GENERAL CHARACTERISTICS

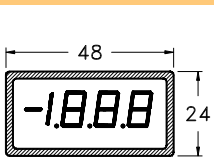
The panel digital indicator DP series is used for the measurement of the most common signals used in industrial processes. The instrument has small dimensions and is suitable for installation both on a panel and on control unit.
The indicator is programmable, and has been designed for use with signals 0/4 ÷ 20mA, 0/2 ÷ 10Vdc, potentiometer with range value from 1kΩ to 100kΩ and temperature measurements with PT100 and PT1000.
The configuration of the measurement can be selected from the outside without opening the instrument. The input signal is galvanically isolated from the power.

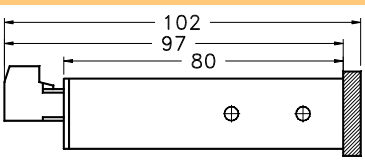
- Programmable input signals.
  0/4 ÷ 20mA, 0/2 ÷ 10Vdc, potentiometer 1kΩ ÷ 100kΩ.
- Measurement range adjustable from -1999 to +1999 digit.
- PT100 measuring ranges -100.0 ÷ +199.9 °C or 0 ÷ +600 °C.
- PT1000 measuring range -50.0 ÷ +100.0 °C.
- Programmable decimal point.
- Green or Red display.
- Power supply: 10,8 **...** 30 Vdc / 17 **...** 30 Vac.
- Galvanic isolation between input signal and power supply.

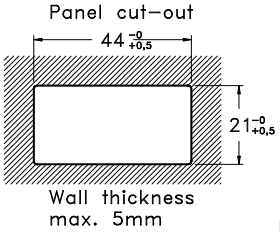
TECHNICAL DATA Tab.1

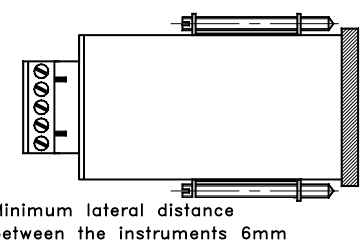
	Description	Characteristics			Code
	Type	Digital panel indicator			**DPA**
Power supply	Power supply	10.8 ÷ 30 Vdc	17 ÷ 30 Vac		-
	Frequency	47 ÷ 63 Hz			
	Power consumption	1,2 VA			
	Temperature range	-10° ÷ +60° C / 14 ÷ 140 °F			
	Test voltage	500 Vdc			
	Reference standard	EN55022, IEC61000-4-2/4/11			
Input signals	Voltage	IR = 40 KΩ	Overload 48 V max.		**10**
	Current	IR = 125 Ω	Overload 60 mA max.		
	Potentiometer	Min. 1 KΩ	Max. 100 KΩ		
	Pt100	Measuring current 1,0 mA (not self heating)			**50**
	Pt1000	Measuring current 0,2 mA (not self heating)			**55**
	Accuracy	< 0,05 % ±1 digit			-
	Temperature coefficient	< 50 ppm / K			
	Linearization error	< 0,1 %			
Display	Digit	3 ½ - 7,6 mm. height	Red color		**1**
			Green color		**2**
	Measuring unit	Indicated on front panel		To be specified in order	**°C**
	Conversion rate	About 2 / s			-
	Decimal point	Selectable			
	Overflow indicator	Negative " □□ "	Positive "□ "		
Housing	Front panel degree of protection	IP54			**1**
		IP65 - On request			**2**
	Slide-in Type	According with DIN 43700 - Noryl GFN 2 SE 1			-
	Electrical connection	plug-in terminals	IP20 (BGV A3)	max. 1,5mm²	
	Dimensions	48 x 24 mm	Panel cut-out 44 x 21 mm		
	Weight	100 g			

DIMENSIONS mm.

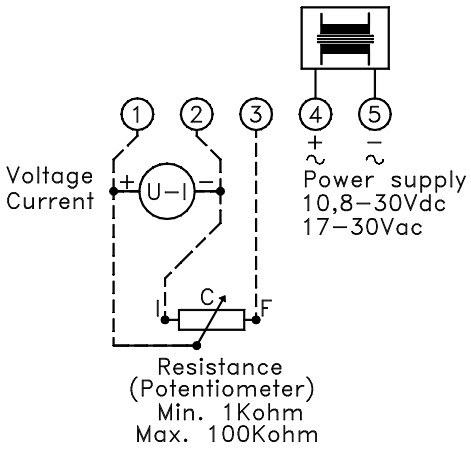


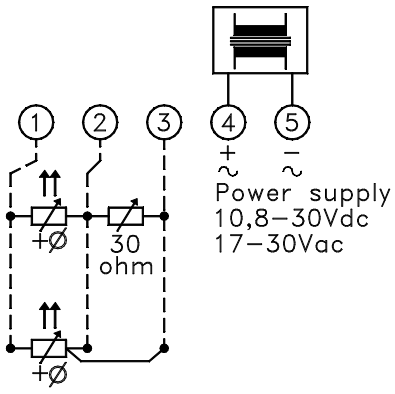






WIRING Tab.2





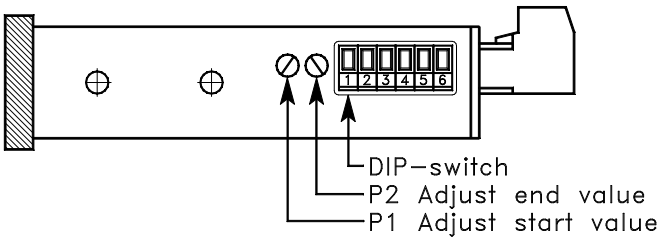
For sensors PT100 - PT1000 with 2-wires connection
It is necessary line compensation (30Ω).
Not necessary in the presence of trimmer inside the instrument.

For sensors PT100 - PT1000 with 3-wires connection
The line is automatically compensated up to 10Ω.

STANDARD INPUTS = Code 10 | **PT100 = Code 50** | **PT1000 = Code 55**

CONFIGURATION Tab.3

Side view



Functions of the DIP-switch S4 ... S6

S4 ON ► 3 decimals (display **1.888**)
S5 ON ► 2 decimals (display **18.88**)
S6 ON ► 1 decimal (display **188.8**)

Standard inputs			
Code	**10**	DIP-switch settings	
Input	**S1**	**S2**	**S3**
0 ÷ 2,5 Vdc	OFF	OFF	OFF
2 ÷ 10 Vdc	ON	OFF	ON
(*) 0 ÷ 10 Vdc	**ON**	**OFF**	**OFF**
4 ÷ 20 mA	OFF	ON	ON
0 ÷ 20 mA	OFF	ON	OFF
0 ÷ 1/100 KΩ	OFF	OFF	OFF

(*) Standard configuration

PT100			
Code	**50**	DIP-switch settings	
Measuring range	**S1**	**S2**	**S3**
-100 °C ÷ +199,9 °C	ON	OFF	ON
-100 °C ÷ +600, °C	OFF	ON	OFF

Range of adjustment	Standard signals	PT100 – PT1000
	Code 10	**Codes 50 - 55**
Initial value	-1999 … 1999	± 10/5 °C
Final value	0 … 3999	90 … 110 %

NOMENCLATURE

DPA	10	1	°C	IP54		
•					Tab.1	Digital panel indicator
	•				Tab.1-2-3	Input signal – Electrical connection - Configuration
		•			Tab.1	LED display color
			•		Tab.1	Front panel measuring unit – To be specified
				•	Tab.1	Degree of protection