Data Sheet: DFP.418.R4.EN

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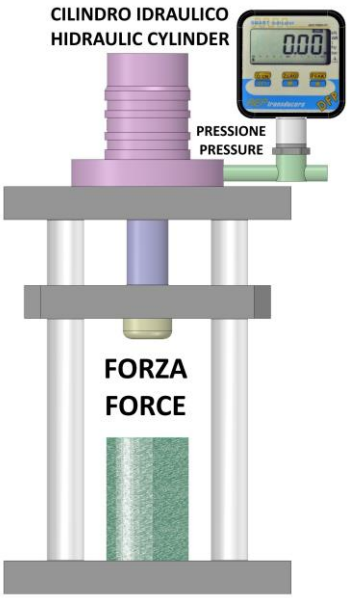
DFP

Digital Pressure Gauge



Smart

LCD DISPLAY

Batteries INCLUDED
Battery

IP65

CE RoHS

PRESSURE ➡ FORCE

Linearità - Isteresi
≤±0.10%
Linearity - Hysteresis

The DFP series digital gauges are made according to the more modern technologies in order to provide a high level of reliability, versatility and inexpensiveness at the same time.
Its main feature is that of being able to convert the measured pressure inside a cylinder in units of measurement of force in a straightforward manner, displaying in real time the applied load in kN, daN, t or kg.
Ideal for being used in the most modern measurement systems, as materials testing machines, printing presses, test benches and automation in general.
Its main applications include industrial fields where it is necessary to check processes or fields where a precision class better than 0.10% is required.
To increase the practicality and make the instrument completely autonomous, the pressure gauge is powered by internal batteries providing 1 year battery life.
In the programming menu, reachable through the keyboard it is possible to adjust different functions such as: digital filter that allows to maintain the measurement steady even in presence of unsteady pressures, the display resolution which allows to increase the measurement at fixed steps (2, 5, 10) the measurement unit which can be changed.
The sensor, entirely made in stainless steel is monolithic to ensure a long term high stability even in presence of highly dynamic pressures.

Main features:

- NORMALIZED PRESSURE FROM **10 bar** TO **3000 bar**.
- ~ 1 YEAR AUTONOMY WITHOUT RECHARGING.
- PROGRAMMABLE RESOLUTION, DIGITAL FILTER and BAUD RATE.
- ZERO and PEAK functions.
- ANALOG PRESSURE INDICATION ALWAYS ACTIVE (Bar Graph).
- EXTERNAL POWER SUPPLY (optional).
- RS232 OUTPUT (optional).
- BUILT-IN CASE (optional).

Main characteristics:

ACCURACY (linearity and hysteresis)	**≤ ± 0.10 % F.S.**
RELATIVE PRESSURE (R) Zero at atmospheric pressure	10 – 20 – 50 – 100 bar 250-350 – 500 – 700 bar 1000 – 1500 – 2000 - 2500 – 3000 bar
PRESSURE UNITS	bar – kg – t – daN – kN
OPERATING TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY	0 … +50 °C -10 … +60 °C < 90 % not condensed
TEMPERATURE EFFECT (1 ° C) a) on zero b) on sensitivity	 ≤ ± 0.002% ≤ ± 0.002%
INTERNAL RESOLUTION READINGS PER SECOND (0 filter) **DIGITAL FILTER** PROGRAMMABLE **RESOLUTION** PROGRAMMABLE **ZERO** FUNCTION **PEAK** FUNCTION BAUD RATE PROGRAMMABLE RS232C CONNECTION (option)	16 bit 10 (100ms) 0 … 99 1, 2, 5, 10 Active up to 50% F.S. Active in POSITIVE and NEGATIVE 19200, 9600, 4800 DB9 female connector
DISPLAY	16 mm (custom LCD)
POWER SUPPLY AUTONOMY BATTERY	NOT RECHARGEABLE inside BATTERY ~ 1 YEAR n° 2 to 1,5V size AAA
MECHANICAL LIMIT VALUES: a) service pressure b) limit pressure c) breaking pressure d) highly dynamic pressure	 100% F.S. 150% F.S. >300% F.S. 75% F.S.
PROCESS COUPLING SEAL RECOMMENDED	1/2" G Male USIT A 63-18
TIGHTENING WRENCH TIGHTENING TORQUE	27 mm 28 Nm
PROTECTION CLASS (EN 60529) SENSOR EXECUTION MATERIAL CASE EXECUTION MATERIAL	IP40 INOX 17-4 PH ALUMINUM

