## DrägerSensor® Selection and Warranty Chart



11/30/2022																
117002022					8000	8500	-am 5100	2800	0099	3500	ıt,				Bump Test or	
Sensor	Measuring				ac 60'	ac 85	a a		E E	E E		Recommended	Maximum	Calibration manually	Calibration with	
Description XS DrägerSensor®	Range	Accuracy	Resolution	Part No.	<u>~</u> ~	ă.	××	××	××	××	: ≥	Cal Interval	Cal Interval	or with CC-Vision	X-dock	Comments*
AS Drager Sensor Hydrazine (N-H <sub>2</sub> ) XS N2H4 (hydrazine) CH3NH-NH2 (monomethyl hydrazine) (CH3)2N-NH2 (dimethyl hydrazine)	Max 0 - 3.00 ppm 0 - 3.00 ppm 0 - 3.00 ppm 0 - 3.00 ppm	≤±5% of measured value	0.01 ppm	6809190			x				1-Yr	3 Month	6 Months	DraegerService	N/A	Factory calibration
Hydrogen Flouride/Hyrdogen Chloride (HF/HCl) XS HCl (hydrogen chloride) HNO3 (nitro acroide) HBr (hydrogen bromide) PCO3 (bhosphorous throhlorideoxide) PCI3 (phosphorous trichloride HF (hydrogen flouride)	Max 0 - 30.0 ppm 0 - 30.0 ppm	≤±15% of measured value	0.1 ppm	6809140			x				1-Yr	12 Month	18 Months	10 or 25 ppm HCl	N/A	SS Regulator, PTFE-lined hose (short as possible)
Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) XS	0 - 20.0 ppm	≤±10% of measured value	0.1 ppm	6809170			х				1-Yr	3 Months	6 Months	10 ppm SO <sub>2</sub>	N/A	
XXS DrägerSensor®																
Amines XXS CH3NH2 (methylamine) (CH3)2NH (dimethylamine) CH3)3N (timethylamine) CH3)3N (timethylamine) (C2H5)3NI (teltylamine) (C2H5)3NI (teltylamine) (C2H5)3NI (teltylamine)	Std 0 - 100 ppm 0 - 100 ppm	≤±5% of measured value	1 ppm	6812545				,	×	,	1-Yr	3 Months	6 Months	50 ppm NH <sub>3</sub>	50 ppm NH <sub>3</sub>	Use Tygon tubing and Stainless-Steel Regulator
Ammonia (NH <sub>3</sub> ) XXS	0 - 300 PPM	≤±3% of measured value	1 ppm	6810888	х			<b>)</b>	( X	<u> </u>	1-Yr	3 Months	6 Months	50 ppm NH3	50 ppm NH3	Use Tygon tubing and Stainless-Steel Regulator
Carbon Dioxide (CO <sub>2</sub> ) XXS	0 - 5.0%	≤±20% of measured value	0.1% Vol.	6810889	Х				X		15-Mo		6 Months	2.5% Vol CO2	2.5% Vol CO2	
Carbon Monoxide (CO) XXS <sup>1</sup>	0 - 2,000 ppm	≤±2% of measured value	2 ppm	6810882			X		X		3-Yr	6 Months	12 Months	100 ppm CO	100 ppm CO	
Carbon Monoxide Low Conc. (CO) XXS LC <sup>1</sup> Carbon Monoxide High Conc. (CO) XXS HC	0 - 2,000 ppm 0 - 10,000 ppm	≤±2% of measured value ≤±2% of measured value	1 ppm 5 ppm	6813210 6812010	X		Х		X		3-Yr 1-Yr	6 Months 3 Months	12 Months 6 Months	100 ppm CO 100 ppm CO	100 ppm CO 100 ppm CO	
CO Hydrogen Compensated (CO-H2 CP) XXS	0 - 2,000 ppm	≤±2% of measured value	1 ppm	6811950		х			( X		1-Yr	6 Months	12 Months	100 ppm CO	100 ppm CO	
