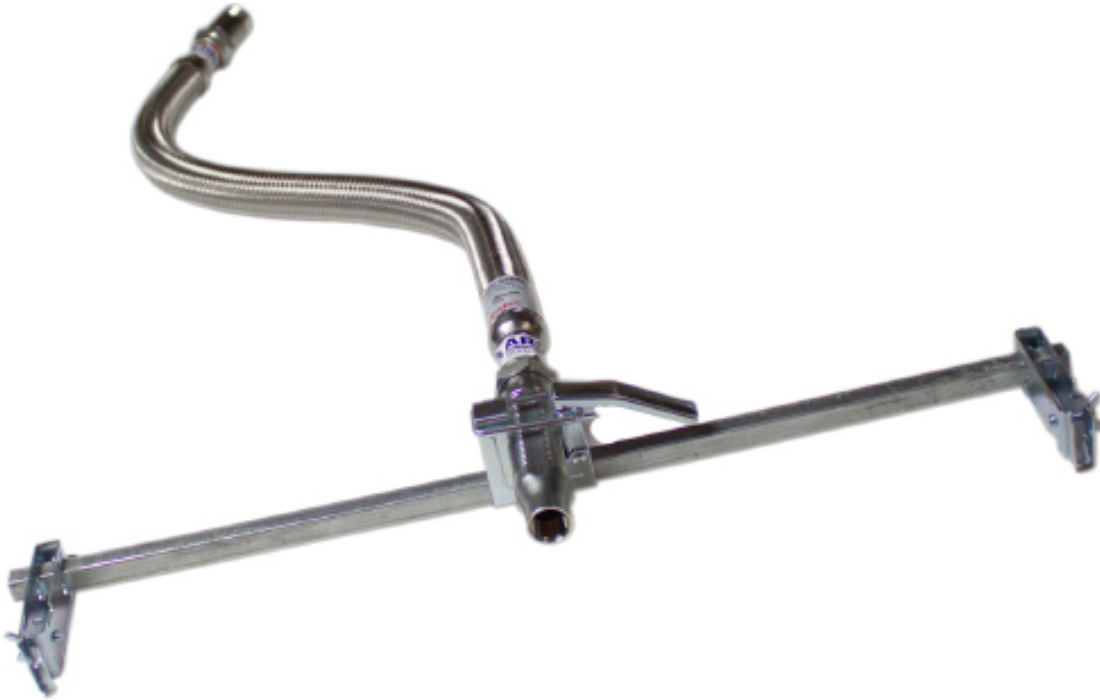




## **FLEXIBLE SPRINKLER DROP**



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# 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.

Manufactured with corrosion resistant AISI Grade 304 Stainless Steel corrugated high flexibility tube with two hex slip nuts an 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.

### National Fire Protection Association (NFPA):

- NFPA 13: Standard for the Installation of Sprinkler Systems
- NFPA 13D: Standard for the Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes
- NFPA 13R: Standard for the Installation of Sprinkler Systems in residential Occupancies up to and including four stories in height.
- 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 (UL):

- 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      |  |

# 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 APPROVED | 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.

FM Notes: ARGCO hoses have been tested and Approved by FM Global for use in wet, dry and preaction systems per NFPA13, 13R and 13D.

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

# FLEXIBLE SPRINKLER DROP HOSE 3-BEND

## BRAIDED CONNECTIONS



### Friction Loss Data and Specifications

|                   |             |      |          | Equivalent Length of 1 ft Sch 40 Pipe |                 |                     |             |                 |                     |
|-------------------|-------------|------|----------|---------------------------------------|-----------------|---------------------|-------------|-----------------|---------------------|
| Model             | Length      | NPT  | ITEM #   | UL LISTED                             |                 |                     | FM APPROVED |                 |                     |
|                   |             |      |          | UL                                    | 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"                 |

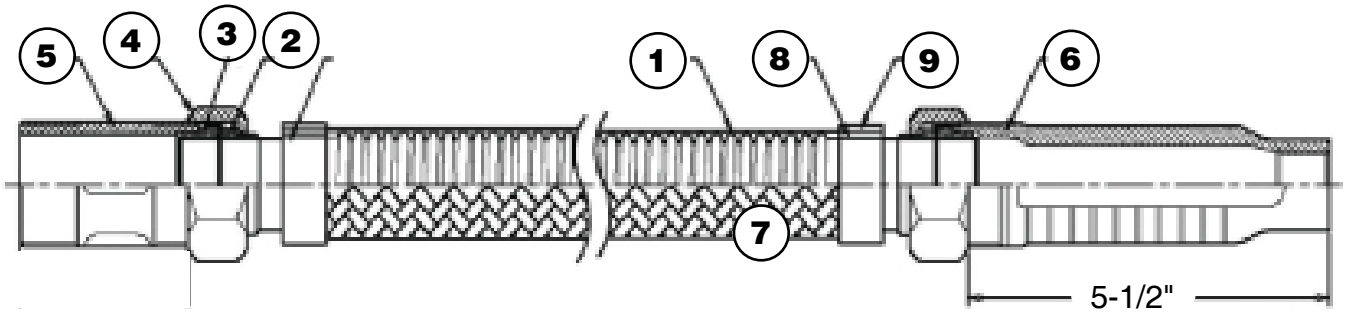
| Number of Bends<br>Equivalent Length of 1 ft Sch 40 Pipe |        |      |      |      |      |      |      |
|--|--------|------|------|------|------|------|------|
| Model  | Length | NPT  | 0    | 1    | 2    | 3    | 4    |
| AR-BR FLEX-07-050  | 28"    | 1/2" | 15.1 | 18.0 | 25.0 |      |      |
| AR-BR FLEX-10-050  | 39"    | 1/2" | 19.0 | 24.0 | 28.0 | 33.0 |      |
| AR-BR FLEX-12-050  | 47"    | 1/2" | 26.0 | 30.0 | 34.0 | 39.0 |      |
| AR-BR FLEX-15-050  | 59"    | 1/2" | 35.0 | 41.0 | 45.0 | 50.0 |      |
| AR-BR FLEX-18-050  | 71"    | 1/2" | 42.0 | 47.5 | 52.8 | 58.1 | 63.4 |

| Number of Bends<br>Equivalent Length of 1 ft Sch 40 Pipe |        |      |      |      |      |      |      |
|--|--------|------|------|------|------|------|------|
| Model  | Length | NPT  | 0    | 1    | 2    | 3    | 4    |
| AR-BR FLEX-07-075  | 28"    | 3/4" | 16.4 | 18.8 | 21.0 |      |      |
| AR-BR FLEX-10-075  | 39"    | 3/4" | 22.0 | 27.0 | 31.0 | 36.0 |      |
| AR-BR FLEX-12-075  | 47"    | 3/4" | 29.0 | 34.0 | 38.0 | 43.0 |      |
| AR-BR FLEX-15-075  | 59"    | 3/4" | 38.0 | 43.0 | 47.0 | 52.0 |      |
| AR-BR FLEX-18-075  | 71"    | 3/4" | 52.0 | 57.3 | 61.3 | 65.3 | 69.3 |

