

French Catheter Gauge Size Decimal and Metric Equivalents

Gauge	Dia. in mm	Dia. in Inches
3	1	0.0390
4	1.33	0.053
5	1.67	0.066
6	2	0.079
7	2.3	0.092
8	2.7	0.105
9	3	0.118
10	3.3	0.131
11	3.7	0.144
12	4	0.158
13	4.3	0.170
14	4.7	0.184
15	5	0.197
16	5.3	0.210
17	5.7	0.223
18	6	0.236
19	6.3	0.249
20	6.7	0.263
22	7.3	0.288
24	8	0.315
26	8.7	0.341
28	9.3	0.367
30	10	0.393
32	10.7	0.419
34	11.3	0.445

*The French Catheter System was initially developed in the 1800s by a surgical instrument maker in Paris France, Joseph-Frè`de`ric-Benoit Charrie`re. Because many catheters are multilumen in cross section, the French size scale is a measure of the external diameter of the catheter with no corresponding call out for the inside diameter. As opposed to the "Birmingham Gauge" used for hypodermic needle tubing, French catheter sizes increase in diameter as their numerical designation increases. The French catheter sizing is typically designated Fr but can also be abbreviated as FR, Fg or even F when its meaning is obvious. In French speaking countries, it may be referred to by the inventor's initials CH or Ch.

The catheter's diameter in millimeters is determined by dividing the Fr size by 3: $D(\text{mm}) = \text{Fr} / 3$ or $\text{Fr} = D(\text{mm}) \times 3$