

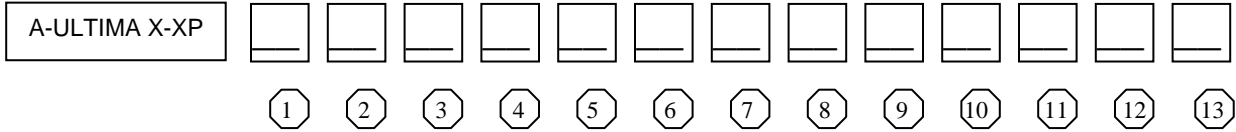


The Safety Company

MSA - Product Group 0700

Category I

# Ultima® X Series Gas Monitors



- 1 Model**  
E = Explosion proof, with display  
I = XI (IR sensor with no display)  
L = Explosion proof, no display  
Catalytic & Electrochemical Infrared  
J = X series junction box (No electronics)
- 2 Gas Code** –see list for gas type  
NOTE: The following codes will provide enclosure and electronics only. No sensor components.  
01 = “Standard” toxics and oxygen  
02 = Catalytic  
03 = IR  
04 = “Reactive” toxics (ex. Cl, HCl, ClO<sub>2</sub>, NH<sub>3</sub>, HF, EtO)  
05 = IR CO<sub>2</sub>
- 3 Configuration**
  - A = ATEX w/metric threads
  - B = ATEX w/NPT threads
  - \* C = CSA approval w/NPT threads
  - > F = FM approval (cFM<sub>us</sub>) w/NPT threads
  - + U = UL approval w/NPT threads
  - I = IEC approval w/metric threads
- 4 Sensor Output**  
0 = No electronics, sensor body & puck only  
1 = 2-Wire mA output  
2 = 2-Wire (mA + HART) output  
3 = 3-Wire mA output  
4 = 3-Wire (mA + HART) output
- 5 Sensor Mounting Style** –  
S = Sensor mounted on control unit  
D = Sensor mounted on remote housing  
N = No conduit
- 6 Relays and LEDs**  
0 = No relays and no LEDs (Required if 2-wire)  
1 = LEDs, no relays (Required if Model = L)  
2 = Relays and LEDs
- 7 Display Language/Features**  
0 = English  
S = Spanish  
H = English with custom horn software
- 8 Optional Power Supply** (Converts AC to DC)  
0 = None  
1 = 12 VDC Internal  
2 = 24 VDC Internal  
3 = 12 VDC External  
4 = 24 VDC External  
NOTE: Power supplies not available for ATEX or IEC

- 9 Gas Sample Selection**  
0 = None – Standard diffusion method  
1 = Flow cap assembly  
XE  
XIR
- 10 Integrated Accessories**  
0 = None  
1 = XP HART port  
2 = Pushbutton switch – approved for Div. 1, Gr. B-D only  
3 = Both XP HART port and pushbutton  
Note: option 3 requires use of a HART module
- 11 Installation Hardware**  
0 = None  
1 = Brackets  
2 = Duct Mount Kit  
3 = Brackets + Duct Mount Kit
- 12 Manuals** – alternate quantities can be ordered separately  
0 = Standard  
1 = Hardcopy + CD
- 13 Custom Features**  
0 = None  
C = Custom operation necessary  
T = Custom Tagging, SS  
TC = Custom Tagging/Custom operations necessary  
CC = Certificate of calibration request  
CF = Certificate of conformance request  
CB = Both certificates



- Key:
- + UL approved Class I, Div 1 & 2, Groups A, B, C & D; Class II, Div 1, Groups E, F & G for IR, Groups F & G for E-chem and catalytic; Class III
  - > FM approved Class I, Div 1 & 2, Groups A, B, C & D for oxygen, catalytic and IR
  - \* CSA approved Class I, Div 1, Groups A, B, C & D for E-chem and Catalytic, Groups B, C & D for IR
  - ATEX or IEC approved Ex d IIC T4, IP66



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Category I

Gases for Ultima X and X<sup>3</sup> Technology

Gas Selection Table

Table with 2 columns: Gas ID and Gas Description. Includes entries for various gases like Carbon Monoxide, Oxygen, Hydrogen Sulfide, Chlorine, Sulfur Dioxide, Nitric Oxide, Nitrogen Dioxide, Hydrogen Cyanide, Hydrogen Chloride, Chlorine Dioxide, Hydrogen Fluoride, Acetylene, Carbon Dioxide, Phosphine, Arsine, Silane, Diborane, Bromine, Fluorine, Ammonia, Ethylene Oxide, Comb. Gas, Solvent Tolerant Oxygen, and Low Oxygen.

SELECTION GUIDE FOR ULTIMA XIR COMBUSTIBLE

CATEGORY 38: Methane Calibration

Table with 4 columns: Controller Code, Cal Cylinder, Cylinder P/N, Cal Span Value. Row for Methane with values 1, 2.5% Methane, 10028032, 50% LEL.

CATEGORY 39: Non-Methane Calibration

Table with 4 columns: Controller Code, Cal Cylinder, Cylinder P/N, Cal Span Value. Rows for Propane, Ethane, Butane, Pentane, Hexane, Cyclopentane, Ethylene with various calibration values.

For sensing multiple gases, always calibrate for the least sensitive gas or vapor expected to be measured (highest response factor within a category). All other combustible gas span values available upon request.

Key:

- + UL approved Class I, Div. 1 & 2, Groups A, B, C & D; Class II, Div. 1, Groups E, F & G for IR, Groups F & G for E-chem and catalytic; Class III
> FM approved Class I, Div. 1 & 2, Groups A, B, C & D for oxygen, catalytic and IR
\* CSA approved Class I, Div. 1, Groups A, B, C & D for E-chem and catalytic, Groups B, C & D for IR
• ATEX or IEC approved Ex d IIC T4, IP66
\*\* Selections 3 - 11 must be zero
^ Available as custom product only
x XP Stainless Steel only
-- X3IR must have conduit
~ Available with intrinsically safe barrier and ATEX approval or UL Div 2 approval
" Not available as XL model
} Not available as XT model

Ultima X Sensor X-Change Program

-Exchange sensors on demand w/pre-calibrated, factory checked sensors. Contact your local Territory Manager for more information.