

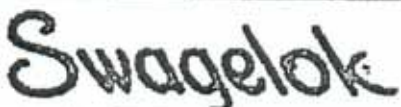
**FORM FOR THE REGISTRATION OF FITTING DESIGNS**

NEW BRUNSWICK  
NUNAVUT

NOVA SCOTIA  
YUKON

PRINCE EDWARD ISLAND  
NORTHWEST TERRITORIES

NEWFOUNDLAND AND LABRADOR

MANUFACTURER'S NAME: <u>Swagelok Company</u>	
MANUFACTURER'S ADDRESS: <u>29500 Solon Road, Solon, Ohio 44139 USA</u>	
PLANT LOCATIONS: <u>Headquarters: 29500 Solon Road, Solon, Ohio 44139 USA (See Attachment A)</u>	
<b>CATEGORY OF FITTINGS TO BE REGISTERED. CIRCLE ONE CATEGORY ONLY</b>	
A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps <input checked="" type="checkbox"/> F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs H Pressure retaining components that do not fall into one of the above categories N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> . (Meeting AECB or ASME requirements)	TITLE OF THE STANDARD OF CONSTRUCTION  <b>ASME B31.3</b>
SHOW MANUFACTURER'S NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON THE PRODUCT  	TYPE OF CONSTRUCTION FORGED <input type="checkbox"/> WELDED <input type="checkbox"/> WROUGHT IRON <input type="checkbox"/> CAST <input type="checkbox"/> OTHER <input type="checkbox"/> DESCRIBE OTHER:
LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL ITEMS TO BE REGISTERED: <u>ISO 9001:2015 Certificate, Attachment A, Attachment B, Catalog Information and other Support Documents</u>	

**DECLARATION:**

I, Joel Feldman, Vice President, Engineering (see note 3) employed by Swagelok Company and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true and to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by BSI as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Signature of Declarer:  3/25/2021 | 10:45 AM EDT


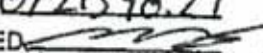
Declared before me at Unable to get a notary  
 This \_\_\_\_\_ day of signature or seal due to  
 Commissioner of Oaths or Notary Public: (sign) COVID-19 situation  
 (Affix Official seal to the right)

USE THIS SPACE FOR THE OFFICIAL SEAL

This space for Regulatory Authority use. This registration must be revalidated after ten (10) years from the date of compliance.

CRN: OF21398.2  
 FID#: 1214

Notes:  
 1. All fittings shall be registered in the name of the Manufacturer.  
 2. Each category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.  
 3. The declaration shall be made by the person having full authority and responsibility for the quality of the end product.  
 4. Quality control programs shall be resubmitted for validation at a maximum interval of five (5) years.

  
**Northwest Territories**  
 REGISTERED  
 UNDER THE AUTHORITY OF  
 THE BOILER AND PRESSURE  
 VESSEL ACT.  
 C.R.N. OF21398.2T  
 SIGNED   
 DATE April 30 2021

48200



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

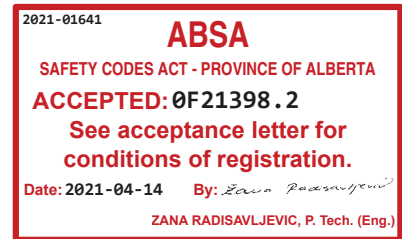
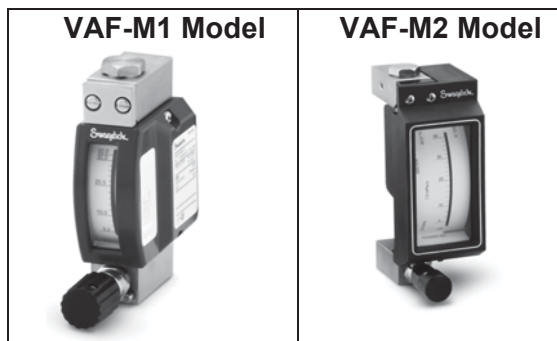
March 24, 2021  
Page 1 of 2

