

# WEISS INSTRUMENTS

## Stainless Steel Case Gauges



Where vibration, corrosion and pulsating conditions exist, the Weiss line of stainless steel cased liquid filled industrial pressure gauges are designed to meet the most severe applications.

Some recommended uses are for agricultural equipment, hydraulic systems, oil field equipment, pumps, compressors and car wash systems. All liquid filled gauges are offered for direct mounting to the equipment, wall or panel mounting. With ranges from Vacuum to 15,000 psi, the Weiss line will provide the instrument for both the specific requirement of the OEM and the industrial user.

## CASE STYLES

Direct Mounted, Front Flange, Back Flange and U-Clamp mounts.



C-Tube

Coiled Spiral Tube

## INTERNALS

Phosphor bronze or Stainless Steel "C-Tube" or Coiled Spiral Bourdon Tube Assembly. The Coiled Spiral Bourdon Tube is standard for pressure ranges of 1000 psi and above.

## LIQUID FILLINGS

Glycerine is Standard and is suitable for temperature conditions between +20°F and +150°F. Silicone filling rated at -40°F/150°F is available on special order.

## INDICATING DIALS

Nominal 2 1/2", 4" and 6". Custom dials are available.

## RELIEF VALVE

Provided on all Liquid Filled Pressure Gauges to compensate for internal case pressure build-up.

**WARNING:** Misuse of this product may cause explosion and personal injury, read ANSI B40.1 before installation or use. Glycerine can combine with *strong oxidizing agents* including (but not limited to) chlorine, nitric acid and hydrogen peroxide and result in an explosion which can cause property damage. Consult factory for proper filling medium in hazardous service. Additional information can be obtained by reading Pressure Gauge Standard ANSI/ASME B40.1 available from the *American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, NY 10017.*

## Liquid Filled Gauges-Crimped Ring Stainless Steel Cases 2 1/2"

### LF251



LF251U

LF251F

**CASE & RING:** 2 1/2" type 304 stainless steel case with polished stainless steel crimped ring.  
**DIAL:** ABS, white with black and red markings.(psi & kPa)  
**WINDOW:** Clear acrylic.  
**TUBE:** Phosphor Bronze to 6000psi, 316SS to 10,000psi.  
**SOCKET:** Brass with threaded restrictor.  
**POINTER:** Black anodized aluminum.  
**MOVEMENT:** Brass.  
**ACCURACY:** ±1.6% of span.  
**CONNECTION:** 1/4" NPT bottom or center back.  
**RANGES:** Vacuum, Compound, Pressure to 10,000 psi.

**PANEL MOUNTING OPTIONS**  
**U-CLAMP:** Series LF251U  
**FRONT FLANGE:** Series LF251F

### LF252



**CASE & RING:** 2 1/2" type 304 stainless steel case with polished stainless steel crimped ring.  
**DIAL:** ABS, white with black and red markings.(psi & kPa)  
**WINDOW:** Clear acrylic.  
**TUBE:** Type 316 Stainless Steel.  
**SOCKET:** Type 316 Stainless Steel with threaded restrictor.  
**POINTER:** Black anodized aluminum.  
**MOVEMENT:** Stainless Steel.  
**ACCURACY:** ±1.6% of span.  
**CONNECTION:** 1/4" NPT bottom or center back.  
**RANGES:** Vacuum, Compound, Pressure to 10,000 psi.

**PANEL MOUNTING OPTIONS**  
**U-CLAMP:** Series LF252U  
**FRONT FLANGE:** Series LF252F

## Liquid Filled Gauges-Crimped Ring Stainless Steel Cases 4"

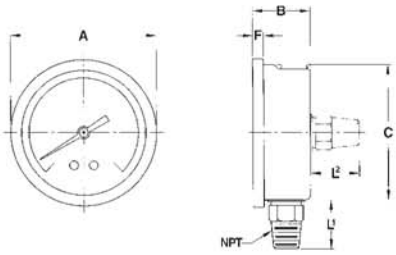
### LF441



**CASE & RING:** 4" type 304 stainless steel thin line case with polished stainless steel crimped ring.  
**DIAL:** White aluminum with black and red markings. (psi & kPa)  
**WINDOW:** Clear acrylic.  
**TUBE:** Phosphor Bronze.  
**SOCKET:** Brass with threaded restrictor.  
**POINTER:** Black anodized aluminum.  
**MOVEMENT:** Brass rotary type with bushings.  
**ACCURACY:** 1% of span.  
**CONNECTION:** 1/4" NPT bottom.  
**RANGES:** Vacuum, Compound, Pressure to 1000 psi.

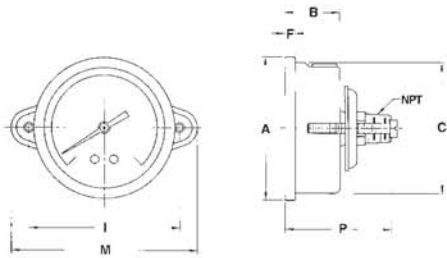
**PANEL MOUNTING OPTIONS**  
**BACK FLANGE:** Series LF441BF

## Case Dimensions LF & NF25



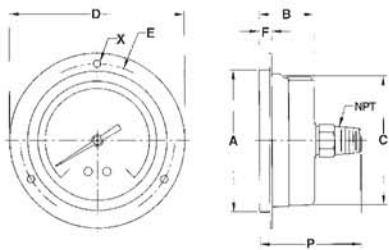
LOWER AND CENTER BACK CONNECTION

SERIES		A	B	C	F	L <sub>1</sub>	L <sub>2</sub>	NPT
LF251	INCH	2.68	1.18	2.45	.24	.93	1.00	1/4"
LF252	MM	68	30	62	6	24	25	
NF252								



