

# Flexible Sprinkler Drops

## Braided Flexible Sprinkler Connection Data Sheet

**GENIE SYSTEMS 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.**

Genie Systems flexible sprinkler connections offer braided and unbraided flexible hoses in 700mm, 1000mm, 1200mm, 1500mm and 1800mm with top loading or front loading brackets for variety of ceiling and wall applications: T-Bars, metal studs, hangers at 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.

### TECHNICAL SPECIFICATIONS

#### GENIE SYSTEMS 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 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

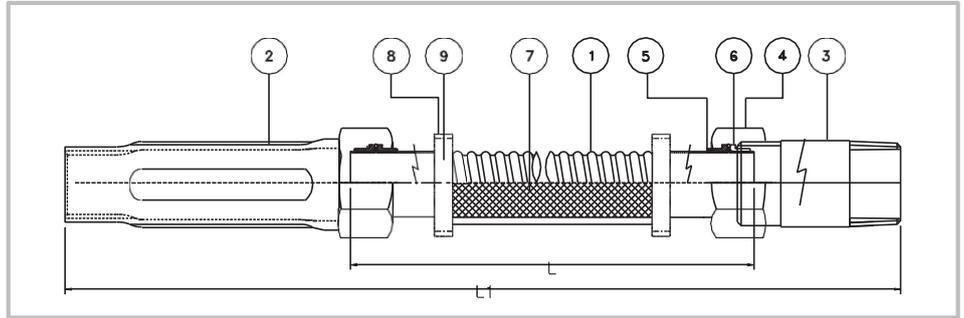
**5. International Building Code (IBC) Section 1621 / American Society of Civil Engineers (ASCE) 7.9.6.2.6.2 & 9.6.2.6.2.2:**

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

Job Name :
Engineer / Architect :
Job Location :
Wholesaler :
Submittal Date :
Contractor :



## BRAIDED TYPE FLEXIBLE HOSE



- 1. FLEXIBLE TUBE
- 2. REDUCER
- 3. NIPPLE
- 4. SLIP NUT
- 5. ISOLATING-RING
- 6. GASKET
- 7. BRAIDED HOSE
- 8. CLAMP(OUTSIDE)
- 9. CLAMP(INSIDE)

## SPECIFICATIONS

Lengths Available (ft or mm)	2.3, 3.3, 3.9, 4.9, 5.9 or 700, 1000, 1200, 1500, 1800	Hose	Stainless Steel 304
Outlet	1/2" or 3/4"	Nut & Nipple	Zinc-Plated Steel
Hose Type	Braided	Sealing Gasket / Isolation Ring	EPDM / Nylon
Max. Ambient Temperature Rating	225°F	Minimum Bend Radius	3"(UL) from connection nuts
Max. Working Pressure Rating	200 psig	Connection	Inlet: 1"NPT or BSP
			Outlet: 1/2" or 3/4"NPT or BSP

\* Required torque to assemble reducer and nipple with the flexible hose : 300kgf.cm



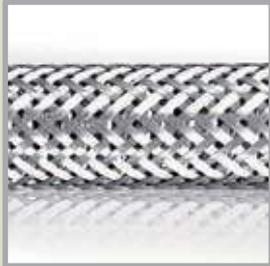
## FRICION LOSS DATA

DJ28B 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, in.	Equivalent Length of 1 in. Schedule 40 Steel Pipe (C = 120), ft	Flexibility Type
DJ28B-700	200	225	1x1/2	2.3 (700)	3	3	18	Limited
DJ28B-1000	200	225	1x1/2	3.3 (1000)	5	3	23	Limited
DJ28B-1200	200	225	1x1/2	3.9 (1200)	7	3	29	Limited
DJ28B-1500	200	225	1x1/2	4.9 (1500)	9	3	39	Limited
DJ28B-1800	200	225	1x1/2	5.9 (1800)	12	3	50	Limited
DJ28B-700	200	225	1x3/4	2.3 (700)	3	3	20	Limited
DJ28B-1000	200	225	1x3/4	3.3 (1000)	5	3	24	Limited
DJ28B-1200	200	225	1x3/4	3.9 (1200)	7	3	31	Limited
DJ28B-1500	200	225	1x3/4	4.9 (1500)	9	3	40	Limited
DJ28B-1800	200	225	1x3/4	5.9 (1800)	12	3	70	Limited

