



CONFIGURABLE DIGITAL PRESSURE MONITOR

EC 3-563

GENERAL CHARACTERISTICS

- * Size: 74 x 32 mm.
- * Power supply: 12 or 12-24Vac/dc
- * Three digit display, height: 12,5mm.
- * Indication of pressure with decimal point
- * Custom configuration through keyboard or Personal Computer
- * Possibility of field-configuration
- * Easy integration with remote-assistance or remote-measuring

EC 3-563 is a three digit pressure monitor designed to work with current output 0-20 mA or 4-20 mA 2 or 3 wires pressure transducers.

In factory, the instrument gets programmed to accept, at the input, one of the Every Control transducers (EC PRS 00, EC PRS 01, EC PRS 02 or EC PRS 03) that permit to cover a range of pressure between -0.5 and 250 bar; however, just changing some parameters it is possible to connect the instrument to other transducers.

The electronical solutions of this instrument make it able to power-supply the transducers, as long as they can work inside a range of supply-voltage between 9 and 20 V.

Failure of functioning, defective probe, corrupted memory-data or probe-signal outside the limits, are indicated by the flashing display, in order to catch user's attention.

The possibility of field-reconfiguration and the chance of being connected in remote-measuring or remote assistance network, makes it highly flexible in the use and able to meet the most different needs.

MOUNTING

For a proper mounting, take note of the attached indications; be sure that the conditions of use (voltage of power-supply, environment temperature, humidity) are inside the instrument working limits.

Voltage at terminal 12 is not stabilized. If the transducer is powered by the instrument, it should be verified that in all working conditions, especially for high signal output, **the voltage on the transducer** does not drop below the minimum working value, in order to guarantee a correct measure.

WARNING : according to the source of power-supply, find a protection able to limit the quantity of current absorbed by the instrument in case the failure.

CONFIGURATION

Push		and keep it pushed for 4 sec. at least : "PA" will appear on the display
Release		and push it straight after: the first modifiable parameter will appear on the screen
Release and push		until the requested parameter appears
Keep pushed		for 4 sec. at least : the parameter value will appear on the screen
Keep pushed again		for 4 sec. at least : the displayed value start increasing at the speed of 1 digit for 1/2 sec.
Release		at the reaching of the requested value.

WARNING: The parameter value gets increased at the speed of 1 digit for 1/2 sec., until the upper end of scale reaching, afterwards the instrument returns to the lower end of scale, and from here it keeps increasing.

To exit the configuration

Push  again after the selection of the last available parameter, or wait 50 seconds, or switch the power supply off and then switch it on.

SIGNALS AND ALARMS

"E0" flashing on the display means one of the following defects: probe-signal outside the limits, defective probe or wrong connection (in case of not connected probe, the indication "E0" will appear if the parameter is /0=30 (4-20 mA) and "0" if the parameter is /0=31 (0-20 mA)).

"E2" flashing on the display: failure of memorised configuration-data; try to switch the power-supply off, and then, switch it on.

CONFIGURATION PARAMETERS

CODE	PARAMETER	DESCRIPTION	MIN	MAX	U.M.	STANDARD
/	PROBE					
/0	kind of probe	30 = 4-20 mA ; 31 = 0-20 mA	30	31	----	30
/1	calibration		-9.0	+10	bar	0
/2	digital filter(speed response)	0=0s; 1=0.4s; 2=1.2s; 3=3.0s; 4=8.0s; 5=19.8s; 6=48.0s	0	6	----	3
/4	without leading zeros	0=NO; 1=SI	0	1	----	1
/5	with decimal point	0=NO; 1=SI	0	1	----	0
/6	start of scale for input	0-20 mA or 4-20 mA correspondent to input's minimum value	-99	999	bar	see table
/7	end of scale for input	0-20 mA or 4-20 mA correspondent to input's maximum value	-99	999	bar	see table
L	NETWORK CONNECTION					
L1	instrument address		1	15	----	1
L2	instrument group		0	7	----	0

notes

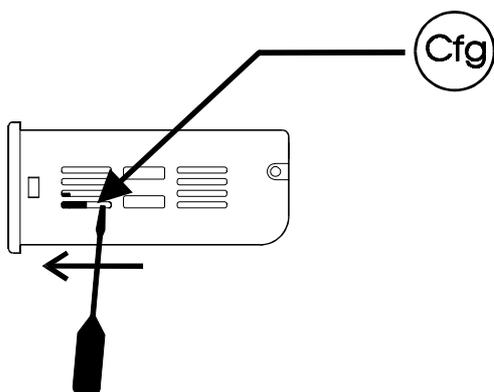
N.B. On request, it is possible to configure the instrument with different unit of measure.
 The transducers pressure ranges are to be considered as " **relative to atmospheric pressure** ";
 the unit of measure is **bar** (1 bar = 0.1 MPa; 1 MPa = 10 bar).

