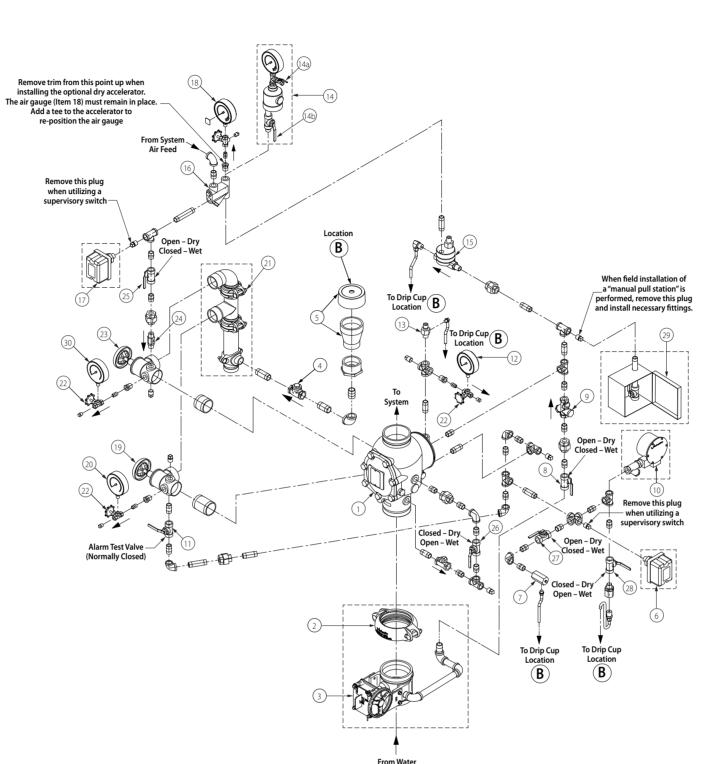
## SERIES 764 FIRELOCK NXT<sup>™</sup> ALTERNATE WET/DRY VALVE <sup>™</sup> ← LPCB

# NOTE: THIS WALL CHART IS A GUIDE FOR PLACING THE SYSTEM IN SERVICE AND FOR PERFORMING WATER FLOW ALARM TESTS.

ALWAYS REFER TO THE INSTALLATION, MAINTENANCE, AND TESTING MANUAL FOR COMPLETE INFORMATION.

