PVT-1 | Pavement Snow & Ice Sensor

Features & Benefits

- Electronic Snow and Ice sensor for pavement installations
- Compatible with Frio S1-A-0002 Heat Trace Controller.
- Requires 24VAC power supply (SM-JB-1)
- Rust-proof, cylindrically shaped metallic design mounts in standard 4” diameter round junction box (included).
- Includes 33ft. 4-wire cable (can be extended up to 1000 ft. with 4-wire shielded cable, 18-AWG or larger)

Description

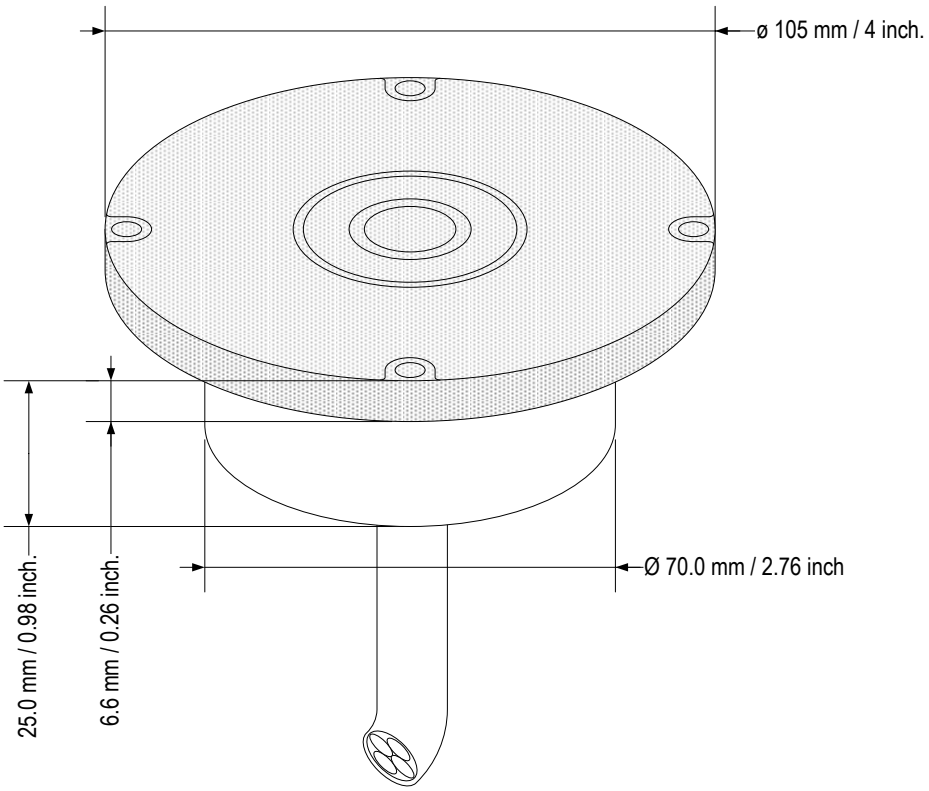
The PVT-1 is a reliable snow and ice sensor for pavement installations. Installed in the ground, it measures detects moisture, and sends a signal to the Frio S1-A controller. The PVT-1 requires an ambient temperature sensor, which can be either the Thermistor which is included with the S1-A or a user provided RTD. The S1-A uses the moisture signal from the PVT-1 in combination with the ambient temperature signal to activate the heating system.

The PVT-1 is connected to the Frio S1-A controller via a junction box (SM-JB-1) with a 30 feet (10 m.), 24V 4-wire cable (Up to (2) total PVT-1 sensors may be connected to a single SM-JB-1).

The rust-proof metallic cylinder shape design and heated sensing face help to assure reliable snow/ice detection by preventing snow from accumulating around the sensing area. The sensor is mounted via four screws to a standard PVC 4” diameter round junction box, allowing easy removal for service and maintenance.

The Frio S1-A system can work with up to (6) total PVT-1, GUT-1 or AER-1 snow sensors.

PVT-1 | Pavement Snow & Ice Sensor
Dimensions



Technical specifications

Enclosure Protection	IP65, Outdoor Mounting	**Supply**	24VAC±20%,50-60Hz
Entries	33 ft. (10 m) Four wires cable: 2x18AWG power supply wires 2x22AWG communication wires	**Communication**	RS485
		Operating Temperature	-40°F to 122°F (-40° C to 50°C)
Material	Metal Sensor: Stainless steel Junction Box: PVC	**Storage Temperature**	–50°F to 158°F (–40°C to 70°C)

The performance specifications are nominal and conform to acceptable industry standards. For applications in conditions beyond these specifications, consult Frio Controls or representative. Frio Controls shall not be liable for damages resulting from misapplication or misuse of its products.

This document is subject to change without any notice.

© Copyright 2025 Frio LLC All rights reserved.