

## Fig. 20XXE Elbow Hose

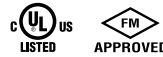


Fig. 20XXE cULus & FM Approved Brackets

Bracket Fig # & Size	cULus Listed	FM Approved	FlexHead Historical Model Number
BKT-MPO	✓	✓	MPO24BKT2
BKT-ADO, 16 in	✓	✓	ADO16BKT3
BKT-ADO, 24 in	✓	✓	ADO24BKT3
BKT-ADO, 30 in		✓	ADO30BKT3
BKT-ADO, 48 in		✓	ADO48BKT3
BKT-UHO3		✓	UHO-3
BKT-TZ		✓	SPO6TZBKT2

**Notes:** Flexhead Historical Model Numbers may be used to verify cULus Listings & FM Approvals.

### Specifications

#### Assembly Length

24 in	36 in	48 in
60 in	72 in	

#### Drop Length

1.5 in	3.0 in	4.0 in
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#### Outlet Drop Size (NPT per ASME B1.20.1)

½ NPS (DN15)	¾ NPS (DN20)
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#### Inlet Pipe Size (NPT per ASME B1.20.1)

1 NPS (DN25)

#### Pressure Rating

UL: 175 psi (1,205 kPa)

FM: 175 psi (1,205 kPa)

#### Minimum Bend Radius

UL: 3.0 in (76.2 mm)

FM: 8.0 in (203.2 mm)

#### Ambient Temperature

300°F (145°C) Max

#### Material

304 Stainless Steel

#### Features

- 100% Leak Tested Fully Welded Design
- Pre-Installed Sprinkler Head option available upon request
- Compliant with NFPA 13, 13R, & 13D
- For Wet, Dry, and Pre-Action Sprinkler Systems

#### Ordering

Specify figure number, length, outlet size, outlet drop length, and description.



PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

## Fig. 20XXE Elbow Hose

Fig. 20XXE cULus Listing per UL 2443 & FM Approval (Listing) per FM 1637

Outlet Drop Size	Assembly Length	Equivalent Length						Max # of 90° Bends	
		UL	FM					UL	FM
			k = 5.6	k = 8.0	k = 11.2	k = 14.0	k = 16.8		
½ NPS DN15	24	ft/m	ft/m	ft/m	ft/m	ft/m	ft/m	3	1
		19	26.4	6.8	7.4	-	-		
	36	5.8	8.0	2.1	2.3	-	-	3	2
		23	30.1	11.8	12.5	-	-		
	48	7.0	9.2	3.6	3.8	-	-	4	3
		27	33.8	16.9	17.6	-	-		
60	8.2	10.3	5.2	5.4	-	-	4	4	
	32	37.5	21.9	22.7	-	-			
72	9.8	11.4	6.7	6.9	-	-	4	4	
	35	41.2	27.0	27.8	-	-			
¾ NPS DN20	24	ft/m	-	8.8	8.7	14.7	8.2	3	1
		18	-	2.7	2.7	4.5	2.5		
	36	5.5	-	25.2	14.2	21.8	13.0	3	2
		23	-	7.7	4.3	6.6	4.0		
	48	7.0	-	32.9	18.4	29.0	17.8	4	3
		23	-	10.0	5.6	8.8	5.4		
60	8.8	-	40.6	22.7	36.1	22.6	4	4	
	29	-	12.4	6.9	11.0	6.9			
72	9.8	-	48.5	27.0	43.2	27.5	4	4	
	32	-	14.8	8.2	13.2	8.4			

1. Equivalent Length of NPS 1 (DN25) Sch 40 Pipe.
2. Equivalent Lengths listed above assume the maximum number of 90° bends.
3. A 90° bend can be achieved with two 45° bends or three 30° bends.
4. UL Equivalent Lengths are listed for installation with sprinklers with a maximum k-factor of 16.8.
5. FM Equivalent Lengths listed above include the Friction Loss of the Sprinkler.
6. UL Listed for "Limited Flexibility".