CO-LC/H <sub>2</sub> S-LC Dual Sensor XXS	0 - 2,000 ppm CO 0 - 100 ppm H <sub>2</sub> S	H <sub>2</sub> S: ≤ ± 5 % of measured value, CO: ≤ ± 2 % of measured value	1 ppm 0.1 ppm	6813280		x			c x		2-Yr	6 Months	12 Months	500 ppm H2 100 ppm CO 25 ppm H2S	500 ppm H2 100 ppm CO 25 ppm H2S	
204122 12	0 - 2,000 ppm CO		2 ppm					١.						100 ppm CO	100 ppm CO	
CO/H <sub>2</sub> S Dual Sensor XXS	0 - 200 ppm H2S	≤±2% of measured value	1 ppm	6811410				,	( X	,	2-Yr	6 Months	12 Months	25 ppm H2S	25 ppm H2S	
Chlorine (Cl <sub>2</sub> ) XXS CI2 (chlorine) F2 (fluorine) Br2 (prornine) ClO2 (chlorine dioxide)	Std 0 - 20 ppm 0 - 20 ppm	≤±2% of measured value	0.1 ppm	6810890	x			<b>X</b>	x	<b>X</b>	1-Yr	3 Months	6 Months	5 ppm Cl2	5 ppm Cl2	Use Stainless-Steel Regulator and PTFE-lined Tygon tubing with 2ea. 8324098 X-dock PTFE Hose Connector Sets for connection to X-dock.
Hydrogen Cyanide (HCN) XXS	0 - 50 ppm	≤±5% of measured value	0.1 ppm	6810887	Х				X		2-Yr	3 Months	6 Months	10 ppm HCN	10 ppm HCN	
Hydrogen Cyanide (HCN) XXS PC Hydrogen High Conc. (H <sub>2</sub> ) XXS HC	0 - 50 ppm 0 - 4% Vol.	≤±5% of measured value ≤±2% of measured value	0.5 ppm 0.1% Vol.	6813165 6812025					X		1-Yr	3 Months	6 Months	10 ppm HCN 2% Vol (50%LEL) H2	10 ppm HCN 2% Vol (50%LEL) H2	Charles a second the title with CO as CO 110 assessed
Hydrogen Low Conc. (H <sub>2</sub> ) XXS	0 - 4% Vol. 0 - 2,000 ppm	≤±1% of measured value	5 ppm	6812370					X		1-11	3 Months	6 Months	500 ppm H2	500 ppm H2	Check on compatibility with CO or CO-H2 sensors
Hydrogen Sulfide (H <sub>2</sub> S) XXS <sup>1</sup>	0 - 200 ppm	≤±2% of measured value	1 ppm	6810883			х	, ,		×		6 Months	12 Months	25 ppm H2S	25 ppm H2S	
Hydrogen Sulfide High Conc. (H <sub>2</sub> S) XXS HC	0 - 1,000 ppm	≤±2% of measured value	2 ppm	6812015			^		X	·	1-Yr	3 Months	6 Months	100 ppm H2S	100 ppm H2S	
Hydrogen Sulfide Low Conc. (H <sub>2</sub> S) XXS LC <sup>1</sup>	0 - 100 ppm	≤±2% of measured value	0.1 ppm	6811525	х		х	хх	( X		3-Yr	6 Months	12 Months	25 ppm H2S	25 ppm H2S	
Nitrogen Dioxide (NO <sub>2</sub> ) XXS	0 - 50 ppm	≤±2% of measured value	0.1 ppm	6810884	х		х	хх	( X	хх	1-Yr	3 Months	6 Months	5 or 10 ppm NO2	5 or 10 ppm NO2	
Nitrogen Dioxide Low Conc. (NO <sub>2</sub> ) XXS LC	0 - 50 ppm	≤±3% of measured value	0.02 ppm	6812600	х			<b>)</b>	( X	×	1-Yr	3 Months	6 Months	5 ppm NO2	5 ppm NO2	
