

VACUUM AND PRESSURE GAUGES

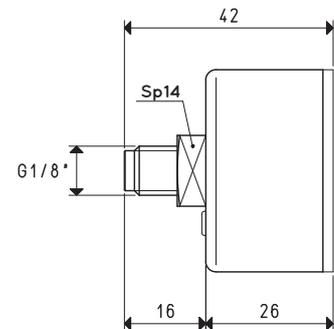
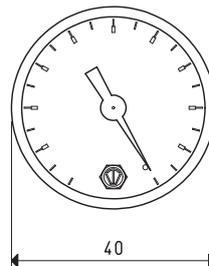
The measurement method of our vacuum gauges is based on the principle of the Bourdon spring (Eugène Bourdon, France, 1808 – 1884).

It is made using section tubes in special copper alloy, one end is welded to the threaded pin of the vacuum-pressure gauge, thus forming a single body with it, while the other closed end is free. As the vacuum or the pressure inside increases, it tends to shift from the initial position (Bourdon effect). The movement of the free end of the spring determines the vacuum-pressure measurement.

For easier reading, this movement is amplified by means of a connection lever and transmitted to the pointer.

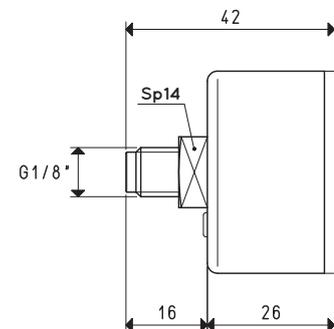
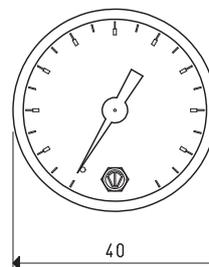
Everything is contained in a sturdy case made from different materials according to the function of models, fastened onto a threaded fitting for connection to the system. The face and index are visible thanks to a clear plastic protective disc. They are available in various versions, with radial or coaxial connectors, with built-in or external flange, dry or glycerine filled. With the exception of the Ø 40 mm vacuum gauges, all other models have a double scale dial.

All the vacuum and pressure gauges we will describe on these pages are made in compliance with all the safety standards and measurement units in force in the European Union.



VACUUM GAUGE

Item	Scale kPa	Admissible scale error	Temperature of use	Notes	Case material	Weight g
09 03 15	0 ÷ -100	2.5%	-10 °C ÷ +50 °C	dry	Black plastic	52



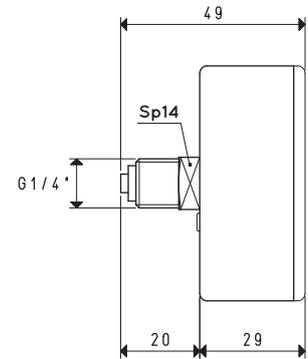
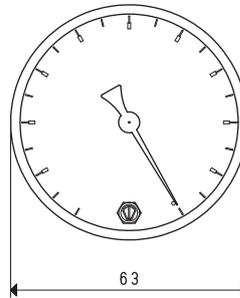
PRESSURE GAUGES

Item	Scale bar	Admissible scale error	Temperature of use	Notes	Case material	Weight g
09 03 20	0 ÷ 1.6 0 ÷ 23 psi	2.5%	-10 °C ÷ +50 °C	dry	Black plastic	54
09 03 25	0 ÷ 10 0 ÷ 1.0 MPa	2.5%	-10 °C ÷ +50 °C	dry	Black plastic	54



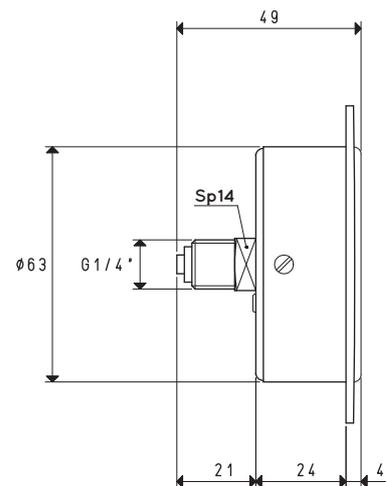
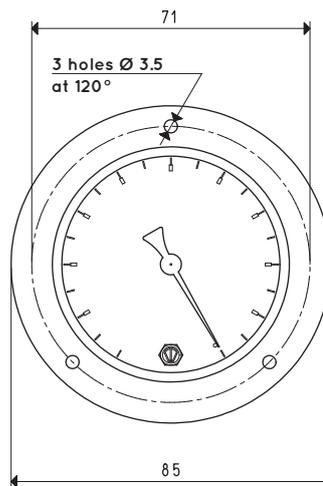
VACUUM GAUGES

3D drawings are available on vuotecnica.net



VACUUM GAUGE

Item	Scale mbar	Scale kPa	Admissible scale error	Temperature of use	Notes	Case material	Weight g
09 03 10	-1000 ÷ 0	-100 ÷ 0	2.5%	-10 °C ÷ +50 °C	dry	black plastic	134



