

Intelligent Vortex Flowmeters

Kits for Converting to Vortex Model 84C – Ordering Master Instruction

MI 019-225

Release date July 24, 2020

Legal Information

The Schneider Electric brand and any trademarks of Schneider Electric SE and its subsidiaries referred to in this guide are the property of Schneider Electric SE or its subsidiaries. All other brands may be trademarks of their respective owners.

This guide and its content are protected under applicable copyright laws and furnished for informational use only. No part of this guide may be reproduced or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), for any purpose, without the prior written permission of Schneider Electric.

Schneider Electric does not grant any right or license for commercial use of the guide or its content, except for a non-exclusive and personal license to consult it on an "as is" basis. Schneider Electric products and equipment should be installed, operated, serviced, and maintained only by qualified personnel.

As standards, specifications, and designs change from time to time, information contained in this guide may be subject to change without notice.

To the extent permitted by applicable law, no responsibility or liability is assumed by Schneider Electric and its subsidiaries for any errors or omissions in the informational content of this material or consequences arising out of or resulting from the use of the information contained herein.

Important Information

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that accompany this symbol to avoid possible injury or death.

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

Failure to follow these instructions will result in death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Please Note

Electrical equipment should be installed, operated, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

Table of Contents

Introduction.....	7
Overview of Conversion.....	7
Qualification of Personnel	8
Kit Contents.....	8
Flowmeter Identification and Data Plate Management.....	9
Ordering Instructions.....	12
Identify and Record Info From Data Plates	12
Get Return Material Authorization.....	12
Configure Conversion Kit Using BuyAutomation	13
Building the Model Code of the Conversion Kit.....	18
Enter Tags in BuyAutomation	19
Model Codes	20
83V84CF (Flanged) Conversion Kit	20
83V84CW (Wafer) Conversion Kit	23

Introduction

This document contains instructions for ordering a conversion kit to convert an existing Model 83 flowmeter to a Model 84C. The kit allows you to convert an integral or remote Model 83 flanged or wafer Vortex flowmeter (Model 83F or 83W) in the field. The Model 83 to Model 84C conversion kits will include a new sensor for the 84CF or 84CW flowmeter.

Overview of Conversion

Although the preferred method of upgrading from a Vortex Model 83 to a Vortex Model 84C flowmeter is to return the complete flowmeter for an upgrade, this document describes the procedure for customers who must do the conversion in the field. Converting a flowmeter in the field requires that you call Global Customer Support and use the Return Material Authorization (RMA) procedure.

⚠ CAUTION

SUPPLY VOLTAGE HAZARD

Please note that the Model 84C electronics module has a higher compliance voltage than the existing Model 83 electronics module. Make sure your site accommodates the voltage requirements of the Model 84C electronics module (see PSS 1-8A8A, *Model 84C Product Specification Sheet*).

Failure to follow these instructions can result in injury or equipment damage.

The following steps provide a summary of the ordering and conversion process:

1. Locate the data plates on the flowmeter you want to convert to a Model 84C flowmeter and verify that the serial number and the K-Factor match on the flowmeter to be updated. The information on the data plates will be needed in the following steps.
NOTE: If the serial number and K-Factor do not match, that indicates you may have swapped major component parts from one flowmeter to another. In that case, the flowmeter cannot be converted to an 84C.
2. Contact Global Customer Support to open a Return Material Authorization (RMA) for the order.
3. Use your existing flowmeter model code from the Model 83 data plates and the RMA number to order your conversion kit using BuyAutomation.com. The conversion kit you order must have comparable options to your existing flowmeter.
4. When the conversion kit arrives, refer to the instructions in MI 019-226 to install the conversion kit in the field. The resulting flowmeter will have the Model 84C housing and will use the HART® communications protocol with 4 to 20 mA and pulse output capability.
5. To complete the RMA procedure, remove the data label(s) from the Model 83 topworks and from the junction box (for remotely mounted flowmeters only) and return the data label(s) to the factory authorized service personnel (FASP) or Technical Sales Consultant (TSC).

