

Section 5

Threaded Fittings & Welding Outlets

Threaded Fittings & Welding Outlets..... 126

Threaded Fittings

811 / 812 / 813 / 814 Elbows & Tee 127

815 Tee 128

816 / 817 / 818 Cross & Coupling..... 129

819 / 820 / 825 / 827 / 831 / 832 Plug, Cap, Extension Piece,
Hex Bushing, Elbow & Tee 130

830 / 841 Union & Companion Flange..... 131

Top Beam Clamp

B20 / B24 Beam Clamps 132

Welding Outlets

71 Threaded Outlet 133

72C / 72R Welding Outlet 134

Threaded Fittings & Welding Outlets

Shurjoint offers a complete range of ductile iron Class 300 threaded fittings in sizes from ½" to 2½" (15 mm to 65 mm). **Shurjoint** ductile iron threaded fittings are 100% air tested underwater to ensure leak-free performance. The **Shurjoint** ductile iron fitting series is UL listed and FM approved, making them the right choice for fire protection and other general application services.



Ductile Iron Class 300 threaded fittings are designed to the same basic dimensions as that of Class 150 malleable iron fittings. Though due to the superior strength characteristics, ductile iron fittings carry a much higher pressure rating. Laboratory tests confirm **Shurjoint** ductile iron fittings have passed hydrostatic test pressures exceeding 6,000 psi (414 Bar), which is equal to four times the 1,500 psi (103 Bar) as specified by ANSI B16.3 for 1½" – 2" (32 mm – 50 mm) sizes.



Burst pressure testing of DI threaded fittings (2")

Pressure-Temperature Rating (ANSI B16.3 & B16.14)

Nom. Rating	Working Pressure (W.O.G.) @ 150°F / @ 65°C	Working Pressure Saturated Steam
Class 300	½" – 1" : 2000 psi / 140 Bar 1½" – 2" : 1500 psi / 105 Bar 2½": 1000 psi / 70 Bar	300 psi (20 Bar)

*Proof test pressure: 1.5 times the working pressure, non-shock cold water.

Pressure-Temperature Rating Unions, Brass to Iron Seat (ANSI B16.39)

Nom. Rating	Working Pressure (W.O.G.) @ 150°F / @ 65°C	Working Pressure Saturated Steam
Class 300	600 psi / 42 Bar	300 psi (20 Bar)

*Proof test pressure: 1.5 times the working pressure, non-shock cold water.

*Max. Temperature: 450°F (ASME Boiler Code)

Pressure-Temperature Rating Companion Flanges (ANSI B16.42)

Nom. Rating	Working Pressure (W.O.G.) @ 150°F / @ 65°C	Working Pressure Saturated Steam
Class 150	250 psi / 17 Bar	150 psi (10 Bar)

*Proof test pressure: 1.5 times the working pressure, non-shock cold water.

Material: Ductile iron ASTM A536 Gr. 65-45-12

Dimensions: ANSI B16.3 Class 150 except bushings and plugs (B16.14), unions (B16.39) and companion flanges (B16.42) Please note wall thickness dimensions are subordinate to **Shurjoint** UL and FM pressure rating listings and approvals.

Threads: ANSI B1.20.1 NPT or ISO 7 (BSPT)

Finish: Black or hot-dip galv

Welding Outlets

Shurjoint welding outlets provide an easy branch outlet at any desired location along the header pipe. Available in a variety of size and configurations including threaded, cut grooved and roll grooved ends. Welding outlets are UL listed and FM approved for fire protection applications.



Pressure-Temperature Rating

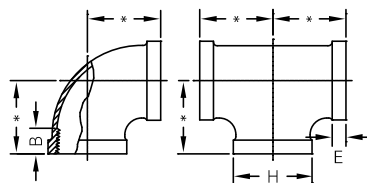
Nom. Rating	Working Pressure (W.O.G.) @ 150°F / @ 65°C	Working Pressure Saturated Steam
Class 300	600 psi / 42 Bar	300 psi (20 Bar)

*Proof test pressure: 1.5 times the working pressure, non-shock cold water.

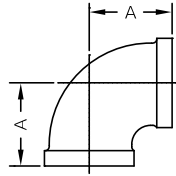
*Burst test pressure: Minimum 3 times the working pressure.

General Dimensions

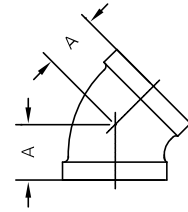
These dimensions apply to all standard fittings, both straight and reducing. For center-to-face dimensions(*), see fitting tables.



