

Duct Mount



ROSEMOUNT™

Legal Notice

The Flame Detector described in this document is the property of Rosemount.

No part of the hardware, software, or documentation may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, without prior written permission of Rosemount.

While great efforts have been made to ensure the accuracy and clarity of this document, Rosemount assumes no liability resulting from any omissions in this document or from misuse of the information obtained herein. The information in this document has been carefully checked and is believed to be entirely reliable with all of the necessary information included. Rosemount reserves the right to make changes to any products described herein to improve reliability, function, or design and reserves the right to revise this document and make changes from time to time in content hereof with no obligation to notify any persons of revisions or changes. Rosemount does not assume any liability arising out of the application or any use of any product or circuit described herein; neither does it convey license under its patent rights or the rights of others.

WARNING!

This manual should be read carefully by all individuals who have or will have responsibility for using, maintaining, or servicing the product.

The Detector is not field repairable due to the meticulous alignment and calibration of the sensors and the respective circuits. Do not attempt to modify or repair the internal circuits or change their settings, as this will impair the system's performance and void the Rosemount product warranty.

Warranty

- Limited Warranty.** Subject to the limitations contained in Section 10 (Limitation of Remedy and Liability) herein, Seller warrants that (a) the licensed firmware embodied in the Goods will execute the programming instructions provided by Seller; (b) that the Goods manufactured by Seller will be free from defects in materials or workmanship under normal use and care; and (c) Services will be performed by trained personnel using proper equipment and instrumentation for the particular Service provided. The foregoing warranties will apply until the expiration of the applicable warranty period. Sensors and detectors are warranted against defective parts and workmanship for 24 months from the date of purchase and other electronic assemblies for 36 months from the date of purchase. Products purchased by Seller from a third party for resale to Buyer (**Resale Products**) shall carry only the warranty extended by the original manufacturer. Buyer agrees that Seller has no liability for Resale Products beyond making a reasonable commercial effort to arrange for procurement and shipping of the Resale Products. If Buyer discovers any warranty defects and notifies Seller thereof in writing during the applicable warranty period, Seller shall, at its option, (i) correct any errors that are found by Seller in the firmware or Services; (ii) repair or replace FOB point of manufacture that portion of the Goods found by Seller to be defective; or (iii) refund the purchase price of the defective portion of the Goods/Services. All replacements or repairs necessitated by inadequate maintenance; normal wear and usage; unsuitable power sources or environmental conditions; accident; misuse; improper installation; modification; repair; use of unauthorized replacement parts; storage or handling; or any other cause not the fault of Seller, are not covered by this limited warranty and shall be replaced or repaired at Buyer's sole expense and Seller shall not be obligated to pay any costs or charges incurred by Buyer or any other party except as may be agreed upon in writing in advance by Seller. All costs of dismantling, reinstallation, freight and the time and expenses of Seller's personnel and representatives for site travel and diagnosis under this limited warranty clause shall be borne by Buyer unless accepted in writing by Seller. Goods repaired and parts replaced by Seller during the warranty period shall be in warranty for the remainder of the original warranty period or 90 days, whichever is longer. This limited warranty is the only warranty made by Seller and can be amended only in a writing signed by an authorized representative of Seller. The limited warranty herein ceases to be effective if Buyer fails to operate and use the Goods sold hereunder in a safe and reasonable manner and in accordance with any written instructions from the manufacturers. THE WARRANTIES AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE. THERE ARE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE OR ANY OTHER MATTER WITH RESPECT TO ANY OF THE GOODS OR SERVICES.
- Limitation of Remedy and Liability** SELLER SHALL NOT BE LIABLE FOR DAMAGES CAUSED BY DELAY IN PERFORMANCE. THE REMEDIES OF BUYER SET FORTH IN THE AGREEMENT ARE EXCLUSIVE. IN NO EVENT, REGARDLESS OF THE FORM OF THE CLAIM OR CAUSE OF ACTION (WHETHER BASED IN CONTRACT, INFRINGEMENT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE), SHALL SELLER'S LIABILITY TO BUYER AND/OR BUYER'S CUSTOMERS EXCEED THE PRICE TO BUYER OF THE SPECIFIC GOODS MANUFACTURED OR SERVICES PROVIDED BY SELLER GIVING RISE TO THE CLAIM OR CAUSE OF ACTION. BUYER AGREES THAT IN NO EVENT SHALL SELLER'S LIABILITY TO BUYER AND/OR BUYER'S CUSTOMERS EXTEND TO INCLUDE INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES. THE TERM "CONSEQUENTIAL DAMAGES" SHALL INCLUDE, BUT NOT BE LIMITED TO, LOSS OF ANTICIPATED PROFITS, REVENUE OR USE AND COSTS INCURRED INCLUDING WITHOUT LIMITATION FOR CAPITAL, FUEL AND POWER, AND CLAIMS OF BUYER'S CUSTOMERS.

