1 Sensor Performance

Sensor Performance

Parameter	LG16-0025D	LG16-0150D	LG16-043xD	LG16-1000D	LG16-2000D	Units
H_2O full scale flow rate	1.50	7	80	1000	5000	µl/min
H_2O sensor output limit[a]	1.70	8	120	1100	5500[d]	µl/min
Accuracy below full scale (whichever error is larger)	10 0.5	5.0 0.3	5.0 0.15	5.0 0.2	5.0 0.2	% of m.v.[b] % of full scale
Repeatability below full scale (whichever error is larger)	<1 0.06	0.5 0.05	0.5 0.01	0.5 0.02	0.5 0.02	% of m.v. % of full scale
Temperature coefficient (additional error / °C; whichever is larger)	0.15 0.007	0.09 0.005	0.13 0.003	0.1 0.004	0.1 0.004	% m.v. / °C % full scale / °C
Mounting orientation sensitivity[c]	-	<0.4	<0.4	1.0	1.5	% of full scale

[a]Flow rate at which the sensor output saturates. See section 2 for performance between full scale and saturation point.
[b]Measured value
[c]Maximum additional offset when mounted vertically
[d]Extended range up to 10500 ul/min, see Specification Charts for details

Table 1: Model specific performance of LG16 (all data for medium H_2O, 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		µl/min
				80	ml/min
IPA sensor output limit[a]	100	600	11'000		µl/min
				90	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

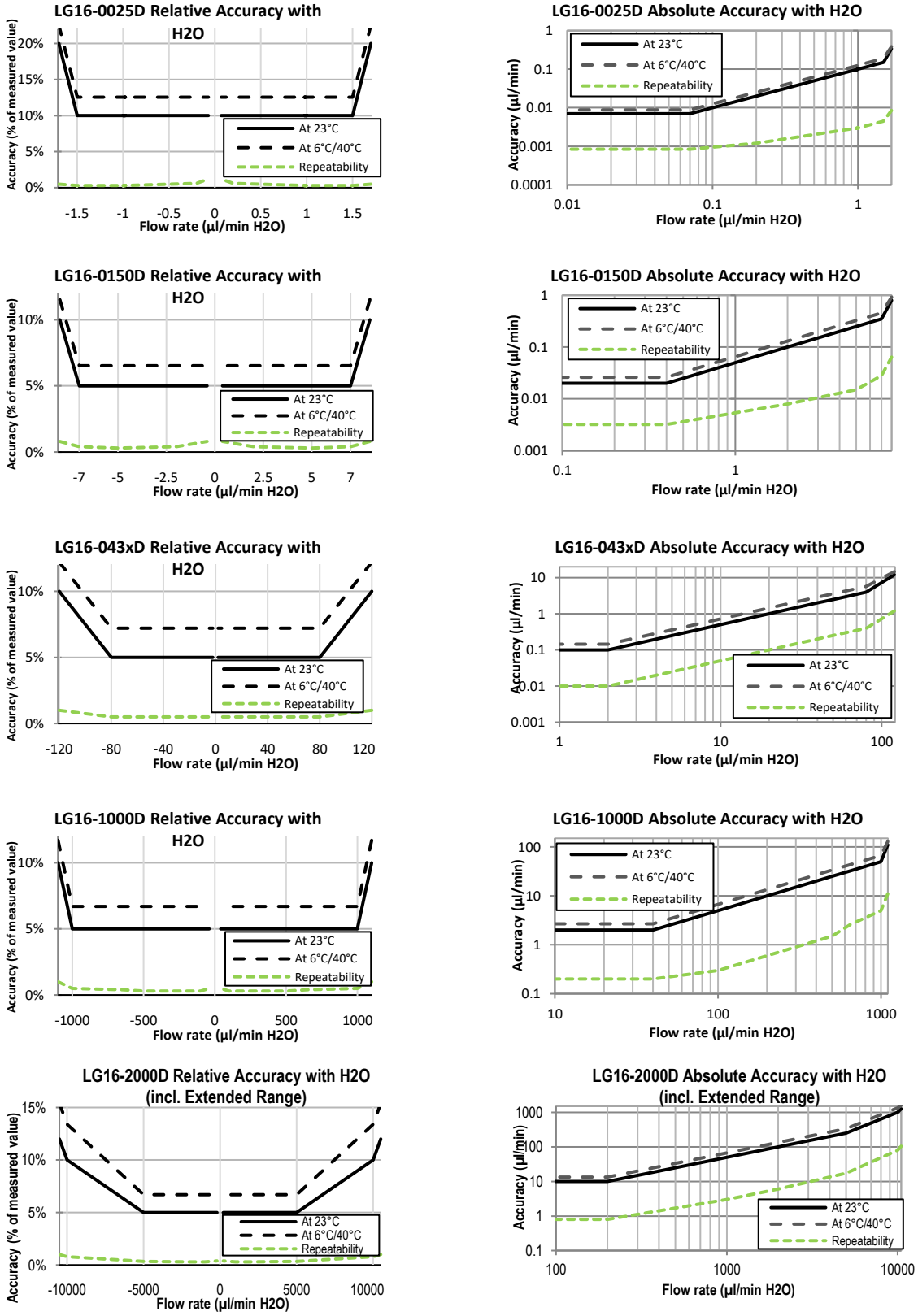

Figure 1: Flow meter accuracy and repeatability across the flow range. Relative error in % of measured value (left column) and absolute error in µl/min (right column) for H2O.