



Linearità - Isteresi
 $\leq \pm 0.15\%$
 Linearity - Hysteresis

Linearità - Isteresi
 $\leq \pm 0.05\%$
 Linearity - Hysteresis

2 Set Point



Misura della temperatura del fluido

 Measurement of fluid temperature

DMM₂ is a digital pressure gauge made according to the most modern technologies to ensure a high level of reliability, versatility and practicality at the same time.

The robustness and high stability over time are guaranteed by a sensor made entirely of stainless steel able to work even in the presence of highly dynamic pressures, and by a robust black painted aluminium housing.

Designed for monitoring industrial processes and to be used for automation and laboratories, it exceeds class **0,15%** (STANDARD version) or **0,05%** accuracy in 23 different pressure ranges ABSOLUTE, RELATIVE, VACUUM and DIFFERENTIAL.

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

Integrated electronics allow you to customize the instrument in different configurations to suit different applications, thanks also to the sampling rate that can be programmed from 2,5 to 1200 Hz.

2 Versions available:

- **BASIC** Version powered directly from the USB port using the supplied power adapter which allows you to control the process and transmit data to the PC via software like WinTEST2 (OPTION).
- **FULL** Version externally powered to 12 Vdc or 24 Vdc which includes the USB output, 2 SET POINT with relay output to control levels of pressure or temperature, and several remote digital controls. As an OPTION, you can also add an analogue output, the serial communication RS232 and RS485 Modbus.

Main features:

- PRESSURE STANDARDIZED FROM 100mbar TO 3000bar ABSOLUTE, RELATIVE, VACUUM and DIFFERENTIAL.
- TEMPERATURE MEASUREMENT.
- PROGRAMMABLE RESOLUTION, DIGITAL FILTER AND CONVERSIONS UNITS.
- ZERO FUNCTION, AND PEAK HOLD (POSITIVE PRESSURE and VACUUM).
- USB COMMUNICATIONS PORT.
- 2 SET POINT WITH PROGRAMMABLE RELAY OUTPUT (FULL VERSION)
- COMMUNICATION PORT RS232 and RS485 Modbus and PRINTER (OPTION).
- ANALOG OUTPUT (OPTION).

Accessories: WinTEST2: software for connecting the instrument to a PC complete with DATA LOGGER and export of the data as EXCEL file.

Main features

ACCURACY (linearity and hysteresis)	$\leq \pm 0,15$ % F.S. STANDARD
ACCURACY (linearity and hysteresis)	$\leq \pm 0,05$ % F.S. HIGH ACCURACY version from 100mbar to 2000 bar
ABSOLUTE PRESSURE (A) Zero to the absolute vacuum pressure	1 – 2,5 – 5 – 10 bar
RELATIVE PRESSURE (R) Zero at atmospheric pressure	100 – 250 – 500 mbar 1 – 2,5 – 5 – 10 – 20 – 50 – 100 bar 250-350 – 500 – 700 bar 1000 – 1500 – 2000 – 2500 – 3000 bar
DIFFERENTIAL PRESSURE (D) Zero at the same 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 – mbar – psi – MPa
TEMPERATURE INDICATION a) Resolution b) Accuracy	0,1 °C ± 1 °C
REFERENCE TEMPERATURE OPERATING TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY	+23 °C 0 / +70 °C -10 / +80 °C < 90 % not condensed
TEMPERATURE EFFECT (1 ° C) a) on zero b) on sensitivity	$\leq \pm 0,002$ % $\leq \pm 0,002$ %
INTERNAL RESOLUTION READINGS PER SECOND PROGRAMMABLE DIGITAL FILTER PROGRAMMABLE RESOLUTION PROGRAMMABLE ZERO FUNCTION PEAK FUNCTION MENU LOCK (LOC) 	24 bit from 2,5 to 1200 (1,2 kHz) 0 ÷ 5 1, 2, 5, 10 100 % Active in the POSITIVE /NEGATIVE RANGE To Protect parameters from changes
COMMUNICATION COMMUNICATION RATE in CONTINUOS MODE Max Distance	USB 2.0 Max 1200 values per seconds 5m
RED DISPLAY highly efficient DISPLAY HEIGHT	7 segments 13 mm
PROTECTION CLASS (EN 60529) SENSOR EXECUTION MATERIAL CASE EXECUTION MATERIAL	IP40 INOX 17-4 PH ALUMINUM

