

4B 48 / 4B 96

FORCE, PRESSURE and DISPLACEMENT TRANSDUCERS INDICATOR with
INPUT for STRAIN-GAUGE or POTENTIOMETER



Main applications

- Extrusion lines
- Rubber presses
- Test benches
- Food processing equipment
- Weight indicators
- Pressure indicators
- Position indicators

Main features

- Strain-gauge or potentiometer input - configurable by faceplate
- Sensor supply check
- Easy to calibrate with sensitivity auto-ranging
- Protected by a personal code
- Configurable by serial link
- Internal linearisation for engineering units
- Labels provided for the more common physical units

GENERAL

Microprocessor based indicator in both 48x48 (1/16 DIN) and 96x48 (1/8 DIN) formats manufactured with SMT.

The instruments have a lexan membrane faceplate (guaranteed to IP65) which has 3 keys, a 3-digit display for the 48x48 format or a 3 / 4 digit display for the 96x48 format, and 3 indicating LED's for the output statuses.

The input signal can be selected from a wide range of sensors:

- Potentiometer (minimum 100Ω)
- Load cell with sensitivity autoranging between 1,5 and 3,3mV/V
- Strain-gauge pressure sensor

The selection is made using the faceplate keys.

The programming of the instrument is made easy by grouping the parameters in function blocks and by a simplified data entry menu.

The configuration can be simplified even further using the PC programming kit made up of a connection cable and a menu guide program that runs under Windows (see data sheet cod. 80021). A configurable personal software protection code (password protection)

can be used to restrict the levels of editing and displaying the configuration parameters.

TECHNICAL DATA

INPUTS

Accuracy 0,2% f.s. ± 1 digit.
Sampling time 120msec with sensor supply check, configurable down to a minimum of 15msec with reduction of the resolution to 2000 steps.
Configurable decimal point position for linear inputs from potentiometer or strain-gauge for scales -199.9 to 999.9 (4 digit display) and -99.9 to 99.9 (3 digit display with sign), with over- and under-range indication.
32-segment configurable linearisation can be used.

Strain-gauge

350Ω, maximum sensitivity 3.3mV/V with positive or symmetrical polarisation and calibration that automatically calculates the sensitivity.

Potentiometer

supply 1,2Vdc >100Ω

POWER SUPPLY

Standard: 100 to 240Vac/dc $\pm 10\%$
optional: 11 to 27Vac/dc $\pm 10\%$
0 to 62Hz, max. 3VA
protected by an internal replaceable fuse

POWER SUPPLY**SENSOR/TRANSMITTER**

1,2Vdc for potentiometer > 100Ω

5Vdc, 10Vdc max. 120mA

for strain-gauge

15Vdc, max 50mA

24Vdc ±10% unstabilised, max. 50mA

AMBIENT CONDITIONS

Working temperature range: 0 to 50°C

Storage temperature range: -20 to 70°C

Humidity: 20 to 85%Ur non-condensing

WEIGHT

150g. (48 format), 280g. (96 format) in
the complete version

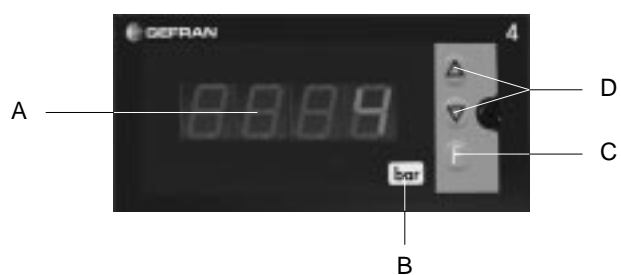
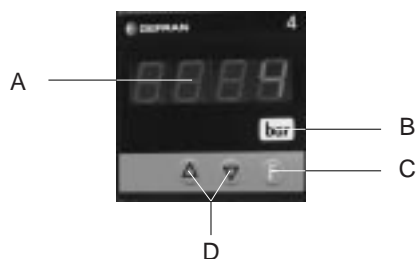
FACEPLATE DESCRIPTION

