

Pressure Units in Gas Analysis

Randall Bramston-Cook & Sylvie Lekhac
Lotus Consulting
5781 Campo Walk, Long Beach, Ca 90803
310/569-0128
randy@lotusinstruments.com
www.lotusinstruments.com

March 5, 2023

Copyright 2023 Lotus Flower, Inc

From/To	mTorr	Torr	Pascal	Inches Hg	Inches Water	psiAbsolute	psiGauge	Bar	Atmosphere
Atmosphere	760,000	760	101,325	29.921	406.782	14.696	14.696 - 14.696	1.01325	--
Bar	750,062	750.062	100,000	29.530	401.463	14.504	14.504 - 14.696	--	0.898
psiGauge	51715 + 14.696	51.715 + 14.696	6895 + 14.696	2.036 + 14.696	27.680 + 14.696	14.696	--	0.0689 + 14.696	0.068 + 14.696
psiAbsolute	51,715	51.715	6,895	2.036	27.680	--	-14.696	0.0689	0.068
Inches Water	1,868	1.868	249.088	0.07356	--	0.036	0.036 - 14.696	0.002491	0.002458
Inches Hg	25,400	25.400	3,386	--	13.595	0.491	0.491 - 14.696	0.033864	0.033421
Pascal	7.501	0.007501	--	0.000295	0.004015	0.000145	0.000145 - 14.696	0.00001	0.000009869
Torr	1,000	--	133.32	0.039370	0.535240	0.019337	0.019337 - 14.696	0.001333	0.001316
mTorr	--	0.001	0.133	0.000039	0.000535	0.000019	0.000019 - 14.696	0.00000133	0.000001316

All constants are multipliers

Inches Hg accurate at 0°C, 32°F

Inches Water accurate at 4°C, 39.2°F

Conversion of Gauge to Absolute accurate at sea level, use barometer in place of 14.696