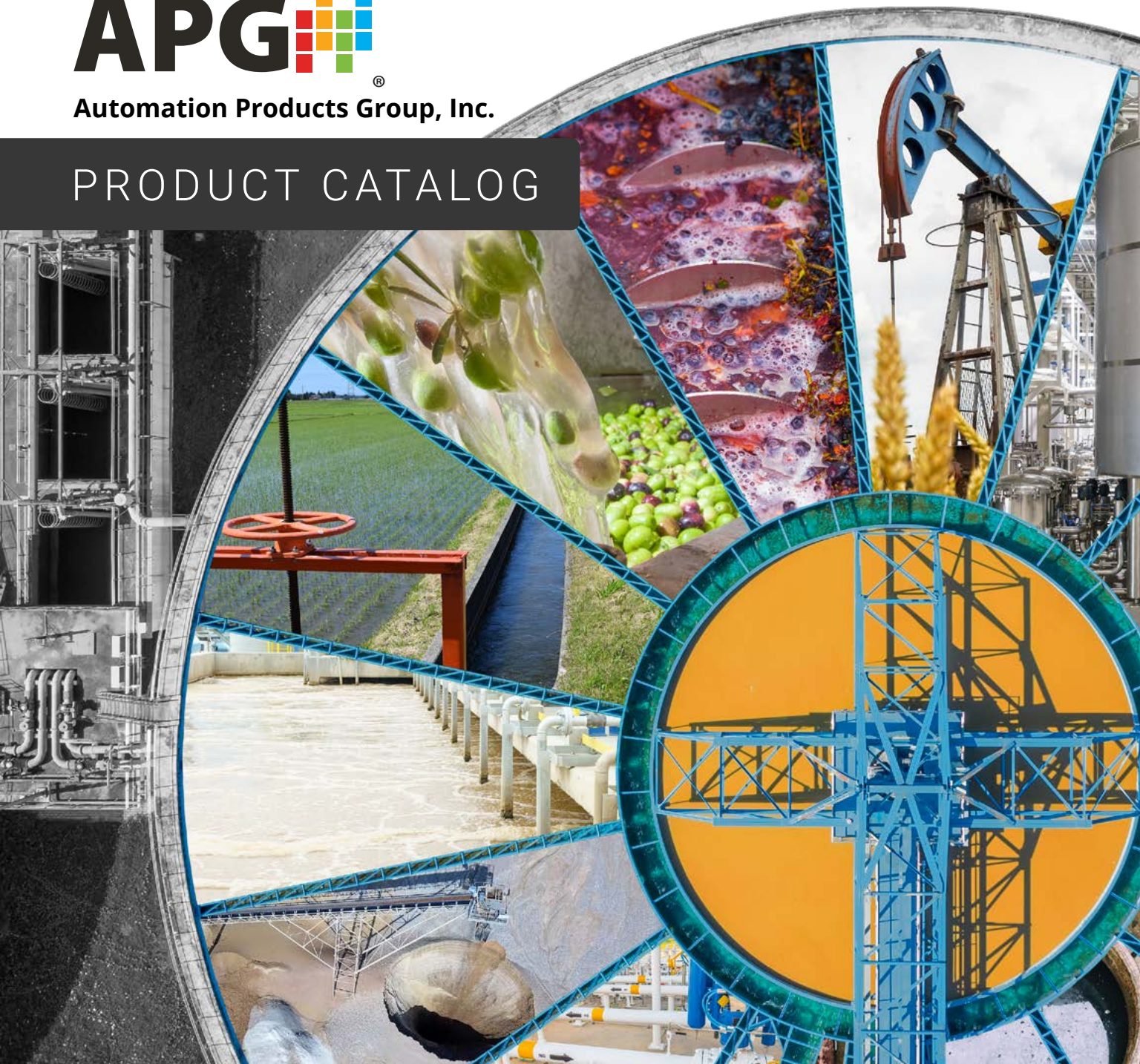
APG®

Automation Products Group, Inc.

PRODUCT CATALOG



ABOUT APG

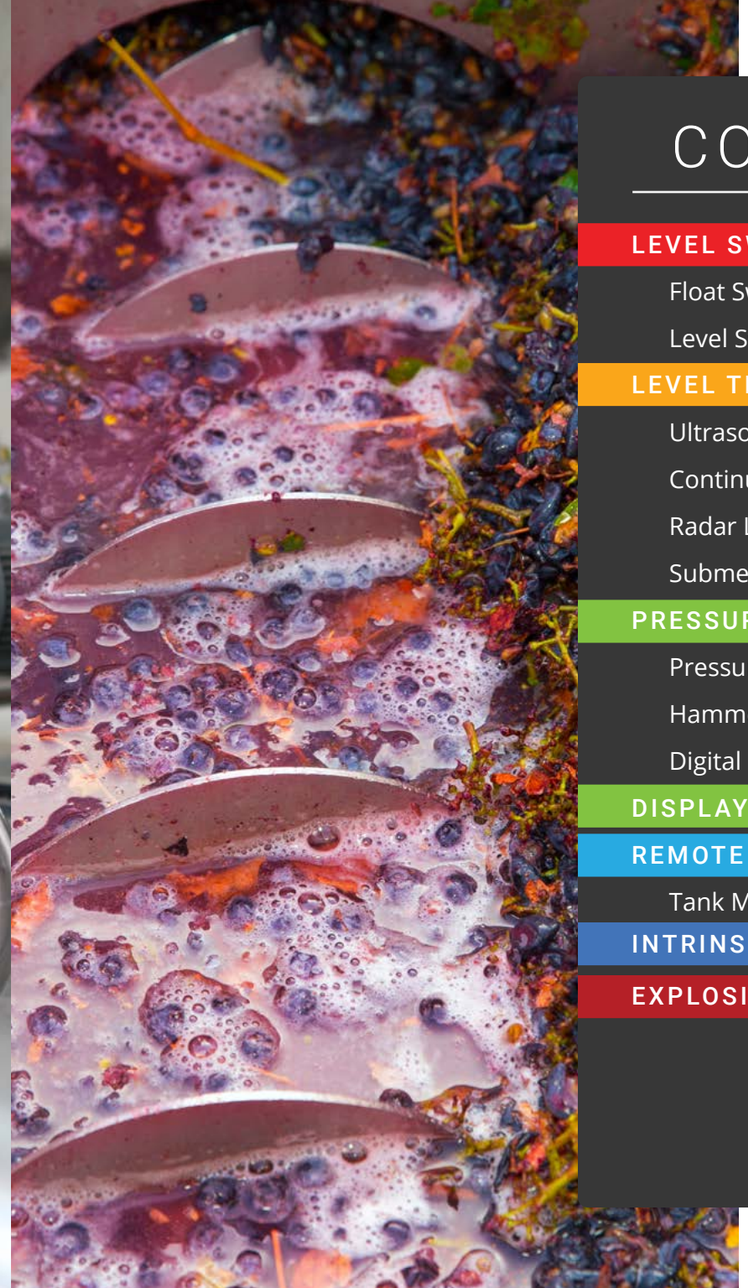
At APG, our primary goal is to enrich lives by providing reliable solutions and products to our customers. We are dedicated to designing and manufacturing innovative level and pressure sensors to match your application needs. As part of that dedication, we recently released the MPXI-F/B and the MPXI-F/K, two new products that add flexiblity to our long-lasting and dependable MPX probe series.