## SETUP INSTRUCTIONS FOR PLACING THE DRY CONFIGURATION IN SERVICE

- 1. Open the system main drain valve (Item 23). Confirm that the system is drained.
- 2. Close the system main drain valve (Item 23).
- 3. Confirm that all system drains are shut and that the system is free of leaks.
- 3a. Confirm that the system has been depressurized. The gauges should indicate zero pressure.
- 4. If a Series 746-LPA Dry Accelerator (Item 14) is installed, confirm that the isolation ball valve (Item 14b) is closed.
- 5. If a Series 746-LPA Dry Accelerator (Item 14) is installed, open the <sup>1</sup>/<sub>4</sub>-turn vent ball valve (Item 14a).
- 6. Open the dry system air supply ball valve (Item 25).
- 7. Close the wet system bypass ball valve (Item 26).
- 8. Open the drip check isolation ball valve (Item 27).
- 9. Close the alarm line drain ball valve (Item 28).
- 10. Open the diaphragm-charge-line ball valve (Item 8).
- 11. Confirm that water is flowing steadily from the Auto Drain (Item 13). Pull up on the Auto Drain Sleeve, and confirm that water is flowing through the Series 776 Low-Pressure Actuator (Item 15).
- 12. Close the diaphragm-charge-line ball valve (Item 8).
- 13. Confirm that the alarm test ball valve (Item 11) is closed.
- 14. Charge the system with air by turning on the compressor or by opening the fast-fill ball valve on the optional air maintenance trim assembly (AMTA).
- The minimum air pressure for a Series 764 FireLock NXT Alternate Wet/Dry Valve installed with or without a Series 746-LPA Dry Accelerator shall be 0.9 Bar/90 kPa/13 psi. The maximum air pressure shall be 1.2 Bar/124 kPa/18 psi.
  - 14a. Confirm that the system is charging by observing the air pressure gauge. If the gauge is not showing an increase in air pressure, there is a leak or an opening in the line. Repair any leaks or openings and restart the setup procedures.
- 14b. Confirm that no water is being exhausted from the Auto Vent of the Series 776 Low-Pressure Actuator (Item 15). If water is being exhausted from the Auto Vent, continue to run air through the system in order to remove moisture from the upper chamber of the Series 776 Low-Pressure Actuator. If a Series 746-LPA Dry Accelerator (Item 14) is installed, make sure the accelerator is not flooded.
- 15. When the system reaches approximately 0.7 Bar/69 kPa/10 psi, and no additional moisture is being released from the Auto Vent, pull up on the Auto Vent Sleeve of the Series 776 Low-Pressure Actuator (Item 15). **NOTE:** The Auto Vent Screw should seal and remain in the set ("UP") position.
- 16. When system air pressure is established, close the fast-fill ball valve on the optional AMTA.
- 17. Open the slow-fill ball valve on the optional AMTA. **NOTE:** Failure to leave the slow-fill ball valve open may allow system pressure to drop, resulting in valve operation in the event of a system leak.
- 18. Open the diaphragm-charge-line ball valve (Item 8). Allow water to flow through the Auto Drain tube.
- 19. Pull up on the Auto Drain Sleeve (Item 13) until the screw is in the set ("UP") position. Verify that there is pressure on the gauge (Item 12) to the diaphragm charge line.
- 20. When the diaphragm charge line is pressurized, temporarily close the diaphragm-charge-line ball valve (Item 8). Confirm that the diaphragm charge line is maintaining pressure by observing the diaphragm-charge-line pressure gauge (Item 12).
  - 20a. If pressure in the diaphragm charge line drops, the diaphragm must be replaced and/or any leaks in the diaphragm charge line must be corrected.
- 20b. If pressure in the diaphragm charge line does not drop, re-open the diaphragm-charge-line ball valve (Item 8), and proceed to the following step.
- 21. If a Series 746-LPA Dry Accelerator (Item 14) is installed, close the ¼-turn vent ball valve (Item 14a).
- 22. If a Series 746-LPA Dry Accelerator is installed (Item 14), open the isolation ball valve (Item 14b). This will set the accelerator.
- 23. Observe the system air pressure over a 24-hour period to confirm system integrity. If there is degradation in system air pressure, find and correct all leaks.
- 24. Open the water supply main drain valve (Item 19).
- 25. Open the water supply main control valve (Item 3) slowly until water flows steadily from the open water supply main drain valve.
- 26. Close the water supply main drain valve (Item 19) when a steady flow of water occurs.
- 27. Confirm that there is no leakage from the intermediate valve chamber. The drip check (Item 7) in the alarm line should not be leaking water or air.
- 28. If water is flowing from the drip check (Item 7), close the water supply main control valve (Item 3), and start over at step 1.
- 29. Open the water supply main control valve (Item 3) fully.
- $\ensuremath{\mathsf{30.}}$  Record the system air pressure and the water supply pressure.
- 31. Confirm that all valves are in their normal operating positions (refer to table in next column).



Item	Description		Item	
1	Series 764 FireLock NXT Alternate Wet/Dry Valve		17	
2	FireLock Rigid Coupling *		18	
3	Water Supply Main Control Valve *			
4	Drain Swing Check Valve		19	
5	Drip Cup with Cap		20	
6	Alarm Pressure Switch *		21	
7	Series 729 Drip Check Valve		27	
8	Diaphragm-Charge-Line Ball Valve (Lockable – Open/Dry, Closed/Wet)		23	
9	3-in-1 Strainer/Check/Restrictor Assembly		24	
10	Series 760 Water Motor Alarm **		25	
11	Alarm Test Ball Valve			
12	Diaphragm-Charge-Line Pressure Gauge (0 – 20.7 Bar/ 0 – 2068 kPa/0 – 300 psi)		26	
13	Series 749 Auto Drain		27	
14	Series 746-LPA Dry Accelerator Assembly **		28	
14a	14-Turn Vent Ball Valve (Series 746-LPA Dry Accelerator)			
14b	Isolation Ball Valve (Series 746-LPA Dry Accelerator)		29	
15	Series 776 Low-Pressure Actuator		30	
16	Air Manifold			

\* Optional/sold separately - comes standard when VQR assembly is ordered \*\* Optional/sold separately



