

Fire Sprinkler Monitoring PRODUCTS



- Accessories
- Alarm Bells
- Waterflow Detectors
- Pressure Switches
- Supervisory Switches
- Explosion-Proof





ZONE 5
RACK SPRINKLER



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Fire Sprinkler Monitoring Products

During a fire condition, sprinkler system reliability is critical, whether it's the operation of a sprinkler head or the monitoring of the sprinkler system itself. System Sensor's line of waterflow detectors, pressure switches, and supervisory switches provide that reliability when monitoring waterflow, system pressure, and valve position within a fire sprinkler system.

Waterflow Monitoring

Waterflow detectors are available in a variety of configurations and accommodate 2" through 8" pipe for commercial riser applications, as well as 1" NPT and CPVC connections for residential or branch line signaling. The WFDN series detectors provide a mechanical time delay to help prevent false alarms due to water pressure surges or air trapped in the system. The time delay mechanism now includes an easy-to-rotate timer dial with high contrast pad printed markings to make setting the device easy. The terminal block is designed for easy wiring and the device cover is designed to be damage and shock resistant.

Pressure Monitoring

System Sensor's line of pressure switches includes the EPS10 series for use in wet, dry, deluge and pre-action automatic sprinkler systems to indicate a discharge from a sprinkler. The EPS40 and EPS120 series supervisory pressure switches are intended for dry pipe systems or pressure tanks and water supplies of automatic water control valves. These models offer a choice of initiating low or high/low pressure alarms, in a variety of pressure ranges.

Valve Monitoring

The nerve center of a fire sprinkler system is the valves that control the entire system. System Sensor offers a variety of choices for supervising system control valves. Regardless of valve type (outside screw and yoke, post indicator, butterfly, or non-rising stem gate valve), our OSY2, PIBV2, and PSP1 models provide you with the peace of mind that comes from knowing that your system's control valves are being monitored.

System Alarms

Completing the System Sensor line of sprinkler monitoring products are the PDRP-2001 control panel and SSV/SSM series alarm bells. Our reliable system provides a way to detect and respond to changes on all initiating and release circuits, reducing the risk of loss from fire. Combined with our alarm bells, these devices make it easy to signal any change in your fire sprinkler system.

Explosion-Proof

To complement our line of fire sprinkler monitoring products, we offer a full line of Explosion-Proof devices intended for use in hazardous locations where volatile vapors or particulates may be present. Our Explosion-Proof product offering includes 2" through 8" waterflow detectors; EPS10, EPS40, and EPS120 pressure switches; and OSY2 and PIBV2 supervisory switches.



How can you be sure your **system** will **operate** when needed?

The National Fire Protection Association (NFPA) records indicate Sprinklers save lives and protect property from fires. Compared to properties without automatic extinguishing equipment, the death rate per fire in sprinklered homes is 83 percent lower. Direct property damage per fire in sprinklered homes is 73 percent lower. The question then becomes: How can you be sure that your system will operate when needed?

System Sensor Sprinkler Monitoring Devices

System Sensor products supervise sprinkler systems by monitoring waterflow, valve positions, and system pressure to ensure system reliability and effectiveness. When it comes to installing the very best, always specify System Sensor fire sprinkler monitoring devices. Our engineered products help keep people and property safe.

The Power Behind the Products

Founded in 1984, System Sensor is a global manufacturer of fire and life safety devices, specializing in smoke detection, carbon monoxide detection, and notification technology. System Sensor develops products for real-world applications worldwide. With sales, service, and manufacturing facilities throughout the Americas, Europe, and Asia, System Sensor places a premium on research and development to provide the most reliable, innovative, and comprehensive line of products in the industry.

Code Requirements

When installing and maintaining a fire sprinkler system, be familiar with NFPA requirements:

- NFPA 13: Standard for the Installation of Sprinkler Systems
- NFPA 13D: Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes
- NFPA 13R: Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies
- NFPA 25: Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
- NFPA 72: National Fire Alarm Code
- NFPA 101: Life Safety Code



Fire Sprinkler Monitoring

WFDN Series Waterflow Detectors

The WFDN Series detectors provide an easy to see, feel, and set time delay mechanism. The timer dial is large and easy to turn, with high contrast pad-printed markings. Set by feel in dimly lit locations with tactile features for approximate setting at 30 and 60 seconds. The delay/switch assembly is field replaceable for ease of maintenance.

WFDN Series Waterflow Detectors

Model	Pipe Size	Hole Size	Pressure Rating	Contact Ratings	Triggering Threshold
WFD20N	2 in.	1¼ in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM
WFD25N	2½ in.	1¼ in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM
WFD30N	3 in.	2 in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM
WFD40N	4 in.	2 in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM
WFD50N	5 in.	2 in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM
WFD60N	6 in.	2 in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM
WFD80N	8 in.	2 in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM



See, feel, and set timer dial

The new timer dial has high-contrast lettering and tactile markings. Now you can set the timer by sight or touch with repeatable precision: a must when detectors are installed in hard-to-reach or dark spaces.