APG has specialized in matching application needs with the right sensing technologies since the early '70s. Our sensors are used in applications across a variety of industries including:

- Water / Wastewater
- Food / Beverage
- Chemical / Petrochemical
- Mining / Minerals
- Medical / Pharmacy
- Aerospace / Military
- Oil / Gas
- Car Wash
- Agriculture

As an ISO 9001:2015 certified manufacturer, quality is a commitment we make to our customers at APG. We firmly believe that we cannot succeed if our customers do not succeed. So, what pressure or level measurement and control problems can we help you solve?

Our Measurement Experts are available via phone, email, or web-chat Monday through Friday, from 7 AM to 5 PM Mountain Time, and our online store at store.apgsensors.com is available 24 hours a day. If you prefer, you can fill out the Contact Us form on our website, or find us on LinkedIn, Facebook, Twitter, YouTube, and Instagram.



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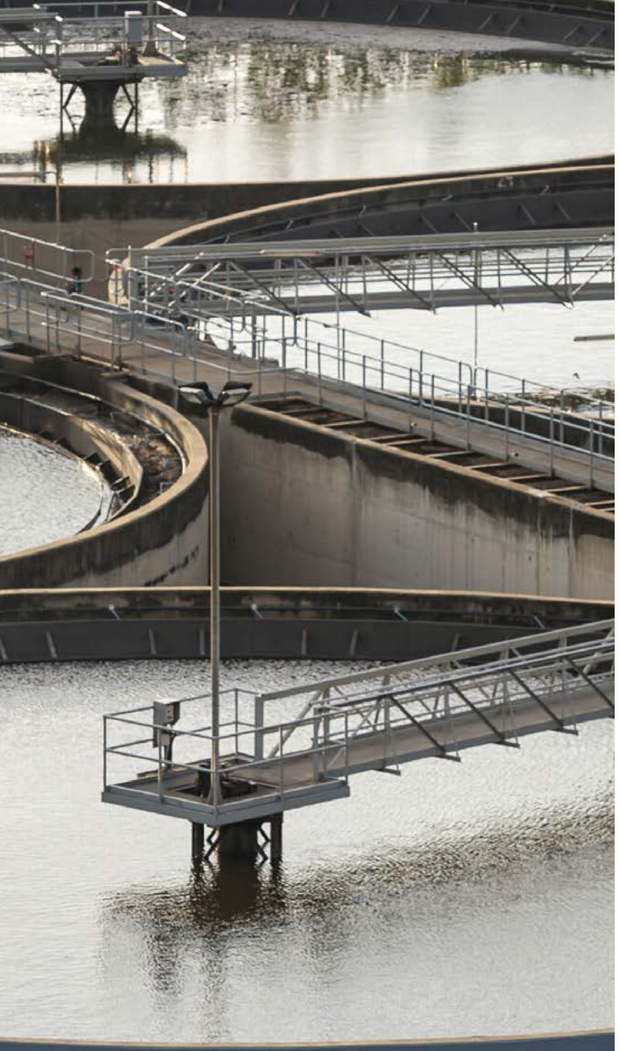
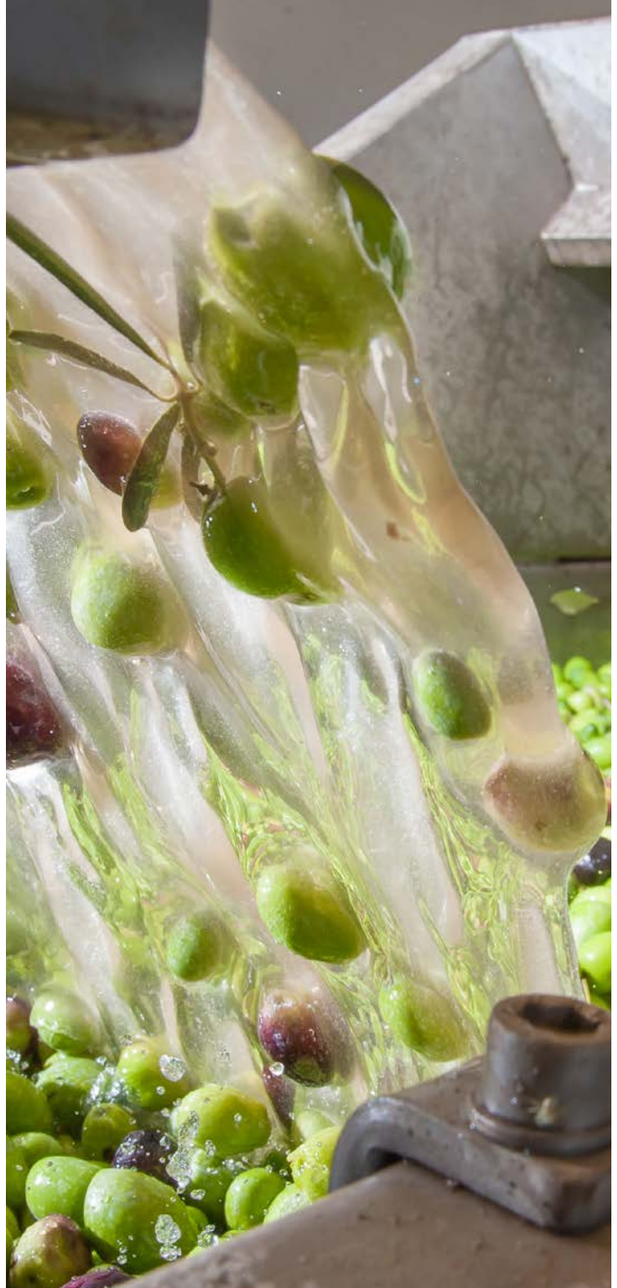




LEVEL SWITCHES

APG's level switches are contact level sensors used for point-level measurements of liquids and fluidized solids. They are also used for level indication, such as controlling pumps and alarms when a specific element must be maintained. APG's level switches come in a variety of options, from singular float switches to multi-point level switches, and can be used in a variety of places, from small, tight corners to larger silo spaces. Their durability is unmatched, making them a reliable choice for your needs.

