

# Brass Case, Liquid Filled



## 300 SERIES

- High quality, heavy-duty liquid filled gauge
- Vacuum and compound ranges through 0 psi to 15,000 psi
- 2-1/2" and 4" gauge sizes
- Die cast Brass case with natural Brass finish
- Copper alloy or 316 Stainless Steel and Brass wetted parts

### OPERATING SPECIFICATIONS

#### 1. Working Pressure Limitations

##### a. Dynamic Pressure

The working pressure should be limited to 60% of the dial range.

##### b. Static Pressure

The working pressure, where no sharp fluctuations occur, should be limited to 90% of the dial range.

### APPLICATIONS

- Automotive
- Construction
- Hydraulics & pneumatics
- Mining
- Stamping & forming presses
- Transportation

|                     | SERIES                                      | SPECIFICATIONS                                                                                                                                                         |
|---------------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pressure ranges     | 300 Series (all)                            | Vacuum and compound ranges through 0 psi to 15,000 psi                                                                                                                 |
| Accuracy            | 25-300, 25-310                              | ±1.6% full scale                                                                                                                                                       |
|                     | 40-300, 40-310                              | ± 1% full scale                                                                                                                                                        |
| Temperature ranges* | 300 Series (all)                            | Media -4 °F to 140 °F (-20 °C to 60 °C)<br>Ambient 0 °F to 160 °F (-18 °C to 71 °C)<br>Optional temperature ratings available from -40 °F to 212 °F (-40 °C to 100 °C) |
| Measuring element   | 25-300, 25-310<br>(≤ 600 psi)               | Copper alloy "C" tube                                                                                                                                                  |
|                     | 25-300, 25-310<br>(800 psi to 6,000 psi)    | Copper alloy coiled safety tube                                                                                                                                        |
|                     | 25-300, 25-310<br>(7,500 psi to 15,000 psi) | 316 Stainless Steel coiled safety tube                                                                                                                                 |
|                     | 40-300, 40-310<br>(≤ 1,000 psi)             | Copper alloy "C" tube                                                                                                                                                  |
|                     | 40-300, 40-310<br>(15,000 psi)              | 316 Stainless Steel coiled safety tube                                                                                                                                 |
| Connection          | 25-300, 25-310                              | 1/4" NPT die-cast Brass with the case. 7/16" – 20 SAE adjustable type straight thread with FKM O-ring is also available as a stock option on many ranges (-4 SAE).     |
|                     | 40-300, 40-310                              | 1/4" NPT die-cast Brass with the case. 1/2" NPT is available on certain 40-300 ranges as a stock option, and on all other 40-300 and 40-310's as a non-stock option.   |
| Case                | 300 Series (all)                            | Die cast Brass (natural Brass finish) with safety relief plug                                                                                                          |
| Cover ring          | 300 Series (all)                            | Polished Brass                                                                                                                                                         |
| Lens                | 300 Series (all)                            | Acrylic with o-ring seal                                                                                                                                               |
| Pointer             | 300 Series (all)                            | Balanced Aluminum, black finish                                                                                                                                        |
| Dial                | 300 Series (all)                            | Aluminum, white background with black scale. UV resistant.                                                                                                             |
| Movement            | 300 Series (all)                            | Brass and Nickel-silver with highly polished bearing surfaces                                                                                                          |
| Fill liquid**       | 300 Series (all)                            | Glycerin                                                                                                                                                               |

\* For every 18 °F (10 °C) shift in temperature from which the gauge is calibrated, the user can experience up to ±0.4% additional error.

\*\*See page 51 for gauge fill options.

For details on accuracy/standard dial configuration and dial layouts, see pages 56-61.



