

FIG. 670 - 678

PIPE ALIGNMENT GUIDES

Function: Designed for use with insulated or non-insulated pipe lines to direct the axial expansion and contraction of the pipe. The use of two or more guides on both sides of the expansion joint is recommended to avoid a pivoting effect. The first pipe guide should be placed a maximum of 4 pipe diameters from an expansion joint. Pipe guides are not designed to support any of the piping system's weight therefore additional supports are required. The maximum operating temperature should not exceed 750°F (399° C).

Material: Carbon steel

Finish: Painted

Install: The use of non-insulated guides with expansion joints shall be controlled by the recommendation of the expansion joint manufacturer (or in accordance with the Expansion Joint Manufacturers Association (EJMA) guidelines).

Ordering: Specify figure number and pipe size.

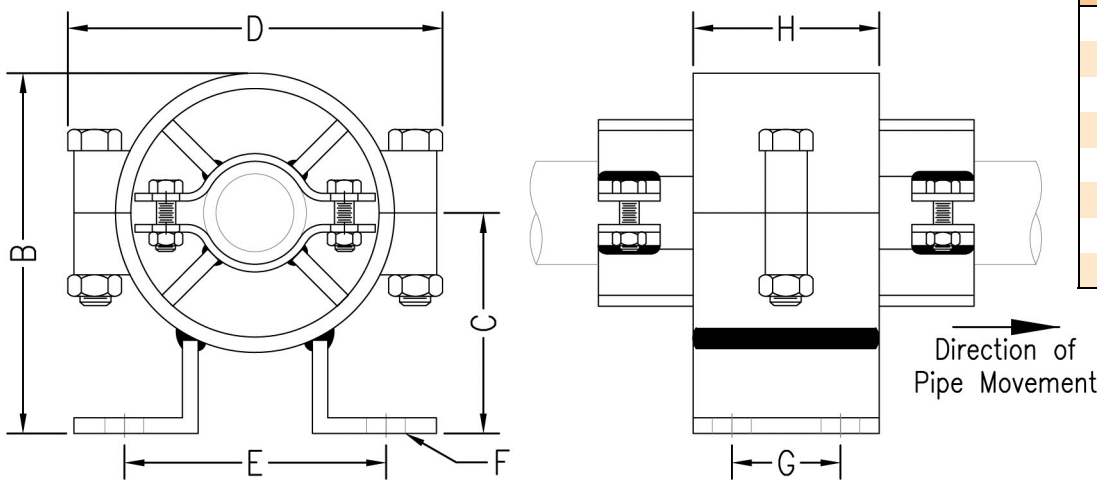


Fig. Number	Insulation Thickness	
670	0	(0)
671	1	(25.4)
673	1½	(38.1)
674	2	(50.8)
675	2½	(63.5)
676	3	(76.2)
677	3½	(88.9)
678	4	(101.6)

