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Portable digital pressure gauge for potentially explosive atmospheres



# TINYGAL T210-IS



#### **Applications**

- Gauge pressure
- Absolute pressure
- Differential pressure
- Vacuum
- Combined ranges (vacuum-pressure)

The TINYCAL Series T210-IS digital pressure gauge are portable instruments that operate by means of a microprocessor, designed and manufactured by Gometrics for indicating pressure values. The instrument is designed to operate as a pressure gauge and digital multimeter, giving it greater versatility and making it possible to calibrate the electronic pressure transmitter with a single instrument, including the pressure reading and the 4-20 mA transmitter signal output, by pressing just one of the keys on the instrument.

The pressure sensor is built into the equipment and made of stainless steel\*. This, together with the excess pressure that it is able to withstand, guarantees the long life of the instrument.

The keyboard on the front has an ergonomic design that is created especially for it to be operated using one hand, permitting the following functions:

- Changing the engineering units (bar, kPa, kgf/cm2, mbar, psi, mmHg, mH2O, cmH2O, mmH2O, atm)
- Auto-zero
- Input selection: pressure or current.

The weight and size of the TINYCAL pressure gauges allows them to be used quickly and effectively for field and workshop calibration operations. The equipment has a lectern-type stand for table-top use, to facilitate the reading process.

The instrument is fitted with a 6LR61 alkaline battery and is supplied with a carrying-case, cables, calibration certificate with traceability (optional ENAC) and has a 2-year warranty.

## **Technical specifications**

Pressure range: (see table) Uncertainty*:	Min: 0-25 mbar Max: 0-350 bar 0.25% FS and 0.10% FS		
Current range: Uncertainty*:	±30 mA 0.025% of reading + 2 μA		
Resolution: (see table)	4 1/2 digits in pressure 1 μA / 10 μA in current		
Process connection:	Conical internal 60° 1/8" BSP M		
Operational temperature:	0-50 °C		
Temperature coefficient:	0.02% FS/°C < 1 bar 0.01% FS/°C ≥ 1 bar		
Fluids:	Compatible with stainless steel and Buna N for ranges ≥ 1 bar. Air or inert gases for ranges < 1 bar and differential pressure.		

Proof pressure:	2 times the range. For differential pressure equal to maximum static				
Maximum static pressure:	(only differential pressure) 3 times the range or 14 bar (whichever is lower)				
Display:	10mm LCD				
Power supply:	6LR61 alkaline battery				
Autonomy:	30 hours				
Dimensions:	83 x 152 x 33 mm				
Weight:	360 grams				
Warranty:	2 years				
Marking:	CE				
Certification:	⟨ II 1G Ex ia IIB T4				

Calibration certificate with standard traceability (optional ENAC)

#### **Certification data**



Permitted for Zone 0 (permanent presence of flammable gas), group II, gases, vapours or mixture belonging to group B (methane, propane, ethylene...).

T4 temperature class.



<sup>\*</sup> For all models with intervals of 0-1 bar and higher-

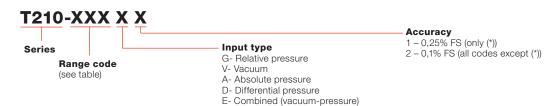
<sup>\*</sup> Includes non-linearity, hysteresis, repeatability, thermal drift between 20°C and 26°C and stability after 1 year

### Table of existing ranges depending on type of input

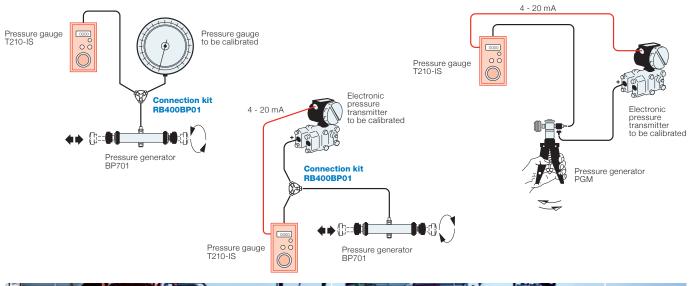
Range code	Relative (G)	Vacuum (V)	Combined (E) <sup>(3)</sup>	Differential pressure (D) <sup>(1)</sup>	Absolute (A)	Display reading resolution	
025	0 – 25	-25 / 0	-25 / +25	-25 / +25	-	0,01	_
070	0 – 70	-70 / 0	-70 / +70	-70 / +70	-	0,01	mbar
300	0 – 300	-300 / 0	-300 / +300	-300 / +300	0 – 300 (*)	0,1	_
101	0 – 1	-1 / 0	-1 / +1	-1 / +1	0 – 1	0,0001	
201	0 – 2	-	-1 / +2	-1 / +2	0 – 2	0,0001	
701	0 – 7	-	-1 / +7	-1 / +7	0 – 7	0,001	
172	0 – 17	-	-1 / +17	-1 / +17	-	0,001	bar
352	0 – 35	-	-1 / +35	-1 / +35	-	0,01	å
702	0 – 70	-	_	-	-	0,01	
173	0 – 170	-	-	-	-	0,01	
353	0 – 350	-	-	-	-	0,1	

- (\*) Not available with uncertainty 0.1% FS
- (1) Max. static pressure: 3 times the range or 14 bar (whichever is lower)
- (2) Maximum static pressure 300 mbar (3) For combined ranges, uncertainty is expressed as a % of SPAN
- (4) Inert gases only

#### **Coding** (how to determine the model)



# **Operating diagrams**









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