# SETUP INSTRUCTIONS FOR CONVERTING THE DRY CONFIGURATION TO THE WET CONFIGURATION

- 1. Notify local fire companies that the system is being serviced.
- 2. Confirm that system drains are shut and the system is free of leaks.
- 2a. Confirm that the system has been depressurized. The gauges should indicate zero pressure.
- 3. Open the remote system test valve (inspector's test connection) and any auxiliary drains to remove all air from the system.
- 4. Confirm that the alarm test ball valve (Item 11) is closed.
- 5. Close the dry system air supply ball valve (Item 25).
- 6. Open the wet system bypass ball valve (Item 26).
- 7. Close the drip check isolation ball valve (Item 27).
- 8. Open the alarm line drain ball valve (Item 28).
- 9. Confirm that the diaphragm-charge-line ball valve (Item 8) is closed.
- 9a. PUSH DOWN ON THE AUTO DRAIN SCREW TO REMOVE PRESSURE IN THE DIAPHRAGM CHARGE LINE.
- 10. Open the water supply main control valve (Item 3) slowly.
- 11. Allow the system to fill with water completely. Allow water to flow from the remote system test valve (inspector's test connection) and any auxiliary drains until all trapped air is removed from the system.
- 12. After a steady flow of water is established and all air is released from the system, close the remote system test valve (inspector's test connection) and any auxiliary drains in the system.
- 13. Record the system pressures. The system pressure gauge should be equal to or greater than the water supply pressure gauge.
- 14. Confirm that all valves are in their normal operating positions (refer to table below).

### NORMAL OPERATING POSITIONS FOR VALVES

Valve	Normal Operating Position for Dry Configuration	Normal Operating Position for Wet Configuration
Diaphragm-Charge-Line Ball Valve	Open	Closed
Alarm Test Ball Valve	Closed	Closed
Water Supply Main Control Valve	Open	Open
Water Supply Main Drain Valve	Closed	Closed
System Main Drain Valve	Closed	Closed
Isolation Ball Valve for Series 746-LPA Dry Accelerator (If Applicable)	Open	Closed
1/4-Turn Vent Ball Valve for Series 746-LPA Dry Accelerator (If Applicable)	Closed	Closed
Slow-Fill Ball Valve of the Victaulic AMTA (If Applicable)	Open	Closed
Fast-Fill Ball Valve of the Victaulic AMTA (If Applicable)	Closed	Closed
Dry System Air Supply Ball Valve	Open	Closed
Wet System Bypass Ball Valve	Closed	Open
Drip Check Isolation Ball Valve	Open	Closed
Alarm Line Drain Ball Valve	Closed	Open

NOTE: The minimum air pressure for a Series 768 FireLock NXT Dry Valve installed with or without a Series 746-LPA Dry Accelerator shall be 0.9 Bar/90 kPa/13 psi. The maximum air pressure shall be 1.2 Bar/124 kPa/18 psi.

#### WATER FLOW ALARM TEST FOR THE DRY OR WET CONFIGURATION

Perform the water flow alarm test on a frequency required by the local authority having jurisdiction. Verify these requirements by contacting the authority having jurisdiction in the affected area.

- 1. Notify the authority having jurisdiction, remote station alarm monitors, and those in the affected area that the water flow alarm test will be performed.
- 2. Open the water supply main drain valve (Item 19) fully to flush the water supply of any contaminants.
- 3. Close the water supply main drain valve (Item 19).
- 4. Open the alarm test ball valve (Item 11). Confirm that mechanical and electrical alarms are activated and that remote monitoring stations, if provided, receive an alarm signal.
- 5. Close the alarm test ball valve (Item 11) after verifying proper operation of all alarms.
- 6. If the valve is set in the dry configuration: push in the plunger of the drip check (Item 7) to verify that there is no pressure in the alarm line.

7. Verify that all alarms stopped sounding, that the alarm line drained properly, and that remote station alarms reset properly.

- 8. Confirm that there is no leakage from the intermediate chamber.
  - 8a. If the valve is set in the dry configuration: The drip check in the alarm line should not be leaking water or air.
- 8b. If the valve is set in the wet configuration: Confirm that there is no leakage from the restrictor.
- 9. Notify the authority having jurisdiction, remote station alarm monitors, and those in the affected area that the valve is back in service.
- 10. Provide test results to the authority having jurisdiction, if required.



## Description

- Air Supervisory Pressure Switch \* Dry System Air Pressure Gauge (0 – 5.5 Bar/0 – 552 kPa/0 – 80 psi with Retard)
- Water Supply Main Drain Valve Flow Test
- Water Supply Pressure Gauge
- (0 20.7 Bar/ 0 2068 kPa/0 300 psi)
- Drain Connection Kit \*
- Gauge valve
- System Main Drain Valve Series 748 Ball Check Valve

Dry System Air Supply Ball Valve (Lockable – Open/Dry, Closed/Wet)

- Wet System Bypass Ball Valve (Lockable Open/Wet, Closed/Dry)
- Drip Check Isolation Ball Valve (Lockable Open/Dry, Closed/Wet)
- Alarm Line Drain Ball Valve (Lockable Open/Wet,
- Closed/Dry)
- Series 755 Manual Pull Station
- Wet System Pressure Gauge (0 – 20.7 Bar/ 0 – 2068 kPa/0 – 300 psi)