

**DESCRIPTION**

ALZ 3920 is a small diameter version of our standard submersible hydrostatic level transmitter. High quality silicon piezoresistive sensor, robust Ø21 mm stainless steel housing and a hydrometric cable with the ventilation tube provide high performance in a slimmer form factor for a wide variety of industrial level measurement applications.

SPECIFICATIONS

Ranges: 1 mH₂O up to 250 mH₂O

Basic accuracy: ±0.25%

Probe: Ø21 mm, AISI 316L stainless steel

Output: 4...20 mA

Sensor: silicon piezoresistive

Media temperatures: -20...+70 °C

Optional: Ex ia

APPLICATIONS

Confined spaces level measurement

Water, wastewater

Fuels, oils

Tanks, wells

Pump protection

TECHNICAL SPECIFICATIONS

MEASURING RANGES

Pressure range, bar	Level, mWC	Overpressure, bar	Pressure range, bar	Level, mWC	Overpressure, bar
0...0.10	1.0	1.0	0...2.5	25	6.0
0...0.16	1.6	1.0	0...4.0	40	15
0...0.25	2.5	1.0	0...6.0	60	15
0...0.40	4.0	1.0	0...10	100	30
0...0.60	6.0	3.0	0...16	160	60
0...1.0	10	3.0	0...25	250	60
0...1.6	10	6.0			

PERFORMANCE

	P > 0.4 bar	P ≤ 0.4 bar
Accuracy, % of span*	≤ ±0.25 (standard) / 0.20 (optional)	≤ ±0.5 (standard)
Temperature effect, (% of span / 10 °C)	≤ ±0.1	≤ ±0.2
Compensated range	-20...+70 °C	0...+70 °C
Power supply effect	≤ ±0.05% of span / 10 V	
Load resistance effect	≤ ±0.05% of span / kOhm (transmitters with current output)	
Long term stability	≤ ±0.1% of span / year	
Response time (10...90%)	≤ 1 ms	

* Accuracy includes non-linearity, hysteresis and non-repeatability.

OPERATING CONDITIONS

Medium temperature (depends on seal)	-20...+70 °C
Ambient temperature	-20...+70 °C
Storage temperature	-20...+70 °C
Vibration resistance	10 g RMS, 20–2000 Hz
Shock resistance	100 g / 11 ms
Service life	> 100 x 10 ⁶ cycles

MECHANICAL SPECIFICATIONS

Housing	stainless steel 316L (1.4404)
Seal	FKM; EPDM; NBR
Diaphragm	stainless steel 316L (1.4435)
Cable external jacket	PVC, PUR, FEP
Ingress protection	IP69K

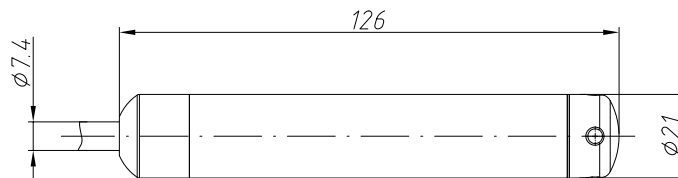
ELECTRICAL SPECIFICATIONS

Output signal	Power supply, U _s	Load resistance, R	Power consumption
4...20 mA / 2-wire	12...36 V	≤ [(U _s - 12 V) / 0,02 A] Ohm*	< 26 mW

ELECTRICAL CONNECTIONS / PIN ASSIGNMENT

Circuits	Cable gland wires
2-wire	
power +	white
power -	brown
ground	yellow-green

DIMENSIONS (mm)



ORDERING CODE




ALZ 3920		-X	-XXXX	-X	-X	-XXXX	-X	-X	-XX
UNIT OF MEASUREMENT									
	bar	B							
	kg/cm ²	S							
	mH ₂ O	W							
	kPa	H							
	Other (specify when ordering)	X							
UPPER RANGE LIMIT (URL)									
bar, kg/cm ²		mWC		kPa					
0.10	0100	1.0	1000	10	1001				
0.16	0160	1.6	1600	16	1601				
0.25	0250	2.5	2500	25	2501				
0.40	0400	4.0	4000	40	4001				
0.60	0600	6.0	6000	60	6001				
1.0	1000	10	1001	100	1002				
1.6	1600	16	1601	160	1602				
2.5	2500	25	2501	250	2502				
4.0	4000	40	4001	400	4002				
6.0	6000	60	6001	600	6002				
10	1001	100	1002	1000	1003				
16	1601	160	1602	Other	XXXX				
25	2501	250	2502						
Other	XXXX	Other	XXXX						
ACCURACY									
		0.25% (P > 0.4 bar) (standard)		C					
		0.50% (P ≤ 0.4 bar) (standard)		D					
		0.20% (P > 0.4 bar)		B					
		Other (specify when ordering)		X					
CABLE EXTERNAL JACKET									
				PVC	P				
				PUR	U				
				FEP	T				
				Other (specify when ordering)	X				
CABLE LENGTH									
						any length in meters (e.g., 010M means 10 meters)	XXXM		
OUTPUT SIGNAL									
						4...20 mA / 2-wire (standard)	A		
						Other (specify when ordering)	X		

ORDERING CODE (CONTINUED)

	ALZ 3920	-X	-XXXX	-X	-X	-XXXX	-X	-X	-XX
SEALS									
							FKM	F	
							NBR	N	
							EPDM	E	
							Other (specify when ordering)	X	
VERSION									
								Standard	00
								Pt100 temperature sensor (incompatible with RS-485 / Modbus RTU)	0T
								Other (specify when ordering)	XX

Example: ALZ 3920-W-6000-D-P-010M-A-F-00

ACCESSORIES

		
Anchoring clamp for submersible transmitter	PZ 1024 Power supply unit	BZ 05 / BZ 10 Dry air junction box for submersible transmitters