

# Bourdon Tube Pressure Gauges UHP, Stainless Steel Series Model 230.15 with Alarm Contact Model 851.3

WIKA Data Sheet PM 02.21

## 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

- With electric contact (Reed contact)
- 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" with Reed Contact

## Description

### Nominal size

2"

### Accuracy class

Grade A according to ASME B40.1

### Scale ranges

0 ... 4 to 0 ... 400 bar (0 ... 60 to 0 ... 6000 psi)  
or other equivalent units of pressure or vacuum

### Working pressure

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

### Operating temperature

Ambient: -20 ... +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, C-type

Measurement system gap free design

Leakage proof: leak rate  $\leq 10^{-9}$  mbar · l / s

Method of test: helium mass spectrometry

## Movement

Stainless steel

## Dial

White aluminium with black lettering

## Pointer

Black aluminium

## Case

Stainless steel, electropolished

## Window

Polycarbonate,  
screw on (Twist Lock)

## Cleanliness

Spezial cleaning according to SEMI spec

## Alarm contact

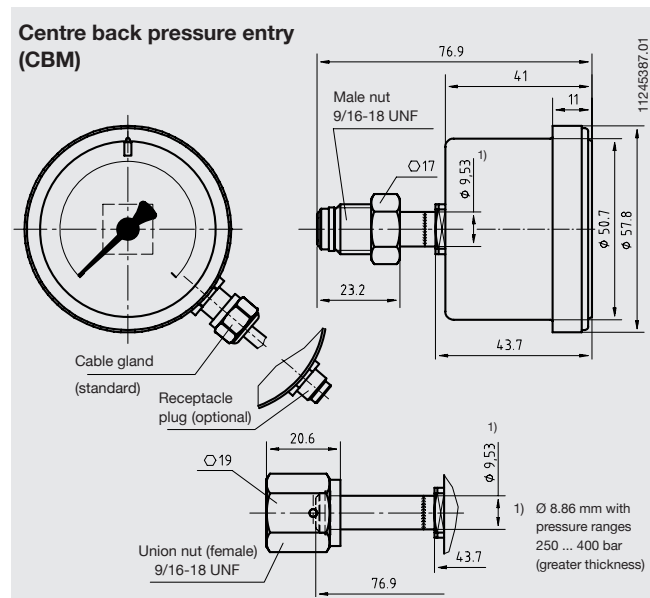
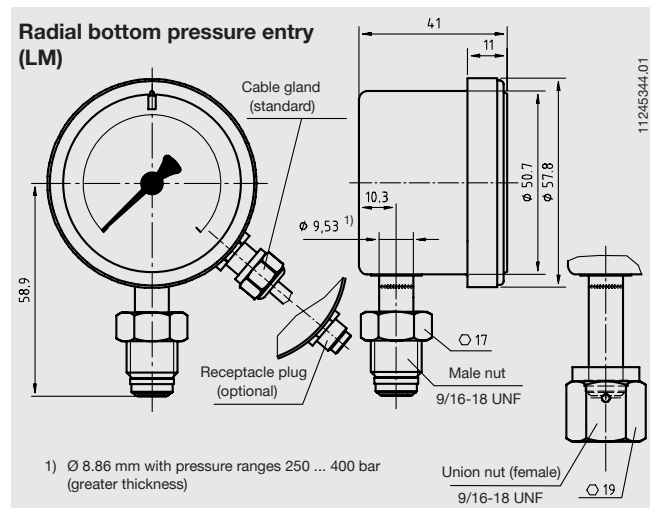
- Reed contact Model 851.3; The switching function is identified by the index '3'. 851.3 = SPDT contact
- Setting the switching point  
In order to adjust the switching point, the gauge should be disconnected from the voltage supply and the window unscrewed.  
The switches are set via the mark pointer on the dial's circumference. The set value of the switching point is adjustable up to 80 % of the scale range.
- Electrical load
  - Max. switching voltage: 24 VDC / VAC
  - Max. load: 10 W
  - Max. current: 0.5 A
- Electrical connection with cable gland  
M8 x 1.25, cable output 3 m long, conductor cross section 0.14 mm<sup>2</sup>, flying leads, the terminal assignment is stated on the pressure gauge's connection plate

## 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.

## Standard version



## Optional extras

- Other process connection
- Electrical connection with receptacle plug (Binder plug M8 x 1)
- Dual pressure scale