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.
PROCESS COUPLING	1/2" G MALE
SEAL RECOMMENDED	USIT A 63-18
TIGHTENING WRENCH	27mm
TIGHTENING TORQUE	28Nm

DMM2 *BASE* VERSION

SET POINT PROGRAMMABLE	2
PROGRAMMABLE HYSTERESIS	2
TYPE OF REPORTING	Through LED on the front panel
POWER SUPPLY	included power supply or via USB port

Included Accessories

USB power adapter (5VDC @ 700mA)

USB cable.

CD with USB DRIVER and MANUAL.

Nr. 2 mordant cones for high-pressure from 1000 bar to 3000 bar pressure gauges.



DMM2 *FULL* VERSION

SET POINT PROGRAMMABLE	2
PROGRAMMABLE HYSTERESIS	2
TYPE OF REPORTING	Through LED on the front panel
RELAY OUTPUT (set point)	2
ELECTRICAL	Max. 24 Vdc, 500mA, 12W
POWER SUPPLY	External Power Supply: 12Vdc or 24Vdc
POWER SUPPLY RANGE	12Vdc: 10,8-15V 24Vdc: 18 -26V
MAX CURRENT CONSUMPTION	120mA
REMOTE COMMANDS	PEAK, ZERO, PRINT, HOLD

Options (can be purchased separately only for DMM2 FULL Version)

SERIAL OUTPUT	RS232C / RS485
TYPE OF TRANSMISSION	On Demand / Continuous Modbus-RTU Protocol Printer Protocol
ANALOG OUTPUT	± 10V, ± 5V, 0...10V, 0...5V - 4-20mA

Included Accessories

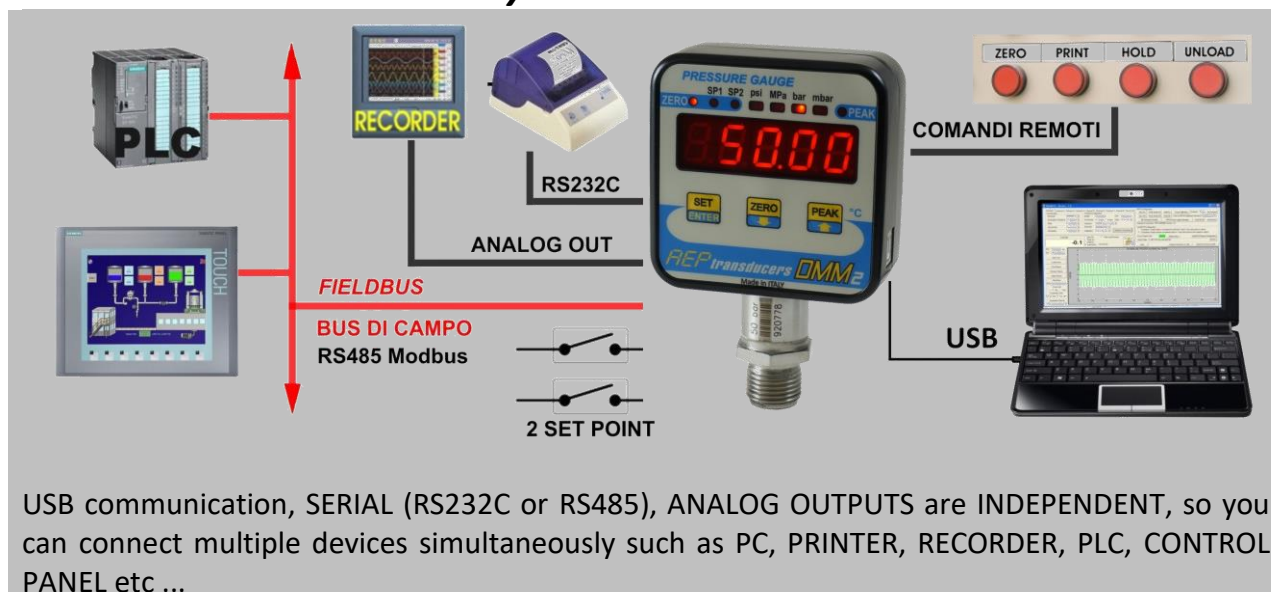
DB25 Male connector for external electrical connections.