VACUUM GAUGE

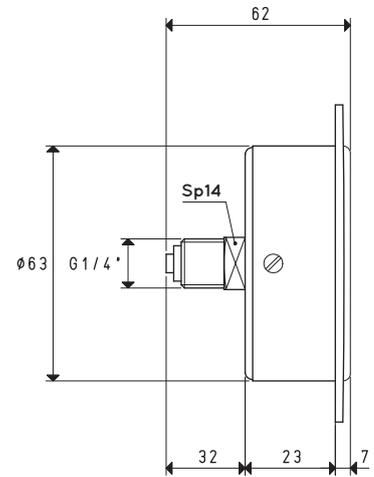
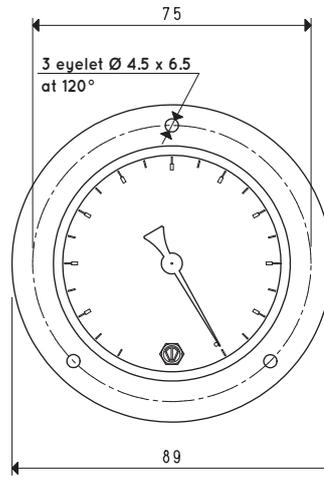
Item	Scale mbar	Scale kPa	Admissible scale error	Temperature of use	Notes	Case material	Flange material	Weight g
09 01 10	-1000 ÷ 0	-100 ÷ 0	2.5%	-10 °C ÷ +50 °C	dry	black plastic	chrome-plated steel	162

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch = $\frac{\text{mm}}{25.4}$; pounds = $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

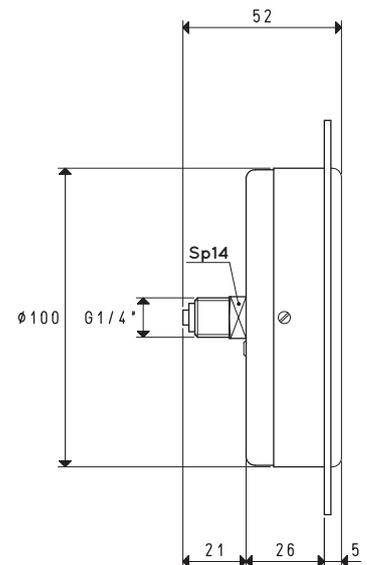
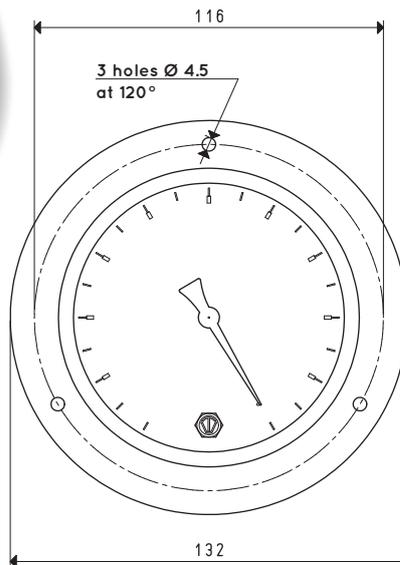
Adapters for GAS - NPT threading available on page 1.134

VACUUM GAUGES



VACUUM GAUGE

Item	Scale		Admissible scale error	Temperature of use	Notes	Case material	Flange material	Weight g
	mbar	kPa						
09 01 16	-1000 ÷ 0	-100 ÷ 0	1.6%	-10 °C ÷ +50 °C	in glycerine bath	Die-cast brass	chrome-plated steel	348



VACUUM GAUGE

Item	Scale		Admissible scale error	Temperature of use	Notes	Case and flange material	Weight g
	mbar	kPa					
09 02 10	-1000 ÷ 0	-100 ÷ 0	1%	-10 °C ÷ +50 °C	dry	black steel	346

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

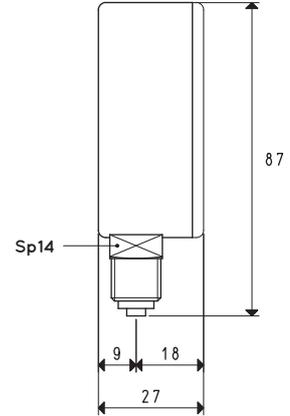
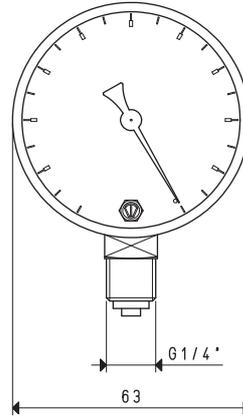
inch = $\frac{\text{mm}}{25.4}$; pounds = $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

Adapters for GAS - NPT threading available on page 1.134



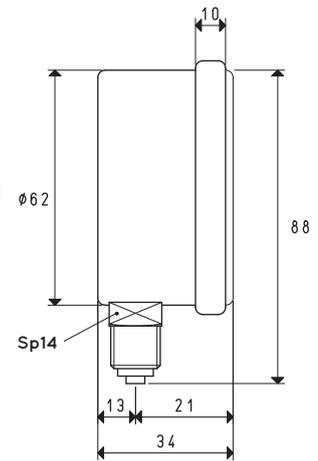
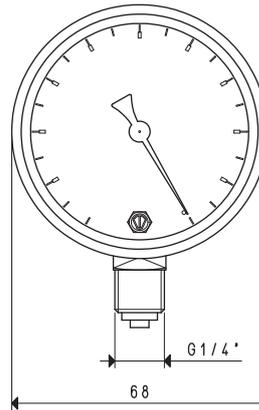
VACUUM GAUGES

3D drawings are available on vuototecnica.net



VACUUM GAUGE

Item	Scale		Admissible scale error	Temperature of use	Notes	Case material	Weight g
	mbar	kPa					
09 05 10	-1000 ÷ 0	-100 ÷ 0	2.5%	-10 °C ÷ +50 °C	dry	black plastic	136



VACUUM GAUGE

Item	Scale		Admissible scale error	Temperature of use	Notes	Case material	Weight g
	mbar	kPa					
09 05 16	-1000 ÷ 0	-100 ÷ 0	1.6%	-10 °C ÷ +50 °C	in glycerine bath	stainless steel	218

Note: On request, vacuum gauges art. 09 05 16 can be supplied with calibration certificate.

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch = $\frac{\text{mm}}{25.4}$; pounds = $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

Adapters for GAS - NPT threading available on page 1.134