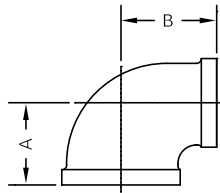
Pipe Size	H Band O.D.	E Band Width	B Thread Length (min)
in	in	in	in
mm	mm	mm	mm
½	1.02	0.25	0.43
15	26	6	11
¾	1.46	0.27	0.5
20	37	7	13
1	1.77	0.3	0.58
25	45	8	15
1½	2.15	0.34	0.67
32	55	9	17
1½	2.43	0.37	0.7
40	62	9	18
2	2.96	0.42	0.75
50	75	11	19
2½	3.59	0.48	0.92
65	91	12	23

Model
811 90° Elbow


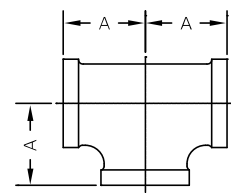
Size	Pipe O.D.	A	Weight	Box Q'ty
in	in	in	Lbs	Pcs
mm	mm	mm	Kgs	
½	0.840	1.12	0.25	240
15	21.3	28	0.1	
¾	1.050	1.31	0.35	120
20	26.7	33	0.2	
1	1.315	1.50	0.57	70
25	33.4	38	0.3	
1¼	1.660	1.75	0.97	40
32	42.2	44	0.4	
1½	1.900	1.94	1.17	30
40	48.3	49	0.5	
2	2.375	2.25	1.83	20
50	60.3	57	0.8	
2½	2.875	2.70	3.34	10
65	73.0	69	1.5	

Model
813 45° Elbow


Size	Pipe O.D.	A	Weight	Box Q'ty
in	in	in	Lbs	Pcs
mm	mm	mm	Kgs	
½	0.840	0.88	0.22	250
15	21.3	22	0.1	
¾	1.050	0.98	0.33	150
20	26.7	25	0.1	
1	1.315	1.12	0.55	90
25	33.4	28	0.2	
1¼	1.660	1.29	0.84	50
32	42.2	33	0.4	
1½	1.900	1.43	0.92	35
40	48.3	36	0.4	
2	2.375	1.68	1.63	18
50	60.3	43	0.7	
2½	2.875	1.95	2.42	12
65	73.0	50	1.1	

Model
812 Reducing 90° Elbow


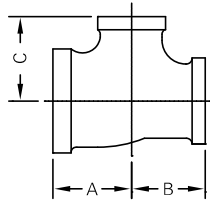
Size	Pipe O.D.	A	B	Weight	Box Q'ty
in	in	in	in	Lbs	Pcs
mm	mm	mm	mm	Kgs	
¾ x ½	1.050 x 0.840	1.20	1.22	0.35	160
20 x 15	26.7 x 21.3	30	31	0.2	
1 x ½	1.315 x 0.840	1.26	1.36	0.46	110
25 x 15	33.4 x 21.3	32	35	0.2	
1 x ¾	1.315 x 1.050	1.18	1.45	0.57	90
25 x 20	33.4 x 26.7	30	37	0.3	
1¼ x ½	1.660 x 0.840	1.34	1.53	0.64	75
32 x 15	42.2 x 21.3	34	39	0.3	
1¼ x ¾	1.660 x 1.050	1.45	1.62	0.68	60
32 x 20	42.2 x 26.7	37	41	0.3	
1¼ x 1	1.660 x 1.315	1.58	1.67	0.81	55
32 x 25	42.2 x 33.4	40	42	0.4	
1½ x ½	1.900 x 0.840	1.41	1.66	0.84	45
40 x 15	48.3 x 21.3	36	42	0.4	
1½ x ¾	1.900 x 1.050	1.52	1.75	0.90	45
40 x 20	48.3 x 26.7	39	44	0.4	
1½ x 1	1.900 x 1.315	1.65	1.80	0.95	40
40 x 25	48.3 x 33.4	42	46	0.4	
1½ x 1¼	1.900 x 1.660	1.82	1.88	1.10	35
40 x 32	48.3 x 42.2	46	48	0.5	
2 x ¾	2.375 x 1.050	1.60	1.97	1.19	30
50 x 20	60.3 x 26.7	41	50	0.5	
2 x 1	2.375 x 1.315	1.73	2.02	1.47	25
50 x 25	60.3 x 33.4	44	51	0.7	
2 x 1½	2.375 x 1.900	2.02	2.16	1.61	20
50 x 40	60.3 x 48.3	51	55	0.7	
2½ x 2	2.875 x 2.375	2.39	2.60	2.93	15
65 x 50	73.0 x 60.3	61	66	1.3	

Model
814 Tee


Size	Pipe O.D.	A	Weight	Box Q'ty
in	in	in	Lbs	Pcs
mm	mm	mm	Kgs	
½	0.840	1.12	0.31	150
15	21.3	28	0.1	
¾	1.050	1.31	0.48	90
20	26.7	33	0.2	
1	1.315	1.50	0.81	60
25	33.4	38	0.4	
1¼	1.660	1.75	1.28	35
32	42.2	44	0.6	
1½	1.900	1.94	1.72	24
40	48.3	49	0.8	
2	2.375	2.25	2.57	12
50	60.3	57	1.2	
2½	2.875	2.70	4.44	8
65	73.0	69	2.0	