Nitrogen Oxide (NO) XXS Odorant (mercaptan) XXS THT (tetrahydrothisphene) (CH3)3CSH (tert-buty mercaptane) CCH5CH(CH3)SH (sec-buty) mercaptane) CH3SH (methy mercaptane) CCH5SH (ethy mercaptane) (CH3)S (dimethy subpide) (CH3)S (dimethyd subpide)	0 - 200 ppm Std 0 - 40 ppm 0 - 40 ppm	≤±3% of measured value ≤±3% of measured value	1 ppm	6811545 6812535	X		X	X	c x	)	1-Yr	3 Months 3 Months	6 Months	25 ppm NO 10 ppm MeM	25 ppm NO  10 ppm MeM or 10 ppm THT	MeM available on X-dock with ≥02.02.11 firmware
Organic Vapor (OV) XXS  C2H40 (ethylene oxide)  C3H60 (incyloylene oxide)  C3H6 (ethylene oxide)  C2H3 (ethyne)  C3H6 (propen)  C4H3C (vinyl chloride)  CH3OH (methanol)  CH3OH (methanol)  CH2CHCHCH2 (butaliene)  HCH0 (formalderlyde)  (HSC)CCH0 (iso-propanol)  C4H80 (tetrahydrofuran)  C2H3OCH2CI (-t-blioro-2,3-epoxypropane)  C6H5CHCH2 (styrene)  H2CC(CH3COCOH3 (methyl methacrylate)	Std 0 - 200 ppm 0 - 200 ppm 0 - 200 ppm 0 - 100 ppm 0 - 200 ppm 0 - 200 ppm 0 - 200 ppm 0 - 300 ppm 0 - 200 ppm 0 - 100 ppm 0 - 100 ppm 0 - 100 ppm 0 - 100 ppm	≤±5% of measured value	0.5 ppm	6811530	x			)	c x	>	1-Yr	3 Months	6 Months	10 ppm ETO or 100 ppm CO or 25 ppm Ethylene	10 ppm ETO or 100 ppm CO or 25 ppm Ethylene	Calibration gas capability controlled by sensor code
Organic Vapor A (OV-A) XXS C2H40 (ethylene oxide) 2CCHCN (acprointile) (CH3)2CCH2 (scbutene) (CH3COCC2H3 (invjlacetate) C2H5COH (ethanol) CH3CH0 (CH3CO) (CH3CH0 (CH3CH0) (C2H5)2O (idethyl ether) C2H2 (ethine') acetylene)	Std 0 - 200 ppm 0 - 200 ppm 0 - 100 ppm 0 - 300 ppm 0 - 300 ppm 0 - 300 ppm 0 - 300 ppm 0 - 200 ppm 0 - 200 ppm 0 - 100 ppm	≤±20% of measured value	1 ppm	6811535	x			,	( x	,	1-Yr	3 Months	6 Months	10 ppm ETO or 100 ppm CO or 25 ppm Ethylene	10 ppm ETO or 100 ppm CO or 25 ppm Ethylene	Calibration gas capability controlled by sensor code

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## DrägerSensor® Selection and Warranty Chart



11/30/2022																	
Sensor Description	Measuring Range	Accuracy	Resolution	Part No.	Pac 60/6500	Pac 8500	X-am 5100 X-am 2500	X-am 2800	X-am 5000	X-am 3500	X-am 8000	Warranty	Recommended Cal Interval	Maximum Cal Interval	Calibration manually or with CC-Vision	Bump Test or Calibration with X-dock	Comments*
O2/CO-LC Dual Sensor XXS	0 - 25% Vol O2 0 - 2,000 ppm CO	O2: ≤ ± 1 % of measured value, CO: ≤ ± 2 % of measured value	0.1%Vol 1 ppm	6813275		x			x x	ĸ	х	2-Yr	6 Months	12 Months	ambient air 100 ppm CO	ambient air 100 ppm CO	≤19% O2 required for bump test of O2 on X-dock
O2/H2S-LC	0 - 25% Vol O2 0 - 100 ppm H2S	O2: ≤ ± 1 % of measured value, H2S: ≤ ± 5 % of measured value	0.1%Vol 0.1 ppm	6814137		x			x x	ĸ	х	2-Yr	6 Months	12 Months	ambient air 25 ppm H2S	ambient air 25 ppm H2S	≤19% O2 required for bump test of O2 on X-dock
