



NOT JUST ANOTHER PRESSURE GAUGE
THE ORIGINAL.



Process Instrumentation

The Original Bourdon

History and Innovation

“The Best Way Towards A Bright Future Is A Bright Past.”

When he discovered the manometer, Eugène Bourdon was searching for improvement but found a solution that would endure for centuries. Our engineers, much like Bourdon himself, continually find themselves facing challenges: Know the unknown and continuously optimize to find a solution.



Fevrier 1849.
Premier essai de Manometre
metallique a tube meplat et
courbe.

C'est ce manometre qui a été
appliqué en février 1849 sur la
chaudière de m...
avant que M...
le sien en Pr...
Le tube de
fabriqué par
d'instrumen...



It's All About The Internals.

Case: Stainless steel or Monel, with or without blow-out plug on the back. Safety level S1, S2 or S3 (EN 837).

Window: Instrument glass, polycarbonate or safety glass.

Bourdon tube: Stainless steel or Monel (seamless as an option).

Process connections (several types: G 1/2, 1/2 NPT, M20x1.5...)

Restrictor screw for reducing pressure peaks.

Vent plug filling with damping fluid (e.g. glycerine, silicone, etc. depending on application).
Optional: Dry, without filling.

Movement: Stainless steel, optionally available with silicone damping (Dashpot) for applications with vibrations or pulsations.

Standard: EN837-1 or ASME B40.1.

Dial: Optional customer specific.

Customer logo: Black or colored.





DIAL PRINTING



DATE STAMP



OVER PRESSURE & INITIAL CALIBRATION

Our gauges are assembled here in the USA

Science and history have taught us that improvement and optimization call for extraordinary experience as well as bright, curious minds that are able to confidently explore new territory. Bourdon, is a pioneer. As a pioneer, Bourdon sees in each new situation an opportunity to discover and develop a unique method or process of innovation.

Bourdon continues manufacturing the famous Bourdon products, adding on modern production and quality methods which provide significant benefits especially for the Oil & Gas industry. Production starts with the bending of the Bourdon tube and finishes with final testing and compliance of our BTrace standards.

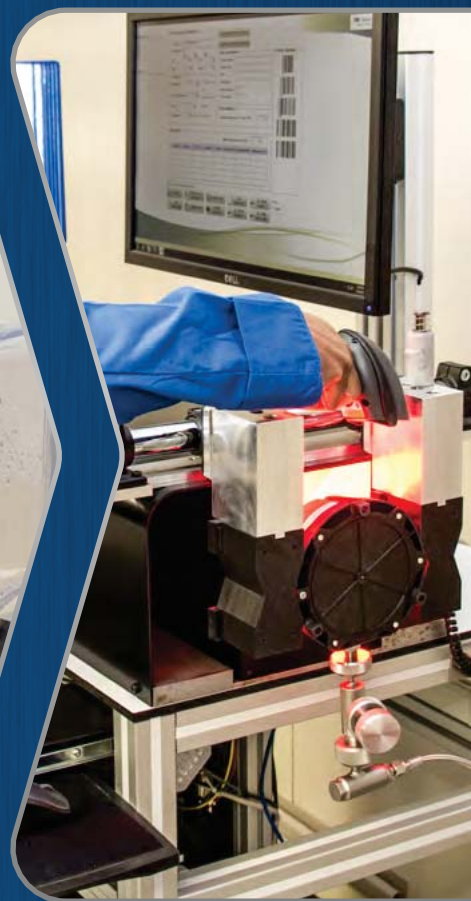




CLOSING & CRIMPING



FILLING



**FINAL TESTING &
BTRACE COMPLIANCE**

BTrace comprises of six elements

Bourdon Business System for process optimization in production and management

Traceability throughout the whole order process

Reliability compliant to the “Zero Defect Philosophy” (ZDP)

Automation representing the advanced and computer-based calibration and certification system

