

DME2 is a digital pressure gauge made according to the latest technology to ensure a high level of reliability, versatility and practicality at the same time.

The sturdiness and a high stability over time are guaranteed by a monolithic sensor made entirely of stainless steel capable of working even in the presence of highly dynamic pressures, and by a robust housing made of painted aluminum.

*Designed to be used in industrial process controls and automation, it achieves a better accuracy class of **0.20%** in 16 different RELATIVE and VACUUM pressure ranges.*

*With this instrument it is possible to measure **TEMPERATURE** and **PRESSURE** generated by air, gas, oil, water or any other type of non-corrosive fluid.*

These pressure gauges find their specific use in various industrial fields: pneumatic, hydraulic, control of food processes, refrigeration systems (vacuum), test benches, material testing machines, level meters.

In the standard version the pressure gauge is supplied externally to 24 Vdc and manages 2 SET POINTS with relay output to control pressure or temperature levels.

In OPTION you can add the ANALOGUE OUTPUT in voltage or current and the external power supply to 12Vdc.

Main features:

- PRESSURE STANDARDIZED FROM 1 bar TO 3000 bar RELATIVE and VACUUM.
- TEMPERATURE MEASUREMENT FROM 0 TO 70°C.
- PROGRAMMABLE RESOLUTION, DIGITAL FILTER AND ZERO FUNCTION.
- PEAK FUNCTION (POSITIVE PRESSURE and VACUUM).
- 2 SET POINT WITH PROGRAMMABLE RELAY OUTPUT
- ANALOG OUTPUT (OPTION)
- 12VDC EXTERNAL POWER SUPPLY (OPTION)

Main features

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|--|---|
| ACCURACY (linearity and hysteresis) | $\leq \pm 0,20$ % F.S. |
| RELATIVE PRESSURE (R) Zero at atmospheric pressure | 1 – 2,5 – 5 – 10 – 20 – 50 – 100 bar 250 - 350 – 500 – 700 bar 1000 – 1500 - 2000 – 2500 – 3000 bar |
| RELATIVE VACUUM (V) Zero at atmospheric pressure | -1 ... 1 bar -1 ... 2,5 bar -1 ... 5 bar -1 ... 10 bar -1 ... 20bar |
| PRESSURE UNITS | bar (other units on request) |
| TEMPERATURE INDICATION | °C |
| a) Resolution | 0,1 °C |
| b) Accuracy | ± 1 °C |
| REFERENCE TEMPERATURE | 23 °C |
| OPERATING TEMPERATURE | 0 / +70 °C |
| STORAGE TEMPERATURE | -10 / +80 °C |
| RELATIVE HUMIDITY | < 90 % not condensed |
| TEMPERATURE EFFECT (1 ° C) | |
| a) on zero | $\leq \pm 0,002$ % |
| b) on sensitivity | $\leq \pm 0,002$ % |
| RED DISPLAY highly efficient | 7 segmenti |
| NUMBER OF DIGITS | 4 |
| DISPLAY HEIGHT | 14 mm |
| INTERNAL RESOLUTION | 16 bit |
| READINGS PER SECOND PROGRAMMABLE | 50 (20ms) |
| DIGITAL FILTER PROGRAMMABLE | 0 ÷ 5 |
| RESOLUTION PROGRAMMABLE | 1, 2, 5, 10 |
| ZERO FUNCTION | 100 % |
| PEAK FUNCTION | Active in the POSITIVE /NEGATIVE RANGE |
| SETPOINT PARAMETER PROTECTION | Via Password |
| SET POINT PROGRAMMABLE | 2 |
| RELE' OUTPUT With EXCHANGE CONTACTS | 2 |
| MAX TENSION TO THE CONTACTS | 24 Vdc |
| MAX CURRENT | 500 mA |
| MAX POWER | 12 W |
| EXTERNAL POWER SUPPLY | 24 Vdc |
| POWER SUPPLY RANGE | 18 ... 26 Vdc |
| MAX CURRENT CONSUMPTION | 120 mA |
| EXTERNAL ELECTRICAL CONNECTIONS | Sub Db9 Female |
| MECHANICAL LIMIT VALUES: | |
| a) service pressure | 100% F.S. |
| b) limit pressure | 150% F.S. |
| c) breaking pressure | >300% F.S. |
| d) highly dynamic pressure | 75% F.S. |

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|-----------------------------|------------------|
| PROCESS COUPLING | 1/2" G Maschio |
| SEAL RECOMMENDED | USIT A 63-18 |
| TIGHTENING WRENCH | 27 mm |
| TIGHTENING TORQUE | 28 Nm |
| PROTECTION CLASS (EN 60529) | IP65 front panel |
| SENSOR EXECUTION MATERIAL | INOX 17-4 PH |
| CASE EXECUTION MATERIAL | ALLUMINIO |