Release History

Revision	Date	Revision History
A	March 2016	First release

Contents

Chapter 1	General Description	1
Chapter 2	Installation Instructions	2
Chapter 3	Technical Support	8

1 General Description

This document describes the installation instructions for the Duct Mount (P/N 00975-9000-0002).

The Duct Mount is suitable for use with the Rosemount 975 Flame Detectors (975MR, 975HR, 975UF, and 975UR) for both the aluminum and stainless steel enclosures.

The Duct Mount allows flame detection in areas where high temperatures exist or in cases where the detector cannot be installed inside the area. It comprises a special duct mount arrangement with a specific optical window to allow installation in high temperature duct applications.

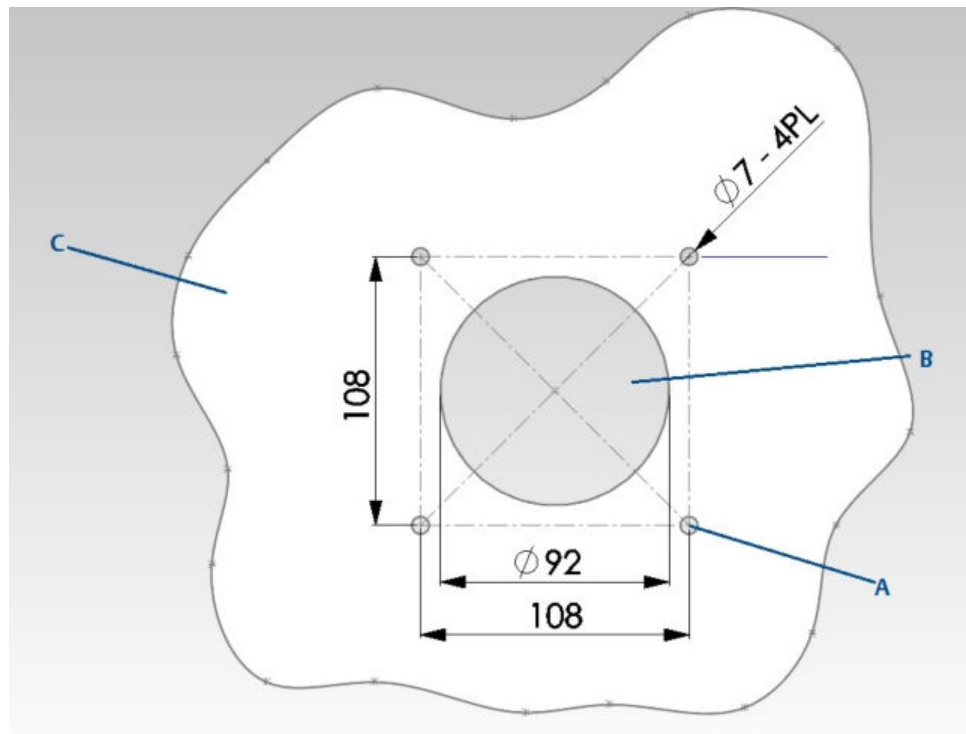
The Duct Mount will limit the cone of vision of the installed detector to 65 ° horizontal and 65 ° vertical.

The temperature allowed for the Duct Mount to be installed at is -67 °F to 392 °F (-55 °C to 200 °C).

2 Installation Instructions

1. Prepare the surface (*Figure 2-1*).
 - a. Check the air duct installation surface (C) stability. It should be as near as possible to a riding girder connection in order to ensure proper support to the mounting and to the unit. Also, the surface must be stable and free of vibrations.
 - b. Locate the best installation surface for the detector, so that the detector will have a full cone of vision to the protected area.
 - c. Drill the duct hole (B) and the screw holes (A) carefully.