**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

| ORDERING INFORMATION |        |                               |         |                             |            |                                |         |                               |
|----------------------|--------|-------------------------------|---------|-----------------------------|------------|--------------------------------|---------|-------------------------------|
| GAUGE SIZES          | 25     | 2-1/2"                        | 40      | 4"                          |            |                                |         |                               |
| CASE TYPES           | 300    | Brass, bottom connection      | 310     | Brass, back connection      |            |                                |         |                               |
| PRESSURE RANGES      | 30vac  | -30 inHg to 0 psi             | 30/300  | -30 inHg to 0 to 300 psi    | 300        | 0 psi to 300 psi               | 3000    | 0 psi to 3,000 psi            |
|                      | 30/15  | -30 inHg to 0 to 15 psi       | 15      | 0 psi to 15 psi             | 400        | 0 psi to 400 psi               | 5000    | 0 psi to 5,000 psi            |
|                      | 30/30  | -30 inHg to 0 to 30 psi       | 30      | 0 psi to 30 psi             | 600        | 0 psi to 600 psi               | 6000    | 0 psi to 6,000 psi            |
|                      | 30/60  | -30 inHg to 0 to 60 psi       | 60      | 0 psi to 60 psi             | 800        | 0 psi to 800 psi               | 7500    | 0 psi to 7,500 psi            |
|                      | 30/100 | -30 inHg to 0 to 100 psi      | 100     | 0 psi to 100 psi            | 1000       | 0 psi to 1,000 psi             | 10000   | 0 psi to 10,000 psi           |
|                      | 30/160 | -30 inHg to 0 to 160 psi      | 160     | 0 psi to 160 psi            | 1500       | 0 psi to 1,500 psi             | 15000   | 0 psi to 15,000 psi           |
|                      | 30/200 | -30 inHg to 0 to 200 psi      | 200     | 0 psi to 200 psi            | 2000       | 0 psi to 2,000 psi             |         |                               |
| SCALE OPTIONS        | psi    | psi single scale              | psi/kPa | psi/kPa dual scale          | psi/kg/cm² | psi/kg/cm² dual scale          | psi/bar | psi/bar dual scale            |
| CONNECTION SIZES     | 1/4    | 1/4" NPT                      | 1/2     | 1/2" NPT                    | SST        | SAE J1926-3:7/16-20 Adjustable |         |                               |
| OPTIONS              | CFF    | Chrome Front Flange           | RF      | Rear Flange                 | GLO        | Glass Lens Overlay             | BT3     | Brass Threaded Orifice 0.3 mm |
|                      | CFFN   | Chrome Front Flange w/o holes | CCR     | Chrome Cover Ring           | SGO        | Safety Glass Overlay           | BT4     | Brass Threaded Orifice 0.4 mm |
|                      | BFF    | Brass Front Flange            | CBU     | Chrome Bezel & U-Clamp      | AR         | Adapter Ring                   | BT8     | Brass Threaded Orifice 0.8 mm |
|                      | BLFF   | Black Front Flange            | MIP     | Maximum Indicating Pointer* | LM         | Laser Marking                  | RCP     | Rubber Case Protector         |
|                      | SSRF   | 304SS Rear Flange             | LL      | Polycarbonate Lens          | ST         | Stainless Steel Tagging        |         |                               |
|                      |        |                               |         |                             |            |                                |         |                               |

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

NOTES: Refer to 300 Series Options & Accessories chart on page 51 for availability by part number.

Cleaning for Oxygen Service (O2) is available only for dry or HL filled gauges

\* GY40 fill is standard for liquid filled gauges

## EXAMPLE

40 - 300 - 3000 - psi - 1/2<sup>†</sup> - BT3

Gauge size .....4"

Case type ..... Brass, bottom connection

Pressure range & scale option .....0 psi to 3,000 psi

Connection size<sup>†</sup> ..... 1/2" NPT

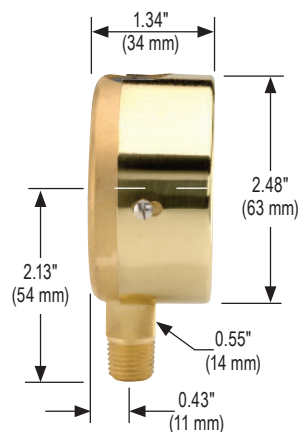
Option.....Brass Threaded Orifice 0.3 mm

<sup>†</sup> Only include in part number if non-standard connection size is ordered.

