

FLEXIBLE SPRINKLER DROP HOSE 3-BEND BRAIDED CONNECTIONS



- Save Time & Money
- No cutting, no welding, no threading
- Perfect for retrofit applications
- Easy to move for layout changes
- Most flexible hose in its class.
UL: 3 bends 4" minimum radius

Full assembly includes Stainless Steel Braided Hose, Reducing Discharge Nipple, 1" Inlet Nipple, Hinged Lever Center Bracket, two End Brackets & 24" Square Bar

TECHNICAL DATA

- Rated Pressure: 203 PSI (14 Bars)
- Maximum Ambient Temperature: 225°F (107°C)
- Designed for use in wet and dry systems
- Flexibility Type: Unlimited
- Hose Diameter: O.D. 1-1/16" / Flow 13/16"



Friction Loss Data and Specifications

Model	Length	NPT	ITEM #	Equivalent Length of 1 ft Sch 40 Pipe					
				UL LISTED	Max. # of Bends	Min. Bending Radius	FM	Max. # of Bends	Min. Bending Radius
AR-BR FLEX-07-050	28" (0.6 m)	1/2"	6530165A	25 ft	2	4"	26.7 ft	1	10"
AR-BR FLEX-10-050	40" (0.9 m)	1/2"	6530166A	33 ft	3	4"	42.6 ft	2	10"
AR-BR FLEX-12-050	48" (1.2 m)	1/2"	6530167A	39 ft	3	4"	53.2 ft	3	10"
AR-BR FLEX-15-050	60" (1.5 m)	1/2"	6530168A	50 ft	3	4"	67.8 ft	3	10"
AR-BR FLEX-18-050	72" (1.8 m)	1/2"	6530169A	58 ft	3	4"	82.4 ft	4	10"
AR-BR FLEX-07-075	28" (0.6 m)	3/4"	6530175A	21 ft	2	4"	22.1 ft	1	10"
AR-BR FLEX-10-075	40" (0.9 m)	3/4"	6530176A	36 ft	3	4"	40.6 ft	2	10"
AR-BR FLEX-12-075	48" (1.2 m)	3/4"	6530177A	43 ft	3	4"	53.0 ft	3	10"
AR-BR FLEX-15-075	60" (1.5 m)	3/4"	6530178A	52 ft	3	4"	64.2 ft	3	10"
AR-BR FLEX-18-075	72" (1.8 m)	3/4"	6530179A	63 ft	3	4"	75.5 ft	4	10"

Anchoring components are intended for use with drop ceilings conforming to ASTM C635 and other major standards when installed in accordance with the standard practice for installation of metal ceiling suspension systems for acoustical tile and lay-in panel, ASTM C635 or other equivalent standards.

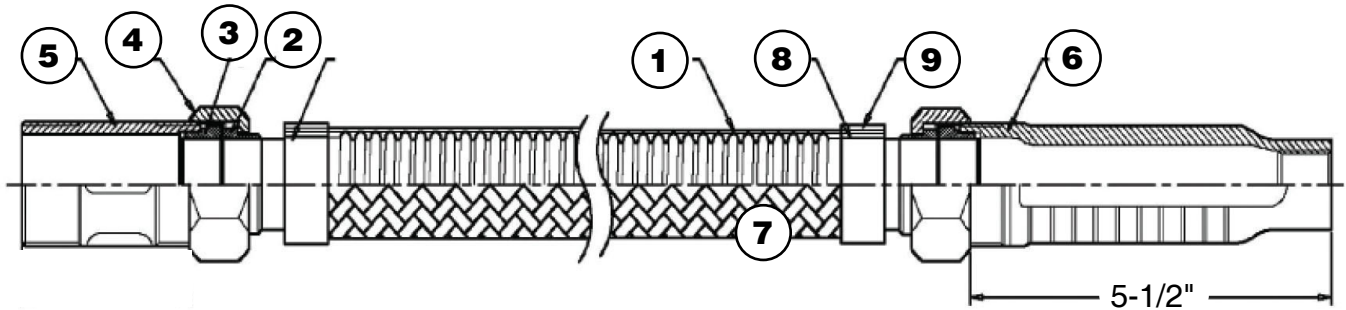
System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	