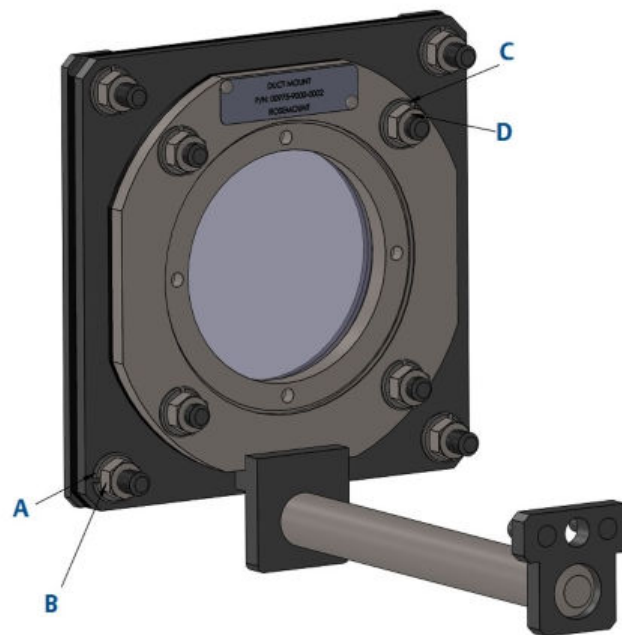
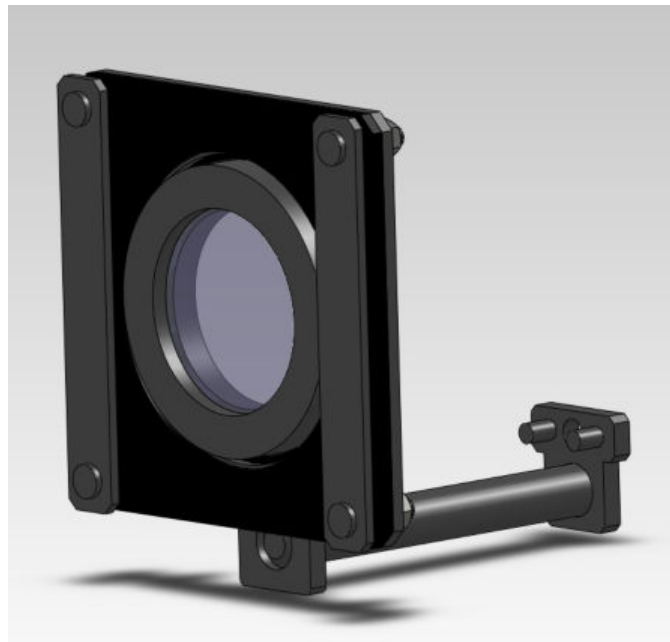
Figure 2-1: Drilling layout dimensions for duct installation



