



Absolute Pressure Gauges

Compact Design

With Capsule Element • Type 516.11

With Bourdon Tube • Type 516.12

Pressure Gauges

Application

Measurement of absolute pressure without the effect of barometric pressure variation. Suitable for all clean and dry gaseous media that will not attack copper alloy and aluminum parts

Size

3" (80 mm)

Accuracy

± 1.5% of span

Ranges

Type 516.11: 10 "H₂O to 400 "H₂O Absolute

Type 516.12: 30 PSI to 200 PSI Absolute

Working Range

Steady: full scale value

Fluctuating: 0.9 x full scale value

Overpressure Safety

Type 516.11: 14.7 PSI absolute (atmospheric pressure) with all scale ranges

Type 516.12: full scale value

Operating Temperature

Ambient: -4°F (-20°C) to 140°F (60°C)

Media: max. + 160°F (+70°C)

Temperature error

Additional error when temperature changes from reference temperature of 68°F (20°C) ± 0.4% for every 18°F (10°C) rising or falling. Percentage of span.

Weather Protection

Weather proof (NEMA 4 / IP 66)

Standard Features

Connection (exposed to pressure medium)

Lower mount (LM)

Center back mount (CBM)

1/8" NPT female

Pressure Element (exposed to pressure medium)

Type 516.11: Copper alloy capsule

Type 516.12: Stainless steel Bourdon tube

Movement (exposed to pressure medium)

Copper alloy

Dial (exposed to pressure medium)

White aluminum with black lettering

Pointer

Black aluminum

Zero Adjustment

Adjustment made in back of case (Type 516.11)

Case (exposed to pressure medium)

Black aluminum with black aluminum ring. NOTE: Case under pressure.

Window

Flat instrument glass



Gaskets (exposed to pressure medium)

NBR (Buna rubber)

Gauge Mounting

Mounts to sturdy male piping. Male threaded connection, front flange, rear flange, or u-clamp mounting are optional.

Optional Extras

Other pressure connection

U-clamp panel mounting

Front flange

Rear flange

Male threaded connection

Operating Principle

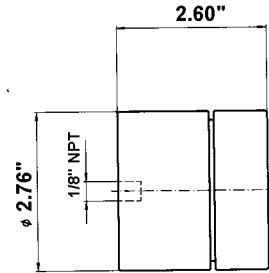
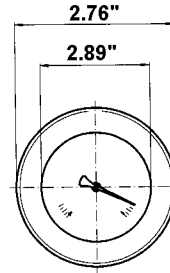
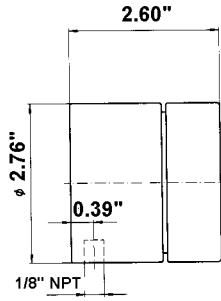
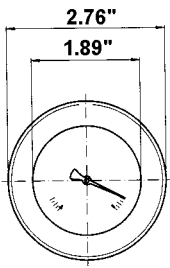
- The aluminum case holds the system pressure. The capsule element or Bourdon tube is permanently sealed with the zero reference pressure.
- The specially shaped capsule fully collapses to provide overpressure safety regardless of the scale range.
- Any pressure applied is compared to the sealed reference chamber (capsule element or Bourdon tube) to get an accurate measurement of absolute pressure.

Dimensions:

Standard Version

Lower Mount (LM)

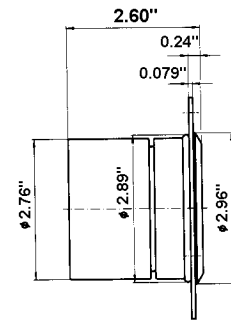
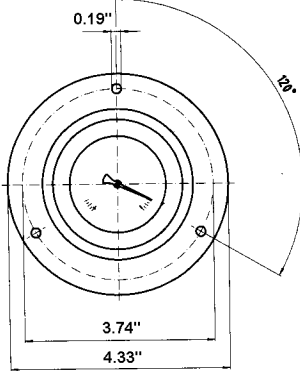
Center Back Mount (CBM)



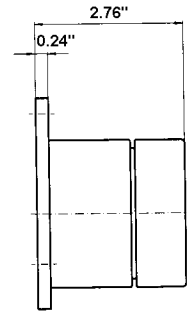
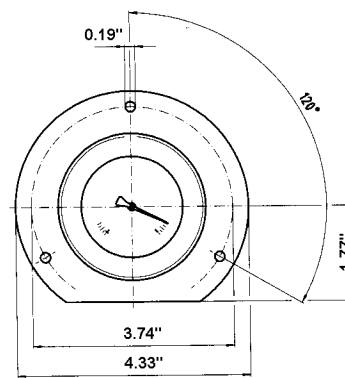
Optional Extras

Front Flange

Rear Flange

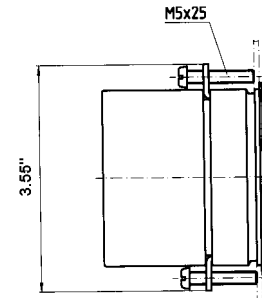
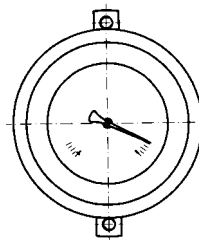


Panel Cutout \varnothing 2.96"



U-Clamp (UC)

Weight	
Type 516.11	Type 516.12
1.1 lb (0.48 kg)	1.2 lb (0.55 kg)



Panel cutout \varnothing 2.83"

THE MEASURE OF
Total Performance™

Ordering Information:

State computer part number (if available) / type number / size / range / connection size and location / options required.

Specifications given in this price list represent the state of engineering at the time of printing. Modifications may take place and the specified materials may change without prior notice



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