

# Reliable®

## Model C Mechanical Sprinkler Alarm

### Features

- Dependable - Pelton Wheel Type
- Prompt - Positive Operation
- Nylon Bearings - No Lubrication Needed
- Compact - Lightweight - Easily Installed
- Rust-Free Cast Aluminum Gong. No Gong Cover Needed
- Gong Available in Red and Bright Metallic Finishes
- Self-Setting After Operation Eliminating Need of Removing Covers, Plates, Etc. to Reset Internal Mechanisms
- Maximum allowable flowing pressure 232 psi (16 bar)

### Product Description

The Reliable Model C Mechanical Alarm, also called a water motor and gong, is the hydro-mechanical alarm of Reliable Wet and Dry Pipe Automatic Sprinkler Systems. Usually mounted on an outside building wall and energized by water flowing from the alarm (wet) or dry pipe valve, it automatically sounds a continuous piercing alarm when the sprinkler system operates to extinguish a fire.

### Listings and Approvals

| Type   | Approvals   |
|--------|---|
| ANSI   | UL, cULus, FM Approved  |
| Metric | UL, cULus, FM, VdS Schadenverhütung, Loss Prevention Council (LPC), CE, European Standard EN 12259-4, UKCA: 0832-UKCA-CPR-S5080 |

### Operation

When an alarm (wet) or dry pipe valve is operated by the fusing of one or more automatic sprinklers due to fire, water flows through the 3/4 inch strainer, and 3/4 inch piping that connects the mechanical sprinkler alarm to the alarm or dry pipe valve. On entering the mechanical sprinkler alarm inlet, the water passes through the nozzle and impinges against the pelton wheel blades causing the pelton wheel to rotate. The striker assembly connected to the pelton wheel by the drive shaft also rotates causing the striker to impact against the gong producing a continuous piercing alarm. The water, after impinging against the pelton wheel, drains off through the 1-inch drain outlet in the body housing.

The alarm continues to sound as long as water is flowing through the sprinkler system. It may be shut off by closing the alarm control valve located in the piping line connecting the mechanical sprinkler alarm with the alarm (wet) or dry pipe valve. Reliable Model C Mechanical Sprinkler Alarm is self setting after each operation, eliminating the need of removing cover plates, etc. to reset internal mechanisms.



Model C Mechanical Sprinkler Alarm

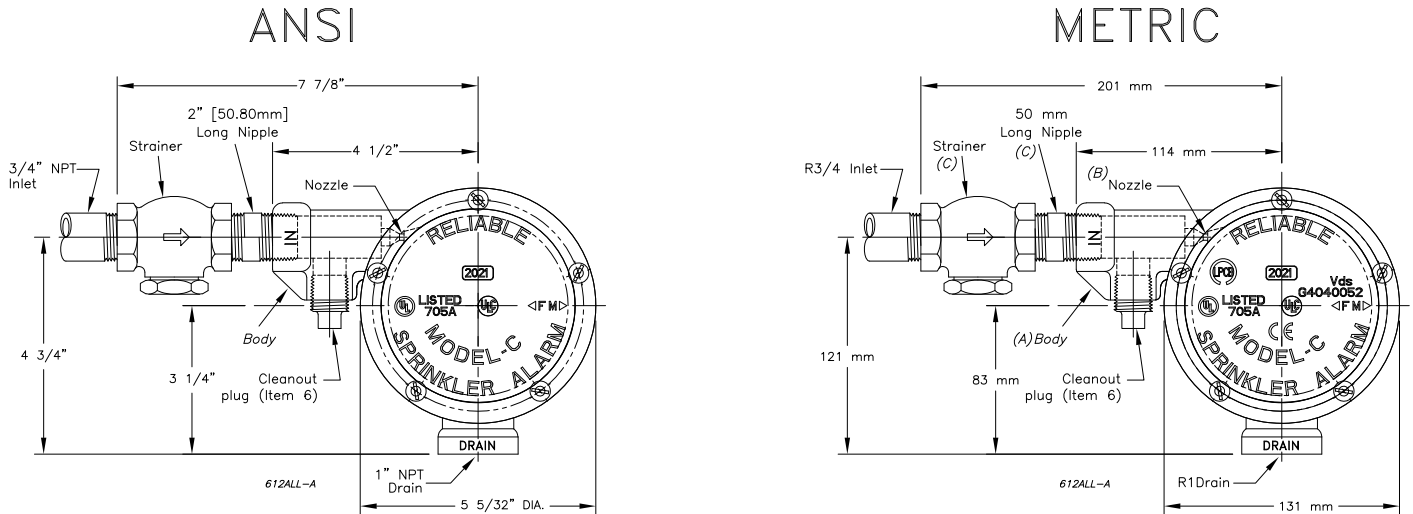
### Installation

The Reliable Model C Mechanical Sprinkler Alarm is easily installed. As illustrated in the figure below, a 3/4" (20mm) support pipe of appropriate length runs through the wall supporting the pelton wheel body on the inside wall surface and the gong assembly on the exterior wall surface. The entire assembly can be secured and aligned by simply screwing the body onto the support pipe, compressing the wall support washer.

The drive shaft is furnished in a standard length of 18" for a 14" (355mm) wall. Longer shafts for thicker walls are furnished on request. The drive shaft can be installed by removing the body cover and pelton wheel from the body.

