



HYGIENIC APPLICATIONS



/ UNCOMPROMISING

Where hygiene is the first priority, there is no compromise. And for this reason, we make none. With our specific product portfolio, we therefore do not simply deliver excellent solutions for the field of hygienic applications in the highest product quality and usability:

rather, we provide you with safety and protection for your process and products at all times. Securing your process is essential for the company. As a partner, we are aware of this responsibility and are ready to take it on.



We have spent years developing our devices to be the best for your process. We understand how important it is to get the right instrumentation. We are there with you at each step.

MEASURE US BY IT!

HYGIENIC APPLICATIONS

HYGIENIC APPLICATIONS

/ THIS IS ASHCROFT

DEVELOPMENT FROM TRADITION

When Edward Ashcroft founded our company in 1852, his mission was to protect the steam-powered industry and its workers by using more sophisticated and reliable instruments. Times have changed, but not our attitude. With a history of more than 165 years, of which more than 40 years with our own production in Europe, we have experienced and learned a lot. Together with our customers, we have mastered three industrial revolutions, survived global and regional conflicts and crisis's. We look forward to accompanying our customers with our products in the fourth industrial revolution as well.

GLOBAL - REGIONAL - LOCAL

Globally positioned - regionally represented and locally available for you. With local contacts who speak your language and are ready to solve your challenges.

OUR GREATEST STRENGTH

All of Ashcroft's products and services are the result of our exceptional people. We are all passionate about our common goal, the best customer satisfaction. Ashcroft is inspired of a common commitment to our work and to each other. Combining the talents of our diverse workforce makes us more competitive, resilient and better able to respond to the ever-changing needs of our customers and markets.

OUR MOTIVATION

As a customer and partner, you are the focus of our attention. We are passionate about designing and producing the most innovative, high quality pressure and temperature measuring instruments on our planet.

OUR VALUES

Our five corporate values are not abstract, but are lived by us, and every Ashcroft employee bases his or her daily actions on them.

HYGIENIC APPLICATIONS



THINK CUSTOMER FIRST

Every measure, every plan and every project is aimed first and foremost at you, our customer. We see the world through your eyes.

NEVER SETTLE / CHALLENGE THE STATUS QUO

What was true yesterday is not necessarily true today. At Ashcroft, we challenge each other to never be indifferent, to keep improving ourselves and the company.

RESPECT EACH OTHER

We celebrate our diversity, share our ideas and intensify our collective thinking. We act and discuss in mutual respect and thus find better solutions.

THINK BEYOND BORDERS

Across geographical borders. Beyond the factory. Beyond your own area of responsibility. Beyond the personal comfort zone.

WIN AS A TEAM

The common goal is more important to us than our own.

HYGIENIC APPLICATIONS

PROTECTION

SAFETY

/ ASHCROFT HYGIENIC APPLICATIONS

QUALITY

RELIABILITY

HYGIENIC APPLICATIONS

/ ASHCROFT HYGIENIC APPLICATIONS

IN THE PHARMACEUTICAL AND FOOD-PROCESSING INDUSTRIES, STERILITY, SAFETY AND ACCURACY ARE INDISPENSABLE FOR THE STRICT AND HIGH QUALITY REQUIREMENTS.

For these industries, we design and produce our process transmitters, diaphragm seal systems and temperature measurement solutions with sterile connections and polished wetted parts, which permanently guarantee production safety and residue-free cleaning.

Various connection types are certified according to the European Hygienic Engineering & Design Group (EHEDG) and the American sanitary standard 3-A.

Our portfolio includes more than 30 connections, and we keep numerous special diaphragm seals in stock to enable rapid response times.

HYGIENE AT THE HIGHEST LEVEL

HYGIENIC APPLICATIONS



/ MECHANICAL PRESSURE GAUGES

HYGIENE AT THE HIGHEST LEVEL



Since Edward Ashcroft acquired the patent for the Bourdon tube in 1852, Ashcroft pressure gauges have been in use in a wide range of applications across the globe. It has been a trusted product for over 165 years.

