

# Fig. CT-255

## Copper Tubing Alignment Guide

**Size Range:** 1" through 4"

**Material:** Carbon steel

**Finish:**  Plain or  Hot-Dip Galvanized Housing with Zinc Plated Bolts and Nuts. (Hot-Dip Galvanized optional) Copper Plated Finish on Spider Clamp.

**Service:** For maintaining alignment of tubing through its axial expansion and contraction cycles. Normally, two or more pipe alignment guides are used on a single tubing run to avoid a pivoting effect within the tubing system. Consult the Expansion Joint Manufacturers Association or the Copper Tube Manufacturers for additional guidelines of spacing requirements of intermediate guides. Supports are usually required between intermediate guides to comply with standard support practices.

**Maximum Temperature:** 400° F

**Installation:**

- (1) Attach outer housing to structure by bolting or welding.
- (2) Remove upper section of housing to open position.
- (3) Attach spider clamp to tube and completely insulate.
- (4) Set tube and spider clamp into outer housing.
- (5) Replace upper section of housing to closed position and secure.

**Note:** Spider attachments to tube must be properly located during installation to insure that a minimum of one-half the spider width remains within the length of the outer housing for all conditions of operation. If larger travels are required, special guides can be furnished to special order.

**How to size:** Size by nominal tube size and insulation thickness in accordance with the selection table.

**Ordering:** Specify size number, tube size, insulation thickness, figure number, name and finish.

**Caution:** The primary function of the Figure CT-255 is to maintain axial alignment of a system. Other components should be incorporated into the system to carry the primary loading of the system. Guides are designed such that minor loading amounts may be transferred to the guide in any given direction, up to 20% of dead weight load for typical maximum spans of a given pipe diameter.

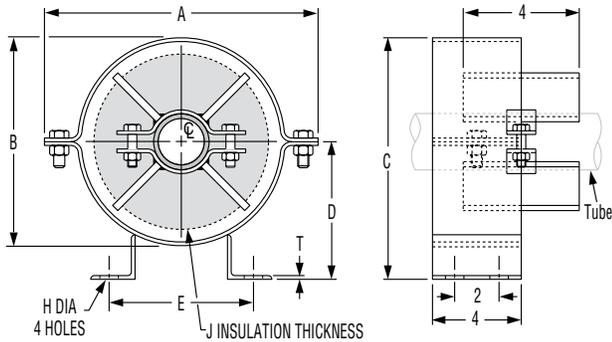


Tube Size (in)	L (in)	Maximum Movement
1" to 4"	4	4

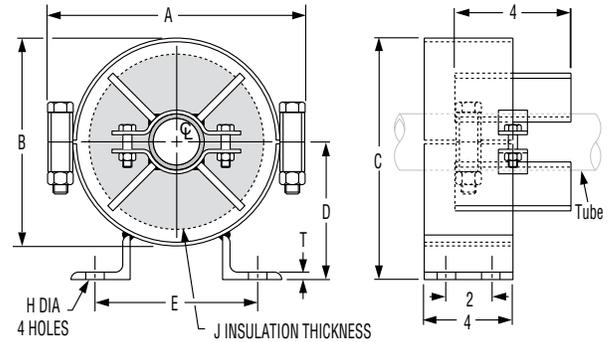
PROJECT INFORMATION		APPROVAL STAMP	
Project:		<input type="checkbox"/> Approved	
Address:		<input type="checkbox"/> Approved as noted	
Contractor:		<input type="checkbox"/> Not approved	
Engineer:		Remarks:	
Submittal Date:			
Notes 1:			
Notes 2:			

# Fig. CT-255

## Copper Tubing Alignment Guide (cont.)



Copper Tubing Alignment Guide, Figure CT-255, Size A & B



Copper Tubing Alignment Guide, Figure CT-255, Size C thru D

Guide Size No.	Dimensions (in)						
	A	B	C	D	E	H	T
A	8 <sup>13</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>4</sub>	8	4 <sup>5</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>4</sub>	5/8	1/4
B	10 <sup>13</sup> / <sub>16</sub>	8 <sup>3</sup> / <sub>4</sub>	10	5 <sup>3</sup> / <sub>8</sub>	7		
C	13 <sup>5</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>4</sub>	12 <sup>7</sup> / <sub>16</sub>	6 <sup>5</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>4</sub>	3/4	3/8
D	15 <sup>7</sup> / <sub>8</sub>	13 <sup>3</sup> / <sub>8</sub>	14 <sup>13</sup> / <sub>16</sub>	7 <sup>15</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>4</sub>		

Tube Size	Guide Size Number					
	Insulation Thickness (in)					
	1	1½	2	2½	3	4
1/2	A	A	A	A	—	—
3/4	A	A	A	A	—	—
1	A	A	A	A	C	C
1¼	A	A	A	C	C	C
1½	A	A	A	C	C	C
2	B	B	B	B	C	C
2½	B	B	B	B	C	C
3	B	B	B	B	D	D
3½	B	B	B	D	D	D
4	B	B	B	D	D	D