



PA 450

2 Channel **Process Display**

Subtraction

Function

- different display modes to show difference or input
- simulation of contact and analogue output
- simple menu system for configuration of display, contacts, etc.

Product characteristics

- mathematical subtraction for standard transmitter with
 - 4 ... 20 mA / 2-wire technology
- integrated transmitter power supply
- output signal
 - 4 ... 20 mA and 0 ... 20 mA adjustable
- turn down of analogue signal 1:6
- 4-digit LED display
- robust plastic housing

Optional versions

- 3-wire-analogue output: 0 ... 10 V
- 1 or 2 contacts
- square root extraction

The process display PA 450 has been designed for the subtraction of two independent analog signals. Due to the integrated transmitter power supply the wiring costs are considerably reduced.

The difference or the individual value of the respective transmitter is shown on the 4-digit LED display.

About the user-friendly menu system the device simply can be configured. It has functions, such as access protection, configuration of advertisement and contacts, min. / max. value memory. The set parameters are being stored in an EEPROM and are being kept also in case of power breakdown.

Optionally the PA 450 can reamed with one or two contacts and square root analogue signal.

Typical applications



Differential Pressure Measurement Filter Monitoring





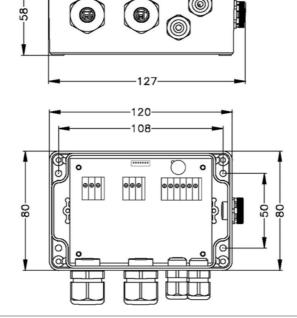




Process Display

General specifications			
Supply	24 V _{DC} ± 10 %		
Housing material	plastic ABS, grey		
Ingress protection	IP 66		
Cable gland	2 x M16x1.5 and 2x M12x1 Polyamide, seals NBR, IP 68		
Atmospheric pressure	pressure compensation element with PTFE filter		
Connecting terminals	Screw-typ terminal for stranded and solid wires up to 1.5 mm ²		
Permissible temperatures	environment / storage: -20 60 °C		
Installation position	any		
Weight	approx. 300 g		
Display	4-digit, 7-segment-LED display, visible range 37.2 x 11 mm; digit height 10 mm, range of indication -1999 +9999; accuracy 0.2 % ± 1 digit; digital damping 0.3 30 sec (programmable); measured value update 0.0 10 sec (programmable)		
Data memory	non-volatile EEPROM		
Sensor supply	V _S - 4 V @ 20 mA		
Sensor current limit	approx. 32 mA		
Contact (optional)			
Number, type	standard: without option: 1 PNP-contact 2 PNP-contacts		
Max. switching current	contact rating max. 125 mA, short-circuit resistant		
Repeatability	≤± 0.1 % FSO		
Switching frequency	max. 10 Hz		
Switching cycles	> 100 x 10 ⁶		
Delay time	0 100 sec		
Analogue output (on request	<u>, </u>		
standard	0 20 mA / 4 20 mA, adjustable (turn-down of span 1:6 1)		
3-wire current signal	permissible load: $R_{max} = 500 \Omega$ response time: < 30 msec		
option	0 10 V, adjustable (turn-down of span 1:6¹)		
3-wire voltage signal	permissible load: $R_{min} = 10 \text{ k}\Omega$ response time: < 30 msec		
with turn-down of span the analog	ue signal is adjusted automatically to the new measuring range		

Dimensions



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Ordering code PA 450				
PA 450	Ш-0-0-	- 🔲		
Standard version				
	8 5 4			
Contact				
without contact	0			
1 PNP-contact	1			
2 PNP-contacts	2			
Analogue output				
4 20 mA / 3-wire	7			
0 10 V / 3-wire	3			
customer	9	consult		
Label on display				
neutral		N		
customer		9 consult		

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