

1008 Stainless Steel Case Gauge

FEATURES

- 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
- MSL helium leak tested to 1×10^{-6} scc/s
- Ventable fill plug
- Accessory kits for easy panel mounting (u-clamp and front flange)

TYPICAL USES

- Pumps and compressors
- Hydraulic and pneumatics
- Specialized OEM equipment
- Food and beverage



SPECIFICATIONS

Accuracy:	±1.6% of span (Dry) ±2% of span (Liquid filled)
Dial Sizes:	63mm (2½"), 100mm (3½")
Ranges:	Minimum 0-15 psi, maximum 0-15,000 psi, vacuum and compound

Wetted Materials

Tube:	316L stainless steel
Process Connection:	316L stainless steel

Non Wetted Materials

Window:	Polycarbonate
Dial:	Black figures on white background, aluminum
Pointer:	Black, aluminum
Movement:	PowerFlex™ movement, inaccessible
	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)
Dampening:	Glycerin case fill (Std. liquid fill), Silicone case fill (XGV), Halocarbon case fill (XGX), PLUS! ™ Performance (XLL)

KEY BENEFITS

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

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

Approvals: CRN, RoHS, PED

Options
 YW - 316L Stainless steel case and ring and flange
 SM - All stainless steel movement
 LL - **PLUS!**™ performance
 6B - Cleaned for oxygen service
 FF - Front flange
 FW - Back flange
 UC - U-clamp
 (see ordering code for more options)

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

1008 Stainless Steel Case Gauge

ORDERING CODE

Example: **631008 S L 02 L XC4 3000#**

Dial Size/Series Code						
631008 – Stainless steel case	631008					
101008 – Stainless steel case						
System						
S - 316L SS tube/316L SS process connection (Max. pressure 15,000)	S					
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, lower only						
RW - SAE 7/16 & 20 Straight thread						
KJ - 1/4 Straight JIS, BSP						
KA - 1/4 Tapered JIS, BSP						
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						
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						
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						
SM - All stainless steel movement					C4	
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						

Data Sheet

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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

DIMENSIONS (dimensions in [] are millimeters)

Technical drawing of the 100 Series connector showing three views: side, front, and top. Dimensions are provided in inches and millimeters.

- Side View:**
 - Length: 29.4 (1.16)
 - Mounting hole offset: 21.3 (.84)
- Front View:**
 - Height: 25.3 (1.00)
 - Body diameter: 91.3 (Ø 3.59)
 - Total height: 10.4 (41)
- Top View:**
 - Outer diameter: 98.3 (Ø 3.87)
 - Mounting hole diameter: 75 (2.95)
 - Flat width: 11 (.44) FLATS
 - Top offset: .21

and Back Connect

Technical drawing showing the back of the connector with dimensions:

- (29.4) 1.16
- (25.3) 1.00
- (5.5) .21
- (62.3) Ø 2.45
- (69.3) Ø 2.73
- (21.3) .84
- (10.4) .41
- (11) .44 FLATS
- (60.6) 2.39

100mm 1008 Back Connect (XUC)

Front View Dimensions:

- Overall Width: (106.3) 4.18
- Mounting Flange Width: (61.1) 2.41
- Panel Cutout Width: (26.4) 1.04
- Panel Cutout Height: 3.66 (93) $\pm .03(1)$
- Mounting Flange Thickness: (6.4) .25

Side View Dimensions:

- Overall Height: (50.7) 2.00
- Mounting Flange Thickness: (33.3) 1.31
- Panel Thickness: (25.3) 1.00
- Panel Mounting Flange Thickness: (29.4) 1.16
- Panel Mounting Flange Diameter: (91.3) $\varnothing 3.59$
- Panel Mounting Flange Thickness: (21.3) .84
- Panel Mounting Flange Diameter: .44 (11) FLATS
- Panel Mounting Flange Thickness: (5.5) .21
- Panel Mounting Flange Diameter: (98.3) $\varnothing 3.87$
- Panel Mounting Flange Thickness: 1/16 (2) TO 1/4

Labels:

- #8-32 STUDS & 3/8 HEX NUT
- PANEL CUTOUT
- PANEL

[illegible]

100mm 1008 Back Connect (XFF)

Technical drawing showing the side and end views of the 100mm 1008 Back Connect (XFF) component. The side view includes dimensions for the panel cutout, mounting flange, and internal features. The end view shows the bolt circle and overall diameter.

Dimensions (mm):

- Panel Cutout: $\varnothing 3.78$ (96) MIN, $\varnothing 3.86$ (98) MAX
- Mounting Flange: $\varnothing 3.59$ (91.3)
- Internal Feature: $\varnothing 3.87$ (98.3)
- Bolt Circle: $\varnothing 4.57$ (116)
- Overall Diameter: $\varnothing 5.20$ (132)
- Other Dimensions: $\varnothing 5.6$ (146), $\varnothing 2.2$ (56), $\varnothing 1.16$ (29.4), $\varnothing 1.21$ (30.7), $\varnothing 1.52$ (38.1), $\varnothing 0.60$ (15.2), $\varnothing 0.84$ (21.3), $\varnothing 0.44$ (11)

Notes:

- FLATS
- BACK CONNECT (XFF)

Back Connect (XFF)

PANEL CUTOUT
2.53(64) +/- .03(1)

(29.4) 1.16

(62.3) Ø 2.45

(21.3) .84

.44 (11) FLATS

#6-32 SCREWS & HEX NUTS

(5.8) .23

(75) - (75.9)
Ø 2.95 - Ø 2.99
BOLT CIRCLE

Ø.142 (3.6) (HOLE IN FLANGE-TYP)

(82.6) Ø 3.25

(70.2) Ø 2.77

PANEL
1/16 (2) TO 1/4 (6)