Oxygen (O <sub>2</sub> ) XXS <sup>1</sup>	0 - 25% Vol.	≤±1% of measured value	0.1% Vol.	6810881	х		х	X	X X	x x	х	3-Yr	6 Months	12 Months	ambient air	ambient air	≤19% O2 required for bump test of O2 on X-dock
Oxygen (O <sub>2</sub> ) XXS O2 100	0 - 100% Vol.	≤±1% of measured value	0.5% Vol.	6812385					X X	K	х	1-Yr	3 Months	6 Months	ambient air	ambient air	Calibrate at altitude where being used
Oxygen (O2) XXS PR	0 - 30% Vol.	≤±1% of measured value	0.1% Vol.	6800530			х	х	x x	x x	х	2-Yr	6 Months	12 Months	ambient air	ambient air	≤19% O2 required for bump test of O2 on X-dock Order via configurator
Ozone (O <sub>3</sub> ) XXS	0 - 10 ppm	≤±3% of measured value	0.01 ppm	6811540	X				x x	x	х	1-Yr	3 Months	6 Months	5 ppm NO2	5 ppm NO2	N2 required for zero calibration
Phosgene (COCI <sub>2</sub> ) XXS	0 - 10 ppm	≤±5% of measured value	0.01 ppm	6812005	>				x x	ĸ	х	1-Yr	3 Months	6 Months	2 to 3 ppm COCI2	2 to 3 ppm COCI2	Calibration gas not sold by Draeger
Phosphine (PH <sub>3</sub> ) XXS PH3 (phosphine) AsH3 (arsine) B2H6 (dibrane) SiH4 (silane)	Std 0 - 20 ppm 0 - 20 ppm	≤±2% of measured value	0.1 ppm	6810866	,				x x	x	x	1-Yr	3 Months	6 Months	0.5 ppm PH3	0.5 ppm PH3	
Phosphine High Conc. (PH <sub>3</sub> ) XXS HC	0 - 1,000 ppm	≤±2% of measured value	1 ppm	6812020					X X	ĸ	Х	1-Yr	3 Months	6 Months	5 ppm PH3	5 ppm PH3	Not compatible with CatEx sensor
Sulfur Dioxide (SO <sub>2</sub> ) XXS	0 - 50 ppm	≤±2% of measured value	0.1 ppm	6810885	Х		Х	X	X X	X X	Х	2-Yr	3 Months	6 Months	5 ppm SO2	5 ppm SO2	Do not use H2S/SO2 mixed gas on the X-dock
Cat Ex DrägerSensor®																	
Cat Ex 125 PR	0 - 100% LEL 0 - 5.0% Vol. 5 - 100% Vol. <sup>2/3</sup>	≤±1% of LEL	1% LEL 0.1%Vol. 1.0% Vol.	6812950			х		x	х	х	3-Yr	3 Months	6 Months	50% LEL CH4	50% LEL CH4	
Cat Ex 125 PR Mining/Gas (MSHA Approved)	0 - 5.0% Vol. 5 - 100% Vol. <sup>2/3</sup>	≤±1% of LEL	0.1% Vol. 1.0% Vol.	6813080			х		х		x	3-Yr	3 Months	6 Months	2.5% Vol CH4	2.5% Vol CH4	"ch <sub>4</sub> L" mode in X-am 8000 for 50 to 50,000 ppm range for Method 21 type testing
CarEx 125 SR (Shock Resistant)	0 - 100% LEL 0 - 5.0% Vol.	≤ ± 1 % LEL at 50 % LEL	1% LEL 0.05%Vol	6851900				х				3-Yr	3 Months	6 Months	2.5% Vol CH4	2.5% Vol CH4	
IR DrägerSensor®																	
Dual IR-Ex/CO <sub>2</sub> HC	0 - 100%LEL 0 - 100% Vol. 0 - 100% Vol. CO <sub>2</sub>	≤±1.5% LEL methane at 50% LEL ≤±0.5 Vol% CO2 at 50 Vol%	1% LEL 0.1% Vol. 0.1%Vol.	6800276							x	5-Yr	6 Months	12 Months	50% LEL CH4 50% Vol CH4 50% Vol CO2	50% LEL CH4 50% Vol CH4 50% Vol CO2	X-am 8000 Only - Must be installed in HPP 1 - No PID sensor can be installed at the same time.
