

# INSTA-FLOW INDUSTRIAL PRESSURE GAUGES



**QUALITY PRODUCTS SINCE 1937**  
[www.ChicagoStainless.com](http://www.ChicagoStainless.com)

Since 1937, Chicago Stainless Equipment has been manufacturing Sanitary Equipment for the food industry. Our Industrial Pressure Gauges are constructed with an all stainless steel case, socket, tube and movement. This pressure gauge is perfect for process lines that need the hygienic aspect of stainless steel, without the cleanability that comes from a diaphragm on a Sanitary Pressure Gauge.

All of our pressure gauges are built to withstand the harshest environments and function for many years with little to no maintenance. Our dedication to quality is not only evident in our products, but also in our customer service. CSE commits to offering the highest level of product and resources to every customer. We provide efficient, quick, and friendly service along with striving to build relationships with all of our partners.

## KEY FEATURES

316L Stainless Steel Construction	On all wetted surfaces, assures maximum corrosion resistance
304L Stainless Steel Case	For durability even in the harshest environments
Waterproof Construction	Allows gauge to be submersed for cleaning
Clean-In-Place (CIP)	Can be cleaned in place for convenience and to eliminate the possibility of damage from mishandling
Pressure Ranges	Available from 15 psi up to 23,000 psi Also available in vacuum ranges
Dial Face Sizes	Available in 2½", 4" or 6"
True Zero	Standard on all gauges. The pointer is not pinned at zero and there is not a large zero block. This lets the operator know the pressure is truly zero and gives the most accurate pressure reading available.
Re-Zero Feature	Optional on all gauges
Glycerin Fill	Standard to protect the gear mechanism against wear
Maximum Process Temperature	176°F (80°C)

## TYPICAL INDUSTRIES

- Pharmaceutical
- Biotechnology
- Specialized OEM Equipment
- Food
- Beverage
- Citrus
- Meat / Poultry
- Distillery
- Winery
- Cosmetic

# SPECIFICATIONS

## TOLERANCES:

Compliance:	NEMA 4X, IP67, ISO 9001:2015
Accuracy: 2" Dial	±1.5% of Full Range (Grade B)
Accuracy: 4" Dial	±1% of Full Range (Grade 1A)
Accuracy: 6" Dial	±1% of Full Range (Grade 1A)
Over Range Capability:	25% Over Range
Repeatability:	±0.5% of Full Scale
Linearity:	±0.5% of Full Scale
Hysteresis:	±0.5% of Full Scale
Process Temperature Range:	-4° to 176°F (-20° to 80°C) *
Ambient Operating Limits:	-40° to 140°F (-40° to 60°C)
Ambient Storage Limits:	-40° to 250°F (-40° to 121°C)

\* High Temperature Option increases maximum process temperature to 350°F (176°C)

## CONSTRUCTION:

Available Dial Sizes	2½" (63mm), 4" (100mm), 6" (160mm)
Connection Type:	1/4" & 1/2" NPT Male
Product Contact Material:	316L Stainless Steel
Case and Lens Ring Material:	304L Stainless Steel
Lens Material: 2½" Dial	1/4" Thick (6.4mm) Polycarbonate
Lens Material: 4" Dial	Shatter-Resistant Laminated Glass
Lens Material: 6" Dial	Shatter-Resistant Laminated Glass
Dial Face:	Aluminum Printed with UV Inks (No Stickers)
Bourdon Tube:	316L Stainless Steel
Socket:	316L Stainless Steel
Re-Zero Adjustment:	Optional - 100% of Span *
Standard Case Fill:	99.7% USP Food Grade Glycerin **
Approx. Shipping Weight (2½"):	1 Pound (0.5 Kg)
Approx. Shipping Weight (4"):	2 Pounds (1.0 Kg)
Approx. Shipping Weight (6"):	4 Pounds (1.8 Kg)

\* Re-Zero feature on 4" and 6" dials requires a polycarbonate lens option

\*\* Other fill options available - See website or contact us

# PART NUMBERS

Example: **4N-I-1/2NPT-GF-BT - CSE**

## SERIES

2-1/2" Insta-Flow Pressure Gauge	2N	6" Insta-Flow Pressure Gauge	6N
4" Insta-Flow Pressure Gauge	<b>4N</b>		