Model

815 Reducing Tee



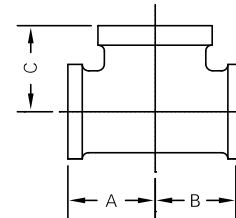
Size			A	B	C	Weight	Box Q'ty
in mm			in mm	in mm	in mm	Lbs Kgs	Pcs
¾	20	¾	1.20	1.20	1.22	0.46	95
		½	1.20	1.20	1.22	0.46	
1	25	1	1.50	1.36	1.50	0.71	55
		¾	1.50	1.36	1.50	0.71	
		½	1.50	1.36	1.50	0.71	
	32	1	1.26	1.20	1.36	0.59	80
		¾	1.26	1.20	1.36	0.59	
		½	1.26	1.20	1.36	0.59	
1 ¼	32	1	1.50	1.45	1.50	0.77	55
		¾	1.50	1.45	1.50	0.77	
		½	1.50	1.45	1.50	0.77	
		1	1.26	1.26	1.36	0.64	65
		¾	1.26	1.26	1.36	0.64	
		½	1.26	1.26	1.36	0.64	
	40	1	1.58	1.50	1.67	1.01	45
		¾	1.58	1.50	1.67	1.01	
		½	1.58	1.50	1.67	1.01	
		1	1.44	1.31	1.69	0.92	40
		¾	1.44	1.31	1.69	0.92	
		½	1.44	1.31	1.69	0.92	
1 ½	40	1	1.65	1.50	1.80	1.19	30
		¾	1.65	1.50	1.80	1.19	
		½	1.65	1.50	1.80	1.19	
		1	1.41	1.34	1.66	1.08	40
		¾	1.41	1.34	1.66	1.08	
		½	1.41	1.34	1.66	1.08	
	48	1	1.65	1.50	1.80	1.19	30
		¾	1.65	1.50	1.80	1.19	
		½	1.65	1.50	1.80	1.19	
		1	1.41	1.34	1.66	1.08	40
		¾	1.41	1.34	1.66	1.08	
		½	1.41	1.34	1.66	1.08	
	60	1	1.65	1.50	1.80	1.19	30
		¾	1.65	1.50	1.80	1.19	
		½	1.65	1.50	1.80	1.19	
		1	1.41	1.34	1.66	1.08	40
		¾	1.41	1.34	1.66	1.08	
		½	1.41	1.34	1.66	1.08	

Size			A	B	C	Weight	Box Q'ty
in mm			in mm	in mm	in mm	Lbs Kgs	Pcs
2	50	1	2.25	2.02	2.25	2.13	15
		¾	2.25	2.02	2.25	2.13	
		½	2.25	2.02	2.25	2.13	
		1	1.49	1.41	1.88	1.52	30
		¾	1.49	1.41	1.88	1.52	
		½	1.49	1.41	1.88	1.52	
	60	1	2.25	2.16	2.25	2.33	15
		¾	2.25	2.16	2.25	2.33	
		½	2.25	2.16	2.25	2.33	
		1	1.73	1.73	2.02	1.80	20
		¾	1.73	1.73	2.02	1.80	
		½	1.73	1.73	2.02	1.80	
2 ½	65	1	2.02	2.02	2.16	2.24	15
		¾	2.02	2.02	2.16	2.24	
		½	2.02	2.02	2.16	2.24	
		1	1.74	1.60	2.32	2.35	15
		¾	1.74	1.60	2.32	2.35	
		½	1.74	1.60	2.32	2.35	

*Non-standard/stock items may require longer lead time.

Model

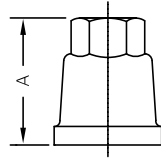
815 Bullhead Tee



Size			A	B	C	Weight	Box Q'ty
in mm			in mm	in mm	in mm	Lbs Kgs	Pcs
¾	20	¾	1.45	1.45	1.37	0.66	65
		½	1.45	1.45	1.37	0.66	
1	25	1	1.67	1.67	1.58	0.97	45
		¾	1.67	1.67	1.58	0.97	
	32	1	1.81	1.81	1.65	1.15	35
		¾	1.81	1.81	1.65	1.15	
1 ¼	32	1	1.88	1.81	1.82	1.43	30
		¾	1.88	1.81	1.82	1.43	
		½	1.88	1.81	1.82	1.43	
	40	1	1.88	1.88	1.82	1.52	30
		¾	1.88	1.88	1.82	1.52	
		½	1.88	1.88	1.82	1.52	
1 ½	40	1	2.10	2.10	1.90	1.80	24
		¾	2.10	2.10	1.90	1.80	
		½	2.10	2.10	1.90	1.80	
	48	1	2.16	2.10	2.02	1.94	20
		¾	2.16	2.10	2.02	1.94	
		½	2.16	2.10	2.02	1.94	
2	50	2	2.60	2.60	2.39	3.61	10
		1 ½	2.60	2.60	2.39	3.61	

