

1 Sensor Performance

Sensor Performance

Parameter	LG16-0025D	LG16-0150D	LG16-043xD	LG16-1000D	LG16-2000D	Units
H ₂ O full scale flow rate	1.50	7	80	1000	5000	µl/min
H ₂ O sensor output limit ^a	1.70	8	120	1100	5500 ^d	µl/min
Accuracy below full scale (whichever error is larger)	10	5.0	5.0	5.0	5.0	% of m.v. ^b
	0.5	0.3	0.15	0.2	0.2	% of full scale
Repeatability below full scale (whichever error is larger)	<1	0.5	0.5	0.5	0.5	% of m.v.
	0.06	0.05	0.01	0.02	0.02	% of full scale
Temperature coefficient (additional error / °C; whichever is larger)	0.15	0.09	0.13	0.1	0.1	% m.v. / °C
	0.007	0.005	0.003	0.004	0.004	% full scale / °C
Mounting orientation sensitivity ^c	-	<0.4	<0.4	1.0	1.5	% of full scale

^aFlow rate at which the sensor output saturates. See section 2 for performance between full scale and saturation point.

^bMeasured value

^cMaximum additional offset when mounted vertically

^dExtended range up to 10500 µl/min, see Specification Charts for details

Table 1: Model specific performance of LG16 (all data for medium H₂O, 23 °C, 1 bar_{abs} unless otherwise noted)

Parameter	LG16-0150D	LG16-043xD	LG16-1000D	LG16-2000HC-D	Unit
IPA full scale flow rate	70	500	10'000	80	µl/min
					ml/min
IPA sensor output limit ^a	100	600	11'000	90	µl/min
					ml/min
Accuracy below full scale (whichever error is larger)	20 0.3	20 1	20 1	10 0.5	% of m.v. ^b
					% of full scale
Repeatability below full scale (whichever error is larger)	1 0.01	1 0.05	1 0.05	1.5 0.03	% of m.v.
					% of full scale
Temperature coefficient (additional error / °C; whichever is larger)	0.4	0.5 0.025	0.4 0.02	0.35	% m.v. / °C
					% full scale / °C

^a Flow rate at which the sensor output saturates

^b Measured value

Table 2: Model specific performance of LG16 series (all data for medium IPA, 23 °C, 1 bar_{abs} unless otherwise noted)

1.1 Specification Charts

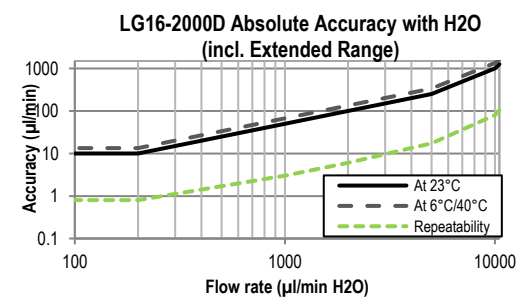
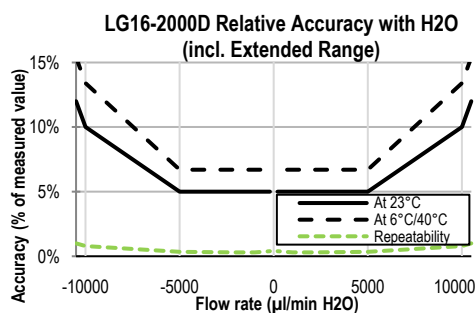
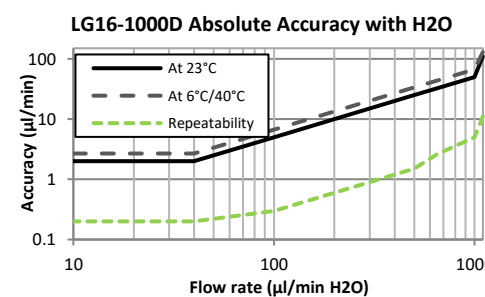
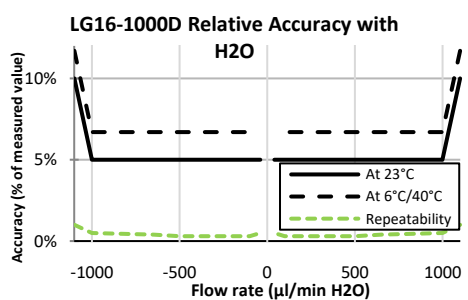
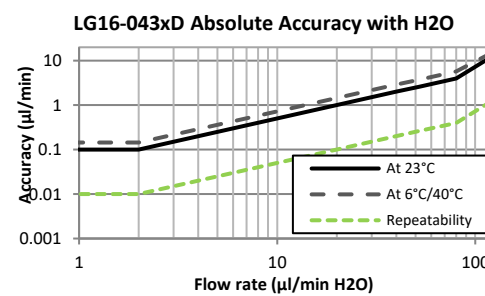
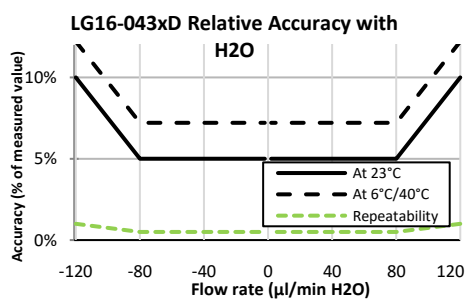
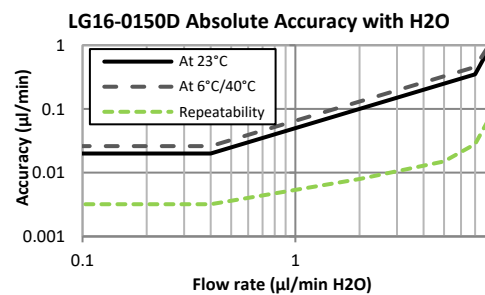
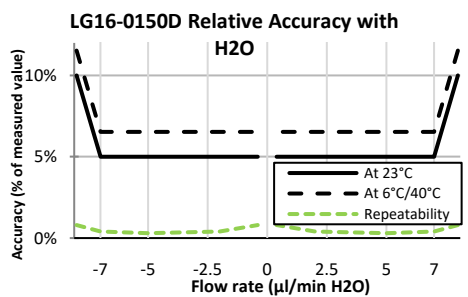
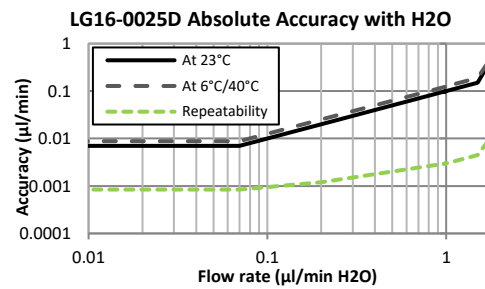
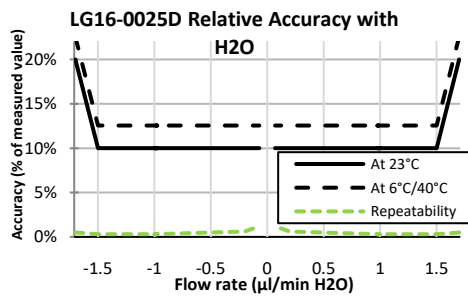


Figure 1: Flow meter accuracy and repeatability across the flow range. Relative error in % of measured value (left column) and absolute error in $\mu\text{l/min}$ (right column) for H₂O.