



NOT JUST ANOTHER PRESSURE GAUGE
THE ORIGINAL.



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 Manomètre
métallique à tube méplat et
courbé.
C'est ce manomètre qui a été
appliqué en février 1849 à la
chaudière de la machine à vapeur
avant que M. Bourdon ne
le sien en Pression.
Le tube à méplat
fabriqué par M. Bourdon
d'instrumenter



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)

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



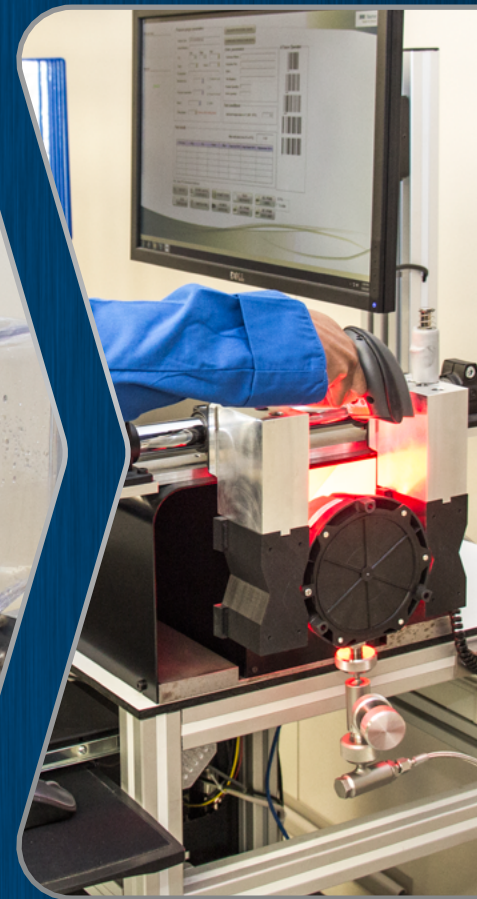
**OVER PRESSURE &
INITIAL CALIBRATION**



CLOSING & CRIMPING



FILLING



**FINAL TESTING &
BTRACE COMPLIANCE**

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.



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 100 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 14301 (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

MEX5-B60-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



MAX3



MAX5



MAG3



MAG5

Protection	IP65	IP65	IP66	IP66
Size	2.5"	4"	2.5"	4"
Range	Vac.....15,000 psi	Vac.....15,000 psi	Vac.....15,000 psi	Vac.....15,000 psi
Accuracy	1.6	1	1.6	1
Wetted Parts	Copper Alloy	Copper Alloy	Copper Alloy	Copper Alloy
Element	Bourdon Tube	Bourdon Tube	Bourdon Tube	Bourdon Tube
Case	Stainless	Stainless	Brass	Brass
Process Connection	1/4 NPT	1/4 NPT 1/2 NPT	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



MMX1



MEX2



MEX3, MEM3



MEX5, MEM5



MPG6



MEP5



MIX7

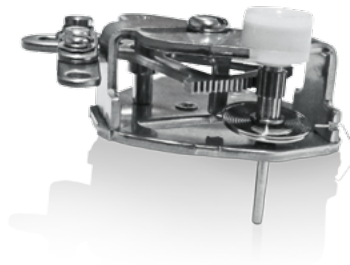
Protection	IP33/43	IP65	IP65	IP65	IP67	IP67	IP65
Size	1.5"	2"	2.5"	4"	4.5"	4"	6"
Range	20...300 psi	Vac.....15,000 psi	Vac.....15,000 psi	Vac...20,000 psi	Vac...20,000 psi	Vac...20,000 psi	Vac...20,000 psi
Accuracy	2.5	1.6	1.6	1	0.5	1	1
Wetted Parts	Stainless	Stainless	Stainless	Stainless	Stainless	Stainless	Stainless
Element	Bourdon Tube	Bourdon Tube	Bourdon Tube	Bourdon Tube	Bourdon Tube	Bourdon Tube	Bourdon Tube
Case	Stainless	Stainless	Stainless	Stainless	Polypropylene	Stainless	Stainless
Process Connection	1/8 NPT 1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT 1/2 NPT	1/4 NPT 1/2 NPT	1/4 NPT 1/2 NPT	1/4 NPT 1/2 NPT
Approval	ATEX	Lloyds Register / ATEX	Lloyds Register / ATEX	Lloyds Register / ATEX	S3 Safety Level	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.

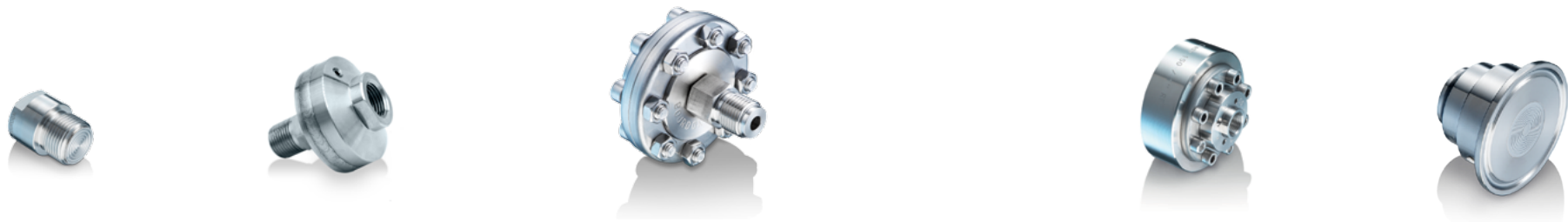


Minimizing vibrations or pulsations:
Filling with damping fluid or dashpot in the movement.



