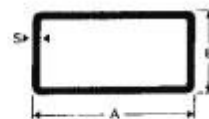


TUBI RETTANGOLARI SALDATI
UNI 7810-7813 - DIN 2395

- FE 360
- FE 430
- FE 510



dimensione A x B mm	spessore "S" mm				
	1,5	2	3	4	5
	peso kg/m				
15 x 10	0,52				
20 x 10	0,64	0,81			
15	0,75	0,97			
25 x 10	0,75	0,97			
15	0,87	1,13			
20	0,99	1,29			
30 x 10	0,87	1,13			
15	0,99	1,29			
20	1,11	1,44	2,07		
25	1,22	1,60	2,31		
35 x 10	0,99	1,29			
15	1,11	1,44	2,07		
20	1,22	1,60	2,31		
25	1,34	1,76	2,54		
40 x 10	1,11	1,44			
15	1,22	1,60	2,31		
20	1,34	1,76	2,54	3,35	
25	1,46	1,91	2,78	3,75	
30	1,58	2,07	3,01	4,04	
45 x 10	1,22	1,60	2,31		
15	1,34	1,76	2,54		
20	1,46	1,91	2,78	3,75	
25	1,58	2,07	3,01	4,04	
30	1,69	2,23	3,25	4,34	
50 x 10	1,34	1,76	2,54		
15	1,46	1,92	2,78		
20	1,58	2,07	3,01		
25	1,69	2,23	3,25	4,34	
30	1,81	2,39	3,48	4,52	
40	2,05	2,70	3,95	5,15	
60 x 10	1,58	2,07	3,01		
15	1,69	2,23	3,25		
20	1,81	2,39	3,48	4,63	
25	1,93	2,54	3,74	4,93	
30	2,05	2,70	3,95	5,07	
40	2,28	3,01	4,43	5,35	6,39
50	2,52	3,33	4,90	5,98	8,02

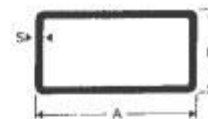
TUBI RETTANGOLARI SALDATI

UNI 7810-7813 - DIN 2395

• FE 360

• FE 430

• FE 510

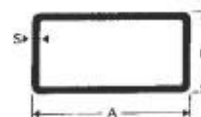


dimensione A x B mm	spessore "S"mm							
	1,5	2	3	4	5	6	7	8
peso kg/m								
70 x 20	2,05	2,70	3,95	5,23				
25	2,17	2,86	4,19					
30	2,28	3,01	4,43	5,35				
40	2,52	3,33	4,90	5,98	8,02			
50	2,76	3,64	5,37	7,05	7,79	9,21	10,34	
80 x 15	2,16	2,86						
20	2,28	3,01	4,43					
30	2,52	3,33	4,90	5,98				
40	2,76	3,64	5,37	7,05	7,97	9,21	10,34	
50	2,99	3,96	5,84	7,66	9,62			
60	3,23	4,27	6,31	7,86	9,54	11,10	12,54	
90 x 30	2,76	3,64	5,37	7,10				
40	2,99	3,96	5,84	7,66	9,62	11,40		
50	3,23	4,27	6,31	7,86	10,36	12,28		
60		4,58	6,78	8,92	11,10	13,17		
100 x 20	2,76	3,64	5,37	7,10				
30	3,00	3,95	5,84	7,66				
40	3,22	4,27	6,31	7,86	9,54	11,10	12,54	
50	3,46	4,58	6,78	8,92	11,40	12,04	13,64	
60		4,90	7,25	9,55	11,77	12,98	14,74	
70		5,21	7,72	10,17	12,56	13,93		
80		5,53	8,19	10,80	13,35	14,87	16,94	
110 x 50		4,90	7,25	9,55	11,77	12,98	14,74	
120 x 30		4,59	6,81	9,55	11,77	12,98	14,74	
40		4,90	7,25	9,55	11,77	12,98	14,74	
50		5,21	7,72	10,17	12,56	13,93		
60		5,53	8,19	10,80	13,35	14,87	16,94	
80		6,15	9,14	12,06	14,91	16,76	19,14	21,39
100			9,90	12,99	15,81	18,62	21,32	
130 x 50		5,50	8,20	10,80	13,35	14,87		
60		5,84	8,67	11,43	14,31	17,02	19,60	
140 x 40		5,53	8,19	10,80	13,35	14,87		
50		5,84	8,67	11,43	14,31	17,02	19,60	
60		6,15	9,14	12,06	14,91	16,76	19,14	
70		6,47	9,61	12,27	15,04	17,70	21,76	23,6
80			9,90	12,99	15,81	18,62	21,32	