FLEXIBLE SPRINKLER DROP HOSE BRAIDED CONNECTIONS

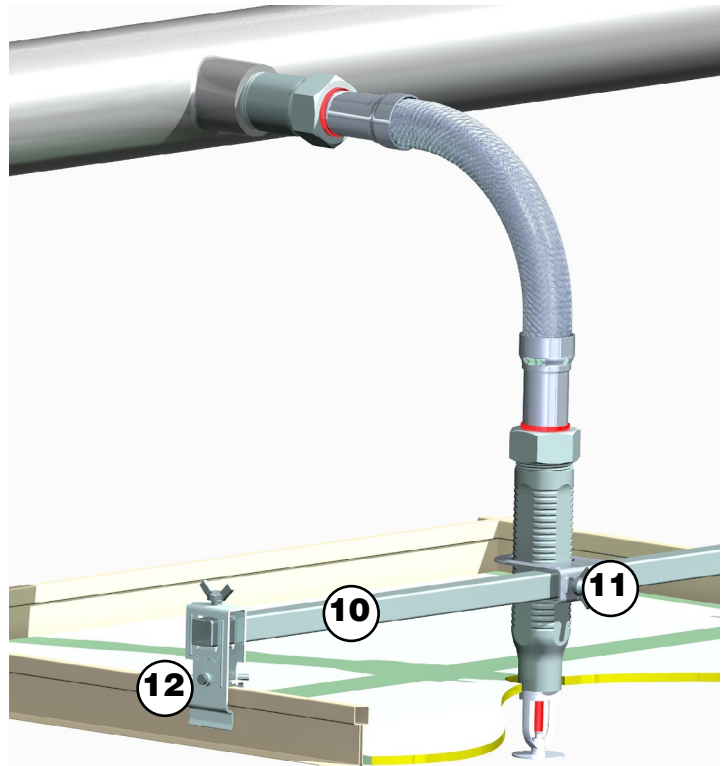


ARGCO's hoses are manufactured with corrosion resistant AISI Grade 304 Stainless Steel corrugated high flexibility tube with two hex slip nuts and high integrity O-ring seals with a burst test pressure of 70 bar/875 psi at ambient temperature, providing flexibility, high performance durability and reliability.

COMPONENTS:



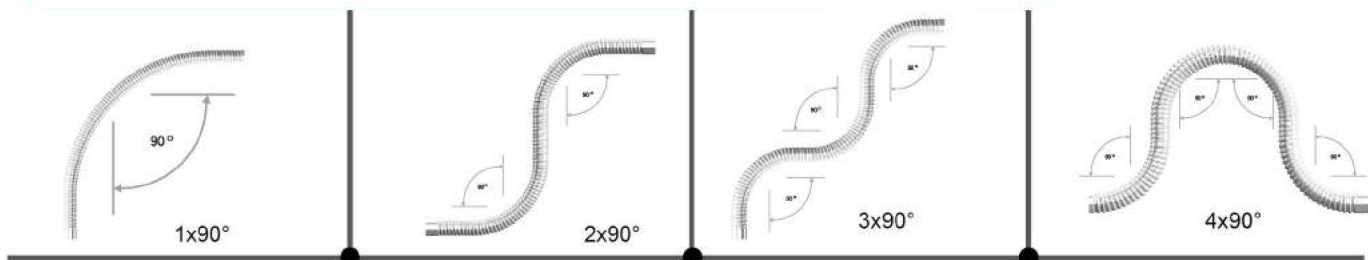
1. FLEXIBLE TUBE	304 STAINLESS STEEL
2. ISOLATION RING	NYLON 66
3. SEALING GASKET	EPDM
4. NUT	ZINC PLATED STEEL
5. NIPPLE 1"	ZINC PLATED STEEL
6. REDUCING NIPPLE	ZINC PLATED STEEL
7. BRAID	304 STAINLESS STEEL
8. COLLAR RING (INNER)	304 STAINLESS STEEL
9. COLLAR RING (OUTER)	304 STAINLESS STEEL
10. SQUARE BAR	ZINC PLATED STEEL
11. CENTER BRACKET	ZINC PLATED STEEL
12. 4" END BRACKET(S)	ZINC PLATED STEEL