Consistency in continuous optimization based on Lean Management, MUDA and KAIZEN

Excellence for highest quality to the customer



**PROUDLY SERVING MULTIPLE INDUSTRIES
FOR OVER 150 YEARS.**



Industries We Serve



OIL & GAS



ENERGY / POWER PLANTS



FOOD & BEVERAGE



MACHINE BUILDING



WATER TREATMENT



HVAC



TRANSPORTATION



CUSTOMER SPECIFIC



**BOURDON'S VAST PORTFOLIO IS SURE TO COVER
ALL OF YOUR APPLICATION NEEDS.**





PART NUMBER NOMENCLATURE

							Hxx	/
Modal								
Forged Brass (2.5", 4")	MAG							
Stainless Case with brass internals (2.5", 4")	MAX							
Stainless Case with stainless internals (1.5", 2", 2.5", 4")	MEX							
Process gauge, stainless internals (4.5")	MPG							
Stainless case with stainless internals (6")	MIX							
Dial Size								
1.5"						1		
2"						2		
2.5"						3		
4"						5		
4.5"						6		
6"						7		
Mounting / Style								
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 / front flange							C	
Bottom connection							D	
Back connection, 3 back lugs fixing							E	
Back connection with clamp							G	
Connection Type								
1/8" NPT							4	
1/4" NPT							5	
1/2" NPT							6	
Fill Options								
Dry								0
Low Temp Glycerine								1
Glycerine								2
Silicone								3
Pressure Ranges								
psi								Hxx
Options to be added								

Code	psi	Code	psi	Code	psi	Code	psi
H59	-30" Hg - 0	H82	-30" Hg - 300	H22	0 - 160	H34	0 - 3000
H73	-30" Hg - 15	H13	0 - 10	H23	0 - 200	H38	0 - 6000
H75	-30" Hg - 30	H15	0 - 15	H25	0 - 300	H40	0 - 10000
H2C	-30" Hg - 60	H1C	0 - 20	H26	0 - 400	H41	0 - 15000
H78	-30" Hg - 100	H17	0 - 30	H27	0 - 600	H1D	0 - 20000
H79	-30" Hg - 150	H19	0 - 60	H30	0 - 1000		
H81	-30" Hg - 220	H21	0 - 100	H31	0 - 1500		

Example

MEX	5	-	B	6	0	.	H22	/
-----	---	---	---	---	---	---	-----	---

- All stainless steel pressure gauge ←
- Nominal size 4" ←
- Back connection, front flange, 3 mounting holes, case material 1.4301 ←
- Process connection 1/2 NPT ←
- No liquid filling ←
- Single scale psi ANSI : 0 ... 160 psi ←

BRASS INTERNAL OPTIONS



MAX3



MAX5

Protection	IP65	IP65
Size	2.5"	4"
Range	Vac.....15,000 psi	Vac.....15,000 psi
Accuracy	1.6	1
Wetted Parts	Copper Alloy	Copper Alloy
Element	Bourdon Tube	Bourdon Tube
Case	Stainless	Stainless
Process Connection	1/4 NPT	1/4 NPT 1/2 NPT

Prepared for any requirement.

Reliable results even under extreme conditions

Bourdon stands for more than 150 years of expertise in measuring technology. The patented original Bourdon Tube by French engineer Eugene Bourdon, firmly branded the company history and is still the essential component of precise mechanical pressure measuring instruments.

SPEED AVAILABILITY SERVICE



MAG3

IP66

2.5"

Vac.....15,000 psi

1.6

Copper Alloy

Bourdon Tube

Brass

1/4 NPT

MAG5

IP66

4"

