle wall | Stainless steel 1.4301 (AISI 304) Fixed by screws inside the case |
| Safety | S1 according EN837-1 Pressure gauge with blow-out device |

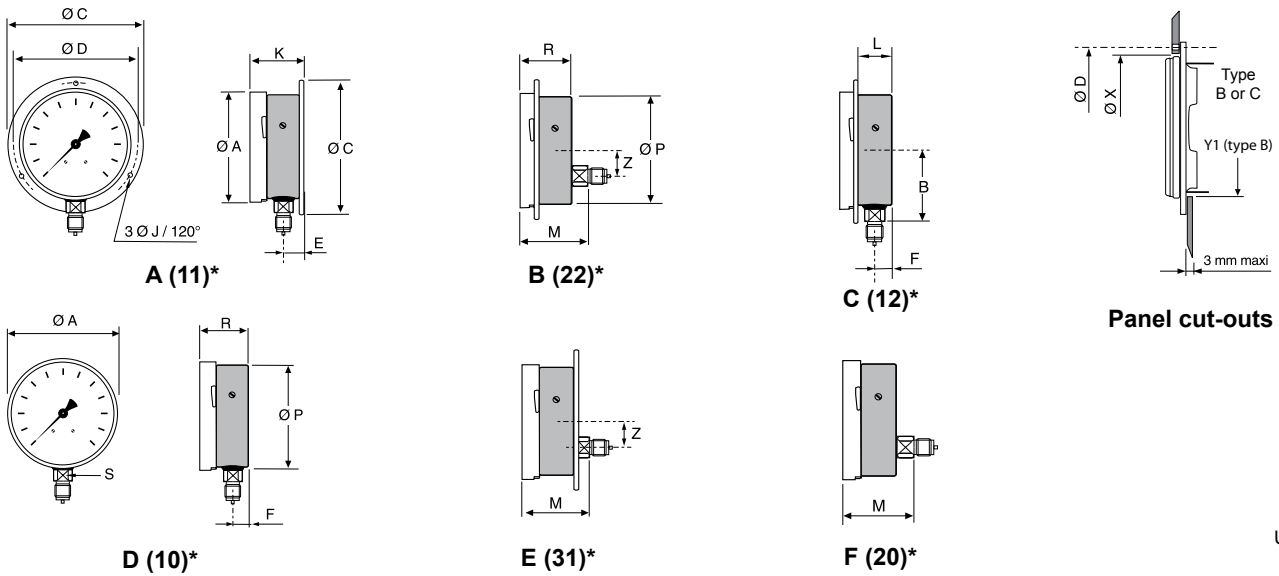
Options

| | |
|---|--|
| ATEX II2GDc-IM2c | Code 0078 |
| Adjustable micro metric pointer (P ≥ 1.6 bar) | Code 0678 |
| Adjustable friction pointer | Code 0679 |
| Restrictor screw Ø 0.5 (for fittings > 1/4") | Code 0771 |
| Stainless steel 1.4404 (AISI 316L) solid drawn Bourdon tube | Code 0816 |
| Accuracy class | 0.5 P > 1 bar Code 0843 0.6 P > 1 bar Code 0840 |

To be ordered separately

| | |
|---|------------|
| Material certificate 3.1 EN10204 | Code Q1229 |
| Calibration certificate EN837-1 (5 points raising and 5 points falling) | Code Q1070 |

Dimensions - Types of mounting



Weight (kg)
Filled : 1.700
Unfilled : 0.880

*Type of mounting according to EN837-1 in brackets

| mm | A | B | C | D | E | F | J | K | L | M | P | R | S | W | X | Y1 | Z |
|---------------|-------|----|-----|-----|------|------|-----|------|------|------|-----|------|----|-----|-----|-----|------|
| NS 150 | 150.2 | 85 | 180 | 168 | 25.5 | 23.5 | 5.5 | 56.5 | 37.5 | 68.5 | 142 | 54.5 | 22 | 152 | 151 | 145 | 31.5 |