## SINGLE SCALE

<u>RANGE</u>	<u>PSI</u>	<u>BAR</u>	<u>kg/cm<sup>2</sup></u>	<u>kPa</u>	<u>MPa</u>	<u>Tons/Ft<sup>2</sup></u>	<u>Atmospheres</u>
0 to 15	A	1BAR	1KG	100KPA		1TON	1ATM
0 to 30	B	2BAR	2KG	200KPA		2TON	2ATM
0 to 60	C	4BAR	4KG	400KPA		4TON	4ATM
0 to 100	D	7BAR	7KG	700KPA		7TON	7ATM
0 to 160	E	11BAR	11KG	1100KPA	1.1MPA	11TON	11ATM
0 to 200	F	14BAR	14KG		1.4MPA	14TON	14ATM
0 to 300	G	21BAR	21KG		2.1MPA	21TON	21ATM
0 to 400	H	28BAR	28KG		2.8MPA	28TON	28ATM
0 to 600	<b>I</b>	42BAR	42KG		4.2MPA	42TON	42ATM
0 to 1,000	K	70BAR	70KG		7MPA	70TON	70ATM
0 to 1,500	1500	100BAR	100KG		10MPA	100TON	100ATM
0 to 2,000	2000	140BAR	140KG		14MPA	140TON	140ATM
0 to 3,000	U	210BAR	210KG		21MPA	210TON	210ATM
0 to 6,000	6000	400BAR	420KG		41MPA	420TON	420ATM
0 to 10,000	W	700BAR	700KG		70MPA	700TON	700ATM
0 to 14,500	14500	1000BAR	1000KG		100MPA	1000TON	1000ATM
0 to 23,000	23000	1600BAR	1600KG		160MPA	1600TON	1600ATM
30"Hg to 0	J	-1/0BAR	-1/0KG			-1/0TON	-1/0ATM
30"Hg to 15	L	-1/1BAR	-1/1KG	-100/100KPA		-1/1TON	-1/1ATM
30"Hg to 30	M	-1/2BAR	-1/2KG	-100/200KPA		-1/2TON	-1/2ATM
30"Hg to 60	N	-1/4BAR	-1/4KG	-100/400KPA		-1/4TON	-1/4ATM
30"Hg to 100	O	-1/7BAR	-1/7KG	-100/700KPA		-1/7TON	-1/7ATM
30"Hg to 150	P	-1/10BAR	-1/10KG	-100/1000KPA	-.1/1MPA	-1/10TON	-1/10ATM
30"Hg to 200	Q	-1/14BAR	-1/14KG		-.1/1.4MPA	-1/14TON	-1/14ATM
30"Hg to 300	R	-1/21BAR	-1/21KG		-.1/2.1MPA	-1/21TON	-1/21ATM

# ***PART NUMBERS CONT...***

***OR***

## **DUAL SCALE**

<u>RANGE</u>	<u>PSI-BAR</u>	<u>PSI &amp; kg/cm<sup>2</sup></u>	<u>PSI &amp; kPa</u>	<u>PSI &amp; MPa</u>	<u>PSI &amp; Tons/Ft<sup>2</sup></u>	<u>PSI &amp; Tons/Ft<sup>2</sup></u>
0 to 15	AB	AKG	AKP		ATON	AATM
0 to 30	BB	BKG	BKP		BTON	BATM
0 to 60	CB	CKG	CKP		CTON	CATM
0 to 100	DB	DKG	DKP		DTON	DATM
0 to 160	EB	EKG	EKP	EMPA	ETON	EATM
0 to 200	FB	FKG		FMPA	FTON	FATM
0 to 300	GB	GKG		GMPA	GTON	GATM
0 to 400	HB	HKG		HMPA	HTON	HATM
0 to 600	IB	IKG		IMPA	ITON	IATM
0 to 1,000	KB	KKG		KMPA	KTON	KATM
0 to 1,500	1500B	1500KG		1500MPA	1500TON	1500ATM
0 to 2,000	2000B	2000KG		2000MPA	2000TON	2000ATM
0 to 3,000	UB	UKG		UMPA	UTON	UATM
0 to 6,000	6000B	6000KG		6000MPA	6000TON	6000ATM
0 to 10,000	WB	WKG		10000MPA	WTON	WATM
0 to 14,500	14500B	14500KG		14500MPA	14500TON	14500ATM
0 to 23,000	23000B	23000KG		23000MPA	23000TON	23000ATM
30"Hg to 0	JB	JKG	JKP		JTON	JATM
30"Hg to 15	LB	LKG	LKP		LTON	LATM
30"Hg to 30	MB	MKG	MKP		MTON	MATM
30"Hg to 60	NB	NKG	NKP		NTON	NATM
30"Hg to 100	OB	OKG	OKP		OTON	OATM
30"Hg to 150	PB	PKG	PKP	PMPA	PTON	PATM
30"Hg to 200	QB	QKG		QMPA	QTON	QATM
30"Hg to 300	RB	RKG		RMPA	RTON	RATM