TUBI RETTANGOLARI SALDATI

UNI 7810-7813 - DIN 2395

- FE 360
- FE 430
- FE 510



dimensione A x B mm	spessore "S" mm									
	1,5	2	3	4	5	6	7	8	9	10
peso kg/m										
150 x 30		5,50	8,20	10,80	13,35					
40		5,87	8,73	12,27	15,04	17,70				
50		6,16	9,14	12,06	14,91	16,76	19,14			
100			11,49	15,20	18,84	21,47	24,90			
160 x 40		6,07	8,96	11,73	14,24	16,74				
50			9,43	12,36	15,03	17,68				
60			9,90	12,99	15,81	18,62	21,32			
80			11,02	14,57	18,05	20,53	23,80	26,41		
180 x 60			11,02	14,57	18,05	20,53	23,80			
80			11,78	15,50	18,95	22,39	25,71	28,92		
200 x 100			13,85	18,34	22,09	26,19	30,48	33,95	37,12	41,59
250 x 100			16,02	21,16	26,01	30,90	35,65	40,23	44,18	48,44
150				24,29	29,94	35,58	41,10	46,51	51,25	56,29
300 x 100				24,29	29,94	35,58	41,10	46,51		
150			20,58	27,44	33,90	40,34	46,65	52,79		
200				30,57	37,79	45,00	52,09	59,07		
400 x 200					45,64	54,42	63,08	71,63		
250					49,57	59,13	68,58	77,9		

