



# PA 440

**Field Display  
for current loop  
with Contacts**

## Functional range

- ▶ free scalable display
- ▶ switch mode, hysteresis, parameterizable deceleration of the contacts
- ▶ no external power supply necessary

## Product characteristics

- ▶ field display for pressure transmitter with output signal: 4 ... 20 mA / 2-wire or 0 ... 10 V / 3-wire
- ▶ 4-digit LCD display
- ▶ plastic or aluminium housing
- ▶ pressure compensation element with PTFE-Filter

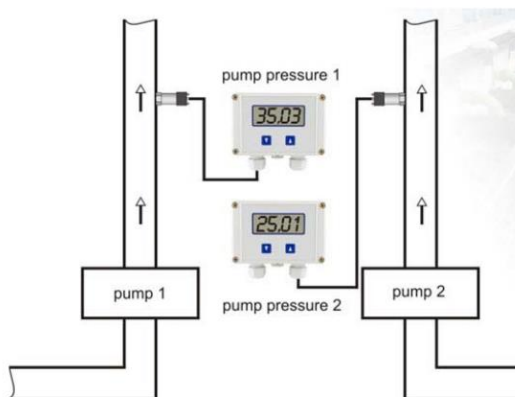
## Optional versions

- ▶ IS-version
- ▶ 2 contacts
- ▶ 4-digit LED display

## Typical application

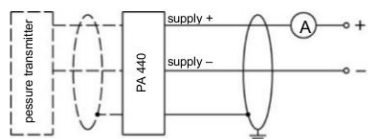


in situ display at pumping stations



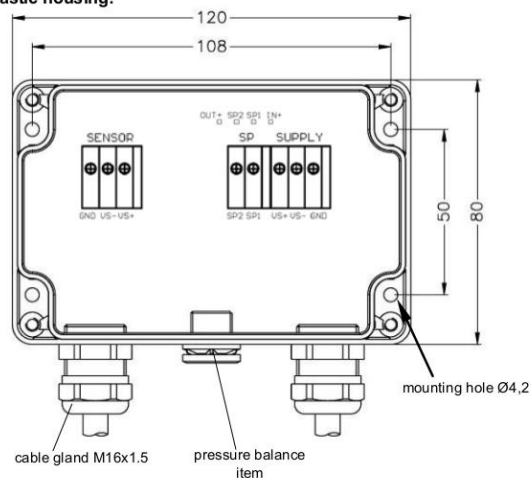
<b>Analogue signal</b>	
Standard	2-wire: 4 ... 20 mA
Option IS-version	2-wire: 4 ... 20 mA
Option 3-wire	0 ... 10 V (in preparation)
Accuracy	$\leq \pm 0.1\%$ FSO $\pm 1$ digit
<b>Supply</b>	
2-wire system	supplied by current loop; voltage drop $\leq 6.5$ V IS version: max. 28 V <sub>DC</sub> (for combination with transmitter and PA 440)
3-wire system	display is supplied parallel with transmitter; V <sub>S</sub> = 8 V <sub>DC</sub> ... 36 V <sub>DC</sub>
<b>Contact</b>	
Number, type	2 independent PNP open collector contacts
Switching performance	contact rating max. 125 mA, short-circuit resistant
Switching frequency	max. 8/sec
Delay time	0 ... 100 sec
<b>Miscellaneous</b>	
Electrical protection	reverse polarity protection (no damage, but also no function); electromagnetic compatibility (emission and immunity according to EN 61326); short-circuit protection
Ingress protection	IP 65
Display	4-digit, 7-segment LC display, range of indication -1999 ... 9999; accuracy 0.2 % $\pm 1$ digit; standard: LC display, digit height 18 mm      option: LED display, digit height 10 mm, red
Permissible temperatures	electronics / environment / storage: -20 ... 70 °C
Material display housing	standard: plastic ABS, grey option: aluminium die cast case, grey powder-coating
Cable entries	cable gland M16x1.5 Polyamide, seals NBR, diameter range: standard 5 ... 10 mm
Atmospheric pressure compensation	pressure compensation element with PTFE filter
Terminal clamps	vertical clamps for stranded and solid wires up to 2.5 mm <sup>2</sup>
Dimensions (height x width x depth)	plastic housing: 80 mm x 120 mm x 57 mm aluminium die cast case: 80 mm x 125 mm x 57 mm
Weight	plastic housing: approx. 220 g      aluminium die cast case: approx. 550 g
<b>IS protection (optionally)</b>	
Approval AX15-PA 440	IBExU08ATEX1126 X      zone 1: II 2G Ex ia IIB T4 Gb
Safety technical maximum values	U <sub>i</sub> = 28 V <sub>DC</sub> , I <sub>i</sub> = 93 mA, P <sub>i</sub> = 660 mW, C <sub>i</sub> = 0 nF, L <sub>i</sub> = 0 $\mu$ H
Ambient temperature range	from -20 °C to +70 °C

**Wiring diagram**

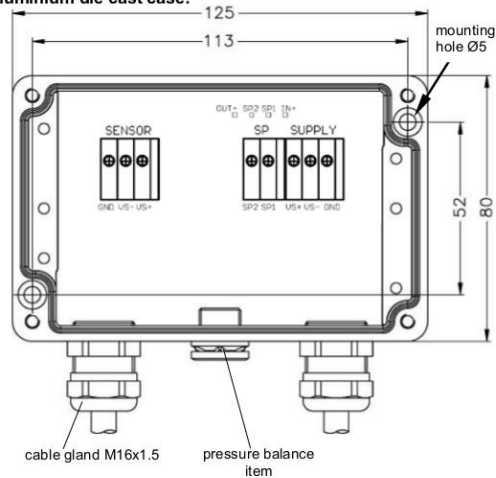


**Dimensions (in mm)**

**plastic housing:**



**aluminium die cast case:**





## Ordering code PA 440

PA 440

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Standard version									
	8	5	1						
Analogue output									
4 ... 20 mA / 2-wire	1								
Intrinsic safety for zone 1 / 4 ... 20 mA / 2-wire	E								
customer	9								
Contact									
without contact	0								
2 contacts <sup>1</sup>	2								
Unit									
without <sup>2</sup>	0								
bar	1								
mbar	2								
mH <sub>2</sub> O	3								
%	P								
mA	A								
customer	9								
Label on display									
standard	1								
neutral	N								
customer	9								
Display									
LC display	C								
LED display	D								
Housing material									
plastic ABS	G								
Aluminium	L								
Special version									
standard	0	0	0						
overvoltage protection <sup>3</sup>	1	0	1						
customer	9	9	9						

<sup>1</sup> only possible in combination with LED display

<sup>2</sup> the unit signs are loose-settled

<sup>3</sup> not possible for Ex-version