CHARACTERISTICS:

- Minimum bend radius Braided 3" (230 mm)
- Flexibility Type: Limited

HOSE BENDING PARAMETERS






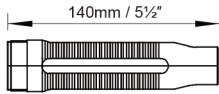
FLEXIBLE SPRINKLER DROP HOSE BRAIDED CONNECTIONS



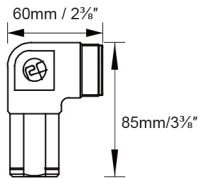
INSTALLATION CLEARANCE

This data sheet indicates the minimum distance for Flex Hose installation between the building room and ceiling tiles. Unless otherwise specified, all figures include 25 mm / 1" operation space.

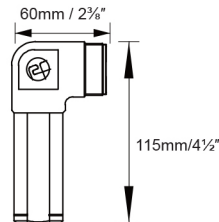
Grid type	Side bracket	Straight reducer [%]		Cast elbow short ^{\$}		Cast elbow long [*]		Elbow reducer ⁺	
		concealed sprinkler	pendent sprinkler	concealed sprinkler	pendent sprinkler	concealed sprinkler	pendent sprinkler	concealed sprinkler	pendent sprinkler
T-bar grid 	RF-12210/30 Long S. bracket	1.1	2.1	/	/	1.4	/	1.7	/
	RF-12110/30 Short S. bracket	/	2.2	1.2	/	/	2.4	/	2.6
	RF-12510 B-shape S. bracket	/	2.3	1.3	/	/	2.5	/	2.7
C-beam 	RF-12610/30 C-clamp	/	4.2	/	4.3	/	4.5	/	4.7
	RF-12510 B-shape S. bracket	/	4.1	3.1	/	3.2	4.4	/	4.6
	RF-12210/30 Long S. bracket	3.3	4.8	/	/	/	3.4	/	4.7
	RF-12110/30 Short S. bracket	/	4.9	3.5	/	3.6	4.10	/	4.11
Hat furring channel 	RF-12310 Hat furring channel bracket	5.1	6	/	/	5.2	/	5.3	/



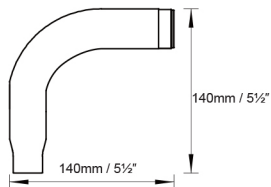
Mark %: Straight reducer includes RF-13102/202, 13103/203, 13109/209, 13110/210



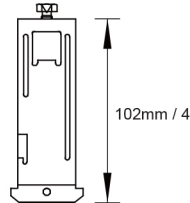
Mark \$: Cast elbow short includes RF-13137/237, 13138/238;



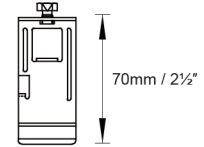
Mark *: Cast elbow long includes RF-13147/247, 13148/248;



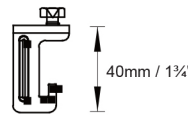
Mark +: Elbow reducer includes RF-13104/204, 13105/205



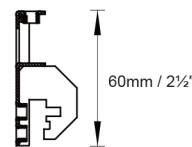
RF-12210/30 Long side bracket



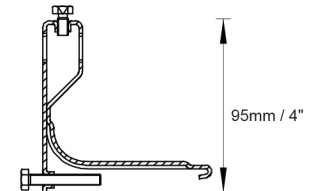
RF-12110/30 Short side bracket



RF-12610/30 C-clamp



RF-12510 B-shape side bracket



RF-12310 Hat furring channel bracket

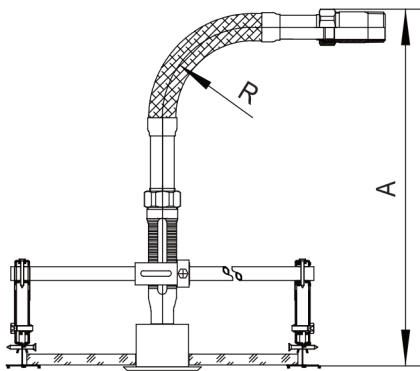
FLEXIBLE SPRINKLER DROP HOSE BRAIDED CONNECTIONS



