



Diámetro Nominal Pulg. Mm	Diám. Ext. D mm	Diám. Interior mm	Espesor t mm	Peso kg/m	Area cm <sup>2</sup>	Momento de Inercia cm <sup>4</sup>	Modulo de Sección cm <sup>3</sup>	Radio de Giro cm	No. de Cédula	
2 1/2 64	73	70.35	2.65	4.707					30	
	73	63	5.2	8.6	11.0	63.7	17.4	2.4	40	
	73	59	7.0	11.4	14.5	80.1	21.9	2.3	80	
	73	54	9.5	14.9	19.0	97.9	26.8	2.3	160	
3 76	89	85.96	3.04	6.705					30	
	89	78	5.5	11.3	14.4	126	28.3	3.0	40	
	89	74	7.6	15.3	19.5	162	36.5	2.9	80	
	89	67	11.1	21.3	27.2	210	47.2	2.8	160	
3 1/2 89	102	90	5.7	13.6	17.4	199	39.2	3.4	40	
	102	85	8.1	18.6	23.8	261	51.5	3.3	80	
4 102	114	110.96	3.04	8.524					30	
	114	102	6.0	16.1	20.6	301	52.7	3.8	40	
	114	97	8.5	22.3	28.5	400	70.0	3.8	80	
	114	92	11.1	28.3	36.1	485	84.8	3.7	120	
	114	87	13.5	33.6	42.9	552	96.7	3.6	160	
5 127	141	128	6.6	21.8	27.8	631	89.3	4.8	40	
	141	122	9.5	30.9	39.5	860	121.8	4.7	80	
	141	116	12.7	40.3	51.5	1071	151.6	4.6	120	
	141	110	15.9	49.0	62.6	1250	177.0	4.5	160	
6 152	168	163.45	4.55	18.41					30	
	168	154	7.1	28.2	36.0	1171	133.3	5.7	40	
	168	146	11.0	42.5	54.3	1685	200.2	5.6	80	
	168	140	14.3	54.2	69.2	2077	247	5.5	120	
	168	132	18.3	67.4	86.1	2455	292	5.3	160	
		219	206	6.3	33.3	42.5	2402	219	7.5	20
		219	205	7.0	36.8	47.0	2635	241	7.5	30
		219	203	8.1	42.5	54.3	3018	276	7.5	40
		219	198	10.3	53.1	67.8	3696	338	7.4	60
		219	194	12.7	64.6	82.5	4400	402	7.3	80
8 203	219	189	15.0	75.7	96.7	5053	461	7.2	100	
	219	183	18.0	90.3	115.3	5852	534	7.1	120	
	219	178	20.6	100.9	128.8	6402	585	7.1	140	

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10 254	219	173	23.0	111.2	142.0	6905	631	7.0	160
	273	260	6.3	42.1	53.8	4728	346	9.4	20
	273	257	7.8	50.9	65.0	5719	419	9.4	30
	273	255	9.3	60.2	76.9	6689	490	9.3	40
	273	248	12.7	81.5	104.1	8824	646	9.2	60
	273	243	15.1	95.8	122.3	10194	747	9.1	80
	273	237	18.2	114.6	146.3	11913	873	9.0	100
	273	230	21.4	132.7	169.5	13498	989	8.9	120
	273	222	25.4	155.0	197.9	15309	1122	8.8	140
	273	216	28.6	172.6	220.4	16624	1218	8.7	160
12 305	324	311	6.3	49.7	63.5	8004	494	11.2	20
	324	307	8.4	65.2	83.3	10343	638	11.2	30
	324	303	10.3	79.8	101.9	12499	772	11.1	40
	324	295	14.3	108.9	139.1	16670	1029	10.9	60
	324	289	17.4	131.9	168.4	19779	1221	10.8	80
	324	281	21.4	160.7	205.2	23384	1443	10.7	100
	324	273	25.4	186.8	238.9	26710	1649	10.6	120
	324	267	28.6	208.3	266.0	29165	1828	10.5	140
	324	257	33.3	239.6	306.0	32520	2007	10.3	160
14 356	356	343	6.3	55.1	70.4	10655	599	12.3	10
	356	340	7.9	68.5	87.5	13107	736	12.3	20
	356	337	9.5	81.8	104.5	15517	872	12.2	30
	356	333	11.1	93.8	119.8	17881	1005	12.2	40
	356	325	15.1	126.5	161.5	23409	1315	12.0	60
	356	318	19.0	159.2	203.3	28616	1608	11.9	80
	356	308	23.8	194.9	248.9	34152	1919	11.8	100
	356	300	27.8	224.7	286.9	38701	2174	11.6	120
	356	292	32.0	254.5	325.0	42768	2403	11.5	140
	356	284	35.7	282.8	361.1	46489	2612	11.4	160
		406	394	6.3	62.5	78.9	16025	789	14.1
	406	391	7.9	77.4	98.8	19729	972	14.1	20
	406	387	9.5	93.8	119.8	23396	1153	14.0	30
	406	381	12.0	123.5	157.7	30464	1501	13.9	40

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16 406	406	373	16.7	160.7	205.2	38818	1912	13.8	60
	406	364	21.4	203.9	260.4	48141	2371	13.6	80
	406	354	26.0	245.5	313.5	56857	2801	13.5	100
	406	345	30.9	287.2	366.8	64757	3190	13.3	120
	406	333	36.5	333.3	425.6	73307	3611	13.1	140
	406	325	40.5	364.5	465.5	78805	3882	13.0	160
18 457	457	445	6.3	69.9	89.3	22893	1002	15.9	10
	457	441	7.9	87.8	112.1	28275	1237	15.9	20
	457	435	11.1	122.0	155.8	40087	1754	15.8	30
	457	429	14.3	156.2	199.5	46493	2035	15.7	40
	457	419	19.0	205.3	262.2	63059	2760	15.5	60
	457	410	23.8	254.5	325.0	76333	3341	15.3	80
	457	398	29.4	309.5	395.2	90822	3975	15.2	100
	457	387	34.9	363.1	463.7	103971	4550	15.0	120
	457	378	39.7	409.2	522.5	114455	5009	14.8	140
	457	367	45.2	459.8	587.2	125710	5502	14.7	160
20 508	508	495	6.3	78.9	100.8	31592	1244	17.7	10
	508	489	9.5	117.6	150.2	46327	1824	17.6	20
	508	487	12.7	156.3	199.6	60645	2388	17.5	30
	508	478	15.1	183.0	233.7	70926	2792	17.4	40
	508	467	20.6	248.5	317.3	93943	3699	17.2	60
	508	456	26.2	311.0	397.1	115338	4541	17.1	80
	508	443	32.5	380.9	486.4	138064	5436	16.8	100
	508	432	38.1	442.0	564.4	156295	6153	16.7	120
	508	419	44.5	509.0	650.0	175525	6910.0	16.5	140
	508	408	49.9	564.0	720.0	190884	7515.0	16.3	160