Details for each step in the ordering process are provided in this document and details for the installation of the conversion kit are provided in MI 019-226.

Qualification of Personnel

⚠ WARNING
<p>ELECTRICAL HAZARD AND POSSIBLE IMPACT ON SITE’S SAFETY CERTIFICATIONS</p> <ul style="list-style-type: none"> • Personnel involved in maintenance of Vortex meters must be trained and qualified in the use of the equipment required and in the removal and replacement of meter components. • Only authorized service providers, technical sales consultants, or other approved site leaders should perform this installation. Model 84C flowmeters must be installed to meet all applicable local installation regulations, such as hazardous location requirements, electrical wiring codes, and mechanical piping codes. Personnel involved in the installation must be trained in these code requirements. <p>Failure to follow these instructions can result in death or serious injury and can impact site safety certifications.</p>

Kit Contents

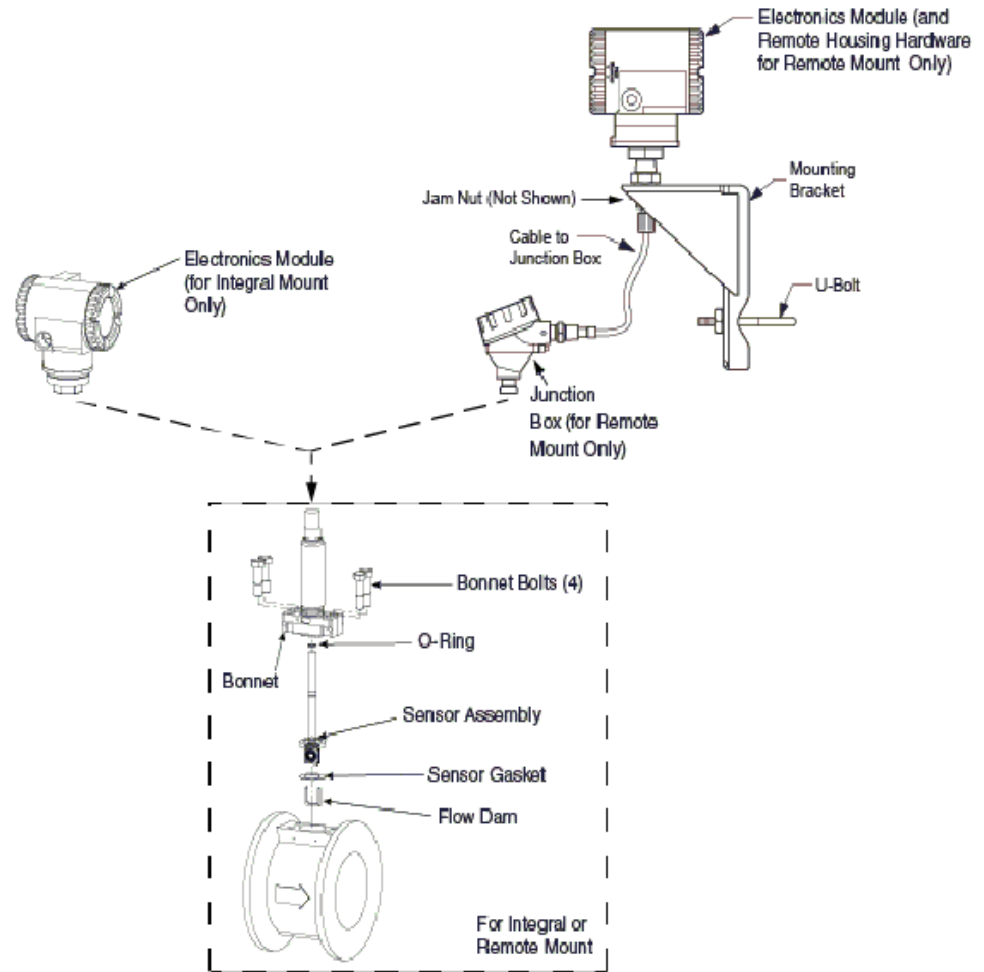
The conversion kit contents are shipped according to the model code of the conversion kit you order.

