



AZ-01N

Attachable Display for Pressure and Temperature Transmitters



Features

- / Independent from auxiliary power
- / Freely scalable in seconds
- / Optionally with switching output
- / For 2- or 3-wire transmitters
- / 4-digit LED
- / Turnable display and housing
- / Available for hazardous areas

Description:

The AZ-01N attachable display unit is suited for all measuring transmitters with a 4...20 mA output in 2-wire or a 0...10 V output in 3-wire technology. The display is mounted only between the plug and the cable box and is instantaneously ready to operate. By default, the AZ-01N has a plug connector as per ISO4400. Optionally, other versions with plug connector M12x1, 5-pole and BINDER 723, 5-pole can also be supplied. Further versions are possible on request. The display unit is freely programmable. The parameters such as scaling, decimal point, attenuation, setpoint adjustment etc. can be set easily over the keypad on the front. The parameters are stored in an EEPROM and continue to be present even when there is an outage. Exceeding the range limits in both directions can be displayed as error messages. The integrated diagnostic system continuously monitors all functions of the display. The unit of measurement specified at the time of ordering will be imprinted below the display film ex factory to ensure protection against deletion. As a practical alternative, the customer can fix a label with another unit on the display film. A set of sticker labels is included in the delivery.



Electrical Specifications:

Analogue signal /	4. .20 mA, 2-wire or 0. .10 VDC, 3-wire
Auxiliary power /	2-wire system: supply from the current loop (voltage drop <6 VDC) Ex-version max. 28 VDC for combination of transmitter and AZ-01N 3-wire system: unit is supplied parallel to the transmitter $U_{Bmin} = 8 \text{ VDC} \cdot U_{MUmin}$ $U_{Bmax} = U_{MUmax} \cdot 36 \text{ VDC}$ (U_{MU} = supply voltage of used transmitter)
Switching output /	0, 1, or 2 independent open collector PNP-outputs
Switching load /	standard max. 125 mA load, protected against short-circuiting, $U_{switch} = U_B - 2 \text{ VDC}$ optionally ATEX-approval max. contact power at a setpoint of 70 mA, for two setpoints 70 mA as sum of both outputs
Repeatability:	< ± 0.1% FSO
Switching frequency:	max. 10 Hz
Switching cycles:	> 100 x 10 ⁶
Time delay:	0. .100 s
Electric protection /	
Short-circuit prot.:	permanent
Polarity reversal:	no function in case of interchanged connections but no damage
Electromagnetic compatibility:	Interference signal and Interference-proof as per EN61326
Option Ex-approval:	Zone 1: II 2G Ex ia IIC T4 Gb (only in combination with 4. .20 mA, 2-wire)
Safety-related maximum values	$U_i = 28 \text{ VDC}$, $I_i = 93 \text{ mA}$, $P_i = 660 \text{ mW}$, $C \approx 0 \text{ nF}$, $L_i \approx 0 \text{ }\mu\text{H}$, plus cable inductivities 1 $\mu\text{H/m}$ and capacities 100 pF/m
Display /	
Type:	4-digit, red LED-display,
Digits height:	7 mm
Digits width:	4.85 mm (angle 10°)
Range:	-1999. .+9999
Accuracy:	0.1% ± 1 Digit
Refreshing:	new value every 0. .10 s, adjustable
Digital damping:	0.3. .30 s, adjustable

Technical Specifications:

Mechanical strength /	Vibration 5 g RMS (20. .2000 Hz) shock 100 g / 11 ms
Storage temperature /	-40. .+85°C
Ambient temperature /	-25. .+85°C (Ex-Schutz +70°C)
Material /	housing out of PA 6.6, polycarbonate
Weight /	approx. 150 g
Data-security /	non-volatile EEPROM
Protection class /	IP65
Programmable features /	<ul style="list-style-type: none"> · dezimal point · zero and span · damping · updating time for displayed measuring value · actuating and deactuating values of setpoints · switching delay · hysteresis or window mode · password protection

Ordering Codes:

Order no.	AZ-01N.	2.	1.	2.	5.	0
Attachable Display for Pressure and Temperature Measuring						
Analogue output of transmitter /						
1 = 4. .20 mA, 2-wire						
2 = 0. .10 VDC, 3-wire						
3 = ATEX-approval zone 1 for 4-20 mA, 2-wire						
4 = others						
Switching output (not in EX-version or 3-wire with plug ISO 4400) /						
0 = no switching output						
1 = 1 switching output (not with plug ISO 4400 combined with 3-wire transmitter)						
2 = 2 switching outputs (not with 3-wire transmitter, not with plug connector ISO 4400)						
Electrical connection /						
1 = plug DIN 43650						
2 = plug BINDER series 723, 5-pole						
3 = M12x1, 5-pole, metallic version						
Unit /						
1 = none						
2 = bar						
3 = mbar						
4 = mWs						
5 = %						
6 = mA						
Special version /						
0 = none						
1 = please specify in detailed text						



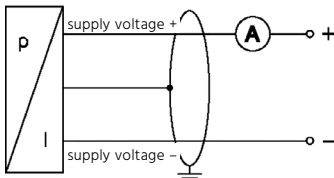
Connection Layout:

