

FINE CONTROLS (UK) LTD



Fine Controls have been supplying process controls & instrumentation equipment since 1994, & now serves an ever expanding customer base, both in the UK & globally.

We offer a full range of valve & instrumentation products & services, with our product rangerepresenting leading technologies & brands:

Flow: Flow Meters & Transmitters, Flow Switches, Flow Control Valves & Batch Control Systems

Temperature: Temperature Probes & Thermowells, Temperature ransmitters, Temperature Regulators & Temperature Displays

Level: Level Transmitters & Switches

Pressure: Pressure Gauges & Transmitters, Precision & High Pressure Regulators & I-P Converters, Volume boosters.

Precision Pneumatics: Pressure Regulators, I-P Converters, Volume Boosters, Vacuum Regulators

Valves: Solenoid & Pneumatic Valves, Control Valves & Positioners, Actuated Ball, Globe or Diaphragm Valves & Isolation Valves

Services: Repair, Calibration, Panel Build, System Design & Commissioning

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Bourdon
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SOLDO
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Fine Controls (UK) LTD, Bassendale Road, Croft Business Park,
Bromborough, Wirral, CH62 3QL UK
Tel: 0151 343 9966
Email: sales@finecontrols.com



BOURDON
The Original by Baumer



Main Features

- For corrosive gasses and liquids
- Class 1 according to EN 837-1
- Wetted parts Stainless steel (MEX) or Monel (MEM)
- Lloyds Register Approval
- 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		Bezel ring	Stainless steel 1.4301 (AISI 304) Option : stainless steel 1.4404 (AISI 316L)
Measurement range	MEX :	-1 ... 0 to 0 ... 1600 bar	Movement	Stainless steel
	MEM :	-1 ... 0 to 0 ... 600 bar	Window	Instrument glass
Pressure limitation			Window gasket	Elastomer
Ranges ≤ 600 bar	Steady :	100% of full scale value	Dial	Aluminium, white
	Fluctuating :	90% of full scale value	Pointer	Aluminium, black
	Short time :	130% of full scale value	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
Ranges > 600 bar	Steady :	75% of full scale value	Thermal drift	± 0.4% F.S. / 10 K (reference : 20°C)
	Fluctuating :	65% of full scale value	Safety	S1 according EN837-1 Pressure gauge with blow-out device
	Short time :	100% of full scale value		
Accuracy	Class 1 (according EN837-1)			
Protection rating	IP 65 (EN 60529)			
Process Connection	MEX :	Stainless steel 1.4404 (AISI 316L)		
	MEM :	Monel 400		
Bourdon tube	MEX :	Stainless steel 1.4404 (AISI 316L)		
	MEM :	Monel 400		
Case	Stainless steel 1.4301 (AISI 304) Option : Stainless steel 1.4404 (AISI 316L)			

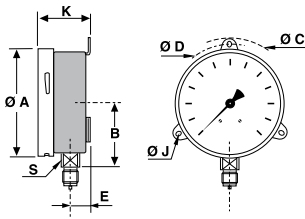
Options

ATEX II2GDc-IM2c (Including window laminated safety glass)	Code 0078
Adjustable micro metric pointer (P ≥ 1.6 bar)	Code 0678
Adjustable friction pointer	Code 0679
Window laminated safety glass	Code 0751
Window polycarbonate	Code 0753
Blow out disc at the back	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
Lloyd's Register approval	Code 0827
Accuracy class 0.6 (For pressure gauge not filled and P < 1000 bar)	Code 0840

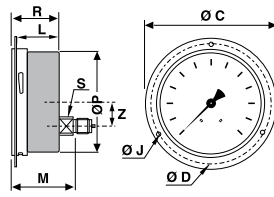
To be ordered separately

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

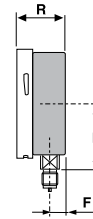
Dimensions - Types of mounting



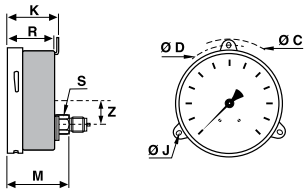
A (11)*



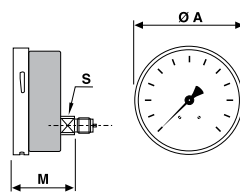
B (32)*



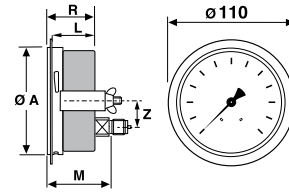
D (10)*



E (31)*



F (30)*



G (33)*

Weight (kg)
Filled : 0.81
Unfilled : 0.51

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	J	K	L	M	P	R	S	Z
NS 100	101	67	134	118	21.5	17	5.5	54.5	44.5	64	99	50.5	22	31.5

