



# VTM & High-Flow Dispenser Tolerances for 100-Gallon Provers

**Table 1: Accuracy Classes and Tolerances for VTMs (Vehicle Tank Meters)**

Accuracy Class	Application	Acceptance Tolerance	Maintenance Tolerance	Special Test Tolerance*
0.3	Petroleum products delivered from large capacity devices [flow rates over 115 L/min (30 gpm)], including motor fuel devices	0.15% 35 CI	0.3% 69 CI	0.45% 104 CI

**Table 2: Accuracy Classes and Tolerance for Liquid Measuring Devices (High Flow Dispensers)**

*Covered in NIST Handbook 44, Section 3.30*

Accuracy Class	Application	Acceptance Tolerance	Maintenance Tolerance	Special Test Tolerance
0.3	Petroleum products delivered from large capacity devices [flow rates over 115 L/min (30 gpm)], including motor fuel devices	0.2% 46 CI	0.3% 69 CI	0.5% 115 CI
0.5	Petroleum products delivered from small capacity motor fuel devices [flow rates between 4 L/min (1 gpm) and 115 L/min (30 gpm)]	0.3% 69 CI	0.5% 115 CI	0.5% 115 CI

## Product Depletion Test

The difference between the test result for any normal test and the product depletion test shall not exceed 0.5% of the volume delivered in one minute at the maximum flow rate marked on the meter for meters rated higher than 380 L/min (100 gpm) or 0.6% of the volume delivered in one minute at the maximum flow rate marked on the meter for meters rated 380 L/min (100 gpm) or lower. Test drafts shall be of the same size and run at approximately the same flow rate.

\*The result of the product depletion test may fall outside of the applicable test tolerance as specified in Table 1.

Product Depletion Test Results		
Max GPM Rating	Tolerance %	Tolerance Cubic Inches (From Normal Test Result)
300	0.5%	347
250	0.5%	289
200	0.5%	231
150	0.5%	173
100	0.6%	139
60	0.6%	83
30	0.6%	42