## 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

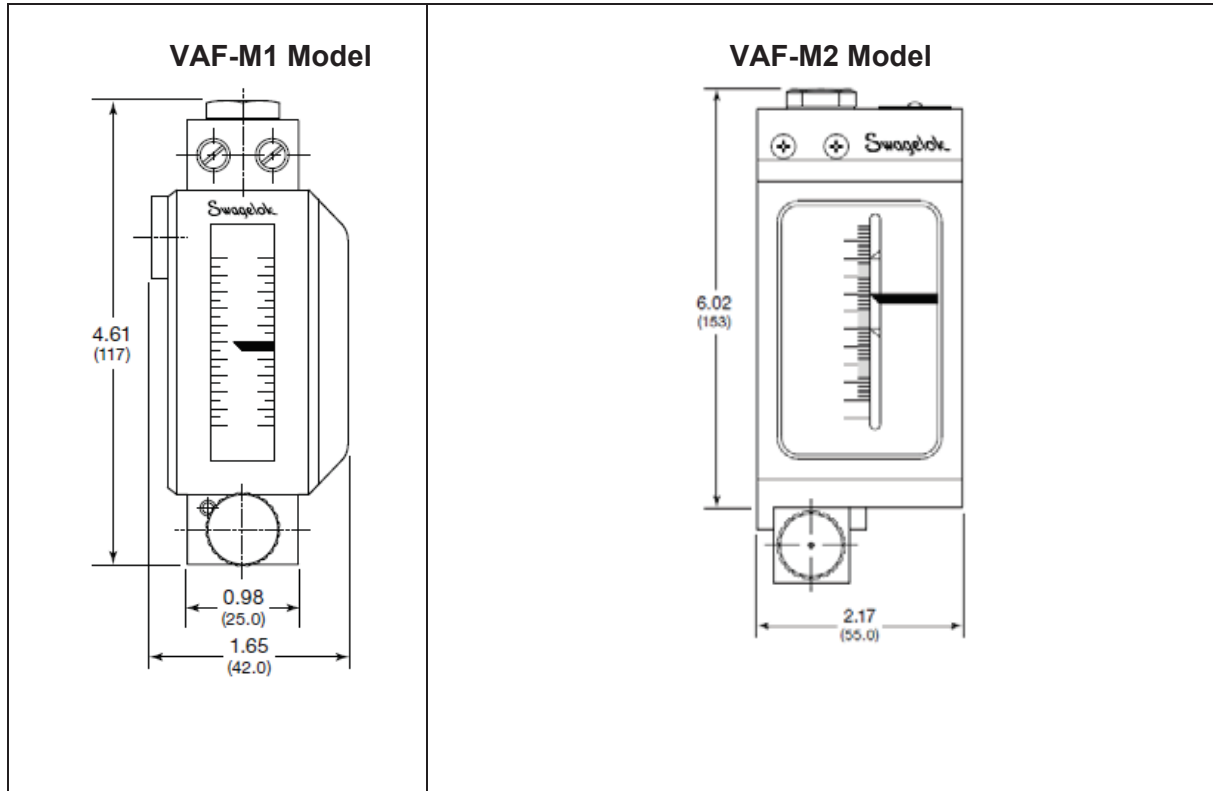
Model	Material	Port Connections and Sizes	Max. Inlet Pressure at 70° F (psig)	Min. Temperature Rating (°F)	Max. Temperature Rating (°F)	Design Code of Construction
VAF-M1	316L SS	NPT 1/4"	1885	-4	302	ASME B31.3
VAF-M2	316L SS	NPT 1/4"	1885	-4	302	ASME B31.3



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 pressure-temperature 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

## **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

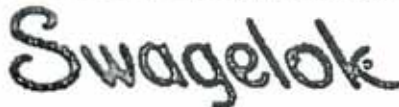
FORM FOR THE REGISTRATION OF FITTING DESIGNS

NEW BRUNSWICK  
NUNAVUT

NOVA SCOTIA  
YUKON

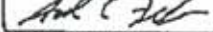
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NEWFOUNDLAND AND LABRADOR

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PLANT LOCATIONS: <u>Headquarters: 29500 Solon Road, Solon, Ohio 44139 USA (See Attachment A)</u>	
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A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps <input checked="" type="checkbox"/> F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs H Pressure retaining components that do not fall into one of the above categories N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> (Meeting AECB or ASME requirements)	TITLE OF THE BY-LAW/BOARD OF CONSTRUCTION  <u>ASME VIII Div 1, ASME B31.1, ASME B31.3</u>
SHOW MANUFACTURERS NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON THE PRODUCT	
	
TYPE OF CONSTRUCTION FORGED <input type="checkbox"/> WELDED <input type="checkbox"/> WROUGHT <input checked="" type="checkbox"/> CAST <input type="checkbox"/> OTHER <input type="checkbox"/> DESCRIBE OTHER:	
LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL ITEMS TO BE REGISTERED: <u>ISO 9001:2015 Certificate, Attachment A, Attachment B, Catalog Information and other Support Documents</u>	

DECLARATION:

I Joel Feldman, Vice President, Engineering (see note 3) employed by Swagelok Company and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true and to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by BSI as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Signature of Declarer:  3/20/2021 | 4:16 PM EDT


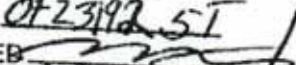
Declared before me at Unable to get a notary  
 This \_\_\_\_\_ day of \_\_\_\_\_ AD  
 signature or seal due to  
 Commissioner of Oaths  
 or Notary Public: (sign) COVID-19 situation  
 (Affix Official seal to the right)

USE THIS SPACE FOR THE  
OFFICIAL SEAL

This space for Regulatory Authority use  
 This registration must be revalidated after ten (10) years from the date of acceptance.