T-TAP Series Waterflow Detectors

The T-Tap Series Waterflow detectors are designed for residential and branch-line signaling; all have a NEMA 4 rating and two Form C relays. The WFDTNRN has instant activation and all other models have a built-in adjustable time delay. Models install on a wide variety of 1 inch NPT threaded tees and the WFDNFS glues directly in to CPVC tees.

T-Tap Series Waterflow Detectors

Model	Compatible Tee Fittings	Time Delay	Pressure Rating	Contact Ratings	Triggering Threshold
WFDTN	1 in. NPT branch, including: 1 in., 1¼ in., 1½ in. and 2 in. NPT threaded ferrous and brass tees; 1 in., 1¼ in., 1½ in. and 2 in. copper sweat tees; Tyco, Spears, NIBBCO brand 1 in. CPVC tees	Adjustable 0 to 90 seconds	375 PSI	2 Form C: 10 A @ 125/250 VAC, 2.5 A 24 VDC	4–10 GPM
WFDTNRN	1 in. NPT branch, including: 1 in., 1¼ in., 1½ in. and 2 in. NPT threaded ferrous and brass tees; 1 in., 1¼ in., 1½ in. and 2 in. copper sweat tees; Tyco, Spears, NIBBCO brand 1 in. CPVC tees	Instant activation	375 PSI	2 Form C: 10 A @ 125/250 VAC, 2.5 A 24 VDC	4–10 GPM
WFDNFS	1 in., 1¼ in., 1½ in. and 2 in. Tyco, Spears, NIBBCO, and IPEX brand CPVC tees	Adjustable 0 to 90 seconds	175 PSI	2 Form C: 10 A @ 125/250 VAC, 2.5 A 24 VDC	4–10 GPM
WFDNFT	1 in., 1¼ in., 1½ in., 2 in. brass threaded and copper sweat tees; 1 in., 1½ in. CPVC tees	Adjustable 0 to 90 seconds	175 PSI	2 Form C: 10 A @ 125/250 VAC, 2.5 A 24 VDC	4–10 GPM



Fire Sprinkler Monitoring

Transition from WFD Series to WFDN Series Waterflow Detectors

Convert to the fully redesigned WFDN Series Waterflow Detector offering, including the T-Tap Series, designed to meet the needs of today's fire sprinkler professional. See the cross-reference chart below.



WFD to WFDN Series Conversion

Model	Model	Description
WFD20	WFD20N	2" Waterflow Detector
WFD25	WFD25N	2.5" Waterflow Detector
WFD30-2	WFD30N	3" Waterflow Detector
WFD40	WFD40N	4" Waterflow Detector
WFD50	WFD50N	5" Waterflow Detector
WFD60	WFD60N	6" Waterflow Detector
WFD80	WFD80N	8" Waterflow Detector
WFDT	WFDTN	T-Tap Waterflow Detector for use with 1" NPT
WFDTH	WFDTN	T-Tap Waterflow Detector for use with 1" NPT
WFDTNR	WFDTNRN	T-Tap Waterflow Detector for use with 1" NPT, without time delay

Supervisory Switches

System Sensor manufactures devices for supervising a variety of control valves, including outside screw and yoke, post indicator, butterfly, and rising and non-rising stem gate.



Supervisory Switches

Model	Description	Valve Size	Contact Rating	Maximum Operating Current
OSY2	Used to monitor the open position of an outside screw-and-yoke type gate valve	1 in. to 12 in.	10 A @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	—
PIBV2	Used to monitor the open position of post indicator and butterfly control valves	—	10 A @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	—
PSP1	A plug-in special application supervisory switch designed for applications where no other type of listed valve supervisory switch can be used	—	Plug Contacts: 250 mA @ 6/12/24 VAC/DC, normally open Cover Tamper: 5 A @ 125/250 VAC, 2.5 A @ 6/12/24 VAC	250 mA

EPS Series Pressure Switches

The EPS Series pressure switches are offered in three varieties and with one or two SPDT contacts. The EPS10 alarm pressure switches are ideal for dry pipe systems, while the EPS40 and EPS120 supervisory pressure switches are intended for supervising air pressure in pipes or pressure tanks.



EPS Series Pressure Switches

Model	Maximum Operating Pressure	Maximum Adjustment Range	Differential	Contact Rating	Threaded Connection
EPS10-1 EPS10-2	300 psi	4 to 20 psi	3 psi	10 A, ½ HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	½ NPT male reinforced nylon
EPS40-1 EPS40-2	300 psi	10 to 100 psi	3 psi @ 10 psi and 6 psi @ 100 psi	10 A, ½ HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	½ NPT male reinforced nylon
EPS120-1 EPS120-2	300 psi	10 to 200 psi	3 psi @ 10 psi and 9 psi @ 200 psi	10 A, ½ HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	½ NPT male reinforced nylon

Fire Sprinkler Monitoring



Explosion-Proof Waterflow Detectors & Switches

System Sensor's full line of explosion-proof products are intended for use in hazardous locations where volatile vapors or particulates may be present. System Sensor offers a complete line of explosion-proof waterflow detectors, supervisory switches, and alarm and supervisory pressure switches.

