

# National Pipe Taper (NPT) Joint Strength

Nominal Size (inches OD)	Schedule	NPT Joint Strength (pounds)	Wall Size (inches)	Inside Diameter (inches)	Weight Per Foot (pounds)
3/8 (0.675)	40	540	0.091	0.493	0.573
	80	920	0.126	0.423	0.746
1/2 (0.840)	40	740	0.109	0.622	0.851
	80	1,250	0.147	0.546	1.088
	160	1,750	0.187	0.466	1.474
3/4 (1.050)	40	1,500	0.113	0.824	1.131
	80	1,800	0.154	0.742	1.474
	160	2,800	0.218	0.614	1.937
1 (1.315)	40	1,500	0.133	1.049	1.679
	80	2,600	0.179	0.957	2.172
	160	4,000	0.250	1.815	2.844
1 1/4 (1.660)	40	2,200	0.140	1.380	2.273
	80	3,800	0.191	1.278	2.997
	160	5,500	0.250	1.160	3.765
1 1/2 (1.900)	40	2,700	0.145	1.610	2.718
	80	4,700	0.200	1.500	3.631
	160	7,500	0.281	1.338	4.859
2 (2.375)	40	3,900	0.154	2.067	3.653
	80	7,000	0.218	1.939	5.022
	160	12,300	0.344	1.687	7.462
2 1/2 (2.875)	40	5,700	0.203	2.469	5.793
	80	9,800	0.276	2.323	7.661
	160	15,000	0.375	2.125	10.010
3 (3.500)	40	8,000	0.216	3.068	7.576
	80	13,900	0.300	2.900	10.250
	160	23,000	0.438	2.624	14.320
3 1/2 (4,000)	40	10,000	0.226	3.548	9.109
	80	17,500	0.318	3.364	12.510
4 (4,500)	40	12,500	0.237	4.026	10.790
	80	21,500	0.337	3.826	14.980
	160	38,500	0.531	3.438	22.510
5 (5.562)	40	18,300	0.258	5.047	14.620
	80	32,000	0.375	4.813	20.780
	160	58,500	0.625	4.312	32.960
6 (6.625)	40	25,000	0.280	6.065	18.970
	80	46,000	0.432	5.761	28.570
	160	83,500	0.719	5.187	45.350

The information and data presented herein are typical or average values and are not a guarantee of maximum or minimum values. No liability, either direct or indirect, is assumed for the correctness of this, or any other data in this publication. Applications specifically suggested are made only for the purpose of illustration, to enable the reader to make his/her own evaluation, and are not intended as warranties either expressed or implied of fitness for these or other uses.

©2011, MAASS Midwest Manufacturing, Inc.



**MIDWEST**

**MANUFACTURERS OF QUALITY WATER WELL ACCESSORIES**

MEMBER:



LISTED PAS-97(04)  
PIELESS ADAPTER STANDARD

U.S. & CANADA 1-800-323-6259 • FAX 1-847-669-3230 www.maassmidwest.com

P. O. Box 547, 11283 Dundee Road, Huntley, IL 60142-0547 • (800) 323-6259 • IL AREA (847) 669-5135

## Weight of Water and Pipe

Pipe	Nominal Size of Pipe (inches)	Pipe I.D. (inches)	Approx. Weight of Water (lbs./ft.)	Approx. Weight of Pipe ( lbs./ft)	Approx. Total Weight ( lbs./ft)
125 psi polyethylene	1	1.049	0.38	0.2	0.58
	1 1/4	1.38	0.65	0.33	0.98
160 psi polyethylene	1	1.049	0.38	0.26	0.64
	1 1/4	1.38	0.65	0.43	1.08
Schedule 80 PVC	1	0.957	0.31	0.4	0.71
	1 1/4	1.278	0.56	0.55	1.11
	1 1/2	1.5	0.77	0.66	1.43
	2	1.939	1.28	0.92	2.2
Steel Pipe	1	1.049	0.38	1.68	2.06
	1 1/4	1.38	0.65	2.28	2.93
	1 1/2	1.61	0.88	2.73	3.61
	2	2.067	1.45	3.68	5.13
	2 1/2	2.469	2.074	5.79	7.864
	3	3.068	3.202	7.58	10.782
	4	4.026	5.515	10.79	16.305
	6	6.065	12.52	18.97	31.49
	8	7.981	21.67	28.55	50.22
	10	10.02	34.16	40.18	74.34

### N.P.S. and I.S.O. Equivalent Pipe Sizes

NPS	ISO	NPS	ISO	NPS	ISO	NPS	ISO	NPS	ISO
1/8	DN6	1 1/4	DN32	3 1/2	DN90	8	DN200	18	DN450
1/4	DN8	1 1/2	DN40	4	DN100	10	DN250	20	DN500
1/2	DN15	2	DN50	4 1/2	DN115	12	DN300	24	DN600
3/4	DN20	2 1/2	DN65	5	DN125	14	DN350	28	DN700
1	DN25	3	DN80	6	DN150	16	DN400	30	DN750

Nominal Pipe Sizes (NPS) and their metric equivalents (called "DN" or "Diameter Nominal"). The metric sizes conform to the International Standards Organization (ISO) usage and apply to all plumbing, natural gas, heating oil, drainage and miscellaneous piping used in building and civil works projects. (Note: A pipe of ISO DN150 is 150 mm in diameter.)

#### Water Conversions

1 Cubic Foot	=	7.48 gallons
	=	28.317 liters
	=	62.428 pounds
1 Gallon	=	8.345 pounds
	=	3.785 liters
	=	231 cubic inches
1 Liter	=	2.205 ounces
	=	0.2642 gallons
	=	61 cubic inches
1 Cubic Meter	=	2204.5 pounds
	=	1000 liters
	=	2.64.2 gallons
1 Pound	=	27.7 cubic inches

#### Volume of Water per Linear Foot of Schedule 40 Steel Pipe

PIPE DIAMETER	CUBIC FEET	GALLONS
1.0	.006	.045
1.25	.010	.078
1.5	.012	.106
2.0	.022	.174
2.5	.034	.26
3.0	.051	.384
4.0	.087	.65
5.0	.139	1.04
6.0	.196	1.47
8.0	.349	2.61
10.0	.545	4.08
12.0	.785	5.89

©2011, MAASS Midwest Manufacturing, Inc.



**MIDWEST**

**MANUFACTURERS OF QUALITY WATER WELL ACCESSORIES**

U.S. & CANADA 1-800-323-6259 • FAX 1-847-669-3230 [www.maassmidwest.com](http://www.maassmidwest.com)

P. O. Box 547, 11283 Dundee Road, Huntley, IL 60142-0547 • (800) 323-6259 • IL AREA (847) 669-5135

MEMBER:



LISTED PAS-97(04)  
FITLESS ADAPTER STANDARD