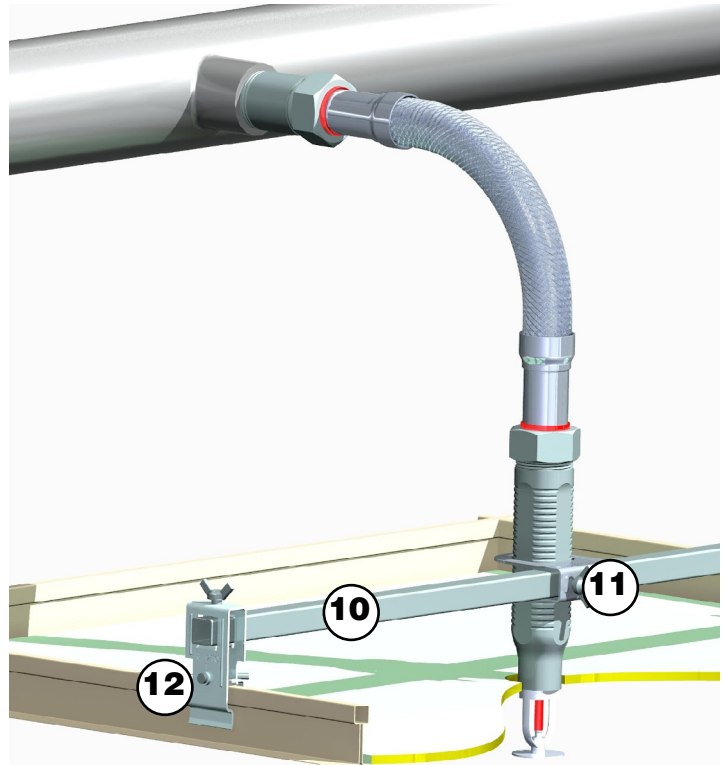
# FLEXIBLE SPRINKLER DROP HOSE BRAIDED CONNECTIONS



## COMPONENTS:



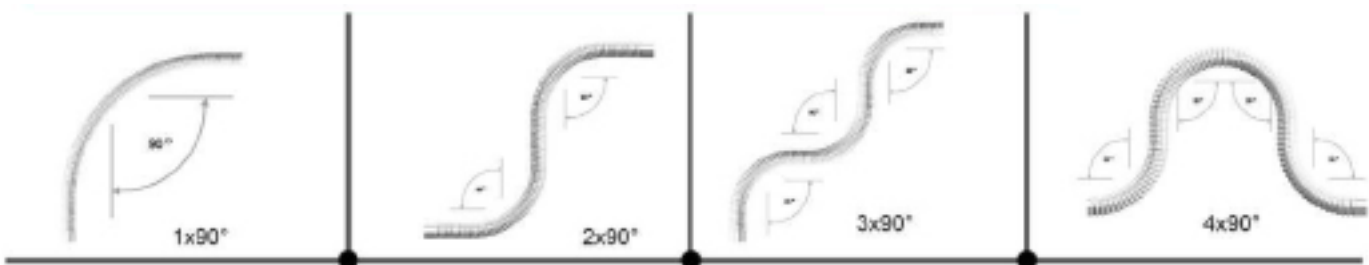
- |                        |                     |
|------------------------|---------------------|
| 1. FLEXIBLE TUBE       | 304 STAINLESS STEEL |
| 2. ISOLATION RING      | NYLON 66            |
| 3. SEALING GASKET      | EPDM                |
| 4. NUT                 | ZINC PLATED STEEL   |
| 5. 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 FULL BORE

## BRAIDED CONNECTIONS

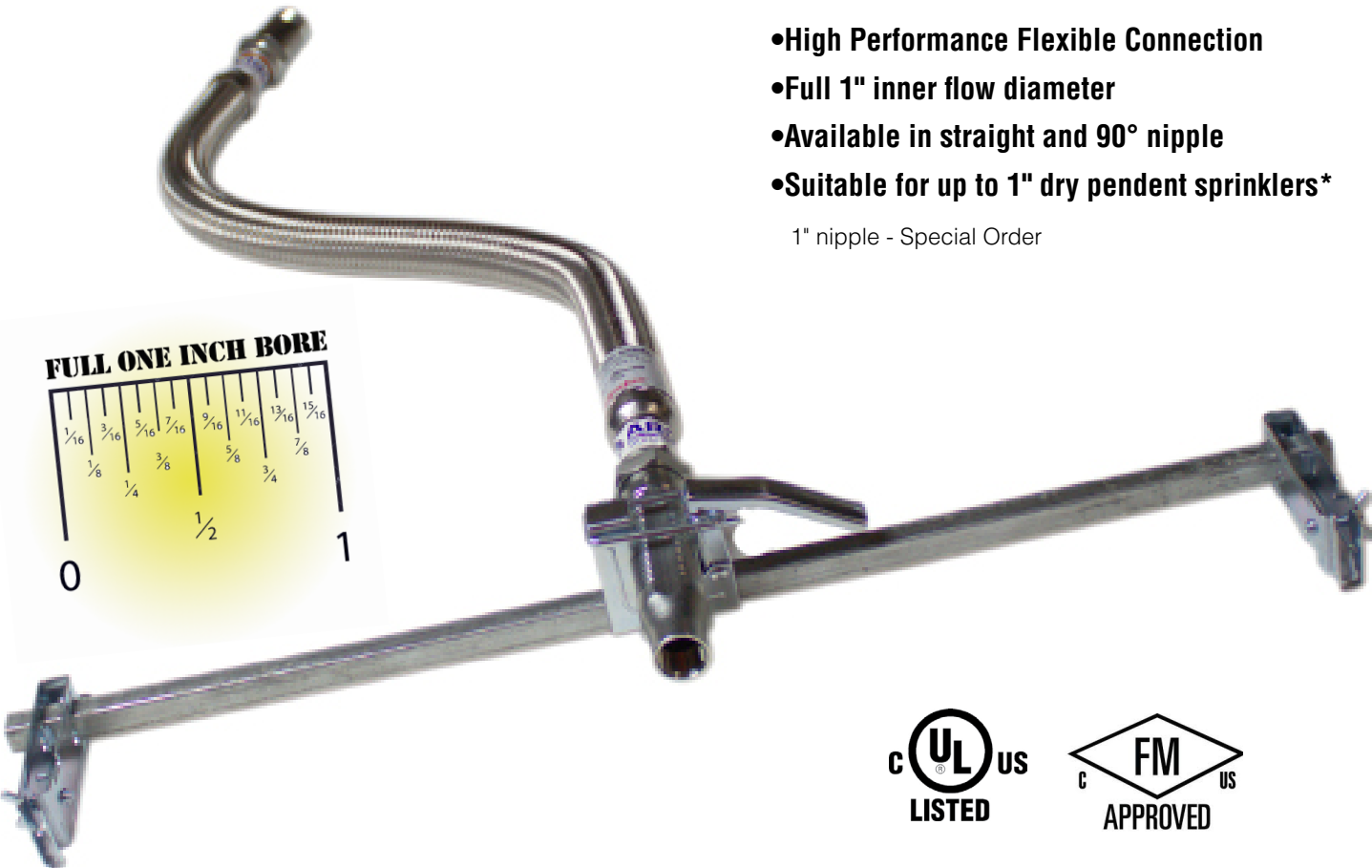
with Straight End Connection Inlet



# MEGA-FLEX

- High Performance Flexible Connection
- Full 1" inner flow diameter
- Available in straight and 90° nipple
- Suitable for up to 1" dry pendent sprinklers\*

1" nipple - Special Order



### PRODUCT DESCRIPTION

- Series AR-400-BR 1"/DN25 Nominal ID Braided Hose: 28, 40, 48, 60, 72"
- Sprinkler Connections: 1/2", 3/4" and 1" NPT
- Inlet Connections: 1"/25mm NPT
- Straight Reducing Nipple Length: 5.5" (other lengths available)
- 90° Elbows: Long (typically used with recessed pendent sprinklers)