LIQUID LEVEL SOLUTIONS

- Float Switches
- Stem-Mounted Float Switches
- Cable Float Switches
- Pneumatic Level Switch

SOLID LEVEL SOLUTIONS

- Paddle Wheel Switch
- Vibrating Level Switch

COMMON APPLICATIONS

- Pump Control
- Alarm Configuration
- Tank Level
- Solids Processing/Handling
- Water and Wastewater
- Food and Beverage
- Agriculture

FLOAT SWITCHES

WHERE THEY WORK

An APG float switch can be found for almost every situation because of the variety of materials, arrangements, and capabilities they have. Whether complicated or straight-forward, small vessels or large reservoirs, common liquids or really aggressive chemicals, there is an APG float switch fit for the job.

FS-500 XP

Stainless Steel Horizontal Float Switch

With reversible switch orientation, three mounting choices, and CSA & NSF 169 certifications, the FS-500 switch is the go-anywhere, use-everywhere horizontal float switch.

FS-400 XP

Vertical Stainless Steel Float Switch

All stainless steel wetted materials, operating temperatures up to 500º F, and capable of VDC or VAC operation.

FS-410 XP

Miniature Vertical Float Switch

Designed to measure small spaces, the FS-410 is less than 2.35" in total height and the float is just under 1.2" wide.

	FS-400	FS-410	FS-500
Material	316L SS		
Max Power	100 W		
Temp. Range	-40° F up to 500° F		
Specific Gravity	0.6	0.7	
Certifications	CSA Explosion-proof to 368°F; General Use to 500°F; All Models NSF 169		

Cable-Suspended Float Switches

KA

Single Float Switch

A single Kari float allows up to four switch points in a single float, saving you money by replacing four single-level float switches. The sensors are durable, highly chemical compatible, and come in 25 configurations, most with built-in hysteresis.

Stem-Mounted Float Switches

FLE/R

Custom Multi-Point Level Control

The FL series delivers linear level measurement in tight spaces, with a single mount holding up to three (FLE) or seven (FLR) switch points customized to your needs. The FLE's 5/16-inch diameter stem makes it perfect for small tanks and totes, while the FLR's 1/2-inch diameter stem operates well in larger tanks and barrels.

FLX XP

Explosion-Proof Point-Level Control

The FLX is THE float switch for use in Class I Division 1 or 2 hazardous locations in North America. Up to seven switch points can be placed along the stem, wherever you need them, making each FLX uniquely customized to its intended application.

FT-100/300

Single-Point Float Switch

This inexpensive, traditional single-point switch is ideal for simple alarming applications. The sensors trigger immediately above or below horizontal, for a highly repeatable performance that you can count on.

TLS

Dual-Point Float Switch with Hysteresis

The TLS series cable switches are dual-point switches with built-in hysteresis to provide high- and low-level control that won't wear out your pumps with frequent on/off cycles.

	FLE	FLR	FLX
Max. Stem Length	Up to 48 in	153 in	
Switch Points	Up to 3	Up to 7	
Wetted Material	316L SS		
Certification	NEMA 4X, IP68; IP65	—	Flameproof/Explosion-proof - CSA

	KA Series	FT-100	FT-300	TLS
Cable Length	16 ft, 49 ft, custom	20 ft, custom 5 ft increments		20 ft, 40 ft, 60 ft
Switch Point(s)	up to 4 NO/NC	1 NO/NC; 1 SPTD	1 NO/NC	NO/NC
Control Range	Variable	N/A	N/A	6 to 8 in
Certification	General Purpose - CSA			—

LF

Miniature Float Switches

These small float switches offer multiple form factors and functionalities to fit wherever needed inside a system. Their compact size is perfect for a variety of OEM applications.

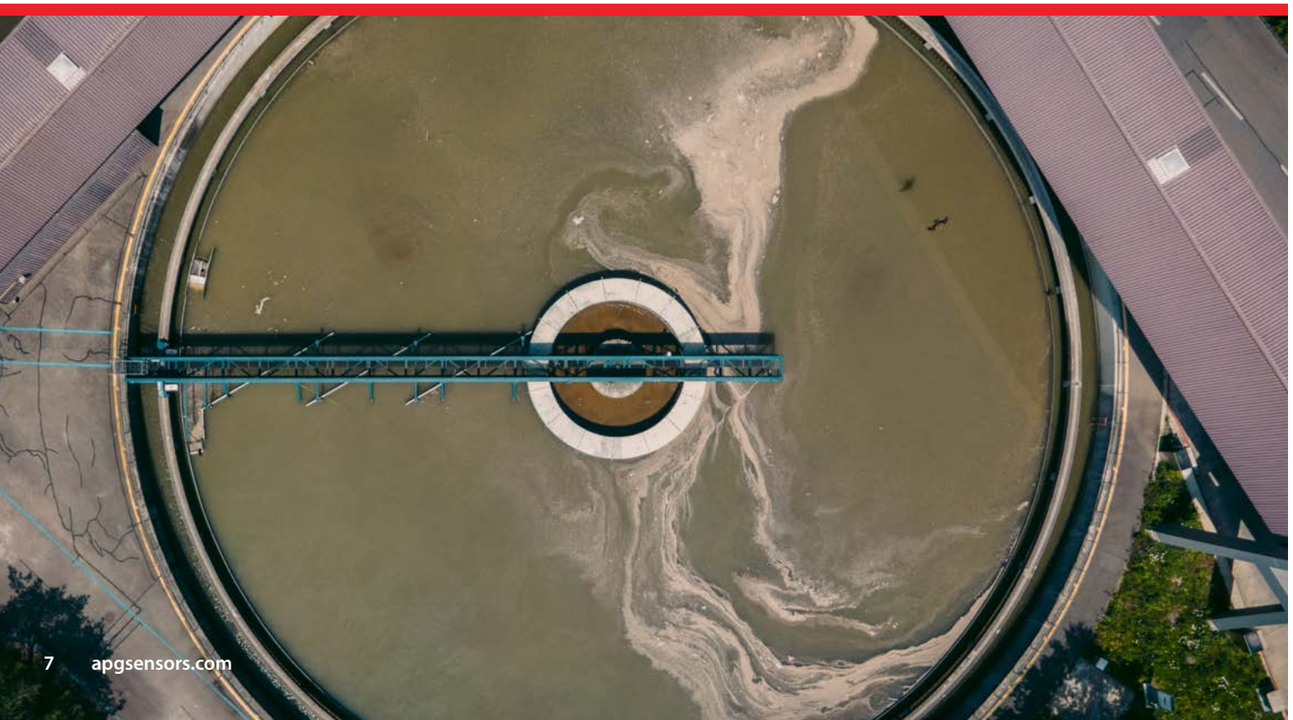
	LF
Switch Point	1 NO/NC
Wiring	2 conductor lead wire
Materials	Polypropylene, Buna, PVDF, 316L SS, 3014 SS, 6-Nylon
Max. Operating Temperature	Varies per model from 175° to 392° F

MLS

Mechanical Float Switch

Tailor this float switch to your needs in the field with adjustable switch point and hysteresis.

