



## Application

- ✓ Harsh ambience
- ✓ Severe operating conditions
- ✓ Chemical and petrochemical processing industries
- ✓ Couple with diaphragm seals
- ✓ Power plants, offshore sites, ships and food industry
- ✗ Do not use directly for medias that are viscous or crystallizing

## Special Features

- ✓ Proved accuracy, stability and repeatability
- ✓ IP65
- ✓ Shock resistant and durable
- ✓ Reasonable price for a distinguished quality

## Description

InstruMate 113AA full stainless steel gauge in standard version is offered with Micro-adjustable pointer, safety glass and blow out disk. All of 113AA pressure gauges pass cycle testing, vibration testing, overpressure testing, and Helium leakage testing as part of production process. The choice of material as well as its heavy-duty construction makes this model a suitable pressure gauge for a wide range of industries from pharmaceutical to petrochemical.

All InstruMate pressure gauges have geometrically balanced dial designs to make gauge readings easier.

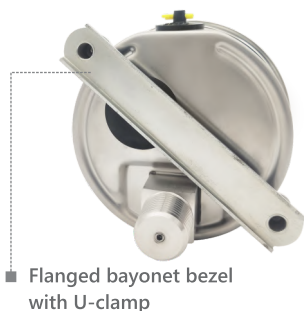
## Default Specification

Design	Nominal sizes in mm
EN 837-1	63, 100, 160, 250
Temperature Effect	Process Connection
$\pm 0.035 \times (t_2 - t_1) \%$ of the span $t_1$ is the Reference temperature in degrees celsius. $t_2$ is the Ambient temperature in degrees celsius.	As standard version NS 63: SS316 1/4 NPT (bottom connection & center back connection)  As standard version NS 100, 160, 250: SS316L 1/2 NPT (bottom connection & lower back connection)
Pressure Limitations	
NS 63 Steady: 80% of full scale Fluctuating: 65% of full scale Over-Pressure: 100% of full scale	NS 100, 160, 250 (Heavy duty) Steady: 100% of full scale Fluctuating: 90% of full scale Over-Pressure: 130% of full scale
Scale Range	Permissible Temperature
NS 63: 0...1 bar to 1000 bar NS 100, 160, 250: 0...0.6 bar to 1600 bar Vacuum & compound ranges	Ambient: -20...+60 °C Medium: +190 °C Maximum for dry version 95 °C Maximum for oil filled version
Pressure units	Pressure Element
bar/psi (other pressure units available on request)	NS 63: SS316 NS 100, 160, 250: SS316L C-type for ≤ 60bar Helical for > 60bar
Pointer	Accuracy
Aluminum, Black Micro-Adjustable Pointer	NS 63: 1.6% of full scale NS 100, 160, 250: 1% of full scale
Window	Dial
Safety Glass	Aluminum
Case	Movement
Matte SS304	Stainless Steel

