



Features

ECS In-Line Corrosion Detector (U.S. Patents 9,095,736 and 9,839,802)

- Early warning of internal pipe corrosion
- Match pipe material, size and schedule
- Roll groove ends for easy installation
- Installation on wet or dry systems
- Optional remote monitoring from BMS



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General Description

The ECS In-Line Corrosion Detector (ILD) is designed to provide an early warning indication of internal corrosion activity in water-based fire protection systems. A cross-section of the device shows the two key attributes that allow for early detection of corrosion: an externally milled section of the pipe that creates a “thin wall” section and a pressure chamber created by an external sleeve welded over the pipe.

The device is designed to be installed where corrosion is most likely to occur: the air/water interface. In wet pipe fire sprinkler systems this area is generally found on high branch lines where trapped air is present. In dry pipe fire sprinkler systems this area is generally found on low mains where trapped water is present. The thin wall section of the device will fail before other system piping to provide an early warning indication. The pressure switch will detect the pressure change caused by the failure in the thin wall section.

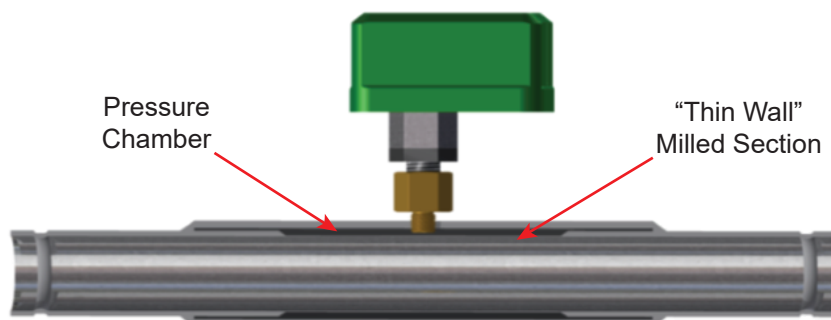
The ILD is equipped with a pressure switch to monitor the pressure chamber. The ECS In-Line Detector can be remotely monitored through a building monitoring system.

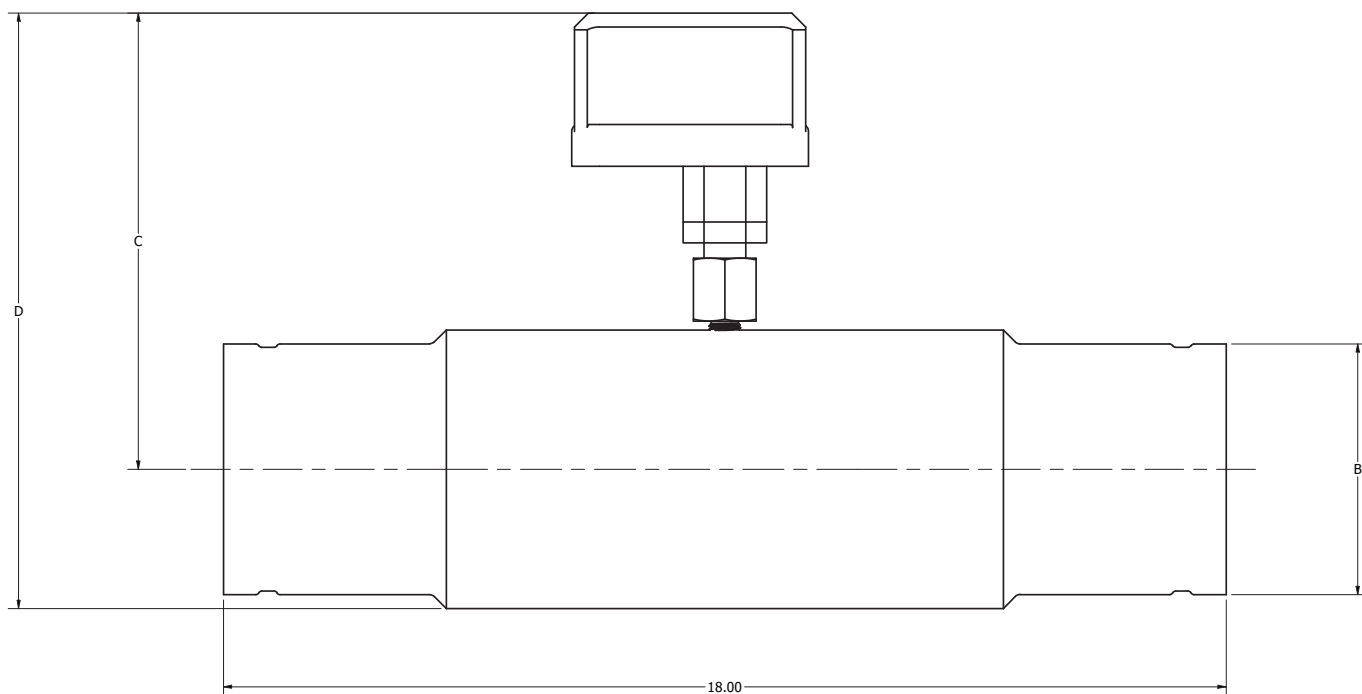
Specifications

Service Pressure	175 PSIG (12 Bar)
Electrical Connection	Dry Contact
Temperature Range	-40°F - 120°F (-40°C - 49°C)
Pipe Size	1.25" - 6"
Pipe Schedule	Sch. 10 or Sch. 40
Pipe Material	Black Steel or Galvanized

Installation

The ECS In-Line Corrosion Detector easily installs in-line as an integral spool piece within the fire sprinkler system piping to monitor real time corrosion activity. By placing the ECS In-Line Corrosion Detector within the system piping all of the environmental factors that directly affect the corrosion rate within the fire sprinkler system can be monitored. For detailed installation and operation please refer to the ILD installation sheet.





NPS	Material*	Sch.	A	B	C	D
1	B	40	0.133	1.315	6.7	7.6
1.25	B	10	0.109	1.660	6.9	8.1
	G	40	0.140			
	B	10	0.109			
	G	40	0.145			
1.5	B	10	0.109	1.900	6.9	8.1
	G	40	0.145			
	B	10	0.109			
	G	40	0.154			
2	B	10	0.109	2.375	7.1	8.6
	G	40	0.154			
	B	10	0.109			
	G	40	0.203			
2.5	B	10	0.120	2.875	7.5	9.2
	G	40	0.203		7.4	9.2
	B	10	0.120		7.9	10.2
	G	40	0.216		7.7	9.7
3	B	10	0.120	3.500	8.5	11.3
	G	40	0.237		8.2	10.7
	B	10	0.134		10.0	14.3
	G	40	0.280		11.1	16.4
4	B	10	0.120	4.500	8.5	11.3
	G	40	0.237		8.2	10.7
	B	10	0.134		10.0	14.3
	G	40	0.280		11.1	16.4
6	B	10	0.148	8.625	11.1	16.4
	G	40	0.322		11.1	16.4
	B	10	0.148		11.1	16.4
	G	40	0.322		11.1	16.4

*Material: Black Steel (B), Galvanized Steel (G)

