

## Fig. 167

### Insulation Protection Shield

**Size Range:** 1/2" through 24" pipe with up to 2" thick insulation

**Material:** Carbon steel

**Finish:** Pre-Galvanized Material

**Service:** Recommended for outside of foam or fiber glass insulation for distribution of loads to preclude crushing of insulation without breaking the vapor barrier.

**Approvals:** Complies with Federal Specification A-A-1192A (Type 40), WW-H-171-E (Type 41), ANSI/MSS SP-69 and MSS SP-58 (Type 40).

**How to size:** Refer to "shield size selection table" below.

**Features:** Chamfered cupped ends for safe non-sharp edges.

**Ordering:** Specify size, figure number and name. Data applicable to shields for thicker insulation or larger pipe sizes is available upon request.



**FIG. 167: DIMENSIONS (IN) • WEIGHT (LBS)**

Shield Size	Weight	Stock Size	L	Insulation OD	Fig. 260
X1A	0.5	18 Ga.	12	1.90	1 1/2
1A	0.7			2.38	2
2A	0.8			2.88	2 1/2
3A	1.0			3.50	3
4A	1.1			4.00	3 1/2
5A	1.3			4.50	4
6A	1.4			5.00	5
7A	1.6			5.56	5
8A	1.9			6.64	6
9A	2.7			7.64	8
10A	3.1	16 Ga.	18	8.64	8
9B	4.0			7.64	8
10B	4.6	16 Ga.	18	8.64	8
11B	5.1			9.64	10
12B	5.6	14 Ga.	24	10.76	10
13C	10.2			11.76	12
14C	11.1			12.76	12
15C	12.3			14.00	14
16C	12.7			15.00	16
17C	13.6			16.00	16
18C	14.5			17.00	18
19C	21.2			18.00	18
20C	22.4			19.00	20
21C	23.6			20.00	20
22C	24.8	12 Ga.	24	21.00	24
23C	25.9			22.00	24
24C	27.1			23.00	24
25C	28.3			24.00	24
26C	31.0			26.00	30
27C	31.8			27.00	30
28C	33.0	28.00	30		

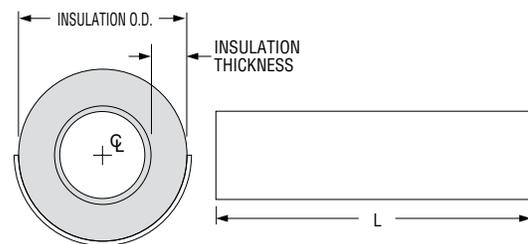
#### SHIELD SIZE SELECTION FOR NOMINAL PIPE SIZE

Pipe Size	Insulation Thickness (in)				
	1/2	3/4	1	1 1/2	2
1/2	1A	1A	-	-	-
3/4		2A	3A	4A	6A
1			5A	7A	
1 1/4	2A	3A	4A	6A	7A
1 1/2		8A			
2	3A	4A	5A	7A	8A
2 1/2	4A	5A	6A	8A	9A
3	5A	6A	7A		
3 1/2	-	-	8A	9A	10A
4	-	-	-	-	-
5	-	-	9B	10B	11B
6	-	-	10B	11B	12B
8	-	-	12B	13C	14C
10	-	-	14C	15C	16C
12	-	-	16C	17C	18C
14	-	-	17C	18C	19C
16	-	-	19C	20C	21C
18	-	-	21C	22C	23C
20	-	-	23C	24C	25C
24	-	-	26C	27C	28C

#### SHIELD SIZE SELECTION FOR COPPER TUBING

Tube Size	Insulation Thickness (in)					
	1/2	3/4	1	1 1/2	2	
3/8	X1A	1A	2A	3A	5A	
1/2, 5/8, 3/4		1A	2A	3A	5A	7A
1, 1 1/4			4A	6A		
1 1/2	2A	3A	4A	6A	8A	
2	3A	4A	5A	7A		
2 1/2	4A	5A	6A	8A	9A	
3	5A	6A	7A			
3 1/2	6A	7A	8A	9A	10A	
4	7A	8A				
5	8A	9A	10A	11B		
6	9A	9A	10A	11B	12B	
8	11B	11B	12B	13C	14C	

Shading in gray indicates this shield fits loosely inside the Fig. 260. To be used properly, the Fig. 260 requires a spacer.



Note: As actual foam or fiber glass insulation thicknesses vary, verify that the radius of the selected shield is suitable for the required application. Shields are designed for a maximum span of ten feet on 15 P.S.I. compressive strength insulation. For compressive strengths greater than 15 P.S.I., spans may be increased proportionately up to maximum allowable for steel pipe. Refer to MSS-SP-69 for specific guidelines on compressive strength and maximum span.