

# tensile test to destruction for copper wire

Force /N	Extension /mm	Strain	Stress / MPa
10	0.4	0.000117	25.3
15	0.9	0.000263	37.9
20	1.2	0.000351	50.5
25	1.6	0.000468	63.1
30	2	0.000585	75.8
40	2.8	0.000819	101.0
45	3.5	0.001023	113.7
50	5.1	0.001491	126.3
55	7	0.002047	138.9
60	10.3	0.003012	151.5
65	23.6	0.006901	164.2
70	43.3	0.012661	176.8
75	115	0.033626	189.4
80	159	0.046491	202.1
85	240	0.070175	214.7
90	324	0.094737	227.3
95	368	0.107602	239.9
100	480	0.140351	252.6
105	WIRE BROKE		265.2

Diameter /mm	0.71
Original length /mm	3420

CSA /mm <sup>2</sup>	0.395919214
CSA /m <sup>2</sup>	3.95919E-07