Already offering an impeccable track record for safety and reliability, these gauges are now available with sanitary process connections for the Food & Beverage, Pharmaceutical and Biotech industries. Ensuring we meet all the stringent standards for these hygienic applications, we are pleased to assist in your process.

Our devices are here to be your shield; we want to protect your people, your processes, and your profits. This is our guiding principle and the core of everything we do. Each device is manufactured with you in mind.

HYGIENIC APPLICATIONS



MODEL	T5500 / T6500 PRESSURE GAUGE +32X DIAPHRAGM SEAL	1036 PRESSURE GAUGE & 1037 INLINE FITTING	1032 PRESSURE GAUGE
			
	The Ashcroft® T5500/T6500 pressure gauge designed for high performance and reliability are available with sanitary diaphragm seal assemblies with process connections Varivent®, DIN 11851, Tri-Clamps, SMS, RJT, IDF and more.	The Ashcroft® 1036 inline 3A authorized sanitary gauge in 3-1/2" dial sizes), satisfies stringent sanitary requirements with its unique design. Mated with the type 1037 inline fitting, this assembly virtually eliminates process deadleg and contamination.	The Ashcroft® 1032 sanitary gauge with Tri-Clamp connection is 3A authorized and is designed specifically to satisfy stringent sanitary requirements.
ACCURACY CLASS	/ EN 837-1 Class 1	/ 1.5% to 2.5%	/ 1.5% to 2.5%
DIAL SIZES	/ 100 mm / 160 mm	/ 3½"	/ 2 1/2", 3 1/2", 4 1/2"
AMBIENT TEMPERATURE (°C)	/ -40/70 (subject to conditions for ATEX version)	/ -40/93 (depends on fill fluid)	/ -40/93 (depends on fill fluid)
PROCESS TEMPERATURE (°C)	/ -40/125 (depends on fill fluid)	/ -40/138 (depends on fill fluid)	/ -40/138 (depends on fill fluid)
PRESSURE RANGE (BAR)	/ -1/0 to 0/100 (depends on type process connection)	/ -1/0 to 0/60 (depends on type process connection)	/ -1/0 to 0/60 (depends on type process connection)
CIP/SIP	✓	✓	✓
AUTOCLAVE OPTION		✓	✓
SOLID FRONT OPTION	✓		
ATEX	✓		
3-A AUTHORIZED		✓	✓
ELECTROPOLISHED WETTED PARTS OPTION	✓	✓	✓
PLUS!™ PERFORMANCE	✓	✓	✓
EASY ZERO™ OPTION		✓	✓

HYGIENIC APPLICATIONS

MODEL

A-SERIES

GP/GD SERIES



The Ashcroft® APA and APS explosion proof and water tight miniature pressure switches are designed for pressure control within harsh applications. Its compact design allows for easy integration into custom equipment or systems. This model is ideal for pressure alarm, shutdown or control within hazardous areas when limited size and process compatibility are needed.

The Ashcroft® GP pressure switch's simple design allows for easy field installation and calibration, while proven technology ensures a highly reliable, safe and accurate switch. Ideal for pressure control, safety shutdown or alarm operations when two independent setpoints or adjustable deadbands are required.

ACCURACY	/ 2% to 5% of span	/ 1% of span
AMBIENT TEMPERATURE (°C)	/ -40/89 (subject to conditions for ATEX version)	/ -30/65
PROCESS TEMPERATURE (°C)	/ -40/100 (depends on application & type of fill fluid)	/ -30/125 (depends on application & type of fill fluid)
PRESSURE RANGE (BAR)	/ -1/0 to 0/70 (depends on type process connection)	/ -1/0 to 0/70 (depends on type process connection)
DIFFERENTIAL PRESSURE OPTION		✓
ADJUSTABLE SET POINT	✓	✓
DUAL SET POINT		✓
ADJUSTABLE DEAD BAND		✓
CIP/SIP (subject to conditions of temperature & duration)	✓	✓
ATEX	✓	
SIL3	✓	
3-A AUTHORIZED	✓	✓

HYGIENIC APPLICATIONS



/ PRESSURE SWITCHES

HYGIENE AT THE HIGHEST LEVEL

Whether it is getting the right measures of ingredients for the perfect taste of food & drink, or the exact amounts of chemicals in a pharmaceutical process, the pivotal action is timing. Over or under filling in any of these processes results in lost product and profits. You need to be able to rely on your instruments.

