

Vacuum Pressure Ratings for Tubes



DISCLAIMER: These values are approximate. They are the property of Jacob Tubing LP. They are to be treated as a confidential disclosure and to be returned upon request. They are not to be used, in whole or in part, to the disadvantage of Jacob Tubing LP. Jacob Tubing is not responsible for the design of systems using Jacob products.

CONDITIONS: 2m long tubes are measured for indentions. For steady vacuum ONLY; not suited for fluctuating vacuum applications.

WARNING: Measurements are without safety factor. The customer must determine the suitable safety factor.

NOTE: Those values highlighted in RED exceed "full vacuum" (-14.7psi). These are theoretical, calculated values and are FOR REFERENCE ONLY. Therefore, use -14.7psi (-406.9" w.c./1 bar).

Maximum Ratings (mbar)

Dia. mm Ø	1mm	1.5mm	2mm	3mm	Dia. mm Ø	1mm	1.5mm	2mm	3mm
120	475.0	1599.0	4504.0	N/A	500	61.0	178.0	375.0	1058.0
140	366.0	1100.0	2492.0	9511.0	560	53.0	155.0	328.0	925.0
150	330.0	974.0	2130.0	7065.0	630	43.0	127.0	269.0	762.0
175	266.0	770.0	1628.0	4763.0	710	36.0	107.0	226.0	624.0
200	222.0	639.0	1338.0	3787.0	800	30.0	90.0	190.0	540.0
224	190.0	547.0	1144.0	3204.0	900	13.0	38.1	80.3	228.2
250	163.0	471.0	985.0	2749.0	1000	11.2	32.8	68.9	196.3
300	126.0	366.0	768.0	2145.0	1120	9.53	27.9	58.5	166.7
350	102.0	295.0	620.0	1738.0	1250	8.15	23.8	49.7	142.2
400	84.0	245.0	515.0	1446.0	1400	6.93	20.2	42.0	120.5
450	71.0	207.0	436.0	1227.0	1600	5.73	16.6	34.4	99.0

Maximum Ratings (inches of H2O)

Dia. mm Ø	1mm	1.5mm	2mm	3mm	Dia. mm Ø	1mm	1.5mm	2mm	3mm
120	190.8	642.4	1809.5	N/A	500	24.5	71.5	150.7	425.0
140	147.0	441.9	1001.2	3821.0	560	21.3	62.3	131.8	371.6
150	132.6	391.3	855.7	2838.3	630	17.3	51.0	108.1	306.1
175	106.9	309.3	654.0	1913.5	710	14.5	43.0	90.8	250.7
200	89.2	256.7	537.5	1521.4	800	12.1	36.2	76.3	216.9
224	76.3	219.8	459.6	1287.2	900	5.2	15.3	32.3	91.7
250	65.5	189.2	395.7	1104.4	1000	4.5	13.2	27.7	78.8
300	50.6	147.0	308.5	861.7	1120	3.83	11.2	23.5	67.0
350	41.0	118.5	249.1	698.2	1250	3.27	9.6	20.0	57.1
400	33.7	98.4	206.9	580.9	1400	2.79	8.1	16.9	48.4
450	28.5	83.2	175.2	492.9	1600	2.30	6.7	13.8	39.8

Maximum Ratings (psi)

Dia. mm Ø	1mm	1.5mm	2mm	3mm	Dia. mm Ø	1mm	1.5mm	2mm	3mm
120	6.9	23.2	65.4	N/A	500	0.9	2.6	5.4	15.4
140	5.3	16.0	36.2	138.0	560	0.8	2.2	4.8	13.4
150	4.8	14.1	30.9	102.5	630	0.6	1.8	3.9	11.1
175	3.9	11.2	23.6	69.1	710	0.5	1.6	3.3	9.1
200	3.2	9.3	19.4	55.0	800	0.4	1.3	2.8	7.8
224	2.8	7.9	16.6	46.5	900	0.2	0.6	1.2	3.3
250	2.4	6.8	14.3	39.9	1000	0.2	0.5	1.0	2.8
300	1.8	5.3	11.1	31.1	1120	0.14	0.4	0.8	2.4
350	1.5	4.3	9.0	25.2	1250	0.12	0.3	0.7	2.1
400	1.2	3.6	7.5	21.0	1400	0.10	0.3	0.6	1.7
450	1.0	3.0	6.3	17.8	1600	0.08	0.2	0.5	1.4