Body No.	B		C		D		E		F		G		H		Axial Movement		Wt. Each	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs.	kg
4	5 ⁷ / ₈	(149.23)	3 ¹ / ₂	(88.90)	6 ¹ / ₈	(155.58)	4 ¹ / ₈	(104.78)	5 ⁵ / ₈	(15.88)	1 ³ / ₄	(44.45)	3	(76.20)	3	(76.20)	6	(2.72)
5	6 ³ / ₄	(171.45)	4	(101.60)	7 ¹ / ₈	(180.98)	4 ³ / ₈	(111.13)	5 ⁵ / ₈	(15.88)	1 ³ / ₄	(44.45)	3	(76.20)	3	(76.20)	8	(3.63)
6	7 ⁵ / ₈	(193.68)	4 ³ / ₈	(111.13)	8 ¹ / ₈	(206.38)	5 ¹ / ₈	(130.18)	5 ⁵ / ₈	(15.88)	1 ³ / ₄	(44.45)	3	(76.20)	3	(76.20)	10	(4.54)
8	9 ¹ / ₄	(234.95)	5 ¹ / ₄	(133.35)	10 ¹ / ₈	(257.18)	6 ¹ / ₈	(155.58)	5 ⁵ / ₈	(15.88)	1 ³ / ₄	(44.45)	3	(76.20)	3	(76.20)	13	(5.90)
10	11 ⁵ / ₈	(295.28)	6 ¹ / ₄	(158.75)	12 ¹ / ₈	(307.98)	7	(177.80)	5 ⁵ / ₈	(15.88)	2 ³ / ₄	(69.85)	4	(101.60)	4	(101.60)	20	(9.07)
12	13 ³ / ₈	(339.73)	7	(177.80)	14 ¹ / ₈	(358.78)	8 ¹ / ₄	(209.55)	5 ⁵ / ₈	(15.88)	2 ³ / ₄	(69.85)	4	(101.60)	4	(101.60)	25	(11.34)
14	15 ¹ / ₈	(384.18)	7 ⁷ / ₈	(200.03)	16 ¹ / ₈	(409.58)	9 ⁷ / ₈	(250.83)	3 ³ / ₄	(19.05)	4	(101.60)	6	(152.40)	6	(152.40)	40	(18.14)
16	17	(431.80)	8 ⁷ / ₈	(225.43)	18 ¹ / ₈	(460.38)	10 ⁷ / ₈	(276.23)	3 ³ / ₄	(19.05)	4	(101.60)	6	(152.40)	6	(152.40)	45	(20.41)
18	18 ³ / ₄	(476.25)	9 ³ / ₄	(247.65)	20 ¹ / ₈	(511.18)	11 ⁷ / ₈	(301.63)	3 ³ / ₄	(19.05)	4	(101.60)	6	(152.40)	6	(152.40)	55	(24.95)
20	21	(533.40)	10 ⁷ / ₈	(276.23)	22 ¹ / ₈	(561.98)	11 ³ / ₄	(298.45)	3 ³ / ₄	(19.05)	6	(152.40)	8	(203.20)	6	(152.40)	65	(29.48)
22	23 ¹ / ₈	(587.38)	12 ¹ / ₈	(307.98)	24 ¹ / ₈	(612.78)	14 ¹ / ₂	(368.30)	7 ⁷ / ₈	(22.23)	6	(152.40)	8	(203.20)	6	(152.40)	95	(43.09)
24	25	(635.00)	13	(330.20)	26 ¹ / ₈	(663.58)	15 ¹ / ₂	(393.70)	7 ⁷ / ₈	(22.23)	6	(152.40)	8	(203.20)	6	(152.40)	115	(52.16)
26	27 ³ / ₄	(704.85)	14 ³ / ₄	(374.65)	28 ¹ / ₈	(714.38)	17 ¹ / ₈	(434.98)	1 ¹ / ₈	(28.58)	6	(152.40)	8	(203.20)	6	(152.40)	135	(61.23)
30	31 ¹ / ₂	(800.10)	16 ¹ / ₂	(419.10)	32 ¹ / ₈	(815.98)	19 ¹ / ₄	(488.95)	1 ¹ / ₈	(28.58)	6	(152.40)	8	(203.20)	6	(152.40)	150	(68.04)

PIPE GUIDE CHARTS



PIPE GUIDE SELECTION CHART FIG. 670 - 678

Pipe Size		Body No.							
		Insulation Thickness							
		Fig. 670 None	Fig. 671 1 (25.4)	Fig. 673 1½ (38.1)	Fig. 674 2 (50.8)	Fig. 675 2½ (63.5)	Fig. 676 3 (76.2)	Fig. 677 3½ (88.9)	Fig. 678 4 (101.6)
½	(15)	4	4	4	5	6	8	8	10
¾	(20)	4	4	5	6	8	8	10	10
1	(25)	4	4	5	6	8	8	10	20
1¼	(32)	4	4	5	6	8	8	10	10
1½	(40)	5	5	5	6	8	8	10	10
2	(50)	5	5	6	8	8	10	10	12
2½	(65)	6	6	6	8	8	10	10	12
3	(80)	6	6	8	8	10	10	12	12
4	(100)	8	8	8	10	10	12	12	14
5	(125)	10	10	10	10	12	12	16	16
6	(150)	10	10	10	12	12	14	16	16
8	(200)	12	12	12	14	16	16	18	18
10	(250)	16	16	16	16	18	18	20	20
12	(300)	18	18	18	18	20	20	22	22
14	(350)	20	20	20	20	20	22	22	24
16	(400)	22	22	22	22	22	24	24	26
18	(450)	24	24	24	24	24	26	26	30
20	(500)	26	26	26	26	26	30	30	30
24	(600)	30	30	30	30	30	--	--	--

