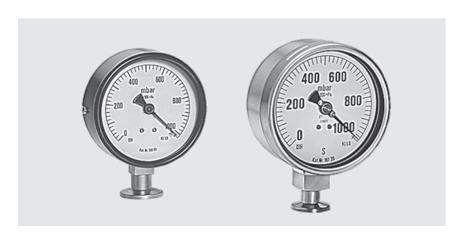
### **Products**

# Mechanical Gauges

### Bourdon Vacuum Gauges



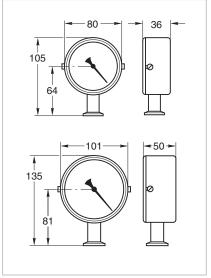
**Advantages to the User** 

- Highly reliable, rugged, insensitive to vibrations
- Linear readout, independent of the type of gas
- Excellent media compatibility owing to the stainless steel movement (BOURDONVAC C)
- IP 54 protection (BOURDONVAC C)

#### **Typical Applications**

- Vacuum distillation
- Drying processes
- For explosion hazard applications
- Vacuum coneying systems

Rugged relative pressure vacuum gauges based on the Bourdon principle covering the pressure range from 1 to 1020 mbar (0.75 to 765 Torr).



Dimensional drawing for the BOURDONVAC A (top) and the BOURDONVAC C (bottom)

#### **Technical Data**

### **BOURDONVAC A**

#### **BOURDONVAC C**

Measurement range	mbar	1 to 1020	1 to 1020
Measurement uncertainty	% FS	1	1
Overload range (abs. briefly)	bar	1.5	1.3
Storage temperature range	°C	-25 to +60	-25 to +60
Nominal temperature range	°C	10 to 60	10 to 100 (max.)
Flange connection	DN	16 KF	16 KF
Length of scale	mm	140	207
Diameter	mm	79	101
Overall weight	mm	105	135
Weight	kg (lbs)	0.25 (0.55)	0.6 (1.33)
Materials in contact with the med	lium	nickel plated standard steel, bronze, soft solder	stainless steel 1.4571

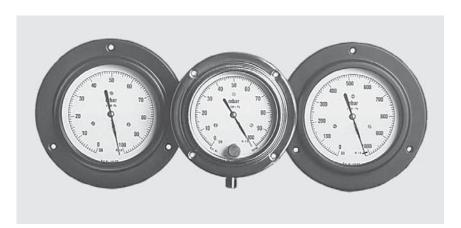
#### **Ordering Information**

#### **BOURDONVAC A**

#### **BOURDONVAC C**

Bourdon vacuum gauge Part No.	160 40 Part No. 161 20
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# Capsule Vacuum Gauges



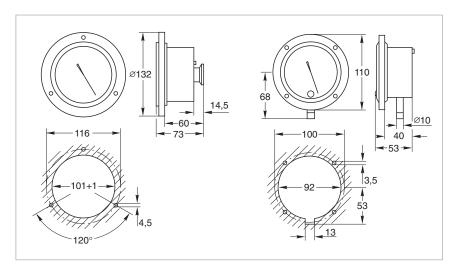
Rugged absolute pressure gauges for the pressure range from 1 to 1000 mbar (0.75 to 750 Torr).

#### **Advantages to the User**

- Rugged and insensitive to vibra-
- Models available for two measurement ranges (1 to 100 mbar and 1 to 1000 mbar)
- Readout independent of the type of gas and changes in atmospheric pressure
- Linear pressure readout
- Installation direct via the connection flange or panel mounting
- Model with integrated isolation valve for use on packaging machines (Part No. 160 68)

#### **Typical Applications**

- Measurement of absolute pressures (for inert gases only)
- Vacuum conveying systems
- Operation monitoring
- Packaging



Dimensional drawings and panel cut-outs for the capsule vacuum gauges Part Nos. 160 63/64 (left) and Part No. 160 68 (right)

