

## **Braided Flexible Sprinkler Connection Data Sheet**

Flexible Sprinkler Drops are designed to significantly reduce labor and installation costs. By eliminating the need for pipe cutting and midline connections, you save valuable time and money.

Armour flexible sprinkler connections offer braided and unbraided flexible hoses in 700mm,1000mm,1200mm and 1800mm with top loading or front loading brackets for variety of ceiling and wall applications: T-Bars, metal studs, hat channels, wood beams, concrete sidewalls, and more. The system is qualified to be installed at commercial, hotel, retail, restaurants, cultural, entertainment, educational, government, healthcare, and religious buildings.

## **ARMOUR Flexible Sprinkler Drops Appliance Standards**

- 1. Underwriter's Laboratories, Inc. (UL), UL 2443:
  - Standard for flexible sprinkler hose with fittings for fire protection service
- 2. Factory Mutual (FM), FM Class No. 1637:
  - ASTM C635: Standard specifications for the manufacture, performance, and testing of metal suspension system
- 3. 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 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 6ft.
- 4. American Society for Testing and Methods (ASTM):
  - ASTM C635: Standard specifications for the manufacture, performance, and testing
  - ASTM C636: Standard practice for installation of metal ceiling suspension systems for acoustical tile and lay-in panels

## 5. International Building Code (IBC) Section 1621 / American Society of Civil Engineers (ASCE) 7.9.6.2.6.2 & 9.6.2.6.2.2:

• Flexible Sprinkler Connections are an alternative solution to install without seismic escutcheons of metal suspension systems for acoustical tile and lay-in panel ceilings

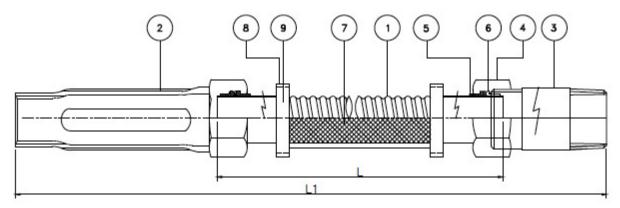








# **Braided Flexible Sprinkler Connection Data Sheet**



- 1. FLEXIBLE TUBE
- 2. REDUCER
- 3. NIPPLE

- 4. SLIP NUT
- 5. ISOLATED-RING
- 6. GASKET

- 7. BRAIDED HOSE
- 8. CLAMP(OUTSIDE)
- 9. CLAMP(INSIDE)

### **SPECIFICATIONS**

Lengths Available	24", 36", 48", 60" and 72"
Outlet	1/2" or 3/4"
Hose Type	Braided
Max. Ambient Temperature Rating	225°F
Max. Working Pressure Rating	175 psig

Hose	Stainless Steel 304		
Nut & Nipple	Zinc-Plated Steel		
Sealing Gasket / Isolation Ring	EPDM / NYLON		
Minimum Bend Raius	190mm(UL/ULC) and 10"(FM) from connection nuts		
Connection	Inlet 1"NPT or BSP		
	Outlet 1/2" or 3/4"NPT or BSP		



### US FRICTION LOSS DATA

DJ25B Series Braided Hose with Fittings

Model	Rated Pressure, psig	Max. Ambient Temp, °F	Nom. Inlet by Outlet Size, in.	Assembly Length, ft (mm)	Max No. of 90° Bends	Min Bend Radius, mm.	Equivalent Length of 1 in. Schedule 40 Steel Pipe (C = 120), ft	Flexibility Type
DJ25B	175	225	1x1/2	2.0 (610)	1	190	12	Limited
	175	225	1x1/2	2.6 (790)	1	190	19	Limited
	175	225	1x1/2	3.0 (915)	2	190	42	Limited
	175	225	1x1/2	4.0 (1220)	2	190	53	Limited
	175	225	1x1/2	5.0 (1525)	3	190	68	Limited
	175	225	1x1/2	5.9 (1800)	3	190	94	Limited
	175	225	1x3/4	2.0 (610)	1	190	21	Limited
	175	225	1x3/4	2.6 (790)	1	190	27	Limited
DJ25B	175	225	1x3/4	3.0 (915)	2	190	47	Limited
	175	225	1x3/4	4.0 (1220)	2	190	49	Limited
	175	225	1x3/4	5.0 (1525)	3	190	73	Limited
	175	225	1x3/4	5.9 (1800)	3	190	99	Limited



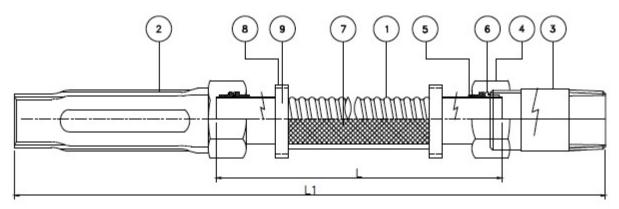




\* UL: 19mm minimum bend radius, where C=120



# **Braided Flexible Sprinkler Connection Data Sheet**



- 1. FLEXIBLE TUBE
- 2. REDUCER
- 3. NIPPLE

- 4. SLIP NUT
- 5. ISOLATED-RING
- 6. GASKET

- 7. BRAIDED HOSE
- 8. CLAMP(OUTSIDE)
- 9. CLAMP(INSIDE)

### **SPECIFICATIONS**

Lengths Available	24", 36", 48", 60" and 72"
Outlet	1/2" or 3/4"
Hose Type	Braided
Max. Ambient Temperature Rating	225°F
Max. Working Pressure Rating	175 psig

Hose	Stainless Steel 304		
Nut & Nipple	Zinc-Plated Steel		
Sealing Gasket / Isolation Ring	EPDM / NYLON		
Minimum Bend Raius	190mm(UL/ULC) and 10"(FM) from connection nuts		
Connection	Inlet 1"NPT or BSP		
	Outlet 1/2" or 3/4"NPT or BSP		



### FM>FRICTION LOSS DATA

APPROVED DJ25B Series Braided Hose with Fittings

Model	NPT in.	Hose Assembly length, ft (m)	Equivalent Length of 1 in. Schedule 40 Pipe, ft (m)
	1/2	2 (0.6)	13.7 (4.1)
DJ25B -	1/2	2.6 (0.8)	17.9 (5.4)
	1/2	3 (0.9)	22.2 (6.7)
	1/2	4 (1.2)	37.0 (11.2)
	1/2	5 (1.5)	45.5 (13.8)
	1/2	6 (1.8)	63.0 (19.2)
	3/4	2 (0.6)	10.5 (3.2)
DJ25B	3/4	2.6 (0.8)	14.4 (4.4)
	3/4	3 (0.9)	18.3 (5.6)
	3/4	4 (1.2)	32.8 (10.0)
	3/4	5 (1.5)	43.2 (13.1)
	3/4	6 (1.8)	58.7 (17.9)





<sup>\*</sup> FM: 10" minimum bend radius, where C=120