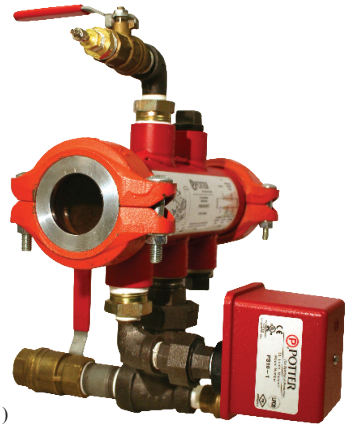
PCMS-RM

POTTER CORROSION MONITORING STATION-RISER MOUNT

FOR WET OR DRY PIPE SPRINKLER SYSTEMS



Patent Pending
(Shown with optional PCMPK-1)

Service Pressure: Up to 250 PSIG
Temperature Range: 40°F to 120°F (4.5°C to 49°C)
Coupon Holders: Qty. (2) included

Ordering Information

Stock number: 1119546 PCMS-RM

Replacement Kits

Stock number:

1119670	Replacement Coupon Holder Assembly
0090173	CRTK-2 Coupon Replacement Test Kit
0090177	CPRTK-2 Coupon/Probe Replacement Test Kit

Suggested Options:

0090180	PCMPK-1 Potter Corrosion Monitoring Probe Kit
1000040	RBVS Retrofit Ball Valve Switch (w/o cover tamper)
1000035	RBVS-T Retrofit Ball Valve Switch (w/ cover tamper)

General

The Model PCMS-RM, is a Corrosion Monitoring Station-Riser Mount consisting of a coupon rack that is installed on fire sprinkler riser to monitor corrosion in a fire sprinkler system. The PCMS-RM is designed to simulate conditions within the fire sprinkler system. The coupon rack can be isolated from the fire sprinkler riser and easily accessed for servicing and monitoring of test specimens (corrosion coupons) without interruption to fire protection. Test material strip specimens (corrosion coupons) are installed into the coupon rack using coupon holders. The PCMS-RM can be used on wet or dry pipe systems.

The optional PCMPK-1 contains a corrosion monitoring probe and pressure switch that provides notification to the fire/sprinkler administrator when there may be an excessive amount of corrosion taking place in the sprinkler piping. The corrosion monitoring probe has a precision thin wall thickness which will eventually corrode through, allowing the system pressure to enter into the probe and actuate the pressure switch. When the pressure switch is wired to the building fire alarm panel, a trouble or supervisory signal is generated notifying the fire/sprinkler administrator. This is the notification to remove the test coupons that were installed at the same time as the probe, for analysis on the condition of the sprinkler piping. The corrosion monitoring probe is a single use device and must be replaced upon the installation of new test coupons.

The CPRTK2-Coupon/ Probe Replacement Test Kit contains the necessary components to remove, replace, and forward for analysis, test coupons, and water sample from a PCMS-RM.

NOTE: The probe is not for analysis. It allows the fire sprinkler administrator to leave the coupons in the system until the probe activates the pressure switch.

Installation (See Fig. 1)

1. The PCMS-RM is assembled in two sections to be joined by the attached 1" union, to allow for quick installation. Install the unit on the system side of any control valve. Install the unit in the vicinity of the riser, when it is installed on a main horizontal feed.
2. The contractor shall supply and install a 1" NPT female connection to the sprinkler system riser or supply main (as determined by the engineer or designer).
3. Using the lower 1" union connection pointing in the up position, connect the lower, sub-assembly section with the isolation and drain valve to the previously installed 1" NPT male connection. NOTE: Install this sub-assembly in a horizontal and level position. Make sure that the isolation valve is in the closed position.
4. Attach the upper coupon rack sub-assemble section union to the previously installed lower section union and tighten union fitting. The product labels and sight glass shall be visible in the installed position.
5. The contractor shall verify that the corrosion monitoring station has the appropriate coupons/probes (as required by the engineer or designer). Verification shall be made by viewing the coupons/ probes through the sight glass end of the PCMS-RM corrosion monitoring station.

NOTE: The corrosion monitoring station shall be installed in a horizontal and level position. It may be necessary to exchange the location of the sight glass and the blank end cap so the inside of the coupon rack is visible through the sight glass for the PCMS-RM.

Placing the PCMS-RM in Service on a Wet Pipe System

1. With the coupon rack isolation valve closed to the system, and the coupon rack drain valve closed and plugged, pre-charge the coupon rack with air through the air inlet isolation valve to approximately ½ the system water pressure.
2. Open the coupon rack isolation valve and check the water level in the coupon rack through the end sight glass. Maintain the water level at the centerline of the pipe (coupon rack).
3. Add additional air through the air inlet isolation valve to lower the water level or relieve air to raise the water to the correct centerline level.
4. Close the air inlet isolation ball valve after the correct water level has been maintained.

Placing the PCMS-RM in Service on a Dry Pipe System

1. Close the air inlet isolation valve. Open the coupon rack isolation valve.

NOTES (for BOTH Wet and Dry Systems):

- Be sure to leave the coupon rack isolation valve open to the fire sprinkler system. Verify that all valves are in the correct position and the corrosion monitoring station is free of any leaks.
- Fill out the coupon card completely for the coupon analysis. Forward the coupons and completed card to the coupon supplier, after the required amount of time or when the optional PCMPK-1 probe activates the pressure switch.