	MLS
Switch Point	1 NO/NC Adjustable Switch Point, Adjustable Mechanical Hysteresis
Min. Specific Gravity	0.85
Operating Temperature	32° to 176° F
Enclosure Protection	IP42, NEMA 1



LEVEL SWITCHES

NLS

Pneumatic Level Switch

Viscous liquids can stop a float switch in its tracks. NLS pneumatic point-level sensors have no wetted moving parts--only a flexing diaphragm safely tucked inside the housing--so they provide long-lasting and reliable performance in your stickiest situations.

	NLS
Operation	1 SPDT Switch
Detection Range	8 to 200 in.
Operating Temperature	-4 - 158° F
Enclosure Protection	IP42/NEMA 4

PWS

Mini Level Paddle Wheel Switch

With a paddle diameter of 3.15" and blade depths between 1.2 and 1.5", the PWS Mini Level Paddle Wheel switch is perfect for providing level-based on-off signals in small bins, hoppers, and any other small- to medium-grain piling solids.

	PWS
Operation	1 SPDT Switch
Detection Range	8 to 200 in.
Adjustable Torque Setting	390 to 630 g/cm
Enclosure Protection	IP40

VBL

Vibrating Rod Level Switch

The VBL allows you to adjust the sensitivity setting to accurately detect the presence of different types of solids, and for silos and bins of many shapes and sizes.

	VBL
Operation	1 SPDT switch
Power Consumption	≤ 15 VA
Sensitivity Adjustments	High: small particles; Low: large particles
Enclosure Protection	IP65, NEMA 4

LEVEL TRANSMITTERS

APG offers both contact and non-contact level transmitters that provide continuous level measurements. APG manufactures level transmitters that can be used to determine the level of both liquids and bulk solids at any given time. Many of the level transmitters can additionally be used for point-level detection.

LIQUID LEVEL SOLUTIONS

- Ultrasonic Level Sensors
- Magnetostrictive Liquid Level Probes
- Resistive Liquid Level Sensors
- Radar Level Transmitters
- Submersible Pressure Transducers

SOLID LEVEL SOLUTIONS

- Ultrasonic Level Sensors
- Radar Level Transmitters

OBJECT DETECTION

- Ultrasonic Level Sensors

COMMON APPLICATIONS

- Tank Level
- Open Channel Flow
- Water and Wastewater
- Food and Beverage
- Agriculture
- Minerals and Mining
- Chemical / Petrochemical
- Solids Processing / Handling

ULTRASONIC LEVEL SENSORS

WHERE THEY WORK

Ultrasonic sensors are our workhorse level sensors because they perform well in so many places and environments. Ultrasonics are great for almost all tank-level measurement applications, open channel flow calculations, and monitoring reservoirs, retention ponds, or dam tail-waters. They do well for object detection/profiling in car wash systems, and can be programmed to provide distance, level, or volume output readings.

MNU IS IS

Intrinsically Safe Modbus Sensor

Our MNU IS brings worry-free level monitoring and remote Modbus controls to hazardous locations with its intrinsically safe design.

MNU

Web-Enabled Modbus Sensor

Built for any situation that requires Modbus, the MNU is compatible with any Modbus controller, and can be monitored online via Tank Cloud.

LOE

Web-Enabled Sensor and Controller

Designed for remote measurement, the LOE series connects to the internet to provide online monitoring via Tank Cloud for up to 10 APG Modbus sensors.

	MNU	MNU IS	LOE
Range	4 in to 40 ft		
Output	Modbus RS-485		Modbus TCP/IP
Mount	1, 2, or 3 in NPT	2 in NPT	2 or 3 in NPT
Certification	—	Intrinsically Safe - CSA, IECEx, ATEX	C1D2 - CSA

LPU-2127

Built-In Keypad and Display

The LPU-2127 features an LCD display for easy programming performed entirely through the built-in keypad.

LPU-2428 IS

Intrinsically Safe, Loop-Powered

Made for highly configurable measurement in linear and non-linear tanks and channels, the LPU-2428 can internally calculate distance, level, open-channel flow, or volume.

IRU-2000

For Object Detection

The IRU-2000 mounts to a flat surface and is ideal for presence/absence detection, object profiling, and a variety of other applications.

IRU-2420, -3400, -5000

Mid-, Long-, and Short-Range Sensors

Designed with flexibility in mind, these series feature auto-sense software for quick, easy programming in a variety of applications.

IRU-6429

Datalogger Compatible

The IRU-6429 features auto-sense software for quick and easy programming, and an excitation input for datalogging.

IRU-9400

For Soft or Reflective Target Surfaces

The IRU-9400 is an indoor sensor with a more sensitive transducer to detect difficult targets such as reflective or soft surfaces.

LPU-2127	LPU-2428	IRU-2000	IRU-2420	IRU-3400	IRU-5000	IRU-6429	IRU-9400
1 to 25 ft		1 to 25 ft		1.5 to 50 ft	4 to 79 in	1 to 30 ft	0.5 to 35 ft
4-20 mA		1 SSR; Isolated 4-20 mA; RS-485 w/ 1 NPN trip point; 4-20mA w/ 2 NPN trip points	Isolated 4-20 mA, 4-20 mA w/ 2 NPN Trip Points		4-20 mA +/- 2 NPN trips; 0-2.5V, 0-5V +/- RS-232	0-2.5V, 0-5V +/- RS-232	4-20 mA +/- 2 NPN trips; 0-2.5V, 0-5V +/- RS-232
2 in NPT		Surface Mount w/ 4 screws	2 in NPT	3 in NPT	1 or 2 in NPT	2 in NPT	
C1D2 - CSA	Intrinsically Safe - CSA	—	C1D2 - CSA; General Purpose - CSA			General Purpose - CSA	

CONTINUOUS FLOAT LEVEL PROBES

WHY IT WORKS: MPXI-F

The MPXI-F works because of the unique Class I, Zone 0/1 rating which allows for an Explosion Proof connection to a Zone 1-installed housing on top of a Zone 0-installed probe stem.

MPXI-F/K XP

PVDF (Kynar) Flexible Stem

The MPXI-F/K features a proprietary PVDF-blend flexible stem and optional high-level float switch for simple installation in the tallest of tall tanks.

MPXI-F/B XP

Stainless Steel Flexible Stem

The MPXI-F/B features a 316L SS flexible tubing braided stem that uncoils easily for simple installation in tall tanks.

