

Vertical Hangers

For 1 5/8 inch Rigid Coaxial Transmission Line

Types RLA100-13-2, RLA100-11-H, 14378

Notice

The installation, maintenance, or removal of antenna systems requires qualified, experienced personnel. ERI installation instructions are written for such personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment. ERI disclaims any liability or responsibility for the results of improper installation practices.

Use clean cotton gloves when handling inner connector or inner conductor.

The hangers are designed to mount 1-5/8" rigid transmission line on a steel tower or other support structure and to accommodate the differential expansion and contraction between the line and the tower.

Type RLA100-13-2 Fixed Vertical Hanger

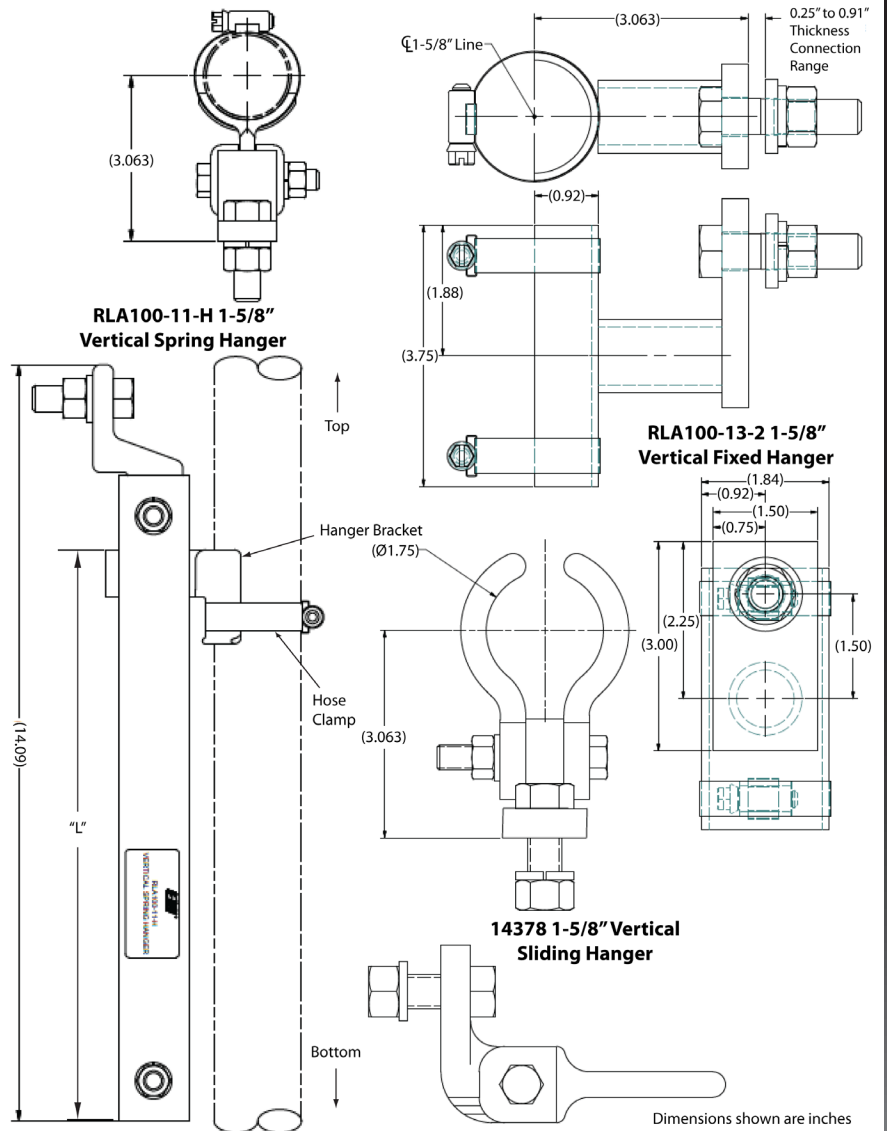
is used to anchor the vertical transmission line run in a spring-suspended system at the top of the tower. Two rigid hangers are needed, at the upper end of the vertical run, within 5 ft (1.5 m) of the antenna input. If the vertical transmission line run is more than 500 ft (152 m) add an additional hanger for each additional 500 ft (152 m).

Type RLA100-11-H Vertical Spring Hanger

is used to support the weight and accommodate the differential expansion and contraction. Spring hangers should be used at 50-foot (15 m) intervals. On towers less than 50 feet high, a spring hanger should be used at the bottom of the vertical run; for more than 500 feet (152 m), a special type vertical spring hanger is required.

Type 14378 Vertical Sliding Hanger

prevents lateral motion of the transmission line. Sliding hangers should be used at 10-ft (3 m) intervals along the vertical and horizontal transmission line runs. Type 14442 Sliding Hanger includes an insulator for isolating the line from the tower when the line feeds an antenna mounted on a "hot" AM broadcast tower.



Installation Instructions

Spring Settings

Temperature, °F	-50	-25	0	25	50	75	100	152	150
(°C)	(-46)	(-32)	(-18)	(-4)	(10)	(24)	(38)	(52)	(66)
Dimension L, inches	8-9/16	8-3/8	8-1/8	7-5/16	7-3/4	7-9/16	7-3/8	7-1/8	6-15/16
(mm)	(217)	(213)	(206)	(202)	(197)	(192)	(187)	(181)	(176)

Read the Instructions Thoroughly Before Assembly

1. If tower or support member is drilled or punched at regular intervals with 9/16" (14 mm) holes for 1/2" (13 mm) diameter hanger bolts, hangers may be attached directly to the tower. If such holes are not provided and cannot be drilled, clamp adapters must be used. Type 13555A adapters are used for towers having angle or flat members up to 7/8 in (22 mm) thick. Types 13550, 13551-1, and 13551-2 adapters are used for towers having round members of 1 to 3 in (25 to 76 mm) diameters, 3 to 4-1/2 in (76 to 114 mm) diameters, and 4-1/2 to 6-1/2 in (114 to 165 mm) diameters, respectively.

WARNING

Tower members should not be drilled without consent of manufacturer because of possible weakening of the structure.

2. Spring hangers should be set and wired in accordance with the setting chart. This operation should be done on ground and wires should not be removed until installation is completed. Settings have been calculated for mean temperature of 50°F (10°C). Since calculated differences in settings for hangers within given run are so small, all hangers within any one system may be used with same settings. To set hanger, wrap baling wire around bottom bolt and hanger bracket as shown in illustration.

3. When all spring hangers are wired to desired setting, begin assembly of transmission line and installation of hangers. Start with rigid hanger at top and work downward with sliding and spring hangers. Make certain to remove wires from spring hangers after installation is completed.

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