# GEFRAN

## 4B 96

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



#### 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
- · Labels provided for the more common physical units
- · Acquisition and alarm programmable from 15 up to 120 msec. with resolution from 30000 to 4000 divisions
- 6 wires calibration
- · Version for magnetostrictive sensors output 4...20mA

# **GENERAL**

Main applications

· Food processing equipment

• Extrusion lines

· Rubber presses Test benches

Weight indicators

Pressure indicators

Position indicators

Microprocessor based indicator in both 96x48 (1/8 DIN) formats manufactured with SMT. The instruments have a lexan membrane faceplate (guaranteed to IP65) which has 3 keys, a 5-digit display.

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
- Magnetostrictive position sensors

The selection is made using the faceplate kevs.

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 code WINSTRUM).

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. ±1digit. Sampling time 120msec with sensor supply check, configurable down to a minimum of 15msec with reduction of the resolution to 4000 steps.

#### Range:

- -1999...9999 resolution 1 digit,
- -19990...99990 resolution 10 digit,
- -1999...28000 resolution 1 digit, Configurable decimal point position. 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 >100 $\Omega$ 

Magnetostrictive position sensors Supply 24Vdc / 100mA Output 4...20mA

#### **POWER SUPPLY**

Standard: 100 to 240Vac/dc  $\pm$  10% optional: 11 to 27Vac/dc  $\pm$  10% 50/60Hz, max. 6,5VA

Protected by an internal fuse (not replaceable by the operator).

# POWER SUPPLY TRANSMITTER

24V ±10% unstabilised, 50mA max (100mA max for the 4...20mA transmitter input model only) 15Vdc max 50mA for strain-gauge 5Vdc, 10Vdc max 120mA for potentiometer (>100 Ω) 1,2Vdc

### **AMBIENT CONDITIONS**

Working temperature range: 0 to 50°C Storage temperature range: -20 to 70°C Humidity: 20 to 85%Ur non-condensing

#### **W**EIGHT

280g. in the complete version

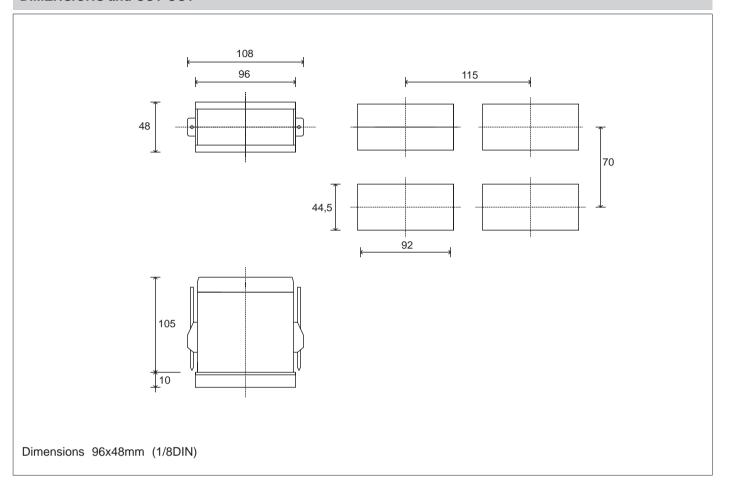
### **FACEPLATE DESCRIPTION**

- **A** PV display: indication of process variable [height 14mm (5 digit) red display ]
- B Label for engineering units
- C "Function" key
- D "Raise" and "Lower" keys

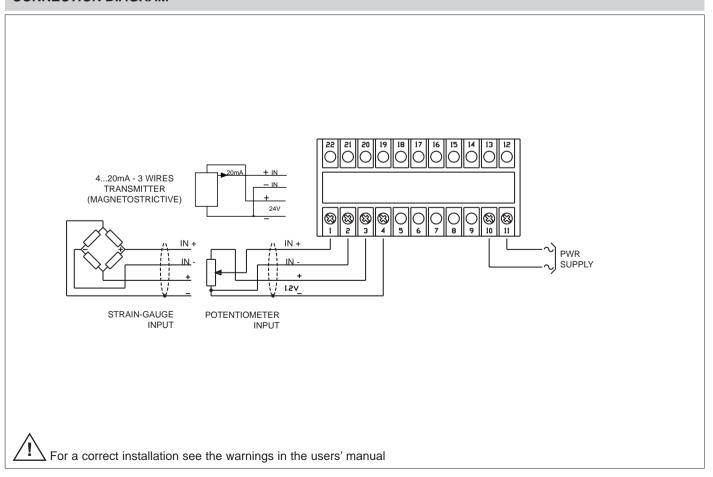


IP65 faceplate protection

## **DIMENSIONS and CUT-OUT**



## **CONNECTION DIAGRAM**



# ORDER CODE 96 5 4B NR. DIGITS **POWER SUPPLY** 11...27Vac/dc 100...240Vac/dc TRANSMITTER POWER SUPPLY 0 1 1,2Vdc for potentiometer 5Vdc 0 5 1 0 10Vdc 1 5 15Vdc 2 4 24Vdc ' 99 All \*\* \* Specific model for use with transmitter 4...20mA (es for position magnetostrittive sensor), it excludes configurability to other options. \*\* Selectable (standard 24Vdc)

Please, contact GEFRAN sales people for the codes availability.

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