MPXI-F/K MPXI-F/B

	MPXI-F/K	MPXI-F/B
Max Length	50 ft	32 ft
Stem	5/8" ø Flexible Tubing, PVDF	7/8" ø Flexible Tubing with Braid, 316L SS
Output	RS-485 Modbus; 4-20 mA	
Temperature Sensor	None; Up to 7 Digital; Digital, per API 18.2 spec	
Mount	NPT; No Mount	
Certification	Flameproof/Explosion-proof - CSA, ATEX, IECEx	

WHY IT WORKS: MPX

Our original magnetostrictive probes carry Class I Division 1 / Class I Zone 1 Flameproof (Explosion-proof) certifications for installation in hazardous areas throughout North America.

MPX-E XP

Float Level Transmitter for Small Spaces

With a 0.5"-diameter 316L SS stem that comes in lengths up to 12.75', the MPX-E is built to handle tough environments in small spaces.

MPX-T XP

Titanium Float Level Transmitter

Designed with H2S specifically in mind, the MPX-T's 1"-diameter titanium 2 stem can handle agressive chemicals that other probes cannot.

MPX-E Chemical XP

XP Float Level Transmitter For Harsh Environments

An anti-corrosion stem coating, a chemically-resistant float, and Explosion-proof ratings allow the MPX-E Chemical to handle big-time nasty chemicals in small-scale containers and transport settings.

MPX-R API 18.2 XP

API 18.2 Custody Transfer Level Probes

The MPX-R API 18.2 offers a 1"-diameter, stainless steel stem. Comes with required digital temperature sensors and feature large, robust floats that resist fouling.

MPX-R XP

Explosion-Proof Float Level Transmitter

The MPX-R's 1"-diameter 316L SS stem and 31.5' max length allow it to bring precision measurement to bigger tanks and thicker liquids.

MPX-T API 18.2 XP

API 18.2 Custody Transfer Level Probes

The MPX-T API 18.2 uses a 1"-diameter titanium stem for a larger range of chemical compatibility. Comes with required digital temperature sensors and feature large, robust floats that resist fouling.

	MPX-E	MPX-E Chemical	MPX-R	MPX-T	MPX-R API 18.2	MPX-T API 18.2
Max Length	12.75 ft		31.5 ft	25 ft	31.5 ft	25 ft
Stem	1/2" ø 316L SS	1/2" ø 316L SS with coating	1.0" ø 316L SS	1.0" ø Titanium 2	1.0" ø 316L SS	1.0" ø Titanium 2
Output	RS-485 Modbus; 4-20 mA				RS-485 Modbus	
Temperature Sensor	None; Stem RTD				Digital, per API 18.2 Spec	
Mount	NPT; No Mount	NPT	NPT; No Mount			
Certification	Flameproof/Explosion-proof - CSA					

WHY IT WORKS: MPI

Our MPI probes carry Class I Division 1 / Class I Zone 0 Intrinsically Safe certifications that are accepted for easy wiring and quick installation nearly world-wide.

MPI-E IS

IS Float Level Transmitter For Small Tanks

With a 0.5"-diameter 316L SS stem that comes in lengths up to 12.75', the MPI-E is built to handle tough environments in small spaces.

MPI-T IS

IS Titanium Float Level Transmitter

With a 1" ø titanium stem, Class I Div 1 and Class I Zone 0 approvals, and floats that just don't get stuck, the MPI-T is built to conquer corrosive chemicals and hazardous locations.

MPI-R IS

IS Float Level Transmitter For Large Tanks

The MPI-R's 1"-diameter 316L SS stem and 31.5' max length allow it to bring precision measurement to bigger tanks and thicker liquids.

MPI-E Chemical IS

IS Float Level Transmitter For Harsh Environments

With a coating to keep the probe safe in corrosive liquids, and Intrinsic Safety ratings, the MPI-E Chemical is perfect for small-scale measurements in big-time nasty environments.

MPI-F/B IS

IS Flexible Float Level Transmitter

The MPI-F features a 316L SS flexible tubing braided stem that uncoils easily for simple installation in tall tanks.

MPI-F/K IS

IS Flexible Float For Very Tall Tanks

The MPI-F/K features a proprietary PVDF-blend flexible stem for easy installation and wiring in the tallest of tall tanks.

	MPI-R	MPI-T	MPI-E	MPI-E Chemical	MPI-F/B	MPI-F/K
Max Length	31.5	25 ft	12.75 ft		32 ft	50 ft
Stem	1.0" ø 316L SS	1.0" ø Titanium	1/2" ø 316L SS	1/2" ø 316L SS with chemical resistant coating	7/8" ø Flexible Tubing with Braid, 316L SS	5/8" ø Flexible with Tubing, PVDF
Output	RS-485 Modbus				RS-485 Modbus; 4-20 mA	
Temperature Sensor	None; Up to 7 Digital					
Mount	NPT; No Mount			NPT	NPT; No Mount	
Certification	Intrinsically Safe - CSA, ATEX, IECEx					

HOW THEY WORK: RESISTIVE CHAIN PROBES

Our RP probes are designed around two technologies that excel in the ultra-tough environments of oil and gas exploration: resistive chains and large, buoyant floats. Inside each probe stem is a chain of resistors linked by reed switches, which are opened and closed by the magnet in the float traveling up and down the stem. No amount of physical shaking or bumping can change the state of a resistor, and the floats are designed to provide unimpeded movement in thick, viscous liquids.

RPE

1/2" Stem - Industrial Strength Level Probe

Designed with small spaces in mind, the RPE combines a 1/2"-diameter stainless steel stem with unsinkable floats for long-lasting, dependable continuous level readings.

RPX XP IS

1/2" Stem - Hazardous Location Level Probe

From mud tanks to meat-processing-plant waste sumps, and any hazardous location in between, the RPX doesn't flinch when called to action in challenging environments.

RPM XP IS

1.25" Stem - Explosion-Proof Liquid Level Probe

The RPM is made to work for you and is completely customizable for your needs including: probe length, float type, specific gravity and outputs.

	RPE	RPX	RPM
Max Length	12.75 ft	6 ft	20 ft
Stem	1/2" ø 316L SS		1.25" ø 316L SS
Output	Resistive; 4-20 mA		
Mount	NPT	NPT; No Mount	
Certification	—	Explosion-proof / Intrinsically Safe - CSA	Explosion-proof - CSA; Intrinsically Safe - CSA, ATEX, IECEx

RADAR LEVEL TRANSMITTERS

WHY THEY WORK

Instead of the physical sound waves used by ultrasonic sensors, radar sensors use electromagnetic waves to measure the distance between the transmitter and the surface of a substance. Thus, they are ideal for measuring difficult materials where there is foam, vapor, or dust that interferes with other noncontact-technology sensors. True Echo™ Radar Level Transmitters have a further advantage in their ability to ignore echoes from identified physical interferences, allowing them to generate a much clearer reading at a much lower power setting.