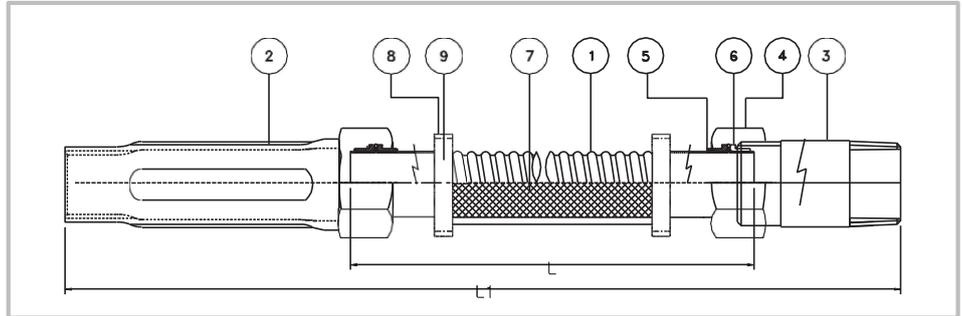
\* UL : 190mm minimum bend radius, where C=120

## TECHNICAL SPECIFICATIONS



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## BRAIDED TYPE FLEXIBLE HOSE



- |                  |                   |                   |
|------------------|-------------------|-------------------|
| 1. FLEXIBLE TUBE | 4. SLIP NUT       | 7. BRAIDED HOSE   |
| 2. REDUCER       | 5. ISOLATING-RING | 8. CLAMP(OUTSIDE) |
| 3. NIPPLE        | 6. GASKET         | 9. CLAMP(INSIDE)  |

## SPECIFICATIONS

Lengths Available (ft or mm)	2.3, 3.3, 3.9, 4.9, 5.9 or 700, 1000, 1200, 1500, 1800
Outlet	1/2" or 3/4"
Hose Type	Braided

Hose	Stainless Steel 304
Nut & Nipple	Zinc-Plated Steel
Sealing Gasket / Isolation Ring	EPDM / Nylon

Max. Ambient Temperature Rating	225°F
Max. Working Pressure Rating	200 psig

Minimum Bend Radius	9"(FM) from connection nuts	
	Connection	
	Inlet	1"NPT or BSP
	Outlet	1/2" or 3/4"NPT or BSP

\* Required torque to assemble reducer and nipple with the flexible hose : 300kgf.cm



## FRICTION LOSS DATA

DJ28B Series Braided Hose with Fittings

Model	NPT in.	k-Factor	Minimum Bend Radius in. (mm)	Number of Bends	Rated Working Pressure psi (kPa)	Hose Assembly length in. (mm)	Equivalent Length of 1 in. Schedule 40 Pipe, ft (m)
DJ28B	1/2	5.6	9 (230)	1	200(1380)	2.3 ft	22.9 (6.9)
	1/2	5.6	9 (230)	2	200(1380)	3.3 ft	34.6 (10.5)
	1/2	5.6	9 (230)	3	200(1380)	3.9 ft	41.0 (12.5)
	1/2	5.6	9 (230)	4	200(1380)	4.9 ft	50.4 (15.3)
	1/2	5.6	9 (230)	4	200(1380)	5.9 ft	58.5 (17.8)
DJ28B	3/4	8.0	9 (230)	1	200(1380)	2.3 ft	15.7 (4.8)
	3/4	8.0	9 (230)	2	200(1380)	3.3 ft	26.9 (8.2)
	3/4	8.0	9 (230)	3	200(1380)	3.9 ft	34.8 (10.6)
	3/4	8.0	9 (230)	4	200(1380)	4.9 ft	43.8 (13.5)
	3/4	8.0	9 (230)	4	200(1380)	5.9 ft	53.4 (16.2)

\* FM : 9" minimum bend radius, where C=120

## TECHNICAL SPECIFICATIONS

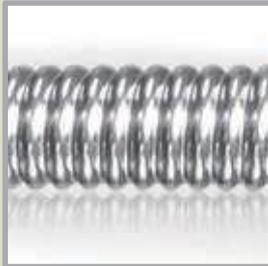


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**FLEXIBLE SPRINKLER CONNECTION PARTS LIST**

**UNBRAIDED FLEXIBLE HOSE**

UL



Part #	Description	Part #	Description
DJ25UB-700	1/2"x700mm Unbraided hose	DJ25UB-700	3/4"x700mm Unbraided hose
DJ25UB-1000	1/2"x1000mm Unbraided hose	DJ25UB-1000	3/4"x1000mm Unbraided hose
DJ25UB-1200	1/2"x1200mm Unbraided hose	DJ25UB-1200	3/4"x1200mm Unbraided hose
DJ25UB-1500	1/2"x1500mm Unbraided hose	DJ25UB-1500	3/4"x1500mm Unbraided hose
DJ25UB-1800	1/2"x1800mm Unbraided hose	DJ25UB-1800	3/4"x1800mm Unbraided hose

