Bourdon tube pressure gauges with switch contacts
UHP, stainless steel version
Model 230.15 with reed contact model 851.3

Applications

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

Special features

■ Built-in electrical switch contact (reed contact)
■ VCR® compatible pressure connection threads
■ Helium leak tested
■ Electropolished case
■ Process connection surface finish \( Ra \leq 0.25 \mu m \)

Description

Nominal size
2"

Accuracy class
Grade A to ASME B40.1

Scale ranges
0 … 4 to 0 … 400 bar (0 … 60 to 0 … 6000 psi)
or all other equivalent vacuum or combined pressure and vacuum ranges

Pressure limitation
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 the temperature of the measuring system deviates from the reference temperature (+20 °C):
max. ±0.4 %/10 K of full scale value

Ingress protection
IP 54 per EN 60529 / IEC 529

Standard version

Process connection
Stainless steel 316L, lower mount (LM) or back mount,
VCR® compatible threaded connection optionally:
with union nut (female)
with male nut
or with male thread 9/16-18 UNF fixed
Male thread ¼ NPT

VCR® is a registered trademark of Swagelok
Pressure element
Stainless steel 316L, C-type
Measuring system in crevice free design
Leak tightness: leak rate \( \leq 10^{-9} \text{ mbar} \cdot \text{l/s} \)
Test method: helium mass spectrometry

Movement
Stainless steel

Dial
Aluminium, white, black lettering

Pointer
Aluminium, black

Case
Stainless steel, electropolished

Window
Polycarbonate, screw-fitted on case (twist lock)

Cleaning
Specially cleaned per SEMI standard

Switch contact
■ Reed contact model 851.3; the switching function is identified by the index 3; 851.3 = the contact switches (change-over contact)
■ Adjustment of switch point
   In order to adjust the switch point, the instrument has to be disconnected from the voltage supply and the window has to be unscrewed. The switches are set via the mark pointer on the dial’s circumference. The set value of the switch point is adjustable up to 80 % of the scale range.
■ Electrical load
   max. switching voltage: DC / AC 24 V
   max. contact rating: 10 W
   max. current: 0.5 A
■ Electrical connection via cable gland
  M8 x 1.25, cable outlet 3 m long, conductor cross section 0.14 mm², flying leads, the terminal assignment is stated on the pressure gauge’s connection plate

Options
■ Other process connection
■ Electrical connection via miniature connector (Binder connector M8 x 1)
■ Dual scale

Dimensions in mm
Standard version

Ordering information
Model / Nominal size / Scale range / Connection size / Connection location / Options

The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.

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