Friction Loss Data continued on next page

### TECHNICAL DATA

- Rated Pressure: 203 PSI (14 Bars)
- Maximum Ambient Temperature: 150°F (66°C)
- Maximum Sprinkler K-factor for 1/2" outlet: 8.0 gal/mm/(psi)^1/2
- Maximum Sprinkler K-factor for 3/4" outlet: 14.0 gal/mm/(psi)^1/2
- Maximum Sprinkler K-factor for 1" outlet: 25.2 gal/mm/(psi)^1/2
- Designed for use in wet and dry systems
- Flexibility Type: Unlimited
- Minimum Bend Radius: 2"
- Hose Diameter: O.D. 1-3/8" / Flow 1"

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

# FLEXIBLE SPRINKLER DROP HOSE FULL BORE BRAIDED CONNECTIONS with Straight End Connection Inlet



## Friction Loss Data and Specifications

| Model                 | Length | NPT  | k-Factor  | Equivalent Length of 1 ft Sch 40 Pipe |                 |                     |             |                 |                     |
|-----------------------|--------|------|-----------|---------------------------------------|-----------------|---------------------|-------------|-----------------|---------------------|
|                       |        |      |           | c(UL)US LISTED                        |                 |                     | FM APPROVED |                 |                     |
|                       |        |      |           | UL                                    | Max. # of Bends | Min. Bending Radius | FM          | Max. # of Bends | Min. Bending Radius |
| AR-400-BR FLEX-07-050 | 28"    | 1/2" | 5.6 & 8.0 | 18 ft                                 | 4               | 2"                  | 4.5 ft      | 1               | 6.9"                |
| AR-400-BR FLEX-10-050 | 39"    | 1/2" | 5.6 & 8.0 | 24 ft                                 | 5               | 2"                  | 9.8 ft      | 3               | 6.9"                |
| AR-400-BR FLEX-12-050 | 47"    | 1/2" | 5.6 & 8.0 | 37 ft                                 | 8               | 2"                  | 13.4 ft     | 3               | 6.9"                |
| AR-400-BR FLEX-15-050 | 59"    | 1/2" | 5.6 & 8.0 | 49 ft                                 | 10              | 2"                  | 18.8 ft     | 4               | 6.9"                |
| AR-400-BR FLEX-18-050 | 71"    | 1/2" | 5.6 & 8.0 | 52 ft                                 | 12              | 2"                  | 24.2 ft     | 4               | 6.9"                |

| Model                 | Length | NPT  | k-Factor        | Equivalent Length of 1 ft Sch 40 Pipe |                 |                     |             |                 |                     |
|-----------------------|--------|------|-----------------|---------------------------------------|-----------------|---------------------|-------------|-----------------|---------------------|
|                       |        |      |                 | c(UL)US LISTED                        |                 |                     | FM APPROVED |                 |                     |
|                       |        |      |                 | UL                                    | Max. # of Bends | Min. Bending Radius | FM          | Max. # of Bends | Min. Bending Radius |
| AR-400-BR FLEX-07-075 | 28"    | 3/4" | 8.0, 11.2, 14.0 | 18 ft                                 | 4               | 2"                  | 13.0 ft     | 1               | 6.9"                |
| AR-400-BR FLEX-10-075 | 39"    | 3/4" | 8.0, 11.2, 14.0 | 24 ft                                 | 5               | 2"                  | 20.8 ft     | 3               | 6.9"                |
| AR-400-BR FLEX-12-075 | 47"    | 3/4" | 8.0, 11.2, 14.0 | 37 ft                                 | 8               | 2"                  | 26.0 ft     | 3               | 6.9"                |
| AR-400-BR FLEX-15-075 | 59"    | 3/4" | 8.0, 11.2, 14.0 | 49 ft                                 | 10              | 2"                  | 33.8 ft     | 4               | 6.9"                |
| AR-400-BR FLEX-18-075 | 71"    | 3/4" | 8.0, 11.2, 14.0 | 52 ft                                 | 12              | 2"                  | 41.7 ft     | 4               | 6.9"                |

| Model                 | Length | NPT | k-Factor      | Equivalent Length of 1 ft Sch 40 Pipe |                 |                     |             |                 |                     |
|-----------------------|--------|-----|---------------|---------------------------------------|-----------------|---------------------|-------------|-----------------|---------------------|
|                       |        |     |               | c(UL)US LISTED                        |                 |                     | FM APPROVED |                 |                     |
|                       |        |     |               | UL                                    | Max. # of Bends | Min. Bending Radius | FM          | Max. # of Bends | Min. Bending Radius |
| AR-400-BR FLEX-07-100 | 28"    | 1"  | 25.2 and less | 18 ft                                 | 4               | 2"                  | 5.6 ft      | 1               | 6.9"                |
| AR-400-BR FLEX-10-100 | 39"    | 1"  | 25.2 and less | 24 ft                                 | 5               | 2"                  | 9.2 ft      | 3               | 6.9"                |
| AR-400-BR FLEX-12-100 | 47"    | 1"  | 25.2 and less | 37 ft                                 | 8               | 2"                  | 11.6 ft     | 3               | 6.9"                |
| AR-400-BR FLEX-15-100 | 59"    | 1"  | 25.2 and less | 49 ft                                 | 10              | 2"                  | 15.2 ft     | 4               | 6.9"                |
| AR-400-BR FLEX-18-100 | 71"    | 1"  | 25.2 and less | 52 ft                                 | 12              | 2"                  | 19.1 ft     | 4               | 6.9"                |

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.

FM Notes: ARGCO hoses have been tested and Approved by FM Global for use in wet, dry and preaction systems per NFPA13, 13R and 13D.

# FLEXIBLE SPRINKLER DROP HOSE FULL BORE

## BRAIDED CONNECTIONS

with Straight End Connection Inlet



### Friction Loss Data and Specifications

| Model                 | Length | NPT  | k-Factor  | Equivalent Length of 1 ft Sch 40 Pipe |                 |                     |             |                 |                     |
|-----------------------|--------|------|-----------|---------------------------------------|-----------------|---------------------|-------------|-----------------|---------------------|
|                       |        |      |           | cUL <sup>US</sup> LISTED              |                 |                     | FM APPROVED |                 |                     |
|                       |        |      |           | UL                                    | Max. # of Bends | Min. Bending Radius | FM          | Max. # of Bends | Min. Bending Radius |
| AR-400-BR FLEX-07-050 | 28"    | 1/2" | 5.6 & 8.0 | 18 ft                                 | 4               | 2"                  | 4.5 ft      | 1               | 6.9"                |
| AR-400-BR FLEX-10-050 | 39"    | 1/2" | 5.6 & 8.0 | 24 ft                                 | 5               | 2"                  | 9.8 ft      | 3               | 6.9"                |
| AR-400-BR FLEX-12-050 | 47"    | 1/2" | 5.6 & 8.0 | 37 ft                                 | 8               | 2"                  | 13.4 ft     | 3               | 6.9"                |
| AR-400-BR FLEX-15-050 | 59"    | 1/2" | 5.6 & 8.0 | 49 ft                                 | 10              | 2"                  | 18.8 ft     | 4               | 6.9"                |
| AR-400-BR FLEX-18-050 | 71"    | 1/2" | 5.6 & 8.0 | 52 ft                                 | 12              | 2"                  | 24.2 ft     | 4               | 6.9"                |