U CLAMP MOUNT - CENTER BACK CONNECTION

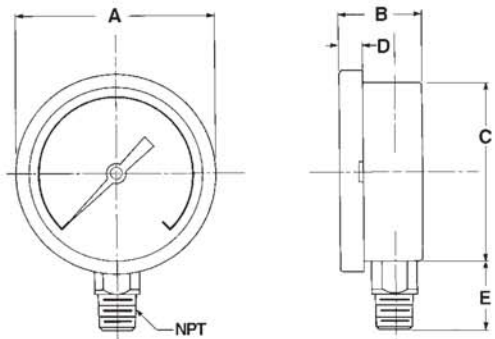
SERIES		A	B	C	F	I	M	P	PANEL HOLE	NPT
LF251U	INCH	2.68	1.18	2.45	.24	3.15	3.66	2.20	2.50	1/4"
LF252U	MM	68	30	62	6	80	93	56	64	



FRONT FLANGE - CENTER BACK CONNECTION

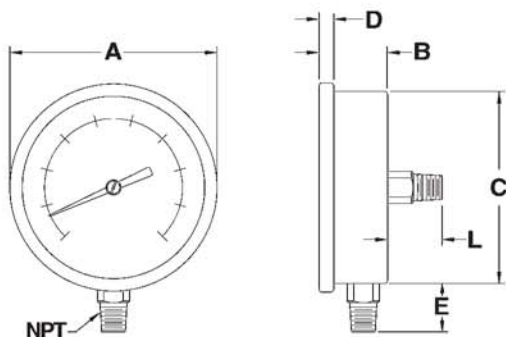
SERIES		A	B	C	D	E	F	P	X	PANEL HOLE	NPT
LF251F	INCH	2.68	1.18	2.45	3.45	2.95	.28	2.20	.19	2.65	1/4"
LF252F	MM	68	30	62	88	75	7	56	5	67	

## Case Dimensions LF & NF4



LOWER CONNECTION

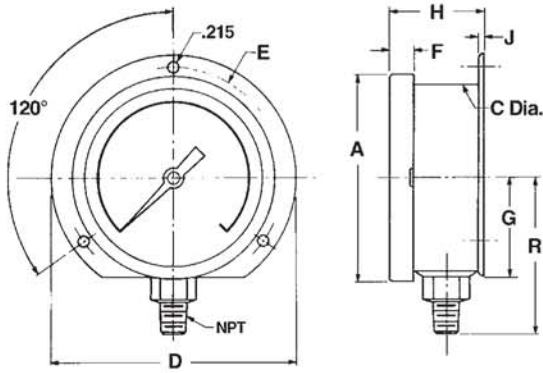
SERIES		A	B	C	D	E	NPT
NF401	INCH	4.35	1.54	3.91	.58	1.24	1/4"
NF402	MM	110	39	99	15	31.5	



LOWER AND CENTER BACK CONNECTION

SERIES		A	B	C	D	E	L	NPT
LF441	INCH	4.28	1.42	3.97	.31	.95	1.13	1/4"
LF442	MM	109	36	101	8	24	29	

# Case Dimensions LF & NF6



BACK FLANGE - LOWER CONNECTION

SERIES		A	B	C	D	E	F	G	H	R	J	NPT
NF601BF	INCH	6.33	5.90	7.64	6.85	.66	3.4	1.95	4.08	4.25	.04	1/4"
LF602BF	MM	160	150	194	174	17	86	50	104	108	1	
NF602BF												

## Standard Ranges

### PRESSURE - Series LF & NF25

Range	Figure interval	Minor graduation
0-15	2	0.5
0-30	5	0.5
0-60	10	1
0-100	10	2
0-160	20	2
0-200	50	5
0-300	50	5
0-400	100	10
0-600	100	10
0-1000	200	20
0-1500	200	20
0-2000	500	50
0-3000	500	50
0-5000	1000	100
0-6000	1000	100
0-10,000	2000	200

### COMPOUND

Range	Figure interval		Minor graduation	
	in Hg	psi	in Hg	psi
30"Hg-30psi	10	5	2	1
30"Hg-60psi	10	10	2	2
30"Hg-100psi	30	20	5	2
30"Hg-150psi	30	20	5	5
30"Hg-200psi	30	20	5	5
30"Hg-300psi	30	50	10	5

### VACUUM

Range	Figure interval	Minor graduation
0-30"Hg	5" Hg	0.5" Hg

### PRESSURE - Series LF & NF4 and LF & NF6

Range	Figure interval	Major grads	Minor grads
0-15	2	2	0.1
0-30	5	5	1.0
0-60	5	5	0.5
0-100	10	10	1
0-160	20	10	1
0-200	20	20	2
0-300	50	50	2
0-400	50	10	5
0-600	100	10	10
0-1000	100	10	10
0-1500	300	100	10
0-2000	200	100	20
0-3000	500	100	20
0-5000	500	100	50
0-10,000	1000	500	100
0-15,000	3000	1000	100

### COMPOUND

Range	Figure interval		Minor graduation	
	in Hg	psi	in Hg	psi
30"Hg-30psi	10	5	0.5	1
30"Hg-60psi	10	10	0.5	1
30"Hg-100psi	30	10	1	2
30"Hg-150psi	30	30	1	5
30"Hg-300psi	30	50	2	10

### VACUUM

Range	Figure interval	Minor graduation
0-30" Hg	5" Hg	0.5" Hg