TUBOLARI STRUTTURALI RETTANGOLARI S275 - S355



Dimensione esterna A x B mm	Spessore t mm	Massa Lineare M kg/m	Area Sezione A cm ²	Momento d'inerzia di flessione		Raggio d'inerzia		Modulo di resistenza W		Modulo Plastico di resistenza Z		Momento d'inerzia e modulo di torsione		Superficial Area per m m ²
				X-X cm ⁴	Y-Y cm ⁴	X-X cm	Y-Y cm	X-X cm ³	Y-Y cm ³	X-X cm ³	Y-Y cm ³	J cm ⁴	C cm ³	
50x30	2.5	2.92	3.72	12.0	5.30	1.80	1.19	4.81	3.53	6.01	4.16	11.7	5.74	0.155
	3.0	3.45	4.40	13.9	6.04	1.78	1.17	5.54	4.03	7.01	4.83	13.5	6.52	0.154
	3.2	3.66	4.66	14.5	6.31	1.77	1.16	5.82	4.21	7.39	5.08	14.2	6.81	0.153
	4.0	4.46	5.68	17.0	7.25	1.73	1.13	6.80	4.83	8.81	6.01	16.6	7.79	0.151
	5.0	5.40	6.88	19.5	8.13	1.68	1.09	7.79	5.42	10.4	6.98	19.0	8.71	0.149
60x40	2.5	3.71	4.72	23.1	12.2	2.21	1.61	7.71	6.10	9.43	7.09	25.0	9.74	0.195
	3.0	4.39	5.60	26.9	14.1	2.19	1.59	8.96	7.04	11.1	8.29	29.2	11.2	0.194
	3.2	4.66	5.94	28.3	14.8	2.18	1.58	9.44	7.39	11.7	8.75	30.8	11.8	0.193
	4.0	5.72	7.28	33.6	17.3	2.15	1.54	11.2	8.67	14.1	10.5	36.6	13.7	0.191
	5.0	6.97	8.88	39.2	20.0	2.10	1.50	13.1	10.0	16.8	12.4	43.0	15.8	0.189
6.3	8.49	10.8	45.1	22.6	2.04	1.45	15.0	11.3	19.9	14.6	49.7	17.7	0.186	
80x40	3.0	5.34	6.80	55.0	18.2	2.85	1.64	13.8	9.10	17.3	10.5	43.7	15.3	0.234
	3.2	5.67	7.22	58.1	19.1	2.84	1.63	14.5	9.56	18.3	11.1	46.1	16.1	0.233
	4.0	6.97	8.88	69.6	22.6	2.80	1.59	17.4	11.3	22.2	13.4	55.1	18.9	0.231
	5.0	8.54	10.9	82.4	26.2	2.75	1.55	20.6	13.1	26.7	15.9	65.0	21.9	0.229
	6.3	10.5	13.3	96.5	29.8	2.69	1.50	24.1	14.9	31.9	18.8	75.8	24.9	0.226
8.0	12.8	16.3	111	33.1	2.61	1.42	27.7	16.6	37.8	21.8	86.3	27.6	0.223	
90x50	3.0	6.28	8.00	85.4	33.8	3.27	2.05	19.0	13.5	23.4	15.5	76.4	22.4	0.274
	3.6	7.46	9.50	99.8	39.1	3.24	2.03	22.2	15.6	27.6	18.1	89.3	25.9	0.272
	5.0	10.1	12.9	130	50.0	3.18	1.97	28.9	20.0	36.6	23.9	116	32.9	0.269
	6.3	12.5	15.9	154	58.1	3.12	1.91	34.2	23.3	44.2	28.5	138	38.2	0.266
