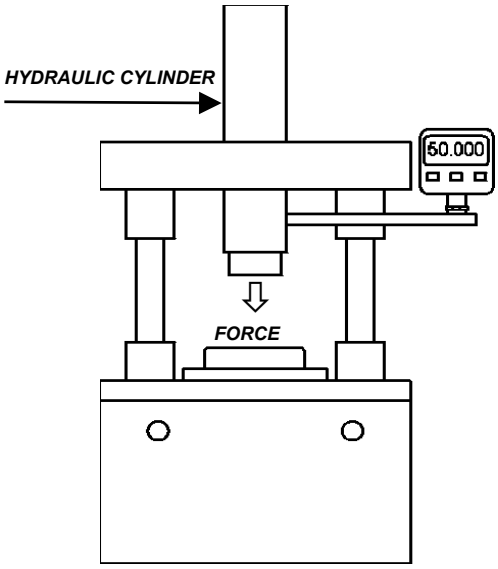
DFP *DIGITAL PRESSURE GAUGE*

DATA SHEET: DFP4/16.11.00

NORDIC TRANSDUCER

PRESSURE ⇨ FORCE



Directive EMC
89/336/EEC 93/68/EEC
CE
EN 50081-1 EN 50082-1

≤±0.10%
Linearity and hysteresis

For very dynamic stresses

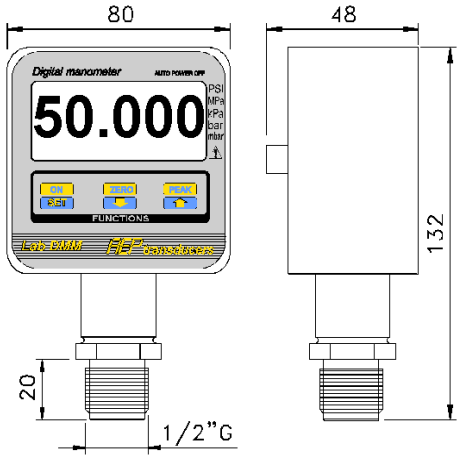
SIT certificate on request

DFP is a microprocessor digital pressure gauge very recently conceived, completely. It is comprehensive of an advanced analog section ensuring a **very high long term stability**, a converter A/D with 16 bits guarantee 65.000 internal divisions and a highly precise pressure transducer especially designed for highly dynamic applications.
DFP is particularly suitable for the most recent measurement system such as material testing machines, moulding presses, testing benches as general used in automation.
The main peculiarity of DFP is to be able to detect existing pressure inside a pneumatic or hydraulic cylinder and translate it into a force unit. The load applied is simultaneously visualised in kN, daN, t or kg.
DFP is equipped with batteries ensuring a 1 hear autonomy without need of recharge. This is also possible thanks to the AUTO POWER OFF feature which turns DFP off if pressure remains unchanged for longer than 30 minutes (during machine operation DFP does not turn off).
Operator can choose the different engineering units, the resolution and the digital filter according to the measurement to effect.
In order to improve the integration level of the components, a combination of traditional and SMT technology has been applied to make the pressure gauge even more resistant against mechanical stresses and vibrations, besides ensuring the maximum reliability of the electronic circuit.
The display also shows an analog indication bar of the measurement which is always active even inside the program menu.

Principal performances:

- ✓ 1 YEAR AUTONOMY WITHOUT RECHARGE.
- ✓ PROGRAMMABLE RESOLUTION.
- ✓ DIGITAL FILTER.
- ✓ PROGRAMMABLE MEASURE UNIT.
- ✓ PEAK FUNCTION (positive and negative).
- ✓ RS232C OUTPUT (optional).

DIMENSIONS in mm



TECHNICAL DATA

DFP

GPM-500 Manual pump pressure generator

Please call us for more information on GPM-500 test system !

RELATIVE PRESSURE (R)	1 - 2.5 - 5 - 10 - 20 bar 50 - 100 - 250 - 350 - 500 - 700 bar 1000 - 1500 - 2000 bar
LINEARITY and HYSTERESIS	≤ ± **0.10 % F.S.**
TEMPERATURE EFFECT 10°C *a) on zero* *b) on sensitivity*	 ≤ ± 0.015% ≤ ± 0.005%
POWER SUPPLY *AUTONOMY* *ALKALINE BATTERIES*	BATTERIE / *BATTERY* 1 ANNO / *YEAR* n°4 to 1,5V size AA
INTERNAL RESOLUTION *PROGRAMMABLE MEASURING UNITS* *PROGRAMMABLE RESOLUTION* *PROGRAMMABLE DIGITAL FILTER* *PROGRAMMABLE BAUD RATE* *ZERO FUNCTION* *PEAK FUNCTION*	65.000 div. bar, kg, t, daN, KN 1, 2, 5, 10 0 ÷99 19200, 9600, 4800 100% positive and negative
READING PER SEC. (0 filter) *DISPLAY*	10 (100ms) custom LCD (H=16mm)
MECHANICAL LIMIT VALUES RELATED TO NOMINAL PRESSURE : *a) service pressure* *b) max. permissible pressure* *c) breaking pressure* *d) high dynamic pressure*	 100% 150% >300% 75%
REFERENCE TEMPERATURE *SERVICE TEMPERATURE RANGE* *STORAGE TEMPERATURE*	+23°C 0/+50°C -10/+60°C
STANDARD PROCESS COUPLING *RECOMMENDED GASKET* *TIGHTENING WRENCH* *TIGHTENING TORQUE* *PROTECTION CLASS (DIN 40050)* *MATERIAL OF THE SENSOR* *MATERIAL OF THE HOUSING* *ELECTRICAL CONNECTION (RS232C)*	1/2" Gas MASCHIO / *BSP MALE* USIT A 63-18 27mm 28Nm IP60 INOX 17-4 pH *ALLUMINIUM* *tank SUB D 9 pole FEMALE*

OPTIONAL

SERIAL OUTPUT	RS232C
*VACUUM (**V**) range*	(**-1**/+1) (**-1**/+2.5) (**-1**/+5) bar

Adjustment of the force unit :

DFP is supplied calibrated in bar pressure unit just like every standard digital pressure gauge. It is task of the installer to calibrate the force unit requested through a sampling dynamometer (the translation of the measurement into the other units is automatically done). To perform the operation enter the DFP protected menu, generate the force through the cylinder on the sampling dynamometer and finally adjust the indication in bar or ! by pushing ∩ and ∪ until the required indication is reached.

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

DFP is produced by AEP transducers for NORDIC TRANSDUCER

Nordisk Transducer Teknik *Als Odde DK9560 Hadsund Denmark*
Tel. +45 98581444 fax. +45 98581866
e-mail: transducer@ntt.dk Web: www.ntt.dk