Pressure ranges

| Code | Bar | Code | kPa | Code | kg/cm ² | Code | psi |
|------|-------------|------|----------------|------|--------------------|------|-----------------|
| B59 | -1 ... 0 | D59 | -100 ... 0 | F59 | -1 ... 0 | H59 | -30" Hg ... 0 |
| B72 | -1 ... 0.6 | D72 | -100 ... 60 | F72 | -1 ... 0.6 | H73 | -30" Hg ... 15 |
| B74 | -1 ... 1.5 | D74 | -100 ... 150 | F74 | -1 ... 1.5 | H75 | -30" Hg ... 30 |
| B76 | -1 ... 3 | D76 | -100 ... 300 | F76 | -1 ... 3 | H2C | -30" Hg ... 60 |
| B77 | -1 ... 5 | D77 | -100 ... 500 | F77 | -1 ... 5 | H78 | -30" Hg ... 100 |
| B79 | -1 ... 9 | D79 | -100 ... 900 | F79 | -1 ... 9 | H79 | -30" Hg ... 150 |
| B81 | -1 ... 15 | D81 | -100 ... 1 500 | F81 | -1 ... 15 | H81 | -30" Hg ... 220 |
| B82 | -1 ... 24 | D82 | -100 ... 2 400 | F82 | -1 ... 24 | H82 | -30" Hg ... 300 |
| B12 | 0 ... 0.6 | D12 | 0 ... 60 | F12 | 0 ... 0.6 | H13 | 0 ... 10 |
| B15 | 0 ... 1 | D15 | 0 ... 100 | F15 | 0 ... 1 | H15 | 0 ... 15 |
| B16 | 0 ... 1.6 | D16 | 0 ... 160 | F16 | 0 ... 1.6 | H1C | 0 ... 20 |
| B18 | 0 ... 2.5 | D18 | 0 ... 250 | F18 | 0 ... 2.5 | H17 | 0 ... 30 |
| B19 | 0 ... 4 | D19 | 0 ... 400 | F19 | 0 ... 4 | H19 | 0 ... 60 |
| B20 | 0 ... 6 | D20 | 0 ... 600 | F20 | 0 ... 6 | H21 | 0 ... 100 |
| B22 | 0 ... 10 | D22 | 0 ... 1 000 | F22 | 0 ... 10 | H22 | 0 ... 160 |
| B24 | 0 ... 16 | D24 | 0 ... 1 600 | F24 | 0 ... 16 | H23 | 0 ... 200 |
| B26 | 0 ... 25 | D26 | 0 ... 2 500 | F26 | 0 ... 25 | H25 | 0 ... 300 |
| B27 | 0 ... 40 | D27 | 0 ... 4 000 | F27 | 0 ... 40 | H26 | 0 ... 400 |
| B29 | 0 ... 60 | D29 | 0 ... 6 000 | F29 | 0 ... 60 | H27 | 0 ... 600 |
| B31 | 0 ... 100 | D31 | 0 ... 10 000 | F31 | 0 ... 100 | H30 | 0 ... 1 000 |
| B33 | 0 ... 160 | D33 | 0 ... 16 000 | F33 | 0 ... 160 | H31 | 0 ... 1 500 |
| B35 | 0 ... 250 | D35 | 0 ... 25 000 | F35 | 0 ... 250 | H34 | 0 ... 3 000 |
| B38 | 0 ... 400 | D38 | 0 ... 40 000 | F38 | 0 ... 400 | H38 | 0 ... 6 000 |
| B39 | 0 ... 600 | D39 | 0 ... 60 000 | F39 | 0 ... 600 | H40 | 0 ... 10 000 |
| B41 | 0 ... 1 000 | D41 | 0 ... 100 000 | F41 | 0 ... 1 000 | H41 | 0 ... 15 000 |
| B42 | 0 ... 1 600 | D42 | 0 ... 160 000 | F42 | 0 ... 1 600 | H1D | 0 ... 20 000 |

