







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
- Remote monitoring from Remote Test Station (RTS) or Building Monitoring System (BMS)



#### **CONTACT ECS FOR AVAILABILITY**

# **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 sprinkler systems. An internal schematic of the ILD shows the two key attributes that allow for early detection of corrosion: an externally milled section of pipe that creates a "thin wall" portion and a pressure chamber created by an external sleeve welded over the pipe. (See Figure 1)

The ILD 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 a high point on branch lines where trapped air is present. In dry pipe fire sprinkler systems this area is generally found on a low point on mains where trapped water is present. The thin wall portion of the ILD 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 portion. The ILD is equipped with a pressure switch to monitor the pressure chamber and can be remotely monitored throught a building monitoring system, or locally through the Remote Test Station.

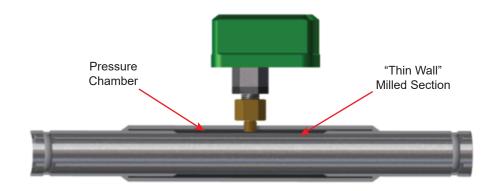
## **Specifications**

Service Pressure	175 PSIG (12 Bar)		
Electrical Connection	Dry Contact		
Temperature Range	-40°F - 120°F (-40°C - 49°C)		
Pipe Size	1.25 - 6in (32 - 152mm)		
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 ILD 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.

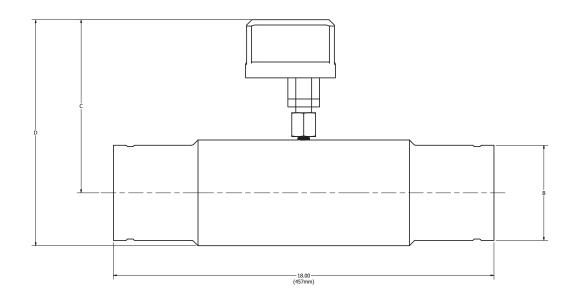
#### FIGURE 1 - ILD Internal Schematic

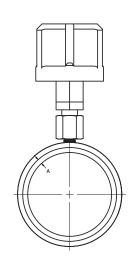


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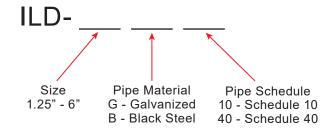




# **Ordering Information**

NPS	Material*	Sch.	_ A	В	С	D
1	В	40	0.133	1.315	6.7	7.6
1.25	В	10	0.109	1.660	6.9	8.1
	G					
	В	40	0.140			
	G					
1.5	В	10	0.109	1.900	6.9	8.1
	G					
	В	40	0.145			
	G					
2	В	10	0.109	2.375	7.1	8.6
	G	10	0.109			
	В	40	0.154			
	G		0.134			
2.5	В	10	0.120	2.875	7.5	9.2
	G		0.120		7.5	0.2
	В	40	0.203		7.4	9.2
	G					
3	В	10	0.120	3.500	7.9	10.2
	G		020			
	В	40	0.216		7.7	9.7
	G					
4	В	10	0.120	4.500	8.5	11.3
	G					
	В	40	0.237		8.2	10.7
	G					
6	В	10	0.134	6.625	10.0	14.3
	G					
	В	40	0.280			
8**	G				11.1	16.4
	В	10	0.148			
	G			8.625		
	В	40	0.322			
	G					

<sup>\*</sup>Material: Black Steel (B), Galvanized Steel (G)
\*\*Special Order Only



Example: ILD-1.5B40

→ 1.5" Schedule 40 Black Steel Chamber

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