Product Manual Addendum
November 2022

Product: Xgard Bright

Documents affected: Xgard Bright User and Operator Manual as listed below:

M079910 Issue 4, December 2020

The following information is changed from the content published in the supplied revision of the manual. This updated information must be noted and followed by the installer and user of the product.

Section 1 – Diagrams

A new section is added as follows:

1.1 Certification Labels, Page 5

Diagram 3. ATEX and IECEx certification label (Stainless Steel Enclosure Only)
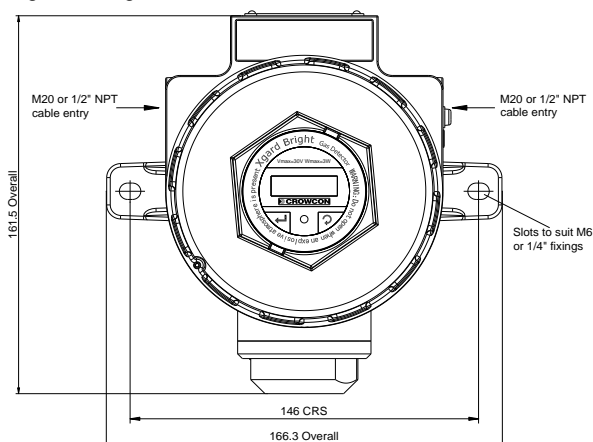
1.2 Dimension Diagrams, Page 7

Diagram 8: XGard Bright Stainless Steel dimension view, all dimensions in millimetres
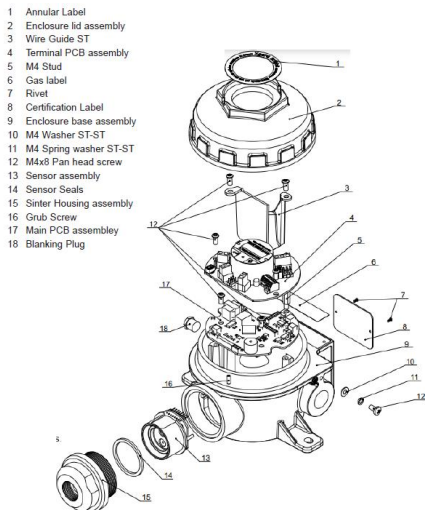
1.4 Exploded View – Stainless Steel Only, Page 11

1 Annular Label
2 Enclosure lid assembly
3 Wire Guide ST
4 Terminal PCB assembly
5 M4 Stud
6 Gas label
7 Rivet
8 Certification Label
9 Enclosure base assembly
10 M4 Washer ST-ST
11 M4 Spring washer ST-ST
12 M4x8 Pan head screw
13 Sensor assembly
14 Sensor Seals
15 Sinter Housing assembly
16 Grub Screw
17 Main PCB assembley
18 Blanking Plug

Diagram 10: Xgard Bright Stainless Steel exploded view

Section 2 – Introduction

New additions to this section as follows:

2.1 Product Overview, Page 15
XGard Bright Stainless Steel is ATEX and IECEx Ex db IIC T3 Gb and ATEX and IECEx Ex db IIC T4 Gb flameproof certified for use in Zone 1 or 2 hazardous gas areas and Ex tb IIIC T80°C Db for use in Zone 21 or 22 hazardous dust areas.

2.2 Safety Information, Page 15
Safety information relevant to Ex requirements (ATEX/IECEx Certification Aluminium):

- WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD. The painted aluminium enclosure constitutes a potential electrostatic hazard and the equipment must only be cleaned using a damp cloth.
- The cable gland must be installed before use and must comply with the requirements of standards EN60019-0 and EN60079-1 with minimum IP66 ingress protection.
- The flameproof properties of the enclosure shall be maintained when an external alarm device is used.
- Unused cable entries must be sealed using an ATEX/IECEx Ex db and Ex tb certified stopping plug with minimum IP66 ingress protection.
- Only the cable/wires which are specified in the user manual can be used.
- External earthing should be considered and installed according to these instructions before use. For use in North America, the internal grounding terminal shall be used as the equipment grounding means and that the external terminal is only a supplemental bonding connection where local authorities permit or require such a connection.
- WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT.
- The lid on Xgard Bright must be kept tightly closed until power to the detector is isolated otherwise ignition of a flammable atmosphere can occur. Before removing the cover for maintenance, ensure the surrounding atmosphere is free of flammable gases or vapours.

