

PLUS!™ Performance... Liquid-filled performance in a dry gauge!



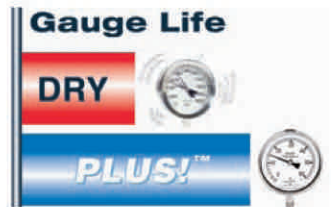
The Problem...

In the past, applications where heavy vibration and pulsation were present required the use of either a conventional dry gauge with a hard to read pointer and a limited life span, or, a costly liquid-filled gauge and all the headaches that come with them.



The Solution...

An exclusive, breakthrough technology developed for Ashcroft pressure gauges providing virtually liquid-filled performance in a dry gauge, the Ashcroft® PLUS!™ Performance option.



Benefits vs. Dry Gauges...

- Dampens vibration and pulsation
- Steady pointer – Easier to read!
- 100% longer life
- Reduce purchases by 50%!

Benefits vs Liquid-filled...

- Dampens vibration and pulsation without the headaches of liquid-filled gauges.
- No liquid – No leaks!
- Easier to read...no fill lines!
- Easier to recalibrate.
- Wider temperature range vs glycerin-fill.
- Eliminates costly specialty fluids.



How'd They Do That?..

The Patented Ashcroft® PLUS!™ Performance option utilizes a unique cartridge to surround the pinion with an engineered dampening agent to dynamically dampen the pointer and movement, thereby providing a dry gauge which acts liquid-filled.

IMPROVED PLANT SAFETY

Safety is a critical issue and the PLUS!™ performance option can improve the safety of your plant. Industry surveys indicate that 20% to 30% of customer's gauges are misapplied and prematurely fail due to pulsation and vibration. If a Bourdon tube fails due to excessive pulsation, the process media will escape causing possible environmental damage, process contamination and more importantly, possible injury, fire or explosion.



- Q. **Are PLUS!™ Performance gauges "new" gauges?**
A. No. We simply enhanced the industry leading Ashcroft products you've grown to trust with a fluid clutch dampener. The mechanical system is unchanged.
- Q. **Does PLUS!™ Performance affect accuracy?**
A. No. The only difference is that the response time is similar to liquid-filled gauges.
- Q. **Can these gauges be oxygen cleaned?**
A. Yes. Our process cleans the system to meet AMSE B40.1 level IV.
- Q. **What temperature range is possible?**
A. -40°F to 200°F or 250°F depending on window material.
- Q. **Can I use PLUS!™ Performance instead of Halocarbon fill**
A. Yes!
- Q. **Can this be used in paint applications or others requiring no silicone?**
A. The standard PLUS!™ Performance cannot be used in silicone-free applications. However, PLUS!™ is available in a silicone-free version. Order as XNS for silicone-free.
- Q. **Does the throttle plug do all the work?**
A. No. Throttle plugs are designed only to fight pulsation. Vibration requires either a liquid-filled gauge or PLUS!™ Performance.
- Q. **Does our competition have anything similar?**
A. No. One competitor evaluated a liquidless gauge with poor results. Their design utilized a dashpot which caused premature failures versus even dry gauges. Gauges with PLUS!™ Performance utilize a completely different approach overcoming their design problem.
- Q. **Will this gauge last forever?**
A. No gauge will last forever under conditions of severe pulsation and vibration. The PLUS!™ Performance gauges simply last significantly longer than traditional dry gauges with the benefits outlined above. *There are a few applications, chiefly severe high frequency pulsation, where a liquid-filled gauge or a remote mounted gauge is necessary. With a few exceptions, Beta site customers have found the performance to rival liquid-filled gauges in life expectancy without any of the headaches of liquid-filled gauges.*
- Q. **How Do I Order?**
A. The product variation "XLL" designates PLUS!™ Performance in all Duragauge®, Duralife®, 1008S and 1032 pressure gauges and Duratran® transmitters.

