

Adjustable Dry Pendent Automatic Sprinkler Model "A-1" Recessed



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

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Central Sprinkler Corporation

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Description

The Model "A-1" Recessed Type Field Adjustable Dry Pendant 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 pendant sprinklers, the Model "A-1" incorporates a special elbow that permits 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 Recessed Model "A-1" offers considerable aesthetic appeal as the sprinkler extends only between 1 and 1½ inches below the ceiling. The escutcheon assembly is comprised of an upper escutcheon support piece permanently attached to the sprinkler frame and a ceiling escutcheon piece that slips over the installed sprinkler and has ½ inch of field adjustment. Therefore, the total field adjustment for the Recessed Model "A-1" is 3 inches. System installation should be completed sooner resulting in greater efficiency and improved cash flow.

Operation

Central's Model "A-1" Recessed Dry Pendant Sprinkler features the basic Central center strut sprinkler. A fusible alloy is sealed into a bronze center strut (#15) by a stainless steel ball (#12). When alloy melts, the ball is forced upward into the center strut releasing the two ejectors (#16) and operating the basic sprinkler (#10). This causes the release of cap (#9) and bushing (#8) allowing guide tube (#6) 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 (#21) for replacement after sprinkler operation. It is only necessary to order the basic adjustable dry pendant assembly in the same length as the original.

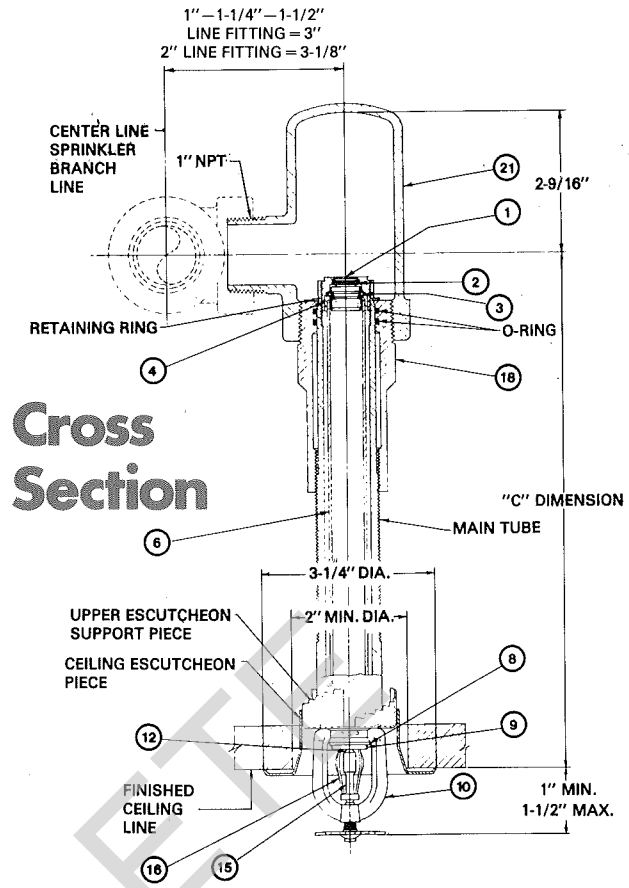
Installation

The special cast iron fitting (#21) is not attached to the Adjustable Recessed Dry Pendant Sprinkler Assembly in the factory as this fitting must be made into the sprinkler line fitting first. Then the Recessed Dry Pendant Sprinkler Assembly is attached to the special cast iron fitting by screwing in threaded connector (#18) 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 counter-clockwise. 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
Recessed	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 White Enamel*

*White enamel finishes are not U.L. Listed or F.M. Approved.



Cross Section

Ordering Information

- Specify:
- Quantity and Style.
 - Finish.
 - Temperature Rating(s).
 - "C" Dimensions in ¼" increments. (See ordering range chart). Minimum "C" dimension is 6¼".
 - Quantity - Model "FR-A10" Sprinkler Wrenches

- Notes:
- Approved length limitations are as follows:

	Pendent	Upright
U.L. & F.M.	36"	Not Listed
 - "C" Dimension is distance between center line of line pipe fitting and finished ceiling line.
 - Do not overtighten special elbow #21 into line fitting or breakage will result.

ORDERING RANGE CHART

Order "C" Dimension	"K" Factor**	Order "C" Dimension	"K" Factor**
6¼"	5.32	16¼"	5.08
7½"	5.29	17½"	5.05
8¾"	5.26	18¾"	5.02
10"	5.23	20"	4.99
11¼"	5.20	21¼"	4.96
12½"	5.17	22½"	4.93
13¾"	5.14	23¾"	4.90
15"	5.11	25"	4.87

*Order by "C" dimensions shown. Field adjustment is ± 1½" to same including escutcheon.

**"K" Factor reduces by .03 per reach 1¼" additional length.