Pressure ranges

Code	Bar
B58	-0.6 ... 0
B59	-1 ... 0
B72	-1 ... 0.6
B74	-1 ... 1.5
B76	-1 ... 3
B77	-1 ... 5
B79	-1 ... 9
B81	-1 ... 15
B82	-1 ... 24
B12	0 ... 0.6
B15	0 ... 1
B16	0 ... 1.6
B18	0 ... 2.5
B19	0 ... 4
B20	0 ... 6
B22	0 ... 10
B24	0 ... 16
B26	0 ... 25
B27	0 ... 40
B29	0 ... 60
B31	0 ... 100
B33	0 ... 160
B35	0 ... 250
B38	0 ... 400
B39	0 ... 600
B41	0 ... 1 000
B42	0 ... 1 600

Code	kPa
D58	-60 ... 0
D59	-100 ... 0
D72	-100 ... 60
D74	-100 ... 150
D76	-100 ... 300
D77	-100 ... 500
D79	-100 ... 900
D81	-100 ... 1 500
D82	-100 ... 2 400
D12	0 ... 60
D15	0 ... 100
D16	0 ... 160
D18	0 ... 250
D19	0 ... 400
D20	0 ... 600
D22	0 ... 1 000
D24	0 ... 1 600
D26	0 ... 2 500
D27	0 ... 4 000
D29	0 ... 6 000
D31	0 ... 10 000
D33	0 ... 16 000
D35	0 ... 25 000
D38	0 ... 40 000
D39	0 ... 60 000

Code	kg/cm ²
F58	-0.6 ... 0
F59	-1 ... 0
F72	-1 ... 0.6
F74	-1 ... 1.5
F76	-1 ... 3
F77	-1 ... 5
F79	-1 ... 9
F81	-1 ... 15
F82	-1 ... 24
F12	0 ... 0.6
F15	0 ... 1
F16	0 ... 1.6
F18	0 ... 2.5
F19	0 ... 4
F20	0 ... 6
F22	0 ... 10
F24	0 ... 16
F26	0 ... 25
F27	0 ... 40
F29	0 ... 60
F31	0 ... 100
F33	0 ... 160
F35	0 ... 250
F38	0 ... 400
F39	0 ... 600
F41	0 ... 1 000
F42	0 ... 1 600

Code	psi
H59	-30" Hg ... 0
H73	-30" Hg ... 15
H75	-30" Hg ... 30
H2C	-30" Hg ... 60
H78	-30" Hg ... 100
H79	-30" Hg ... 150
H81	-30" Hg ... 220
H82	-30" Hg ... 300
H13	0 ... 10
H15	0 ... 15
H1C	0 ... 20
H17	0 ... 30
H19	0 ... 60
H21	0 ... 100
H22	0 ... 160
H23	0 ... 200
H25	0 ... 300
H26	0 ... 400
H27	0 ... 600
H30	0 ... 1 000
H31	0 ... 1 500
H34	0 ... 3 000
H38	0 ... 6 000
H40	0 ... 10 000
H41	0 ... 15 000
H1D	0 ... 20 000

Ordering details MEX5 - MEM5

	5	-			.	xxx	/
Model							
All stainless steel pressure gauge	MEX						
Pressure gauge with monel Bourdon tube ⁽¹⁾	MEM						
Nominal size							
100 mm	5						
		-					
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	
Back connection with clamp						G	
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	
Back connection with clamp						7	
Process connection							
G 1/4						2	
G 1/2						3	
G 3/8						J	
1/4 NPT						5	
1/2 NPT						6	
3/8 NPT						S	
M20 x 1.5						9	
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	
Unit of measurement / Pressure ranges ⁽³⁾							
bar							Bxx
psi							Hxx
kPa							Dxx
MPa							Exx
mbar							Nxx
kg/cm ²							Fxx
bar / psi (double scale)							Kxx
psi / bar (double scale)							Sxx
psi / kPa (double scale)							Vxx
kPa / psi (double scale)							Wxx
kg/cm ² / psi (double scale)							5xx

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

(▶ Standard version)

⁽¹⁾ Monel version is not available for pressure ranges x39, x41 and x59

⁽²⁾ Pressure range 0.6 bar: accuracy cl. 2.5 with BH1 and BH3, 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

	MEX	5	-	B	6	0	.	S22	/	0078	-	0771	-	0679
All stainless steel pressure gauge														
Nominal size 100 mm														
Back connection, front flange, 3 mounting holes, case material 1.4301														
Process connection 1/2 NPT														
No liquid filling														
Double scale psi/bar ANSI : 0 ... 160 psi / 0 ... 10 bar														
Option : ATEX Version with laminated safety glass included														
Option : Restrictor screw Ø 0.5														
Option : Adjustable friction pointer														