

Table 9.7: Automatic Sprinkler System Requirements

ITEMS	REQUIREMENTS
17. ALARM CHECK VALVE	<ul style="list-style-type: none"> i. An Alarm check valve assembly shall be installed in each sprinkler system riser as per the maximum sprinkler protection zone area limitations as per Table 9.7.17.ii, which shall consists of the following equipment and accessories. <ul style="list-style-type: none"> a. An alarm check Valve complete with trim kits & retarding device. b. A water Motor Alarm Gong. c. An electric Alarm pressure switch. d. Pressure Gauges (Upstream & Down stream) ii. Maximum sprinkler zone limitation <ul style="list-style-type: none"> a. Light Hazard—4831 m² b. Ordinary Group 1—4831 m² c. Ordinary Group 2—4831 m² d. Extra Hazard Group 1— 3716 m² e. Extra Hazard Group 2— 3716 m² iii. The alarm valve shall be installed in each sprinkler system supply risers complete with the required trims in all sprinkler system installations. iv. The Alarm valve trims shall consist of a basic trim with all the required pipes, fitting & valves, water motor alarm gong, retard chamber, electric alarm pressure switch, upstream & down stream pressure gauges etc. v. The alarm pressure switch shall be interconnected with the building fire alarm system to activate the fire alarm. vi. A 20 mm diameter by pass line shall be provided connecting the upstream and downstream side of the alarm check to allow the water pressure surge with out lifting the valve clapper off its seat, which will prevent the false alarm. vii. Alarm check valves shall be rated for the system working pressure and water temperature service and approved by the Civil Defence department. viii. All the check valves shall be installed in easily accessible & visible locations. ix. Alarm check valves shall be installed vertically with an adequate clearance space around it for testing and maintenance purposes. x. Retarding device shall be installed in the alarm line to prevent the false alarm due to the water pressure fluctuation in the sprinkler system. xi. The alarm check valve shall be approved and listed with the Civil Defence as per test standards of Section 6.

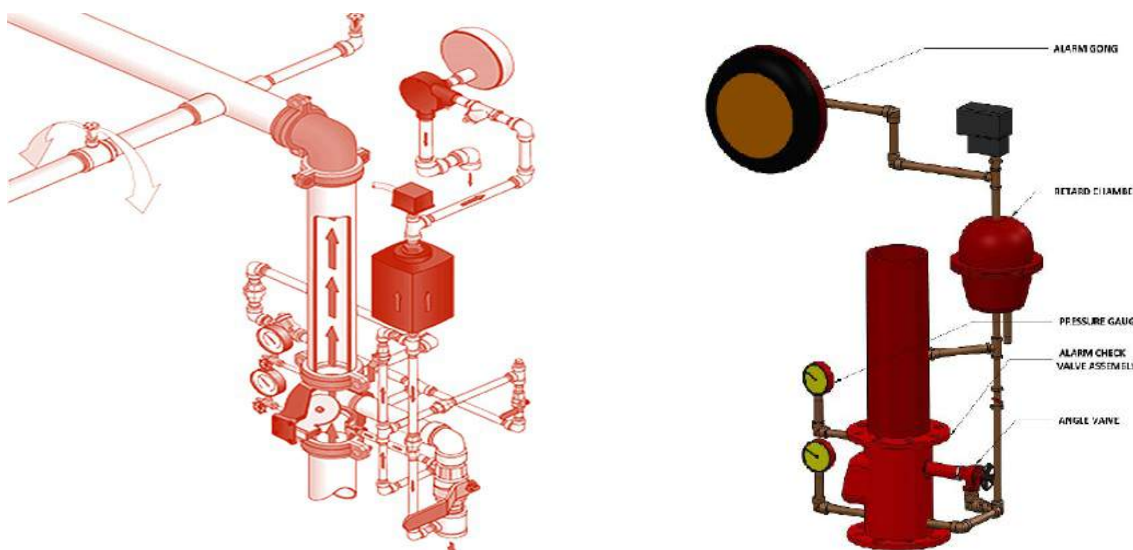


Figure 9.13.: Alarm Check Valve