

Data Sheet

1009 Stainless Steel Case Gauge

FEATURES

- Meets ASME B40.100 specifications
- Corrosion resistant SS case
- Dry gauges are field fillable
- PowerFlex™ movement provides superior resistance to shock, vibration and pulsation
- True Zero™ reduces reading errors by using “zero box” instead of conventional dial pins
- **PLUS!**™ performance available for liquid filled performance with a dry gauge
- MSL helium leak tested to 1X10⁻⁶ scc/s
- Ventable fill plug
- Accessory kits for easy panel mounting

TYPICAL USES

- Pumps and compressors
- Boilers
- Equipment skids
- Specialized OEM equipment
- Hydraulics and pneumatics
- Severe ambient conditions



SPECIFICATIONS

| | |
|-------------|--|
| Accuracy: | ASME B40.100, Grade 1A, ±1% of span (Dry) ±1.5% of span (Liquid filled) |
| Dial Sizes: | 2½" (63mm), 3½" (100mm) |
| Ranges: | Minimum 0-15 psi, maximum 0-15,000 psi, vacuum and compound |

Wetted Materials

| | |
|---------------------|--|
| Tube: | 316L SS tube |
| Process Connection: | 316L SS socket (SW) Aluminum bronze socket (AW) |

Non Wetted Materials

| | |
|-----------|--|
| Window: | Polycarbonate (Std.), Safety glass (XSG), Polysulfone (XPS) 3½" Dial only |
| Dial: | Black figures on white background, aluminum |
| Pointer: | Black, aluminum, adjustable (Std.), micrometer (XMP) |
| Movement: | PowerFlex movement Bottom plate – 304 SS Upper plate – 304 SS Pin – 304 SS Hairspring assembly – 304 SS Pinion – 304 SS Segment – Glass filled polyester |

Case: 304 SS (Std.), 316L SS (XYW)

Ring: 304 SS (Std.), 316L SS (XYW)

Process Connection

Location: Lower, Back, Top, 3 o'clock, 9 o'clock

Process Connection

Sizes: ½ NPT, ¼ NPT (see ordering code for more options)

KEY BENEFITS

- IP65 Rating
- NEMA 4X
- CRN Approved
- PED
- **PLUS!**™ Performance (XLL)

Dampening: Glycerin case fill (Std. liquid fill), Silicone case fill (XGV),
Halocarbon case fill (XGX), **PLUS!** Performance (XLL)

Weather Protection: IP65 (Plug closed), IP54 (Plug vented)
NEMA 4X (Plug closed)

Approvals: CRN, RoHS, PED

MIN/MAX TEMPERATURE LIMITS

| Version | Ambient | Process | Storage |
|-----------------|----------------------|-----------------------|-----------------------|
| Dry | -40/200°F (-40/93°C) | -40/250°F (-40/121°C) | -40/250°F (-40/121°C) |
| PLUS! | -40/150°F (-40/66°C) | -40/200°F (-40/93°C) | -40/150°F (-40/66°C) |
| Glycerin Fill | 20/150°F (-7/66°C) | 20/200°F (-7/93°C) | 0/150°F (-18/66°C) |
| Silicone Fill | -40/150°F (-40/66°C) | -40/200°F (-40/93°C) | -40/150°F (-40/66°C) |
| Halocarbon Fill | -40/150°F (-40/66°C) | -40/200°F (-40/93°C) | -40/150°F (-40/66°C) |