PRS

Dual-Frequency Radar for Solids

The True Echo™ PRS provides accurate level readings of difficult to measure solids: powders, pellets, grains, and granules.

PRL

Pulse Radar for Liquids

The True Echo™ PRL provides accurate level readings from all types of liquid level measurement, including oil-water interface measurement via additional firmware.

PRX XP

Explosion-Proof

True Echo™ PRX makes getting dependable level readings in Class I, Division 1, and Class II/III, Division 1 hazardous locations simple.

	PRS	PRL	PRX
Range	1-17 ft, 1 -50 ft, 1-100 ft		
Output	2- and 3-wire 4-20 mA and Hart		
Enclosure Protection	IP68, NEMA 6		

SUBMERSIBLE PRESSURE TRANSDUCERS

WHERE THEY WORK

APG's submersible pressure transducers are incredibly versatile, often used in waste liquids. Their low current draw makes them popular for battery-powered applications. With our pressure transducers, you can get a pressure level reading inside a tank, well, containment vessel, or outside in areas prone to running or standing liquids.

APG's PT-500 Series Submersible Pressure Transducers are the only transducers on the market with built-in lightning transience protection, Class 1, Division 1 certification, and field-adjustable zero. The PT-500 Series is Tank Cloud compatible for remote monitoring via the internet.

PT-500-P1

PT-500-P38/39

PT-500-P1 IS

For Clean Liquids

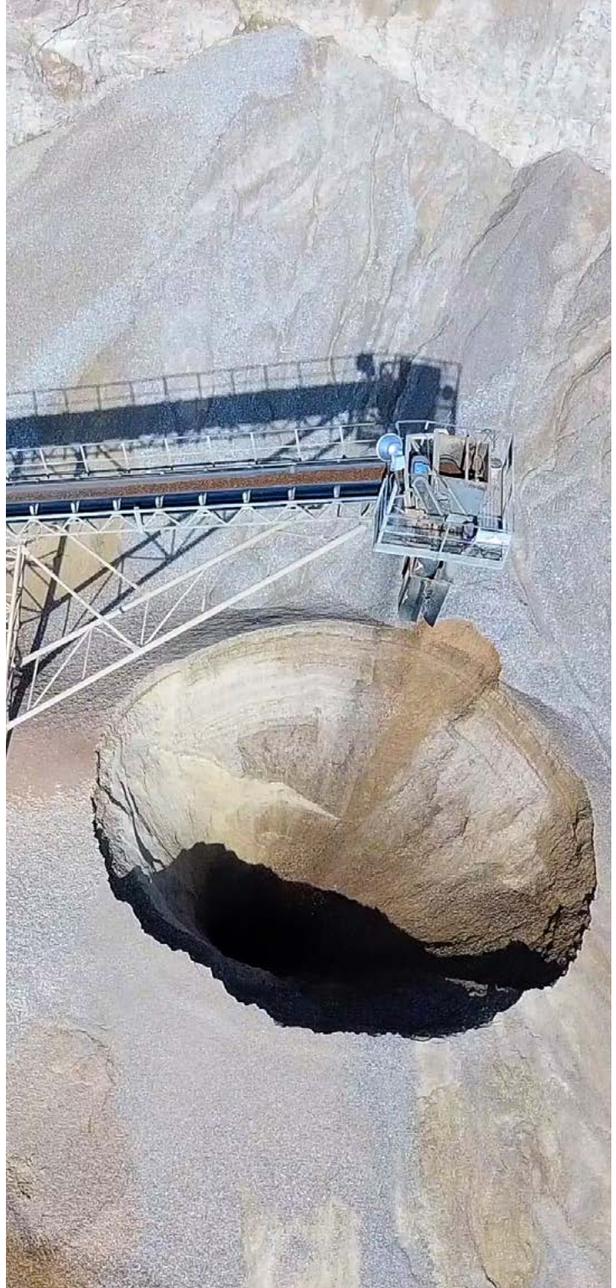
The PT- 500-P1 has a nose cone fitting and is designed for use in clean liquids.

PT-500-P38/39 IS

For Mixed Fluids

The patented, welded cage on the PT-500-P38 and -P39 is designed to protect the sensitive diaphragm in turbulent and dirty liquids. The cage is either removable and reusable, or permanently welded to the PT-500.

	PT-500-P1	PT-500-P38/39
Output	4-20 mA, Modbus RS-485	
Range	up to 575 ft	
Lightning Protection	Built-in, IEC 61000-4-5	
Body	316L SS	
Nose Cone	Delrin	—
Cage	—	316L SS
Certification	Intrinsically Safe - CSA (4-20 mA only)	



PRESSURE SENSORS

APG's pressure sensors use piezoresistive technology to accurately measure the pressure of both liquids and gases. Popular throughout the oil and gas industry, APG's pressure transducers are used in both process and storage environments. APG's digital pressure gauges serve as a vital safety tool to control pressure in any process that uses pressurized vessels or lines. With their accurate, easy-to-read design, they are one of the most valuable instruments you can have. Our hammer union pressure transducers are used across the globe for monitoring mud pressure during the drilling process, along with our PT-400 and PT-405 pressure transducers.

PRESSURE SENSORS

- Pressure Transducers
- Hammer Union Pressure Transducers
- Submersible Pressure Transducers
- Digital Pressure Gauges

COMMON APPLICATIONS

- Oil and Gas
- Tank Level
- Pump Control / Monitoring
- Filter and Control Valve Monitoring
- Hydraulic Weight / Force
- Chemical / Petrochemical
- Pharmacy
- Minerals and Mining
- Water and Wastewater
- Food and Beverage
- Agriculture
- Medical

PRESSURE TRANSDUCERS

WHERE THEY WORK

APG's Pressure Transducers are engineered and manufactured to provide accurate and reliable pressure measurements everywhere you need them. From protected pump houses to remote tank farms to exposed oil rigs, in commercial, industrial, or hazardous environments, you can depend on APG's high-precision pressure transducers.

PT-400 IS

For Harsh Conditions & Hazardous Locations

The PT-400 is built for harsh environments, high vibration, high-pressure spikes, and even extended temperature compensation.

PT-L1/L3/L10

Amplified Output for General Use

These compact, inexpensive pressure transducers have an amplified output and are great for a wide variety of uses, including OEM applications.

PT-405 XP

Explosion-Proof

The PT-405 pressure transducer offers high accuracy and reliability over a wide range of pressures with cCSAus approvals.