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

D400

DA

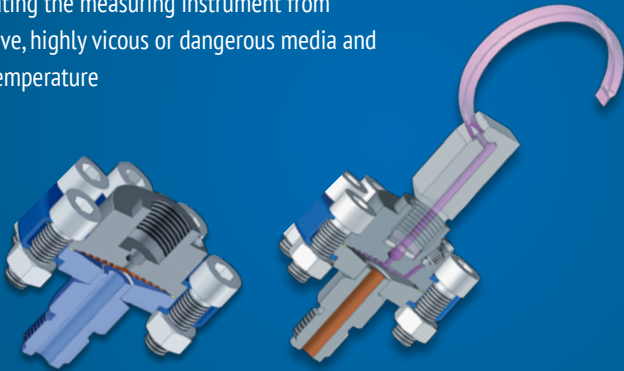
Process Connection	Threaded-Flush	Threaded	Threaded	Flanged	Sanitary Clamp
Body Standard	Stainless	Stainless	Stainless	Stainless	Stainless
Diaphragm	Stainless	Stainless	Stainless, Hast C, Tantalum, Monel	Stainless, Hast C, Tantalum, Monel	Stainless
Measuring Ranges	15...10,000 psi	15...6,000 psi	Vac...15,000 psi	3...6,000 psi	15...600 psi
Approval	N/A	N/A	N/A	N/A	3A



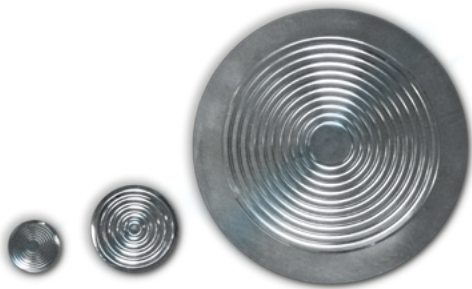
- Same day response time
- Same day order processing
- 24 hour shipping guarantee
- Rapid part development

Chemical Seals

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



Highly risistant membrane materials and coatings for extremely aggressive media.



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CTX



Y913



X913



RP2

Protection Ratings	IP65,67	IP67	IP65	Protection Rating	IP66
Measuring Ranges	Vac...3000 psi	Vac...10,000 psi	Vac...10,000 psi	Measuring Ranges	15...1500 psi
Wetted Materials	Stainless / Ceramic / NBR /EPDM /FKM	Stainless / Ceramic / NBR /EPDM /FKM		Wetted Materials	Stainless
Output	4..20 mA	4..20 mA	4..20 mA	Set Points	1
Technology	Ceramic Thick Film	Ceramic Thick Film	Ceramic Thick Film	Over Pressure	3000 psi
Accuracy	0.5% (BFSL)	0.3% (BFSL)	0.3% (BFSL)	Repeatability	1%
Connections	1/4 NPT 1/2 NPT	1/4 NPT 1/2 NPT	1/4 NPT 1/2 NPT	Connections	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	Current Ratings	10mA to 10 A max 250 VAC / 220 VDC
Approvals		ATEX	ATEX / Hazardous Area: 11,12,21,22	Approvals	ATEX



AVAILABILITY

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

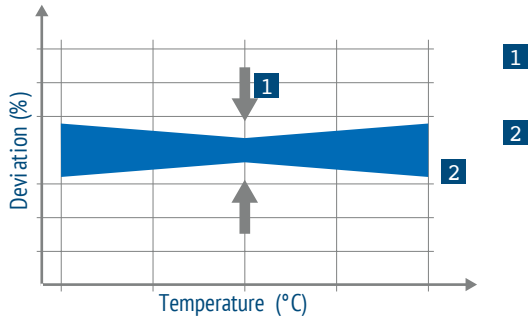
The Bourdon In-House Cell Competence

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.



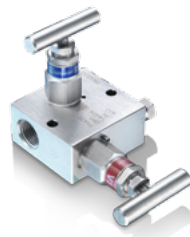
Mechanical Pressure Switches

A proven technology for power plants





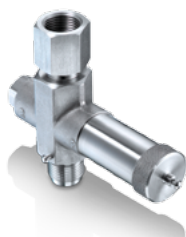
ARPX



AMFD



AORP



ARA



ASIP



AKPL

Process Temperature	-4...480 F	390 F	300 F	480 F	750 F	IP65
Max Pressure	6000 psi	6000 psi	10,000 psi	9000 psi	6000 psi	-30"...0 Hg to 0...20,000 PSI
Materials	Steel / Stainless Steel / PTFE	Stainless Steel / PTFE	Stainless Steel / Viton	Steel / Stainless Steel	Steel / Stainless Steel	Stainless steel



SERVICE

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

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



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	TSF
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



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

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

With Bourdon you can always rely on competent advice

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Worldwide Presence

Worldwide certified quality.



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

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Bourdon USA

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