1009 Stainless Steel Case Gauge

ORDERING CODE

Example: **251009 SW L 02 L XC4 15#**

| | | | | | | | |
|---|--------|----|---|----|---|-----|-----|
| Dial Size/Series Code | | | | | | | |
| 251009 – SS case | 251009 | | | | | | |
| 351009 – SS case | | | | | | | |
| System | | | | | | | |
| AW - 316L SS tube/Aluminum, bronze connection (Max. pressure 1000 psi) | | | | | | | |
| SW - 316L SS tube/316L SS process connection (Max. pressure 15,000 psi) | | SW | | | | | |
| Case Fill | | | | | | | |
| Dry, liquid fillable case | | | | | | | |
| L - Liquid filled case (Glycerin standard) | | | L | | | | |
| Process Connection Sizes | | | | | | | |
| 01 - 1/8 NPT Male | | | | | | | |
| 02 - 1/4 NPT Male | | | | 02 | | | |
| 04 - 1/2 NPT Male | | | | | | | |
| RW - SAE 1/16 & 20 Straight thread | | | | | | | |
| EJ - 7/16 X 20 UNF-3A 37° flare | | | | | | | |
| KJ - 1/4 Straight JIS, BSP - 1009SW | | | | | | | |
| KA - 1/4 Tapered JIS, BSP - 1009SW | | | | | | | |
| 13 - G 1/4" DIN | | | | | | | |
| JP - 1/4" Tubing, no throttle plug (max pressure 10,000 psi) | | | | | | | |
| JQ - 6mm Tubing, no throttle plug (max pressure 6,000 psi) | | | | | | | |
| JL - 9/16" 18 UNF-2A, N/A on 25 1009 lower | | | | | | | |
| Connection Location | | | | | | | |
| L - Lower mount connection | | | | | L | | |
| B - Lower back mount connection | | | | | | | |
| D - Side connection (3 o'clock) | | | | | | | |
| E - Side connection (9 o'clock) | | | | | | | |
| T - Top connection | | | | | | | |
| Options (if choosing an option(s) must include an "X") | | | | | | X__ | |
| LL - PLUS! ™ performance | | | | | | | |
| GV - Silicone case fill | | | | | | | |
| GX - Halocarbon case fill | | | | | | | |
| TU - Throttle plug for ranges up to 1000 psi | | | | | | | |
| TS - Throttle plug for ranges up to 15,000 psi | | | | | | | |
| 6B - Cleaned for oxygen service | | | | | | | |
| SG - Safety glass | | | | | | | |
| PS - Polysulfone window (3 1/2" dial only) | | | | | | | |
| EO - Adjustable red set hand | | | | | | | |
| SH - Red set hand, stationary | | | | | | | |
| NH - SS tag wired to case | | | | | | | |
| FF - Front flange | | | | | | | |
| FW - Back flange | | | | | | | |
| UC - U-clamp | | | | | | | |
| EA - External zero adjust (3 1/2" dial only) | | | | | | | |
| C4 - Individual calibration chart in accordance with ASME B40.100:2013. Accuracy traceable to N.I.S.T | | | | | | C4 | |
| SM - All SS movement | | | | | | | |
| YW - 316L SS case and ring | | | | | | | |
| Range (coding examples only, see range table for all standard ranges) | | | | | | | |
| Single Scales | | | | | | | |
| 15# - 15 psi | | | | | | | 15# |
| 1BR - 1 bar | | | | | | | |
| 1KSC - 1 kilograms per sq. cm | | | | | | | |
| 100KP - 100 kilopascal | | | | | | | |
| Dual Scales | | | | | | | |
| 15#/BR - 15 psi inner scale, 1 bar outer scale | | | | | | | |
| 1BR/# - 1 bar inner scale, 15 psi outer scale | | | | | | | |

