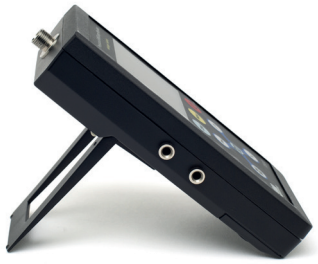
- Relative pressure
- Absolute pressure
- Vacuum
- Combined range (vacuum-pressure)
- Differential pressure



T310

Portable digital pressure gauge
Tinycal series

The new T310 digital pressure gauge is a portable instrument that indicates values of pressure. It has been developed and manufactured by Gometrics, like the entire Tinycal series. The T310 has been designed to operate **both as a pressure gauge and as a digital milliammeter,** allowing the calibration of electronic pressure transmitters with a single instrument. It is able to read both the pressure generated and the 4-20 mA signal from the transmitter output, at the touch of a key.

The compact design of the T310 enables fast and efficient calibration operations, with datalogger function as standard. The pressure sensor, piezoresistive type in stainless steel, is incorporated in the equipment. Its robustness guarantees the long life of the instrument. The ergonomically designed keypad on the front of the instrument is specially designed for one-handed operation. Its large display with 20 mm digits and LED backlighting makes it easy to read, even in dimly lit environments or outdoors. In addition, the T310's rechargeable battery makes it easy to use both in the field and in the workshop, saving batteries and reducing environmental impact. Finally, the T310 is equipped with a lectern stand for convenient handling and operation.

The standard T310 allows the following functions:

- Change of the engineering units (a total of 32)
- Auto-zero
- Input signal selection: pressure or current
- Max. / Min.
- Datalogger

Applications

- Calibration of electronic pressure transmitters
- Leak test in pneumatic circuits
- Indication of relative, absolute, differential or vacuum pressure
- Max. or Min. reading

GOMETRICS INSTRUMENTS

Technical characteristics

Pressure range	Min: 0-25 mbar Max: 0-1000 bar (see table)
Accuracy	0.05% FS
Uncertainty	0.10% FS (1 year) (includes non-linearity, hysteresis, repeatability, thermal drift between 20°C and 26°C and stability at one year)
Resolution	5½ digits in pressure (see table)
Units	Multiple selectable (32)
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 gas for ranges < 1 bar and differential pressure
Overpressure	2 times the range. For differential pressure equal to the maximum static.
Maximum static pressure	(only differential pressure) 3 times the range or 14 bar (the lowest)
Connection to process	1/8" BSP M internal conical 60º
Advanced functions	Max/Min, Leak and data logging for 32 K data (*)
Current range	± 30 mA (resolution 1 µA)
Uncertainty (one year)	0.025% of reading + 2 µA
Display	5½ digits LCD of 20 mm (max. reading ± 199999), with backlight LED
Additional display	Bar graph 0-100% of the measuring range
Batteries	NiMH rechargeable
Autonomy	14 hours
Power supply	230 V, 50 Hz
Operational temperature	0-50ºC
Dimensions	83x152x33 mm
Weight	360 grams
Warranty	3 years
Certificate	Standard factory calibration certificate (ENAC EN17025 as an option)
Approvals	CE label

(*) A free PC software is included for programming and downloading data from the datalogger to Excel.

Ranges according to entry type

Range code	Gauge (G)	Vacuum (V)	Combined (E)	Differential pressure (D)[6]	Absolute (A)	Resolution Display reading
025[6]	0 - 25[5]	-25 / 0[5]	-25 / +25[5]	0 - 25[3]		0,02
070[6]	0 - 70[5]	-70 / 0[5]	-70 / +70[5]	0 - 70[3]		0,005
300[6]	0 - 300[5]	-300 / 0[5]	-300 / +300[5]	0 - 300[4]	0 - 300[1][5]	0,02
101	0 - 1	-1 / 0	-1 / +1	0 - 1[4]	0 - 1	0,00005
201	0 - 2		-1 / +2	0 - 2[4]	0 - 2	0,0001
701	0 - 7		-1 / +7	0 - 7[4]	0 - 7	0,0005
172	0 - 17		-1 / +17			0,001
352	0 - 35		-1 / +35			0,002
702	0 - 70					0,005
173	0 - 170					0,01
353	0 - 350					0,02
104	0 - 1000[2]					0,05

[1] Non available for uncertainty of 0.1% FS
[2] Execution with external sensor. Max overpressure 10% FS (1100 bar)
[3] Maximum static pressure: 300 bar
[4] Maximum static pressure: 3 times the range or 14 bar (the lowest)
[5] Overpressure: 5 times the range
[6] Only inert gases

mbar
bar

The standard Tinycal T310 pressure gauge is supplied with:

- Carrying bag
- Connection cables (mA)
- Battery charger
- Instruction manual
- Calibration certificate

Codification

T310 - X-Y-Z-W

SERIE

PRESSURE RANGE CODE
(see table)