CD with USB DRIVER and MANUAL.

Nr. 2 mordant cones for high-pressure manometers from 1000 bar to 3000 bar.



Available Communication Systems

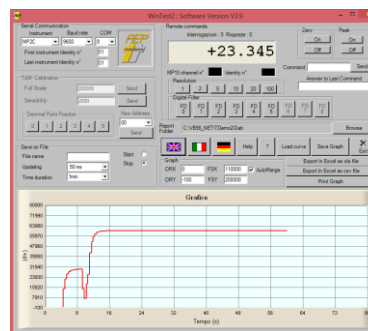


Accessories (can be purchased separately)

Silicon shock-proof cover. Code: TCOVQ	
Built-in version with housing for panel mount. Code: TCINC	
USB cable. RS232 cable.	
Power Supply 220Vac – 24Vdc. Code: TALDMM	
Carrying case. Code: VALIGIADFIBIT	

WinTEST2**Quick analyzer****Quick analyzer Light**

Software that works directly with the pressure gauge and supports the operator in the various test functions like, analysis, over time monitoring, data storage, management, transferring data to Microsoft Excel and so on.



Calibration Report.

Code: **TRM**

ACCREDIA certificate.



Special version with built-in radiator
suitable for measuring high temperature fluids max. 100 ° C

STANDARD version indications ($\leq \pm 0,15$ % F.S.)

	Full Scale	Display	Resolution	Display	Resolution	Display	Resolution	Display	Resolution
TYPE ⁽¹⁾	bar	bar	bar	mbar	mbar	psi	psi	MPa	MPa
RV	0,1	0,1000	0,0001	100,0	0,1	1,450	0,002	0,0100	0,0001
RV	0,25	0,2500	0,0001	250,0	0,1	3,620	0,002	0,0250	0,0001
RV	0,5	0,5000	0,0001	500,0	0,1	7,200	0,002	0,0500	0,0001
ARDV	1,0	1,000	0,001	1000	1	14,50	0,02	0,1000	0,0001
ARDV	2,5	2,500	0,001	2500	1	36,20	0,02	0,2500	0,0001
ARDV	5	5,000	0,001	5000	1	72,50	0,02	0,5000	0,0001
ARDV	10	10,00	0,01	10000	10	145,0	0,2	1,000	0,001
RDV	20	20,00	0,01	20000	10	290,0	0,2	2,000	0,001
RD	50	50,00	0,01	50000	10	725,0	0,2	5,000	0,001
RD	100	100,0	0,1	99900	100	1450	2	10,00	0,01
RD	250	250,0	0,1	99900	100	3620	2	25,00	0,01
RD	350	350,0	0,1	99900	100	5000	2	35,00	0,01
RD	500	500,0	0,1	99900	100	7250	2	50,00	0,01
RD	700	700,0	0,1	99900	100	10000	2	70,00	0,01
RD	1000	1000	1	99000	1000	14500	20	100,0	0,1
RD	1500	1500	1	99000	1000	21700	20	150,0	0,1
RD	2000	2000	1	99000	1000	29000	20	200,0	0,1
RD	2500	2500	1	99000	1000	36250	20	250,0	0,1
RD	3000	3000	1	99000	1000	43500	20	300,0	0,1

⁽¹⁾ A = Absolute R = Relative D = Differential V = Vacuum**HIGH ACCURACY version indications ($\leq \pm 0,05$ % F.S.)**