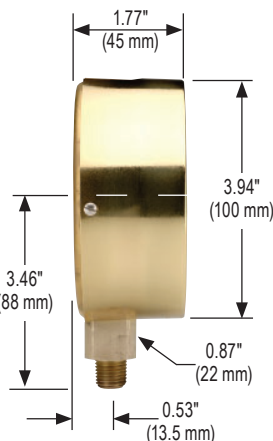
NOTES: See standard connection sizes chart on page 49.

Shaded portions of this part number example are not required unless a non-standard connection size or an option is needed.

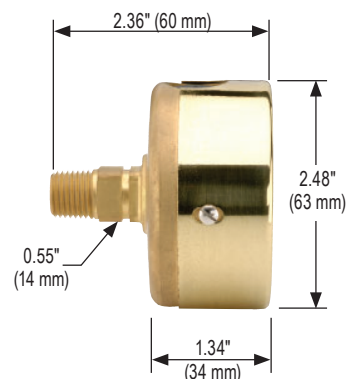
## 25-300



## 40-300

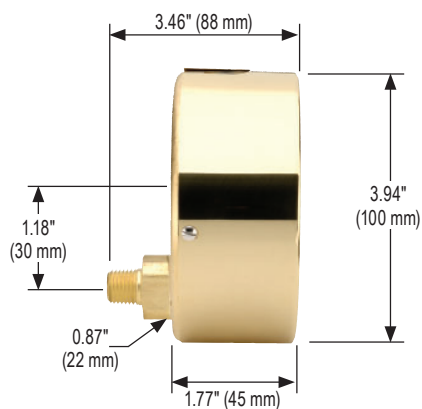