Model

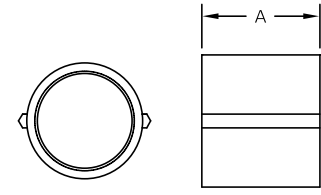
816 Reducing Coupling



Size	Pipe O.D.	A	Wrench Size	Weight	Box Q'ty
in	in	in	in	Lbs	Pcs
mm	mm	mm	mm	Kgs	
¾ x ½	1.050 x 0.840	1.63	1 ¼	0.37	150
20 x 15	26.7 x 21.3	41	32	0.2	
1 x ½	1.315 x 0.840	1.69	1 ¼	0.37	140
25 x 15	33.4 x 21.3	43	32	0.2	
1 x ¾	1.315 x 1.050	1.37	1 ½	0.48	120
25 x 20	33.4 x 26.7	35	38	0.2	
1 ¼ x ¾	1.660 x 1.050	2.06	1 ½	0.59	80
32 x 20	42.2 x 26.7	52	38	0.3	
1 ¼ x 1	1.660 x 1.315	2.06	-	0.66	60
32 x 25	42.2 x 33.4	52	-	0.3	
1 ½ x 1	1.900 x 1.315	2.31	-	0.84	50
40 x 25	48.3 x 33.4	59	-	0.4	
1 ½ x 1 ¼	1.900 x 1.660	2.31	-	0.92	45
40 x 32	48.3 x 42.2	59	-	0.4	
2 x 1	2.375 x 1.315	2.81	-	1.23	35
50 x 25	60.3 x 33.4	71	-	0.6	
2 x 1 ¼	2.375 x 1.660	2.81	-	1.28	30
50 x 32	60.3 x 42.2	71	-	0.6	
2 x 1 ½	2.375 x 1.900	2.81	-	1.66	30
50 x 40	60.3 x 48.3	71	-	0.8	
2 ½ x 2	2.875 x 2.375	3.25	-	2.24	18
65 x 50	73.0 x 60.3	83	-	1.0	

Model

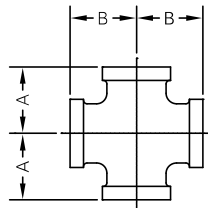
818 Straight Coupling



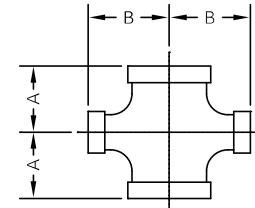
Size	Pipe O.D.	A	Wrench Size	Weight	Box Q'ty
in	in	in	in	Lbs	Pcs
mm	mm	mm	mm	Kgs	
½	0.840	1.38	1 ½	0.18	360
15	21.3	35	29	0.1	
¾	1.050	1.61	1 ¾	0.26	200
20	26.7	41	35	0.2	
1	1.315	1.77	1 11/16	0.42	110
25	33.4	45	43	0.2	
1 ¼	1.660	2.00	2	0.57	75
32	42.2	51	51	0.3	
1 ½	1.900	2.20	2 ¼	0.77	60
40	48.3	56	57	0.3	
2	2.375	2.60	2 ¾	1.17	30
50	60.3	66	70	0.5	
2 ½	2.875	3.00	3 ¾	2.11	18
65	73.0	76	86	1.0	

Model

817 Cross / Reducing Cross


Model 817 Cross

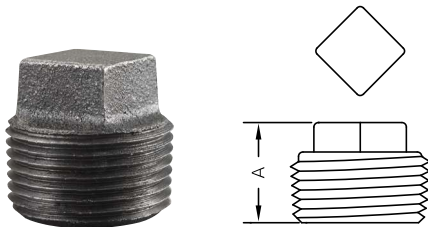
Size	Pipe O.D.	A	B	Weight	Box Q'ty
in	in	in	in	Lbs	Pcs
mm	mm	mm	mm	Kgs	
½	0.840	1.12	1.12	0.48	90
15	21.3	28	28	0.2	
¾	1.050	1.31	1.31	0.77	60
20	26.7	33	33	0.3	
1	1.315	1.50	1.50	0.95	45
25	33.4	38	38	0.4	
1 ¼	1.660	1.75	1.75	1.43	25
32	42.2	44	44	0.6	
1 ½	1.900	1.94	1.94	1.87	20
40	48.3	49	49	0.8	
2	2.375	2.25	2.25	2.86	10
50	60.3	57	57	1.3	


Model 817 Reducing Cross

Size	A	B	Weight	Box Q'ty
in	in	in	Lbs	Pcs
mm	mm	mm	Kgs	
1 ¼ x 1 ¼ x 1 x 1	1.58	1.67	1.25	30
32 x 32 x 25 x 25	40	42	0.6	
1 ½ x 1 ½ x 1 x 1	1.65	1.80	1.47	24
40 x 40 x 25 x 25	42	46	0.7	
2 x 2 x 1 x 1	1.73	2.02	1.94	16
50 x 50 x 25 x 25	44	51	0.9	

Model

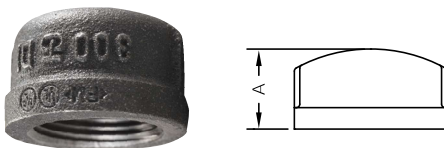
819 Plug



Size	Pipe O.D.	A	Weight	Box Q'ty
in	in	in	Lbs	Pcs
mm	mm	mm	Kgs	
1/2	0.840	0.93	0.09	500
15	21.3	24	0.0	
3/4	1.050	1.13	0.18	300
20	26.7	29	0.1	
1	1.315	1.25	0.25	200
25	33.4	32	0.1	
1 1/4	1.660	1.36	0.42	110
32	42.2	35	0.2	
1 1/2	1.900	1.45	0.59	80
40	48.3	37	0.3	
2	2.375	1.50	0.95	45
50	60.3	38	0.4	