\* OD : 25.1mm / ID : 21.4mm STS 304

**BRAIDED FLEXIBLE HOSE**

UL / FM



Part #	Description	Part #	Description
DJ25B-24	1/2"x24" Braided hose	DJ25B-24	3/4"x24" Braided hose
DJ25B-31.2	1/2"x31.2" Braided hose	DJ25B-31.2	3/4"x31.2" Braided hose
DJ25B-36	1/2"x36" Braided hose	DJ25B-36	3/4"x36" Braided hose
DJ25B-48	1/2"x48" Braided hose	DJ25B-48	3/4"x48" Braided hose
DJ25B-60	1/2"x60" Braided hose	DJ25B-60	3/4"x60" Braided hose
DJ25B-72	1/2"x72" Braided hose	DJ25B-72	3/4"x72" Braided hose

\* OD : 26.8mm / ID : 22.3mm STS 304

UL / FM

Part #	Description	Part #	Description
DJ28B-700	1/2"x700 Braided hose	DJ28B-700	3/4"x700 Braided hose
DJ28B-1000	1/2"x1000 Braided hose	DJ28B-1000	3/4"x1000 Braided hose
DJ28B-1200	1/2"x1200 Braided hose	DJ28B-1200	3/4"x1200 Braided hose
DJ28B-1500	1/2"x1500 Braided hose	DJ28B-1500	3/4"x1500 Braided hose
DJ28B-1800	1/2"x1800 Braided hose	DJ28B-1800	3/4"x1800 Braided hose

\* OD : 28.0mm / ID : 27.4mm STS 304

FM

Part #	Description	Part #	Description
DJ32B-C24	1/2"x24" Braided hose	DJ28B-700	3/4"x700 Braided hose
DJ32B-C36	1/2"x36" Braided hose	DJ28B-1000	3/4"x1000 Braided hose
DJ32B-C48	1/2"x48" Braided hose	DJ28B-1200	3/4"x1200 Braided hose
DJ32B-C60	1/2"x60" Braided hose	DJ28B-1500	3/4"x1500 Braided hose
DJ32B-C72	1/2"x72" Braided hose	DJ28B-1800	3/4"x1800 Braided hose

\* OD : 32.0mm / ID : 26.1mm STS 304



## CENTER BRACKET

Image	Model	Description	Image	Model	Description
	B-CC-B	Easier Fixed Bracket Cap Type Bracket Patented CenterBracket Carbon Steel, Zinc-Plated		B-COT (Old)	One Touch Type Bracket Quick time Fixed Bracket Patented Center Bracket Carbon Steel, Zinc-Plated
	B-CH-B	Hook Type Bracket Economy Cost Carbon Steel, Zinc-Plated		B-COT (New)	One Touch Type Bracket Quick time Fixed Bracket Patented Center Bracket Carbon Steel, Zinc-Plated

## END BRACKET

Image	Model	Description	Image	Model	Description
	B-ES-B	Short End Bracket 68mm Length Carbon Steel, Zinc-Plated		B-EOT-S	Short One touch End Bracket 68mm Length Carbon Steel, Zinc-Plated
	B-EL-B	Long End Bracket 105mm Length Carbon Steel, Zinc-Plated		B-EOT-L	Long One touch End Bracket 105mm Length Carbon Steel, Zinc-Plated

## FIXING ACCESSORIES

Image	Model	Description	Image	Model	Description
	SQ	SQUARE BAR 25" / 650mm / 700mm / 1000mm 1300mm / 1600mm Length Steel / Zinc-Plated		B-EMS-B B-E1-B	Metal Stud End Bracket Carbon Steel / Zinc-Plated
	B-EHC-B	Hat Furring Channal End Bracket Carbon Steel / Zinc-Plated		B-EWS-B	Wood Beam Stud Bracket Carbon Steel / Zinc-Plated