Ashcroft pressure switches are known for their accuracy and are widely used in process industries. Available with hygienic process connections, they are up to the challenge of sanitary applications. With options for differential pressure measurement, explosion-proof enclosures and direct or remote mounting, we are confident we have the instrument to suit your requirements.

Safety is paramount and we want to protect you and your processes.



HYGIENIC APPLICATIONS

/ PRESSURE SENSORS

HYGIENE AT THE HIGHEST LEVEL

At Ashcroft, we continue to master measurement technologies and strengthen know-how in almost all applications by manufacturing instruments tailored to our customers requirements. We continue to grow our portfolio of devices alongside our customer base.

As proud as we are of our heritage in pressure measurement since the 19th century, we have continued to invest in contemporary needs as well as the future.






As we enter Industry 4.0 with more machines communicating with each other across the Internet of Things, Ashcroft offers pressure sensors for customers for any stage of their automation process.

We have sensors with 4-20 mA output, analogue + digital HART communication, and fully digital PROFIBUS communication.

The key to great protection is great communication; let us know your needs and we can speak your language.

HYGIENIC APPLICATIONS



MODEL	CB55	CS55	CG55	CP55	E2 SANITARY
					
	<p>For automated production in Food and Pharma industries, highest accuracies in measurement of process variables are required to maintain the processes in close tolerances. The Sensor integrated just behind the flush diaphragm enables Active Temperature Compensations, helps to achieve the highest accuracy levels with near to zero effects of process temperature variations, hence the stated accuracy even at the lowest span range. Designed with focus on the hygienic applications, the all stainless steel CLEANLINE versions of the transmitter series Bronze, Silver, Gold and Platinum are available with over 50 Sanitary process connections with integrated sensors.</p>				<p>The 3A 74-07 authorized sanitary version of the Ashcroft® E2, combines the proven thin film sensor technology with a sanitary seal. Engineered for easy disassembly and cleaning, it provides an electropolished mating surface, wide selection of electrical connections and fill fluids.</p>
ACCURACY (%)	/ 0.2	/ 0.2/0.1	/ 0.1	/ 0.1/0.075	/ 0.25
AMBIENT TEMPERATURE (°C)	/ -20/70 (subject to conditions for ATEX version)				/ -40/125
PROCESS TEMPERATURE (°C)	/ -20/100				/ -40/125 (depends on type of fill fluid)
PRESSURE RANGE (BAR)	/ -1/0 to 0/100				/ -1/0 to 0/70
CIP/SIP (subject to conditions of temperature & duration)	✓	✓	✓	✓	✓
DISPLAY	✓*	✓	✓	✓	
4-20 mA	✓	✓	✓	✓	✓
HART OPTION		✓	✓	✓	
PROFIBUS PA OPTION				✓	
ATEX			✓	✓	
SIL2	✓		✓		✓
3A AUTHORIZED OPTIONS	✓	✓	✓	✓	✓
EHEDG CERTIFIED OPTIONS	✓	✓	✓	✓	

* optional for CB55

HYGIENIC APPLICATIONS

/ SANITARY DIAPHRAGM SEAL 32X SERIES

HYGIENE AT THE HIGHEST LEVEL

As well as keeping your process protected, you want to make sure your instruments last for as long as possible.

Keeping them separated from the process media prevents the measurement device becoming clogged or damaged and in turn, stops any contaminants returning to your system.

The Ashcroft 32X Diaphragm Seal can connect with analogue and digital gauges, sensors, and switches. With its quick-connect process connection, the seal can easily be removed for cleaning media between your scheduled process runs – helping to reduce downtime and protect your system.

We are thinking about your process at every step and providing the protection where you need it most.