A - PV display: indication of process variable

B - Label for engineering units

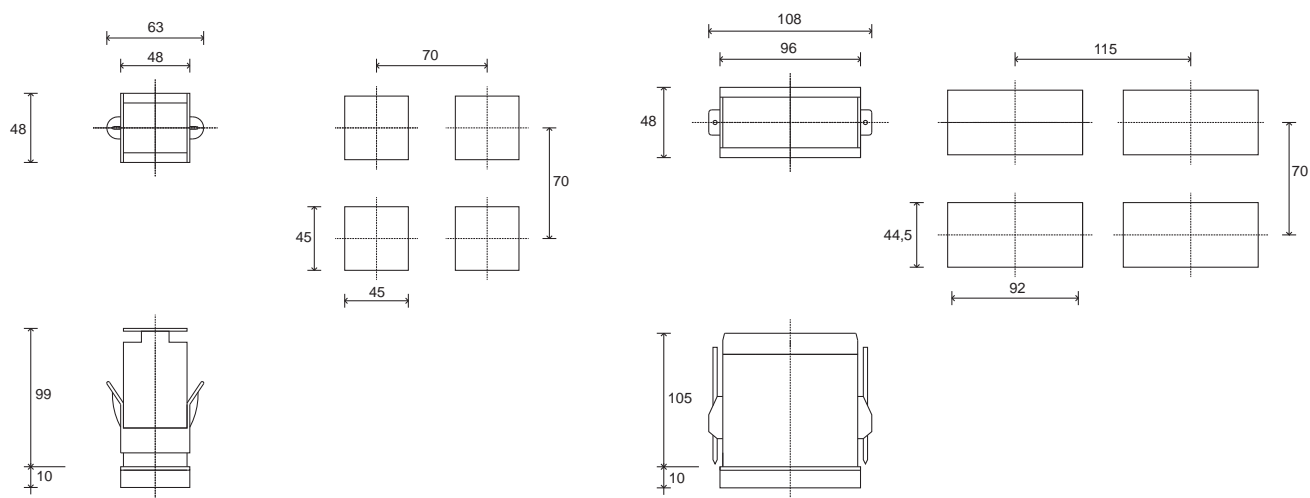
C - "Function" key

D - "Raise" and "Lower" keys



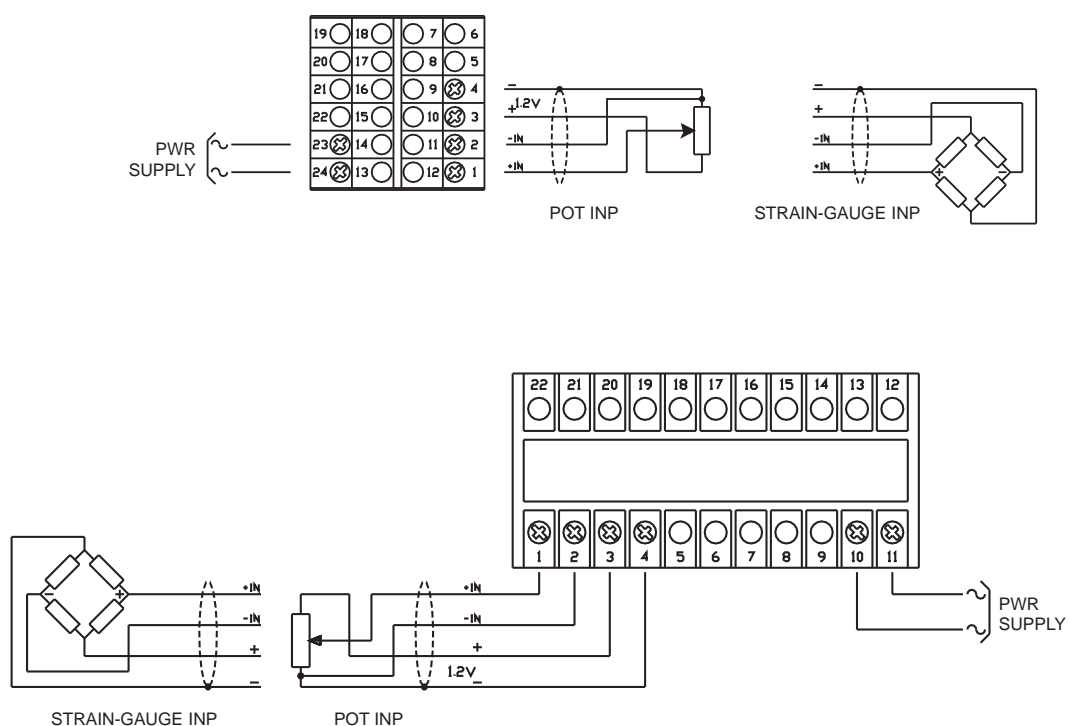
Red LED display
IP65 faceplate protection

DIMENSIONS and CUT-OUT



Dimensions: 48x48mm - 96x48mm (1/16DIN - 1/8DIN) depth 99mm - 105mm

CONNECTION DIAGRAM



Apply user's manual warnings for a correct installation

ORDER CODE

4B



FORMAT	
48 x 48	48
96 x 48	96

NR. DIGITS	
3 + sign (only for 96 format)	3
4	4

POWER SUPPLY	
0	11 to 27Vac/dc
1	100 to 240Vac/dc

SENSOR / TRANSMITTER POWER SUPPLY	
0 1	1,2Vdc (potentiometer)
0 5	5Vdc
1 0	10Vdc, 120mA
1 5	15Vdc (transmitter)
2 4	24Vdc, 50mA (transmitter)

GEFRAN spa reserves the right to make any modification of the design or function, at any moment without prior notice



The instrument conforms to the European Directives 89/336/CEE and 73/23/CEE with reference to the generic standards:
 - EN 50082-2 (immunity in industrial environments) - EN 50081-1 (emission in residential environments) - EN 61010-1 (safety)



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