

# Application Note

## Bias Potential, Load Resistor and Polarity

Sensor	Bias Potential (SE versus RE) [mV]	Polarity (After inv. Amplifier)	Recommended Load Resistor, R <sub>0</sub> [Ohm]	Shorting
AsH <sub>3</sub> 2E 1	not required	+	0	SE-CE
AsH <sub>3</sub> 3E 1 LT	0	+	1500	SE-RE
AsH <sub>3</sub> 3E 1F LT	0	+	1500	SE-RE
B <sub>2</sub> H <sub>6</sub> 3E 1 LT	0	+	1500	SE-RE
Cl <sub>2</sub> 3E 10	0	-	0	SE-RE
Cl <sub>2</sub> 3E 50	0	-	0	SE-RE
ClO <sub>2</sub> 3E 1 O	0	-	100	SE-RE
CO 2E 300	not required	+	33	SE-CE
CO 3E 300	0	+	33	SE-RE
CO 3E 500 S	0	+	33	SE-RE
COCl <sub>2</sub> 3E 1	0	+	0	SE-RE
F <sub>2</sub> 3E 1	0	-	0	SE-RE
H <sub>2</sub> 3E 1%	0	+	10	SE-RE
H <sub>2</sub> 3E 4%	0	+	10	SE-RE
H <sub>2</sub> S 2E 30	not required	+	0	SE-CE
H <sub>2</sub> S 3E 30	0	+	0	SE-RE
H <sub>2</sub> S 2E 50	not required	+	33	SE-CE
H <sub>2</sub> S 2E 50 S	not required	+	33	SE-CE
H <sub>2</sub> S 3E 100	0	+	0	SE-RE
H <sub>2</sub> S 3E 100 S	0	+	33	SE-RE
HCl 3E 30	+200	+	100	---
HCN 2E 30 F	not required	+	0	SE-CE
HCN 3E 30 F	0	+	0	SE-RE
HF 3E 10 SE	0	-	0	SE-RE
N <sub>2</sub> H <sub>4</sub> 2E 1	not required	+	0	SE-CE
NH <sub>3</sub> 3E 100 / 1000	0	+	0	SE-RE
NH <sub>3</sub> 3E 100 / 1000 SE	0	+	0	SE-RE
NH <sub>3</sub> 3E 500 SE	0	+	0	SE-RE
NH <sub>3</sub> 3E 5000 SE	0	+	0	SE-RE
NO 3E 100	+200	+	100	---
NO <sub>2</sub> 3E 50	0	-	47	SE-RE
O <sub>3</sub> 3E 1	0	-	100	SE-RE
O <sub>3</sub> 3E 1 F	0	-	100	SE-RE
PH <sub>3</sub> 3E 5 LT	0	+	1500	SE-RE
PH <sub>3</sub> 3E 5F LT	0	+	1500	SE-RE
SeH <sub>2</sub> 3E 5 LT	0	+	1500	SE-RE
SiH <sub>4</sub> 3E 50 LT	0	+	1500	SE-RE
TBM 2E	not required	+	0	SE-CE
THT 3E 100	+150	+	33	---

SE – Working electrode

CE – Counter electrode

RE – Counter electrode