PT-L9/L13/L14

Millivolt Output for General Use

These inexpensive, super compact pressure transducers have a millivolt output and fit just about anywhere.

	PT-400	PT-405	PT-L1/L3/L10	PT-L9/L13/L14
Range	up to 30,000 psi		up to 10,000 psi	
Output	4-20 mA, 0-5 V, 0-10 V, RS-485		4-20 mA, 0-5 V, 0-10 V	mV/V
Accuracy	0.1 % of f.s.	0.25 % of f.s.	0.1 % of f.s.	
Enclosure Protection	—	IP65	—	
Temperature Range	-40 to 180 F			
Certification	Intrinsically Safe - CSA, ATEX, IECEx (4-20 mA only)	Explosion-proof - CSA	—	

HAMMER UNION PRESSURE TRANSDUCERS

WHERE THEY WORK

APG's Hammer Union Pressure Transducers are built for extreme pressure, intense vibration, and rough handling. Designed with a wider top for easy connector access, these sensors also feature large drain holes to keep water from collecting around the electronics.

HU-1502I IS

Intrinsically Safe, Sour Gas Compatible

Combining the toughness you need with a recalibration port, the HU-15021 is field-proven and features corrosion-resistant material alongside welded construction built from the ground up.

CAGED MODEL AVAILABLE

	HU-1502I
Range	up to 20,000 psi
Output	4-20 mA, 0-5 V
Accuracy	0.25 % of f.s.
Enclosure Protection	IP67/IP65, NACE
Temperature Range	-40 to 185° F
Certification	Intrinsically Safe - CSA, ATEX, IECEx (4-20 mA only)

DIGITAL PRESSURE GAUGES

WHERE THEY WORK

Monitoring pumps is critical, and gauges installed on or near pumps must be able to handle the associated vibrations. Dial pressure gauges are full of moving parts and small gears easily damaged by over-pressure and vibration, not to mention the reading errors inherent to a dial display. In contrast, each of APG's digital pressure gauges contain a flexible diaphragm as the sole moving part, so constant vibration hurts neither the gauge, nor the digital readout. Designed to withstand over-pressure, vibration, and even water hammer, our digital pressure gauges are accurate and readable in demanding conditions.

PG2

Low-Cost, Indoor/Outdoor Gauge

The PG2 digital gauge comes with auto-off and re-zeroing functions, user-selectable units of measure, and an easy-to read display.

PG5

Full-Feature Indoor Gauge

Serving as the foundation to our PG series of gauges, this full-feature, general purpose gauge is designed for accurate indoor pressure measurements.

PG7

Rugged Full-Feature Gauge

The PG7 is a rugged full-feature gauge perfect for indoor and outdoor use.

PG10

Large Display Gauge

The PG10 is our feature gauge with a large, 5-digit display, 270° radial bar, and datalogging.

	PG2	PG5	PG7	PG10
Range	up to 5,000 psi	up to 10,000 psi	up to 30,000 psi	up to 10,000 psi
Output	—	4-20 mA, 0-2 V, 0-5 V	4-20mA, 0-2 V, 0-5 V; Modbus RTU	
Accuracy	available 0.5 % of f.s.	available 0.1 % of f.s.		
Enclosure Protection	IP65	—		IP65

DISPLAYS AND CONTROLLERS

MND

Modbus Digital Display

Local display that works with up to 10 sensors as a server, client, or power source on any Modbus network.

DDD/DBD

Din Mounted Digital Display

Din Mounted Digital/Bright Displays provide highly configurable, 2-line displays with NEMA 4X / IP65 front facing ratings.

IS MDI

Intrinsically Safe Modbus Display

CI, Z1 display that can power and control a CI, Z0 or CI, Z1 sensor, with optional passive connection to external monitoring network.

DDL

Large Digital Display

The DDL features 1.8" digits readable from 100 ft with high intensity LED's for direct sun visibility, and a NEMA 4X / IP65 rated enclosure.

LPD

Loop-Powered Display

Local display designed to be inserted into a 4-20 mA sensor current loop.

DDX XP

Explosion-Proof Digital Display

Loop- and line-powered explosion-proof display encased in a cast aluminum, FM-rated housing.

RST-5003

Web-Enabled Controller

Connects up to 10 daisy-chained Modbus sensors and one 4-20 mA sensor to Tank Cloud for remote viewing and control.

	MDI	MND	LPD	RST-5003	DDD/DBD	DDL	DDX
Input	Modbus RTU	Modbus RTU	4-20 mA	Modbus, 4-20 mA, 0-2 Switches	4-20 mA, 0-10 V DC		
Output	Modbus RTU	4-20 mA; 0-3 V; 1 SPDT Relay; 2 NO or NC Relays	4-20 mA	Modbus, TCP/IP, 2 Relays, 0-2 Isolated SSR	0, 2, or 4 SPDT Relays; Isolated 4-20 mA		
Mount	Wall	Handheld, Panel, Wall		Din Rail		Panel, Wall	
Enclosure Protection	IP66	IP67	IP67/IP68	—	IP65		

REMOTE TANK MONITORING

CONTROLLERS

- LOE p.11
- RST-5003 p.24

SENSORS

- MNU p.11
- MNU IS p.11
- MPXI-F p.13
- MPX p.14
- MPI p.15
- PT-500 p.18
- PT-400 p.21
- PT-405 p.21
- PG7 p.23
- PG10 p.23

Tank Cloud

Allows you to view measurements from your sensors anywhere you have an internet connection.

1. Connect a Remote Sensor

Connect any 4-20 mA signal sensor or up to 10 daisy-chained APG Modbus sensors to a Tank Cloud controller.

2. Use the Internet Backbone

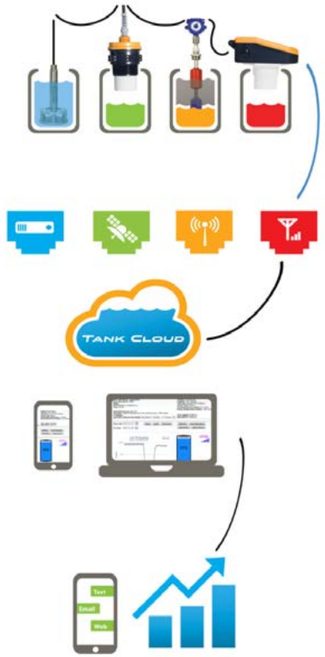
Connect the Tank Cloud controller to a pre-existing Internet connection via an Ethernet cable - landline, satellite, radio, or cellular.

3. View Measurements Online

Access sensor data online anytime through our secure Tank Cloud portal at levelandflow.com. Here you can see everything you need to know about your measurements and adjust the settings on your sensors.

4. Get Alerts and Long-Term Data

Become further connected to your measurements by programming custom alarms that can be received via email and text, and add datalogging for long-term decisions.