	Full Scale	Display	Resolution	Display	Resolution	Display	Resolution	Display	Resolution
TYPE ⁽¹⁾	bar	bar	bar	mbar	mbar	psi	psi	MPa	MPa
RV	0,1	0,1000	0,0001	100,00	0,01	1,450	0,002	0,0100	0,0001
RV	0,25	0,2500	0,0001	250,00	0,05	3,620	0,002	0,0250	0,0001
RV	0,5	0,5000	0,0001	500,00	0,05	7,200	0,002	0,0500	0,0001
ARDV	1,0	1,0000	0,0001	1000,0	0,1	14,500	0,002	0,1000	0,0001
ARDV	2,5	2,5000	0,0005	2500,0	0,5	36,200	0,005	0,2500	0,0001
ARDV	5	5,0000	0,0005	5000,0	0,5	72,500	0,010	0,5000	0,0001
ARDV	10	10,000	0,001	10000	1	145,00	0,02	1,0000	0,0001
RDV	20	20,000	0,002	20000	2	290,00	0,02	2,0000	0,0002
RD	50	50,000	0,005	50000	5	725,00	0,10	5,0000	0,0005
RD	100	100,00	0,01	99900	10	1450,0	0,2	10,000	0,001
RD	250	250,00	0,02	99900	20	3620,0	0,5	25,000	0,002
RD	350	350,00	0,05	99900	50	5000,0	0,5	35,000	0,005
RD	500	500,00	0,05	99900	50	7250,0	0,2	50,000	0,005
RD	700	700,00	0,05	99900	50	10000	0,2	70,000	0,005
RD	1000	1000,0	0,1	99000	100	14500	2	100,00	0,01
RD	1500	1500,0	0,2	99000	200	21700	5	150,00	0,02
RD	2000	2000,0	0,2	99000	200	29000	5	200,00	0,02

⁽¹⁾ A = Absolute R = Relative D = Differential V = Vacuum

Purchase codes DMM2 **BASE** version

TDMM2 B	Pressure	Full Scale			
	R = Relative	0B1	5B	250B	1KB5
	A = Absolute	0B2	10B	350B	2KB
		0B5	20B	500B	2KB5
		1B	50B	700B	3KB
		2B5	100B	1KB	

Example: **TDMM2 B R 50B**

DMMDIFF	DIFFERENTIAL version.
TDMMV	VACUUM relative version.
AC005	Accuracy 0,05% versioni da 100mbar a 2000 bar.

Purchase codes DMM2 **FULL** version

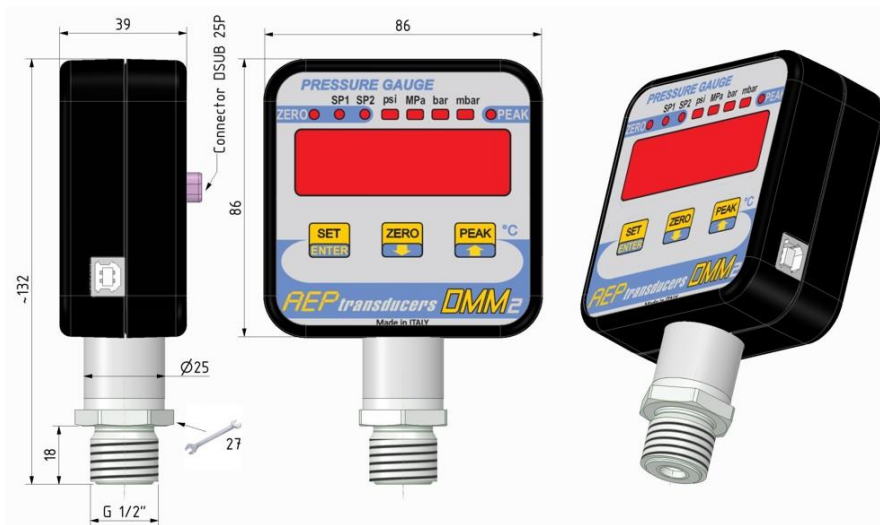
TDMM2 F	Pressure	Full Scale				Analog Out	Serial Out
	R = Relative	0B1	5B	250B	1KB5	A	S
	A = Absolute	0B2	10B	350B	2KB		
		0B5	20B	500B	2KB5		
		1B	50B	700B	3KB		
		2B5	100B	1KB			