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Fig. 1 PCMS-RM Assembly

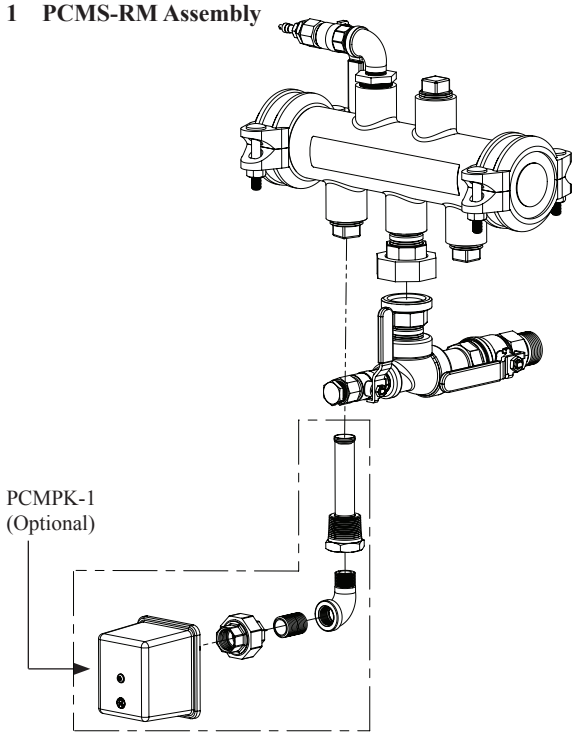


Fig. 2 Corrosion Coupon/Probe Installation Diagram

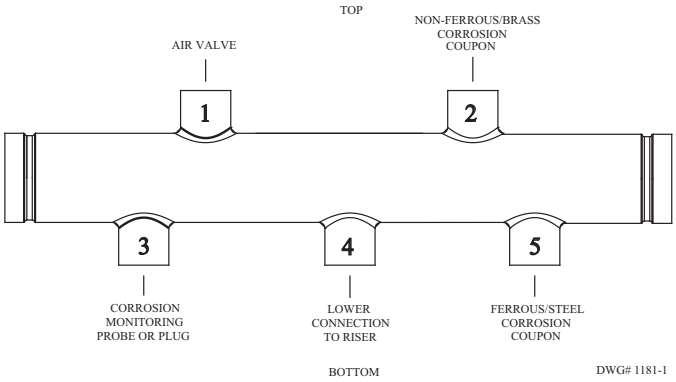
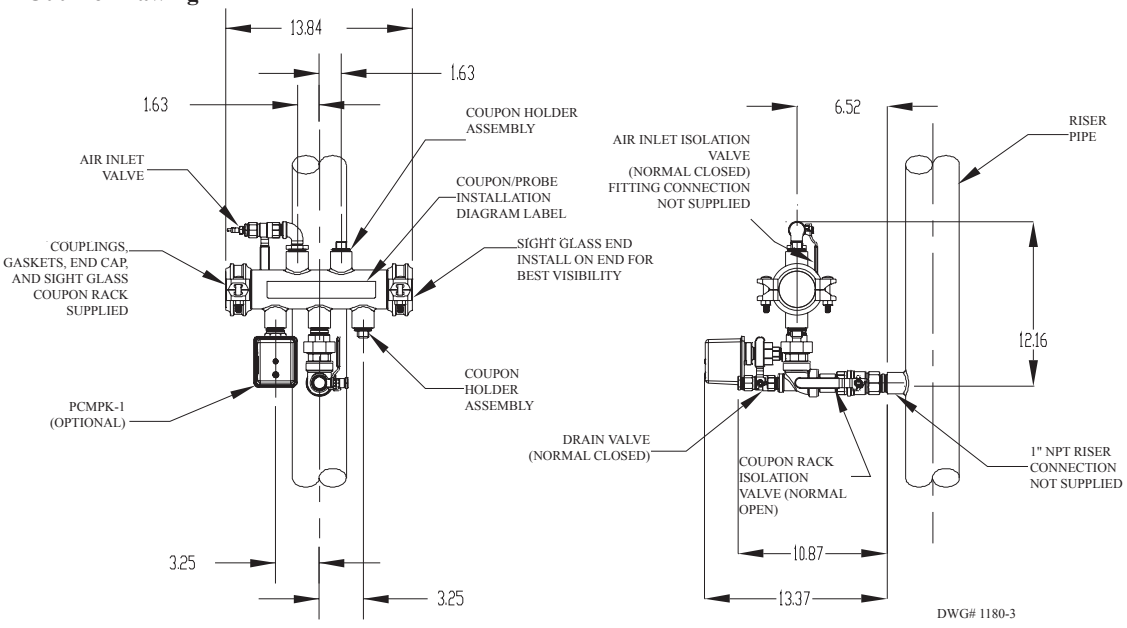


Fig. 3 PCMS-RM Outline Drawing



Note: 3½" minimum clearance height required to remove coupon holder from coupon rack.

⚠ CAUTION

Do not inject any corrosion inhibitor directly into the monitoring stations as the inhibitor could adversely effect the ability of the coupons and probe to provide an accurate assessment of the condition of the sprinkler system.

Close the PCMS-RM isolation valve when injecting inhibitor. Open the isolation valve when the injection of the inhibitor is complete