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CRN 0F21398.2; EXP. DATE 2031-04-14; ABSA TR# 2021-01641



Canadian Registration Number Submittal Category F: Swagelok M1, M2 Variable Area Flow Meters

March 24, 2021 Page 1 of 2

## Attachment B. Scope of Registration for Swagelok M1, M2 Model Variable Area Flow Meters (Category F)

## Product Scope

This document represents the scope of Swagelok's M1 and M2 model Variable Area Flowmeters covered by this CRN approval. These flowmeters have been evaluated in accordance with appropriate North American standards. See the table below for specific design codes of construction for each product series.

## **Product Description**





This stamp and signature have been affixed electronically to this registered design as required by Section 20(1) of the Pressure Equipment Safety Regulation, in accordance with the Electronic Transactions Act.

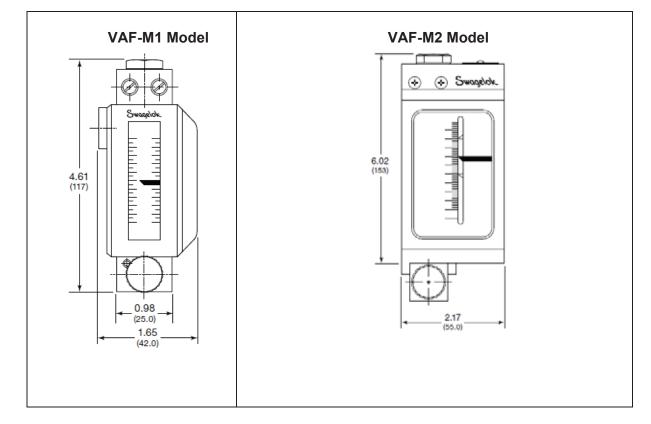
## Summary Table

Model	Material	Port Connections and Sizes	Max. Inlet Pressure at 70° F (psig)	Min. Temperature Rating (°F)	Max. Temperature Rating (°F)	Design Code of Construction
VAF-M1	316L SS	NPT 1/4"	1885	-4	302	ASME B31.3
VAF-M2	316L SS	NPT 1/4"	1885	-4	302	ASME B31.3



Canadian Registration Number Submittal Category F: Swagelok M1, M2 Variable Area Flow Meters March 24, 2021 Page 2 of 2

## Sample Drawings with Nominal Dimensions



## Product Options:

Additional options and non-pressure boundary alterations that do not affect the pressuretemperature ratings may be made available within the scope of this approval. Examples of these include the following:

- Gasket or O-ring materials
- Limit switches
- Top-mounted needle valve
- Silconert coating
- Special cleaning
- Electronic (LED) display

## **Quality System**

The Swagelok Company quality system complies with the requirements of EN ISO 9001:2015. The Swagelok Company maintains British Standards Institution Certificate of Registration Number FM 01729, which applies to all locations listed on the Certificate.

## **References**

The product catalog does not represent the full scope of the registration but rather details some of the most common options.

• Variable Area Flowmeters, G Series and M Series, Product Catalog MS-02-346 Rev. H

## CRN 0F21398.2; EXP. DATE 2031-04-14; ABSA TR# 2021-01641

Canadian Registration Number Submittal Page 1 of 1

# Attachment A. Manufacturing Locations

This document lists the location where end item manufacturing activities take place.

Krohne Messtechnik GmbH Ludwig-Krohne-Str. 5 47058 Duisburg Germany

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MANUFACTURERS ADDI		on Ohio 44130 USA	
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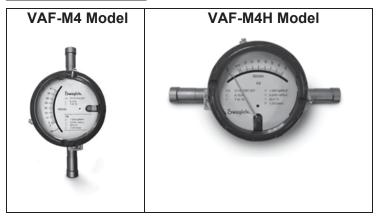
Canadian Registration Number Submittal Category F: Swagelok M4, M4H Variable Area Flowmeters March 24, 2021 Page 1 of 2

## Attachment B. Scope of Registration for Swagelok M4, M4H Model Variable Area Flowmeters (Category F)

### Product Scope

This document represents the scope of Swagelok's M4 and M4H model Variable Area Flowmeters covered by this CRN approval. These flowmeters have been evaluated in accordance with appropriate North American standards. See the table below for specific design codes of construction for each product series.

### Product Description



THIS IS PART OF CRN 0F23192.5 Technical Standards and Safety Authority Boilers and Pressure Vessels Safety Program

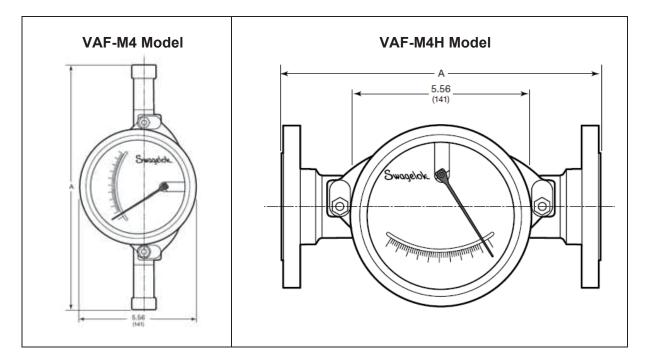
## Summary Table

Model	Material	Port Connections and Sizes	Max. Inlet Pressure at 70° F (psig)	Min. Temperature Rating (°F)	Max. Temperature Rating (°F)	Design Code of Construction
VAF-M4 (1/2 inch dia. Tube)	316L SS	NPT 1/2", 3/4" ASME flange 1/2", 3/4", 1"	2888	-40	572	ASME Section VIII Division 1, ASME B31.1, ASME B31.3
VAF-M4 (1 inch dia. Tube)	316L SS	NPT 3/4", 1" ASME flange 3/4", 1"	1393	-40	572	ASME Section VIII Division 1; ASME B31.1; ASME B31.3
VAF-M4H (1/2 inch dia. Tube)	316L SS	NPT 3/4" ASME flange 1/2", 3/4", 1"	2888	-40	572	ASME Section VIII Division 1; ASME B31.1; ASME B31.3
VAF-M4H (1 inch dia. Tube)	316L SS	NPT 1-1/4" ASME flange 1"	1393	-40	572	ASME Section VIII Division 1; ASME B31.1; ASME B31.3



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## Sample Drawings with Nominal Dimensions



### Product Options:

Additional options and non-pressure boundary alterations that do not affect the pressuretemperature ratings may be made available within the scope of this approval. Examples of these include the following:

- Gasket or O-ring materials
- Limit switches
- Top-mounted needle valve
- Silconert coating
- Special cleaning
- Electronic (LED) display

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### **Quality System**

The Swagelok Company quality system complies with the requirements of EN ISO 9001:2015. The Swagelok Company maintains British Standards Institution Certificate of Registration Number FM 01729, which applies to all locations listed on the Certificate.

### **References**

The product catalog does not represent the full scope of the registration but rather details some of the most common options.

• Variable Area Flowmeters, G Series and M Series, Product Catalog MS-02-346 Rev. H

# Attachment A. Manufacturing Locations

This document lists the location where end item manufacturing activities take place.

Krohne Messtechnik GmbH Ludwig-Krohne-Str. 5 47058 Duisburg Germany