Safety information relevant to Ex requirements (ATEX/IECEx Certification Stainless Steel):

- WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD.
  - The equipment must only be cleaned using a damp cloth;
  - Equipment used in the specified environment;
  - Earthing connection are observed in accordance with User manual;
  - Cleaning and touch the equipment with an insulating object;
  - Routine cleaning can be performed in a place out of zone;
  - Avoid touch the equipment when gas detector is warning;
  - Equipment should be protected to avoid the direct airflow in gas atmosphere and fast moving particles in dust atmosphere on the surface of enclosure, which result in the electrostatic charge;
  - Equipment are not expected are subjected to a prolific charge generating mechanism;
- The cable gland must be installed before use and must comply with the requirements of standards EN60079-0 and EN60079-1 with minimum IP65 ingress protection.
- The only suitable certified cable gland with minimum IP65 rating can be used for installation purpose by end user.
- The flameproof properties of the enclosure shall be maintained when an external alarm device is used.
- Unused cable entries must be sealed using an ATEX/IECEx Ex db and Ex tb certified stopping plug with minimum IP65 ingress protection.
- Only the cable/wires which are specified in the user manual can be used.
- External earthing should be considered and installed according to these instructions before use. For use in North America, the internal grounding terminal shall be used as the equipment grounding means and that the external terminal is only a supplemental bonding connection where local authorities permit or require such a connection.
- WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT.
- The lid on XGard Bright must be kept tightly closed until power to the detector is isolated otherwise ignition of a flammable atmosphere can occur. Before removing the cover for maintenance, ensure the surrounding atmosphere is free of flammable gases or vapours.
- The maximum service temperature of cable entry point and the branching point of the conductor is 72.15°C and 73.75°C respectively, and the end user must select the proper cable and cable gland for intended use.
- Stainless Steel version is certified since ATEX Certificate No.: TÜV 16 ATEX 7908 X Issue: 02 and IECEx CoC No.:IECEx TUR 16.0035X Issue No.2.

Section 3 – Installation

Section revised as follows:

3.1 Hazardous Area Use, Page 20
ATEX/IECEx Aluminium
This detector is designed for use in Zone 1 and Zone 2 or Zone 21 and Zone 22 hazardous areas, and is certified Ex db IIC T6 Gb and Ex tb IIIC T80°C Db for operation up to 70°C (158°F). Installation must be in accordance with the recognized standards of the appropriate authority in the country concerned. For further information please contact Crowcon. Prior to carrying out any installation work ensure local regulations and site procedures are followed.

ATEX/IECEx Stainless Steel
This detector is designed for use in Zone 1 and Zone 2 or Zone 21 and Zone 22 hazardous areas, and is certified Ex db IIC T3 Gb -40°C≤Ta≤70 °C, Ex db IIC T4 Gb -40°C≤Ta≤50 °C and Ex tb IIIC T80°C Db for operation up to 70°C (158°F). Installation must be in accordance with the recognized standards of the appropriate authority in the country concerned. For further information please contact Crowcon. Prior to carrying out any installation work ensure local regulations and site procedures are followed.

3.9 Earthing Requirements, Page 30
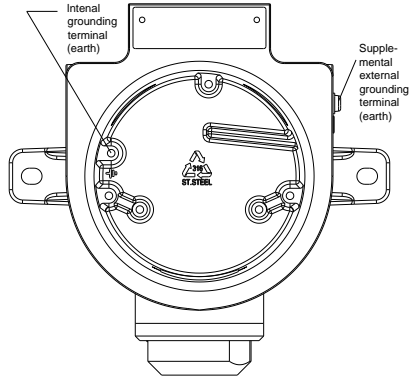
Stainless steel enclosure

Section 5 – Specification

Specification section revised as follows:

Enclosure material	ADC 12 aluminium alloy 316 Stainless Steel
Dimension	Aluminium Enclosure - 156 x 166 x 109mm (6.1 x 6.5 x 4.3inch) Stainless Steel Enclosure - 161 x 166 x 105mm (6.1 x 6.5 x 4.3inch)
Weight	Aluminium alloy 1kg (2.2lbs) Stainless Steel: 3.1 kg (6.8lbs) approx..
Cable entry	2x M20 (stopping plug fitted to left-side entry) or 2x ½" NPT ports (stopping plug fitted to left-side entry)
Approval codes	ATEX (Aluminium): ⟨Ex⟩ II 2 G Ex db IIC T6 Gb -40°C≤Ta≤70 °C ⟨Ex⟩ II 2 D Ex tb IIIC T80°C Db IECEx (Aluminium): Ex db IIC T6 Gb -40°C≤Ta≤70 °C Ex tb IIIC T80°C Db ATEX (Stainless Steel): ⟨Ex⟩ II 2 G Ex db IIC T3 Gb -40°C≤Ta≤70 °C ⟨Ex⟩ II 2 G Ex db IIC T4 Gb -40°C≤Ta≤50°C ⟨Ex⟩ II 2 D Ex tb IIIC T80°C Db IECEx (Stainless Steel): Ex db IIC T3 Gb -40°C≤Ta≤70°C Ex db IIC T4 Gb -40°C≤Ta≤50°C Ex tb IIIC T80°C Db Certificate numbers: TUV 16 ATEX 7908 X IECEx TUR 16.0035 X
Standards:	IEC 60079-0:2017 Ed.7.0; EN IEC 60079-0:2018; IEC 60079-1:2014 Ed.7.0; EN 60079-1:2014; IEC 60079-31:2013 Ed.2.0; EN 60079-31:2014;