	8.0	15.3	19.5	180	66.3	3.04	1.84	40.0	26.5	53.0	33.7	161	43.4	0.263
100x50	3.0	6.75	8.60	111	37.1	3.59	2.08	22.2	14.8	27.6	16.9	88.3	25.0	0.294
	3.2	7.18	9.14	117	39.1	3.58	2.07	23.5	15.6	29.2	17.9	93.3	26.4	0.293
	4.0	8.86	11.3	142	46.7	3.55	2.03	28.4	18.7	35.7	21.7	113	31.4	0.291
	5.0	10.9	13.9	170	55.1	3.50	1.99	34.0	22.0	43.3	26.1	135	37.0	0.289
	6.3	13.4	17.1	202	64.2	3.44	1.94	40.5	25.7	52.5	31.3	160	43.0	0.286
8.0	16.6	21.1	238	73.5	3.36	1.86	47.6	29.4	63.1	37.1	187	49.1	0.283	
100x60	3.0	7.22	9.20	125	56.2	3.69	2.47	25.0	18.7	30.5	21.3	121	30.7	0.314
	3.6	8.59	10.9	147	65.4	3.66	2.45	29.3	21.8	36.0	25.1	142	35.6	0.312
	5.0	11.7	14.9	192	84.7	3.60	2.39	38.5	28.2	48.1	33.3	187	45.9	0.309
	6.3	14.4	18.4	230	99.9	3.54	2.33	46.0	33.3	58.4	40.2	224	53.9	0.306
	8.0	17.8	22.7	272	116	3.46	2.26	54.4	38.7	70.5	48.1	266	62.4	0.303
120x60	3.6	9.72	12.4	230	76.9	4.31	2.49	38.3	25.6	47.6	29.2	183	43.3	0.352
	5.0	13.3	16.9	304	99.9	4.24	2.43	50.7	33.3	63.9	38.8	242	56.0	0.349
	6.3	16.4	20.9	366	118	4.18	2.38	61.0	39.4	78.0	46.9	290	66.0	0.346
	8.0	20.4	25.9	437	138	4.10	2.31	72.8	45.9	94.8	56.4	344	76.8	0.343
120x80	5.0	14.8	18.9	370	195	4.43	3.21	61.7	48.8	75.4	56.7	401	77.9	0.389
	6.3	18.4	23.4	447	234	4.37	3.16	74.6	58.4	92.3	69.1	486	93.0	0.386
	8.0	22.9	29.1	537	278	4.29	3.09	89.5	69.4	113	83.9	586	110	0.383
	10.0	27.9	35.5	628	320	4.20	3.00	105	80.0	134	99.4	688	126	0.379
150x100	4.0	15.0	19.3	612	326	5.64	4.11	81.7	65.2	98.1	74.1	659	105	0.491
	5.0	18.7	23.9	747	396	5.59	4.07	99.5	79.1	121	90.8	806	127	0.489
	6.3	23.3	29.7	910	479	5.53	4.02	121	95.9	148	111	985	153	0.486
	8.0	29.1	37.1	1106	577	5.46	3.94	147	115	183	137	1202	184	0.483
	10.0	35.7	45.5	1312	678	5.37	3.86	175	136	220	164	1431	215	0.479
12.5	43.6	55.5	1532	781	5.25	3.75	204	156	263	194	1680	246	0.473	
160x80	4.0	14.5	18.5	617	208	5.78	3.31	77.3	52.1	95.5	58.7	492	88.1	0.471
	5.0	18.0	22.9	753	251	5.74	3.31	94.1	62.8	117	71.7	599	106	0.469

