CONVERTER 1 and 2 Channel

Pt 100 - RTD

OUTPUT 4/20mA

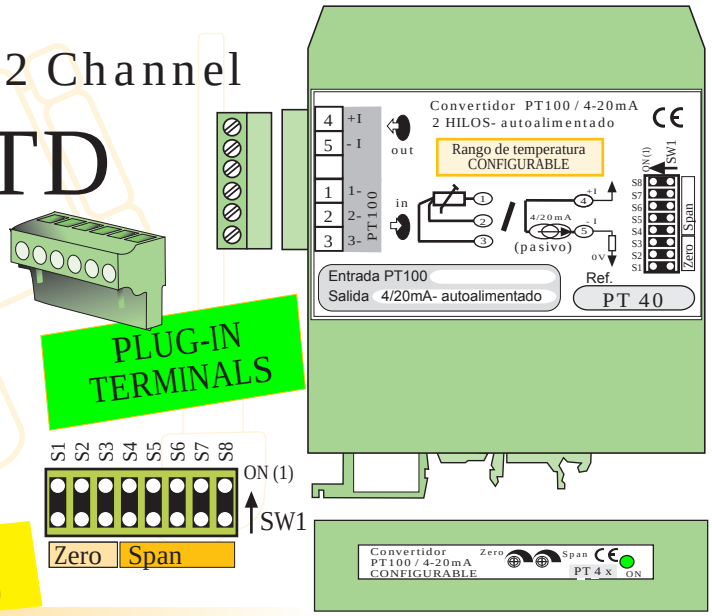
LOW COST

CONFIGURABLE
Temperature range

CE

PLUG-IN TERMINALS

CONFIGURABLE by MICROSWICH (*)



DESCRIPTION

Temperature signal converter for PT100, 2 or 3-wire proportional 4-20 mA signal.
The output is linearized with temperature.
With adjustable SPAN and ZERO.
The front LED indicates that 4-20 mA current flows. If not, the 4-20 mA loop is open.
The modular box is designed to fit in DIN EN rail profiles.
Meets the EMC standards for industrial applications.

TECHNICAL CHARACTERISTICS

- Supply voltage 230 VAC (+ / -10%) OR 24 VDC (+ / -10%)	
- Operating temperature	- 10 ... +60 ºC
- Storage temperature	-40 / +80 ºC
- Temperature coefficient	50 ppm / ºC
- Maximum global error	<0.1%
- Maximum linearity compensation error	<0.08%
- Effect of lead resistance compensation	0.1% for 10 Ohm
- Warm up time	5 minutes
- Adjustable through SPAN and ZERO	

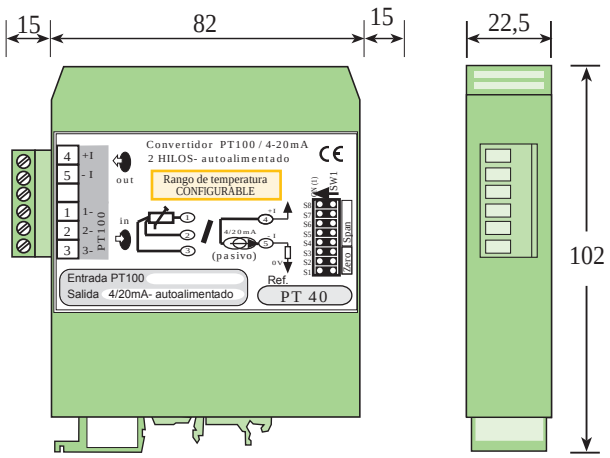
OUTPUT

- Voltage Standard (2-wire) 24 VDC (16 .. 30V)	
- Load impedance (24V)	Max. 600 Ohm
- Maximum intensity (probe Opening)	25 mA
- Temperature drift	0.5 uA / ºC
- Protection against inverse polarity.	

REGULATIONS COMPLIANCE

Electromagnetic Compatibility	2004 / 108 / CE
Low voltage for amb. industrial	2006/95/CEE
Electromagnetic emissions	UNE-EN 50081-2
Electromagnetic immunity	UNE-EN 50082-2
Waste electronics(WEEE)	2002 / 96 / CE

DIMENSIONS (mm)