TANK MINDER

Remote Vendor Managed Inventory System (VMIS)

Tank Minder remote tank vendor management system provides real time tank inventory levels so you receive deliveries based on actual need. Tank Minder measures and transmits tank levels to a secure website, where you can view current and past level measurements, and set level-based delivery alerts.

View Remote Inventory

High-performance level sensors are installed on each tank to measure inventory level that is monitored by a local Modbus RTU - Modbus TCP/IP controller so level measurements can be viewed online.

Define Delivery Alerts

With level-based alerts, you are guaranteed to receive inventory deliveries when you need them without having excess or running out. Simply log on to the secure website and use past readings to determine the alert-levels you need to set for optimal business operations.

INTRINSICALLY SAFE

HOW THEY WORK IS

Our Intrinsically Safe (IS) sensors perform on such a low current and voltage level that flammable material cannot possibly be ignited. By limiting the energy available within the defined hazardous area, electrical equipment can operate safely even amid hazardous mixtures of gases, dust, and metals.

MPI Series

Intrinsically Safe Level Probes

The MPI Series brings you everything you already love about our magnetostrictive liquid level probe line now with an intrinsically safe rating.

MND IS

Intrinsically Safe Modbus Digital Display

Now you can get APG's MND local display with an intrinsically safe rating. The display works as a sensor's power source and display for a complete IS system.

MNU IS

Intrinsically Safe Modbus Sensor

With the mounting and range flexibility of the MNU, the MNU IS brings worry-free level monitoring and remote Modbus controls to hazardous locations.

INTRINSICALLY SAFE SENSORS

- MNU IS p.11
- LPU-2428 p.12
- MPI p.15
- RP p.16
- RPM p.16
- PT-500 p.18
- PT-400 p.21
- HU Series p.22

EXPLOSION-PROOF

HOW THEY WORK XP

The housing of our Explosion-Proof (XP) sensors is strong enough to contain an internal explosion without rupturing, preventing the explosion or flame inside the enclosure causing an explosion in the surrounding atmosphere outside the enclosure. This method is used where it's impossible to reduce the electrical circuit energy.

PRX

Explosion-Proof Radar Level Transmitter

True Echo™ PRX makes getting dependable level readings in Class I, Division 1, and Class II/III, Division 1 hazardous locations simple.

PT-405

Explosion-Proof Pressure Transducer

The PT-405 pressure transducer offers high accuracy and reliability over a wide range of pressures with cCSAus approvals.

DDX

Explosion-Proof Digital Display

Loop- and line-powered explosion-proof display encased in a cast aluminum, FM-rated housing.

EXPLOSION-PROOF SENSORS

- FS 400 p.5
- FS 410 p.5
- FS 500 p.5
- FLX p.6
- MPXI-F p.13
- MPX p.14
- RP p.16
- RPM p.16
- PRX p. 17
- PT-405 p.21

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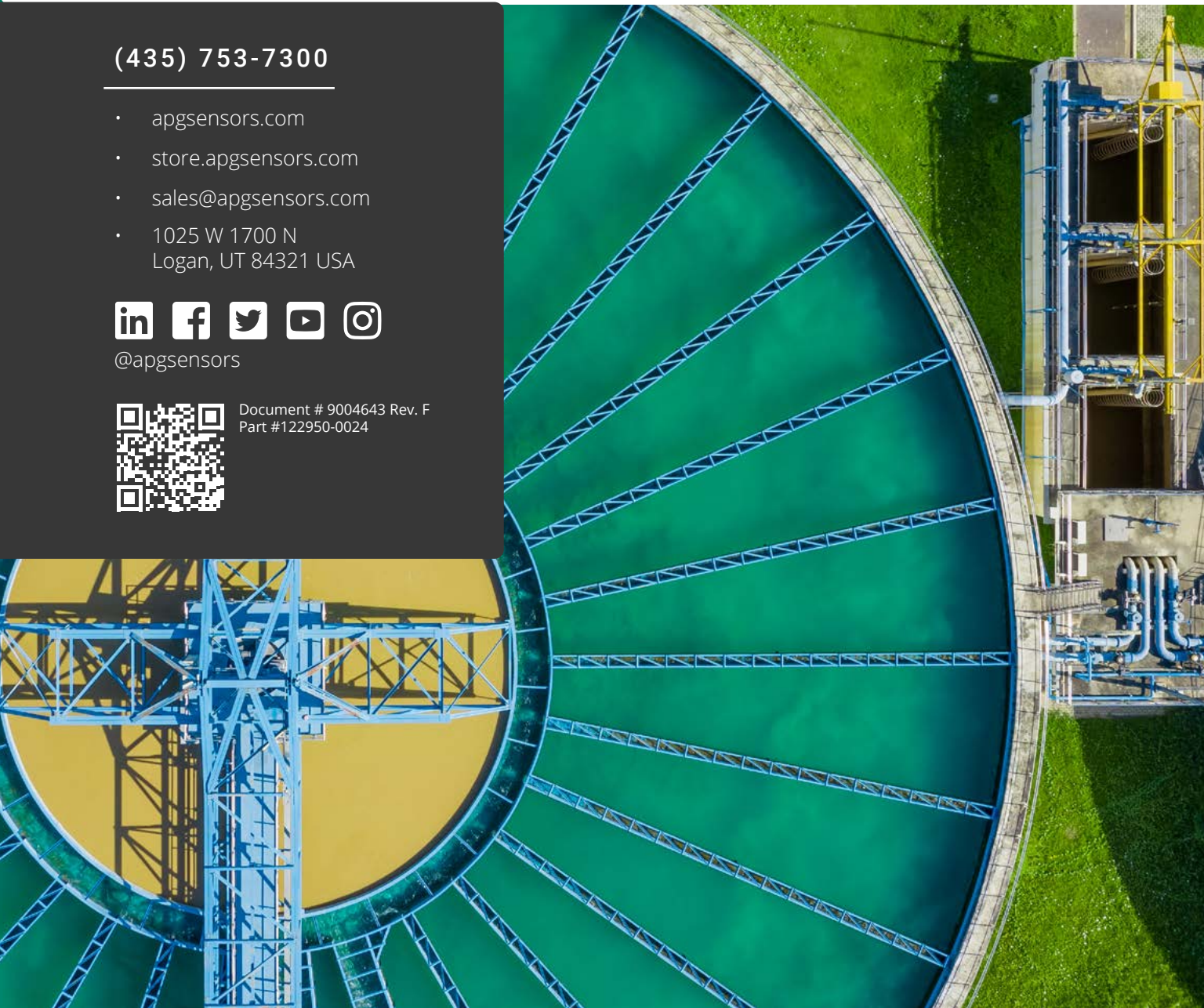
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