Table 1 - Model 83 to Model 84C Conversion Kit Contents (83V84CF or 83V84CW)

Description	Quantity ¹
Bonnet bolts	4
Sensor gasket	1
O-ring	1
Flow dam	1
Bonnet	1
Model 84C (topworks), with Vortex sensor attached. Includes: ² <ul style="list-style-type: none"> • Model 84C Electronics Module • Data Plate 	1
Junction box with data plate (for remotely mounted flowmeters only)	1
Remote mounting hardware (for remotely mounted flowmeters only)	1

1. Quantities are for single measurement. Quantities for all items except Instructions are doubled for dual measurement.
 2. All Model 83 to 84C conversion kits include a new sensor.

Figure 1 - Kit Contents for Model 83 to Model 84C Conversion Kits



Flowmeter Identification and Data Plate Management

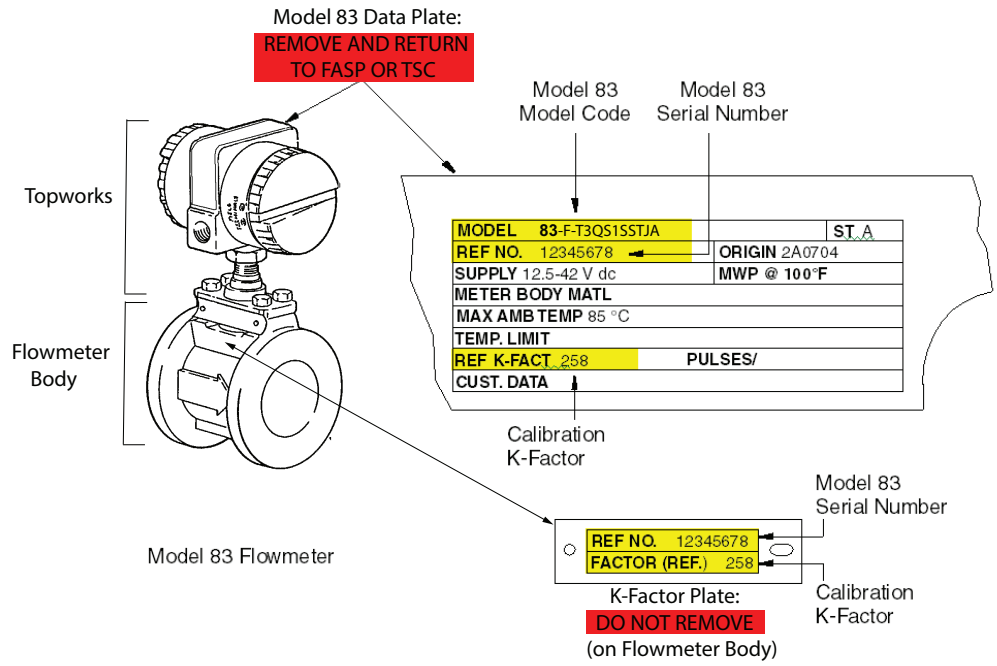
This section shows the data plates on the different flowmeters before and after the conversion kit is installed.

Model 83 Data Plates

Data Plates on Model 83 Flowmeter, page 10 shows the data plates on your existing Model 83 flowmeter. The Model 83 data plate is located on the topworks and the K-Factor plate is on the flowmeter body. During the installation process you will remove the data plate on the Model 83 topworks. It will be return it to Schneider Electric using the RMA after the installation is complete.