Use selection chart to determine body number for dimensional purposes.

PIPE GUIDE SPACING CHART FIG. 670 - 678

Pipe Size		Max. Distance Between Intermediate Guides for Pressure (psig)																			
		50		100		150		200		250		300		350		400		500		600	
		ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m
3	(80)	38	(11.58)	27	(8.23)	22	(6.71)	20	(6.10)	18	(5.49)	17	(5.18)	15	(4.57)	14	(4.27)	13	(3.96)	12	(3.66)
4	(100)	52	(15.85)	37	(11.28)	32	(9.75)	27	(8.23)	25	(7.62)	23	(7.01)	22	(6.71)	19	(5.79)	17	(5.18)	16	(4.88)
6	(150)	66	(20.12)	47	(14.33)	40	(12.19)	35	(10.67)	31	(9.45)	28	(8.53)	27	(8.23)	25	(7.62)	23	(7.01)	20	(6.10)
8	(200)	85	(25.91)	62	(18.90)	51	(15.54)	45	(13.72)	40	(12.19)	36	(10.97)	35	(10.67)	32	(9.75)	29	(8.84)	27	(8.23)
10	(250)	103	(31.39)	75	(22.86)	62	(18.90)	54	(16.46)	50	(15.24)	45	(13.72)	42	(12.80)	40	(12.19)	35	(10.67)	32	(9.75)
12	(300)	118	(35.97)	85	(25.91)	70	(21.34)	60	(18.29)	55	(16.76)	50	(15.24)	46	(14.02)	43	(13.11)	40	(12.19)	35	(10.67)
14	(350)	120	(36.58)	87	(26.52)	72	(21.95)	62	(18.90)	57	(17.37)	52	(15.85)	48	(14.63)	45	(13.72)	41	(12.50)	37	(11.28)
16	(400)	130	(39.62)	95	(28.96)	78	(23.77)	68	(20.73)	61	(18.59)	57	(17.37)	52	(15.85)	49	(14.94)	45	(13.72)	41	(12.50)
18	(450)	145	(44.20)	105	(32.00)	87	(26.52)	75	(22.86)	68	(20.73)	62	(18.90)	58	(17.68)	55	(16.76)	50	(15.24)	45	(13.72)
20	(500)	155	(47.24)	110	(33.53)	92	(28.04)	90	(27.43)	73	(22.25)	68	(20.73)	62	(18.90)	58	(17.68)	53	(16.15)	49	(14.94)
24	(600)	180	(54.86)	128	(39.01)	105	(32.00)	90	(27.43)	83	(25.30)	75	(22.86)	70	(21.34)	65	(19.81)	60	(18.29)	54	(16.46)

Note: The first pipe guide should be placed a maximum of 4 pipe diameters from an expansion joint.

- THREADED ACCESSORIES
- CPVC STRAPS
- BAND HANGERS
- BEAM CLAMPS
- CLEVIS HANGERS
- PIPE ROLLER SUPPORTS
- SPLIT RING HANGERS
- PIPE CLAMPS
- CENTER LOAD BEAM CLAMPS
- PIPE SHIELDS, INSULATION, & SADDLES
- PIPE GUIDES & SLIDES
- WALL BRACKETS
- PIPE SUPPORTS
- STRUCTURAL ATTACHMENTS
- SEISMIC BRACING