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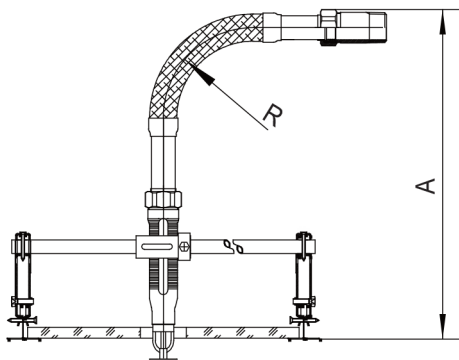
Concealed sprinklers on T-bar grid



Straight Reducer with Long End Bracket

Installation Clearance			
		UL	FM
R	Minimum bend radius	3.9"	5.8"
A	Minimum	15.4"	22.0"

Pendent sprinklers on T-bar grid



Straight Reducer with Long End Bracket

Installation Clearance			
		UL	FM
R	Minimum bend radius	3.9"	9.8"
A	Minimum	14.0"	20.0"

FLEXIBLE SPRINKLER DROP HOSE INSTALLATION INSTRUCTIONS



Determine the approximate place where the sprinklers will be located. The sprinkler should be located as close as possible to the center of the distance between ceiling grid's T-bars.

CONNECT INLET NIPPLE

Use a pipe wrench to screw the INLET NIPPLE into the branch outlet. Apply pipe joint compound or Teflon tape to the tapered threads to seal and tighten the branch line nipple into the branch line outlet, with 35ft-lbs/50N•m.

DO NOT OVERTIGHTEN.



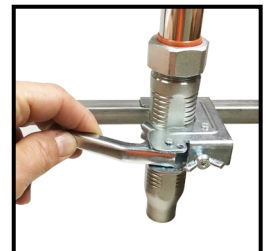
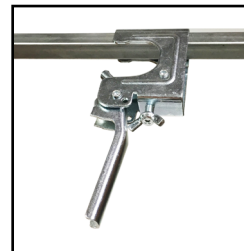
ATTACH BRACKET SET

Attach SIDE BRACKETS and SQUARE BAR to the main rail of the T-Bar grid, with the CENTER BRACKET in the middle. Tighten horizontal bolts on the side brackets with 3ft-lbs/4N•m. For installation requiring UL listing - Drill two sheet metal screws through T-bar grids



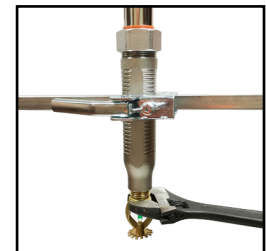
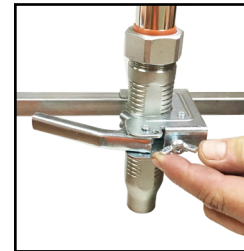
BENDING AND LOCATING

With CENTER BRACKET in the middle of the SQUARE BAR, bend the FLEXIBLE HOSE body as desired (According to hose bending parameters) and locate the DISCHARGE NIPPLE into the CENTER BRACKET and hinge arm and and tighten wing nut with 3ft-lbs/4N•m torque, after the proper location of sprinkler head has been determined.



