Data Sheet: DFW2.542.R1.ENG

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DFW 2 Digital Dinamometer

COMPRESSIONE
COMPRESSION

RECHARGEABLE
Battery

FACILE APPLICAZIONE
EASY APPLICATION

Stabilità a lungo termine
Long term high stability

CE RoHS

Alta Affidabilità
High Reliability

Linearità - Isteresi
≤±0.50%
Linearity - Hysteresis

SOLLECITAZIONI DINAMICHE
DYNAMIC STRESSES

USB 2.0

easy APPLICATIONS

ACCREDIA
L'ENTE ITALIANO DI ACCREDITAMENTO

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

COMPLETO DI
Certificato di Taratura ACCREDIA

COMPLETE WHIT
ACCREDIA Calibration Certificate

DFW2 is a digital dynamometer with internal rechargeable battery and 0.50% accuracy, realized for controlling and testing hydraulic and electrodes welders, pneumatic presses, test benches, torqueing vices etc…
The indicator consists of a microprocessor, of a long-term particularly stable analog section and of a 16 bit A/D converter which guarantees 65.000 internal divisions.
Further then displaying the measurement, other programmable functions are available such as digital filter, zero, peak, change of programmable engineering measurement units (kg, t, N, daN, kN, lb) which enable the operator to suit the dynamometer at best to different applications.
On the display there is an analog bar indication of the force always active, as well as inside the programming menu.
To increase the practicality and make the instrument completely autonomous, DFW2 is power supplied by an internal Li-Ion rechargeable battery.
Furthermore the duration of the battery can be longer using the function of AUTO POWER OFF which begins working when no measurement change is detected in a programmable interval from 1 to 30 minutes. Low-profile strain gauge sensor (18mm) entirely executed in stainless steel, is suitable for high-precision measurements in compression and guarantees a long term stability even in presence of dynamic applications.

Communication via the USB port and the functionality of Data Logger makes it particularly suitable for applications where it is necessary to elaborate on the PC the acquired measurements.

In the sensor support surface, an insulating area has been introduced in order to make the check of hydraulic welders easier.

MAIN FEATURES

- ISOLATED LOW-PROFILE SENSOR (18MM)
- BATTERY RECHARGEABLE USING USB PORT
- DISPLAY LCD WITH BACKLIGTH
- CONVERSION IN 6 MEASUREMENT UNIT
- PROGRAMMABLE RESOLUTION
- PROGRAMMABLE DGITAL FILTER
- ZERO FUNCTION
- PEAK FUNCTION
- AUTO POWER OFF FUNCTION
- USB COMMUNICATION PORT
- KEY BLOCK FUNCTION
- DATALOGGER FUNCTION (option)

ACCESSORIES: To complete the system the software WinTEST or Quick Analyzer are available that display real-time curves generated by the system, record, print, and export to Excel.

TECHNICAL DATA

PRECISION CLASS	**≤ ± 0.50 %**
NOMINAL LOAD	10 – 20 – 30 – 40 kN
LINEARITY HYSTERESIS RIPETIBILITY	≤ ±0.20 % ≤ ±0.20 % ≤ ±0.05 %
CONVERSION PER SECOND	10 Hz
REFERENCE TEMPERATURE WORKING TEMPERATURE STORAGE TEMPERATURE	+23 °C 0 / +50 °C -10 / +60 °C
TEMPERATURE EFFECT 10 °C: a) on zero b) on sensitivity	 ≤ ± 0.010 % ≤ ± 0.025 %
CUSTOM LCD DISPLAY CHARACTER HEIGHT 16 mm PROGRAMMABLE BACKLIGHT from 1 to 60 seconds BACKLIGHT : LED BLU BAR GRAPH ANALOG INDICATION	
PROGRAMMABLE **RESOLUTION** PROGRAMMABLE **DIGITAL FILTER** **ZERO** FUNCTION **PEAK** FUNCTION **AUTO POWER OFF** FUNCTION **KEY BLOCK** FUNCTION (LOCK) 🔒	1, 2, 5, 10 from 0 to 10 100 % F.S. POSITIVE/NEGATIVE From 1 to 30 minutes (no load changes) To protect parameters from changes
MEASUREMENT UNIT	kN - daN - N - t - kg - lb
COMMUNICATION PORT MAX DISTANCE	USB 2.0 5m
POWER SUPPLY BY INTERNAL BATTERY BATTERY RECHARGE AUTONOMY TIME TO RECHARGE	Li-Ion size 14500 3.6V RECHARGEABLE Through USB 1 month (Backlight disabled) ~ 8 ore
MECHANICAL LIMIT VALUES: a) service load b) max permissible load c) breaking load d) maximum transverse load e) max dynamic load DISPLACEMENT AT NOMINAL LOAD	 120 % 150 % >300 % 50 % 50 % ~ 0.2 mm
PROTECTION CLASS (EN 60529) SENSOR MATERIAL CONTAINER	IP40 INOX 17-4 PH ALLUMINIO e ACCIAIO