Vac.....15,000 psi

1

Copper Alloy

Bourdon Tube

Brass

1/4 NPT 1/2 NPT





MMX1

MEX2

MEX3, MEM3

MEX5, MEM5

Protection	IP33/43	IP65	IP65	IP65
Size	1.5"	2"	2.5"	4"
Range	20...300 psi	Vac.....15,000 psi	Vac.....15,000 psi	Vac...20,000 psi
Accuracy	2.5	1.6	1.6	1
Wetted Parts	Stainless	Stainless	Stainless	Stainless
Element	Bourdon Tube	Bourdon Tube	Bourdon Tube	Bourdon Tube
Case	Stainless	Stainless	Stainless	Stainless
Process Connection	1/8 NPT 1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT 1/2 NPT
Approval	ATEX	Lloyds Register / ATEX	Lloyds Register / ATEX	Lloyds Register / ATEX

Principle of a Bourdon Tube

A flattened tube tends to straighten or regain its circular form in cross-section when pressurized. Although this change in cross-section may be nearly imperceptible, and thus involving only moderate stresses within the elastic range of easily workable materials, the strain of the material of the tube is magnified by forming the tube into a C shape or even a helix, such that the entire tube tends to straighten out or uncoil, elastically, as it is pressurized.



Minimizing vibrations or pulsations:

Filling with dampening fluid or dashpot in the movement.



SPEED AVAILABILITY SERVICE



MPG6



MEP5



MIX7

IP67	IP67	IP65
4.5"	4"	6"
Vac...20,000 psi	Vac...20,000 psi	Vac...20,000 psi
0.5	1	1
Stainless	Stainless	Stainless
Bourdon Tube	Bourdon Tube	Bourdon Tube
Polypropylene	Stainless	Stainless
1/4 NPT 1/2 NPT	1/4 NPT 1/2 NPT	1/4 NPT 1/2 NPT
S3 Safety Level	Lloyds Register / ATEX	Lloyds Register / ATEX

Bourdon complies with many norms and approvals

Our excellence in product quality has won us recognition with prestigious certifications from many different regulatory bodies.





D055



DG



DT

	D055	DG	DT
Process Connection	Threaded-Flush	Threaded	Threaded
Body Standard	Stainless	Stainless	Stainless
Diaphragm	Stainless	Stainless	Stainless, Hast C, Tantalum, Monel
Measuring Ranges	15...10,000 psi	15...6,000 psi	Vac...15,000 psi
Approval	N/A	N/A	N/A

Chemical Seals

Separating the measuring instrument from corrosive, highly viscous or dangerous media and high temperature



Highly resistant membrane materials and coatings for extremely aggressive media.





D400



DA

Flanged	Sanitary Clamp
Stainless	Stainless
Stainless, Hast C, Tantalum, Monel	Stainless
3...6,000 psi	15...600 psi
N/A	3A



- Same day response time
- Same day order processing
- 24 hour shipping guarantee
- Rapid part development

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CTX



Y913



X913

Protection Ratings	IP65,67	IP67	IP65
Measuring Ranges	Vac...3000 psi	Vac...10,000 psi	Vac...10,000 psi
Wetted Materials	Stainless / Ceramic / NBR /EPDM /FKM	Stainless / Ceramic / NBR /EPDM /FKM	
Output	4..20 mA	4..20 mA	4..20 mA
Technology	Ceramic Thick Film	Ceramic Thick Film	Ceramic Thick Film
Accuracy	0.5% (BFSL)	0.3% (BFSL)	0.3% (BFSL)
Connections	1/4 NPT 1/2 NPT	1/4 NPT 1/2 NPT	1/4 NPT 1/2 NPT
Electric Connections	M12-4 / DIN 43650 /cable	M12-4 / DIN 43650 / Cable	1/2 NPT Conduit w/cable & Internal terminal strip gland
Approvals		ATEX	ATEX / Hazardous Area: 11,12,21,22

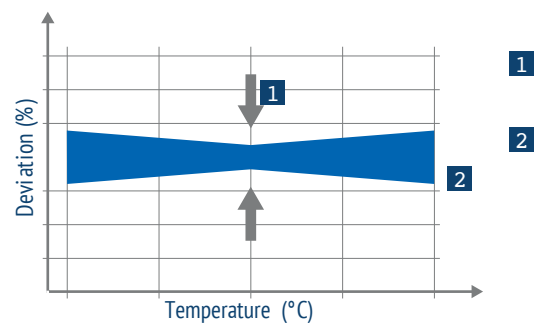
The Bourdon In-House Cell Competence

Bourdon provides the optimum technology for your specific application



Total Error Band

The total error band specifies the characteristic deviation (linearity, hysteresis, repeatability) and the thermal drift over a temperature range.





