

1009 Stainless Steel Case Gauge

FEATURES

- Meets ASME B40.100 specifications
- Corrosion resistant stainless steel 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
- 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 Stainless steel tube

Process Connection: 316L Stainless steel 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 Stainless steel

Upper plate – 304 Stainless steel

Pin - 304 Stainless steel

Hairspring assembly - 304 Stainless steel

Pinion - 304 Stainless steel

Segment - Glass filled polyester

Case: 304 Stainless steel (Std.), 316L Stainless steel (XYW)

Ring: 304 Stainless steel (Std.), 316L Stainless steel (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)

Data Sheet

1009 Stainless Steel Case Gauge

ORDERING CODE

Example: **251009 SW L 02 L XC4 3000#**

Dial Size/Series Code	SW	L	02	L	XC4	3000#
251009 – Stainless steel case						
351009 – Stainless steel case						
System						
AW - 316L SS tube/Aluminum, bronze connection (Max. pressure 1000psi)						
SW - 316L SS tube/316L SS process connection (Max. pressure 15,000)	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 7/16 & 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, N/A with throttle plug						
JQ - 6mm Tubing, N/A with throttle plug, N/A ranges above 6000 psi						
JL - 9/16" 18 UNF-2A, N/A for 251009						
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						
LL - PLUS! ™ performance						
GV - Silicone case fill						
GX - Halocarbon case fill						
TU - Throttling device for ranges up to 1000 psi						
TS - Throttling device for ranges up to 15,000 psi						
6B - Cleaned for oxygen service						
SG - Safety glass						
PS - Polysulfone window (3½" dial only)						
EO - Adjustable red set hand						
SH - Red set hand, stationary						
NH - Stainless steel tag wired to case						
FF - Front flange						
FW - Back flange						
UC - U-clamp						
AB - Gauges calibrated to compensate for absolute pressure						
KH - Custom calibration requirements						
HY - Hydrostatic/pneumatic testing system pressurized to 150% of rated system pressure for 5 minutes. Overload stop standard						
C4 - Individual calibration chart in accordance with ASME B40.100:2013. Accuracy traceable to N.I.S.T C4						
SM - All stainless steel movement						
YW - 316L stainless steel case and ring						
Range (coding examples only, see range table for all standard ranges)						
Single Scales						
15# - 15 psi						3000#
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						

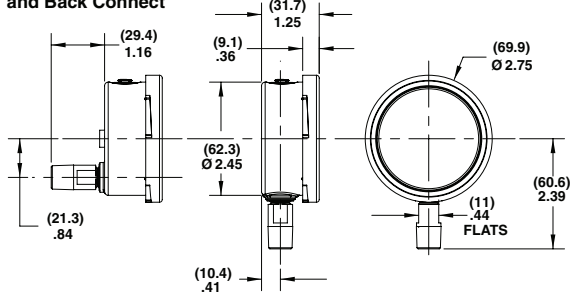
1009 Stainless Steel Case Gauge

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.KSC
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	1000KP	1MP	10KSC
160#	-	-	-	-
200#	-	-	-	-
-	16BR	1600KP	1.6MP	16KSC
300#	-	-	-	-
-	25BR	2500KP	2.5MP	25KSC
400#	-	-	-	-
500#	-	-	-	-
600#	40BR	4000KP	4MP	40KSC
800#	-	-	-	-
-	60BR	6000KP	6MP	60KSC
1000#	-	-	-	-
1500#	100BR	10000KP	10MP	100KSC
2000#	-	-	-	-
-	160BR	16000KP	16MP	160KSC
3000#	-	-	-	-
-	250BR	25000KP	25MP	250KSC
4000#	-	-	-	-
5000#	-	-	-	-
6000#	400BR	40000KP	40MP	400KSC
8000#	-	-	-	-
-	600BR	60000KP	60MP	600KSC
10000#	-	-	-	-
15000#	1000BR	100000KP	100MP	1000KSC

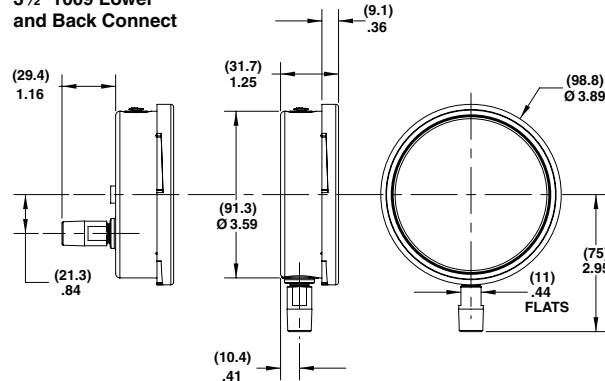
1009 Stainless Steel Case Gauge

DIMENSIONS (dimensions in [] are millimeters)