KEY FEATURES

- Stainless steel flush welded diaphragm seals
- Diaphragm protected against rupture with convolutions behind
- Helium leak tested
- Minimized temperature errors
- Electropolished option with Ra <0,38 µm
- Suitable for CIP and SIP

PROCESS CONNECTION STYLE

- Model 322: Tri-Clamp (DIN 32676 / ISO 2852)
- Model 323: VARIVENT®
- Model 324: Milk coupling (DIN 11851)
- Model 326: SMS 1145
- Model 327: RTJ APV (BS 4825-5)
- Model 328: IDF (BS 4825-4)



CUSTOMIZE If there are any other products of our customer's choice, we can also assemble and calibrate them with our SEAL 32X.

HYGIENIC APPLICATIONS

HYGIENIC APPLICATIONS

/ THERMOMETERS

HYGIENE AT THE HIGHEST LEVEL

Wherever there is pressure, there is temperature.

An accurate temperature measurement in a process such as food or pharmaceuticals can be pivotal in providing a quality, safe product, preventing expensive disposal of material and the whole process to be started again.

At Ashcroft, we have worked on our temperature device portfolio for many years, and we pride ourselves on creating measurement instruments that provide you with accuracy, repeatability, and reliability.




Our thermometers are offered with either a bimetallic or gas-actuated measuring system with a range of dial sizes to suit your requirements.

We can also provide sanitary thermowells designed to keep your process and measuring device safe.

When you need to shield your system, Ashcroft are there.

HYGIENIC APPLICATIONS



MODEL	GAS S5500	BIMETAL EN	BIMETAL ASME
			
	<p>The Ashcroft® S5500 gas actuated thermometer is a direct or remote mounted instrument providing performance while being highly resistant to shock and vibration. This product is extremely versatile for use on many applications. S5500 is ideal for applications with vibration and very high or low temperatures and available in process connections DIN11851, Tri-Clamps, Varivent, SMS, IDF, RJT.</p>		<p>The Ashcroft® bimetallic thermometers are high-quality process temperature instrument that delivers exceptional reliability. An ideal choice for accurate temperature readings. Available also in hermetically sealed case to prevent entry of moisture, interior corrosion and coil freeze up. Tri-clamp process connection are achieved through Sanitary Thermowells.</p>
ACCURACY CLASS	/ EN 13190 Class 1	/ EN 13190 Class 1	/ ASME B40.200 Grade A
DIAL SIZES	/ 100 mm, 160 mm	/ 100 mm, 160 mm	/ 2", 3", 5"
AMBIENT TEMPERATURE (°C)	/ -30/80	/ -40/93 (subject to conditions for ATEX version)	
PROCESS TEMPERATURE (°C)	/ -200/800	/ -50/500	
CIP/SIP (subject to conditions of temperature & duration)	✓	✓	✓
ATEX	✓	✓	✓
MAXIVISION® (min. parallax errors)			✓
EVERYANGLE™	✓	✓	✓
EXTERNAL ADJUSTMENT	✓	✓	✓



SANITARY THERMOWELLS

Ashcroft® sanitary thermowell isolates and protects a temperature instrument's sensing element from pressurized, high velocity and corrosive media. It is a one piece bar stock construction. The polish and large radius between the stem and flange support easier cleaning. Thermowells ensure longer life and accurate measurement while allowing the sensing instrument to be removed without shutting down the process.

HYGIENIC APPLICATIONS

MODEL

GT-SERIES



The Ashcroft® GT NEMA 4 temperature switch with 316L Stainless steel enclosure and simple design allows for easy wiring and field installation, while proven technology delivers repeatable, long-term performance. With a wide range of temperature ranges from -40°C to 400°C, the switch has been in use in wide range of industrial application.

The availability of temperature ranges suitable for F&B and pharma and easy assembly with Ashcroft Sanitary Thermowells makes this ideal for temperature control, shutdown or alarm operations also in hygienic applications.

