

# PA 430



## Plug-on Display for Current Loop with Contacts

### Functional range

- ▶ free scalable display
- ▶ switch mode, hysteresis, parameterizable deceleration of the contacts
- ▶ display 330 ° rotatable
- ▶ connector 300 ° rotatable
- ▶ no external power supply necessary

### Product characteristics

- ▶ plug-on display for pressure transmitter with output signal: 4 ... 20 mA / 2-wire or 0 ... 10 V / 3-wire
- ▶ 4-digit LED display

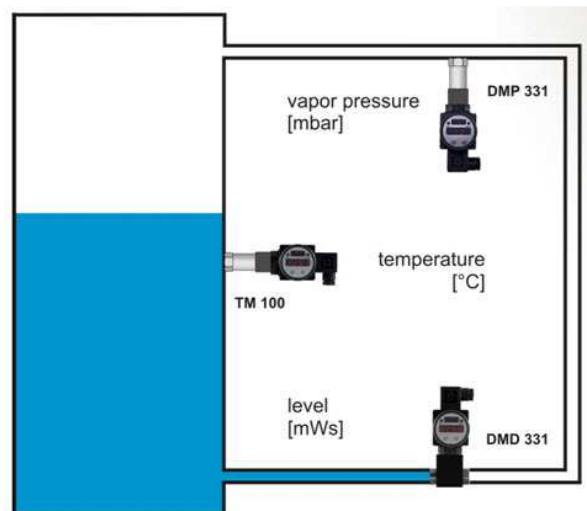
### Optional versions

- ▶ IS-version
- ▶ 1 or 2 programmable contacts

### Typical application



in situ display of pressure, temperature and level



<b>Analogue signal</b>				
2-wire-system	2-wire: 4 ... 20 mA			
Option Ex-protection	2-wire: 4 ... 20 mA			
3-wire-system	0 ... 10 V			
<b>Supply</b>				
2-wire-system	supplied by current loop; voltage drop $\leq 6$ V; $V_S = (V_{T \min} \dots V_{T \max}) + 6 V_{DC}$ with $V_T$ = supply of the used transmitter			
	Ex-protection: max. 28 $V_{DC}$ (for combination of transmitter and PA 430)			
3-wire-system	display is supplied parallel with transmitter $V_{S \min} = 8 V_{DC} \dots V_{T \min}$ ; $V_{S \max} = V_{T \max} \dots 36 V_{DC}$ with $V_T$ = supply of the used transmitter			
<b>Contact (optionally) <sup>1</sup></b>				
Number, type	max. 2 independent PNP open collector contacts			
Switching performance	$V_{Switch} = V_S - 2$ V; contact rating max. 125 mA, short-circuit resistant			
Max. switching current <sup>2</sup>	70 mA			
Repeatability	$\leq \pm 0.1$ % FSO			
Switching frequency	max. 10 Hz			
Switching cycles	$> 100 \times 10^6$			
Delay time	0 ... 100 sec			
<sup>1</sup> max. 1 contact for: 4 ... 20 mA / 2-wire with plug ISO 4400; 0 ... 10 V / 3-wire with Binder 723 (5-pin) or M12x1; Ex-protection no contact possible with 0 ... 10 V / 3-wire with plug ISO 4400				
<sup>2</sup> the real switching current in the application depends on the power supply unit				
<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 red LED display, digit height 7 mm; range of indication -1999 ... +9999; accuracy 0.1 % $\pm 1$ digit; digital damping 0.3 ... 30 sec (programmable); measured value update 0.0 ... 10 sec (programmable)			
Permissible temperatures	electronics / environment: -25 ... 85 °C		storage: -40 ... 85 °C	
Material of display housing	PA 6.6, polycarbonate			
Mechanical stability	vibration: 5 g RMS (20 ... 2000 Hz)		shock: 100 g / 11 msec	
Weight	approx.. 150 g			
CE-conformity	EMC Directive_ 2014/30/EU			
<b>Explosion protection (optionally for 4 ... 20 mA / 2-wire)</b>				
Approval AX4-PA 430	IBExU06ATEX 1049 X		zone 1: II 2G Ex ia IIC T4 Gb	
Safety techn. maximum values	$U_i = 28$ V, $I_i = 93$ mA, $P_i = 660$ mW, $C \approx 0$ nF, $L_i \approx 0$ $\mu$ H; ; plus cable inductivities 1 $\mu$ H/m and cable capacities 100 pF/m			
Permissible temperatures for environment	-25 ... 70 °C			
<b>Wirings diagrams</b>				
<p>2-wire-system (current)</p>		<p>3-wire-system (voltage)</p>		
<b>Pin configuration</b>				
Electrical connection	ISO 4400	M12x1 metal (5-pin)	Binder 723 (5-pin)	Binder 723 (7-pin) <sup>3</sup>
Supply +	1	1	3	3
Supply -	2	2	4	1
Signal + (for 3-wire)	3 <sup>1</sup>	3 <sup>1</sup>	1 <sup>1</sup>	-
Contact 1	3 <sup>1</sup>	5	2	-
Contact 2	-	3 <sup>1</sup>	1 <sup>1</sup>	-
Shield	ground pin	4	5	2
<sup>3</sup> intended for usage with DMP 331i, DMP 333i and LMP 331i with el. connection Binder Series 723 (7-pin); Pins 4, 5, 6, 7 are wired through 1:1; stand-ard without contacts; contacts on request; 3-wire version not possible				
<b>Dimensions (in mm)</b>				

This data sheet contains product specification. properties are not guaranteed. Subject to change without notice.