### Number of Bends | Equivalent Length of 1 ft Sch 40 Pipe

| Model                 | Length | NPT  | Number of Bends   Equivalent Length of 1 ft Sch 40 Pipe |      |      |      |      |      |      |      |      |      |      |      |      |  |
|-----------------------|--------|------|---|------|------|------|------|------|------|------|------|------|------|------|------|--|
|                       |        |      | 0   | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   |  |
| AR-400-BR FLEX-07-050 | 28"    | 1/2" | 8.0   | 10.5 | 13.0 | 15.5 | 18.0 |      |      |      |      |      |      |      |      |  |
| AR-400-BR FLEX-10-050 | 39"    | 1/2" | 11.5  | 14.0 | 16.5 | 19.0 | 21.5 | 24.0 |      |      |      |      |      |      |      |  |
| AR-400-BR FLEX-12-050 | 47"    | 1/2" | 17.0  | 19.5 | 22.0 | 24.5 | 27.0 | 29.5 | 32.0 | 34.5 | 37.0 |      |      |      |      |  |
| AR-400-BR FLEX-15-050 | 59"    | 1/2" | 24.0  | 26.5 | 29.0 | 31.5 | 34.0 | 36.5 | 39.0 | 41.5 | 44.0 | 46.5 | 49.0 |      |      |  |
| AR-400-BR FLEX-18-050 | 71"    | 1/2" | 22.0  | 24.5 | 27.0 | 29.5 | 32.0 | 34.5 | 37.0 | 39.5 | 42.0 | 44.5 | 47.0 | 49.5 | 52.0 |  |

### Number of Bends | Equivalent Length of 1 ft Sch 40 Pipe

| Model                 | Length | NPT  | Number of Bends   Equivalent Length of 1 ft Sch 40 Pipe |      |      |      |      |      |      |      |      |      |      |      |      |  |
|-----------------------|--------|------|---|------|------|------|------|------|------|------|------|------|------|------|------|--|
|                       |        |      | 0   | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   |  |
| AR-400-BR FLEX-07-075 | 28"    | 3/4" | 9.4   | 11.5 | 13.0 | 15.8 | 18.0 |      |      |      |      |      |      |      |      |  |
| AR-400-BR FLEX-10-075 | 39"    | 3/4" | 13.2  | 15.4 | 16.5 | 19.7 | 21.8 | 24.0 |      |      |      |      |      |      |      |  |
| AR-400-BR FLEX-12-075 | 47"    | 3/4" | 19.7  | 21.9 | 22.0 | 26.2 | 28.4 | 30.5 | 32.7 | 34.8 | 37.0 |      |      |      |      |  |
| AR-400-BR FLEX-15-075 | 59"    | 3/4" | 27.4  | 29.6 | 29.0 | 33.9 | 36.0 | 38.2 | 40.4 | 42.5 | 44.7 | 46.8 | 49.0 |      |      |  |
| AR-400-BR FLEX-18-075 | 71"    | 3/4" | 26.0  | 28.2 | 27.0 | 32.6 | 34.7 | 36.9 | 39.0 | 41.2 | 43.4 | 45.5 | 47.7 | 49.8 | 52.0 |  |

### Number of Bends | Equivalent Length of 1 ft Sch 40 Pipe

| Model                 | Length | NPT | Number of Bends   Equivalent Length of 1 ft Sch 40 Pipe |      |      |      |      |      |      |      |      |      |      |      |      |  |
|-----------------------|--------|-----|---|------|------|------|------|------|------|------|------|------|------|------|------|--|
|                       |        |     | 0   | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   |  |
| AR-400-BR FLEX-07-100 | 28"    | 1"  | 9.0   | 11.3 | 13.5 | 15.8 | 18.0 |      |      |      |      |      |      |      |      |  |
| AR-400-BR FLEX-10-100 | 39"    | 1"  | 12.8  | 15.0 | 17.3 | 19.5 | 21.8 | 24.0 |      |      |      |      |      |      |      |  |
| AR-400-BR FLEX-12-100 | 47"    | 1"  | 19.0  | 21.3 | 23.5 | 25.8 | 28.0 | 30.3 | 32.5 | 34.8 | 37.0 |      |      |      |      |  |
| AR-400-BR FLEX-15-100 | 59"    | 1"  | 26.5  | 28.8 | 31.0 | 33.3 | 35.5 | 37.8 | 40.0 | 42.3 | 44.5 | 46.8 | 49.0 |      |      |  |
| AR-400-BR FLEX-18-100 | 71"    | 1"  | 25.0  | 27.3 | 29.5 | 31.8 | 34.0 | 36.3 | 38.5 | 40.8 | 43.0 | 45.3 | 47.5 | 49.8 | 52.0 |  |



# FLEXIBLE SPRINKLER DROP HOSE

## UNBRAIDED 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 Unbraided Hose, Reducing Discharge Nipple, 1" Inlet Nipple, Hinged Lever Center Bracket, two End Brackets & 24" Square Bar

### TECHNICAL DATA

- UL Approved for Unbraided
- Rated Pressure: 203 PSI (14 Bar)
- Max. Burst Pressure: 875 PSI (70 Bar)
- Maximum Ambient Temperature: 225°F (107°C)
- Designed for use in wet and dry systems
- Flexibility Type: Limited
- Hose Diameter: O.D. 1-1/16" / Flow 7/8"



### Friction Loss Data and Specifications

UNBRAIDED



| Length                    | 1/2" NPT |  | 3/4" NPT |  | Max. # of Bends | Min. Bending Radius |
|---------------------------|----------|--|----------|--|-----------------|---------------------|
|                           | ITEM #   | Equivalent Length of 1 ft Sch 40 Pipe* | ITEM #   | Equivalent Length of 1 ft Sch 40 Pipe* |                 |                     |
| AR-UB FLEX-07 28" (0.6 m) | 6530160  | 27 ft                                  | 6530170  | 28 ft                                  | 2               | 4"                  |
| AR-UB FLEX-10 40" (0.9 m) | 6530161  | 37 ft                                  | 6530171  | 41 ft                                  | 2               | 4"                  |
| AR-UB FLEX-12 48" (1.2 m) | 6530162  | 49 ft                                  | 6530172  | 47 ft                                  | 2               | 4"                  |
| AR-UB FLEX-15 60" (1.5 m) | 6530163  | 63 ft                                  | 6530173  | 64 ft                                  | 3               | 4"                  |
| AR-UB FLEX-18 72" (1.8 m) | 6530164  | 78 ft                                  | 6530174  | 80 ft                                  | 4               | 4"                  |

\*Based on UL Listing

\*Based on UL Listing

### COMPONENT LIST

| NO | Part Name       | Material             | QTY |
|----|-----------------|----------------------|-----|
| 1  | Corrugated Tube | 304 Stainless Steel  | 1   |
| 2  | Nut             | Galv Steel (ASTM283) | 2   |
| 3  | Isolation Ring  | Nylon 66             | 1   |
| 4  | O-Ring          | EPDM                 | 1   |
| 5  | Reducer         | Zinc Plated Steel    | 1   |
| 6  | Nipple          | Galv Steel (ASTM283) | 1   |
| 7  | Center Bracket  | Galv Steel (ASTM283) | 1   |
| 8  | End Bracket     | Galv Steel (ASTM283) | 2   |
| 9  | Square Bar      | Galv Steel (ASTM283) | 1   |