CRN: DF23192.5  
 FID#: 1214

Notes:  
 1. All fittings shall be registered in the name of the Manufacturer.  
 2. Each category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.  
 3. The declaration shall be made by the person having full authority and responsibility for the quality of the end product.  
 4. Quality control programs shall be resubmitted for validation at a maximum interval of five (5) years.

  
 Northwest Territories  
**REGISTERED**  
 UNDER THE AUTHORITY OF  
 THE BOILER AND PRESSURE  
 VESSEL ACT.  
 C.R.N. DF23192.51  
 SIGNED   
 DATE April 30, 2021

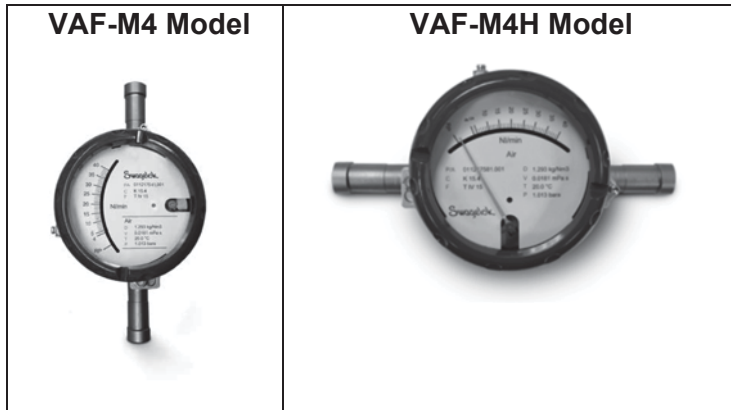
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**Attachment B. Scope of Registration for Swagelok M4, M4H Model  
 Variable Area Flowmeters (Category F)**

**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**

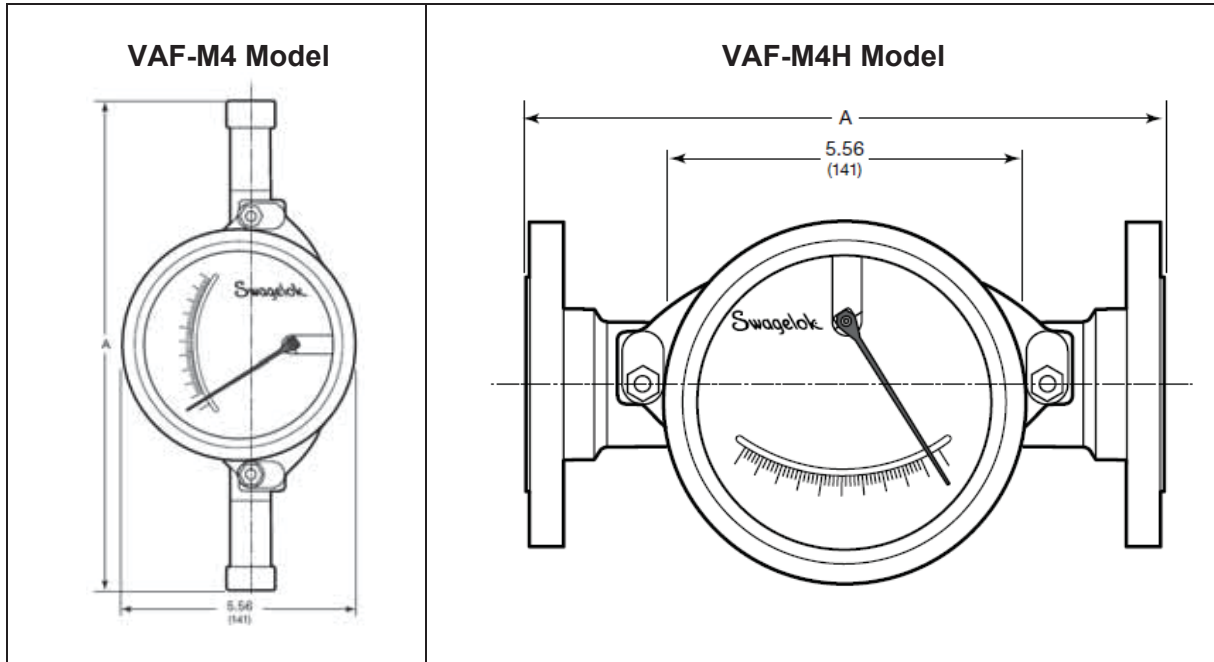


**THIS IS PART OF CRN  
 0F23192.5**  
 Technical Standards and Safety Authority  
 Boilers and Pressure Vessels Safety  
 Program

**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

## Sample Drawings with Nominal Dimensions



## Product Options:

Additional options and non-pressure boundary alterations that do not affect the pressure-temperature 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

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

## 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

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

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

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