

# Section 8 Tubing & Fittings



## STEEL SEAMLESS HYDRAULIC TUBING # 2391

Seamless - Phosphated - Oiled ( Inside DIA. 6 mm and over) - Annealed  
Material: St 37.4

Safety Factor: 1.5 at 120°C (250°F)  
Precision manufactured

Outside diameter of the tubes indicate nominal size of the fittings



Sold in three (3) meter increments

NOM. SIZE O.D. x WALL Thickness	INSIDE DIA.	DESIGN PRESSURE~		WEIGHT POUNDS Per METER
		BAR kg/cm <sup>2</sup>	Approx. PSI	
4 x 0.5	3	313	4,400	0.9
4 x 0.75	2.5	409	5,800	.13
4 x 1	2	522	7,400	.2
5 x 1	3	432	6,100	.25
5 x 1.5	2	-	-	.28
6 x 0.75	4.5	333	4,700	.23
6 x 1	4	389	5,500	.3
6 x 1.5	3	549	7,800	.4
6 x 2	2	692	9,800	.43
8 x 1	6	333	4,700	.4
8 x 1.5	5	431	6,100	.5
8 x 2	4	549	7,800	.7
8 x 2.5	3	658	9,300	.74
10 x 1	8	282	4,000	.5
10 x 1.5	7	373	5,300	.7
10 x 2	6	478	6,700	.9
10 x 2.5	5	576	8,100	1
10 x 3	4	666	9,400	1.14
12 x 1	10	235	3,300	.6
12 x 1.5	9	353	5,000	.9
12 x 2	8	409	5,800	1
12 x 2.5	7	495	7,000	1.3
12 x 3	6	576	8,100	1.4
12 x 3.5	5	651	9,200	1.6
14 x 1	12	201	2,800	.7
14 x 1.5	11	302	4,200	1
14 x 2	10	403	5,700	1.3
14 x 2.5	9	434	6,100	1.6
14 x 3	8	507	7,200	1.8
14 x 3.5	7	576	8,100	1.9
14 x 4	6	641	9,100	2.16

NOM. SIZE O.D. x WALL Thickness	INSIDE DIA.	DESIGN PRESSURE~		WEIGHT POUNDS Per METER
		BAR kg/cm <sup>2</sup>	Approx. PSI	
15 x 1	13	188	2,600	.7
15 x 1.5	12	282	4,000	1.1
15 x 2	11	376	5,300	1.4
15 x 2.5	10	409	5,800	1.7
15 x 3	9	478	6,700	1.9
15 x 3.5	8	-	-	2.18
16 x 1	14	176	2,500	.8
16 x 1.5	13	264	3,700	1.2
16 x 2	12	353	5,000	1.5
16 x 2.5	11	386	5,400	1.8
16 x 3	10	452	6,400	2.1
16 x 4	8	-	-	2.6
18 x 1	16	157	2,200	.9
18 x 1.5	15	235	3,300	1.4
18 x 2	14	313	4,400	1.7
18 x 2.5	13	392	5,500	2.1
18 x 3	12	409	5,800	2.4
18 x 4	10	-	-	3.0
20 x 1.5	17	212	3,000	1.5
20 x 2	16	282	4,000	2
20 x 2.5	15	353	5,000	2.4
20 x 3	14	373	5,300	2.8
20 x 3.5	13	426	6,000	3.1
20 x 4	12	478	6,700	3.4
22 x 1	20	128	1,800	1.1
22 x 1.5	19	192	2,700	1.7
22 x 2	18	256	3,600	2.2
22 x 2.5	17	320	4,500	2.6
22 x 3	16	385	5,400	3
22 x 4	14	-	-	3.9
25 x 1.5	22	-	-	1.9

Sizes continue

~Based on the following values, the Design Pressure has been calculated according to DIN 2413 - Yield Strength: 235 N/mm<sup>2</sup>,  
Safety Factor: 1.5.  
Under normal working conditions and temperatures up to 120°C the working pressure can be chosen equal to design pressure.

Bar = kg/cm<sup>2</sup> = Atm = 98066.50 Pa

Pa = 6894.757 PSI

Bar = 14.22 PSI (approx.)

**How to Order**  
Item #: 2391  
Size: 10 x 2  
Quantity: 12 (Meters)  
Tel: 1-888-966-MMCC

Please note: 6 meter lengths available upon request - **Please inquire.**