AV GATED®

Gated Area-Velocity flow measurement in a reliable, rugged, and affordable sensor, engineered by the most trusted name in wastewater flow monitoring!

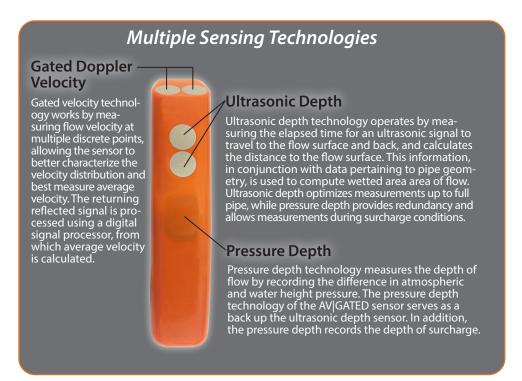
Wastewater flow measurement using the *Area-Velocity Method* requires knowledge of the average flow velocity. A variety of approaches have been developed over the years to measure average velocity, but gated velocity methods are traditionally recognized among the most accurate and reliable. Gated velocity sensors work by measuring flow velocity at multiple discrete points, allowing the sensor to better characterize the velocity distribution and best measure average velocity. The ADS® **AV|GATED** sensor combines proven depth measurement methods with state-of-the-art gated velocity measurement technology to provide *accurate* and *reliable*

Gated Velocity. The AV|GATED sensor brings gated velocity technology into everyday use, and measures average velocity through a wide range of flow conditions.

area-velocity sewer flow measurements.

Dual Depth. The **AV|GATED** sensor leverages dual depth technology. Ultrasonic depth optimizes measurements up to full pipe, while pressure depth provides redundancy and allows measurements during surcharge conditions.

Rugged Construction. Built with a rugged housing that is impact and abrasion-resistant and a contoured form factor that resists debris, the AV|GATED sensor is designed to operate in tough sewer environments.





Compatibility with the ADS TRITON+®

The **AV**|**GATED** sensor is designed to work exclusively with the ADS **TRITON**+ flow monitor. It is one of the latest offerings in the **TRITON**+ array of sensors.

The **TRITON+** is an intrinsically safe, "Fit-for-Purpose" open channel flow monitor for use in sanitary, combined, and storm sewers. It is designed to be the most versatile flow monitoring system available for wastewater collection applications. It supports single pipe or dual pipe flow measurement installations.



For more information, please visit the ADS website at www.adsenv.com/triton.

Applications

The **AV|GATED** sensor is designed for use in many flow monitoring applications, including:

- Infiltration/inflow programs
- Inter-agency billing networks
- Combined sewer overflow (CSO) monitoring
- Sanitary sewer overflow (SSO) monitoring
- Sewer capacity studies/trending
- Rehabilitation effectiveness monitoring
- Comprehensive sewer performance monitoring
- Sewer master plan studies



The AV|GATED sensor is built with a rugged Polycarbonate housing that is impact and abrasion-resistant and a contoured form factor that resists debris.

The sensor is designed to operate in harsh sewer environments.

AV|GATED Sensor Specifications

Housing

Solid molded polycarbonate providing high impact and high abrasion resistance

Color

High-visibility safety orange

Weight

2 pounds (0.91 kg)

Dimensions

Width: 1.49 in. (38 mm) **Height:** 0.83 in. (21 mm) **Length:** 7.12 in. (181 mm)

Temperatures

Operating: -4° to 140° F (-20° to 60° C) **Storage:** -4° to 167° F (-20° to 75° C)

*Note: This sensor will *not* produce accurate readings in frozen flow.

Sensor Cable

Standard Length: 35 ft. (10.7 m)

Extended Lengths: Extension cables available up to 300 ft (91.4 m)

Diameter: 0.28 in. (0.72 cm)

Cable Jacket Material: Polyurethane

Operating Range

Ultrasonic Depth: 1 in. to 72 in. (25.4 mm to 1828.8 mm)

Pressure Depth (standard): 0 to 10 PSI; 0 in. to 277 in. (0 to 7036 mm) **Gated Velocity:** ± 15 fps (4.60 m/s) in Bidirectional mode or ± 20 fps (6.10 m/s) in Forward and Backwards mode; minimum depth for velocity is 5 in. (127 mm); Gated Velocity may operate in shallower flows depending on site hydraulics

Accuracy

Ultrasonic Depth: ± 0.13 in. (3.2 mm) or $\pm 0.5\%$ of flow depth; whichever is

greater

Pressure Depth: ±1% of full range

Gated Velocity: ± 0.2 ft/s or $\pm 4\%$ of average flow velocity; whichever is greater

Resolution

Ultrasonic Depth: 0.01 in. (0.25 mm) **Pressure Depth:** 0.01 in. (0.25 mm)

Gated Velocity: 0.01 feet per second (0.003 m/sec)

Certifications

- Certified under the ATEX European Intrinsic Safety standards for Zone 0 rated
- Certified under IECEx (International Electrotechnical Commission) Intrinsic Safety Standards for use in Zone 0 rated hazardous areas (equivalent to Class I, Division 1, Groups C & D)
- CSA Certified to Class 225803 Process Control Equipment, Intrinsically Safe and Non-Incendive Systems – For Zone 0 Hazardous Locations, Ex ia IIB T3 (152° C) in Canada
- CSA Certified to Class 225883 Process Control Equipment, Intrinsically Safe and Non-Incendive Systems – For Class I Zone 0 Hazardous Locations, AEx ia IIB T3 (152° C) in the USA (equivalent to Class I, Division 1, Groups C & D)

Compatibility

ADS TRITON+ flow monitor

Mounting Method

ADS stainless steel mounting band/ring

Learn more at www.adsenv.com/avgated



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