

ALUMINUM PIPE

Pressure Ratings and End Loads for Victaulic Couplings on Aluminum Pipe*



Style 99
Roust-A-Bout® Coupling

1 Pipe Size		2 PIPE		3	4	5	6
Nominal Diameter Inches/mm	Actual Outside Diameter Inches/mm	Wall Thickness In./mm	Sched.	Req'd Bolt Torque Lb.Ft. N • m	Max. Joint Working Pressure PSI/kPa	Max. Permiss. End Load Lbs./N	
1 25	1.315 33,7	0.179 4,55	80	N/R	N/R	N/R	
		0.133 3,38	40	35 47,5	600 4130	800 3560	
		0.109 2,77	10	35 47,5	300 2065	400 1780	
		0.065 1,65	5	35 47,5	100 690	135 601	
1½ 40	1.900 48,3	0.200 5,08	80	60 81,4	500 3450	1400 6230	
		0.145 3,56	40	60 81,4	400 2760	1100 4895	
		0.109 2,77	10	60 81,4	300 2065	825 3671	
		0.065 1,65	5	N/R	N/R	N/R	
2 50	2.375 60,3	0.218 5,54	80	150 203,4	400 2760	1800 8010	
		0.154 3,91	40	150 203,4	300 2065	1300 5785	
		0.109 2,77	10	150 203,4	200 1380	900 4005	
		0.065 1,65	5	N/R	N/R	N/R	
2½ 65	2.875 73,0	0.276 7,01	80	150 203,4	350 2415	2200 9790	
		0.203 5,16	40	150 203,4	275 1895	1725 7676	
		0.120 5,16	10	150 203,4	150 1035	1000 4450	
		0.083 2,11	5	N/R	N/R	N/R	
3 80	3.500 88,9	0.300 7,62	80	200 271,2	300 2065	2880 12816	
		0.216 5,49	40	200 271,2	200 1380	1920 8544	
		0.120 3,05	10	200 271,2	100 690	960 4272	
		0.083 2,11	5	N/R	N/R	N/R	
3½ 90	4.000 101,6	0.318 8,08	80	200 271,2	250 1725	3100 13795	
		0.226 5,74	40	200 271,2	200 1380	2500 11125	
		0.120 3,05	10	200 271,2	100 690	1250 5563	
		0.083 2,11	5	N/R	N/R	N/R	
4 100	4.500 114,3	0.337 8,56	80	200 271,2	200 1380	3200 14240	
		0.237 6,02	40	200 271,2	150 1035	2400 10680	
		0.120 3,05	10	200 271,2	50 345	800 3560	
		0.083 2,11	5	N/R	N/R	N/R	

* Aluminum Pipe – Alloy 6063-T6 or 6061-T6 in Schedule 80 & 40; Alloy 6063-T6 in Schedule 30, 20, 10 & 5.

NR = Not recommended See column notes on page 2.
Table continued on page 2.



ALUMINUM PIPE – PRESSURE RATINGS

1		2	3	4	5	6
Pipe Size		PIPE		Req'd Bolt Torque Lb.Ft. N • m	Max. Joint Working Pressure PSI/kPa	Max. Permiss. End Load Lbs./N
Nominal Diameter Inches/mm	Actual Outside Diameter Inches/mm	Wall Thickness In./mm	Sched.			
5 125	5.563 141,3	0.375 9,53	80	250 339,0	150 1035	3600 16020
		0.258 6,55	40	250 339,0	100 690	2400 10680
		0.134 3,40	10	250 339,0	50 345	1200 5340
		0.109 2,77	5	N/R	N/R	N/R
6 150	6.625 168,3	0.432 10,97	80	250 339,0	150 1035	5200 23140
		0.280 7,11	40	250 339,0	100 690	3500 15575
		0.134 3,40	10	250 339,0	50 345	1750 7788
		0.109 2,77	5	250 339,0	35 240	1225 5451
8 200	8.625 219,1	0.322 8,18	40	250 339,0	150 1035	9000 40050
		0.277 7,04	30	250 339,0	100 690	6000 26700
		0.250 6,35	20	250 339,0	75 515	4500 20025
		0.148 3,76	10	250 339,0	50 345	3000 13350
10 250	10.750 273,0	0.365 9,27	40	300 406,8	100 690	9000 40050
		0.307 7,80	30	300 406,8	75 515	6300 28035
		0.250 6,35	20	300 406,8	50 345	4500 20025
		0.165 4,19	10	300 406,8	25 172	2250 10013
12 300	12.750 323,9	0.406 10,31	40	300 406,8	100 690	12800 56960
		0.330 8,38	30	300 406,8	75 515	9500 42275
		0.250 6,35	20	300 406,8	50 345	6000 26700
		0.180 4,67	10	300 406,8	25 172	3150 14018

COLUMN 1: Victaulic couplings are identified by nominal pipe size.

COLUMN 2: Nominal pipe wall thickness.

COLUMN 3: Pipe wall thickness schedule as established in ANSI Standard B36, 10-70.

COLUMN 4: Bolt torque required for installing Victaulic plain end couplings to achieve pressure ratings listed in Column 5 and Permissible Maximum End Loads listed in Column 6.

TORQUE RATINGS MUST BE APPLIED AT INSTALLATION.

COLUMN 5: Maximum line pressure, including surge, to which a joint should be subjected, based on couplings assembled to **full torque specifications** on plain end or beveled end standard weight steel pipe and/or Victaulic plain end fittings. Working pressure ratings are based on pipe prepared in accordance with Victaulic specifications.

COLUMN 6: Maximum end load from all internal and/or external forces to which the joint should be subjected based on couplings assembled to full torque specifications.

NOTE: Roust-A-Bout couplings, when sufficiently pressurized, will allow pipe to separate slightly as grips set into pipe. For properly assembled and torqued couplings, this separation should not exceed $\frac{1}{4}$ " (6,4 mm). This should be considered for installations in tightly confined areas. Style 99 couplings are not designed to provide linear or angular movement.

ROUST-A-BOUT STYLE 99 COUPLINGS ARE DESIGNED FOR USE WITH PLAIN END OR BEVELED END PIPE AND VICTAULIC PLAIN END FITTINGS ONLY.