Model

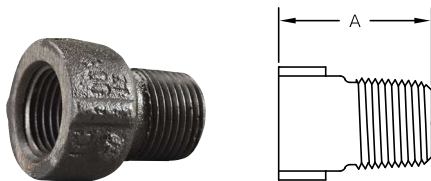
820 Cap



Size	Pipe O.D.	A	Weight	Box Q'ty
in	in	in	Lbs	Pcs
mm	mm	mm	Kgs	
1/2	0.840	0.89	0.14	500
15	21.3	23	0.1	
3/4	1.050	1.00	0.20	300
20	26.7	25	0.1	
1	1.315	1.18	0.33	180
25	33.4	30	0.1	
1 1/4	1.660	1.32	0.46	110
32	42.2	34	0.2	
1 1/2	1.900	1.38	0.57	80
40	48.3	35	0.3	
2	2.375	1.48	0.88	45
50	60.3	38	0.4	
2 1/2	2.875	1.77	1.54	25
65	73.0	45	0.7	

Model

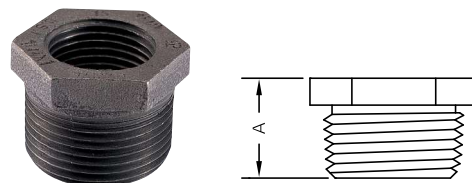
825 Extension Piece



Size	Pipe O.D.	A	Weight	Box Q'ty
in	in	in	Lbs	Pcs
mm	mm	mm	Kgs	
1/2 x 1 1/2L	0.840 x 1.900	1.50	0.18	300
15 x 40L	21.3 x 48.3	38	0.1	
1/2 x 2L	1.900 x 2.375	2.00	0.22	250
15 x 50L	21.3 x 60.3	51	0.1	
3/4 x 1 1/2L	1.050 x 1.900	1.50	0.22	250
20 x 40L	26.7 x 48.3	38	0.1	
3/4 x 2L	1.050 x 2.375	2.00	0.26	200
20 x 50L	26.7 x 60.3	51	0.1	

Model

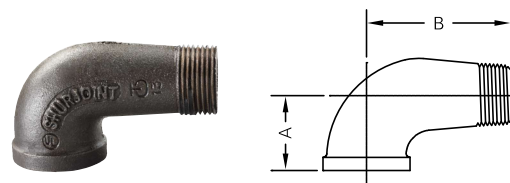
827 Hex Bushing



Size	Pipe O.D.	A	Weight	Box Q'ty
in	in	in	Lbs	Pcs
mm	mm	mm	Kgs	
1 x 1/2	1.315 x 0.840	1.06	0.20	280
25 x 15	33.4 x 21.3	27	0.1	
1 x 3/4	1.315 x 1.050	1.06	0.18	280
25 x 20	33.4 x 26.7	27	0.1	
1 1/4 x 1	1.660 x 1.315	1.18	0.29	150
32 x 25	42.2 x 33.4	30	0.1	
1 1/2 x 1	1.900 x 1.315	1.26	0.53	100
40 x 25	48.3 x 21.3	32	0.2	
1 1/2 x 1 1/4	1.900 x 1.660	1.26	0.37	100
40 x 32	48.3 x 42.2	32	0.2	
2 x 1	2.375 x 1.315	1.34	0.75	80
50 x 25	60.3 x 33.4	34	0.3	
2 x 1 1/4	2.375 x 1.660	1.34	0.75	80
50 x 32	60.3 x 42.2	34	0.3	
2 x 1 1/2	2.375 x 1.900	1.34	0.64	80
50 x 40	60.3 x 48.3	34	0.3	

Model

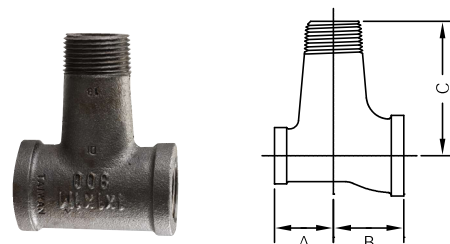
831 Long Street 90° Elbow



Size	Pipe O.D.	A	B	Weight	Box Q'ty
in	in	in	in	Lbs	Pcs
mm	mm	mm	mm	Kgs	
1 x 1/2M	1.315 x 0.840	1.50	3.00	0.66	80
25 x 15M	33.4 x 21.3	38	76	0.3	
1 x 1M	1.315 x 1.315	1.50	3.00	0.81	60
25 x 25M	33.4 x 33.4	38	76	0.4	

Model

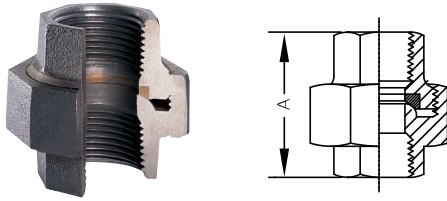
832 Long Street Tee



Size	A	B	C	Weight	Box Q'ty
in	in	in	in	Lbs	Pcs
mm	mm	mm	mm	Kgs	
1 x 1/2 x 1M	1.50	1.40	3.00	0.91	50
25 x 15 x 25M	38	36	76	0.4	
1 x 1 x 1M	1.50	1.50	3.00	1.03	45
25 x 25 x 25M	38	38	76	0.5	

Model

830 Brass Seat Union

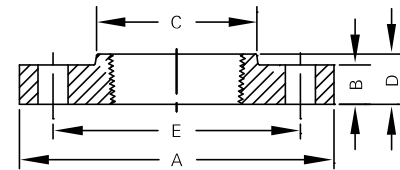


Size	Pipe O.D.	A	Weight	Box Qty
in	in	in	Lbs	Pcs
mm	mm	mm	Kgs	
½	0.840	1.81	0.46	110
15	21.3	46	0.2	
¾	1.050	1.99	0.64	80
20	26.7	51	0.3	
1	1.315	2.17	1.01	50
25	33.4	55	0.5	
1¼	1.660	2.52	1.45	35
32	42.2	64	0.7	
1½	1.900	2.64	1.85	25
40	48.3	67	0.8	
2	2.375	3.15	2.86	18
50	60.3	80	1.3	

Model

841 Companion Flange

The Model 841 is a traditional companion flange used for transition from a flanged to a threaded piping system.



