



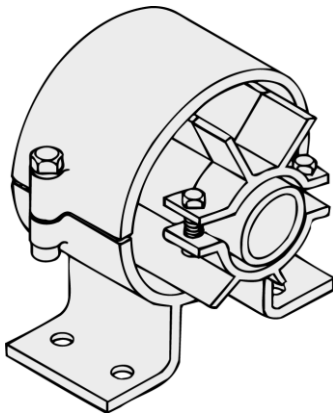
PIPE ALIGNMENT GUIDES

Fig. 670 - 678

PIPE ALIGNMENT GUIDES

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)



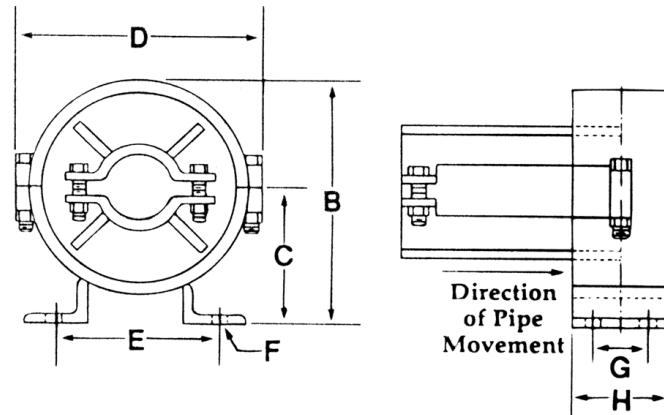
FUNCTION: Designed for use with insulated or non-insulated pipe lines to direct the axial expansion and contraction of the pipe. The use of two or more guides on both sides of the expansion joint is recommended to avoid a pivoting effect. The first pipe guide should be placed a maximum of 4 pipe diameters 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

ORDERING: Specify pipe size and figure number.

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).



Body No.	B		C		D		E		F		G		H		Axial Movement		Wt. Each	
																	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 ¹ / 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 ¹ / 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 ¹ / 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 ¹ / 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 ⁵ / 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 ⁵ / 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)

Unless otherwise specified, all dimensions on drawings and in charts are in inches and dimensions shown in parentheses are in millimeters.

PIPE GUIDE CHARTS



PIPE GUIDE SELECTION CHART For Fig. 670 - 678

Pipe Size		Body No.							
		Insulation Thickness							
		None	1 (25.4)	1½ (38.1)	2 (50.8)	2½ (63.5)	3 (76.2)	3½ (88.9)	4 (101.6)
1/2	(15)	4	4	4	5	6	8	8	10
3/4	(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	--	--	--
Fig. No.		670	671	673	674	675	676	677	678

Use selection chart to determine body number for dimensional purposes on page 68.

PIPE GUIDE SPACING CHART

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.

Unless otherwise specified, all dimensions on drawings and in charts are in inches and dimensions shown in parentheses are in millimeters.