

PA 430

Plug-on Display



Functional range

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

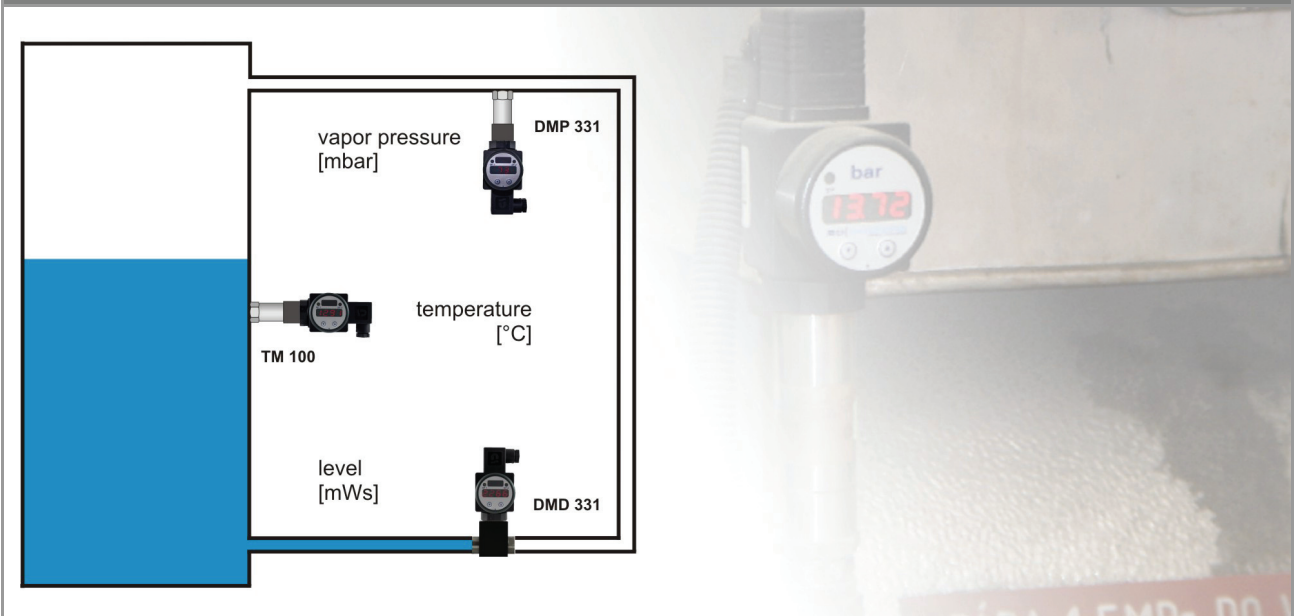
Product characteristics

- ▶ 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 $\leq 6\text{ V}$; $V_S = (V_{T\min} \dots V_{T\max}) + 6 V_{DC}$ 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			
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 AX11-PA 430	zone (0) 1: II (1) 2 G EEx ia IIC T4			
Safety techn. maximum values	$U_i = 28\text{ V}$; $\Sigma I_i = 93\text{ mA}$; $\Sigma P_i = 660\text{ mW}$; max. switching current ² : 70 mA; max. inductivity: 4.7 mH			
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	1 ¹	-
Contact 1	3 ¹	5	2	-
Contact 2	-	3 ¹	1 ¹	-
Shield	ground pin	4	5	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)				

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 (output)																				
	Male plug ISO 4400				1	0	0													
	Male plug Binder series 723 (5-pin)				2	0	0													
	Male plug Binder series 723 (7-pin) ²				A	0	1													
	M12x1 (5-pin) / metal version				N	1	0													
Electrical connection (input)																				
	Male plug ISO 4400					1	0	0												
	Male plug Binder series 723 (5-pin)					2	0	0												
	Male plug Binder series 723 (7-pin)					A	0	1												
	Male plug M12x1 (5-pin) / metal version					N	1	0												
Unit																				
	without ³																			
	bar																			
	mbar																			
	mH ₂ O																			
	%																			
	mA																			
	customer																			consult
Label on display																				
	standard																			
	neutral																			
	customer																			consult
Special version																				
	standard																			
	customer																			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

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