Nominal Pipe Size	Pipe O. D.	Diameter of flange "A"	Thickness of flange "B"	Diameter of hub "C"	Length of hub "D"	Bolt Circle dia. "E"	Bolt No.	Bolt Size	Weight
in	in	in	in	in	in	in		in	Lbs
mm	mm	mm	mm	mm	mm	mm			Kgs
1	1.315	4.25	0.56	1.94	0.69	3.12	4	½ x 2.25	1.54
25	33.4	108	14	49	18	79		—	0.7
1¼	1.660	4.62	0.62	2.31	0.81	3.50	4	½ x 2.50	1.94
32	42.2	117	16	59	21	89		—	0.9
1½	1.900	5.00	0.69	2.56	0.88	3.88	4	½ x 2.50	2.29
40	48.3	127	18	65	22	99		—	1.0
2	2.375	6.00	0.75	3.06	1.00	4.75	4	¾ x 2.75	4.18
50	60.3	152	19	78	25	121		—	1.9
2½	2.875	7.00	0.88	3.56	1.12	5.50	4	¾ x 3.00	5.83
65	73.0	178	22	90	28	140		—	2.6
3	3.500	7.50	0.94	4.25	1.19	6.00	4	¾ x 3.25	6.60
80	88.9	191	24	108	30	152		—	3.0
4	4.500	9.00	0.94	5.31	1.31	7.50	4	¾ x 3.25	11.75
100	114.3	229	24	135	33	191		—	5.3
6	6.625	11.00	1.00	7.56	1.56	9.50	4	¾ x 3.50	16.50
150	168.3	279	25	192	40	241		—	7.5
8	8.625	13.50	1.12	9.69	1.75	11.75	4	¾ x 3.75	25.98
200	219.1	343	28	246	44	298		—	11.8

Model

B20 Standard Top Beam Clamp **B24 Wide Mouth Top Beam Clamp**

Size Range: $\frac{3}{8}$ " and $\frac{1}{2}$ " rod.

Material: Ductile iron casting with a hardened steel cup-point set screw and lock nut.

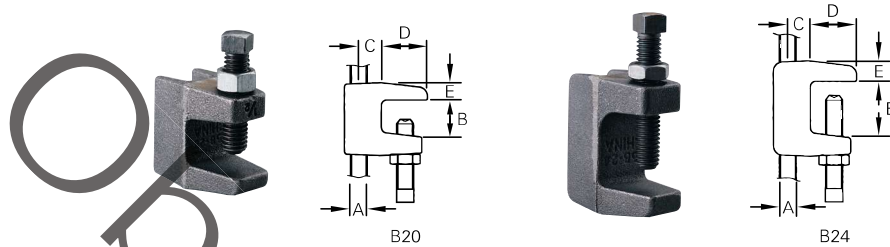
Application: Designed for structural attachment to the top of metal beams, channel or other structural shapes to support hanger rod. The universal design allows clamps to be installed in the top or bottom

beam position.

Conforms to: Federal Specification WW-H-171 (Type 23), Manufacturers Standardization Society ANSI/MSS SP-58 (Type 19 & 23), install in accordance with ANSI/MSS SP-69.

Exceeds requirements of NFPA 13.

Finish: Black or electro zinc plated.

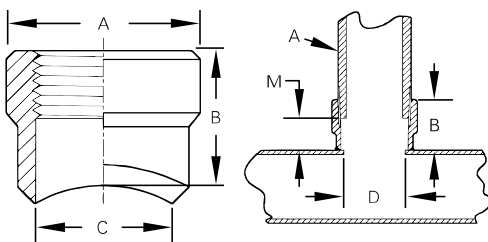
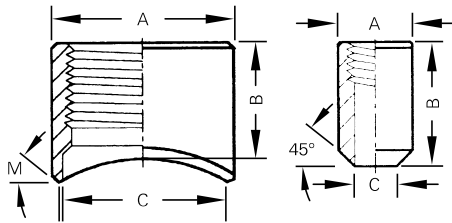
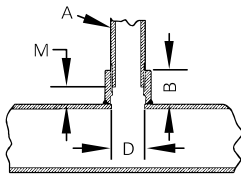