Example: **TDMM2 F R 500B A**

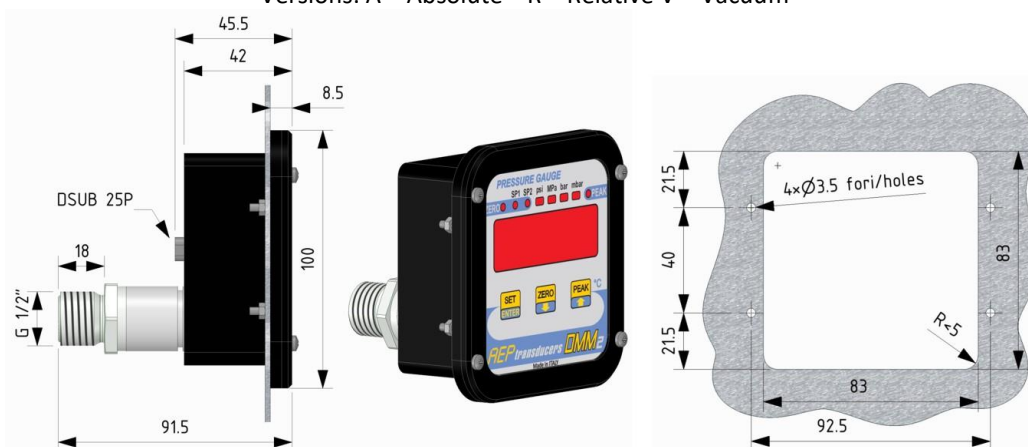
DMMDIFF	DIFFERENTIAL version.
TDMMV	VACUUM relative version.
AC005	Accuracy 0,05% versioni da 100mbar a 2000 bar.

Dimensions (mm):

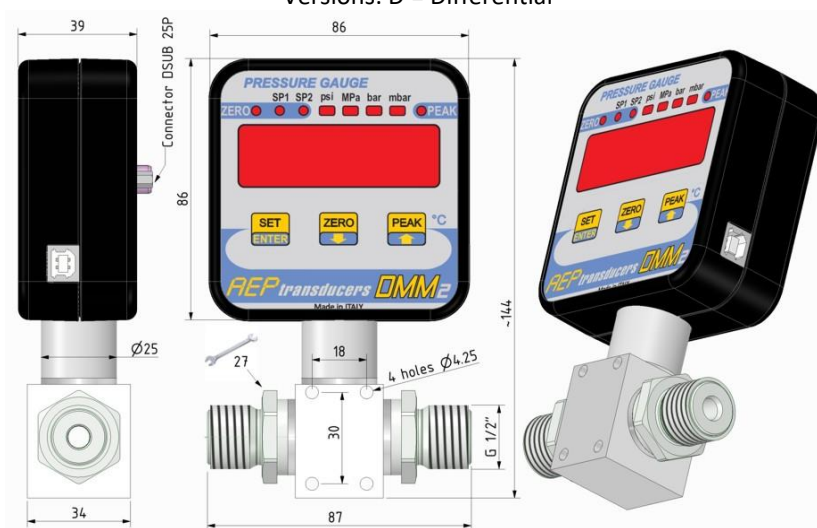
Versions: A = Absolute R = Relative V = Vacuum



Versions: A = Absolute R = Relative V = Vacuum



Versions: D = Differential



AEP transducers



Dasa-Rägi register
EN ISO 9001:2008
IQ-1100-01



LAT N° 093
Calibration Centre
The products are NOT
covered by accreditation



**Production Quality
Assurance Certified n°**
TÜV CY 17 ATEX 0205891 Q

41126 Cognento (MODENA) Italy Via Bottego 33/A Tel: +39-(0)59-346441 Fax: +39-(0)59-346437 E-mail: aep@aep.it

In order to improve the technical performances of the product, the company

**SYSTEM
TECHNOLOGY**
SWEDEN AB

www.systemtech.se

+46 (0)13 35 70 30 • sales@systemtech.se
Linnégatan 14 • 582 25 LINKÖPING