**DRY FIRE SPRINKLER SYSTEMS, LEAK RATE MONITOR**

A. Furnish and install a leak rate monitor on all dry and pre-action systems to monitor and report the status of individual system leak rates.

1. The leak rate monitor shall consist of a control module, pressure sensor and an optional solenoid assembly for isolating the system being monitored.
2. The leak rate monitor shall be capable of monitoring supervisory gas leak rates, compressor runtimes, fire sprinkler system supervisory pressure, and ambient temperature.
3. The leak rate monitor shall be capable of reporting status and alerts locally and optionally via the internet.
4. The leak rate monitor shall be capable of indicating status via dry contacts suitable for monitoring by a building managements system or fire panel.
5. The leak rate monitor shall be capable of being monitored over the internet with web portals or mobile applications.
6. The leak rate monitor shall be capable of monitoring fire sprinkler systems with or without storage tanks, with common compressor or nitrogen systems for multiple fire sprinkler systems, with tank based supervisory gas systems, and with or without an air maintenance device, AMD.
7. The leak rate monitor shall be capable of detecting and indicating the presence or development of leaks.
8. The leak rate monitor shall be capable of testing and reporting the results of the fire sprinkler system’s compliance to the allowable leak rates in NFPA 13 and NFPA 25.
9. The leak rate monitor shall be capable of testing for compliance to the allowable leak rates in NFPA 13 and NFPA 25 immediately, at a future time, or periodically at defined intervals.
10. The leak rate monitor shall be capable of displaying test reports locally on the control module, remotely via the internet portal or mobile applications, and shall be capable of being downloaded.
11. The leak rate monitor shall be capable of managing tests and monitoring to prevent dry valve or preaction valve operation due to low supervisory pressures.
12. The leak rate monitor shall be capable of reporting abnormal fire sprinkler supervisory pressures.

B. Approved leak rate monitors and accessories are:

1. Potter Electric IntelliCheck™ advance leak rate monitor, model LRM.
2. Potter Electric IntelliCheck ™ LRM solenoid kit.
3. Potter Electric IntelliView™ web portal or mobile device application.