

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

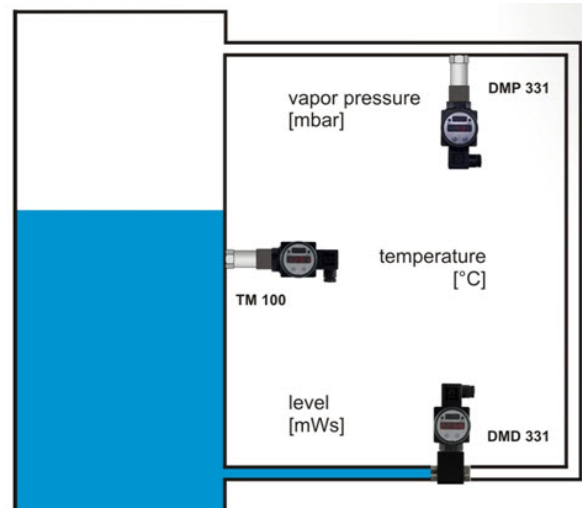
Optional versions

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

Typical application



in situ display of pressure, temperature and level



Analogue signal				
2-wire-system	2-wire: 4 ... 20 mA			
Option Ex-protection	2-wire: 4 ... 20 mA			
3-wire-system	0 ... 10 V			
Supply				
2-wire-system	supplied by current loop; voltage drop $\leq 6\text{ V}$; $V_S = (V_{T\text{min}} \dots V_{T\text{max}}) + 6\text{ V}_{DC}$ 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 $V_{S\text{min}} = 8\text{ V}_{DC} \dots V_{T\text{min}}$; $V_{S\text{max}} = V_{T\text{max}} \dots 36\text{ V}_{DC}$ with V_T = supply of the used transmitter			
Contact (optionally) ¹				
Number, type	max. 2 independent PNP open collector contacts			
Switching performance	$V_{\text{Switch}} = V_S - 2\text{ V}$; contact rating max. 125 mA, short-circuit resistant			
Repeatability	$\leq \pm 0.1\%$ FSO			
Switching frequency	max. 10 Hz			
Switching cycles	$> 100 \times 10^6$			
Delay time	0 ... 100 sec			
¹ 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				
Miscellaneous				
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	
Explosion protection (optionally for 4 ... 20 mA / 2-wire)				
Approval AX14-PA 430	IBExU 06 ATEX 1050 X		zone 1: II 2G Ex ia IIC T4 Gb	
Safety techn. maximum values	$U_i = 28\text{ V}$, $I_i = 93\text{ mA}$, $P_i = 660\text{ mW}$, $C \approx 0\text{ nF}$, $L_i \approx 0\text{ }\mu\text{H}$; max. switching current ² : 70 mA			
Permissible temperatures for environment	-25 ... 70° C			
² the real switching current in the application depends on the power supply unit				
Wirings diagrams				
<p>2-wire-system (current)</p>		<p>3-wire-system (voltage)</p>		
Pin configuration				
Electrical connection	ISO 4400	M12x1 metal (5-pin)	Binder 723 (5-pin)	Binder 723 (7-pin) ³
Supply +	1	1	3	3
Supply -	2	2	4	1
Signal + (for 3-wire)	3 ¹	3 ¹	5 ¹	-
Contact 1	3 ¹	5	2	-
Contact 2	-	3 ¹	1 ¹	-
Shield	ground pin	4	ground pin	2
³ 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; standard without contacts; contacts on request; 3-wire version not possible				
Dimensions (in mm)				

© 2015 BD|SENSORS GmbH – The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.

Ordering code PA 430

PA 430



Standard version		8	5	0															
Analogue output																			
	4 ... 20 mA / 2-wire				1														
	0 ... 10 V / 3-wire				3														
	Intrinsic safety for zone 1 / 4 ... 20 mA / 2-wire				E														
	customer				9														consult
Contact ¹																			
	without contact				0														
	1 contact				1														
	2 contacts				2														
Electrical connection																			
	ISO 4400				1	0	0												
	Binder series 723 (5-pin)				2	0	0												
	Binder series 723 (7-pin) ²				A	0	1												
	M12x1 (5-pin) / metal version				N	1	0												
Unit																			
	without ³							0											
	bar							1											
	mbar							2											
	mH ₂ O							3											
	%							P											
	mA							A											
	customer							9											consult
Label on display																			
	standard							1											
	neutral							N											
	customer							9											consult
Special version																			
	standard									0	0	0							
	customer									9	9	9							consult

¹ 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 (5-pin); Ex-protection

no contact possible with 0 ... 10 V / 3-wire with plug ISO 4400

² intended for the use with DMP 331i, DMP 333i and LMP 331i with el. connection Binder Serie 723 (7-pin)

³ the unit signs are loose-settled