WFD Series Explosion-Proof Waterflow Detectors

Hazardous Location Classification: Class I, Groups B, C, D, Division 1 & 2; Class II, Groups E, F, G, Division 1 & 2; Class III, Division 1 & 2

Model	Pipe Size	Hole Size	Pressure Rating	Contact Ratings	Triggering Threshold
WFD20EXP	2 in.	1¼ in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM
WFD25EXP	2½ in.	1¼ in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM
WFD30-2EXP	3 in.	2 in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM
WFD40EXP	4 in.	2 in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM
WFD50EXP	5 in.	2 in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM
WFD60EXP	6 in.	2 in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM
WFD80EXP	8 in.	2 in.	450 PSI	2 Form C: 10 A, 1/2 HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	4–10 GPM



Explosion-Proof Supervisory Switches

Hazardous Location Classification: Class I, Groups B, C, D, Division 1 & 2; Class II, Groups E, F, G, Division 1 & 2

Model	Description	Valve Size	Contact Rating
OSY2EXP	Explosion-proof supervisory switch used to monitor the open position of an outside screw-and-yoke type gate valve	1 in. to 12 in.	10 A @ 125/250 VAC; 2.5 A @ 6/12/24 VDC
PIBV2EXP	Explosion-proof supervisory switch used to monitor the open position of post indicator and butterfly control valves	—	10 A @ 125/250 VAC; 2.5 A @ 6/12/24 VDC



Explosion-Proof Pressure Switches

Hazardous Location Classification: Class I, Groups B, C, D, Division 1 & 2; Class II, Groups E, F, G, Division 1 & 2; Class III, Division 1 & 2

Model	Maximum Operating Pressure	Maximum Adjustment Range	Differential	Contact Rating	Threaded Connection
EPS10EXP	250 psi	4 to 20 psi	3 psi	10 A, ½ HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	½ NPT male brass fitting
EPS40EXP	250 psi	10 to 100 psi	3 psi @ 10 psi and 6 psi @ 100 psi	10 A, ½ HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	½ NPT male brass fitting
EPS120EXP	250 psi	10 to 200 psi	3 psi @ 10 psi and 9 psi @ 200 psi	10 A, ½ HP @ 125/250 VAC; 2.5 A @ 6/12/24 VDC	½ NPT male brass fitting



Alarm Bells & Notification

The alarm bells offer high-output notification in security and fire alarm systems. Six-inch, eight-inch, and ten-inch models are available for 24 VDC and 120 VAC systems.

Alarm Bells

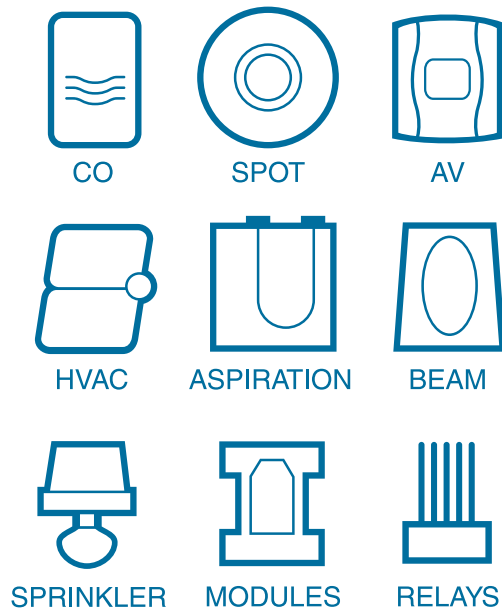
Model	Gong Size	Nominal Voltage	Operating Voltage	Sound Output	Maximum Current
SSM24-6	6 in.	24 VDC	16–33 VDC	82 dB	DC–31.1 mA / FWR–53.5 mA
SSM24-8	8 in.	24 VDC	16–33 VDC	80 dB	DC–31.1 mA / FWR–53.5 mA
SSM24-10	10 in.	24 VDC	16–33 VDC	81 dB	DC–31.1 mA / FWR–53.5 mA
SSV120-6	6 in.	120 VAC	96–132 VAC	85 dB	53 mA
SSV120-8	8 in.	120 VAC	96–132 VAC	82 dB	53 mA
SSV120-10	10 in.	120 VAC	96–132 VAC	82 dB	53 mA



Notification

Model	Description
PDRP-2001	Deluge Pre-action Control Panel: Up to 6 Class A/B initiating zones, up to 4 Class A/B NAC, 100% programmable relays, 80 character LCD display, and a 256 event history
P2RHK-120	SpectraAlert® Advance Outdoor Wall-Mount Horn Strobe: Red with FIRE marking, High Candela, 2-Wire, Clear Lens, 120 V





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