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 UNBRAIDED CONNECTIONS



## Friction Loss Data and Specifications

UNBRAIDED



|               | Length      | 1/2" NPT |  | 3/4" NPT |  | Max. # of Bends | Min. Bending Radius |
|---------------|-------------|----------|--|----------|--|-----------------|---------------------|
|               |             | ITEM #   | Equivalent Length of 1 ft Sch 40 Pipe* | ITEM #   | Equivalent Length of 1 ft Sch 40 Pipe* |                 |                     |
| AR-UB FLEX-07 | 28" (0.7 m) | 6530160  | 27 ft                                  | 6530170  | 28 ft                                  | 2               | 4"                  |
| AR-UB FLEX-10 | 39" (0.9 m) | 6530161  | 37 ft                                  | 6530171  | 41 ft                                  | 2               | 4"                  |
| AR-UB FLEX-12 | 48" (1.2 m) | 6530162  | 49 ft                                  | 6530172  | 47 ft                                  | 2               | 4"                  |
| AR-UB FLEX-15 | 60" (1.5 m) | 6530163  | 63 ft                                  | 6530173  | 64 ft                                  | 3               | 4"                  |
| AR-UB FLEX-18 | 72" (1.8 m) | 6530164  | 78 ft                                  | 6530174  | 80 ft                                  | 4               | 4"                  |

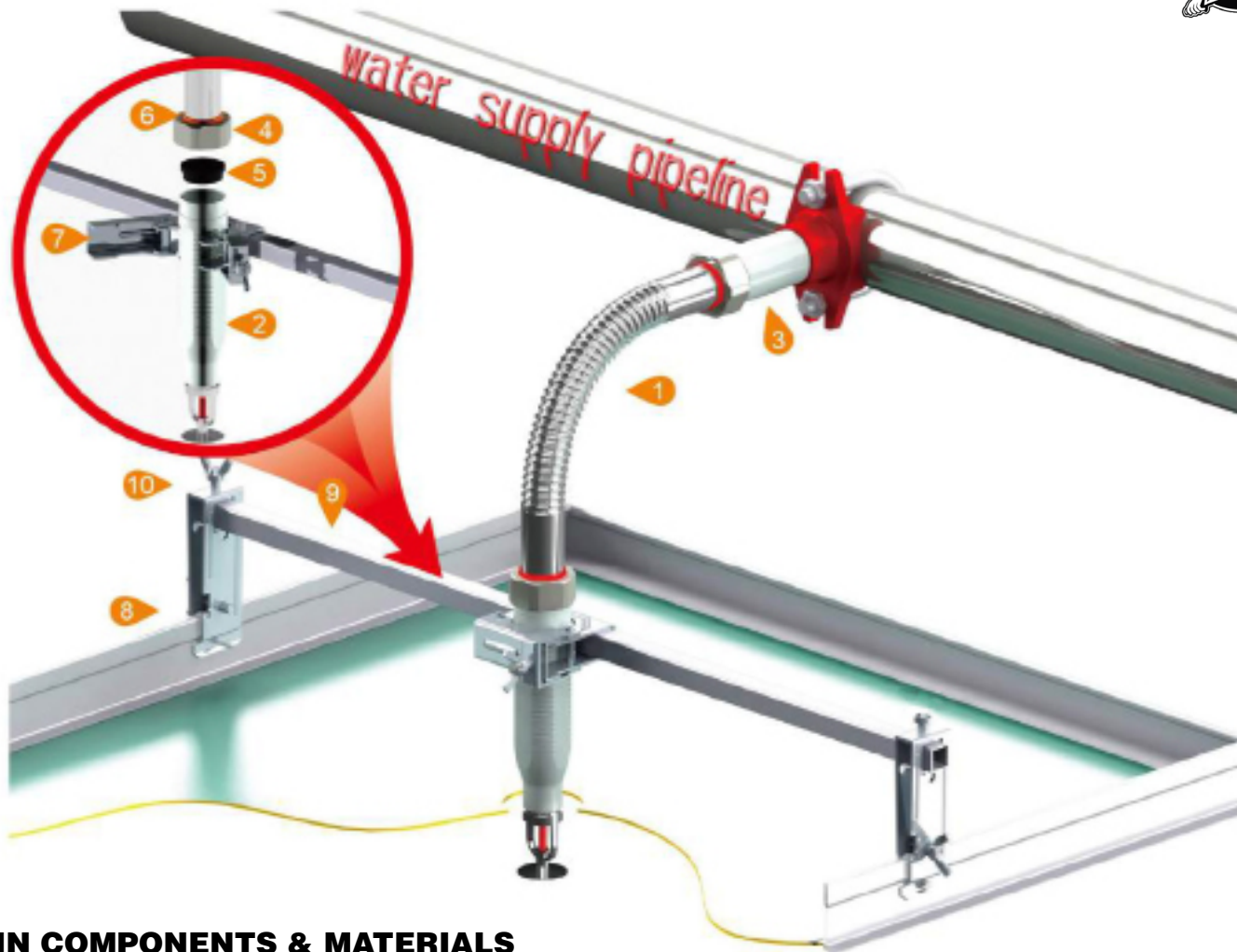
\*Based on UL Listing

\*Based on UL Listing

| Number of Bends<br>Equivalent Length of 1 ft Sch 40 Pipe |        |      |      |      |      |      |      |
|--|--------|------|------|------|------|------|------|
| Model  | Length | NPT  | 0    | 1    | 2    | 3    | 4    |
| AR-UB FLEX-07-050  | 28"    | 1/2" | 13.8 | 20.0 | 27.0 |      |      |
| AR-UB FLEX-10-050  | 39"    | 1/2" | 17.5 | 24.0 | 30.5 |      |      |
| AR-UB FLEX-12-050  | 47"    | 1/2" | 29.5 | 36.0 | 42.5 |      |      |
| AR-UB FLEX-15-050  | 59"    | 1/2" | 43.5 | 50.0 | 56.5 | 63.0 |      |
| AR-UB FLEX-18-050  | 71"    | 1/2" | 58.0 | 64.5 | 69.7 | 74.9 | 80.1 |

| Number of Bends<br>Equivalent Length of 1 ft Sch 40 Pipe |        |      |      |      |      |      |      |
|--|--------|------|------|------|------|------|------|
| Model  | Length | NPT  | 0    | 1    | 2    | 3    | 4    |
| AR-BR FLEX-07-075  | 28"    | 3/4" | 20.4 | 24.3 | 28.0 |      |      |
| AR-BR FLEX-10-075  | 39"    | 3/4" | 29.6 | 33.4 | 37.2 |      |      |
| AR-BR FLEX-12-075  | 47"    | 3/4" | 35.6 | 39.4 | 43.2 |      |      |
| AR-BR FLEX-15-075  | 59"    | 3/4" | 52.6 | 56.4 | 60.2 | 64.0 |      |
| AR-BR FLEX-18-075  | 71"    | 3/4" | 59.1 | 66.3 | 71.5 | 76.7 | 81.9 |

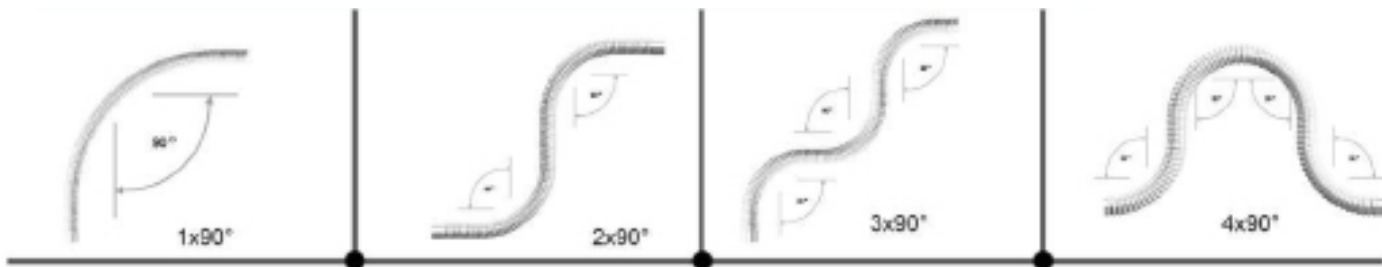
# FLEXIBLE SPRINKLER DROP HOSE UNBRAIDED CONNECTIONS