Options

The DATALOGGER function allows to store in the internal memory of the instrument measurements taken at programmable intervals.

Programmable Acquisition Interval	from 1 second to 10 hour
Max. number acquisition point	60.000 points

The stored measurements can then be displayed on the display or downloaded directly to a PC via the Quick Analyzer software that allows you to have a graphical representation and export data into Excel for a customized analysis.

OPTION
For special applications, you can have the DFW2 sensor and the indicator separated and connected via cable.

Accessories Supplied

USB Power Supply(5VDC @700mA)

USB Cable

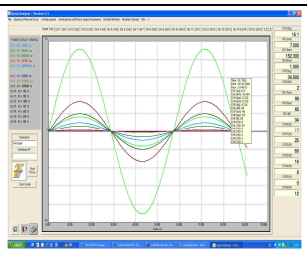
Carrying case

CD with MANUAL and USB DRIVER

Accessories (to be purchased separately)

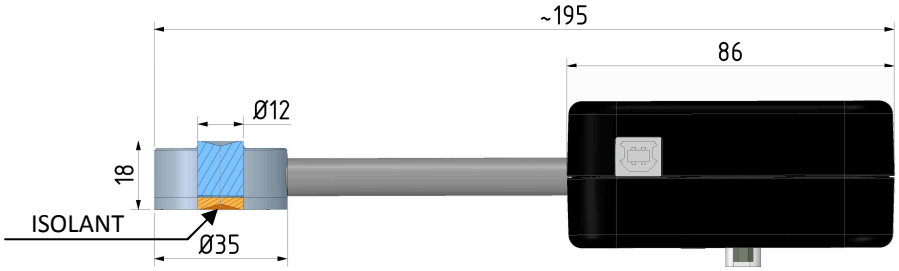
WinTEST: Application software that allows you to directly connect the instrument to your PC, record real-time measurements on graph and all the features available.
Ability to save the test and export them to Microsoft Excel for custom analysis. **LOW COST**

Quick Analyzer: Professional software that interfaces directly to DFW2 and supports the operator in the various test functions, analysis, monitoring over time, data storage, data logger management, transfer of measures on Microsoft Excel etc . Moreover it allows to download datalogger cycles



ACCREDIA CALIBRATION CERTIFICATE
Calibration Report (as an alternative to the ACCREDIA Certificato)

Dimensions (mm):



Application

STANDARD INDICATION

Load	Display	Resol.	Display	Resol.	Display	Resol.	Display	Resol.	Display	Resol.	Display	Resol.
kN	kN	kN	daN	daN	N	N	t	t	kg	kg	lb	lb
10	10,00	0,01	1000	1	10000	10	1,000	0,001	1000	1	2248	1
20	20,00	0,01	2000	1	20000	10	2,000	0,001	2000	1	4496	1
30	30,00	0,01	3000	1	30000	10	3,000	0,001	3000	1	6744	1
40	40,00	0,01	4000	1	40000	10	4,000	0,001	4000	1	8992	1

PURCHASE CODES

EDFW2	FULL SCALE	Option
	1 = 10 kN	D = Data logger
	2 = 20 kN	
	3 = 30 kN	
	4 = 40 kN	

Example: **EDFW2 3 D**

AEP transducers
Dasa-Rägister EN ISO 9001:2008 IQ-1100-01
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