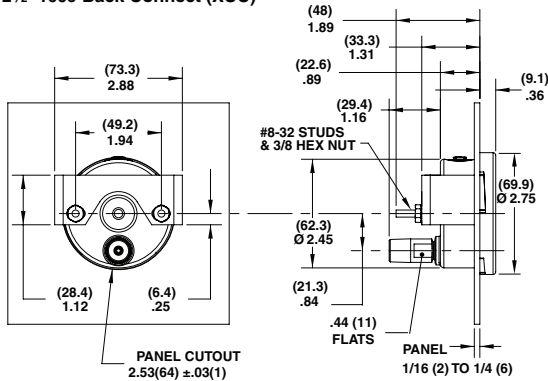
2½" 1009 Lower and Back Connect



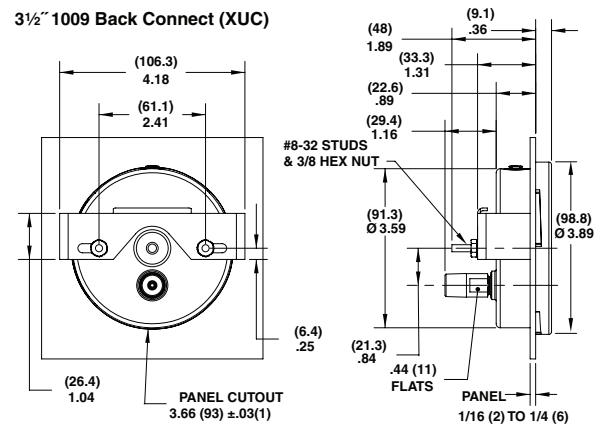
3½" 1009 Lower and Back Connect



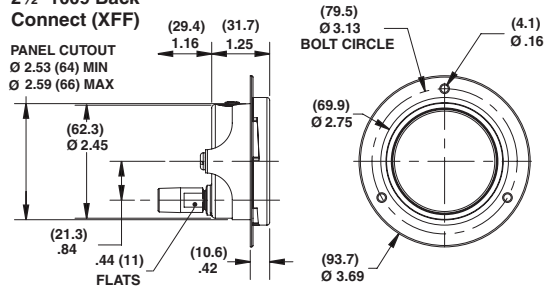
2½" 1009 Back Connect (XUC)



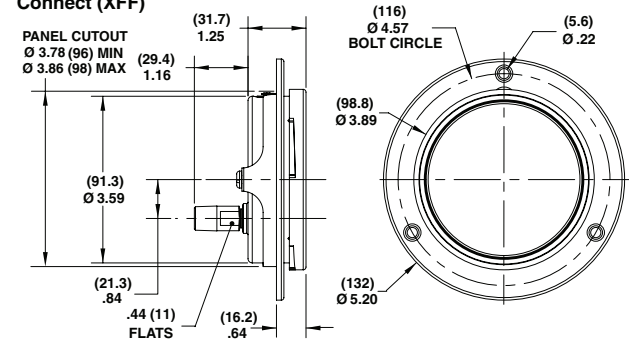
3½" 1009 Back Connect (XUC)



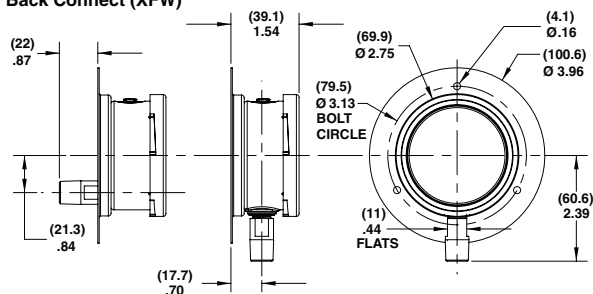
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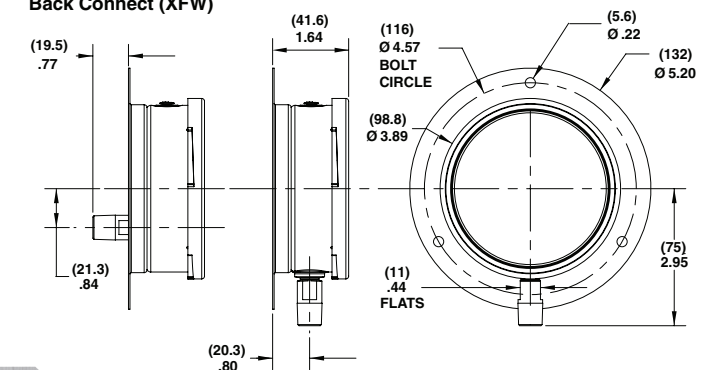
3½" 1009 Back Connect (XFF)



2½" 1009 Lower and Back Connect (XFW)



3½" 1009 Lower and Back Connect (XFW)