Model No.	Rod Size A	Dimensions				Pipe Size	Max. Recom. Load		Weight Per 100 pcs.
		B	C	D	E		Top	Bottom	
	in	in	in	in	in	in	Lbs	Lbs	Lbs
	mm	mm	mm	mm	mm	mm	Kgs	Kgs	Kgs
B20-3	$\frac{3}{8}$	$\frac{3}{4}$	0.49	1	$\frac{3}{8}$	$\frac{3}{4}$ - 4	500	250	35.7
	M10	19.1	12.5	25.4	9.5	20 - 100	227	114	16.2
B20-4	$\frac{1}{2}$	$\frac{3}{4}$	0.49	1	$\frac{3}{8}$	5, 6, 8	950	750	35.7
	M12	19.1	12.5	25.4	9.5	125, 150, 200	432	340	16.2
B24-3	$\frac{3}{8}$	$1\frac{1}{8}$	0.49	1	$\frac{7}{16}$	$\frac{3}{4}$ - 4	500	250	43.2
	M10	28.6	12.5	25.4	11.1	20 - 100	227	114	19.6
B24-4	$\frac{1}{2}$	$1\frac{1}{8}$	0.49	1	$\frac{7}{16}$	5, 6, 8	950	750	43.2
	M12	28.6	12.5	25.4	11.1	125, 150, 200	432	340	19.6

Model

71 Female Threaded Outlet Fitting

The Shurjoint Model 71 Female Threaded Outlet Fittings are designed to provide a threaded outlet at any desired location along the header. Made of highly weldable SAE J403 forged steel the Model 71 is designed for single pass welding. The Model 71 features a counter bore and a 1.6 mm land around the full circumference of the mouth, which helps ensure full penetration welds and minimize the likelihood of any burn through or distortion that might be caused by excessive heat. The Model 71 is UL / cUL listed and FM approved for services up to 300 psi (20 Bar).



Outlet Size	Header Size Range	Outlet O.D. A	Outlet Length B	Counter-bore C	Make-Up M	Hole Saw Dia. (Ref.) D	Max. Hole Dia. (Ref.) D	Weight	
in	in	in	in	in	in	in	in	Lbs	Kgs
mm	mm	mm	mm	mm	mm	mm	mm		
1/4	1 1/4 - 8	0.75	1.25	0.42	0.81	3/8	13/32	0.09	0.04
8		19.1	31.8	10.7	20.5	9.5	10.3		
1/2	1 1/4 - 1 1/2							0.15	0.07
15	1 1/2 - 2	1.13	1.00	0.81	0.50	1 1/16	13/16	0.15	0.07
	2 - 2 1/2	28.6	25.4	20.6	12.7	17.5	20.6	0.13	0.06
	2 1/2 - 8							0.11	0.05
3/4	1 1/4 - 1 1/2							0.22	0.10
20	1 1/2 - 2	1.37	1.00	1.06	0.50	7/8	1	0.20	0.09
	2 - 2 1/2	34.9	25.4	26.9	12.7	22.2	25.4	0.20	0.09
	2 1/2 - 8							0.18	0.08
1	1 1/4 - 1 1/2							0.24	0.11
	1 1/2 - 2							0.24	0.11
25	2 - 2 1/2	1.57	1.13	1.25	0.50	1 1/8	1 1/4	0.24	0.11
	2 1/2 - 3	40.0	28.6	31.8	12.7	28.6	31.8	0.24	0.11
	3 - 4							0.24	0.11
	5 - 8							0.22	0.10
1 1/4	1 1/2 - 2							0.42	0.19
32	2 - 2 1/2	1.91	1.25	1.61	0.50	1 1/8	1 1/2	0.42	0.19
	2 1/2 - 3	48.5	31.8	41.0	12.7	34.9	38.1	0.42	0.19
	3 - 4							0.40	0.18
	5 - 8							0.40	0.18
1 1/2	2							0.53	0.24
40	2 1/2	2.16	1.25	1.85	0.88	1 1/8	1 1/4	0.53	0.24
	3 - 4	55.0	31.8	47.0	22.2	41.3	44.5	0.48	0.22
	5 - 8							0.48	0.22
2	2 1/2							0.88	0.40
50	3							0.86	0.39
	4	2.64	1.50	2.30	0.88	2 1/8	2 1/4	0.86	0.39
	5	67.0	38.1	58.6	22.2	54.0	57.2	0.86	0.39
	6							0.84	0.38
	8							0.84	0.38
2 1/4	3							1.06	0.48
65 (73.0 O.D.)	4	3.11	1.76	2.76	1.13	2 1/8	2 3/8	0.84	0.38
	5	79.0	44.5	70.1	28.6	63.5	66.7	0.84	0.38
	6							0.99	0.45
	8							1.08	0.49
3	4							1.76	0.80
80	5	3.86	2.10	3.43	1.50	3 1/8	3 1/4	1.70	0.77
	6	98.0	53.3	87.0	38.1	79.4	82.6	1.70	0.77
	8							1.70	0.77
4	5	4.93	2.37	4.46	2.00	4 1/8	4 1/4	3.08	1.40
100	6	125.2	63.3	113.3	50.8	104.8	108.0	2.90	1.32
	8							2.90	1.32

The precision machined mouth is designed to fit the first listed header size perfectly, and allows only a small gap along the longitudinal centerline of the second listed header size.

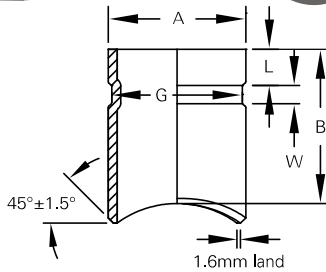
Each outlet size shown in the following table fits the same header pipe size. Special attention is required to the hole size (D) in the header pipe, which is one size smaller than the regular hole size.