## NUTS & GASKET, RING

Image	Model	Description	Image	Model	Description
	NU-36	Nut -Braid BSP or NPT Carbon Steel, Zinc-Plated		E-G25 E-G26 E-G28 E-G32	Gasket - DJ25UB Gasket - DJ25B Gasket - DJ28B Gasket - DJ32B-C Silicone / EPDM material
	NU-33	Nut-Unbraid BSP or NPT Carbon Steel, Zinc-Plated		E-I25 E-I26 E-I28 E-I32	Nylon Isolation Ring - DJ25UB - DJ25B - DJ28B - DJ32B-C Nylon material

REDUCER

Image	Model	Description
	R-33-P1/P2/P3/P4 R-33-N1/N2/N3/N4	Reducer - Unbraided 1/2" or 3/4" or 3/8" or 1" BSP or NPT Carbon Steel, Zinc-Plated 118mm Length
	R-36-P1/P2/P3/P4 R-36-N1/N2/N3/N4	Reducer - Braided 1/2" or 3/4" or 3/8" or 1" BSP or NPT Carbon Steel, Zinc-Plated 118mm Length
	140 R-36-P1/P2 140 R-36-N1/N2	Reducer - Braided 1/2" or 3/4" BS P or NPT Carbon Steel, Zinc-Plated 140mm Length
	140R-36RM-P1/P2 140R-36RM-N1/N2	Reducer - Braided 1/2" or 3/4" BS P or NPT Carbon Steel, Zinc-Plated 140mm Length / Grooved
	6R-R36-P1/P2 6R-R36-N1/N2 7R-R36-P1/P2 7R-R36-N1/N2 8R-R36-P1/P2 8R-R36-N1/N2 9R-R36-P1/P2 9R-R36-N1/N2	Reducer - Unbraided or Braided 1/2" or 3/4" BSP or NPT Carbon Steel, Zinc-Plated 6", 7", 8", 9" Length

Image	Model	Description
	140RE-33WR-P1/P2 140RE-33WR-N1/N2 155RE-33WR-P1/P2 155RE-33WR-N1/N2	Elbow - Unbraided 1/2" or 3/4" BSP or NPT Carbon Steel, Zinc-Plated 140mm, 155mm Length
	140RE-36WR-P1/P2 140RE-36WR-N1/N2 155RE-36WR-P1/P2 155RE-36WR-N1/N2	Elbow - Braided 1/2" or 3/4" BSP or NPT Carbon Steel, Zinc-Plated 140mm, 155mm Length
	RE-33L-P1/P2 RE-33L-N1/N2	Elbow - Unbraided 1/2" or 3/4" BSP or NPT Carbon Steel, Zinc-Plated 145mm Length
	RE-36L-P1/P2 RE-36L-N1/N2	Elbow - Braided 1/2" or 3/4" BSP or NPT Carbon Steel, Zinc-Plated 145mm Length
	42RE-33S-P1/P2/N1/N2 42RE-36S-P1/P2/N1/N2 62RE-33S-P1/P2/N1/N2 62RE-36S-P1/P2/N1/N2 82RE-33S-P1/P2/N1/N2 82RE-36S-P1/P2/N1/N2	Elbow - Unbraided or Braided 1/2" or 3/4" BSP or NPT Carbon Steel, Zinc-Plated 42mm, 62mm, 82mm Length
	42RE-33B-P1/P2/N1/N2 42RE-36B-P1/P2/N1/N2 62RE-33B-P1/P2/N1/N2 62RE-36B-P1/P2/N1/N2 82RE-33B-P1/P2/N1/N2 82RE-36B-P1/P2/N1/N2	Short Elbow Bracket - Unbraided or Braided 1/2" or 3/4" BSP or NPT Carbon Steel, Zinc-Plated 42mm, 62mm, 82mm Length

NIPPLE

Image	Model	Description
	N-33-P1/P2/P3/P4 N-33-N1/N2/N3/N4	Nipple -Unbraided 1"x 1/2" or 3/4" or 3/8" or 1" BSP or NPT Carbon Steel, Zinc-Plated
	N-36-P1/P2/P3/P4 N-36-N1/N2/N3/N4	Nipple -Braided 1"x 1/2" or 3/4" or 3/8" or 1" BSP or NPT Carbon Steel, Zinc-Plated
	N-36-P5 N-36-N5	Nipple -Braided 1"x 1 1/4"(32mm) BSP or NPT Carbon Steel, Zinc-Plated



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