

**Note:** For horizontal pipe runs, we recommend EJMA (Expansion Joint Manufacturers Association) guidelines be used to determine guide spacing, see Tables 1 and 2 below. Piping in risers develop loads differently than horizontal pipe. Please review "[Understanding The Dynamic Of Riser Design In Skyscrapers](#)" white paper found on [www.metralflex.com](http://www.metralflex.com), or consult Metraflex if you need assistance determining guide spacing for risers.

### General

1. The Metraflex Style IV Spider Guide features guide cylinder, spider, and mounting feet.
2. The Metraflex Style IV Spider Type pipe guide was designed to restrain the lateral loads and control pipe movement.
3. The Style IV is not designed to carry the weight of the piping system and must be used along with pipe supports and hangers.

**Application:** When the Style IV pipe guide is used in conjunction with expansion joints other than no thrust load type, we recommend that EJMA (Expansion Joint Manufacturers Association) guidelines for guide spacing is followed. See Tables 1 and 2.

Pipe size	Maximum Distance To	Maximum Distance To	Distance Between Additional Pipe guides			
	1st Guide / Anchor	2nd Guide	In Feet			
			At 50 PSI	At 100 PSI	At 150 PSI	At 300 PSI
1"	4"	1' - 4"	21	15	12	10
1.25"	5"	1' - 5"	23	17	13	12
1.5"	6"	1' - 9"	28	20	17	13
2"	8"	2' - 4"	32	23	18	15
2.5"	10"	2' - 11"	35	28	22	19
3"	1' - 0"	3' - 6"	38	28	23	20
4"	1' - 4"	4' - 8"	52	38	31	22
5"	1' - 8"	5' - 8"	63	45	38	25
6"	2' - 0"	7' - 0"	68	48	40	28
8"	2' - 8"	9' - 4"	87	62	45	38
10"	3' - 4"	11' - 8"	107	75	60	48
12"	4' - 0"	14' - 0"	118	85	70	50
14"	4' - 8"	16' - 4"	122	88	72	55
16"	5' - 4"	18' - 8"	137	96	80	60
18"	6' - 0"	21' - 0"	145	105	85	65
20"	6' - 8"	23' - 4"	160	118	90	70
24"	8' - 0"	28' - 0"	181	125	105	75

Table 1. Guide Spacing for Standard Weight (Sch 40) Carbon Steel Pipe

Size	Max distance to 1st guide / anchor	Distance from 1st guide to 2nd guide	Additional Guide distance in Feet		
				Pressure	
			25	50	70
.5"	2"	7"	5	4	3
.75"	3"	10.5"	7	6	5
1"	4"	1' - 2"	9	8	6
1.25"	5"	1' - 5.5"	14	11	9
1.5"	6"	1' - 9"	14	11	9
2"	8"	2" - 4"	19	14	12
2.5"	10"	2' - 11"	23	17	15
3"	1' - 0"	3' - 6"	27	20	18
4"	1' - 4"	4' - 8"	31	23	21

Table 2. Guide Spacing for Copper Pipe

### Installation

1. After the piping is installed, install the housing in the designated area. The feet of the housing can be either bolted or welded to the structure.
2. Install the spider so that the leading edge of the spider is installed halfway into the housing, see Figure 1.
3. For copper pipe / tubing applications install the dielectric felt supplied with the guide between the spider and copper tube / pipe.
4. Insulation may be inserted into the spider fins.

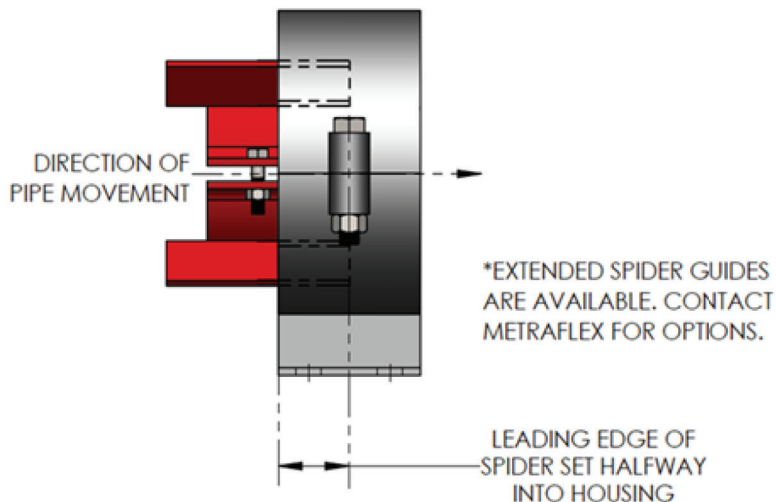


Figure 1. Spider Installation

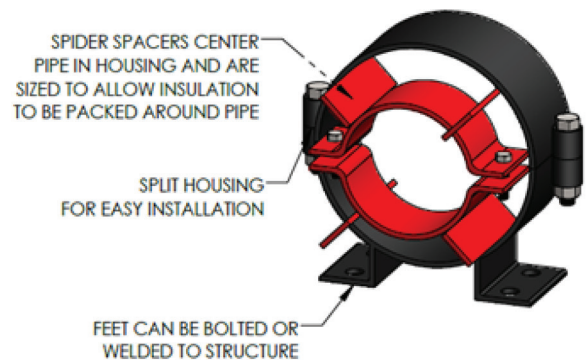


Figure 2. Guide Assembly

### Precautions:

1. For curved pipe, consult Metraflex.
2. Periodically inspect guide to insure proper operation.
3. For copper applications, periodically inspect dielectric insert to ensure that it is intact and in place.

**Maintenance:** Metraflex Style IV pipe guide has no serviceable parts and does not require maintenance.

Contact Metraflex or your local Metraflex Representative with any questions.