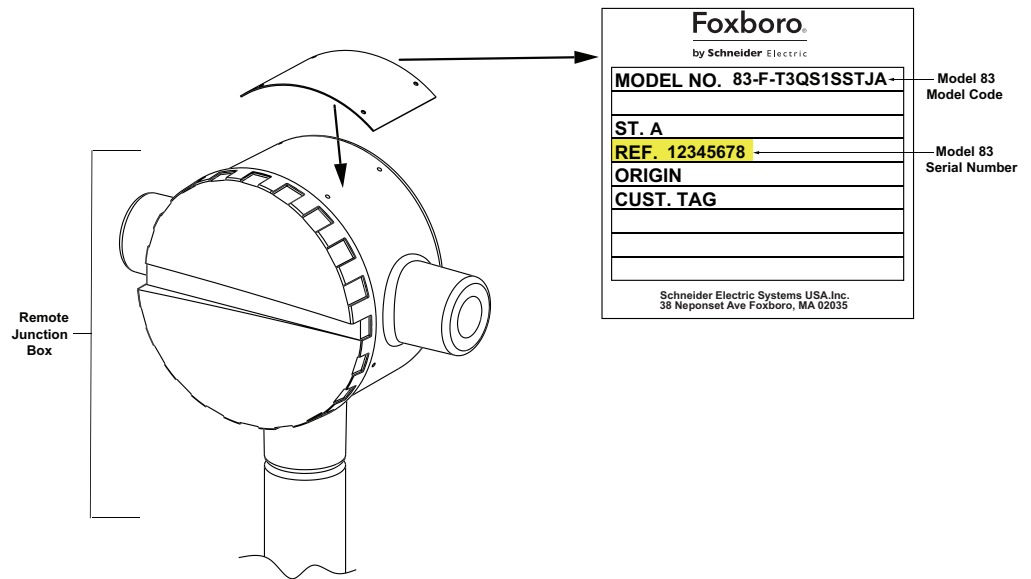
NOTE: DO NOT remove the K-Factor data plate from the existing Model 83 flowmeter body!

Figure 2 - Data Plates on Model 83 Flowmeter



Label on Junction Box for Remote Installation of Model 83, page 10 shows the label on the top of the junction box for a remotely mounted Model 83. After the new junction box is installed, you will remove this label and return it to Schneider Electric using the RMA.

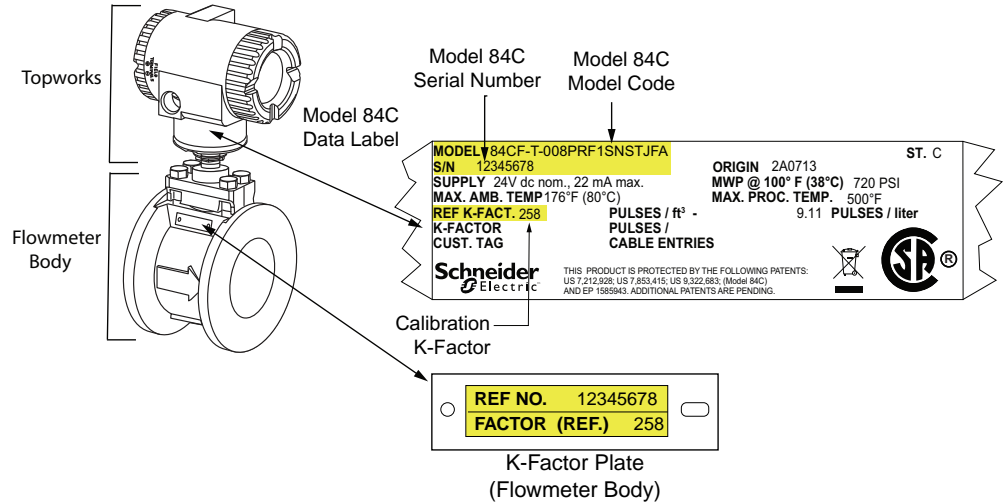
Figure 3 - Label on Junction Box for Remote Installation of Model 83