## 25-310

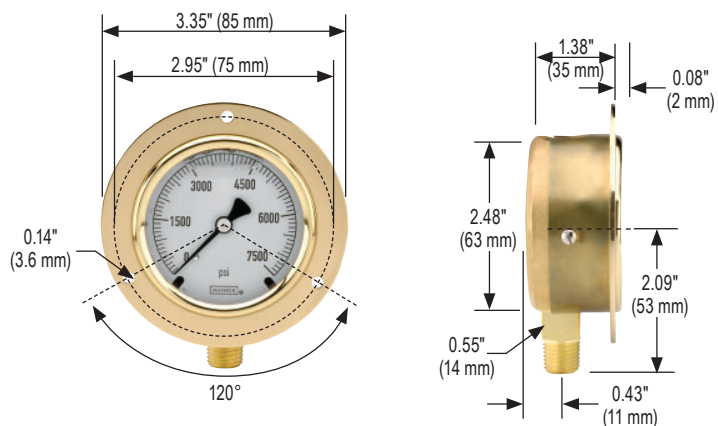


# Dimensions

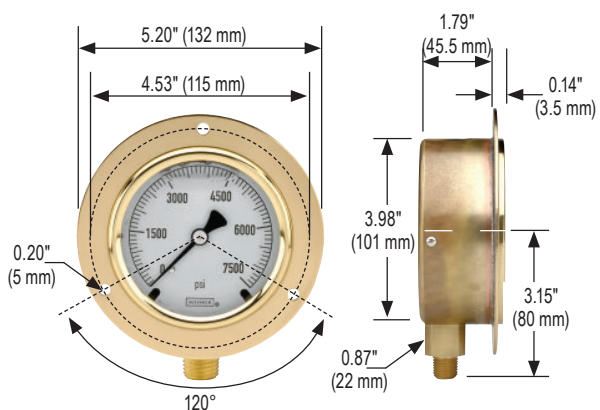
40-310



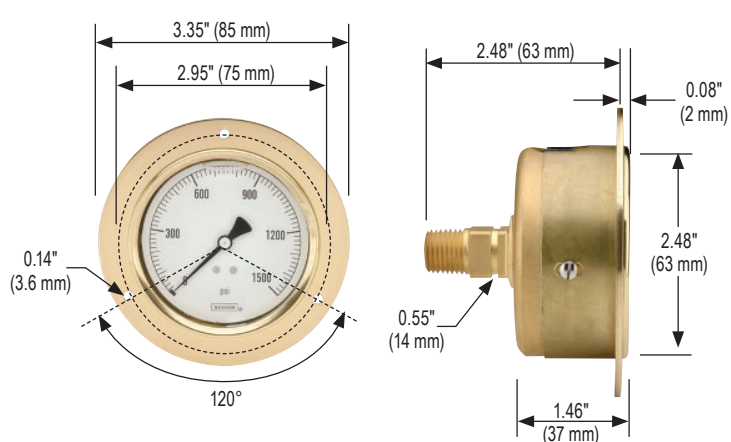
25-300 Front Flange



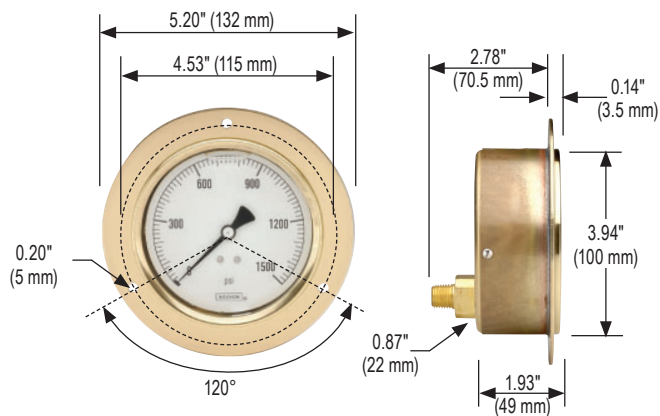
40-300 Front Flange



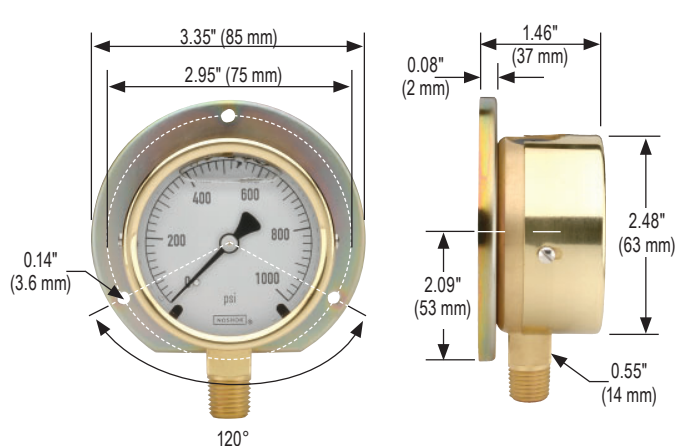
25-310 Front Flange



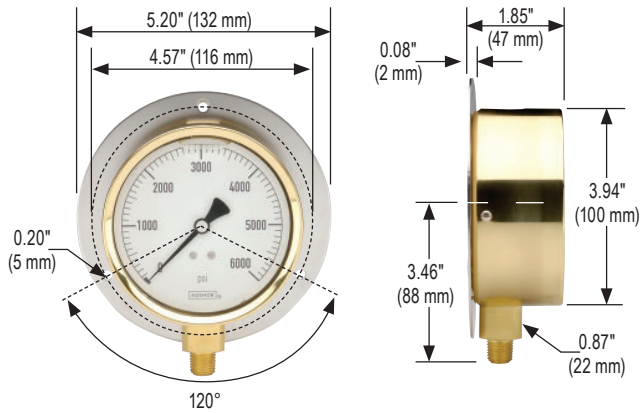