PLUS!™ Performance... Liquid-filled performance in a dry gauge



DURAGAUGE® PRESSURE GAUGE

ACCURACY
½% full scale

DIAL SIZE
4½", 6", 8½"

TUBE MATERIAL
Bronze, 316 SS, Monel, Inconel

SENSING ELEMENT
Bourdon tube

CONNECTION
¼ NPT, ½ NPT, JIS, DIN, BSP,
All lower or back

RANGES
Vac. to 100,000 psi

CASE MATERIAL
Phenolic, aluminum,
polypropylene

MOVEMENT
Stainless steel, rotary design,
Teflon® S coated pinion and
bearings

POINTER
Micrometer adjustable

DIAL
White painted aluminum

TYPE NUMBERS
1279 phenolic (4½")
1377 aluminum (4½", 6", 8½")
1379 aluminum (4½", 6", 8½")
2462 (6")



TYPE 2279 DURATRAN® PRESSURE TRANSMITTER AND GAUGE

ACCURACY
½% full scale

OUTPUT
2 wire, 4-20mA

STABILITY
±0.25% full scale

SUPPLY VOLTAGE
24 Vdc nominal, 16V min.,
40V max.

DIAL SIZE
4½" analog dial

TUBE MATERIAL
316 SS, Monel

SENSING ELEMENT
Bourdon tube

CONNECTION
½ NPT – lower

RANGES
Vacuum, 12 to 20,000 psi

CASE MATERIAL
Phenolic

MOVEMENT
Stainless steel

POINTER
Micrometer adjustable

WEATHERPROOF
NEMA 4 – Hermetic seal

AUTOCLAVABLE!



TYPE 1032 SANITARY GAUGE

ACCURACY
1.5%-2% depending on range

DIAL SIZE
2½", 3½", 4½"

TUBE MATERIAL
316 SS

SENSING ELEMENT
316L SS diaphragm
(12-20RA finish)

CONNECTION
Standard: 1½" or 2" Tri-Clamp,®
others on request
Location: lower, back,
side or top

RANGES
From 15# to 1000# including
vacuum and compound

CASE & RING MATERIAL
304 stainless steel

MOVEMENT
Stainless steel, PowerFlex™

POINTER
Adjustable Pointer (all)
Easy Zero Ext. Adjust (3½")

DIAL
White painted aluminum

WINDOW
Polycarbonate, Polysulfone
(optional)

CLEAN & STEAM IN PLACE
Temperature limits to 300°F
(140°C)

AUTOCLAVE OR STERILIZE
Temperature limits to 300°F
(140°C) with polysulfone
window

SYSTEM FILL
Glycerin (Std)
Food Grade Silicone (Opt)

AGENCY APPROVAL
Meets 3A Standard 74-03



TYPE 1009 PRESSURE GAUGE

ACCURACY
1% full scale

DIAL SIZE
2½", 3½", 4½", 6"

TUBE MATERIAL
316 SS (2½", 3½")
Bronze, 316 SS, monel,
steel (4½", 6")

SENSING ELEMENT
Bourdon tube, Helium leak test
to 1 x 10⁻⁶ ATM CC/sec

CONNECTION
⅛ NPT, ¼ NPT, ½ NPT,
7/16" x 20 SAE lower or lower
back, other threads on
application

RANGES
Vac. to 30,000 psi including
compound

CASE & RING MATERIAL
304 Stainless steel with ventable
relief plug

MOVEMENT
Stainless steel, PowerFlex™
(2½", 3½")
Stainless steel (4½", 6")

POINTER
Adjustable

DIAL
White painted aluminum

WINDOW
Polycarbonate (2½", 3½")
Glass (4½", 6"), safety glass
optional

- ASME B40.100
- EN837.1 compliance available
- RO HS compliant
- CRN approved



TYPE 1008S STAINLESS STEEL METRIC CASE

ACCURACY
1.6% full scale

DIAL SIZE
63mm, 100mm

TUBE MATERIAL
316 SS

SENSING ELEMENT
Bourdon tube

CONNECTION
¼ NPT lower or lower back
½ NPT lower (100mm), JIS,
DIN available

RANGES
Vac. to 15,000 psi including
compound

CASE MATERIAL
304 stainless steel

MOVEMENT
Stainless steel, PowerFlex™

POINTER
Fixed

DIAL
White painted aluminum

WINDOW
Polycarbonate

- ASME B40.100
- EN837.1 compliance available
- RO HS compliant
- CRN approved