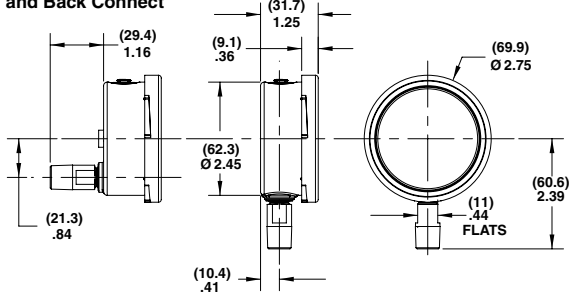
1009 Stainless Steel Case Gauge

| STANDARD RANGES | | | | |
|-----------------|----------|------------|-----------|--------------------|
| psi | bar | kPa | Mpa | kg/cm ² |
| 30IMV | -1BR | -100KP | -.1MP | -1KSC |
| - | -1&.6BR | -100&60KP | -.1&.06MP | -1&.6KSC |
| 30IMV&15# | - | - | - | - |
| - | -1&1.5BR | -100&150KP | -.1&.15MP | -1&1.5KSC |
| 30IMV&30# | - | - | - | - |
| - | -1&3BR | -100&300KP | -.1&.3MP | -1&3KSC |
| 30IMV&60# | - | - | - | - |
| - | -1&5BR | -100&500KP | -.1&.5MP | -1&5KSC |
| 30IMV&100# | - | - | - | - |
| - | 1&9BR | -100&900KP | -.1&.9MP | -1&9KSC |
| 15# | 1BR | 100KP | .1MP | 1KSC |
| 20# | - | - | - | - |
| - | 1.6BR | 160KP | .16MP | 1.6KSC |
| 30# | - | - | - | - |
| - | 2.5BR | 250KP | .25MP | 2.5KSC |
| 60# | 4BR | 400KP | .4MP | 4KSC |
| - | 6BR | 600KP | .6MP | 6KSC |
| 100# | - | - | - | - |
| 120# | - | - | - | - |
| - | 10BR | 1,000KP | 1MP | 10KSC |
| 160# | - | - | - | - |
| 200# | - | - | - | - |
| - | 16BR | 1,600KP | 1.6MP | 16KSC |
| 300# | - | - | - | - |
| - | 25BR | 2,500KP | 2.5MP | 25KSC |
| 400# | - | - | - | - |
| 500# | - | - | - | - |
| 600# | 40BR | 4,000KP | 4MP | 40KSC |
| 800# | - | - | - | - |
| - | 60BR | 6,000KP | 6MP | 60KSC |
| 1,000# | - | - | - | - |
| 1,500# | 100BR | 10,000KP | 10MP | 100KSC |
| 2,000# | - | - | - | - |
| - | 160BR | 16,000KP | 16MP | 160KSC |
| 3,000# | - | - | - | - |
| - | 250BR | 25,000KP | 25MP | 250KSC |
| 4,000# | - | - | - | - |
| 5,000# | - | - | - | - |
| 6,000# | 400BR | 40,000KP | 40MP | 400KSC |
| 8,000# | - | - | - | - |
| - | 600BR | 60,000KP | 60MP | 600KSC |
| 10,000# | - | - | - | - |
| 15,000# | 1,000BR | 100,000KP | 100MP | 1,000KSC |

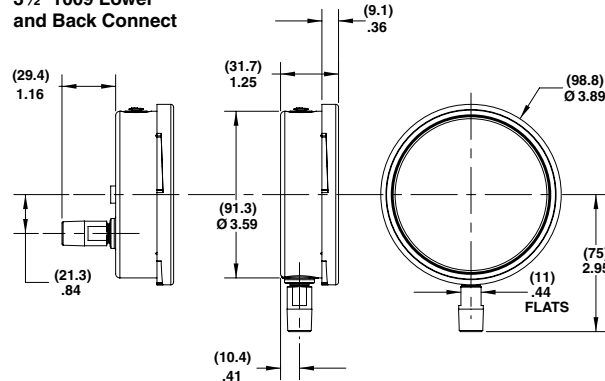
1009 Stainless Steel Case Gauge

DIMENSIONS (dimensions in [] are millimeters)