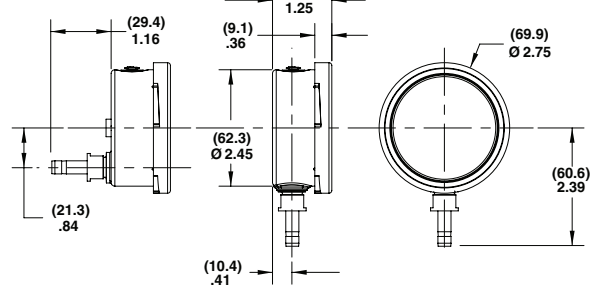


Data Sheet

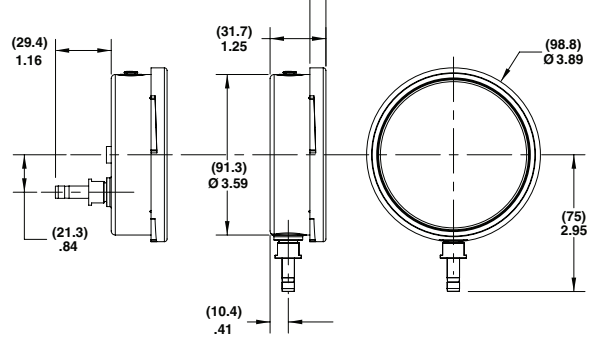
1009 Stainless Steel Case Gauge with Tubing Connections

DIMENSIONS (dimensions in [] are millimeters)

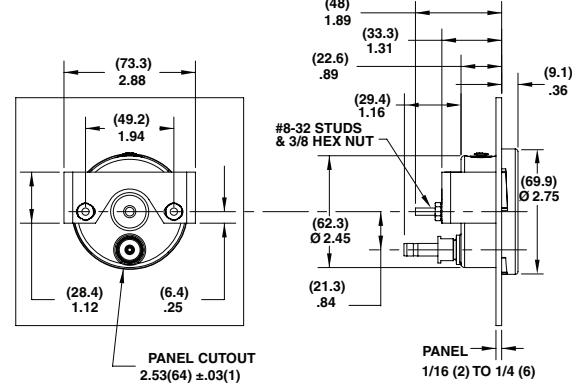
2½" 1009 Lower and Back Connect



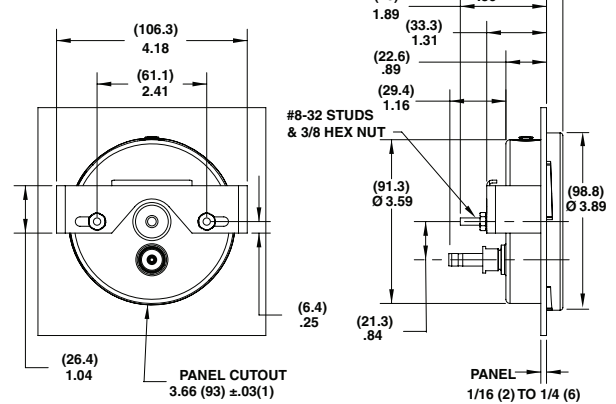
3½" 1009 Lower and Back Connect



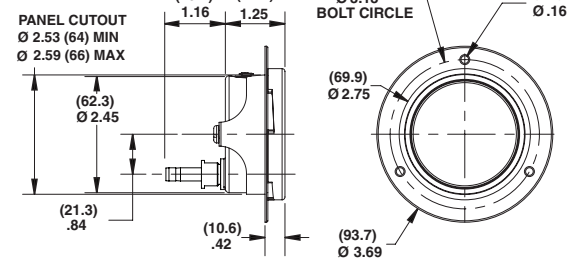
2½" 1009 Back Connect (XUC)



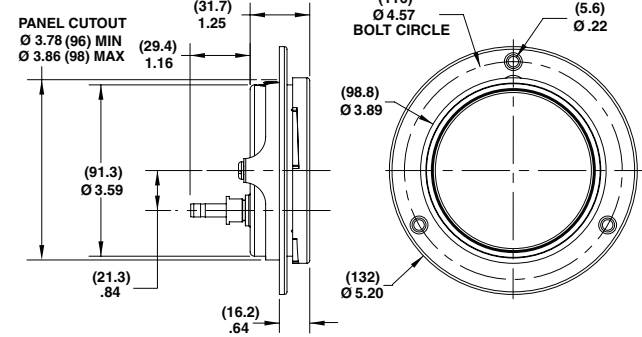
3½" 1009 Back Connect (XUC)



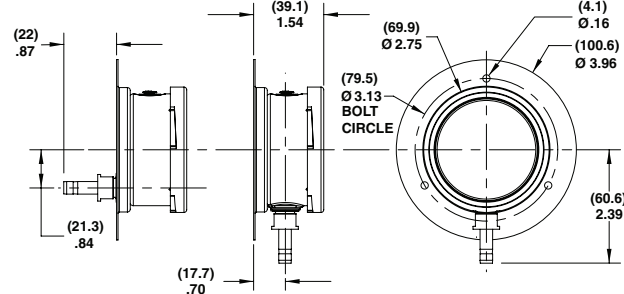
2½" 1009 Back Connect (XFF)



3½" 1009 Back Connect (XFF)



2½" 1009 Lower and Back Connect (XFW)



3½" 1009 Lower and Back Connect (XFW)