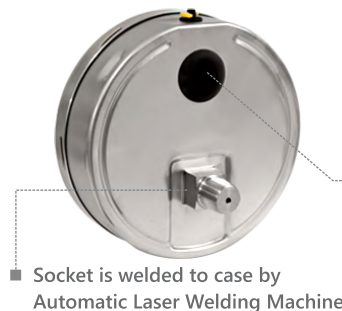
113AAX63



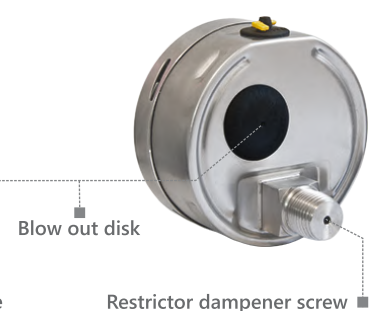
113AAZ100



113AAB160



113AAB100

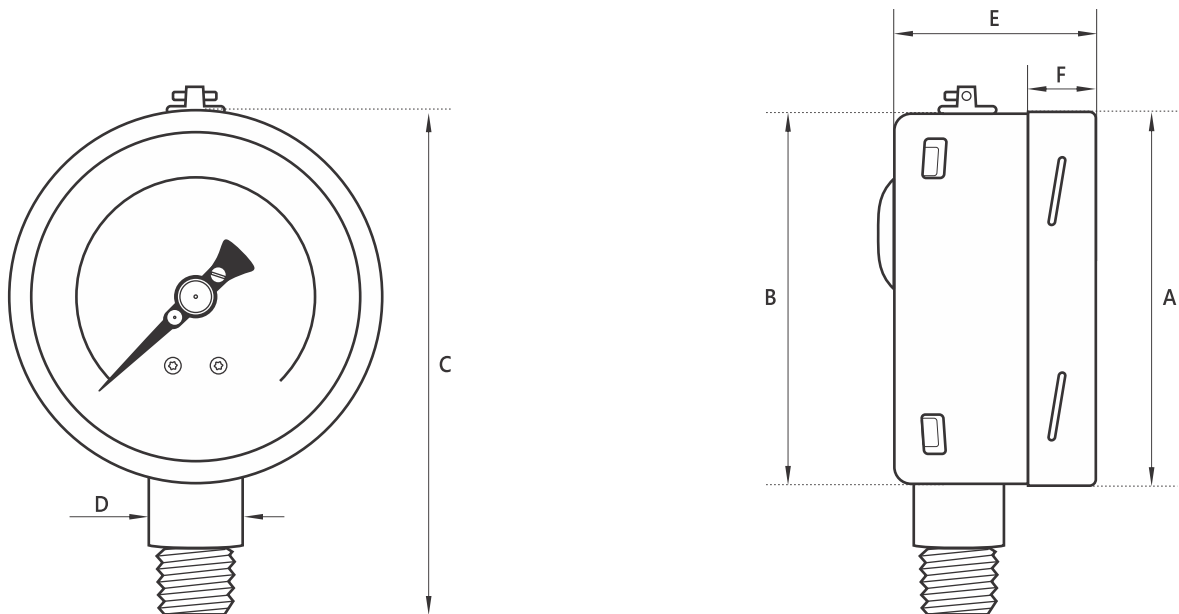


## Options

- ✓ Filled with glycerin or silicon oil
- ✓ Different oil caps available
- ✓ SS316 or Monel process connection and bourdon tube
- ✓ Excellent TIG welding available for case and connection
- ✓ Requested process connections other than stated in the table
- ✓ Refrigeration Scale design
- ✓ To be combined with InstruMate diaphragm seals

## Dimensions (in mm)

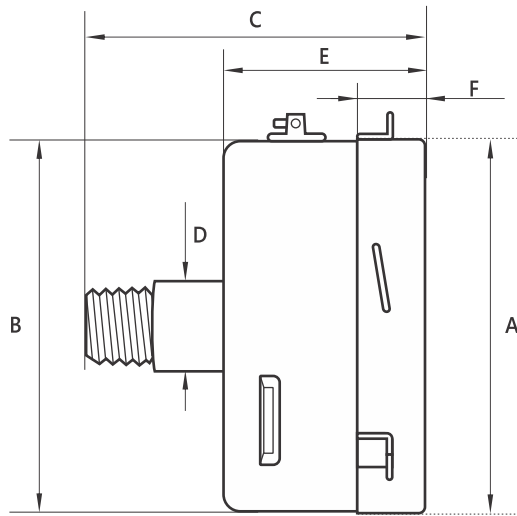
### ■ Bottom Connection



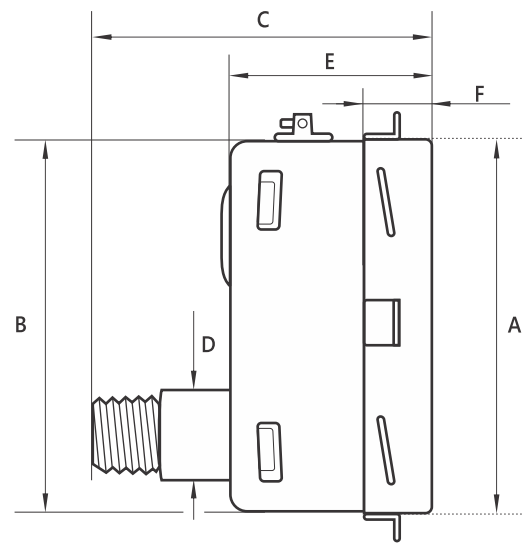
113AAL

Nominal Size	A	B	C	D	E	F	KG
63	63.5	62	85	14	34	12.5	0.16
100	100.5	99	133	22	86	17	0.543
160	160.5	158.5	193.5	22	86	17.5	1.003
250	250	245	292	22	50	18	1.918

## ■ DS 63 Center Back Connection



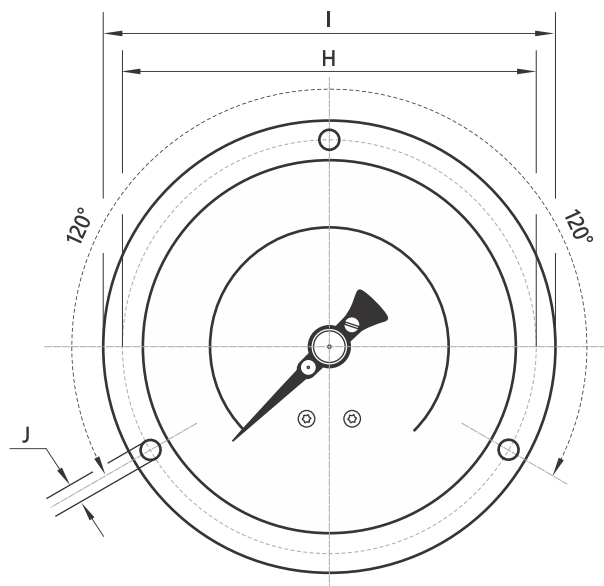
## ■ DS 100,160, 250 Lower Back Connection



### 113AAB

Nominal Size	A	B	C	D	E	F	KG
63	63.5	62	57	14	34	12.5	0.163
100	100.5	99	86	22	49	17	0.505
160	160.5	158.5	86	22	49	17.5	0.883

## ■ DS 63, 100 Back Connection with Front Flange Bezel



### 113AAX

Nominal Size	H	I	J
63	75	85	3.6 x 3.6
100	117	132	4.8 x 4.8

Thread Type	Code
NPT	N
BSPP (G)	B
BSPT	Z
Metric	M

Thread Size	Code
1/4	4
1/2	2
3/8	3
1/8	8
for metric sizes write the number	M20×1.5

### How To Order

Product Group Name	Model	Mounting	Nominal Size	Thread Type	Thread size	Scale Range	Options
<i>E.g.</i> DIN Type Stainless Steel Gauge	113AA	L	100	N	2	0...25bar-psi	Filled with glycerin oil

Or simply order by item number on the basis of your previous purchases.

**InstruMate®**

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