

# Bourdon Tube Pressure Gauges UHP, Stainless Steel Series Model 230.15

WIKA Data Sheet PM 02.20

## Applications

- Suitable for gaseous, liquid and corrosive media, also in a corrosive environment, for demanding high purity applications
- Suitable for all UHP (Ultra High Purity) applications
- Semiconductor and flat panel industry
- Gas distribution systems, medical gases
- Hook-up application

## Special Features

- VCR® compatible face seal fittings
- Helium leak tested
- Electropolished case
- Process connection surface finish  $Ra \leq 0.25 \mu m$



Bourdon Tube Pressure Gauge, UHP Model 230.15.2", pressure connection VCR® compatible face seal fitting with union nut

## Description

### Nominal size

1 1/2", 2"

### Accuracy class

NS 1 1/2": Grade B according to ASME B40.1  
NS 2": Grade A according to ASME B40.1

### Scale ranges

0 ... 1 to 0 ... 400 bar (0 ... 15 to 0 ... 6000 psi)  
or other equivalent units of pressure or vacuum

### Working pressure

Steady: 3/4 x full scale value  
Fluctuating: 2/3 x full scale value  
Short time: full scale value

### Operating temperature

Ambient: -40 ... +60 °C  
Medium: +100 °C maximum

### Temperature effect

When temperature of the pressure element deviates from reference temperature (+20 °C):  
max.  $\pm 0.4 \%$  / 10 K of true scale value

### Ingress protection

IP 54 per EN 60 529 / IEC 529

### Pressure connection

Material: stainless steel 316L  
Lower mount (LM) or centre back mount (CBM)  
VCR® compatible face seal fittings:  
with union nut (female)  
with male nut  
or with fixed body 9/16-18 UNF  
Male thread 1/4 NPT

VCR® is a registered trademark of Swagelok

### Pressure element

Stainless steel 316L,

< 100 bar: C-type, ≥ 100 bar: helical type

Measurement system gap free design,  
dynaflo extrude hone passivated after welding

Ra < 0.5 µm (Ra < 20 µinch)

Leakage proof: leak rate ≤ 10<sup>-9</sup> mbar · l / s

Method of test: helium mass spectrometry

### Movement

Stainless steel

### Dial

White aluminium with black lettering, with pointer stop pin

### Pointer

Black aluminium

### Case

Stainless steel, electropolished

### Window

Polycarbonate,

NS 1 ½": snap-in

NS 2": screw on (twist-lock)

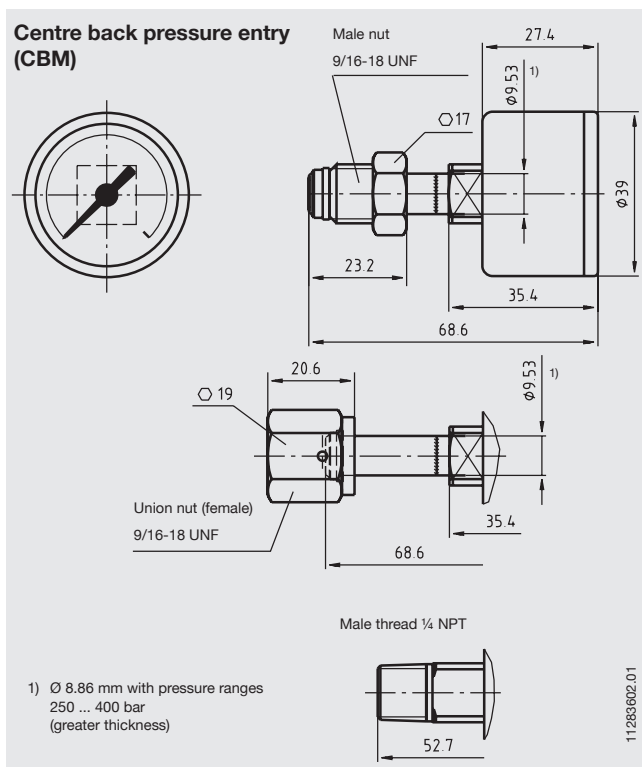
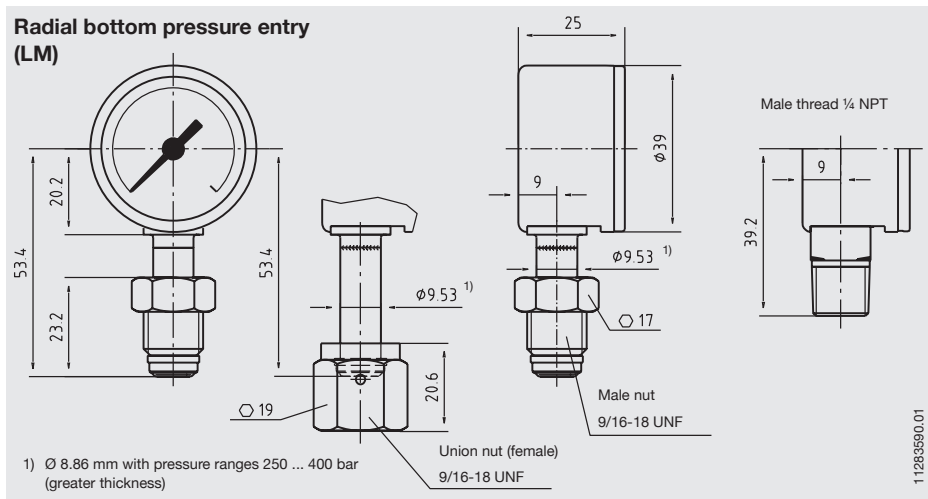
### Cleanliness