## MAIN COMPONENTS & MATERIALS

|                        |                     |                    |                   |
|------------------------|---------------------|--------------------|-------------------|
| 1. FLEXIBLE TUBE       | 304 STAINLESS STEEL | 6. ISOLATION RING  | NYLON 66          |
| 2. DISCHARGE NIPPLE 1" | ZINC PLATED STEEL   | 7. CENTER BRACKET  | ZINC PLATED STEEL |
| 3. INLET NIPPLE        | ZINC PLATED STEEL   | 8. END BRACKET(S)  | ZINC PLATED STEEL |
| 4. NUT                 | ZINC PLATED STEEL   | 9. SQUARE BAR      | ZINC PLATED STEEL |
| 5. SEALING GASKET      | EPDM                | 10. BOLTS & SCREWS | ZINC PLATED STEEL |

## HOSE BENDING PARAMETERS



# 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.



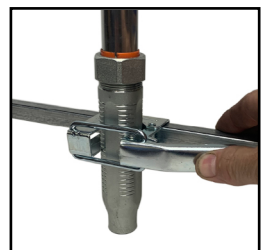
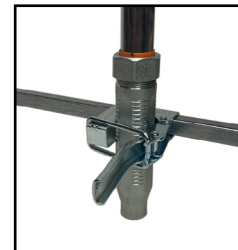
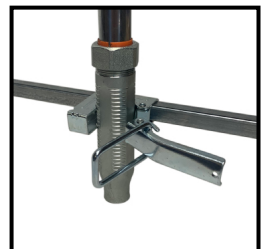
### ATTACH BRACKET SET

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. A second hole is pre-drilled for optional installation applications.



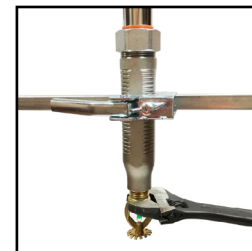
### BENDING AND LOCATING

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

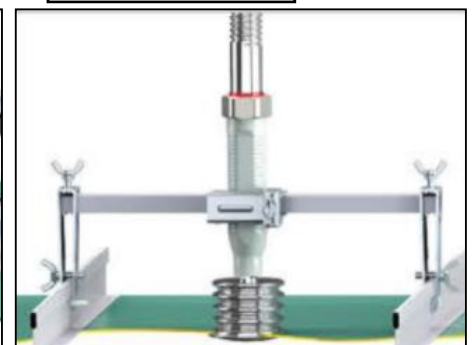
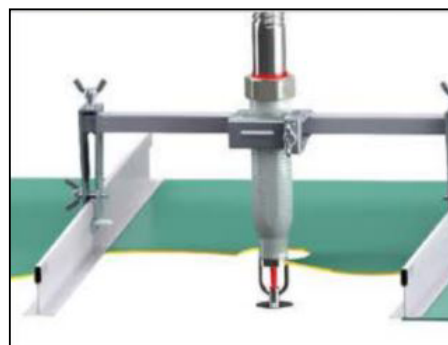
Apply Teflon tape to the male threads of the sprinkler. Tighten slip nuts of CENTER BRACKET and install sprinkler head to discharge nipple by following the sprinkler manufacturer's installation instructions.



### 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.

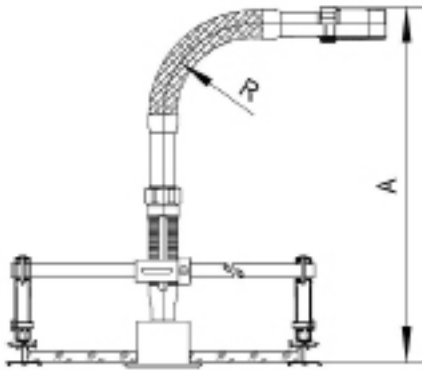


# FLEXIBLE SPRINKLER DROP HOSE



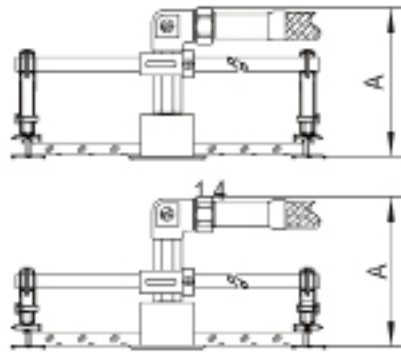
## INSTALLATION CLEARANCE SPECIFICATIONS

### Concealed Sprinklers on T-Bar Grid



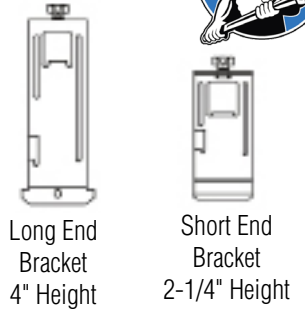
**Straight Reducer + Standard End Bracket**

| Installation Clearance (inch/mm) |                  | UL       | FM       |
|----------------------------------|------------------|----------|----------|
| R                                | min. bend radius | 3.9/100  | 9.8/250  |
| A                                | minimum height   | 13.4/340 | 20.0/510 |



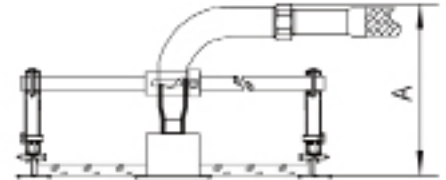
**Cast Elbow Reducer + Long, Short & B-Shaped End Brackets**

| Installation Clearance (inch/mm) |                |         |
|----------------------------------|----------------|---------|
| A                                | minimum height | 5.3/135 |



Long End Bracket  
4" Height

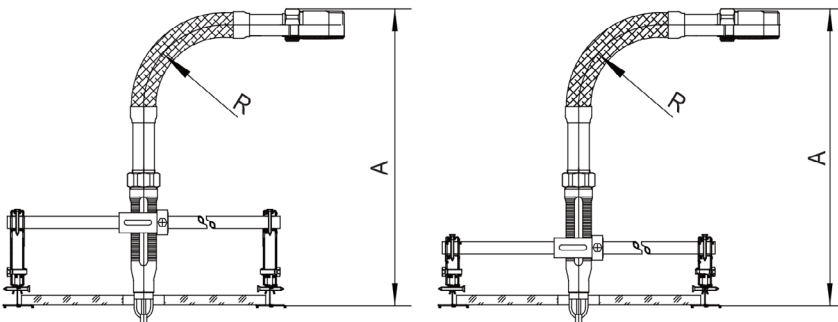
Short End Bracket  
2-1/4" Height



**Elbow Reducer + Long End Brackets**

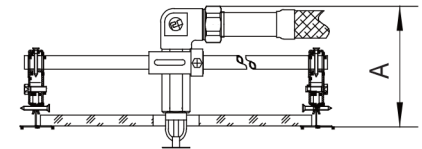
| Installation Clearance (inch/mm) |                |         |
|----------------------------------|----------------|---------|
| A                                | minimum height | 6.3/160 |

