

## 1 Sensor Performance

### Sensor Performance

Parameter	LG16-0025D	LG16-0150D	LG16-043xD	LG16-1000D	LG16-2000D	Units
H <sub>2</sub> O full scale flow rate	1.50	7	80	1000	5000	µl/min
H <sub>2</sub> O sensor output limit <sup>a</sup>	1.70	8	120	1100	5500 <sup>d</sup>	µl/min
Accuracy below full scale (whichever error is larger)	10	5.0	5.0	5.0	5.0	% of m.v. <sup>b</sup>
	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 <sup>c</sup>	-	<0.4	<0.4	1.0	1.5	% of full scale

<sup>a</sup>Flow rate at which the sensor output saturates. See section 2 for performance between full scale and saturation point.

<sup>b</sup>Measured value

<sup>c</sup>Maximum additional offset when mounted vertically

<sup>d</sup>Extended range up to 10500 ul/min, see Specification Charts for details

**Table 1:** Model specific performance of LG16 (all data for medium H<sub>2</sub>O, 23 °C, 1 bar<sub>abs</sub> unless otherwise noted)

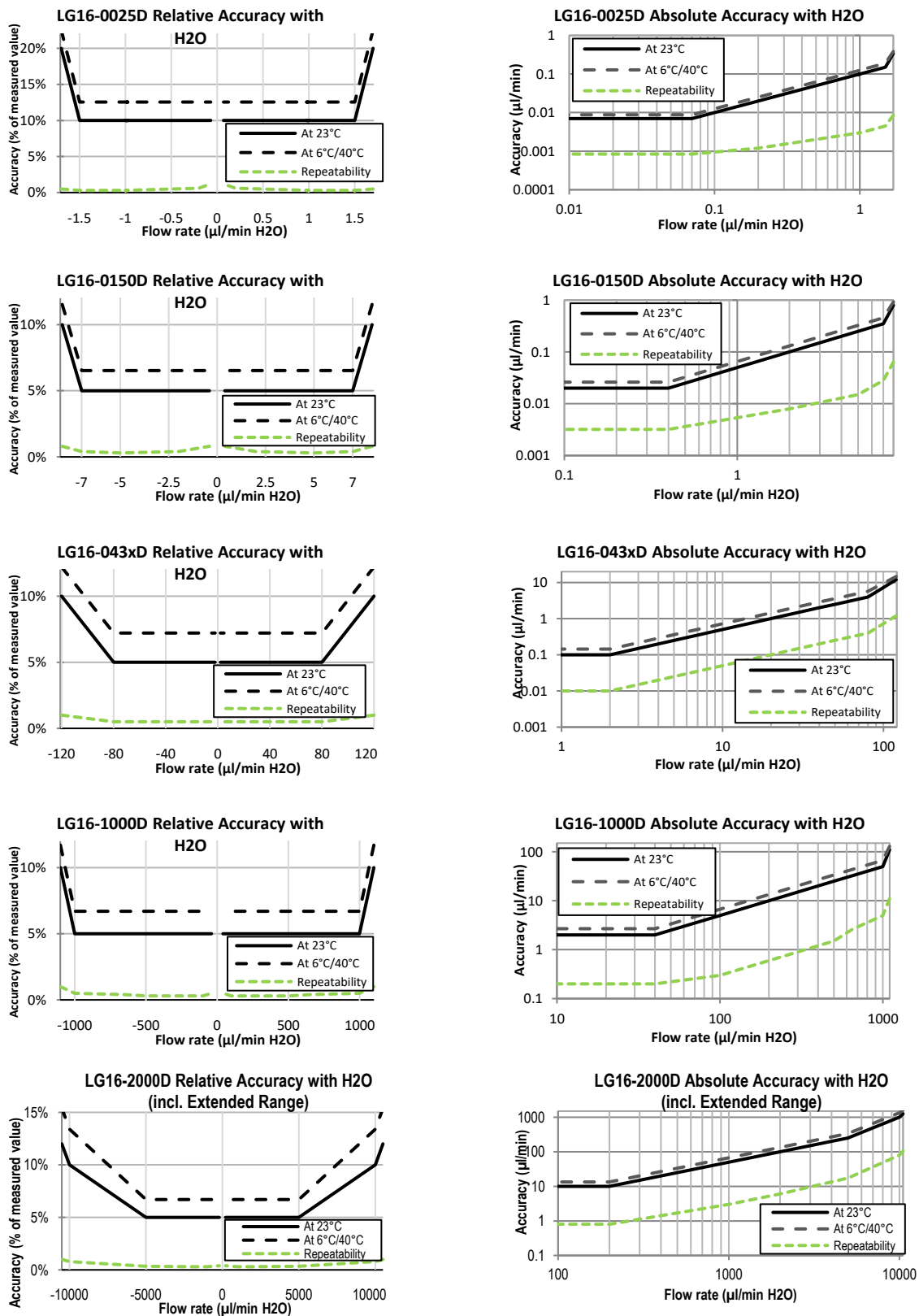
Parameter	LG16-0150D	LG16-043xD	LG16-1000D	LG16-2000HC-D	Unit
IPA full scale flow rate	70	500	10'000	80	µl/min
					ml/min
IPA sensor output limit <sup>a</sup>	100	600	11'000	90	µl/min
					ml/min
Accuracy below full scale (whichever error is larger)	20	20	20	10	% of m.v. <sup>b</sup>
	0.3	1	1	0.5	%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

<sup>a</sup> Flow rate at which the sensor output saturates

<sup>b</sup> Measured value

**Table 2:** Model specific performance of LG16 series (all data for medium IPA, 23 °C, 1 bar<sub>abs</sub> 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 H<sub>2</sub>O.