



BOURDON
The Original by Baumer

EN-837-1

PED

IP 65

Ex

Main Features

- For corrosive gasses and liquids
- Class 1 according to EN 837-1
- Inductive contacts with sensor according to EN 60947-5-6 (NAMUR)
- 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	100 mm
Measurement range	-1 ... 0 to 0 ... 1600 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 ≥ 600 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 and DIN 16085)
Protection rating	IP 65 (EN 60529)
Process Connection	Stainless steel 1.4404 (AISI 316L)
Bourdon tube	Stainless steel 1.4404 (AISI 316L)
Case	Stainless steel 1.4301 (AISI 304)
Bezel ring	Stainless steel 1.4301 (AISI 304)
Movement	Stainless steel
Window	Laminated safety glass
Window gasket	Elastomer
Dial	Aluminium, white
Pointer	Aluminium, black
Thermal drift	± 0.4% F.S. / 10 K (reference : 20°C)

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
Contacts	Inductive contacts with sensor according to EN 60947-5-6 (NAMUR), sensor type SJ2-N Other sensor types, see ordering codes and options
Setpoints	1 or 2
Electrical connection	Connecting box with terminal block Cable gland M20 x 1.5 for cable Ø 7 to 13 mm (others on request)
Minimum pressure range	1 contact 1 bar 2 contacts 1.6 bar
ATEX	<u>Type examination certificate</u> LCIE 03 ATEX 6402 X <u>Classification</u>  II 2 G Ex ia IIC T6 or T5 or T4 Gb <u>Electrical data</u> Ci = 30 nF Li = 100 µH

For limits of voltage, current rating, power consumption and ambient temperature, see datasheet A21.33 and instruction manual.

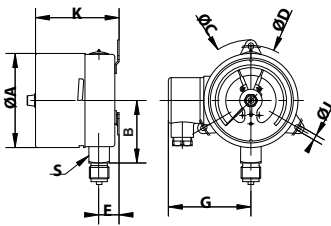
Options

Supplementary blow-out at the back (Ø 30mm)	Code 0760
Restrictor screw Ø 0.5 (for fittings > 1/4")	Code 0771
Stainless steel 1.4404 (AISI 316L) solid drawn Bourdon tube	Code 0816
Electronic contact with 3-wire PNP output (only for contact ordering codes 1, 2, 4, 5, 6, 7, must not be used in hazardous areas)	Code 8804

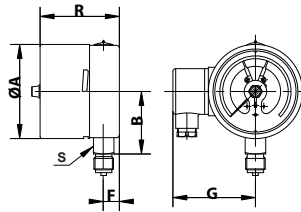
To be ordered separately

Material certificate 3.1 EN10204	Code Q003
Calibration certificate EN837-1 (5 points raising and 5 points falling)	Code Q009

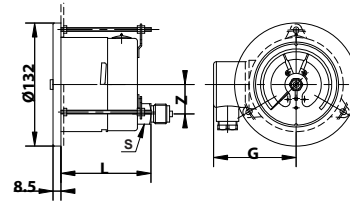
Dimensions - Types of mounting



A (11)*

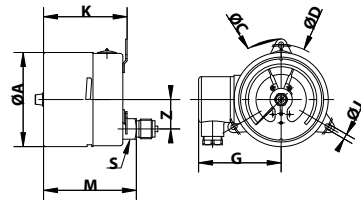


D (10)*

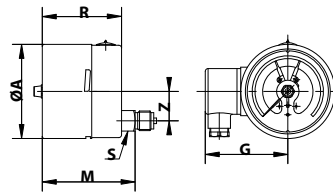


B (22)*

Weight (kg)
Filled : 1.300
Unfilled : 0.750



E (21)*



F (20)*

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

*Type of mounting according to EN837-1 in brackets

mm	A	B	C	D	E	F	G	J	K	L	M	R	S	Z
NS 100	101	67	134	118	21.5	17	89	5.5	89.5	96	99	85.5	22	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
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 MG5

Model									
Pressure gauge with inductive contacts									
Nominal size									
100 mm									
Contact function									
standard inductive contacts									
Contact breaks ⁽¹⁾	1	SJ2-N	8002	1					
Contact makes ⁽¹⁾	1	SJ2-N	8001	2					
1st contact breaks / 2nd contact makes ⁽¹⁾	2	SJ2-N	8021	4					
1st contact breaks / 2nd contact breaks ⁽¹⁾	2	SJ2-N	8022	5					
1st contact makes / 2nd contact makes ⁽¹⁾	2	SJ2-N	8011	6					
1st contact makes / 2nd contact breaks ⁽¹⁾	2	SJ2-N	8012	7					
Fail-safe inductive contacts									
Contact breaks ⁽¹⁾	1	SJ2-SN	8002/8801	J					
Contact makes ⁽¹⁾	1	SJ2-SN	8001/8801	L					
1st contact breaks / 2nd contact makes ⁽¹⁾	2	SJ2-SN	8021/8801	K					
1st contact breaks / 2nd contact breaks ⁽¹⁾	2	SJ2-SN	8022/8801	I					
1st contact makes / 2nd contact makes ⁽¹⁾	2	SJ2-SN	8011/8801	M					
1st contact makes / 2nd contact breaks ⁽¹⁾	2	SJ2-SN	8012/8801	N					
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								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								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	
BH3: silicone oil (medium : -40 ... +100°C)								3	
BH5: fluor carbon for oxygen use (160 bar max.) (medium -15 ... +100°C)								5	
BH10: paraffin, vaseline oil (medium -15 ... +100°C)								K	
Unit of measurement / Pressure ranges ⁽²⁾									
bar								Bxx	
psi								Hxx	
kPa								Dxx	
MPa								Exx	
kg/cm ²								Fxx	

Options to be added behind the / (see example below)

⁽¹⁾ With clockwise pointer motion

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

Ordering example with options

Model									
Pressure gauge with inductive contacts	MG	5	-	1	A	2	0	.	B22
Nominal size 100 mm									/
Contact breaks with clockwise pointer motion									0760
Bottom connection, 3 back lugs fixing, case material 1.4301									
Process connection G 1/4									
No liquid filling									
Scale bar : 0 ... 10 bar									
Option : Supplementary blow-out at the back (Ø 30mm)									