Dual IR-Ex/CO <sub>2</sub> ES (replaces 6811960)	0 - 100%LEL 0 - 100% Vol. 0 - 5.00% Vol. CO <sub>2</sub>	≤±1.5% LEL methane at 50% LEL ≤±0.08 Vol% CO2 at 2.5 Vol%	1% LEL 0.1% Vol. 0.02%Vol.	6851880					,	ĸ	х	5-Yr	6 Months	12 Months	50% LEL CH4 50% Vol CH4 2.5% Vol CO2	50% LEL CH4 50% Vol CH4 2.5% Vol CO2	N2 required for CO2 zero calibration 0 - 9,900 ppm in X-am 5600 0 - 50,000 ppm range in X-am 8000
IR-Ex ES (replaces 6812180)	0 - 100% LEL 0 - 100% Vol.	≤±1.5% LEL methane at 50% LEL	1% LEL 0.1% Vol.	6851881					)	K	х	5-Yr	6 Months	12 Months	50% LEL CH4	50% LEL CH4	Can be configured for 2 ranges/gases via CC-Vision
IR-CO <sub>2</sub> ES (replaces 6812190)	0 - 9,900 ppm 0 - 5.00% Vol.	≤±0.08 Vol% CO2 at 2.5 Vol%	50 ppm 0.02% Vol.	6851882					)	ĸ	x	5-Yr	6 Months	12 Months	2.5% Vol CO2	2.5% Vol CO2	N2 required for CO2 zero calibration 0 - 50,000 ppm range in X-am 8000
PID DrägerSensor®																	
PID HC	0.3 - 2000 ppm	at 100 ppm isobutylene: ≤± 2% of measured value at zero point: ≤± 0.3 ppm isobutylene	0-20 ppm - 100 ppb >20 ppm - 200 ppb >50 ppm - 500 ppb >100 ppm - 1 ppm >200 ppm - 2 ppm >500 ppm - 5 ppm >1000 - 10 ppm	6813475							x	1-Yr	1 Month	12 Months	100 ppm isobutylene	100 ppm isobutylene	Use with benzene scrubber tube for benzene specific readings up to 100 ppm (01/2021).
PID LC	0-10 ppm isobutylene 0.025-5 ppm benzene	at 5 ppm isobutylene: ≤± 2% of measured value at zero point: ≤± 0.05 ppm isobutylene	0-2 ppm - 10 ppb >2 ppm - 20 ppb >5 ppm - 50 ppb	6813500							x	1-Yr	Each use	N/A	5 ppm isobutylene	5 ppm isobutylene	Requires zero air or N2 for zero calibration. 30 minute warm up time, if not stored on charger. Use with benzene scrubber tube for benzene specific readings up to 100 ppm (01/2021).

<sup>\*</sup> Comments - FKM tubing is recommended for all sensors with the exception of chlorine, nitrogen dioxide and ammonia. For chlorine use the Teflon-lined Tygon tubing and for nitrogen dioxide and ammonia use the Tygon tubing.

From December 1st, 2018, 5 year warranty when sold as installed in an X-am multi-gas monitor. 3 year for replacement sensors.
 Full Range mode in X-am 8000