

Model MC-1 (MC-2) Manual Control Station For Deluge And Preaction Systems Manual Release Service

IMPORTANT

Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

Scan the QR code or enter the URL in a web browser to access the most up-to-date electronic version of this document. Data rates may apply.



docs.jci.com/tycofire/tfp1382

General Description

The TYCO Model MC-1 (MC-2) Manual Control Station provides a tamper resistant means for emergency release (that is, operation) of TYCO Automatic Water Control Valves. Interconnection with the valves may be direct via hydraulic (wet) pilot line or indirect via pneumatic (dry) pilot line to a Model DP-1 Dry Pilot Actuator.

The MC-2 Manual Control Station is a modified MC-1 designed for use as a trim component for the Model DV-5A Automatic Water Control Valve.

NOTICE

The Model MC-1 Manual Control Station described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION, in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of these devices.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. The installing contractor or sprinkler manufacturer should be contacted with any questions.

Technical Data

Approvals

UL and UL Listed
FM Approved

Working Water Pressure

20 to 300 psi (1,4 to 20,7 bar)

Minimum Ambient Temperature

Dry Pilot Lines: -50°F (-46°C)
Wet Pilot Lines: 40°F (4°C)

Assembly

The box and cover in Figure 1 are thermo-plastic. The elastomer water seal is TEFLON.

Operation

Operating instructions are imprinted on the Cover, and the Cover is hinged to the Box and is held up in its normally closed position by a polystyrene Break Rod. The Break Rod is inserted through corresponding holes in the top of the Cover and interior of the Box, and the Break Rod does not extend above the top of the Cover so as to prevent unnoticed tampering (that is, the Cover can only be opened by breaking the Break Rod).

After actuation of the MC-1, interference between a boss on the interior of the Cover and the Operating Lever prevents closing of the Cover, before the Operating Lever is raised. As an added precaution, the Cover has been weighted such that it will not remain closed unless a Break Rod has been placed in position.

Opening of the Model MC-1 Manual Control Station relieves hydraulic or pneumatic pressure, as applicable, which permits the automatic water control valve to open and allow a flow of water into the system piping.



Installation

When the TYCO Model MC-1 (MC-2) Manual Control Station is provided as a trim component for TYCO Automatic Water Control Valves, MC-1 (MC-2) must be installed in accordance with the specific instructions provided with the TYCO Automatic Water Control Valve Technical Data Sheets.

When the MC-1 is utilized for remote locations on either wet or dry pilot lines, the following instructions apply:

Step 1. The piping to the MC-1 is to be securely mounted, and the MC-1 is to be located 4-1/2 ft to 6 ft above the floor/ground level.

Step 2. The MC-1 is to be installed vertically (so that the Cover will fall open when the Break Rod is not in place), in plain view, and in a readily accessible location.

Step 3. When used with a wet pilot line, piping from the outlet of the MC-1 is to be directed to a suitable drain such that there will be no accidental damage to property or danger to persons when the MC-1 is operated. When used on dry pilot lines, the outlet piping is to be directed towards the rear of the MC-1 and away from the operator.

Design Criteria

The TYCO Model MC-1 (MC-2) Manual Control Station located at the TYCO Automatic Water Control Valve is to be reset in accordance with the specific instructions provided with the TYCO Automatic Water Control Valve Technical Data Sheets.

When the MC-1 is utilized for remote locations on either wet or dry pilot lines, it is reset by raising the Operating Lever, closing the Cover, and inserting a replacement Break Rod.

NOTICE

In order to ensure the proper maximum pull open force for the Cover, use only P/N 92-289-1-008 replacement Break Rods.

It is recommended that a supply of spare Break Rods be maintained on hand.

Care and Maintenance

The following inspection procedure must be performed as indicated, in addition to any specific requirements of the NFPA, and any impairment must be immediately corrected.

Before closing a fire protection system control valve for inspection or maintenance work on the fire protection system that it controls, permission to shut down the effected fire protection system must first be obtained from the proper authorities and all personnel who may be affected by this action must be notified.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (e.g., NFPA 25), in addition to the standards of any authority having jurisdiction. The installing contractor or product manufacturer should be contacted relative to any questions.

Automatic sprinkler systems are recommended to be inspected, tested, and maintained by a qualified Inspection Service.

After placing a fire protection system in service, notify the proper authorities and advise those responsible for monitoring proprietary and/or central station alarms.

NOTICE

Unless appropriate precautions are taken, operation of the MC-1 (MC-2) when performing an inspection will result in operation of the deluge or preaction systems and/or alarms.

Notify the owner and the fire department, central station, or other signal station to which the system serves or alarms are connected before performing inspections.