# PART NUMBERS CONT...

**FITTING**

1/2" NPT <i>4" Dial or 6" Dial</i>	<b>1/2NPT</b>
1/4" NPT <i>2 1/2" Dial or 4" Dial</i>	1/4NPT

**CASE FILL**

**MOUNT STYLE**

Glycerin Filled Case * STANDARD *	<b>GF</b>	Bottom Mount	<b>BT</b>
No Fill	NF	Center Back Mount <i>2 1/2" &amp; 4" only</i>	BK
Mineral Oil Filled Case	MF	Left Side Mount	LF
Silicone Filled Case	SF	Right Side Mount	RT
Propylene Glycol Filled Case	PF	Top Mount	TP
		Front Flange <i>2 1/2" &amp; 4" only</i>	PM
		Panel Mount	

**LOGO** \* CUSTOM LOGOS AVAILABLE UPON REQUEST \*

Chicago Stainless Equipment, Inc * STANDARD *	<b>CSE</b>
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**ADDITIONAL OPTIONS**

Glass Lens	2GL	Detailed Calibration Certificate	CD
Polycarbonate Lens	4PL or 6PL	Certificate of Conformity	CC
Custom Color Ranged Dial	CR	Oxygen Cleaned	OXY
Re-Zero Feature	RZ	Paper Tag	PTI
High Visibility Dial Face - Yellow	HVY	Stainless Steel Tag	STI
High Visibility Dial Face - Green	HVG	Animal Derived Ingredient Free Cert	ADIF
General Calibration Certificate	CG		

## ***REPAIR***

We offer repairs on all of our Industrial Pressure Gauges. All repair orders must be through a CSE authorized distributor. You may ship your Pressure Gauge to our facility at...

**Chicago Stainless Equipment, Inc**  
**ATTN: REPAIRS**  
**1280 SW 34th St**  
**Palm City, FL 34990**

\*\* Please always include a Purchase Order inside of the box to prevent loss of your item \*\*

- Your item(s) will be evaluated by our skilled technicians and if they find any issues that may deem the gauge(s) to be damaged beyond repair, a member of our Sales Team will reach out to the contact provided on your Purchase Order.
- We do NOT repair by replacement. The Pressure Gauge you send in is the Pressure Gauge you will receive back to you.
- Although we do not require an RMA for repairs, you may request one by email at [Sales@ChicagoStainless.com](mailto:Sales@ChicagoStainless.com)

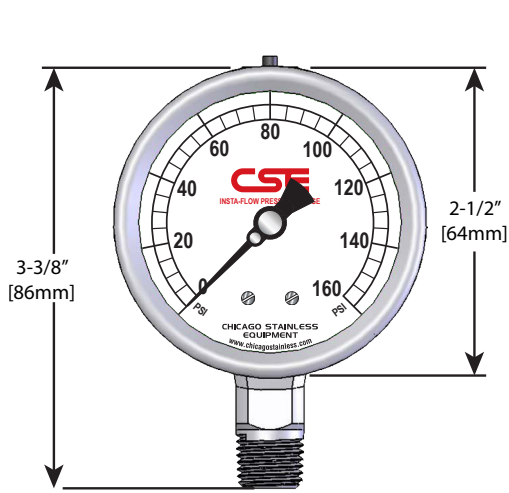
## ***RECALIBRATION***

If you are looking for your Pressure Gauge to be recalibrated and do not believe a repair is needed, you may send in a Pressure Gauge the same way as stated above.

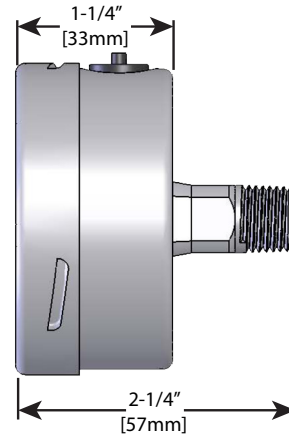
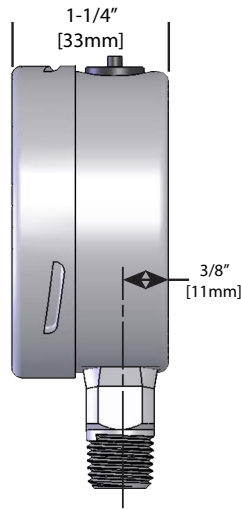
- Recalibration with or without certifications can only be completed on an instrument that has not been damaged and is functioning properly.

If the gauge is found to be damaged or not functioning for any reason, it must first be repaired. After repair of the gauge, it will automatically be recalibrated.

