

# PICA100-P

PROCESS

## DESCRIPTION

48x24mm (1/32 DIN) fully programmable panel meter, easy to scale into desired engineering units directly by frontal keys or rear input signal value in teach mode (tEAc), with 4 x 8mm-high red LED digits, supply excitation for the transducer and TARE function (display value absorption) incorporated that can be locked out at any time. It is designed for measuring  $\pm 10V$  and  $\pm 20mA$  process signals. It also provides an up to  $\pm 60V$  DC voltage input and up to  $\pm 100mV$  DC shunt input which allows high current signals measurement. A multi-point scaling is also possible to define a linearisation by segments to control the volume of irregularly shaped tanks.

It provides two relays that allow this instrument not only to measure but also to be capable of controlling, regulating and detecting alarms for the mentioned signals.

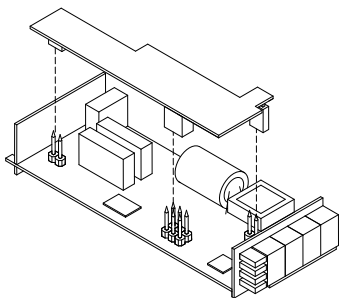
Thanks to its RS4P (RS485) communication and analog ANAP options, it can be integrated to a measurement system providing information via ASCII, ISO 1745, MODBUS-RTU protocols or generating a 0/4-20mA signal respectively.

The indicator incorporates three keys located on the bottom of the frontal display to set all configuration parameters. It is also configurable by a PC using a specific software available on our website.

4-level brightness configuration is possible to adapt it to the light working conditions. Registers the minimum and maximum process values since its starting up or a resetting.

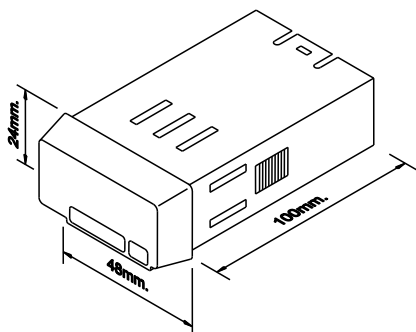
The output options are isolated from the input and power supply.

## STRUCTURE



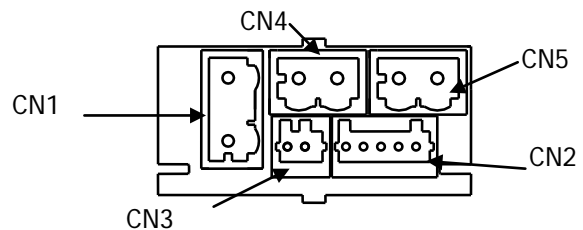
## SIZE

- Dimensions ..... 48x24x100mm
- Panel cut out ..... 45x22mm



## CONNECTIONS

REAR VIEW



CN1	POWER SUPPLY		
	AC VERSION	DC VERSION	
PIN			
1	Phase		-
2	Neutral		+
CN2	INPUT SIGNAL		
	PROC.	VOLT	mV
1	+10V	+60V	
2	+mA		
3			+mV (Shunt)
4	-Signal / -Exc.		
5	+Exc. (20V)		
CN3	OUTPUT RS 485	ANALOG OUTPUT	
1	TxD+ / RxD+	-mA	
2	TxD- / RxD-	+mA	
CN4	RELAY 1		
1	SPST N.O.		
2			
CN5	RELAY 2		
1	SPST N.O.		
2			

# PICA100-P

## TECHNICAL SPECIFICATIONS

### INPUT SIGNAL

- Configuration ..... differential asymmetrical
- Specifications range ..... 23°C±5°C

RANGE	RESOLUTION	INPUT IMP.	ACCURACY
±10V	1mV	1MΩ	±(0.1%rdg+3mV)
±60V	3mV	1MΩ	±(0.1%rdg+18mV)
±100mV	10μV	100MΩ	±(0.1%rdg+30μV)
±20mA	1μA	12.1Ω	±(0.1%rdg+6μA)

- Max. input signal (±10V/±60V) ..... ±12V / ±60V
- Max. input signal (±20mA/±100mV) . ±24mA/±120mV
- Max. continuous overload (±10V/±60V) ..... 80V / 80V
- Max. continuous overload (±20mA) ..... 50mA
- Max. continuous overload (±100mV) ..... 50V
- Excitation ..... 20V±5V DC @ 30mA
- Temperature coefficient ..... 100 ppm/°C
- Warm-up time ..... 15 minutes

### CONVERSION

- Technique ..... Sigma Delta
- Resolution ..... ±15bit
- Conversion rate ..... 25/s

### DISPLAY

- Range ..... -1999 / +9999, 4 digits 8mm
- Decimal point ..... Programmable
- LEDs ..... 4, for functions and outputs
- Display refresh rate ..... 5/s
- Display / input overrange indication .... "-Oue", "Oue"
- Linearization segments ..... 15
- Relays, max. and min. value refresh ..... 10/s
- Brightness levels ..... 4

### RELAYS

- 2 SPST Relays (included) ..... 5A @ 250V AC / 30V DC

### POWER SUPPLY

- PICA10X-P ..... 85-265 V AC / 100-300 V DC
- PICA10X-P6 ..... 21-53 V AC / 10.5-70 V DC
- Consumption (all models) ..... 5W

### FUSES (DIN 41661) - Not included

- PICA10X-P ..... F 0.2A / 250V
- PICA10X-P6 ..... F 1A / 250V

### FILTER P

- Cutoff frequency ..... 0.4Hz to 0.004Hz
- Slope ..... 20dB/decade

### ENVIRONMENTAL

- Operating temperature ..... -10°C to +60°C
- Storage temperature ..... -25°C to +85°C
- Relative humidity non condensed ..... <95% @ 40°C
- Max. altitude ..... 2000m
- Sealed front panel ..... IP65

### DIMENSIONS

- Dimensions ..... 48x24x100mm
- Panel cut out ..... 45x22mm
- Weight ..... 100g
- Case material ..... Polycarbonate s/UL 94 V-0

### OPTIONS

- RS485 communications output:  
1200 to 19200 baud and ASCII, ISO 1745 and MODBUS-RTU protocols  
Ref. .... **RS4P**
- 0/4-20mA analog output:  
Resolution ..... 5.5μA  
Accuracy ..... ±(0.3%L+40μA)  
EMI max. influence ..... ±0.25mA  
Temperature coefficient ..... 3μA/°C  
Maximum load ..... ≤500Ω  
Ref. .... **ANAP**

PICA100-P / PICA100-P6 can be supplied with RS4P or ANAP option assembled.

### ORDERING CODES

- Universal power supply ..... **PICA100-P**
- Universal power supply+ANAP ..... **PICA101-P**
- Universal power supply+RS4P ..... **PICA104-P**
- Low voltage power supply ..... **PICA100-P6**
- Low voltage power supply+ANAP ..... **PICA101-P6**
- Low voltage power supply+RS4P ..... **PICA104-P6**