Outlet Size	Header Size Range	Outlet O.D. A	Outlet Length B	Counter-bore C	Make-Up M	Hole Saw Dia. (Ref.) D	Max. Hole Dia. (Ref.) D	Weight	
in	in	in	in	in	in	in	in	Lbs	Kgs
mm	mm	mm	mm	mm	mm	mm	mm		
1 1/4	1 1/4	1.91	1.25	1.44	0.50	1 1/4	1 1/8	0.42	0.19
32		48.5	31.8	36.5	12.7	31.8	34.9		
1 1/2	1 1/2	2.06	1.25	1.67	0.88	1 1/2	1 1/4	0.46	0.21
40		55.0	31.8	42.5	22.2	38.1	41.3		
2	2	2.64	1.50	2.15	0.88	2	2 1/8	0.75	0.34
50		67.0	38.1	54.5	22.2	50.8	54.0		
2 1/2	2 1/2	3.11	1.75	2.57	1.13	2 1/2	2 1/4	1.08	0.49
65 (73.0 O.D.)		79.0	44.5	65.2	28.6	63.5	63.5		
3	3	3.86	2.10	3.19	1.50	3	3 1/8	1.76	0.80
8		98.0	53.3	81.0	38.1	76.1	79.4		
4	4	4.93	2.37	4.21	2.00	4	4 1/8	3.08	1.40
100		125.2	63.3	107.0	50.8	101.6	104.8		

Model

72C Cut Grooved Welding Outlet

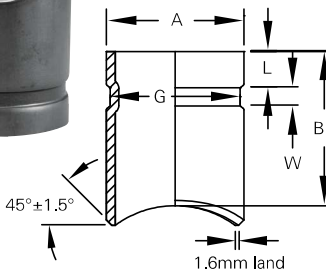
Model 72C Cut Grooved Outlet Fittings are designed to provide a cut grooved outlet at any desired location along the header. Made of standard wall (Sch.40) pipe, the Model 72C is recommended for use with Sch. 40 header pipes. The weld end is provided with a 1.6 mm land around the full circumference to assure a one-pass full penetration weld. The 72C fittings are recommended for services up to 300 psi (20 Bar).



Model

72R Roll Grooved Welding Outlet

Model 72R Roll Grooved Outlet Fittings are designed to provide a roll grooved outlet at any desired location along the header. Made of Sch. 10 pipe, the 72R R-Let is recommended for use with light wall pipes to minimize the likelihood of burn-through and or distortion of the header pipe. The 72R fittings are recommended for services up to 300 psi (20 Bar).



Outlet Size	Run Pipe	Dimensions					Weight
		A	B	L	W	G	
in	in	in	in	in	in	in	Lbs
mm	mm	mm	mm	mm	mm	mm	Kgs
2 50	2	2.375 60.3	3.000 76.2	0.625 15.88	0.312 7.95	2.250 57.15	0.88 0.40
	2½						
	3						
	4						
	5						
	6						
2½ 65	2½	2.875 73.0	3.000 76.2	0.625 15.88	0.312 7.95	2.722 69.09	1.10 0.50
	4						
	5						
	6						
	8						
	3						
3 80	4	3.500 88.9	3.000 76.2	0.625 15.88	0.312 7.95	3.346 84.94	2.00 0.91
	5						
	6						
	8						
	4						
	5						
4 100	5	4.500 114.3	4.000 101.6	0.625 15.88	0.375 9.53	4.337 110.08	3.80 1.73
	6						
	8						
	6						
	150						
	8						
8 200	8	8.625 219.1	4.000 101.6	0.750 19.05	0.438 11.13	8.440 214.40	9.50 4.32
	10						

Outlet Size	Run Pipe	Dimensions					Weight
		A	B	L	W	G	
in	in	in	in	in	in	in	Lbs
mm	mm	mm	mm	mm	mm	mm	Kgs
1¼ 32	1¼	1.660 42.2	3.000 76.2	0.625 15.88	0.281 7.14	1.535 38.99	0.33 0.15
	1½						
	2						
	2½						
	3						
	4						
1½ 40	5-8	1.900 48.3	3.000 76.2	0.625 15.88	0.281 7.14	1.775 45.09	0.40 0.18
	1½						
	2						
	2½						
	3						
	4						
2 50	5-8	2.375 60.3	3.000 76.2	0.625 15.88	0.344 8.74	2.250 57.15	0.64 0.29
	2						
	2½						
	3						
	4						
	5						
2½ 65	6	2.875 73.0	3.000 76.2	0.625 15.88	0.344 8.74	2.720 69.09	1.12 0.51
	8						
	2½						
	3						
	4						
	5						
76.1 mm	6	3.000 76.1	3.000 76.2	0.625 15.88	0.344 8.74	2.845 72.26	1.12 0.51
	8						
	2½						
	3						
	4						
	5						
3 80	6	3.500 88.9	3.000 76.2	0.625 15.88	0.344 8.74	3.440 84.94	1.23 0.56
	8						
	4						
	5						
	6						
	8						
4 100	4	4.500 114.3	4.500 114.3	0.625 15.88	0.344 8.74	4.314 110.08	2.07 0.94
	5						
	6						