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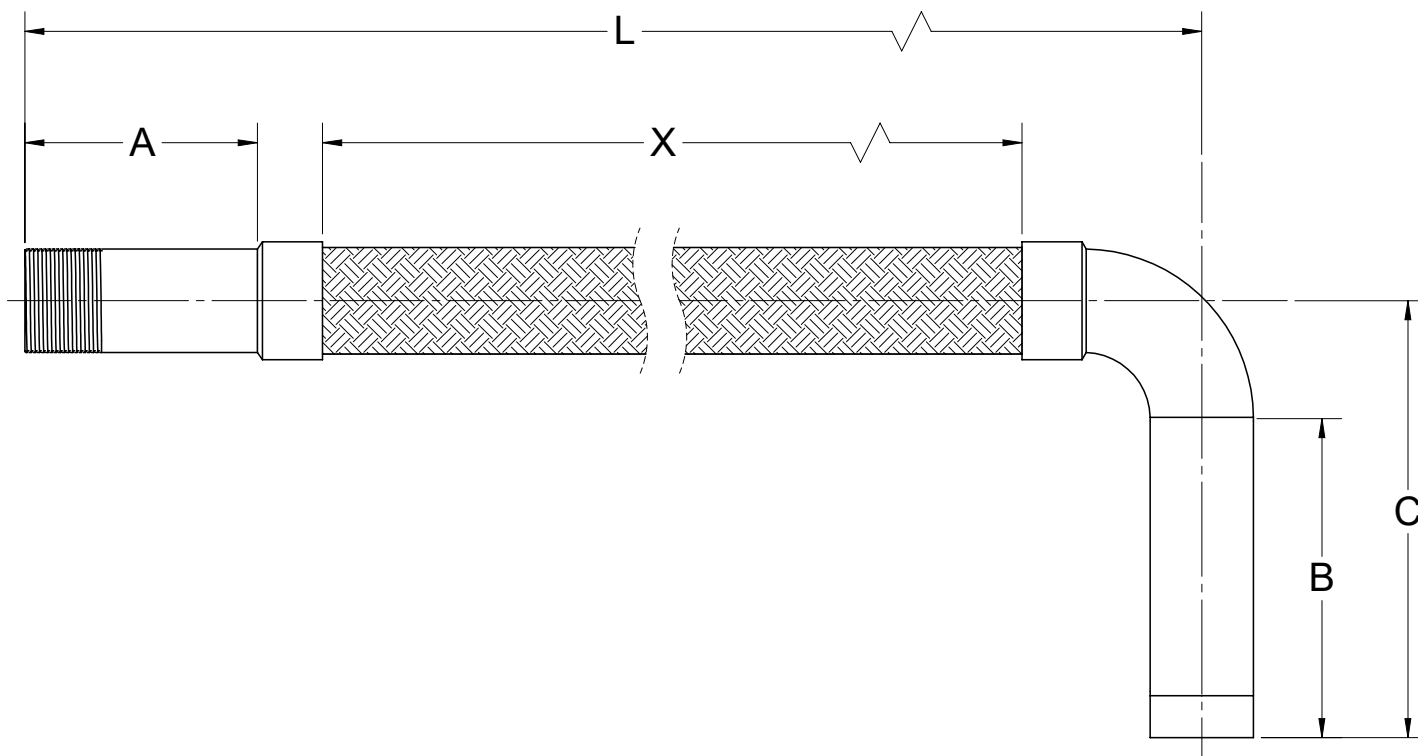


Fig. 20XXE Dimensions & Model Number

Asembly Length	True Length (L)		Braid Length (X)		Inlet Nipple Length (A)		Outlet Drop Length (B)		FlexHead Historical Model Number	
	in	mm	in	mm	in	mm	in	mm	½ NPS Outlet	¾ NPS Outlet
24	24	610	20	508					2024E-50	2024E-75
36	36	914	32	813					2036E-50	2036E-75
48	48	1219	44	1118	3.0	76.2	See Below		2048E-50	2048E-75
60	60	1524	56	1422					2060E-50	2060E-75
72	72	1828	68	1727					2072E-50	2072E-75

Fig. 20XXE Dimensions (Continued)

Outlet Drop Length (B)		Outlet Drop Height (C)	
in	mm	in	mm
1.5	38.0	3.0	76.0
3.0	76.0	4.5	114.0
4.0	102.0	5.5	140.0

## Fig. 20XXE Elbow Hose

### Installation Instructions

#### Connection to the Branch

1. Apply pipe sealant or tape to the NPT thread.
2. Install into branch outlet. Tighten the assembly by placing the pipe wrench on the pipe nipple section.
3. **Note:** Only place the pipe wrench on the unthreaded portion of the inlet nipple.

#### Connection to the Sprinkler Head

1. Installation of the sprinkler head into the outlet drop shall be per the sprinkler manufacturer's installation instructions.

#### Connection to the Bracket

1. Installation of the hose to the bracket shall be per the bracket's installation instructions. The bracket shall be listed for installation with the 20XXE. See Page 1 for Listed and Approved brackets.

#### Bending the Hose

1. The hose may be bent to ensure the inlet nipple and outlet drop are in the desired locations.
2. The hose should never be bent to a radius less than minimum listed bend radius. The bend radius is defined to the center of the hose.
3. The hose must have at least one 90° bend. A 90° bend can be achieved with two 45° bends or three 30° bends.
4. For best performance, the bends in the hose should be as large and smooth as possible.

#### General Installation Notes

1. Never apply a wrench to the braided hose.
2. The Fig 20XXE may be installed in any direction from the branch.
3. If installing a sprinkler to a bracket after installation, it is best practice to prevent twisting of the bracket and hose by holding the outlet drop with a wrench.