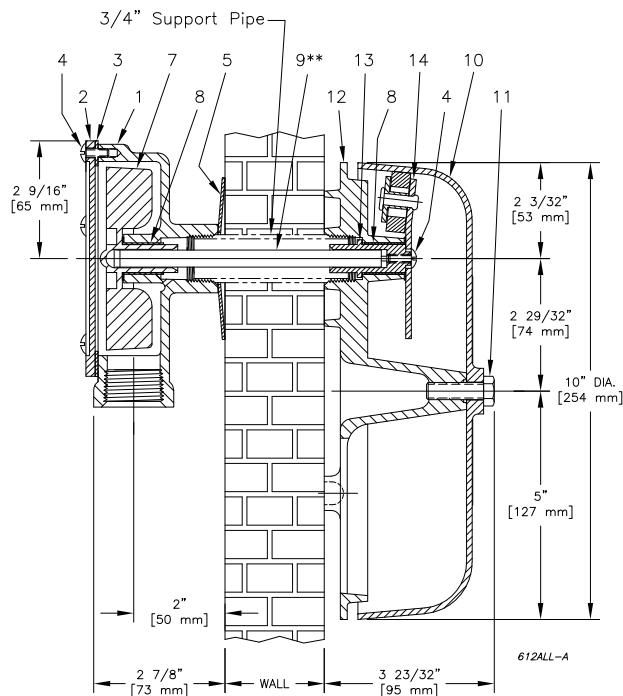
The gong has a raised boss at its center so that identification nameplates can be retained by the " gong bolt. A standard fire alarm identification sign for attachment below sprinkler alarm gongs can be supplied by Reliable.

The Mechanical Sprinkler Alarm shall be located as near to the alarm (wet) or dry pipe valve as practicable to avoid long runs or many fittings in the piping that connects to such devices. Galvanized or brass pipe of a size not less than 3/4" (20mm) is to be used. The 3/4" (20mm) Strainer, provided with the Mechanical Sprinkler Alarm, must be installed at the alarm outlet of the water flow detecting device. For CE application, it is required that the provided strainer be installed close to the Model C mechanical sprinkler alarm using the supplied 22 (50.8mm) long nipple. When a retarding chamber is used in connection with an alarm valve, the strainer shall be located at the outlet of the retarding chamber. The 1-inch drain outlet should discharge into an open drain.



NOTES:

- (A) METRIC BODY IDENTIFIED WITH "M"
- (B) BRASS NOZZLE IS REQUIRED.
- (C) THE STRAINER AND 2" [50.80mm] LONG NIPPLE (PROVIDED) MUST BE INSTALLED AS SHOWN.



List of Model C Mechanical Sprinkler Alarm Parts

|      |             |                               | Table A |        |
|------|-------------|-------------------------------|---------|--------|
| Item | Part Number | Description                   | ASA     | Metric |
| 1    | 91006603    | Body, ASA                     | 1       | 0      |
|      | 91006604    | Body, Metric                  | 0       | 1      |
| 2    | 92106603    | Cover, ASA                    | 1       | 0      |
|      | 92106616    | Cover, Metric                 | 0       | 1      |
| 3    | 93706602    | Gasket, Cover                 | 1       | 1      |
| 4    | 95606604    | Screw, Body Cover & Adapter   | 6       | 6      |
| 5    | 96906603    | Washer, Wall Support          | 1       | 1      |
| 6    | 98604402    | Plug, Clean-out               | 1       | 1      |
| 7    | 97006603    | Pelton Wheel                  | 1       | 1      |
| 8    | 90506603    | Bearing                       | 2       | 2      |
| 9**  | 96206603    | Shaft, Drive, 18"             | 1       | 1      |
| 10   | 93806612    | Gong                          | 1       | 1      |
| 11   | 91106601    | Bolt, Gong                    | 1       | 1      |
| 12   | 95106603    | Wall Plate                    | 1       | 1      |
| 13   | 90086601    | Adapter, Drive Shaft          | 1       | 1      |
| 14   | 73020063    | Striker Assembly              | 1       | 1      |
| 15   | 78650200    | Strainer, 3/4" 24 Mesh        | 1       | 1      |
| 16   | 98543232    | Nipple, 3/4" x 2" Long, Galv. | 0       | 1      |
| 17   | 98580011    | Nozzle, Brass                 | 0       | 1      |

**Note:** Should replacement parts be needed, use only genuine Reliable made parts. When ordering, specify part number, name, and model of the unit.

\*\*Where wall thickness requires added length, order additional PN 96206605 (36" length) drive shaft.

## Maintenance

The owner is responsible for maintaining all parts of the fire protection system in proper operating condition. Any system maintenance or testing that involves placing a system component out of service may eliminate the fire protection that is provided by the fire protection system.

The Reliable Model C Mechanical Sprinkler Alarm shall periodically be given a thorough inspection and test. NFPA 25, "Inspection, Testing, and Maintenance of Water Based Fire Protection Systems," provides minimum maintenance requirements. System components shall be tested, operated, cleaned and inspected at least annually and parts replaced as required.

## Guarantee

For the Reliable Automatic Sprinkler Co., Inc. guarantee, terms, and conditions, visit [www.reliablesprinkler.com](http://www.reliablesprinkler.com).

## Ordering Information

### Specify:

Model C Sprinkler Alarm

- ANSI (US) Version, PN 6302000300
- Metric (European) Version, PN 6302000100