#### **Technical Data**

### **Capsule Vacuum Gauges**

Measurement range mbar	1 to 100	1 to 100	1 to 1000
Measurement uncertainty % FS	1.0	2.5	1.6
Overload range (abs. briefly) bar	1.5	1.5	1.5
Storage temperature range °C	-25 to +60	-25 to +60	-25 to +60
Nominal temperature range °C	10 to 50	10 to 50	10 to 50
Length of scale mm	205	180	205
Dead volume, approx. cm <sup>3</sup>	235	167	235
Diameter mm	132	110	132
Weight kg (lbs)	0.7 (1.54)	0.6 (1.32)	0.7 (1.54)
Vacuum Connection DN	16 KF	10 mm dia. hose nozzle with integrated isolation valve	16 KF
Max. inclination when installed	45°	45°	45°
Materials in contact with the medium	brass standard steel nickel plated glass NBR aluminum copper beryllium soft and hard solder resin	brass standard steel nickel plated glass NBR aluminum copper beryllium soft and hard solder resin	brass standard steel nickel plated glass NBR aluminum copper beryllium soft and hard solder resin

### **Ordering Information**

### **Capsule Vacuum Gauges**

Capsule vacuum gauge	Part No. 160 63	Part No. 160 68	Part No. 160 64
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## Diaphragm Vacuum Gauge DIAVAC DV 1000



Rugged mechanical diaphragm vacuum gauge of high accuracy for the rough vacuum range from 1 to 1000 mbar (1 to 750 Torr).

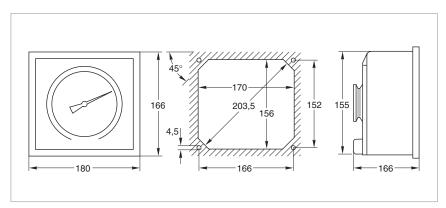
#### **Advantages to the User**

- Wide measurement range from 1 to 1000 mbar (1 to 750 Torr) with high resolution in the range from 1 to 100 mbar (1 to 75 Torr)
- The scale of each gauge is individually calibrated
- Absolute pressure gauge
- Readout independent of the type of gas and changes in atmospheric pressure

- Stainless steel diaphragm for excellent compatibility with most media
- Laser welding technology for high precision diaphragm mount
- Rugged table-top housing, can be freely mounted above the flange connection; also for panel mounting
- Measurement chamber can be easily cleaned owing to the detachable measurement flange

#### **Typical Applications**

- Chemical processes
- Vacuum destillation
- Absolute pressure measurements for gas mixtures
- For use in explosion hazard rated
- Drying processes
- Lamp manufacture



Dimensional drawing and panel cut-out for the DIAVAC DV 1000

#### **Technical Data**

### **DIAVAC DV 1000**

Measurement range	mbar (Torr)	1 to 1000 (1 to 750)
Measurement uncertainty		
1 - 10 mbar (1 - 7.5 Torr)		± 1 mbar (Torr)
10 - 1000 mbar (7.5 - 750 Torr	)	± 10 % of meas. value
Storage temperature range	°C	-25 to +60
Nominal temperature range	°C	0 to 60
Permissible overload (abs.)	bar	3
Lenght of scale / dead volume	mm	270 / 130
Vacuum Connection	DN	40 KF
Dimension (W x H x D)	mm	180 x 166 x 100
Weight	kg (lbs)	2.7 (5.95)
Materials in contact with the med	dium	stainless steel 1.4301, 1.4310 (diaphragm), FPM

### **Ordering Information**

#### **DIAVAC DV 1000**

DIAVAC DV 1000	
	D
mbar readout	Part No. 160 67 <sup>1)</sup>
Torr readout	Part No. 896 06 <sup>1)</sup>
DKD calibration	Part No. 157 12
Replacement sintered filter	
with DN 40 KF centering ring	Part No. 231 93 515
Replacement housing, complete	Part No. 240 000

<sup>1)</sup> Complete with centering ring and sintered filter