TUBOLARI STRUTTURALI RETTANGOLARI S275 - S355



Dimensione esterna A x B mm	Spessore t mm	Massa Lineare M kg/m	Area Sezione A cm ²	Momento d'inerzia di flessione		Raggio d'inerzia		Modulo di resistenza W		Modulo Plastico di resistenza Z		Momento d'inerzia e modulo di torsione		Superficial Area per m m ²
				X-X cm ⁴	YY cm ⁴	X-X cm	YY cm	X-X cm ³	YY cm ³	X-X cm ³	YY cm ³	J cm ⁴	C cm ³	
200x100	6.3	22.3	28.5	917	302	5.68	3.26	115	75.6	144	87.7	729	127	0.466
	8.0	27.9	35.5	1113	361	5.60	3.19	139	90.2	177	107	882	151	0.463
	10.0	34.2	43.5	1318	419	5.50	3.10	165	105	213	127	1041	175	0.459
	12.5	41.6	53.0	1536	476	5.38	3.00	192	119	254	150	1206	199	0.453
	16.0	66.4	84.5	3808	1175	6.71	3.73	381	235	505	297	2988	393	0.566
200x120	5.0*	24.2	30.9	1699	767	7.42	4.99	170	128	206	144	1646	210	0.629
	6.3*	30.3	38.5	2087	937	7.36	4.93	209	156	255	178	2025	256	0.626
	8.0*	37.9	48.3	2564	1140	7.28	4.86	256	190	316	220	2491	310	0.623
	10.0*	46.7	59.5	3079	1356	7.19	4.77	308	226	384	266	2997	367	0.619
	12.5*	57.3	73.0	3658	1590	7.08	4.67	366	265	464	319	3567	429	0.613
200x150	5.0*	26.6	33.9	1984	1272	7.65	6.13	198	170	235	193	2383	267	0.689
	6.3*	33.2	42.3	2442	1561	7.60	6.07	244	208	292	239	2943	326	0.686
	8.0*	41.7	53.1	3006	1914	7.52	6.00	301	255	362	296	3638	398	0.683
	10.0*	51.4	65.5	3621	2293	7.43	5.92	362	306	441	330	4403	475	0.679
	12.5*	63.2	80.5	4316	2717	7.32	5.81	432	362	534	434	5281	560	0.673
250x100	6.3*	33.2	42.3	3242	756	8.75	4.23	259	151	328	171	1981	264	0.686
	8.0*	41.7	53.1	3995	917	8.67	4.15	320	183	408	210	2427	319	0.683
	10.0*	51.4	65.5	4818	1084	8.58	4.07	385	217	498	254	2905	377	0.679
	12.5*	63.2	80.5	5754	1263	8.45	3.96	460	253	603	304	3435	438	0.673
	16.0*	78.9	101	6895	1461	8.28	3.81	552	292	736	364	4054	506	0.666
250x150	5.0*	30.5	38.9	3382	1535	9.33	6.28	271	205	326	229	3275	337	0.789
	6.3	38.2	48.6	4178	1886	9.27	6.23	334	252	405	284	4049	413	0.786
	8.0	48.0	61.1	5167	2317	9.19	6.16	413	309	505	353	5014	506	0.783
	10.0	59.3	75.5	6259	2784	9.10	6.07	501	371	618	430	6082	606	0.779
	12.5	73.0	93.0	7518	3310	8.99	5.97	601	441	751	520	7317	717	0.773
260x140	6.3*	38.2	48.6	4392	1671	9.50	5.86	338	239	414	269	3798	399	0.786
	8.0*	48.0	61.1	5434	2049	9.43	5.79	418	293	516	334	4698	488	0.783
	10.0*	59.3	75.5	6583	2457	9.34	5.70	506	351	631	406	5691	584	0.779
	12.5*	73.0	93.0	7909	2914	9.22	5.60	608	416	767	490	6833	690	0.773
	16.0*	91.5	117	9565	3460	9.06	5.45	736	494	944	598	8253	817	0.766
300x100	6.3*	38.2	48.6	5162	895	10.3	4.29	344	179	442	200	2501	319	0.786
	8.0*	48.0	61.1	6386	1087	10.2	4.22	426	217	551	247	3066	387	0.783
	10.0*	59.3	75.5	7738	1288	10.1	4.13	516	258	674	299	3673	458	0.779
	12.5*	73.0	93.0	9295	1504	10.0	4.02	620	301	819	358	4348	534	0.773
	16.0*	91.5	117	11240	1747	9.82	3.87	749	349	1008	431	5142	620	0.766
300x200	6.3	48.1	61.2	7880	4216	11.3	8.30	525	422	627	475	8468	681	0.986
	8.0	60.5	77.1	9798	5219	11.3	8.23	653	522	785	593	10550	840	0.983
	10.0	75.0	95.5	11940	6331	11.2	8.14	796	633	964	726	12890	1016	0.979
	12.5	92.6	118	14460	7619	11.1	8.04	964	762	1179	866	15650	1217	0.973
	16.0	117	149	17700	9239	10.9	7.89	1180	924	1462	1094	19230	1469	0.966
300x250	6.3*	53.0	67.5	9239	6984	11.7	10.2	616	559	720	636	12140	862	1.09

