



Sensors Approved for Use in Explosive Environments

Ensure proper selection of monitoring equipment for hazardous applications



Highlights

Industrial explosions can cause catastrophic damages and worker injury and/or death. To prevent such disasters, regulations are in place that govern what types of equipment can be installed in potentially explosive environments. IMI Sensors has products approved to several different regulations.

- European Union's ATEX Directive 2014/34/EU (formerly 94/9/EC) Equipment for Potentially Explosive Atmospheres
- International Electrotechnical Commission's IEC Ex Rules 01-05 (IECEX)
- US National Fire Protection Association NFPA 70: National Electric Code® (CSA AEx)
- Canadian Standards Association CSA C22.1: Canadian Electrical Code (CSA Ex)

Typical Applications

- Manufacturing processes creating or using explosive gases, liquids, vapors and/or dust
- Power generation facilities
- Oil and gas wells and pipelines



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| | Output Signal | Max Temperature (°F / °C) | Connector Position | ATEX | | | | IECEX | | | CSA Ex | | | CSA AEx | | |
|---------------------------------------|-----------------------|---------------------------|--------------------|------|----|--------|----|-------|----|----|--------|--------|----|---------|--------|----|
| | | | | d | ia | nL/ic¹ | nA | d | ia | nA | ia | nL/ic¹ | nA | ia | nL/ic¹ | nA |
| Accelerometers | | | | | | | | | | | | | | | | |
| CS604BX1 | ICP [®] | 250/121 | Side | | | | | | | | X | X | | X | X | |
| CS622AX1 | ICP [®] | 250/121 | Top | | | | | | | | X | X | | X | X | |
| CS623CX0 | ICP [®] | 250/121 | Top | | | | | | | | X | X | | X | X | |
| CS625BX1 | ICP [®] | 250/121 | Side | | | | | | | | X | X | | X | X | |
| CS628F11 | ICP [®] | 250/121 | Top | | | | | | | | X | X | | X | X | |
| CSM623C01 | ICP [®] | 250/121 | Top | | | | | | | | X | X | | X | X | |
| CSVO(M)622A01 | ICP [®] | 250/121 | Top | | | | | | | | X | X | | X | X | |
| EX357C7X | Charge | 900/482 | Side | | X | X | | | | | | | | | | |
| EX600B1X | Charge with Amplifier | 900/482 | Integral Cable | | X | | X | | | | X | X | | X | X | |
| EX602D0X | ICP [®] | 250/121 | Side | | X | X | X | | X | | X | X | | X | X | |
| EX602D1X | ICP [®] | 250/121 | Side | | X | X | X | | X | | X | X | | X | X | |
| EX602D6X | ICP [®] | 250/121 | Side | | X | X | X | | X | | X | X | | X | X | |
| EX603C0X | ICP [®] | 250/121 | Top | | X | X | X | | X | | X | X | | X | X | |
| EX603C1X | ICP [®] | 250/121 | Top | | X | X | X | | X | | X | X | | X | X | |
| EX603C6X | ICP [®] | 250/121 | Top | | X | X | X | | X | | X | X | | X | X | |
| EX606BXX | ICP [®] | 250/121 | Side | | X | X | X | | X | | X | X | | X | X | |
| EX607AXX | ICP [®] | 250/121 | Side | | X | X | X | | X | | X | X | | X | X | |
| EX608AXX | ICP [®] | 250/121 | Top | | X | X | X | | X | | X | X | | X | X | |
| EX611AX0 | Charge | 1200/650 | Integral Cable | | X | | | | X | | | | | | | |
| EX615A42 | Charge | 900/482 | Integral Cable | | X | | X | | X | X | X | | X | X | X | |
| EX619A11 | Charge | 900/482 | Integral Cable | | X | | X | | X | X | X | X | X | X | X | |
| EX622AX1 | ICP [®] | 250/121 | Top | | X | | X | | | | | | | | | |