### Pendent Sprinklers on T-Bar Grid



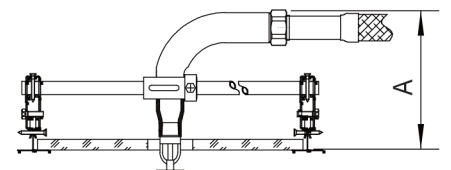
**Straight Reducer + Long & Short End Bracket**

| Installation Clearance (inch/mm) |                  | AR-UB    |          | AR-BR    |          | AR-400-BR |    |
|----------------------------------|------------------|----------|----------|----------|----------|-----------|----|
|                                  |                  | UL       | FM       | UL       | FM       | UL        | FM |
| R                                | min. bend radius | 3.9/100  | 3.9/100  | 9.8/250  | 2/50     | 6.9/175   |    |
| A                                | minimum height   | 14.0/360 | 14.0/360 | 20.0/510 | 11.4/360 | 16.5/420  |    |



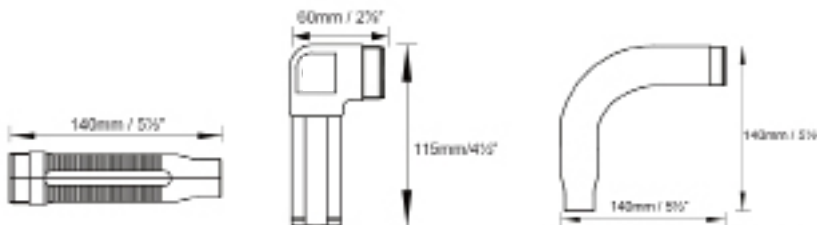
**Cast 90° Reducer + Long & Short End Bracket**

| Installation Clearance (inch/mm) |             | AR-UB   | AR-BR   | AR-400-BR |
|----------------------------------|-------------|---------|---------|-----------|
|                                  |             | UL      | FM      | FM        |
| A                                | min. height | 5.3/135 | 5.3/135 | 5.3/135   |



**Long 90° Degree Reducer + Short End Bracket**

| Installation Clearance (inch/mm) |             | AR-UB   | AR-BR   | AR-400-BR |
|----------------------------------|-------------|---------|---------|-----------|
|                                  |             | UL      | FM      | FM        |
| A                                | min. height | 6.3/160 | 6.3/160 | 6.3/160   |

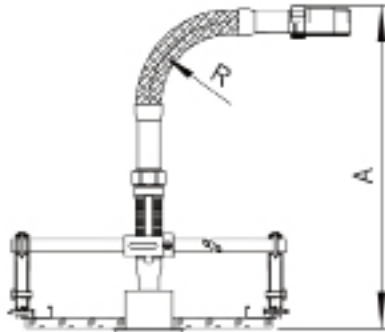


# FLEXIBLE SPRINKLER DROP HOSE



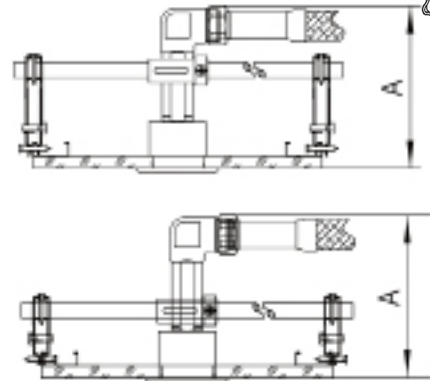
## INSTALLATION CLEARANCE SPECIFICATIONS

### Concealed Sprinklers on C-Beam



**Straight Reducer + Long End Bracket**

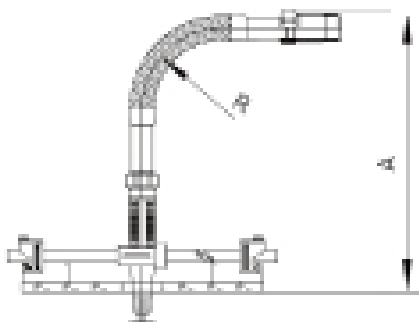
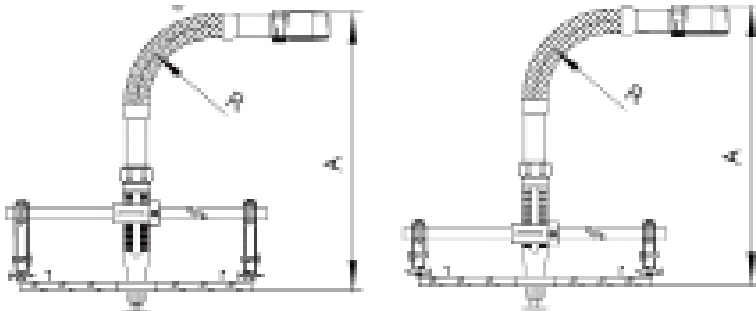
| Installation Clearance (inch/mm) |                  |          |          |         |          |           |  |
|----------------------------------|------------------|----------|----------|---------|----------|-----------|--|
|                                  |                  | AR-UB    |          | AR-BR   |          | AR-400-BR |  |
|                                  |                  | UL       | UL       | FM      | UL       | FM        |  |
| R                                | min. bend radius | 3.9/100  | 3.9/100  | 9.8/250 | 2/50     | 6.9/175   |  |
| A                                | min. height      | 15.4/390 | 16.1/410 | 22/560  | 13.4/340 | 18.5/470  |  |



**Cast 90° Degree Reducer + Long & Short End Bracket**

| Installation Clearance (inch/mm) |             |         |         |           |
|----------------------------------|-------------|---------|---------|-----------|
|                                  |             | AR-UB   | AR-BR   | AR-400-BR |
|                                  |             | UL      | FM      | FM        |
| A                                | min. height | 7.5/190 | 7.5/190 | 7.5/190   |

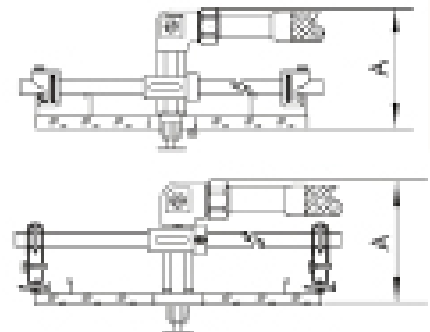
### Pendent Sprinklers on C-Beam



C-Clamp  
1-1/4" Height

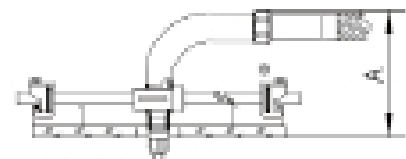
**Straight Reducer + Long, Short End Bracket & C-Clamp**

| Installation Clearance (inch/mm) |                  |          |          |          |          |           |  |
|----------------------------------|------------------|----------|----------|----------|----------|-----------|--|
|                                  |                  | AR-UB    |          | AR-BR    |          | AR-400-BR |  |
|                                  |                  | UL       | UL       | FM       | UL       | FM        |  |
| R                                | min. bend radius | 3.9/100  | 3.9/100  | 9.8/250  | 2/50     | 6.9/175   |  |
| A                                | minimum height   | 13.4/340 | 14.0/360 | 20.0/510 | 11.4/360 | 16.5/420  |  |



**Cast 90° Degree Reducer + Short End Bracket & C-Clamp**

| Installation Clearance (inch/mm) |             |         |         |           |
|----------------------------------|-------------|---------|---------|-----------|
|                                  |             | AR-UB   | AR-BR   | AR-400-BR |
|                                  |             | UL      | FM      | FM        |
| A                                | min. height | 5.3/135 | 5.3/135 | 5.3/135   |