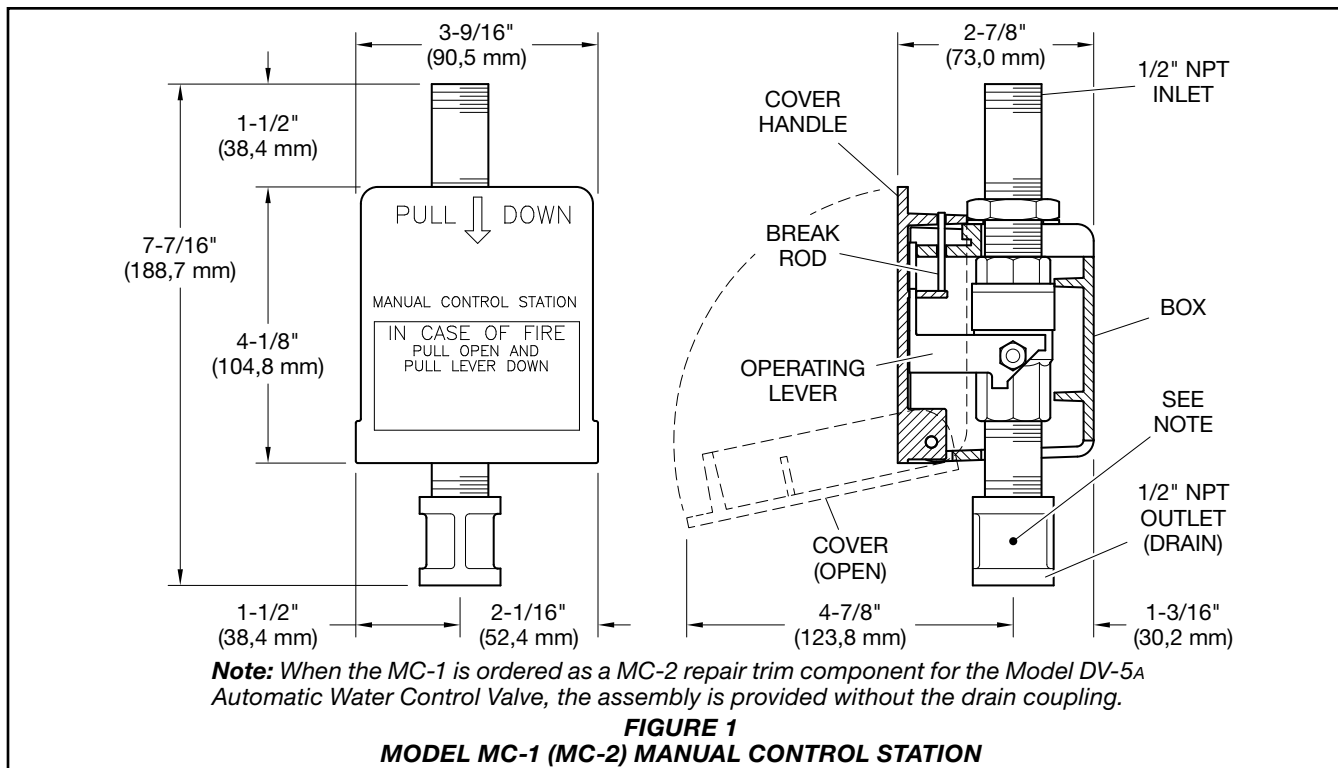
The Model MC-1 (MC-2) Manual Control Station must be inspected quarterly in accordance with this section.

Step 1. Verify that the MC-1 (MC-2) opens with ease when operated.

Step 2. Verify that flow out of the MC-1 (MC-2) increases to a rate which will trip the deluge or preaction valve.

Step 3. Inspect the drain for evidence of continued leakage past the MC-1 (MC-2). Determine and correct the cause of the leakage problem, as applicable.

Step 4. Verify that the MC-1 (MC-2) is reset properly using only a P/N 92-289-1008 Break Rod.



Limited Warranty

For warranty terms and conditions, visit www.tyco-fire.com.

Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name and Part Number (P/N).

MC-1

Specify: Model MC-1 Manual Control Station with galvanized steel fittings, P/N 52-289-2-001

MC-2

Specify: Model MC-1 (MC-2) Manual Control Station with galvanized steel fittings for use with DV-5A Valve, P/N 54-500-2-000

Note: Contact your local distributor for MC-1 and MC-2 with black steel fittings.

Replacement Break Rod

Specify: Replacement Break Rod for Model MC-1 Manual Control Station, P/N 92-289-1-008



Worldwide
Contacts | www.tyco-fire.com

TFP1382

Change History Appendix

ISSUE DATE	NOTES
08-22	Page 1, added QR code and URL to allow convenient access to electronic version from printed document; Page 2, changed corporate address and telephone number to 1467 Elmwood Avenue, Cranston, RI 02910 Telephone +1-401-781-8220, formerly 1400 Pennbrook Parkway, Lansdale, PA 19446 Telephone +1-215-362-0700; Expanded document to 4 pages, formerly 2.
08-18	Updated Tyco® branding and document format; Added Johnson Controls copyright; Added disclaimer stating specifications and information subject to change without notice; Added reference to Regulatory and Health Warning Technical Data Sheet TFP2300.
07-18	Changed Working Water Pressure range to 20 to 300 psi (1,4 to 20,7 bar), formerly 20 to 250 psi (1,4 to 17,2 bar); Added Model MC-2 variant for use in DV-5A Automatic Water Control Valve fire protection system trim assemblies.
04-14	Removed LPCB Approved.
01-03	Added new Tyco Fire & Building Products masthead; Added part numbers for galvanized and brass connections.
06-02	New Technical Data Sheet TFP1382 describes Model MC-1 Manual Control Station.