- A. Screw holes
- B. Duct hole
- C. Duct installation surface

2. Disassemble the Duct Mount.
 - a. See *Figure 2-2*. Open nuts (B and D) and washers (A and C).

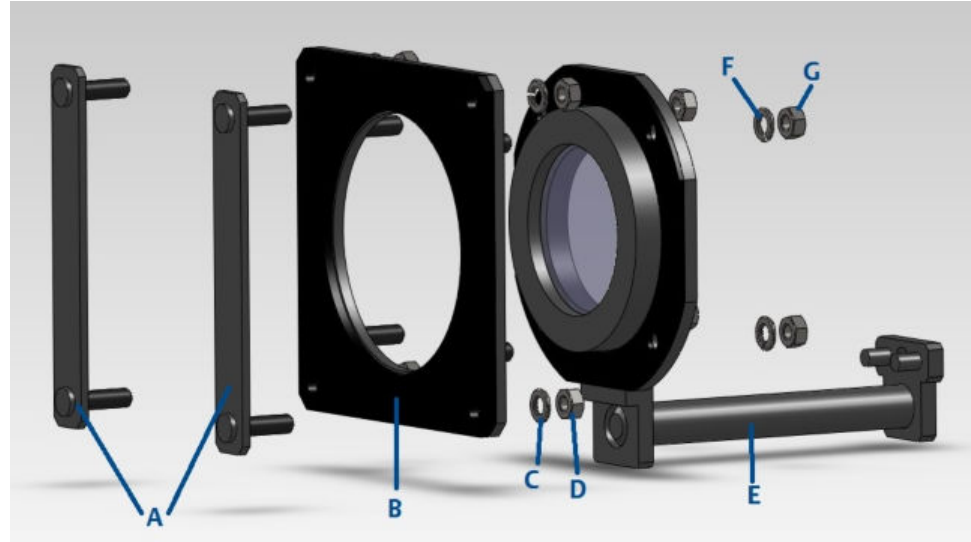
Figure 2-2: Duct Mount disassembly



- A. 4 spring washers M6
- B. 4 plate nuts M6
- C. 4 spring washers M6
- D. 4 base nuts M6

- b. See [Figure 2-3](#). Dismount internal plate (A) and base plate (B).

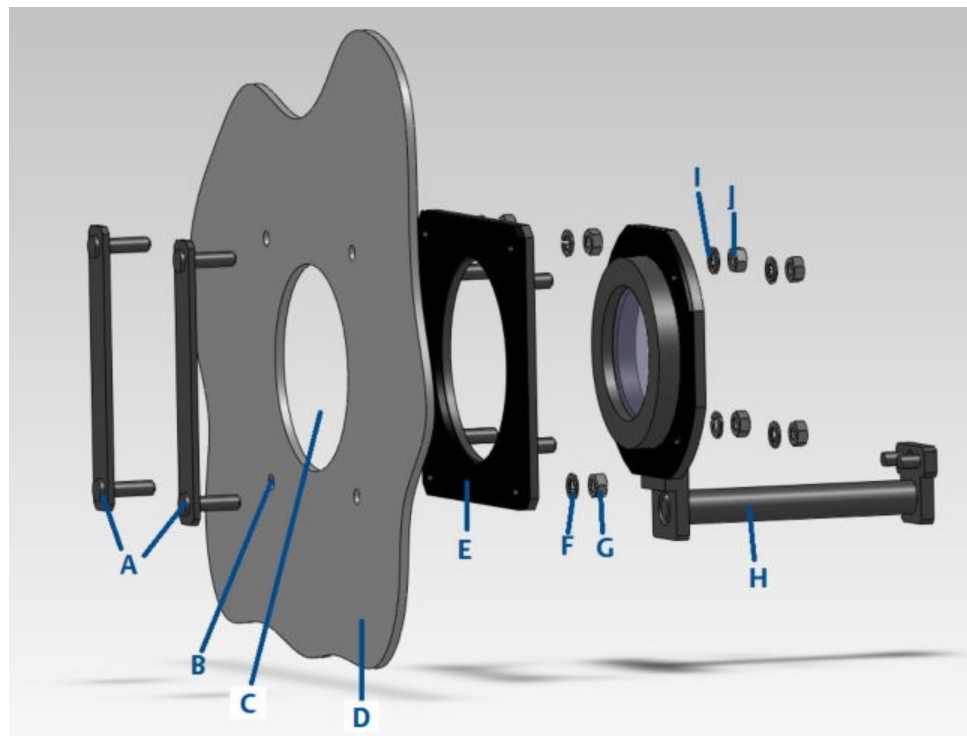
Figure 2-3: Duct Mount parts



- A. 2 internal plates
- B. Base plate
- C. 4 spring washers M6
- D. 4 plate nuts M6
- E. Duct mount base
- F. 4 spring washers M6
- G. 4 base nuts

3. Mount the Duct Mount ([Figure 2-4](#))
 - a. Insert the first internal plate (A) through the air duct hole (C).
 - b. Hold the first internal plate (A) by hand and press the base plate (E) to the installation surface against the internal plate.

