

# SPECIAL PURPOSE

# WELL SPECIFICATIONS

Copyright © 1997, Pyromation, Inc.

### Maximum Fluid Velocity\* Feet Per Second

\* Values based on allowable stress levels published in the 1956 edition of the A.S.M.E. Boiler Code, Section VIII and recommendations of ASAB 16, 5-1957. Note: Bracketed values are in water. All others are air, gas or steam

### PRESSURE - TEMPERATURE RATING LBS. PER SQUARE INCH

(Values based on allowable stress levels published in the 1956 edition of the A.S.M.E. Boiler Code, Section VIII)

MATERIAL	TEMPERATURE - °F						
	70	200	400	600	800	1000	1200
Brass	5000	4200	1000	-----	-----	-----	-----
Carbon Steel	5200	5000	4800	4600	3500	1500	-----
A.I.S.I. 304	7000	6200	5600	5400	5200	4500	1650
A.I.S.I. 316	7000	7000	6400	6200	6100	5100	2500
Monel	6500	6000	5400	5300	5200	1500	-----

S4 or SL4 WELLS		INSERTION LENGTH - "U"							
		2 1/2	4 1/2	7 1/2	10 1/2	13 1/2	16 1/2	19 1/2	22 1/2
P 1/2" NPT	Brass	207 (59.3)	75.5 (32.2)	27.3 (19.7)	13.9	8.4	5.6	4.1	3.0
	Carbon Steel	290 (106)	105 (59)	38.2 (36.3)	19.4	11.8	7.8	5.7	4.2
	A.I.S.I. 304/316	300 (148)	109 (82.2)	39.5 (36.3)	20.1	12.2	8.1	5.9	4.4
	Monel	261 (118)	95 (65.5)	34.4	17.5	10.5	7.1	5.2	3.8
P 3/4" NPT	Brass	207 (59.3)	89.1 (39.8)	32.2 (23.9)	16.4	9.9	6.6	4.8	3.6
	Carbon Steel	290 (106)	123 (71.2)	44.9 (42.7)	22.8	13.8	9.3	6.7	4.9
	A.I.S.I. 304/316	300 (148)	128 (99.3)	46.4 (42.7)	23.6	14.3	9.6	6.9	5.1
	Monel	261 (118)	112 (79.8)	40.0	20.7	12.4	8.3	6.1	4.5
P 1" NPT	Brass	207 (59.3)	102 (47.6)	37.0 (28)	18.8	11.4	7.6	5.5	4.1
	Carbon Steel	290 (106)	143 (84.3)	51.6 (50.6)	26.2	15.9	10.6	7.6	5.7
	A.I.S.I. 304/316	300 (148)	148 (117)	53.5 (50.6)	27.2	16.5	11.0	7.9	5.9
	Monel	261 (118)	128 (93.3)	46.7	23.7	14.4	9.5	6.9	5.1

MATERIAL	TEMPERATURE - °F						
	70	200	400	600	800	1000	1200
Brass	5000	4200	1000	-----	-----	-----	-----
Carbon Steel	5200	5000	4800	4600	3500	1500	-----
A.I.S.I. 304	7000	6200	5600	5400	5200	4500	1650
A.I.S.I. 316	7000	7000	6400	6200	6100	5100	2500
Monel	6500	6000	5400	5300	5200	1500	-----

S6 or SL6 WELLS		INSERTION LENGTH - "U"							
		2 1/2	4 1/2	7 1/2	10 1/2	13 1/2	16 1/2	19 1/2	22 1/2
P 3/4" NPT and 1" NPT	Brass	290 (145)	150 (80)	54.1 (48)	27.6	16.7	11.1	8.0	6.0
	Carbon Steel	326 (260)	192 (144)	69.5 (61)	35.4	20.5	14.3	10.3	7.7
	A.I.S.I. 304/316	349 (360)	199 (155)	71.9 (61)	36.6	21.2	14.8	10.7	8.0
	Monel	316 (320)	189 (178)	68.1	34.8	20.8	14.0	10.0	7.5