Special cleaning according to SEMI spec

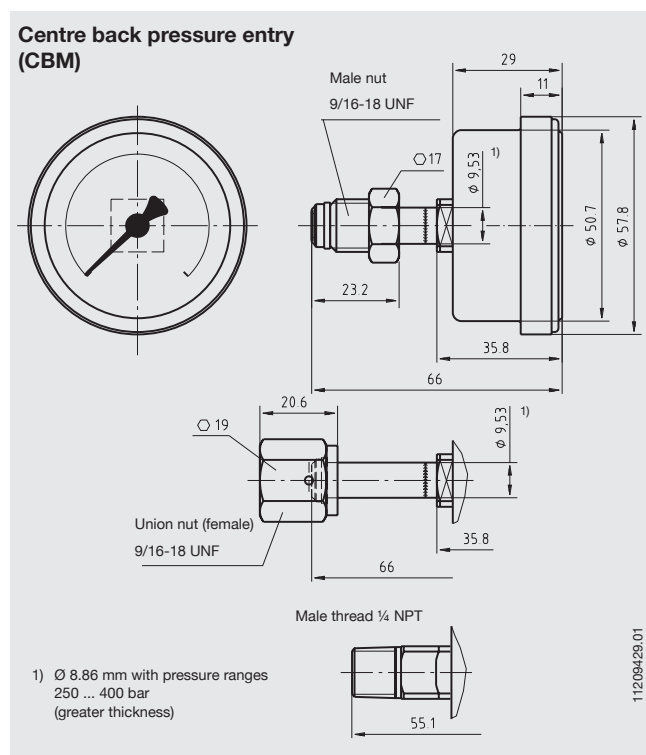
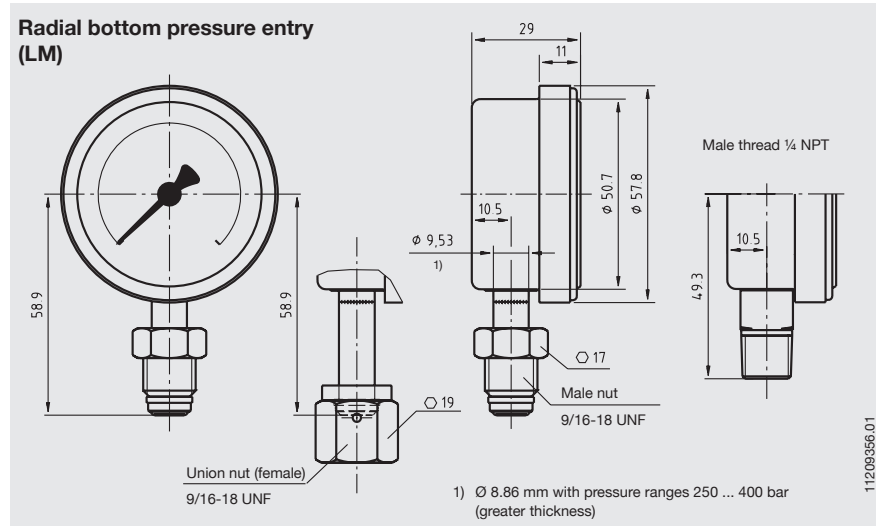
### Optional extras

- Other process connection
- Smaller surface finish of the pressure connection  
Ra ≤ 0.3 µm
- Dual pressure scale
- Scale ranges up to 700 bar with pressure connection  
¼ NPT

### Standard version NS 1 ½"



## Standard version NS 2"



## Ordering information

Pressure gauge model / Nominal size / Scale range / Size and location of connection / Optional extras required

Modifications may take place and materials specified may be replaced by others without prior notice.  
Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.

