



WITH HART COMMUNICATIONS IN JUNE 2022

Explosion Proof Housings With Digital or Analog Output C1D1 Certified for Hazardous Locations



An Explosion Proof Housing can be added to any Model 2100 Digital Level Sensor (RU Flex, Stainless Steel or Fiberglass). This housing actively limits current and voltage to protect intrinsically safe equipment from power spikes and sparking in hazardous environments—ensuring the safety of personnel and equipment. The Explosion Proof Housing is available with either Digital or Analog Output. Digital level sensors with a properly installed explosion proof housing are NRTL (Nationally Recognized Testing Laboratory) certified explosion proof and intrinsically safe, Class I, Div. 1, Group D.

Simplified Site Design

The Explosion Proof Housing option simplifies site design by allowing a Model 2100 Digital Level Sensor to meet electrical code without installing additional equipment. Step-down transformers, barrier boards and other devices are not needed when the sensor is wired to explosion-proof conduit.

Explosion Proof Housing with Digital Output

The 2110EX Explosion Proof Housing with 2-wire RS485 communications is available in both 12V and 24V versions. The 2110EX contains RS485 communication as standard (ASCII & Modbus RTU) and an option for two digital output circuits (High & High-High) for use with the DLS2100 with High-Level Shut-In option.

Explosion Proof Housing with Analog Output

The 2110EX-A Explosion Proof Housing with Analog Output sources the 4-20mA current on two outputs for the DLS 2100 level sensor. Output 1 sources the current for top level and output 2 is selectable to source the current for bottom level or temperature. The 2110EX-A includes point-to-point HART communications with selectable output communications. The 2110EX-A is not compatible with level sensors that include the High-Level Shut-In option.



Polarized plug-in cage clamp for ease of connect/disconnect from the sensor



Stainless Steel Model 2100 DLS



Fiberglass Model 2100 DLS



RU Flex 2100 DLS (uncoiled)

Specifications

Explosion Proof Housing With Digital Output	
Supply Voltage Model 2110EX-12 Voltage Model 2110EX-24 Max. Input Current Current Consumption	10-12VDC 22-24VDC 50mA 40mA
Communication Lines Voltage Max. Input Current	5VDC nom. - 6VDC max. 50mA
Dry Contact Circuit Voltage Model 2110EX-12 Voltage Model 2110EX-24 Max. Input Current Minimum internal "ON" resistance	10-12VDC 22-24VDC 50mA 65.5Ω
Conduit Connection Size	¾" FNPT
Operating Temperature Storage Temperature	-40 to 70°C -40 to 85°C
Atmospheric Pressure	1 atm
Oxygen Concentration	not greater than 21%
Mounting:	
-Weight	1.8kg / 4lbs
-Connection	WAGO polarized plug-in disconnect/connect cage clamp
-Location	Class I Div 1 Group D Temperature code T4
-Enclosure Dimensions	4.2x5.7x5" (HxLxW)
Approvals: UL1203, Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations UL61010-1, Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use CSA C22.2 No. 30, Explosion-proof enclosures for use in Class I hazardous locations CSA C22.2 No. 61010-1, Safety requirements for electrical equipment for measurement, control, and laboratory use UL 91, Standard for Intrinsically Safe Apparatus and Associated Apparatus for Hazard (Classified) Locations UL 60079-11 (Intrinsic Safety "i" Zones 0 and 1) CSA C22.2 No. 60079-0, Explosive atmospheres - Part 0: Equipment - General requirements CSA C22.2 No. 60079-11, Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"	

Explosion Proof Housing with Analog Output & HART	
Supply Voltage Model 2110EX-A Max. Input Current Current Consumption	12-24VDC 200mA 80mA max.
HART Communications	Point to point Jumper selectable output: <ul style="list-style-type: none"> • TX on Output 1 • TX on Output 2 • RX on Output 1 • RX on Output 2
Communication Lines Voltage Max. Output Current Normal Operation Range	5VDC nom. / 24VDC max. 50mA - fuse limited 0 to 20mA
Update Rate	1 second maximum
Conduit Connection Size	¾" FNPT
Operating Temperature Storage Temperature	-40 to 70°C -40 to 85°C
Atmospheric Pressure	1 atm
Oxygen Concentration	not greater than 21%
Mounting:	
-Weight	1.8kg / 4lbs
-Connection	WAGO polarized plug-in disconnect/connect cage clamp
-Location	Class I Div 1 Group D Temperature code T4
-Enclosure Dimensions	4.2x5.7x5" (HxLxW)
Approvals: UL1203, Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations UL61010-1, Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use CSA C22.2 No. 30, Explosion-proof enclosures for use in Class I hazardous locations CSA C22.2 No. 61010-1, Safety requirements for electrical equipment for measurement, control, and laboratory use UL 91, Standard for Intrinsically Safe Apparatus and Associated Apparatus for Hazard (Classified) Locations UL 60079-11 (Intrinsic Safety "i" Zones 0 and 1) CSA C22.2 No. 60079-0, Explosive atmospheres - Part 0: Equipment - General requirements CSA C22.2 No. 60079-11, Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"	

Models

Digital:

2110EX-12 - Digital Explosion Proof Housing 12V
 2110EX-24 - Digital Explosion Proof Housing 24V
 2110EX-12H - Digital Explosion Proof Housing 12V with HLS
 2110EX-24H - Digital Explosion Proof Housing 24V with HLS

Analog:

2110EX-A - Analog Explosion Proof Housing 12-24V with HART Communications