

### Capacity and Displacement of Casing

<b>O.D. (mm)</b>	<b>MASS (kg/m)</b>	<b>I.D. (mm)</b>	<b>CAPACITY (m<sup>3</sup>/metre)</b>	<b>DISPLACEMENT (m<sup>3</sup>/metre)</b>
114.3 (4.5")	14.14	103.89	0.0085	0.0018
	15.62	102.92	0.0083	0.0019
	17.26	101.60	0.0081	0.0022
	20.09	99.57	0.0078	0.0025
127.0 (5.0")	17.11	115.82	0.0105	0.0021
	19.34	114.15	0.0102	0.0024
	22.32	111.96	0.0098	0.0028
	26.78	108.61	0.0093	0.0034
139.7 (5.5")	20.83	127.31	0.0129	0.0026
	23.06	125.73	0.0124	0.0029
	25.30	124.26	0.0121	0.0032
	29.76	121.36	0.0116	0.0038
	34.22	118.62	0.0111	0.0043
168.3 (6.625")	29.76	153.65	0.0185	0.0037
	35.71	150.39	0.0178	0.0045
	41.66	147.09	0.0170	0.0053
	47.62	144.15	0.0163	0.0059
177.8 (7.0")	25.30	166.07	0.0217	0.0032
	29.76	163.98	0.0211	0.0037
	34.22	161.70	0.0205	0.0043
	38.69	159.41	0.0200	0.0049
	43.15	157.07	0.0194	0.0054
	47.62	154.79	0.0188	0.0060
	52.08	152.50	0.0183	0.0066
56.54	150.37	0.0178	0.0071	
193.7 (7.625")	35.71	178.44	0.0250	0.0045
	39.28	177.01	0.0246	0.0049
	44.19	174.63	0.0239	0.0055
	50.15	171.83	0.0232	0.0063
	58.03	168.28	0.0222	0.0072
219.1 (8.625")	35.71	205.66	0.0332	0.0045
	41.66	203.63	0.0326	0.0051
	47.62	201.19	0.0318	0.0059
	53.57	198.76	0.0310	0.0068
	59.52	196.22	0.0302	0.0075
	65.47	193.68	0.0295	0.0082
	72.91	190.78	0.0286	0.0091

### Capacity and Displacement of Casing

O.D. (mm)	MASS (kg/m)	I.D. (mm)	CAPACITY (m <sup>3</sup> /metre)	DISPLACEMENT (m <sup>3</sup> /metre)
244.5 (9.625")	48.06	228.63	0.0411	0.0059
	53.57	226.59	0.0403	0.0066
	59.52	224.41	0.0396	0.0074
	64.73	222.38	0.0388	0.0081
	69.94	220.50	0.0382	0.0088
	79.61	216.79	0.0369	0.0100
273.0 (10.75")	48.73	258.88	0.0526	0.0059
	60.26	255.27	0.0512	0.0074
	67.70	252.73	0.0502	0.0084
	75.89	250.19	0.0492	0.0092
	82.58	247.90	0.0483	0.0103
298.4 (11.75")	62.50	281.53	0.0623	0.0077
	69.94	279.40	0.0613	0.0086
	80.35	276.35	0.0600	0.0099
	89.28	273.61	0.0588	0.0111
339.7 (13.375")	71.42	322.96	0.0819	0.0087
	81.10	320.42	0.0802	0.0100
	90.77	317.88	0.0794	0.0113
	101.18	315.34	0.0781	0.0125
	107.14	313.61	0.0772	0.0134
406.4 (16")	96.72	387.35	0.1178	0.0119
	111.60	384.18	0.1159	0.0138
	124.99	381.25	0.1142	0.0156
508.0 (20")	140.19	485.75	0.1854	0.0178
	158.83	482.60	0.1830	0.0202
	198.35	475.74	0.1778	0.0253
762.0 (30")	234.64	736.60	0.4263	0.0299
	349.41	723.90	0.4117	0.0445
	462.29	711.20	0.3972	0.0589

**The formula for calculating the capacity of a hole or a pipe is:**

$$\text{Capacity (liters/metre)} = (\text{Inside diameter in millimeters, mm})^2 \times 0.0007854$$

**The annular or displacement volume can be calculated using a similar formula:**

$$\text{Capacity (litres/metre)} = (\text{OD in millimeters, mm})^2 - (\text{ID in millimeters, mm})^2 \times 0.0007854$$