ACCURACY	/ 1% of span
AMBIENT TEMPERATURE (°C)	/ -30/65
PROCESS TEMPERATURE (°C)	/ -40/400
ADJUSTABLE SET POINT	✓
DUAL SET POINTS	✓
REMOTE CONNECTION	✓
ADJUSTABLE DEAD BAND	✓
CIP/SIP (subject to conditions of temperature & duration)	✓



SANITARY THERMOWELLS

Ashcroft® sanitary thermowell isolates and protects a temperature instrument's sensing element from pressurized, high velocity and corrosive media. It is a one piece bar stock construction. The polish and large radius between the stem and flange support easier cleaning. Thermowells ensure longer life and accurate measurement while allowing the sensing instrument to be removed without shutting down the process.

HYGIENIC APPLICATIONS

/ TEMPERATURE SWITCHES

HYGIENE AT THE HIGHEST LEVEL

Our innovation never stops. We work to serve your requirements whether the request is large or small. We can tailor our existing products to meet your needs.

Engineered to make very precise temperature switching operations, the Ashcroft Temperature Switch range was created out of such a request. Based on the actuation technique used in our renowned Pressure Switches, our Temperature Switches can control high and low operating limits in a broad range of applications.

They are simple and easy to install and when used in conjunction with our sanitary thermowells, can be kept out of your media while offering a high-accuracy response.

As processes change, we change with them.



HYGIENIC APPLICATIONS

/ TEMPERATURE SENSORS

HYGIENE AT THE HIGHEST LEVEL

Every industry is different and there is no one-size-fits-all. We understand this.

Our devices are built to order so our customers have the exact specification they need.

Our Industrial Temperature Sensor (ITS) and Industrial Temperature Transmitters (ITT) product line offers a range of products specifically designed for temperature measurement in the process industry. Our sensors are so variable, we can customise them to suit your application.

They are as unique as your process.

The threaded process connections when assembled with the Sanitary Thermowells, opens out a wide range of possibilities for the food and beverage and pharma-biotech industries in automation through temperature sensing.

HYGIENIC APPLICATIONS



MODEL	ITS3	ITS4	ITT5
	The Ashcroft® ITS3 and ITS4 are temperature sensors available with a wide range of customization possibilities in type of measurement element, electrical connections, and output.		The Ashcroft® ITT5 are compact temperature transmitters available with PT1000 Class A, offering an accuracy of 0.1%. The measurement range of the ITT5 is available as 4-20 mA signal output.
ACCURACY	/ Customized solution (depends on type of sensor and thermowell)		/ 0,1 % of span
AMBIENT TEMPERATURE (°C)	/ Customized solution (depends on type of sensor and thermowell)		/ -40 / 90
PROCESS TEMPERATURE (°C)	/ Customized solution (depends on type of sensor and thermowell)		/ -50 / 200
CIP/SIP (depends on type of sensor and thermowell)	✓	✓	✓
PT100	✓	✓	
PT1000	✓	✓	✓
THERMISTORS	✓	✓	
4-20 mA output			✓
OUTPUT WIRED LEADS / END FERRULES	✓		✓
OUTPUT CONNECTORS		✓	✓



SANITARY THERMOWELLS

Ashcroft® sanitary thermowell isolates and protects a temperature instrument's sensing element from pressurized, high velocity and corrosive media. It is a one piece bar stock construction. The polish and large radius between the stem and flange support easier cleaning. Thermowells ensure longer life and accurate measurement while allowing the sensing instrument to be removed without shutting down the process.

HYGIENIC APPLICATIONS

/ PRESSURE

GAUGES

SWITCHES

SENSORS

MODEL	T5500/T6500	1032	1036	A-SERIES	GP/GD-SERIES	CLEANLINE-SERIES	E2 SANITARY
-------	-------------	------	------	----------	--------------	------------------	-------------