TUBOLARI STRUTTURALI RETTANGOLARI S275 - S355



Dimensione esterna A x B mm	Spessore t mm	Massa Lineare M kg/m	Area Sezione A cm ²	Momento d'inerzia di flessione		Raggio d'inerzia		Modulo di resistenza W		Modulo Plastico di resistenza Z		Momento d'inerzia e modulo di torsione		Superficial Area per m ²
				x-x cm ⁴	yy cm ⁴	x-x cm	yy cm	x-x cm ³	yy cm ³	x-x cm ³	yy cm ³	J cm ⁴	C cm ³	
350x150	8.0*	66.8	85.1	11500	8682	11.6	10.1	767	695	902	796	15170	1067	1.08
	10.0*	82.8	106	14050	10580	11.5	10.0	937	847	1109	978	18600	1295	1.08
	12.5*	102	130	17050	12810	11.4	9.91	1137	1025	1358	1196	22680	1561	1.07
	16.0*	129	165	20930	15670	11.3	9.76	1395	1254	1689	1485	28020	1898	1.07
350x250	6.3*	48.1	61.2	9551	2537	12.5	6.44	546	338	680	375	6383	587	0.986
	8.0*	60.5	77.1	11880	3125	12.4	6.36	679	417	851	467	7917	721	0.983
	10.0*	75.0	95.5	14490	3766	12.3	6.28	828	502	1045	570	9622	867	0.979
	12.5*	92.6	118	14560	4495	12.2	6.17	1003	599	1278	692	11610	1033	0.973
400x120	6.3*	50.0	63.7	11880	1752	13.7	5.24	594	292	766	322	5035	527	1.03
	8.0*	63.1	80.3	14790	2146	13.6	5.17	740	358	960	399	6212	645	1.02
	10.0*	78.1	99.5	18050	2569	13.5	5.08	903	428	1180	486	7501	771	1.02
	12.5*	96.6	123	21900	3040	13.3	4.97	1095	507	1444	588	8973	912	1.01
400x150	6.3*	53.0	67.5	13350	2863	14.1	6.51	667	382	841	420	7588	673	1.09
	8.0*	66.8	85.1	16630	3528	14.0	6.44	832	470	1054	524	9415	828	1.08
	10.0*	82.8	106	20340	4257	13.9	6.35	1017	568	1297	640	11450	998	1.08
	12.5*	102	130	24720	5087	13.8	6.24	1236	678	1589	778	13820	1191	1.07
400x200	6.3*	57.9	73.8	15790	5398	14.6	8.5	789	540	965	597	12600	917	1.18
	8.0	73.1	93.1	19710	6695	14.5	8.48	985	669	1210	746	15720	1135	1.18
	10.0	90.7	116	24140	8138	14.5	8.39	1207	814	1492	916	19240	1377	1.18
	12.5	112	143	29410	9820	14.3	8.29	1471	982	1831	1120	23410	1657	1.17
400x300	6.3*	57.9	73.8	15790	5398	14.6	8.5	789	540	965	597	12600	917	1.18
	8.0	73.1	93.1	19710	6695	14.5	8.48	985	669	1210	746	15720	1135	1.18
	10.0	90.7	116	24140	8138	14.5	8.39	1207	814	1492	916	19240	1377	1.18
	12.5	112	143	29410	9820	14.3	8.29	1471	982	1831	1120	23410	1657	1.17
450x250	8.0*	85.7	109	30270	12200	16.7	10.6	1345	976	1630	1086	27060	1629	1.38
	10.0	106	136	37180	14900	16.6	10.5	1653	1192	2013	1338	33250	1986	1.38
	12.5	132	168	45470	18100	16.5	10.4	2021	1448	2478	1642	40670	2407	1.37
	16.0	167	213	56420	22250	16.3	10.2	2508	1780	3103	2047	50480	2948	1.37
500x200	8.0*	85.7	109	34270	8170	17.7	8.65	1371	817	1716	900	21100	1430	1.38
	10.0*	106	136	42110	9945	17.6	8.57	1684	994	2119	1106	25840	1738	1.38
	12.5*	132	168	51510	12020	17.5	8.46	2060	1202	2609	1354	31480	2097	1.37
	16.0*	167	213	63930	14670	17.3	8.31	2557	1467	3267	1683	38830	2554	1.37
500x300	10.0	122	156	54120	24560	18.7	12.6	2165	1638	2609	1834	52400	2696	1.58
	12.5	152	193	66360	29970	18.5	12.5	2655	1998	3218	2257	64310	3282	1.57
	16.0	192	245	82670	37080	18.4	12.3	3307	2472	4042	2825	80220	4046	1.57
	20.0†	237	302	100100	44550	18.2	12.1	4006	2970	4942	3442	97310	4845	1.56

FORMULA

$$\frac{\text{PERIMETRO}}{3,14} = \varnothing \text{ e}$$

DIAMETRO
ESTERNO