Included Accessories:

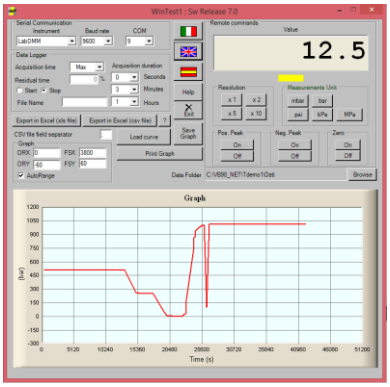
Operating Manual. Nr. 2 mordant cones for high-pressure from 1000 bar to 3000 bar pressure gauges.	

Optionals:

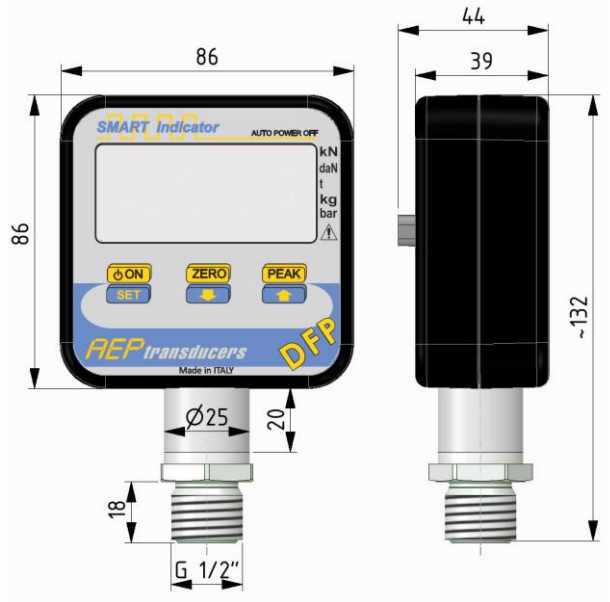
ALUMINIUM BUILT-IN CASE Hole gauge 83 x 83 mm. Code: **TCINC** **WARNING**: Protection class IP65.	
EXTERNAL POWER 12Vdc without batteries. Code: **OPZALIMEST** EXTERNAL POWER SUPPLY from 220V to 12Vdc. Code: **TALDMM** **WARNING**: Protection class IP40.	
SERIAL OUTPUT RS232C Cable RS232. code: **TCAVOSERIALE** USB adapter. code: **CAVO-RS232-USB** **WARNING**: Protection class IP40.	

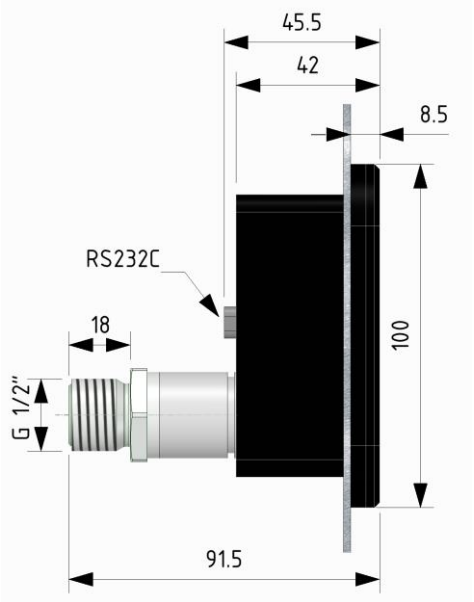
Accessories: (purchased separately)

Shock-resistant silicon COVER. Code: **TCOVQ**	
Carrying case.	

WinTEST1 **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. Codice: **TRM** ACCREDIA certificate.	

Dimensions (mm):





STANDARD indications:

Full Scale	Display	Resolution
bar	**bar**	**bar**
10	10,000	0,001
20	20,000	0,002
50	50,000	0,005
100	100,00	0,01
250	250,00	0,02
350	350,00	0,05
500	500,00	0,05
700	700,00	0,05
1000	1000,0	0,1
1500	1500,0	0,2
2000	2000,0	0,5
2500	2500,0	0,5
3000	3000,0	0,5

Purchase codes:

TDFP	Full Scale				OPTION
	10B	100B	500B	1KB5	S = RS232
	20B	250B	700B	2KB	
	50B	350B	1KB	2KB5	
				3KB	

Exsample: **T D F P 5 0 B S**

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