TYPE OF INPUT
G - Presión relativa
V - Vacuum
A - Absolute pressure
D - Differential pressure
E - Combined (vacuum - pressure)

UNCERTAINTY
2 - 0.1% FS all except [1] see table

OPTIONS
DL - Datalogger

Accessories

- Housing protector T310-PR
- Hard transport case T310-ER

Tinycal T310 pressure gauge operation applications

Connection to a computer for data download (datalogger option)

T310. Portable digital pressure gauge Tinycal series

Advantages

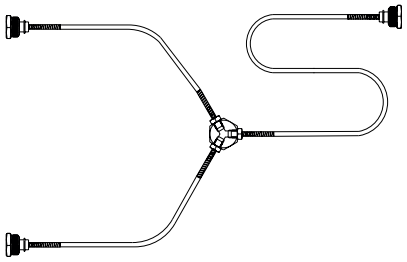
- Large display
- Wide variety of ranges
- Milliammeter (±30 mA)
- Advanced functions: max./min, leak or datalogger for 32.000 data
- Backlight

Main features

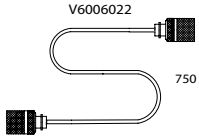
- Simultaneous measurement of pressure and intensity
- Current range ±30 mA
- Uncertainty 0.10% FS (pressure) and 0.025% reading + 2 µA (current) (1 year uncertainty)
- Resolution: 5½ digits for pressure, 1 µA for current
- Accuracy: 0.05% FS

Kits and connection accessories

Pneumatic accessories maximum 20 bar

Reference	Description
RB400BP11 	750 mm-long coupling tubing with 2 X 500-mm extensions
RB400BP22	750 mm-long coupling tubing
RS20012G	Coupling 1/8" BSP M conical 60º both ends
RS20012	Coupling 1/8" NPT M by 1/8" BSP M conical 60º
RS20014	Coupling 1/4" BSP by 1/8" BSP M conical 60º
RS20016	Coupling 3/8" NPT M by 1/8" BSP M conical 60º
RS20018	Coupling 1/2" NPT M by 1/8" BSP M conical 60º
RS20012RG	Coupling 1/8" BSP M by 1/8" BSP M conical 60º
RS20014RG	Coupling 1/4" BSP M by 1/8" BSP M conical 60º
RS20016RG	Coupling 3/8" BSP M by 1/8" BSP M conical 60º
RS20018RG	Coupling 1/2" BSP M by 1/8" BSP M conical 60º
RBQSF612	Coupling 1/8" BSP H fast intake from 6mm tube
U10351620	Washer USIT for 1/8" BSP M thread
Kits	
Calibration KIT RB400BP01	made up of: • RB400BP11 • RS20012 • RS20014
Calibration KIT RB400BP02	made up of: • RB400BP22 • RS20012G

High-pressure accessories up to 600 bar

Reference	Description
V6006022 	750 mm-long coupling tubing x 6 mm diameter
V60018NPT6 	High-pressure Coupling 1/8" NPT M
V60018BSP6 	High-pressure Coupling 1/8" BSP M
V60014NPT6 	High-pressure Coupling 1/4" NPT M
V60014BSP6 	High-pressure Coupling 1/4" BSP M
V60038NPT6 	High-pressure Coupling 3/8" NPT M
V60038BSP6 	High-pressure Coupling 3/8" BSP M

High-pressure Accessories up to 1000 bar (stainless steel)

Reference	Description
HK1-1000	SI High-pressure kit in stainless steel made up of:
01-0706	(1) 1-m-long flexible tubing
01-0707	(1) Coupling 1/4" BSP M
01-0708	(1) Coupling 1/4" BSP F // (1) 1/4" BSP M x 1/2" NPT F
HTPA-1000	Kit with 7 Si adaptors, stainless steel, made up of (1) 1/4" BSP M x 1/8" BSP H // (1) 1/4" BSP M x 1/8" NPT H; (1) 1/4" BSP M x 3/8" BSP H // (1) 1/4" BSP M x 1/4" NPT H; (1) 1/4" BSP M x 1/2" BSP H // (1) 1/4" BSP M x 3/8" NPT H; (1) 1/4" BSP M x 1/2" NPT H

Common accessories (Pneumatic and high-pressure)

Reference	Descripción
 RS4TG	T-coupling 1/4" BSP H
 RS8RB4G	Adaptor 1/2" BSP M to 1/4" BSP H
 RS40012GG Coupling 1/8" BSP H x 1/8" BSP H RS40014GG Coupling 1/4" BSP H x 1/4" BSP H RS40012GN Coupling 1/8" BSP H x 1/8" NPT H RS40014GN Coupling 1/4" BSP H x 1/4" NPT H RS41214GN Coupling 1/8" BSP H x 1/4" NPT H	
 U10351620 USIT Washer for 1/8" BSP M U13702015 USIT Washer for 1/4" BSP M U16702415 USIT Washer for 3/8" BSP M U20702815 USIT Washer for 1/2" BSP M	

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