

TECHNICAL INFORMATION

THREAD DIMENSIONS

The following tables give the actual outside dimension of male threads in inches as well as the pitch given in threads per inch. For fire hose thread dimensions, see detail listings next to G81 in our Fire Section.

PIPE, STRAIGHT PIPE, & GARDEN HOSE THREADS

Pipe Size	Tapered Pipe		Straight Iron Pipe		Garden Hose	
	(NPT) O.D.	(NPSH) Pitch	(GHT) O.D.	(GHT) Pitch	O.D.	Pitch
1/16	0.312	27				
1/8	0.405	27				
1/4	0.540	18				
3/8	0.675	18				
1/2	0.840	14				
3/4	1.050	14	1.035	14	1.062	11 1/2
1	1.315	11 1/2	1.295	11 1/2		
1 1/4	1.660	11 1/2	1.639	11 1/2		
1 1/2	1.900	11 1/2	1.878	11 1/2		
2	2.375	11 1/2	2.352	11 1/2		
2 1/2	2.875	8	2.841	8		
3	3.500	8	3.470	8		
3 1/2	4.000	8	3.970	8		
4	4.500	8	4.470	8		
5	5.563	8				
6	6.625	8				
8	8.625	8				
10	10.750	8				
12	12.750	8				

TUBE FITTING THREADS

Tube O.D.	Brass Compression		SAE 45° Flare		Inverted Flare	
	O.D.	Pitch	O.D.	Pitch	O.D.	Pitch
1/8	5/16	24	5/16	24	5/16	28
3/16	3/8	24	3/8	24	3/8	24
1/4	7/16	24	7/16	20	7/16	24
5/16	1/2	24	1/2	20	1/2	20
3/8	9/16	24	5/8	18	5/8	18
7/16	5/8	24	11/16	16	11/16	18
1/2	11/16	20	3/4	16	3/4	18
5/8	13/16	18	7/8	14	7/8	18
3/4	1	18	11/16	14	11/16	16
7/8	11/8	18	1 1/4	12	13/16	16
1	1 1/4	16	1 3/8	12		

DIMENSIONS OF 150lb ANSI FLANGES

Nominal Size	Flange O.D.	Flange Thickness	No. of Bolts	Bolt Size	Dia. of Bolt Holes	Dia. of Bolt Circle
1 1/4	4.25	9/16	4	1/2	5/8	3 1/8
1 1/2	5	11/16	4	1/2	5/8	3 7/8
2	6	3/4	4	5/8	3/4	4 3/4
2 1/2	7	7/8	4	5/8	3/4	5 3/4
3	7.5	15/16	4	5/8	3/4	6
4	9	15/16	8	5/8	3/4	7 1/2
5	10	15/16	8	3/4	7/8	8 1/2
6	11	1	8	3/4	7/8	9 1/2
8	13.5	1 1/8	8	3/4	7/8	11 3/4
10	16	1 3/16	12	7/8	1	14 1/4
12	19	1 1/4	12	7/8	1	17

HOW TO MEASURE A MALE FIRE HOSE THREAD

Take a strip of paper about 1 wide and wrap it around the male thread snugly so that it overlaps. Where the two ends overlap, use a pin to pierce the paper so that there is a hole in both ends. Press your thumb against the paper so that the threads leave an impression. Remove the paper and measure the distance between the pinholes. This distance, divided by 3.1416, equals the thread o.d. Count the number of thread impressions showing on the paper and divide by the total width of the impressions (in inches). This figure is the pitch in threads per inch.

PRESSURE/TEMPERATURE RATINGS FOR MALLEABLE IRON FITTINGS

The standard malleable fittings shown in this catalog are Class 150 and meet the working pressures shown here for that class. Heavier Class 300 parts are available on special order.

°C	°F	Class 150 Working Pressure	Class 300 Working Pressure		
		All sizes	1/4-1	1 1/4-2	2 1/2-3
		300 psi	2000	1500	1000
93	200	265	1785	1350	910
121	250	225	1575	1200	825
149	300	185	1360	1050	735
185	366	150	1150	900	650
204	400	N/A	935	750	560
232	450	N/A	725	600	475
260	500	N/A	510	450	385
288	550	N/A	300	300	300

ACTUAL MALE PIPE THREAD OUTSIDE DIAMETERS:

