



bar APR3420

Sludge Platform Submersible Depth/Level Pressure Transmitter

FEATURES

- Sludge Platform to raise sensor above sediment level
- Piezoresistive sensor technology for excellent stability and repeatability
- Robust stainless steel construction
- Pressure ranges available from 0-1 mWG
- High Strength cable for protection against ingress
- ATEX/IECEx option available





SPECIFICATIONS

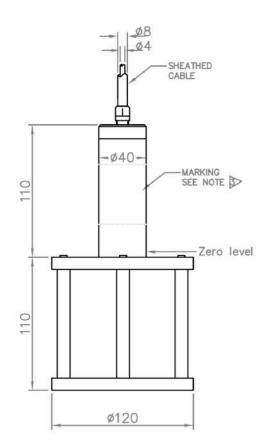
The APR3420 submersible depth and level transmitter has been designed for accurate level measurement where sediment is present. The integral sludge platform ensures that the sensing element is elevated above the sediment level. Standard output signal is 4-20 mA, and electrical connection is via a high strength cable, with integral tube for trouble-free venting to the surface atmosphere. An optional ATEX and IECEx approved version of this product is available for explosion protection for flammable gases (zone 0), dusts (zone 20) and mining areas (group I M1).

Typical applications include:

• Accurate measurement of the depth and level of liquids in many applications.







ELECTRICAL CONNECTIONS

Wire	mA (2 wire)
Red	+supply
Blue	4-20mA signal
Screen	to case

ALTHEN

SENSORS & CONTROLS





TECHNICAL DATA

Туре	APR3420	APR3422	APR3422					
Sensor Technology:	Isolated Piezoresistive Silicon							
Output Signal:	4-20 mA (2 wire)	0-10 V (3 wire)	0-10 V (3 wire)					
Supply Voltage:	13-36 VDC	13-30 VDC	13-30 VDC					
Pressure Reference:	Vented Gauge							
Protection of Supply Voltage:	Protected against supply voltage reversal up to 50 V							
Standard Pressure Ranges (mWG):	0-1 mWG; 0-10 mWG; 0-20 mWG; 0-50 mWG; 0-100 mWG; 0-250 mWG; 0-500 mWG (other options available)							
Standard Pressure Ranges (psi):	0-3 psi; 0-5 psi; 0-7.5 psi; 0-10 psi; 0-15 psi; 0-30 psi; 0-50 psi; 0-100 psi; 0-200 psi; 0-300 psi (other options available)							
Overpressure Safety:	2x all ranges							
Load driving Capability:	4 – 20 mA: RL < [UB - 13 V] / 20 mA; (e.g. with supply voltage (UB) of 36V, max. load (RL) is 1150 Ω ; 10 mV/V: n/a; 0 – 5 V: max. load RL > 5 K Ω ; 0 – 10 V: max. load RL > 10 K Ω							
Accuracy NLHR:	< +0.3 % of span BFSL							
Zero Offset & Span Tolerence:	±0.5% FS at room temperature							
Operating Ambient Temperature:	-20 °C – +60 °C (-4 °F to +140 °F)							
Operating Media Temperature:	Media must not freeze around the sesnor							
Storage Temperature:	+5C to +40C (+41F to +104F) Recommended Best Practice							
Temperature Effects:	$\pm 2.0\%$ FS total error band for -20 °C	to +60 °C. Typical therma	l zero and span coefficien	ts ±0.03% FS/ °C				
ATEX/IECEx Approval (4-20 mA version only):	EX II 1 G Ex ia IICT4 GA (Zone 0) Ex II 1 D Ex ia IIIC T135 C Da (Zone 20)	n/a						
ATEX/IECEx Saftey Values:	Ui = 28 V / Li = 119mA / Pi = 0.65 W / Li = 0.1 pH / Ci = 62 nF. Temperature Range = '- 20C to +70C. Max. cable length = 105m	n/a						
Electromagnetic Campatibility:	Emissions: EN61000-6-4; Immunity: EN61000-6-2; Certification: CE Marked							
Insulation Resistance:		> 100 M @ 50 VDC						
Wetted Parts:	SAE 316L stainless steel housing and diaphragm, polyurethane cable and nitrile (NBR) o-ring seal; 303 stainless steel sludge platform							
Pressure Media:	All fluids compatible with SAE 316L stainless steel, 303 stainless steel, polyurethane and nitrile (NBR)							
Pressure Connection:	4 mm I.D. hose (other options available							
_ Electrical Connection:	Submersible black polyurethane cable moulded to housing. With integral screen, Kevlar strain cord and vent tube. Conductor size 7/0.20 mm (24 AWG), resistance 8.9 Ω / 100 m (x2)							
Net. Weight (Kg):	2.5 Kg							





ORDER MATRIX

Output	Wires	Туре	Electrical Connection/Options	Pressure Range	Process Connection	Cable Length		
4-20 mA	2	APR3420						
0-5 V	4	APR3421						
0-10 V	4	APR3422						
Electrical Connections/Option	ns							
No special option required			-					
ATEX/IECEx certified			EX					
Pressure Range in bar								
0-1 mWG				0001				
0-5 mWG				0005				
0-10 mWG				0010				
0-50 mWG				0050				
0-100 Mwg				0100				
0-250 Mwg				0250				
0-500 Mwg				0500				
Process Connection								
Sludge platform					AY			
Cable Length	Cable Length							
Cable length is specified by adding a 3 digit numeric code as a suffix to the part number e.g '010 = 10 meters. (Max cable length 500 maters).								
						XXX		
Drder Number Example APR3420EX0500AY-020								

For options not listed please contact the sales team

DISCLAIMER: We reserve the right to change specifications without prior notice. specifications without prior notice. All manufactured products are calibrated with precision calibration equipment that is traceable to national measurement standards.

Page 4/4

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The information provided herein is to the best of our knowledge true and accurate, it is provided for guidance only. All specifications are subject to change without prior notification. Althen – Your expert partner in Sensors & Controls | althensensors.com

Althen stands for pioneering measurement and custom sensor solutions. In addition we offer services such as calibration, design & engineering, training and renting of measurement equipment.

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