

BetaGauge 311A / 321A Ranges and Resolutions

Range (PSI)	0.3	1	5	15	30	50	100	300	500	1000	1500	3000	5000	10000	
Burst Pressure (PSI)	10	10	100	500	500	1000	1000	2000	2000	10000	10000	10000	10000	15000	
Proof Pressure (PSI)	1	3	15	30	60	200	200	600	1000	3000	3000	6000	10000	15000	
Engineering Unit	Factor														
Psi	1	0.3000	1.0000	5.0000	15.000	30.000	50.000	100.00	300.00	500.00	1000.00	1500.0	3000.0	5000.0	10000.0
bar	0.06894757	0.0207	0.0689	0.3447	1.0342	2.0684	3.4447	6.8947	20.684	34.474	68.947	103.42	206.84	344.74	689.47
mbar	68.94757	20.684	68.948	344.74	1034.2	2068.4	3447.4	6894.8	20684	34474	68948	N/A	N/A	N/A	N/A
kPa	6.894757	2.0684	6.8948	34.474	103.42	206.84	344.74	689.48	2068.4	3447.4	6894.8	10342	20684	34474	68948
MPa	.00689476	0.0021	0.0068	0.0344	0.1034	0.2068	0.3447	0.6894	2.0684	3.4474	6.8948	10.342	20.684	34.474	68.948
kg/cm2	0.07030697	0.0211	0.0703	0.3515	1.0546	2.1092	3.5153	7.0307	21.092	35.153	70.307	105.46	210.92	351.53	703.07
cmH2O @ 4°C	70.3089	21.093	70.309	351.54	1054.6	2109.3	3515.4	7030.9	21093	35154	70309	N/A	N/A	N/A	N/A
cmH2O @ 20°C	70.4336	21.130	70.434	352.17	1056.5	2113.0	3521.7	7043.4	21130	35217	70434	N/A	N/A	N/A	N/A
mmH2O @ 4 °C	703.089	210.93	703.09	3515.4	10546	21093	35154	70309	N/A	N/A	N/A	N/A	N/A	N/A	N/A
mmH2O @ 20°C	704.336	211.30	704.34	3521.7	10565	21130	35217	70434	N/A	N/A	N/A	N/A	N/A	N/A	N/A
inH2O @ 4°C	27.68067	8.3042	27.681	138.40	415.21	830.42	1384.0	2768.1	8304.2	13840	27681	41521	83042	N/A	N/A
inH2O @ 20°C	27.72977	8.3189	27.730	138.65	415.95	831.89	1386.5	2773.0	8318.9	13865	27730	41595	83189	N/A	N/A
inH2O @ 60°F	27.70759	8.3123	27.708	138.54	415.61	831.23	1385.4	2770.8	8312.3	13854	27708	41561	83123	N/A	N/A
mmHg @ 0°C	51.71508	15.515	51.715	258.58	775.73	1551.5	2585.8	5171.5	15515	25858	51715	77573	N/A	N/A	N/A
inHg @ 0°C	2.03602	61.081	2.0360	10.180	30.540	61.081	101.80	203.60	610.81	1018.0	2036.0	3054.0	6108.1	10180	20360

• N/A - For calibrators with firmware version 2.0 and higher, some units will not be displayed due to limitations on display resolution. For calibrators with earlier versions of firmware, the calibrator will attempt to display a value, but the display will be excessively noisy to be useful. In all cases, best practice would prohibit the use of small engineering units such as mm H2O with high pressure range sensors.

• Proof pressure - maximum allowable pressure without a shift in calibration

• Burst pressure - sensor damaged or destroyed; some risk of personnel injury

• Compound ranges - the data for the 15 PSI range also applies to the -15 to +15 PSI compound range; the data for the 30 PSI range also applies to the -15 to +30 PSI compound range.

• Absolute ranges - the data for the 15, 30, 50, 100 and 300 PSI ranges also applies to the absolute pressure versions of those ranges.