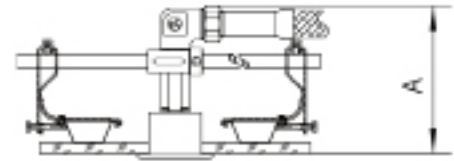
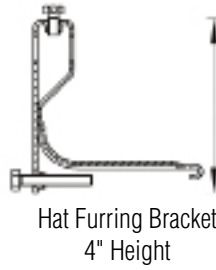
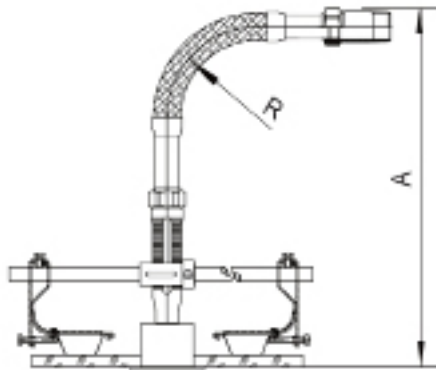


**Elbow Reducer + Short End Bracket & C-Clamp**

| Installation Clearance (inch/mm) |             |         |         |           |
|----------------------------------|-------------|---------|---------|-----------|
|                                  |             | AR-UB   | AR-BR   | AR-400-BR |
|                                  |             | UL      | FM      | FM        |
| A                                | min. height | 6.3/160 | 6.3/160 | 6.3/160   |

# FLEXIBLE SPRINKLER DROP HOSE

## INSTALLATION CLEARANCE SPECIFICATIONS



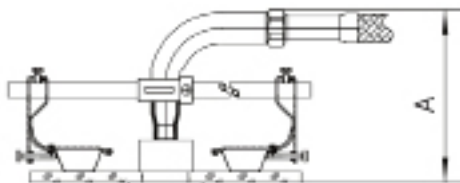
**Straight Reducer + Hat Furring Bracket**

| Installation Clearance (inch/mm) |                  |          |          |         |           |          |
|----------------------------------|------------------|----------|----------|---------|-----------|----------|
|                                  |                  | AR-UB    | AR-BR    |         | AR-400-BR |          |
|                                  |                  | UL       | UL       | FM      | UL        | FM       |
| R                                | min. bend radius | 3.9/100  | 3.9/100  | 9.8/250 | 2/50      | 6.9/175  |
| A                                | min. height      | 15.4/390 | 16.1/410 | 22/560  | 13.4/340  | 18.5/470 |

**Cast 90° Degree Reducer + Hat Furring Bracket**

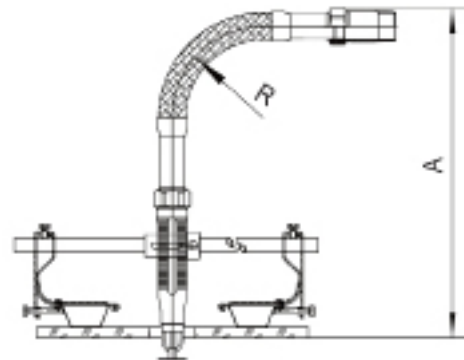
| Installation Clearance (inch/mm) |             |         |         |           |
|----------------------------------|-------------|---------|---------|-----------|
|                                  |             | AR-UB   | AR-BR   | AR-400-BR |
|                                  |             | UL      | FM      | FM        |
| A                                | min. height | 7.5/190 | 7.5/190 | 7.5/190   |

## Pendent Sprinklers on Hat Furring Channel



**Elbow Reducer + Hat Furring Bracket**

| Installation Clearance (inch/mm) |             |         |         |           |
|----------------------------------|-------------|---------|---------|-----------|
|                                  |             | AR-UB   | AR-BR   | AR-400-BR |
|                                  |             | UL      | FM      | FM        |
| A                                | min. height | 8.3/210 | 8.3/210 | 8.3/210   |



**Straight Reducer + Hat Furring Bracket**

| Installation Clearance (inch/mm) |                  |          |         |         |           |          |
|----------------------------------|------------------|----------|---------|---------|-----------|----------|
|                                  |                  | AR-UB    | AR-BR   |         | AR-400-BR |          |
|                                  |                  | UL       | UL      | FM      | UL        | FM       |
| R                                | min. bend radius | 3.9/100  | 3.9/100 | 9.8/250 | 2/50      | 6.9/175  |
| A                                | min. height      | 13.4/340 | 14/360  | 20/510  | 11.4/290  | 1865/420 |

# FLEXIBLE SPRINKLER DROP HOSE ACCESSORIES



## 90° Reducing Nipple

for Braided & Unbraided

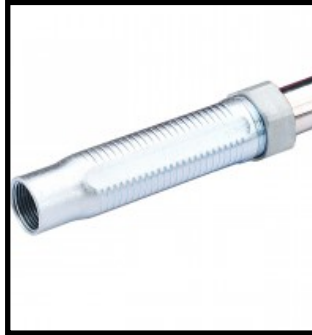
6530190: 1" x 1/2"

6530192: 1" x 3/4"

for MegaFlex:

6531190: 1" x 1/2"

6531192: 1" x 3/4"



## Straight Reducing Nipple

for Braided & Unbraided

6530181: 1" x 1/2" standard

6530180: 1" x 3/4" standard

6530191: 1" x 1/2" x 10" length

for MegaFlex:

6531181: 1" x 1/2" standard

6531180: 1" x 3/4" standard

6531191: 1" x 1/2" x 10" length

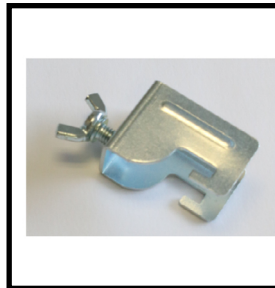
6531191-3/4: 1" x 3/4" x 10" length



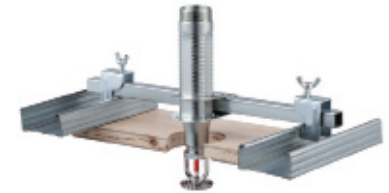
## Flex Hose End Brackets

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



## Warranty:

We warrant all ARGCO Brand Flexible Fire Sprinkler Drop products to be free from defects in materials and workmanship under normal conditions of use and service.

Our obligation under this warranty is limited to repairing at our option at our factory or designated facility any product which shall within 1 year after delivery to the original buyer be returned with transportation charges prepaid, and which our examination and inspection shall show to our satisfaction to have been defective.

This warranty is made expressly in lieu of any other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular purpose.

The buyer's sole and exclusive remedy shall be for the replacement or repair of defective products as provided herein.

The buyer agrees that no other remedy (including but not limited to), incidental or consequential damages for lost profits, lost sales, injury to person or property or any other incidental or consequential loss shall be available to him/her.

Argco neither assumes nor authorizes any person to assume for it any other liability in connection with the sale of such products.

This warranty shall not apply to any product which has been the subject to misuse, negligence or accident, which has been repaired or altered in any manner outside of Argco's factory or designated facility or which has been used in a manner contrary to Argco's instructions, recommendations or generally accepted practices.

Argco shall not be responsible for design errors due to inaccurate or incomplete information supplied by the buyer or his representatives.



**ARGCO.com**

For more products, pricing, technical data, SDS, log onto: [www.argco.com](http://www.argco.com)

**ARGCO SALES:** toll free: 800-854-1015  
international: 760-727-1644 | fax: 800-924-5922  
email: [info@argco.com](mailto:info@argco.com)