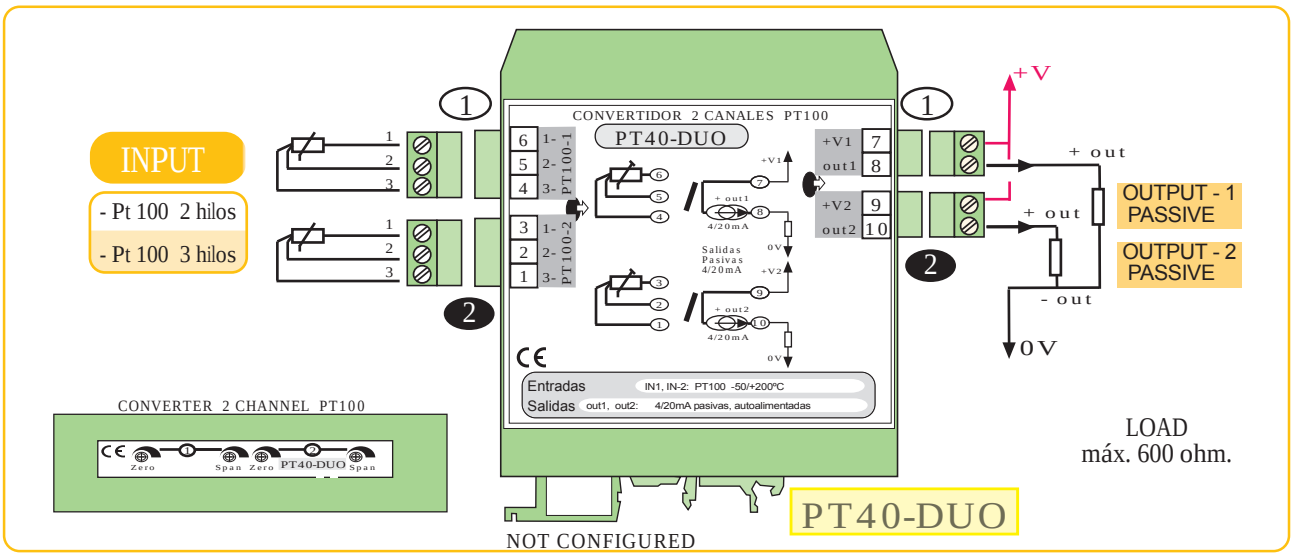
MECHANICAL CHARACTERISTICS

Protection:	IP 20
Connection wire:	<2,5 mm, 12 AWG
Box:	Polyamide UL94. V2
Weight: max.	120 gr.
Rail:	EN 50035, EN 50022

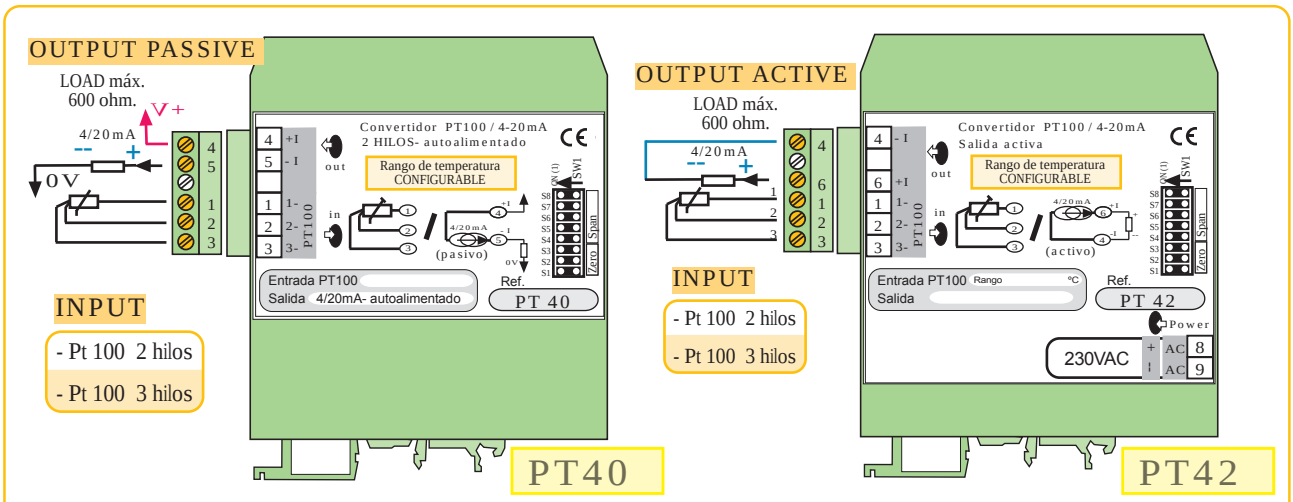
MODELS

OUTPUT	24VDC	230VAC
4 / 20mA (*)	PT40	PT42
(2 canales)	PT40-DUO	
Pt100 inc.(*)	PT40i	PT42i

CONNECTIONS PT40 - DUO . (Self-powered by Output : 6 ..32VDC)

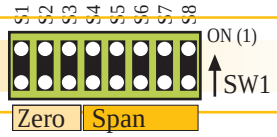


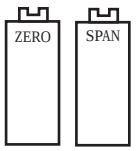
CONNECTIONS PT40 y PT42 (c/ Range temp. configured)



(Autoalim. 6 ..32VDC, for output

RANGE OF TEMPERATURE SETTINGS (SW1)





Adjustables

ZERO Table (*)			
S 1	S 2	S 3	ºC
0	0	0	0ºC
1	0	0	-10ºC
0	1	0	-20ºC
1	1	0	-30ºC
0	0	1	-40ºC
1	0	1	-50ºC
0	1	1	-60ºC
1	1	1	-70ºC

Tmin

Gain table = Incr. T (**)					
S 4	S 5	S 6	S 7	S8=1	S8=0
1 0	0	0	0	25ºC 30ºC	147ºC 175ºC
1 0	0	1	0	35ºC 42ºC	202ºC 241ºC
1 0	1	0	1	48ºC 58ºC	277ºC 333ºC
1 0	0	1	1	70ºC 83ºC	410ºC 485ºC
1 0	1	1	1	100ºC 120ºC	600ºC 700ºC

(*) The values in ºC, corresponding to the central point of the adjustable "ZERO" - "SPAN", ranging from - / +10%

(eg, to 175 °'b0 C, the corresponding adjustment range, serious 158 .. 192 ºC)

(**) The value of the gain table, is equivalent to the increase between the min value and max. operating range T.
(eg, range -25 / +150 ºC, in the gain table 175ºC)