Connection layout table /

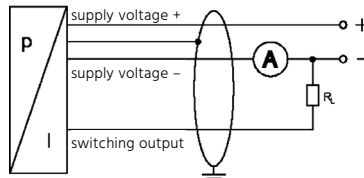
Electrical connections		ISO 4400	M12x1 (5-polig)	Binder 723 (5-polig)
2-wire-system	Supply +	1	1	3
	Supply -	2	2	4
	Switching output 1	3	5	2
	Switching output 2	not used	3	1
	Shield	Ground contact	4	Ground contact
3-wire-system	Supply +	1	1	3
	Supply -	2	2	4
	Signal +	3	3	5
	Switching output 1	not used	5	2
	Switching output 2	not used	not used	not used
	Shield	Ground contact	4	Ground contact

2-Wire-System (Current) (for Ex-Protection the supply is $U = 20 \dots 28$ VDC)

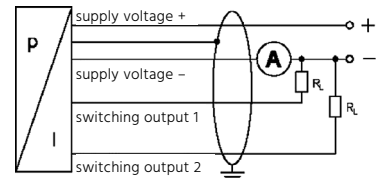
without Switching output



1 Switching output

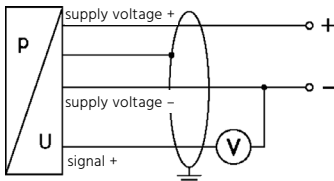


2 Switching outputs

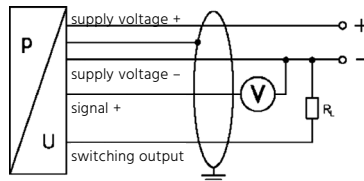


3-Wire-System (Voltage)

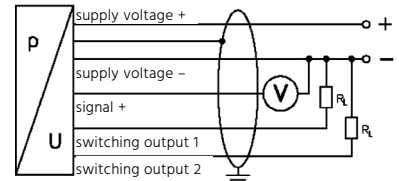
without Schaltausgang



1 Switching output



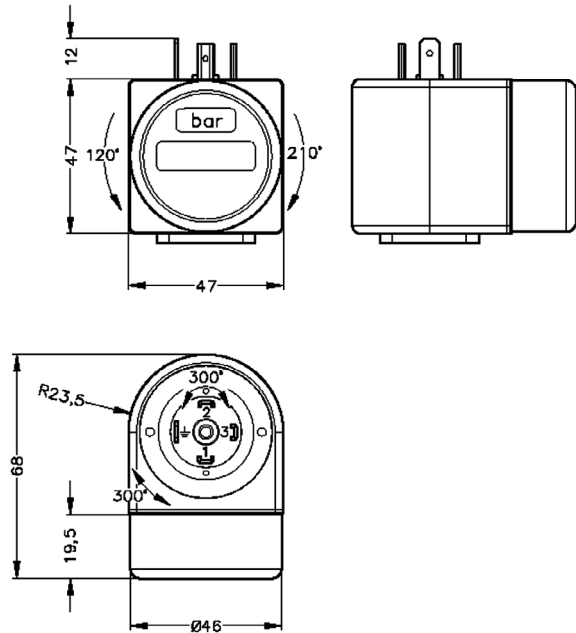
2 Switching outputs



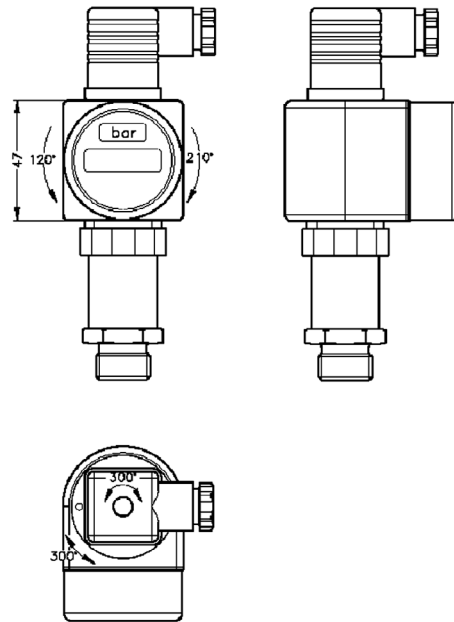


Dimensions in mm:

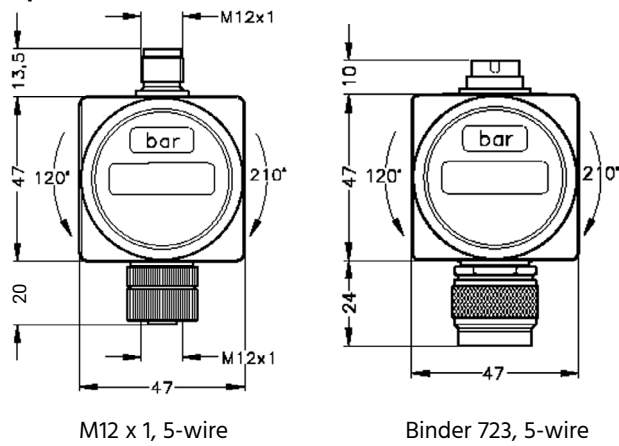
Standard



Example: AZ-01N on Profimess pressure measuring transmitter



Options



Electrical Connection