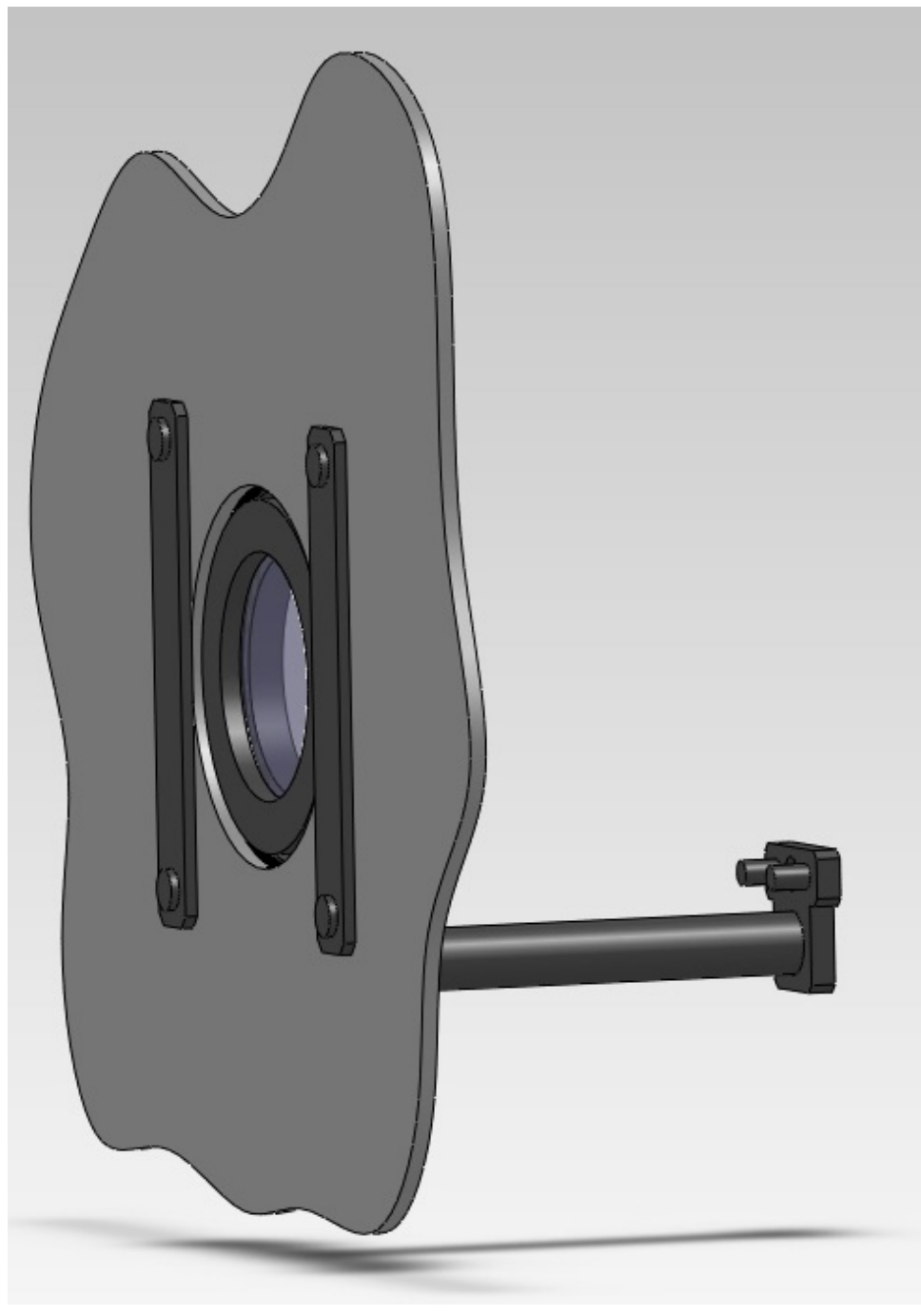
At the base plate (E), there is a gasket, which is glued.
 - c. Insert the internal plate screws into the gasket holes to prevent the internal plate from falling.
 - d. Secure the baseplate to the installation surface using four nuts (G) and washers (F).
 - e. Remove your hand and repeat substeps A-D for the second internal plate.
 - f. Attach the duct mount base (H) to the base plate (E) and secure it with washers (I) and nuts (J).

Figure 2-4: Duct Mount parts before final assembly

- A. Two internal plates
- B. Screw holes
- C. Air duct hole
- D. Duct installation surface
- E. Base plate
- F. 4 spring washers M6
- G. 4 plate nuts M6
- H. Duct mount base
- I. 4 spring washers M6
- J. 4 base nuts M6

The base plate (E) and duct mount base (H) are now connected. See [Figure 2-5](#).