VERSION	// EN 837-1 Class 1 // 100 mm / 160 mm dial	// 1.5% to 2.5% accuracy // 2-1/2", 3-1/2", 4-1/2" dial	// 1.5% to 2.5% accuracy // 3-1/2" dial	// 2% to 5% accuracy // Compact pressure switches	// 1% of span accuracy // Pressure or DP switches	// 0.2%, 0.1%, 0.075% accuracy // Transmitter with smart functions	// 1%, 0.5%, 0.25% accuracy // Compact transducer
RANGES	// -1/0 to 0/100 bar	// -1/0 to 0/60 bar	// -1/0 to 0/60 bar	// -1/0 to 0/70 bar	// -1/0 to 0/70 bar	// -1/0 to 0/100 bar	// -1/0 to 0/70 bar
FEATURES	// PLUS! Performance // IP66 / IP67	// PLUS! Performance // IP65	// PLUS! Performance // IP65	// SPDT / DPDT // IP67	// SPDT / 2 SPDT // IP66	// INTEGRATED Sensor // ACTIVE Temperature compensation // IP67 / IP68	// Thin Film or Pierzo resistive sensor // IP66 / IP67 / IP 69K // External adjustment
OPTIONS	// Open / Solid Front // Safety Glass // Various dial options	// Safety Glass // Various dial options // Easy Zero™ Option	// Safety Glass // Various dial options // Easy Zero™ Option	// Adjustable set point	// Adjustable set point // Dual set points // Adjustable dead band	// 4-20 mA // HART // PROFIBUS PA	// 4-20 mA or Voltage
APPROVALS	// CE, UKCA, CRN, EAC // ATEX-approved	// CRN // 3-A Authorized	// CRN // 3-A Authorized	// CE, UL, FM, CSA, CRN // ATEX, SIL3, ROHS // 3-A Authorized	// CE, CRN, CSA, UL // 3-A Authorized	// CE, ATEX, SIL2 // 3-A Authorized // EHEDG Certified	// CE, ROHS // 3-A Authorized

HYGIENIC APPLICATIONS

/ TEMPERATURE

THERMOMETER

SWITCHES

SENSORS

MODEL	GAS S5500	BIMETAL EN	BIMETAL ASME	GT-SERIES	ITS3	ITS4	ITT5
-------	-----------	------------	--------------	-----------	------	------	------



VERSION	// EN 13190 Class 1 // 100 mm / 160 mm dial	// EN 13190 Class 1 // 100 mm / 160 mm dial	// ASME B40.200 Grade A // 2", 3", 5" dial	// 1% of span accuracy // Direct / remote	// PT1000 / PT100 / NTC // KTY / customer specific accuracy	// PT1000 / PT100 / NTC // KTY / customer specific accuracy	// PT1000 Class A // Accuracy 0.1% (span)
RANGES	// -200 / 800 °C	// -50 / 500 °C	// -50 / 500 °C	// -40 / 400 °C	// -40 / 400 °C custom	// -40 / 400 °C custom	// -50 / 200 °C
FEATURES	// Wide selection of temperature ranges // IP65	// Hermetically sealed // IP66 // Everyangle™	// Hermetically sealed // IP66 // Everyangle™ // Maxivision®	// SPDT / 2 SPDT // IP66	// IP65 / IP66 / IP67 // Output connection: Wire leads / end ferrules	// IP65 / IP66 / IP67 / IP69 // Output connection: Wide range of plug connections	// IP65 // Output: 4- pole M12
OPTIONS	// Direct / remote // Dry or liquid filled // Various dial options	// Various dial options // Dry or liquid filled	// Various dial options // Dry or liquid filled	// Adjustable set point // Dual set point // Adjustable dead band	// Output: PT1000 / PT100 / NTC / KTY	// Output: PT1000 / PT100 / NTC / KTY	// 4-20 mA output
APPROVALS	// ATEX-approved // EAC	// CE, UKCA, PCT // ATEX-approved	// CE, UKCA, PCT // ATEX-approved	// CE, UL, CSA, ROHS	// CE, ROHS	// CE, ROHS	// CE, ROHS

HYGIENIC APPLICATIONS



ASHCROFT[®]
Trust the shield.[®]

 www.ashcroft.eu

ASHCROFT INSTRUMENTS GMBH • Max-Planck-Str. 1 • 52499 Baesweiler • GERMANY