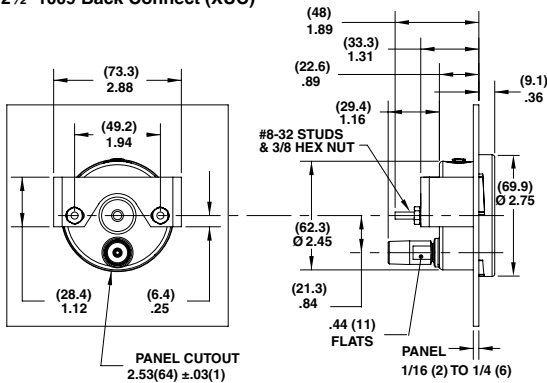
2½" 1009 Lower and Back Connect



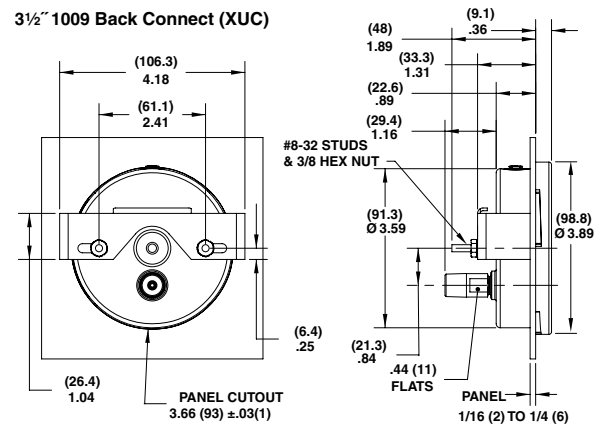
3½" 1009 Lower and Back Connect



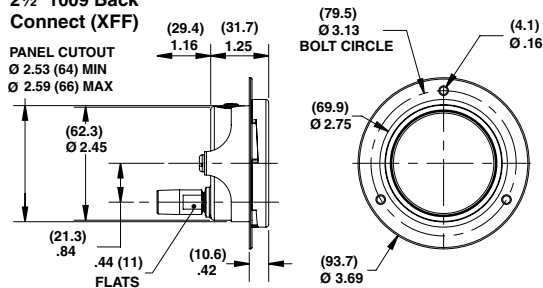
2½" 1009 Back Connect (XUC)



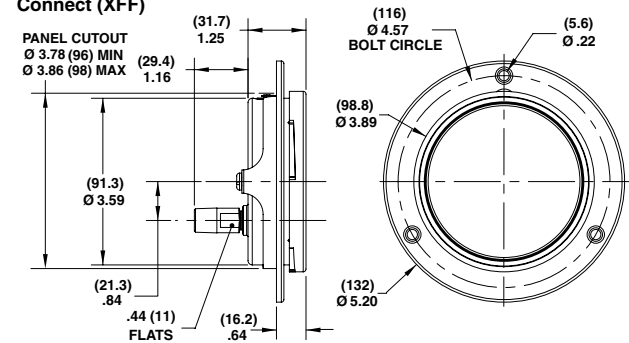
3½" 1009 Back Connect (XUC)



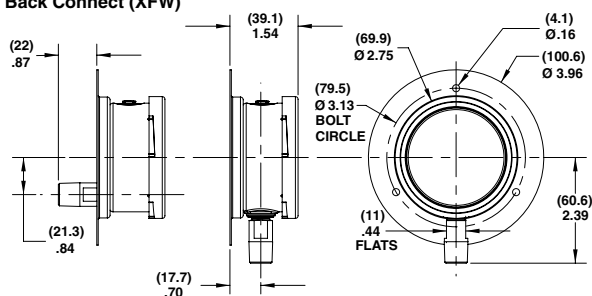
2½" 1009 Back Connect (XFF)



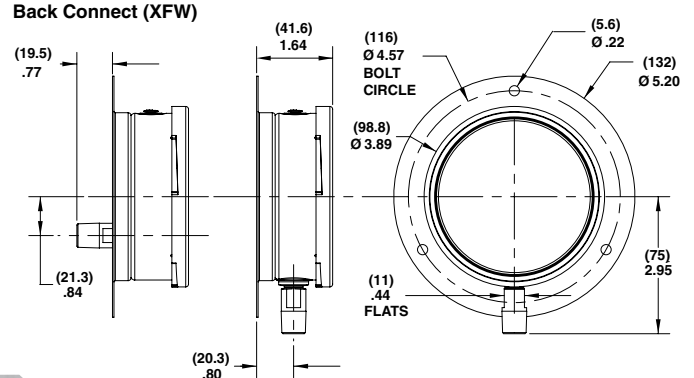
3½" 1009 Back Connect (XFF)



2½" 1009 Lower and Back Connect (XFW)



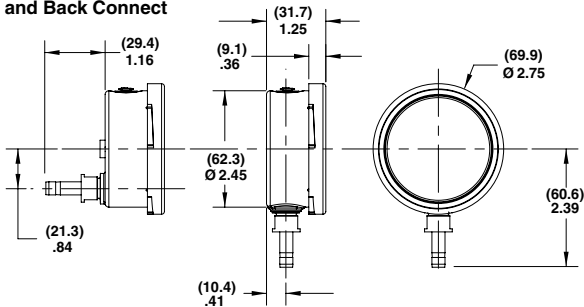
3½" 1009 Lower and Back Connect (XFW)



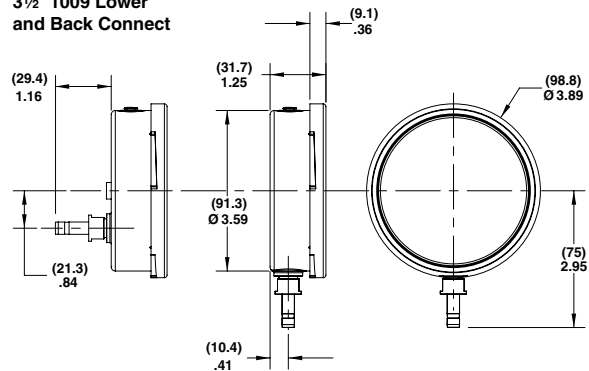
1009 Stainless Steel Case Gauge with Tubing Connections