MATERIAL	TEMPERATURE - °F						
	70	200	400	600	800	1000	1200
Brass	5300	4750	1100	-----	-----	-----	-----
Carbon Steel	5950	5750	5450	5250	4000	1750	-----
A.I.S.I. 304	7800	7050	6400	6150	6000	5190	1875
A.I.S.I. 316	7800	7800	7250	7100	6950	5800	2720
Monel	7450	6850	6150	6100	5940	1750	-----

H4 or HL4 WELLS		INSERTION LENGTH - "U"							
		2 1/2	4 1/2	7 1/2	10 1/2	13 1/2	16 1/2	19 1/2	22 1/2
P 3/4" NPT	Brass	305 (97.5)	93.8 (54.1)	33.9 (24.7)	17.1	10.5	7.0	5.0	3.7
	Carbon Steel	386 (175)	180 (97.2)	65.3 (58.3)	33.0	20.1	13.4	9.6	7.1
	A.I.S.I. 304/316	440 (243)	197 (135)	71.2 (61)	36.0	22.0	14.7	10.5	7.8
	Monel	354 (195)	155 (108)	56.1	28.4	17.3	11.6	7.5	5.6
P 1" NPT	Brass	354 (161)	108 (89.5)	39.4 (28.4)	19.8	12.2	8.1	5.8	4.3
	Carbon Steel	448 (289)	209 (161)	75.7 (61)	38.4	23.3	15.5	11.1	8.2
	A.I.S.I. 304/316	490 (403)	228 (225)	82.5 (71)	41.8	25.5	17.1	12.2	9.1
	Monel	410 (322)	179 (178)	65.1	33.0	20.1	13.5	8.7	6.5

MATERIAL	TEMPERATURE - °F						
	70	200	400	600	800	1000	1200
Brass	5000	4200	1000	-----	-----	-----	-----
Carbon Steel	5200	5000	4800	4600	3500	1500	-----
A.I.S.I. 304	7000	6200	5600	5400	5200	4500	1650
A.I.S.I. 316	7000	7000	6400	6200	6100	5100	2500
Monel	6500	6000	5400	5300	5200	1500	-----

H6 or HL6 WELLS		INSERTION LENGTH - "U"							
		2 1/2	4 1/2	7 1/2	10 1/2	13 1/2	16 1/2	19 1/2	22 1/2
P 1" NPT	Brass	321 (150)	129 (83.5)	46.8	23.6	14.5	9.6	6.9	5.1
	Carbon Steel	410 (270)	249 (150)	90.3 (71)	45.6	27.8	18.5	13.2	9.8
	A.I.S.I. 304/316	483 (350)	272 (208)	97.3 (81)	49.7	30.4	20.3	14.5	10.7
	Monel	396 (300)	214 (167)	77.5	39.2	23.8	16.0	10.3	7.7

MAXIMUM FLANGE PRESSURE-TEMPERATURE RATING* LBS. PER SQ. INCH							
MATERIAL	TEMPERATURE - °F						
	0	200	400	600	800	1000	1125
Carbon Steel	UP	-----	To	-----	2500#	-----	-----
A.I.S.I. 304	UP	-----	To	-----	-----	2500#	-----
A.I.S.I. 316	UP	-----	To	-----	-----	-----	2500#
Monel	UP	-----	To	-----	2500#	-----	-----

SF4 or SF6 WELLS		INSERTION LENGTH - "U"						
		2	4	7	10	13	16	22
.260" Bore	Carbon Steel	404 (129)	184 (71.2)	67.0 (42.7)	34.0	20.6	13.7	7.4
	A.I.S.I. 304/316	430 (179)	192 (99.3)	69.7 (59.6)	35.4	21.5	14.3	7.7
	Monel	350 (300)	168 (79.8)	61 (47.7)	31.0	18.8	12.5	6.7
.385" Bore	Carbon Steel	410 (152)	248 (84.3)	91.3 (50.6)	45.7	27.6	18.5	10.0
	A.I.S.I. 304/316	444 (211)	258 (117)	95.20 (70.3)	47.6	28.8	19.3	10.4
	Monel	338 (168)	226 (93.3)	83.3 (56.0)	41.6	25.2	16.9	9.1

Pyromation®, INC.