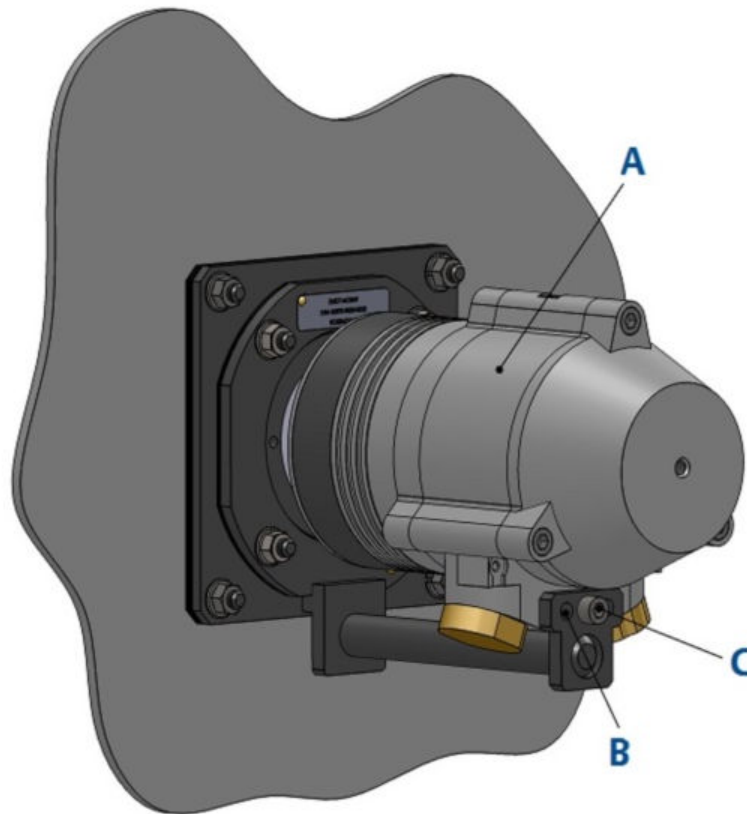
Figure 2-5: Duct Mount parts after assembly



4. Mount the detector ([Figure 2-6](#)). Insert the detector (A) at pin (B) and secure it using a screw (C).

Note

The screw (C) is already mounted on the detector and should be removed and reinstalled facing the other direction.

Figure 2-6: Detector mounted on Duct Mount

- A. Detector
 - B. Pin
 - C. Screw
-

3 Technical Support

For all technical assistance or support contact:

Emerson Process Management

6021 Innovation Boulevard

Shakopee, MN 55379-9795

U.S.A.

T +1 866 347 3427

F +952 949 7001

SAFETY.CSC@Emerson.com

www.EmersonProcess.com/FlameGasDetection

Rosemount

6021 Innovation Blvd.

Shakopee, MN 55379

Toll Free + 866 347 3427

F +1 952 949 7001

safety.csc@emerson.com

www.EmersonProcess.com/FlameGasDetection

EUROPE

Emerson Process Management

Neuhofstrasse 19a P.O. Box 1046

CH-6340 Baar

Switzerland

T + 41 (0) 41 768 6111

F + 41 (0) 41 768 6300

safety.csc@emerson.com

www.EmersonProcess.com/FlameGasDetection

MIDDLE EAST AND AFRICA

Emerson Process Management

Emerson FZE

Jebel Ali Free Zone

Dubai, United Arab Emirates, P.O. Box 17033

T +971 4 811 8100

F +971 4 886 5465

safety.csc@emerson.com

www.EmersonProcess.com/FlameGasDetection

ASIA-PACIFIC

Emerson Process Management

Asia Pacific Private Limited

1 Pandan Crescent

Singapore 128461

Singapore

T +65 777 8211

F +65 777 0947

safety.csc@emerson.com

www.EmersonProcess.com/FlameGasDetection

©2016 Rosemount. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Rosemount is a mark of one of the Emerson Process Management family of companies. All other marks are the property of their respective owners. The contents of this publication are presented for information purposes only, and, while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

ROSEMOUNT™



EMERSON™
Process Management