TABLE

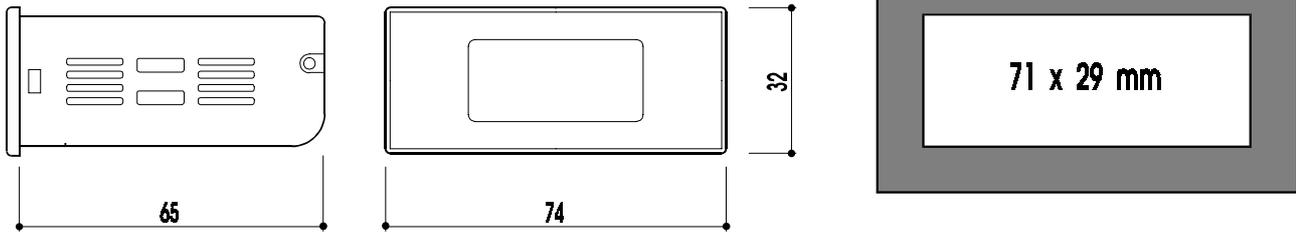
connected transducer	range (bar)	parameter /6 (bar)	parameter /7 (bar)
EC PRS 00	-0.5÷7	-0.5	7
EC PRS 01	0÷25	0	25
EC PRS 02	0÷30	0	30
EC PRS 03	0÷250	0	250
CUSTOM	configurable according to the needs		

HOW TO ENTER THE CONFIGURATION KEY

Use a suitable tool (for instance, a small top screw-driver) to operate on the key through the side openings.

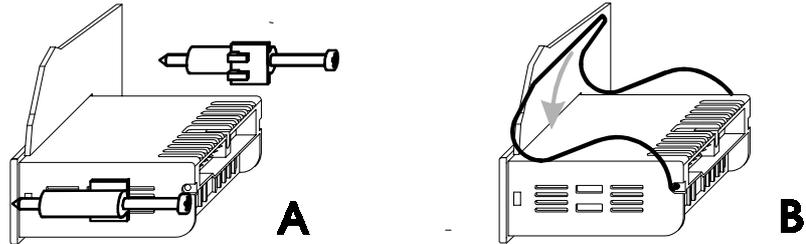


SIZE AND PIERCING TEMPLATE



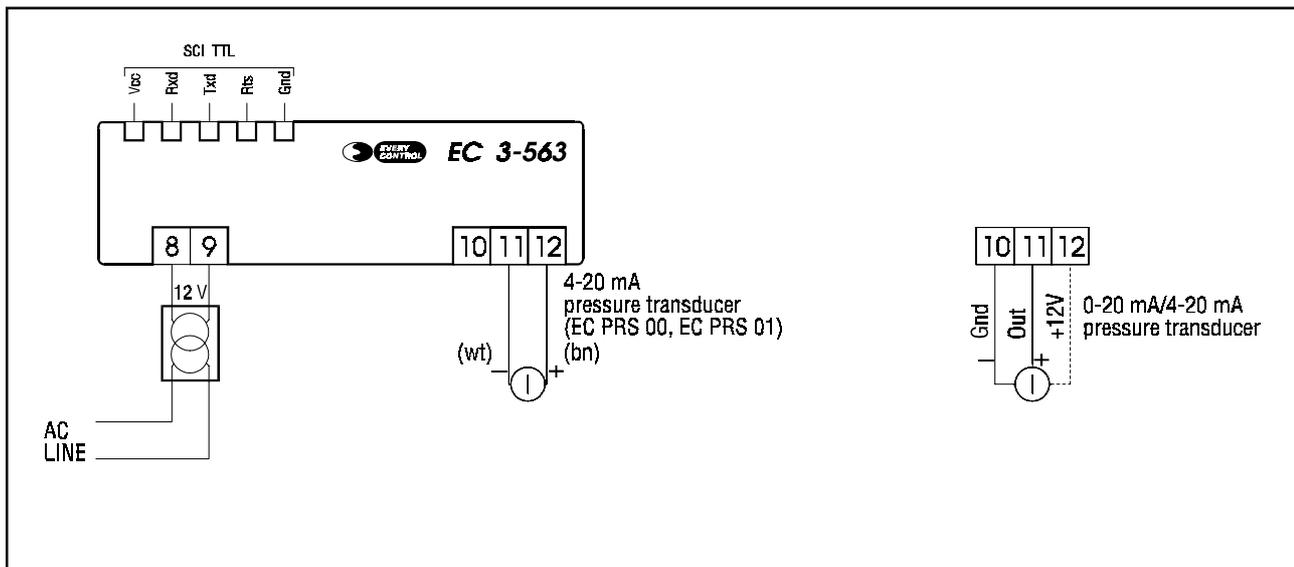
OPTIONS OF MOUNTING

- Screw-brackets (A).
 - Spring-bracket (B).
- The panel thickness will be between 1 and 5 mm.



ELECTRICAL CONNECTIONS

Example of typical application



ELECTRO-MECHANICAL CHARACTERISTICS

- Box:** Self-extinguishing plastic (PC-ABS) according to UL94 V-0.
- Size:** 74 x 32 x 65 mm.
- Mounting:** Panel-mounting through fixing brackets.
- Environment temperature:** from 0 to + 60°C.
- Humidity:** 10...90% not condensing.
- Connections:** Screw connectors.
- Insulation-class:** II (With transformer, according to EN 60742).
- Power-supply:** 12 Vac/dc (Standard) or 12...24Vac/dc (on request); 1 W.
- Inputs for measure:** 1 configurable for pressure transducers with current output (4-20 mA or 0-20 mA).
- Input resistance:** 56 ohm.

- Transducer power-supply:** available at terminal 12 (voltage 12V +30%, -20%).
- Range of measure:**
 - from -0.5 to 7 bar (if programmed for EC PRS 00),
 - from 0 to 25 bar (if programmed for EC PRS 01),
 - from 0 to 30 bar (if programmed for EC PRS 02),
 - from 0 to 250 bar (if programmed for EC PRS 03).
- Resolution:** 0.1 bar or 1 bar.
- Display:** 3 digits display.
- Serial port for data exchange:** TTL with EVCBUS (standard protocol).