| EX623C0X | ICP [®] | 250/121 | Top | | X | | X | | | | | | | | | |
| EX628FX1 | ICP [®] | 250/121 | Top | | X | | X | | | | | | | | | |
| EX629A11A | ICP [®] | 250/121 | Integral Cable | | | X | X | | | | X | | X | X | X | |
| Differential Charge Amplifiers | | | | | | | | | | | | | | | | |
| EX682A40 | N/A | 176/80 | N/A | | | X | X | | | | X | X | | X | X | |
| Pressure Sensors | | | | | | | | | | | | | | | | |
| 102A4X | ICP [®] | 275/135 | Top | | X | X | X | | | | X | X | | X | X | |
| 121A4X | ICP [®] | 250/121 | Top | | X | X | X | | | | X | X | | X | X | |
| 176A02 | Charge | 1200/650 | Integral Cable | | X | | X | | X | X | X | X | | X | X | |
| 176A03 | Charge | 1200/650 | Integral Cable | | X | | X | | X | X | X | X | | X | X | |
| 176A05 | Charge | 968/520 | Integral Cable | | X | | X | | X | X | X | X | | X | X | |
| 176MXX | Charge | 986/530 | Integral Cable | | X | | X | | X | X | X | X | | X | X | |
| Vibration Switches | | | | | | | | | | | | | | | | |
| 685BXXXXC1X | N/A | 158/70 | N/A | | X | | | | | | X | X | | X | X | |
| EX686B0X | N/A | 185/85 | Top | | | | | | | | X | X | | X | X | |
| EX686B7X | N/A | 185/85 | Top | | | | | | | | X | X | | X | X | |
| EX686B7XD | N/A | 185/85 | Top | | X | | | | X | | | | | | | |
| Vibration Transmitters | | | | | | | | | | | | | | | | |
| CS640A0X | 4-20 mA | 176/80 | Top | | | | | | | | X | X | | X | X | |
| CS641A00 | 4-20 mA | 176/80 | Top | | | | | | | | X | X | | X | X | |
| CS645M02 | 4-20 mA | 185/85 | Top | | | | | | | | X | X | | X | X | |
| CS646A01 | 4-20 mA | 185/85 | Top | | | | | | | | X | X | | X | X | |
| CS649A93 | 4-20 mA | 212/100 | Top | | | | | | | | X | X | | X | X | |
| CSEF640A01 | 4-20 mA | 176/80 | Top | | | | | | | | X | X | | X | X | |
| CSEF641A01 | 4-20 mA | 176/80 | Top | | | | | | | | X | X | | X | X | |
| EX640B0X/1X/6X | 4-20 mA | 176/80 | Top | | X | X | | | | | X | X | | X | X | |
| EX640B7XD | 4-20 mA | 176/80 | Top | | X | | | | X | | | | | | | |
| EX640B7X | 4-20 mA | 176/80 | Top | | X | | X | | | | X | X | | X | X | |
| EX641B0X/1X/6X | 4-20 mA | 176/80 | Top | | X | X | | | | | X | X | | X | X | |
| EX641B7X | 4-20 mA | 176/80 | Top | | X | | X | | | | X | X | | X | X | |
| EX641B7XD | 4-20 mA | 176/80 | Top | | X | | | | X | | | | | | | |
| EX642AX1 | 4-20 mA | 185/85 | Side | | X | X | | | | | X | X | | X | X | |
| EX645B0X | 4-20 mA | 185/85 | Top | | X | X | | | | | X | X | | X | X | |
| EX646B00 | 4-20 mA | 185/85 | Top | | X | X | | | | | X | X | | X | X | |
| EX646B2 | 4-20 mA | 185/85 | Top | | X | X | | | | | X | X | | X | X | |
| EX646B71 | 4-20 mA | 185/85 | Top | | X | | X | | | | X | X | | X | X | |
| EX648A11 | 4-20 mA | 185/85 | Top | | X | X | | | | | X | X | | X | X | |
| EX649A01 | 4-20 mA | 212/100 | Top | | X | X | | | | | X | X | | X | X | |
| EX649A71 | 4-20 mA | 212/100 | Top | | X | | X | | | | X | X | | X | X | |

Note 1: ic certification is replacing nL certification as certificates are renewed.



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ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

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IMI-HazardousArea-1116

Printed in U.S.A.



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