CONNECT DISCHARGE NIPPLE

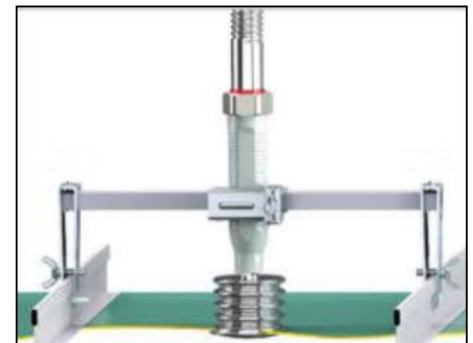
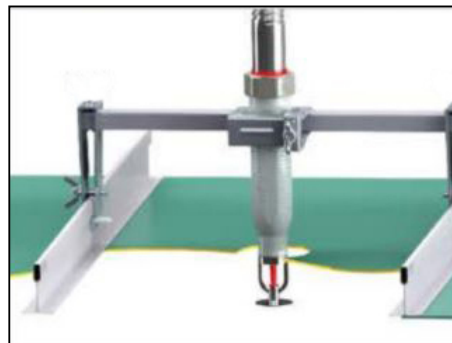
Apply Teflon tape to the male threads of the sprinkler. Tighten slip nuts of CENTER BRACKET and install sprinkler head to discharge nipple by following the sprinkler manufacturer's installation instructions.



TEST

After installation is complete, test the system for leaks in accordance with NFPA guidelines.

Simply add 4x sheet metal screws to build a tamper resistant installation.



AR-200 FLEXIBLE SPRINKLER DROP HOSE ACCESSORIES



90° Reducing Nipple
6530190: 1" x 1/2"
6530192: 1" x 3/4"



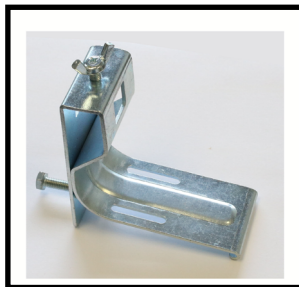
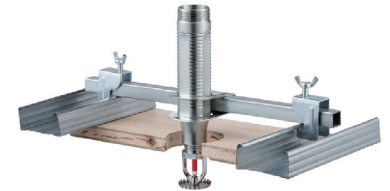
Straight Reducing Nipple
6530181: 1" x 1/2" standard
6530180: 1" x 3/4" standard
6530191: 1" x 1/2" x 9" length



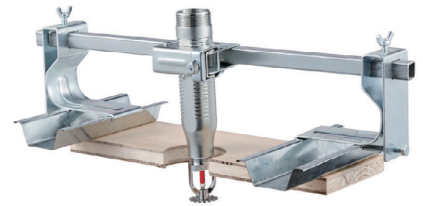
Flex Hose End Brackets
6530185: Standard 4" End Brackets (sold each)
6530183: Short 2-1/4" End Brackets (sold each)



6530194 :
Metal Stud End Bracket
(C-Clamp)



6530195:
Furring Channel End Bracket
(Hat Channel Bracket)



Flex Hose Center Brackets
6530184: Center bracket with hinged lever handle



Flex Hose Square Bar
6530182: 25" Square bar to fit standard ceiling tile grids

FLEXIBLE SPRINKLER DROP HOSE BRAIDED CONNECTIONS



ARGCO Flexible Sprinkler Drops are designed to reduce labor and installation costs by installing without cutting and threading pipe associated with installing a drop, arm-over and elbows. ARGCO offers braided and unbraided hoses in 28, 40, 48, 60 and 72” lengths with simple brackets for suspended ceilings.

National Fire Protection Association (NFPA):

- NFPA 13: Standard for the Installation of Sprinkler Systems
- NFPA 13R: Standard for the Installation of Sprinkler Systems in residential Occupancies up to and including four stories in height.
- NFPA 13D: Standard for the Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes
- NFPA 13 Section 9.2.1.3.3.3: No hangers are required for flexible connections as long as the length does not exceed 6 feet.

American Society for Testing Methods (ASTM):

- ASTM C635: Standard specifications for the manufacture, performance, and testing of metal suspension systems for acoustical tile and lay-in panel ceilings
- ASTM C636: Standard practice for installation of metal ceiling suspension systems for acoustical tile and lay-in panels.

Factory Mutual (FM):

- Approved standard for flexible sprinkler hose with threaded end fittings

Underwriter’s Laboratories (FM):

- Standard for flexible sprinkler hose with fittings for fire protection service

International Building Code (IBC):

- Flexible Sprinkler Connections are an alternative solution to install without seismic escutcheons.

System No.		Location		Spec Section		Paragraph	
Submitted By		Date		Approved		Date	