

# Hygienic Pressure & Temperature Gauges



Regional Distributor of:

# TEMPRESS

# Thermometer



- Case size DN100 (4")
- Sensor diameter Ø10 or Ø13mm (0.4" or 0.5")
- Short sensor length
- Connection 1.5" or 2" clamp ISO 2852 (Tri-clamp®)
- Wetted parts AISI 316
- Temperature compensation
- Measuring range from -40°C to 250°C (-40-480°F)
- Unique resistance to corrosion, damp, vibrations and wear

TEMPRESS gas pressure thermometer is made to meet the requirements of food and pharmaceutical industries.

The sensor is diameter 10 or 13 mm with a 1.5" or 2" clamp connection (Tri-clamp®). The sensor length depends on the diameter. Minimum with 13 mm sensor is L100mm which gives an immersion length of 50mm. The surface is for A8103 polished to Ra <0.8µm (<32µ in.) or electropolished Ra <0.5µm.

The function is based on expansion of the filling medium in the closed sensor. The change of pressure actuates the spiral spring driving the movement. A built-in bimetallic coil compensates automatically for the effect on the reading caused by change of the ambient temperature.

The filling media is an inert gas which is 100% neutral to the environment. This makes the thermometer ideal for use in food and pharmaceutical industries.

Each individual thermometer is manufactured with great care and hand-calibrated. TEMPRESS' high quality standard ensures high accuracy, superb long time-stability and long durability of the instruments.

## Specifications

Thermometer	A8103 - polished
Case Size	DN100
Material	stainless steel
Liquid filling	silicone oil
Neck	50mm (1.75")
Connection clamp	DN38 (1.5") or DN51 (2") acc. to ISO 2852
Sensor diameter	Ø10mm (0.4") or Ø13mm (0.5")
Max. L	560mm
Material	AISI 316 surface finish A8103 Ra<0.8µm (<32µ in.) Optional: Ra<0.5µm (<20µ in.)
Filling media	inert gas
Measuring range	-40°C TO +250°C (-40+480°F)
Minimum span	60°C (140°F)
Accuracy	EN13190, cl.1
Ambient temperature	-40 TO +100°C (-40 TO +212°F (or FS))

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# Pressure Gauge



## Pressure Gauge w. Diaphragm Seal DN 100, with TR7604

- TEMPRESS pressure gauge with diaphragm seal, type A330301/4110 TR7604 with 1.5" clamp is made of stainless steel, AISI 316
- Diaphragm of AISI 316L
- Hygienic
- Pressure gauge DN 100, with bottom connection
- Temperature compensated
- Media temperature of up to 130°C (265°F)
- Ambient temperature of up to 60°C (140°F)
- Lower parts with other connections eg. G $\frac{3}{8}$ B, G $\frac{1}{2}$ B and 1 $\frac{1}{2}$ " welding liner

### Pressure Gauge with Diaphragm Seal

The TEMPRESS pressure gauge with diaphragm seal is an ideal solution in situations where the medium is not to come in contact with the instrument's measuring system whether for reasons of hygiene or due to the thick, crystallising or polluted nature of the medium.

The TR7604 diaphragm seal is a hygienic 1.5" clamp (Tri-Clamp®) which fulfils the standard of ISO 2852. The ultra-thin diaphragm in stainless and acid resistant steel is welded to the top part, allowing it considerable freedom of movement. This gives the instrument a high degree of durability and a level of precision better than  $\pm 1\%$  F.S.

### Temperature compensated

The unique temperature compensation system guarantees a correct reading even during extreme variations in the ambient temperature.

The system automatically compensates for changes in the ambient temperature of up to 60°C (140°F).

### A wide range of other possibilities

The pressure gauge with diaphragm seal is one of more than 150 types TEMPRESS can supply.

### Specifications

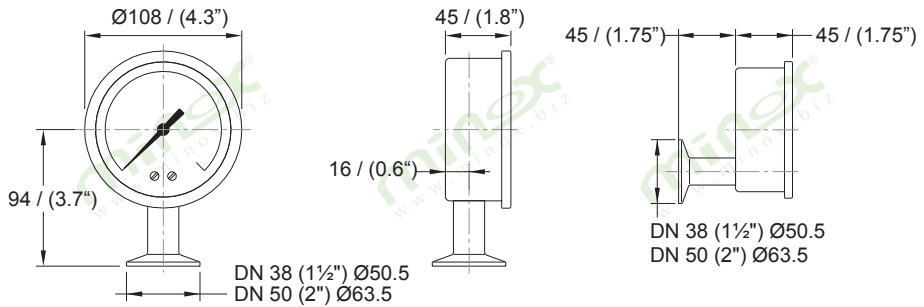
Type A330301...	Pressure gauge w. diaphragm seal
Case size	DN100
Case material	AISI 316, glass-bead blasted
Display face	Acrylic
Bezel	AISI 316
Liquid filling	Glycerine
Connection	1.5" (DN 38) clamp acc. to ISO 2852
Material	AISI 316L
Diaphragm material	AISI 316L
Transmission fluid	Glycerine, 90/10
Measuring range	-1~0 bar to 0~100 bar
Minimum span	1 bar
Damping	Standard
Over range protection	Pmax + 30%
Medium temperature	-5 °C to 130 °C (23~265°F)
Ambient temperature	Span $\leq 2,0$ bar 0~50°C (32~120°F) Span $\leq 2,0$ bar 0~60°C (32~140°F)
Accuracy	Class 1,0 ( $\pm 1\%$ F.S.)
Temp. dependence	$\leq 60$ mbar at 100°C (0,87 psi at 212°F)



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# Pressure Gauge

## Dimensions



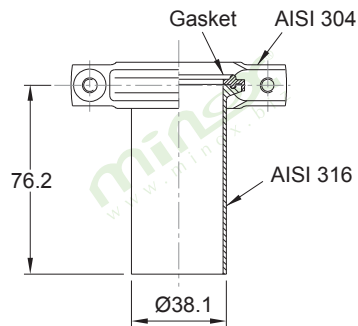
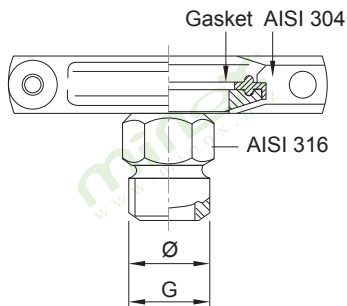
### Ordering key, bottom

Range			
-1-0	bar	0-4	bar
-1-0-3	-	0-6	-
0-1	-	0-10	-
0-2.5	-	0-16	-
0-25	bar	0-40	-
0-60	-	0-60	-
0-100	-	0-100	-

### Ordering key, rear

Range			
0-4	bar	0-10	bar
0-6	-	0-16	-
0-60	bar	-	-
-	-	-	-

## Lower part acc. to ISO 2852 (for TR7604), max. 60 bar (870 psi)



### Ordering key

<b>G</b> - thread	$\varnothing$ - internal boring
<b>G<math>\frac{3}{8}</math>B</b>	11 mm
<b>G<math>\frac{1}{2}</math>B</b>	14 mm
<b>Gasket</b> <small>(7319 NBR gasket is incl. in 7322 and 7323)</small>	NBR rubber < 90°C (195°F) PTFE teflon < 130°C (265°F)

### Ordering key

<b>Nom. size</b>	$\varnothing$ - external diameter
<b>1.5" (DN38)</b>	38,6 mm
<b>Gasket</b> <small>(7319 NBR gasket is incl. in 8707)</small>	NBR rubber < 90°C (195°F) PTFE teflon < 130°C (265°F)

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