40-310 Front Flange



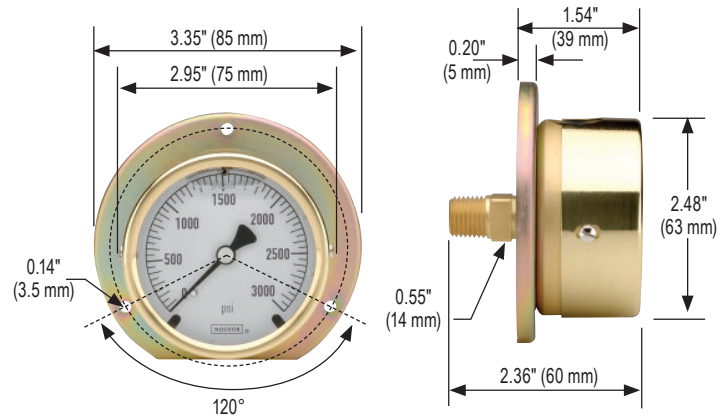
25-300 Rear Flange



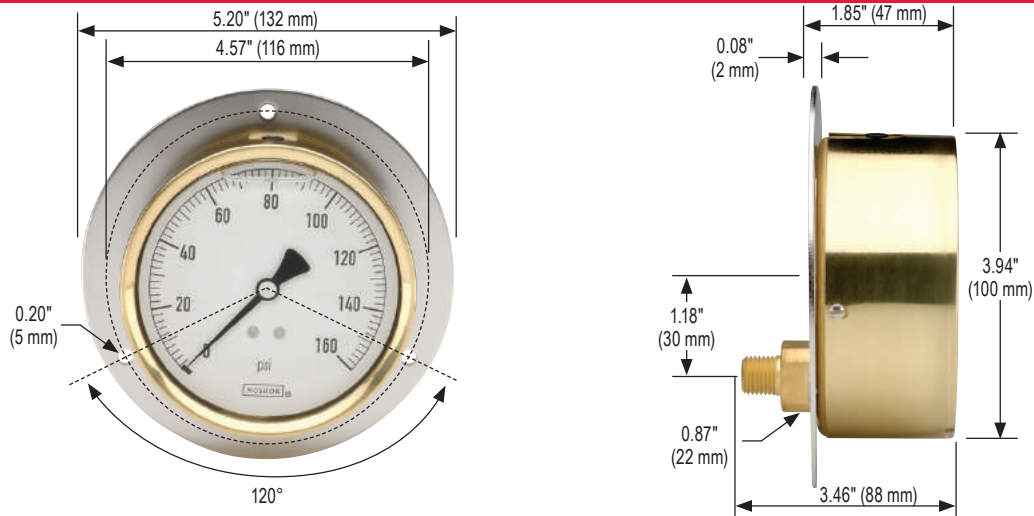
## 40-300 Rear Flange



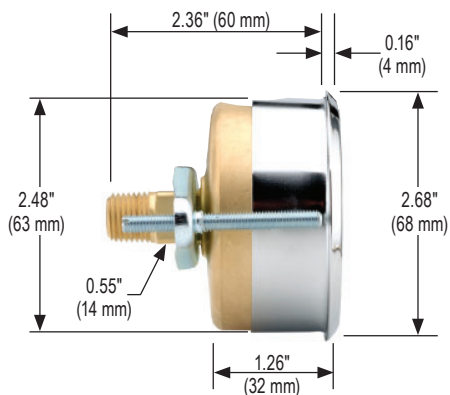
## 25-310 Rear Flange



## 40-310 Rear Flange



## 25-310 Chrome Triangular Bezel with U-Clamp



## 40-310 Chrome Triangular Bezel with U-Clamp