DIMENSIONS (dimensions in [] are millimeters)

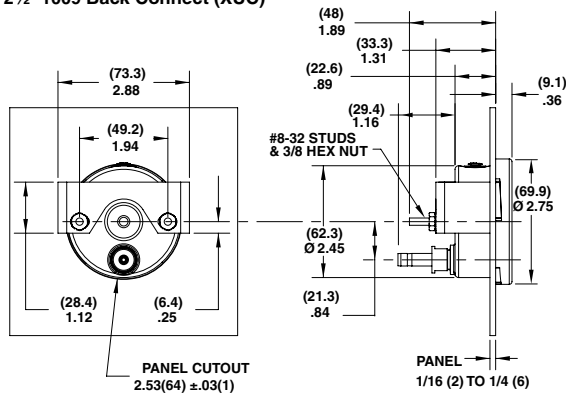
2½" 1009 Lower and Back Connect



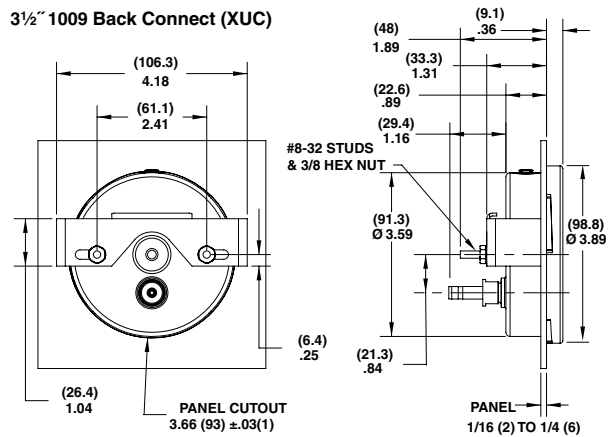
3½" 1009 Lower and Back Connect



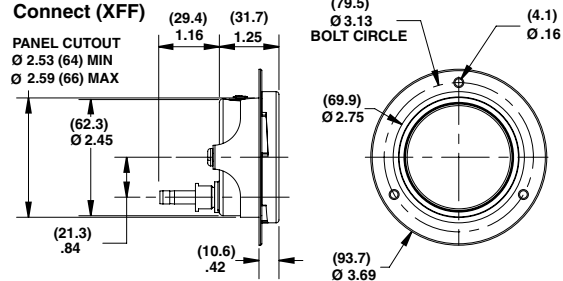
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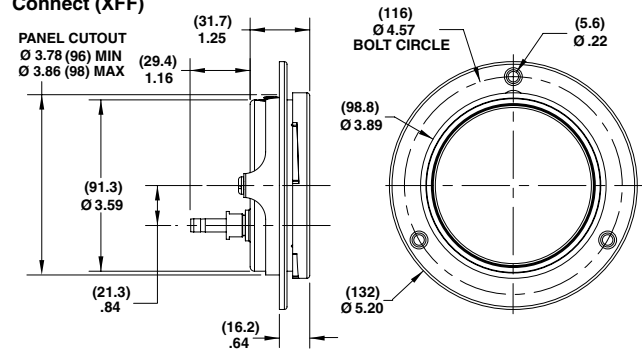
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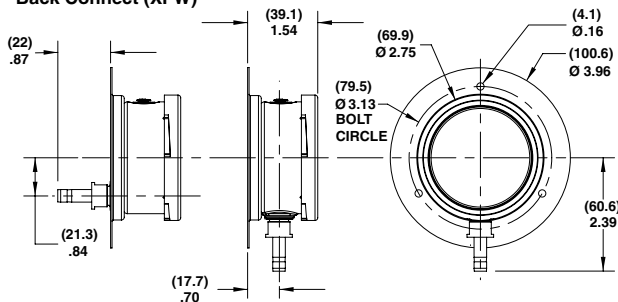
2½" 1009 Back Connect (XFF)



3½" 1009 Back Connect (XFF)



2½" 1009 Lower and Back Connect (XFW)



3½" 1009 Lower and Back Connect (XFW)

