

# Adjustable Dry Pendent Automatic Sprinkler

## Model "A-1" Extended



Listed by: Underwriters Laboratories, Inc.  
Underwriters' Laboratories of Canada  
Approved by: Factory Mutual, State of California  
B.S. & A. of New York City

Description • Operation • Installation • Technical Data

© Central Sprinkler Corporation — 1984



Central Sprinkler Corporation

451 North Cannon Avenue, Lansdale, PA 19446  
(215) 362-0700

# Description

The Model "A-1" Extended Type Field Adjustable Dry Pendent Sprinkler is designed for use in special applications such as freezing environments and conditions where sediment or foreign materials might accumulate in ordinary drop nipples. Unlike standard non-adjustable dry pendent sprinklers, the Model "A-1" incorporates a special elbow allowing the installer 2½ inches of field adjustment. This exclusive and unique feature allows flexibility never before available. It insures a perfect ceiling fit for the sprinkler upon initial installation. Should the ceiling sag, etc. in the future, a simple readjustment at the ceiling is all that should be necessary to once again obtain a perfect ceiling fit.

The two piece adjustable escutcheon assembly is used whenever it is desired to locate the sprinkler deflector at a greater than normal distance below the ceiling due to the presence of flush type lights, etc. The deflector distance below the ceiling may be as much as 4-5/8 inches with this assembly.

# Operation

Central's Model "A-1" Extended Dry Pendent Sprinkler features the basic Central center strut sprinkler. A fusible alloy is sealed into a bronze center strut (#9) by a stainless steel ball (#10). When alloy melts, the ball is forced upward into the center strut releasing the two ejectors (#8) and operating the basic sprinkler (#11). This causes the release of cap (#7) and bushing (#6) allowing guide tube (#12) and thrust bearing (#4) to drop down, allowing ball bearings (#3), seal (#2) and plunger (#1) to be released and ejected through the sprinkler with the water stream. Note that it is not necessary to reorder the special cast iron fitting (#14) for replacement after sprinkler operation. It is only necessary to order the basic adjustable dry pendent assembly in the same length as the original.

# Installation

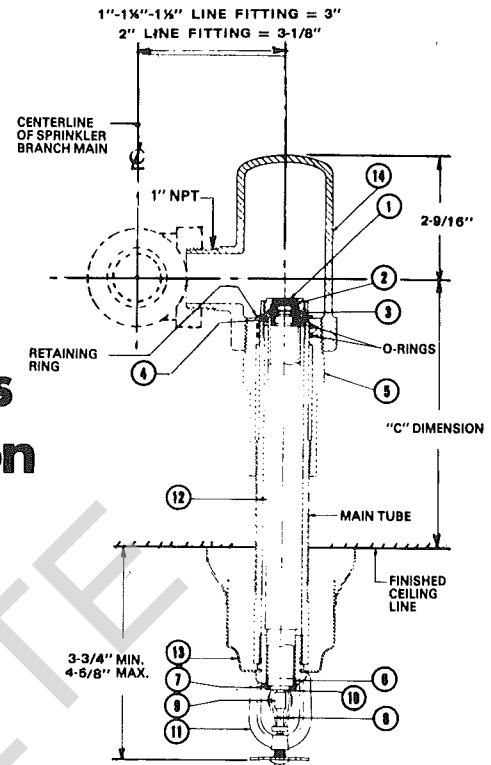
The special cast iron fitting (#14) is not attached to the Adjustable Dry Pendent Sprinkler Assembly in the factory as this fitting must be made into the sprinkler line fitting first. Do not overtighten special elbow (#14) into line fitting or breakage will result. Then the Dry Pendent Sprinkler Assembly is attached to the special cast iron fitting by screwing in threaded connector (#5) tightly. (Apply pipe dope to the male threads first.) Adjustment in length is obtained by applying the sprinkler head wrench and turning either clockwise or counterclockwise. Note that no locking is required when the sprinkler is in its desired position.

# Technical Data

Style	Nominal Orifice Size	"K" Factor	Available Temperature Range	Finishes Available
Extended (2 piece escutcheon)	½"	See Ordering Range Chart	135° F 57.2° C 165° F 74° C 212° F 100° C 286° F 141° C	Factory Bronze Chrome Lead* White Enamel**

\* Lead coating available in 165° F and 212° F only.  
\*\* White enamel finish not U.L. Listed or F.M. Approved.

# Cross Section



## ORDERING INFORMATION

- Specify:
- Quantity and Style.
  - Finish.
  - Temperature Rating(s).
  - "C" Dimension in ¼" increments. (See Ordering Range Chart – Minimum "C" Dimension is 3¾".)
  - Quantity – Universal Sprinkler Wrenches

- Notes:
- Approved length limitations are as follows:

	<b>Pendent</b>	<b>Upright</b>
U.L. & F.M.	36"	Not Listed
  - "C" Dimension is distance between center line of line pipe fitting and finished ceiling line.

## ORDERING RANGE CHART

Order "C" Dimension*	"K" Factor**	Order "C" Dimension*	"K" Factor**
3-3/4"	5.27	12-1/16"	5.06
5"	5.24	13-5/16"	5.03
6-1/4"	5.21	14-9/16"	5.00
7-1/2"	5.18	15-13/16"	4.97
8-3/4"	5.15	17-1/16"	4.94
10"	5.12	18-5/16"	4.91
11-1/4"	5.09	19-9/16"	4.88

\*Order by "C" Dimensions shown. Field adjustment is ± 1-11/16" to same including escutcheon.

\*\*Note: "K" Factor reduces by .03 per each 1¼" additional length.