RP2

Protection Rating	IP66
Measuring Ranges	15...1500 psi
Wetted Materials	Stainless
Set Points	1
Over Pressure	3000 psi
Repeatability	1%
Connections	1/4 NPT 1/2 NPT
Current Ratings	10mA to 10 A max 250 VAC / 220 VDC
Approvals	ATEX

Mechanical Pressure Switches

A proven technology for power plants



AVAILABILITY

- Your supply chain partner
- Your custom part solution
- Parts you need, when you need them
- Largest stock selection in our industry



ARPX



AMFD



AORP



ARA

Process Temperature

-4...480 F

390 F

300 F

480 F

Max Pressure

6000 psi

6000 psi

10,000 psi

9000 psi

Materials

Steel / Stainless Steel / PTFE

Stainless Steel / PTFE

Stainless Steel / Viton

Steel / Stainless Steel

Bourdon provides complete assembly of your gauge and chemical seal needs.





SERVICE

- Commitment to quality
- Dedicated regional support
- Technical expertise
- Consistent info the first time



ASIP

AKPL

750 F

IP65

6000 psi

-30"...0 Hg to
0...20,000 PSI

Steel / Stainless Steel

Stainless steel

Bourdon complies with many norms and approvals

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BI-METAL

TBI

Protection Rating	IP67
Dial Size	3",4",5",6"
Ranges	-100...1100 F
Accuracy	1
Case Materials	Stainless
Stem Lengths	2.5" -36"
Sensing Element	Stainless Bimetal
Capillary	NA
Connection Size	1/2 NPT
Approvals	ATEX

GAS FILLED

TSS

Protection Rating	IP65	IP65
Dial Size	2.5",3",4",6"	2.5",3",4",6"
Ranges	-100...1100 F	-100...1100 F
Accuracy	1	1
Case Materials	Stainless	Stainless
Stem Lengths	4" - 36"	4" - 36"
Sensing Element	Stainless Gas Filled	Stainless Gas Filled & Capillary
Capillary	NA	12" - 80"
Connection Size	1/2 NPT	1/2 NPT
Approvals	ATEX	ATEX

To measure temperature accurately is a question of proper sensor placement.

With Bourdon you can always rely on competent advice



SWITCHES

RT2

Protection Rating	IP66
Measuring Ranges	-40...650 F
Wetted Parts	Stainless
Set Points	1
Repeatability	1% FS
Current Ratings	10mA to 10 A max 250 VAC / 220 VDC
Sensor Type	Stem or with Capillary
Connection	1/2 NPT
Approval	ATEX

SPEED
AVAILABILITY
SERVICE

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T8410, T9093, T9143, T9346



T8416, T9144, T9367



AGW, AGF

Process Connections	Threaded	Welded	Flanged & Threaded
Process Temp	1100 F	1100 F	1100 F
Pressure Max	3600 psi	3600 psi	6000 psi
Materials	Brass / Steel / Stainless Steel	Steel / Stainless Steel	Stainless Steel
Length	2" - 36"	2" - 36"	4" - 36"
Immersion Tube	4,6, & 8 mm	6, 8 mm	7 - 18 mm

Our thermowells are produced to the highest quality standards.

All wells can be provided with any test or certificate needed in lengths up to 36".



When looking to fill your process instrumentation needs, look no further than “The Original Bourdon”.



Worldwide Presence

Worldwide certified quality.



Assembly in the U.S.A., ensures the speed, availability, and service you need.

Atlanta, GA U.S.A

India

Switzerland

Denmark

France

Venezuela

Germany

Saudi Arabia

**For More Information Please
Contact:**