Options (must be purchased separately)

| | |
|----------------------------------|---------|
| EXTERNAL POWER SUPPLY | 12 Vdc |
| ANALOG OUTPUT (Pressure) | |
| Current | 4-20mA |
| Tension (max 20mA – RL min: 1kΩ) | 0...10V |

Included Accessories

| | |
|--|---|
| <p>n° 2 Mounting Brackets Italian / English Manual Nr. 2 mordant cones for high-pressure manometers from 1000 bar to 3000 bar.</p> |  |
|--|---|

Accessories (can be purchased separately)

| | |
|---|---|
| <p>Power Supply 220Vac – 24Vdc. Code: TALDMM</p> |  |
| <p>Carrying case. Code: VALIGIADFIBIT</p> |  |
| <p>Calibration Report. Code: TRM</p> <p>ACCREDIA certificate.</p> |  |

STANDARD indications

| | Full Scale | Display | Resolution |
|---------------------|------------|---------|------------|
| TYPE ⁽¹⁾ | bar | bar | bar |
| RV | 1 | 1.000 | 0.001 |
| RV | 2.5 | 2.500 | 0.001 |
| RV | 5 | 5.000 | 0.001 |
| RV | 10 | 10.00 | 0.01 |
| RV | 20 | 20.00 | 0.01 |
| R | 50 | 50.00 | 0.01 |
| R | 100 | 100.0 | 0.1 |
| R | 250 | 250.0 | 0.1 |

| | Full Scale | Display | Resolution |
|---------------------|------------|---------|------------|
| TYPE ⁽¹⁾ | bar | bar | bar |
| R | 350 | 350.0 | 0.1 |
| R | 500 | 500.0 | 0.1 |
| R | 700 | 700.0 | 0.1 |
| R | 1000 | 1000 | 1 |
| R | 1500 | 1500 | 1 |
| R | 2000 | 2000 | 1 |
| R | 2500 | 2500 | 1 |
| R | 3000 | 3000 | 1 |

⁽¹⁾ R = Relative V = Vacuum

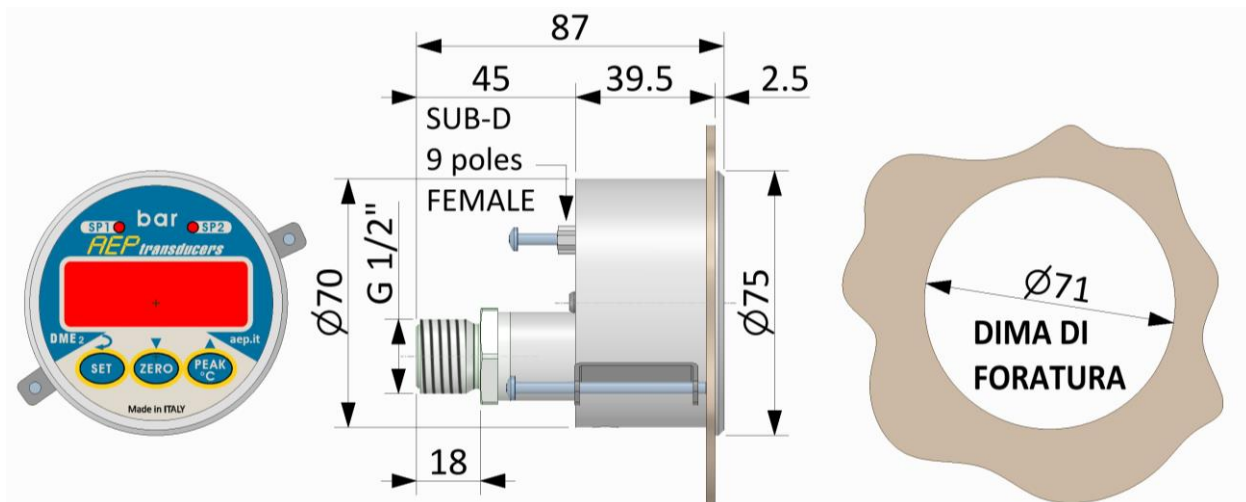
Purchase codes

| TDME2 | Full Scale | | | | Analog output | Power supply |
|-------|------------|------|------|------|---------------|--------------|
| | 1B | 20B | 350B | 1KB5 | A4 = 4-20mA | 12 Vdc |
| | 2B5 | 50B | 500B | 2KB | A10 = 0...10V | |
| | 5B | 100B | 700B | 2KB5 | | |
| | 10B | 250B | 1KB | 3KB | | |

Example: **TDME2 50B 04**

| | |
|--------------|--------------------------|
| TDMMV | VACUUM relative version. |
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Dimensions (mm):



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In order to improve the technical performances of the product, the company reserves the right to make any change without notice.