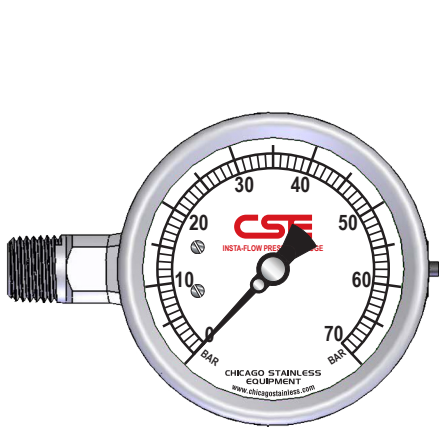
- Any type of recertification can be requested with an additional fee.



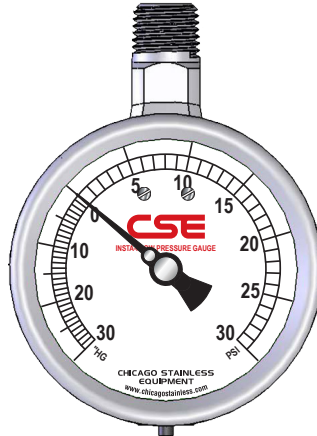
**2-1/2" BOTTOM MOUNT**



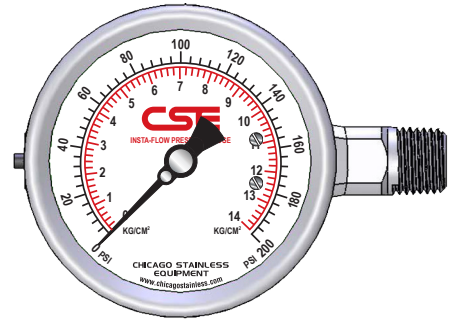
**2-1/2" BACK MOUNT**



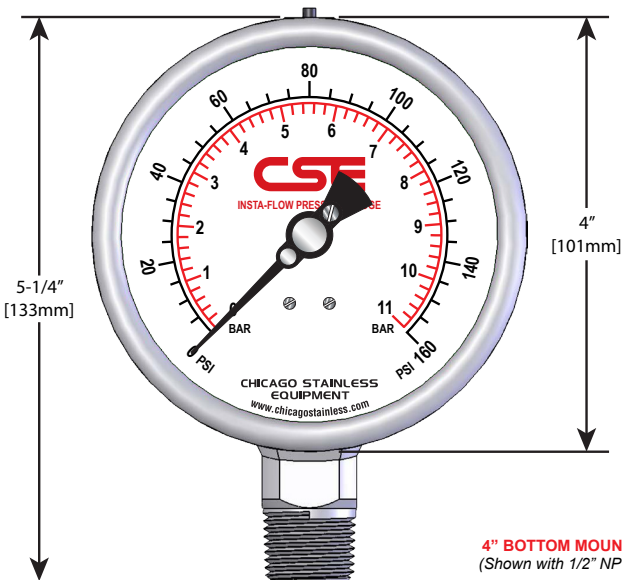
**2-1/2" LEFT SIDE MOUNT**



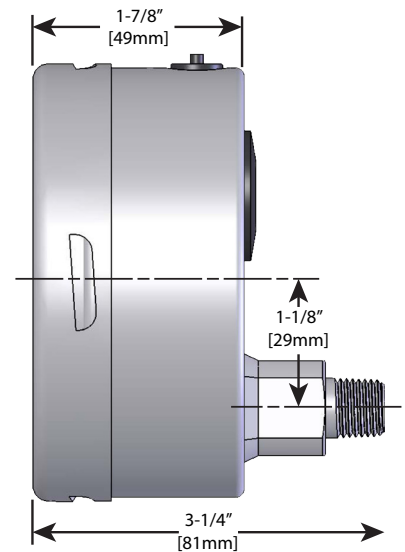
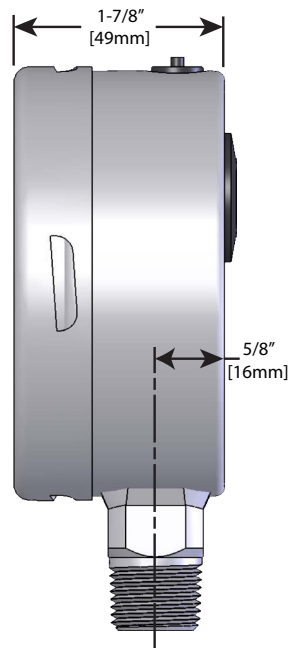
**2-1/2" TOP MOUNT**



**2-1/2" RIGHT SIDE MOUNT**



**4" BOTTOM MOUNT**  
(Shown with 1/2" NPT)



**4" BACK MOUNT**  
(Available with 1/4" NPT only)