Model 84C Data Plates

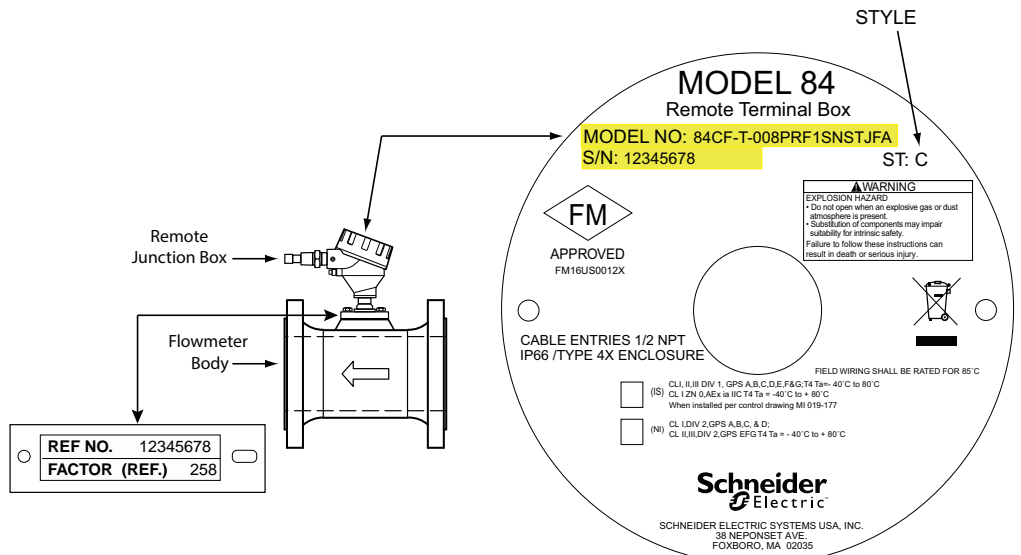
Data Plates on Model 84C Flowmeter, page 11 shows the data plates on your newly converted Model 84C flowmeter. The Model 84C data plate is located on the topworks and the K-Factor data plate is on the existing flowmeter body.

Figure 4 - Data Plates on Model 84C Flowmeter



For remotely mounted flowmeters, you will receive a new junction box with the data plate installed (see Label on Junction Box for Remote Installation of Model 84C, page 11).

Figure 5 - Label on Junction Box for Remote Installation of Model 84C



Ordering Instructions

You order the conversion kit based on the model code of your existing Model 83 flowmeter.

NOTE: Be aware that not all Model 83 model code configurations are available with the Model 84C conversion kits. Refer to the Model Code tables in this manual to verify that your flowmeter is eligible for the conversion.

After recording the existing hardware's model code, serial number, and K-Factor, call Global Customer Support to obtain a Return Materials Authorization (RMA), and then go to Buyautomation.com to configure the conversion kit.

Identify and Record Info From Data Plates

Record key information from data plates in preparation for ordering your Conversion Kit:

1. Identify the Model 83 flowmeter to be converted to a Model 84C flowmeter.

NOTE: If your Model 83 flowmeter has a dual measurement manifold (option D) or a single manifold with an isolation valve (option K), contact Global Customer Support for availability of these options in the Conversion Kits.
2. Using the images in *Flowmeter Identification and Data Plate Management*, page 9, verify that the serial number (labeled REF NO. OR S/N) and the K-Factor (labeled REF K-FACT or FACTOR (REF.)) match on the Model 83 data plate, the Model 83 K-Factor label, and for remote versions, the label on the junction box.
 - If the serial number and K-Factor match on all these labels, proceed with ordering the conversion kit by recording the model code, serial number, and K-Factor of the Model 83 flowmeter to be converted. You will need this information when ordering the conversion kit.
 - If the serial number and K-Factor do not match on all these labels, a conversion kit cannot be ordered because it is likely that you have already swapped major component parts from the flowmeter of interest to another flowmeter.