Ordering details MJX7 - MMJ7

| | 7 | - | | . | xxx | / |
|---|-----|---|--|---|-----|-------|
| Model | | | | | | |
| All stainless steel pressure gauge | MJX | | | | | |
| Pressure gauge with monel Bourdon tube ⁽¹⁾ | MMJ | | | | | |
| Nominal size | | | | | | |
| 150 mm | 7 | | | | | |
| | | - | | | | |
| Type of mounting | | | | | | |
| Stainless steel case and bezel ring 1.4301 (AISI 304) | | | | | | |
| Bottom connection, 3 back lugs fixing | | | | | | A |
| Back connection, front flange, 3 mounting holes | | | | | | B |
| Bottom connection, front flange, 3 mounting holes | | | | | | C |
| Bottom connection | | | | | | ▶ D |
| Back connection, 3 back lugs fixing | | | | | | E |
| Back connection | | | | | | ▶ F |
| Stainless steel case and bezel ring 1.4404 (AISI 316L) | | | | | | |
| Bottom connection, 3 back lugs fixing | | | | | | 1 |
| Back connection, front flange, 3 mounting holes | | | | | | 2 |
| Bottom connection, front flange, 3 mounting holes | | | | | | 3 |
| Bottom connection | | | | | | 4 |
| Back connection, 3 back lugs fixing | | | | | | 5 |
| Back connection | | | | | | 6 |
| Process connection | | | | | | |
| G 1/4 | | | | | | 2 |
| G 1/2 | | | | | | ▶ 3 |
| 1/4 NPT | | | | | | 5 |
| 1/2 NPT | | | | | | ▶ 6 |
| Liquid filling | | | | | | |
| Dry | | | | | | ▶ 0 |
| BH1: low viscosity glycerin/water 86% (medium : -20 ... +70°C) ⁽²⁾ | | | | | | 1 |
| BH2: high viscosity glycerin 99.5% (medium : 0 ... +90°C) ⁽²⁾ | | | | | | 2 |
| BH3: silicone oil (medium : -40 ... +100°C) ⁽²⁾ | | | | | | 3 |
| BH4: silicone oil (medium : -60 ... +100°C) ⁽²⁾ | | | | | | 4 |
| Unit of measurement / Pressure ranges ⁽³⁾ | | | | | | |
| bar | | | | | | ▶ Bxx |
| psi | | | | | | ▶ Hxx |
| kPa | | | | | | ▶ Dxx |
| kg/cm ² | | | | | | Fxx |
| bar / psi (double scale) | | | | | | Kxx |
| psi / bar (double scale) | | | | | | Sxx |
| Options to be added behind the / (see example below) | | | | | | |

(▶ Standard version)

⁽¹⁾ Monel version is not available for pressure ranges x41, x42 and H1D

⁽²⁾ Pressure range 0.6 bar: accuracy cl. 2.5 with BH1, BH3 and BH4, not available with BH2

⁽³⁾ Available standard pressures ranges, see tables on page 2. For ranges not listed, please contact Baumer.

Ordering example with options

| | MJX | 7 | - | B | 6 | 0 | . | B22 | / | 0678 | - | 0771 |
|---|-----|---|---|---|---|---|---|-----|---|------|---|------|
| All stainless steel pressure gauge | ← | | | | | | | | | | | |
| Nominal size 150 mm | ← | | | | | | | | | | | |
| Back connection, front flange, 3 mounting holes, case material 1.4301 | ← | | | | | | | | | | | |
| Process connection 1/2 NPT | ← | | | | | | | | | | | |
| No liquid filling | ← | | | | | | | | | | | |
| Scale bar : 0 ... 10 bar | ← | | | | | | | | | | | |
| Option : Adjustable micro metric pointer (P ≥ 1.6 bar) | ← | | | | | | | | | | | |
| Option : Restrictor screw Ø 0.5 | ← | | | | | | | | | | | |