Get Return Material Authorization

To obtain your Return Material Authorization number so that you can return the data plate(s) from the existing Model 83 flowmeter:

1. Call Global Customer Support to open a Return Material Authorization (RMA). Call 1-866-746-6477 inside the U.S. or 1-508-549-2424 outside the U.S.
2. Choose the **Repair** option when prompted.
3. Record the RMA number you are given as you will need it when ordering the conversion kit on BuyAutomation.com.

Configure Conversion Kit Using BuyAutomation

To order your Conversion Kit on BuyAutomation.com:

NOTE: You must place a separate order for each conversion kit purchased.

1. Go to www.buyautomation.com.
2. Enter the conversion kit number (83V84CF for flanged or 83V84CW for wafer) or search for “conversion kit”.
3. Select the conversion kit to be ordered (83V84CF for flanged or 83V84CW for wafer). The options available for the selected conversion kit display in BuyAutomation.
4. Go to **Selections** and choose the desired options for the new conversion kit based on your existing Model 83 flowmeter model code. Use the following tables to configure the new conversion kit. The column on the left shows the Model Code selections for your existing Model 83 flowmeter and the column on the right shows the Model Code selections that should be entered when you order the conversion kit on BuyAutomation.

Table 2 - Configure the 83V84CF (Flanged) Conversion Kit

If the Value in the Model Code for the Model 83F is:	>>	Then, select the following Value in BuyAutomation to configure Conversion Kit 83V84CF: ³
Selection Name		
Electronic/Protocol Type: The default option is –T. The resulting flowmeter will use the HART communication protocol with 4 to 20 mA and pulse output capability.		
–T	>>	–T
Nominal Line Size: Choose the same nominal line size as the existing Model 83 flowmeter.		
3Q	>>	-008
01	>>	–010
1H	>>	–015
02	>>	–020
03	>>	–030
04	>>	–040
06	>>	–060
08	>>	–080
10	>>	–100
12	>>	–120
Pulse Output: No selection was needed for Model 83, but the Model 84C Model Code needs this selection.		
Not specified	>>	P
Body and Flange Material: Choose the same body and flange material as the existing Model 83 flowmeter. BuyAutomation will provide descriptions to help you make the correct selection.		
S	>>	R, Y, or E
End Connection: Choose the same end connection option as the existing Model 83 flowmeter.		
1	>>	F1
2	>>	F2
3	>>	F3
D	>>	B1
F	>>	B3
G	>>	B6
H	>>	B7
Single or Dual Measurement and Isolation Manifold: Choose the same single or dual measurement and isolation manifold option as the existing Model 83 flowmeter.		
S	>>	S
D	>>	D ⁴
K	>>	K ⁴
Multi-Variable Selections: No selection was needed for Model 83, but the Model 84C Model Code needs this selection.		
Not specified	>>	N

3. For detailed information on the Conversion Kit Model Code, see 83V84CF (Flanged) Conversion Kit, page 20

4. Contact Global Customer Support for availability.

Table 2 - Configure the 83V84CF (Flanged) Conversion Kit (Continued)

If the Value in the Model Code for the Model 83F is:	>>	Then, select the following Value in BuyAutomation to configure Conversion Kit 83V84CF: ⁵
Sensor Fill, Temperature Range, and Material: Choose the same sensor fill, temperature range, and material option as the existing Model 83 flowmeter.		
D	>>	D
F	>>	F
R	>>	R
S	>>	S
C	>>	E
T	>>	G
Mounting/Conduit Openings for Electronic Housing: Choose the appropriate mounting/conduit openings for electronic housing option. Two new options, V and W have been added to the Conversion Kit.		
T	>>	T or V
R	>>	R or W
Display/Output Indicator: Choose the local digital indicator/configurator preference. If your existing Model 83 flowmeter does not have a digital indicator, you can add one to the conversion kit. Choose N to order the conversion kit without a digital indicator or choose J to order the kit with a digital indicator.		
N	>>	N
J	>>	J
Electrical Certifications: The Electrical Certifications for the Model 84C flowmeter are more narrowly defined than the Model 83 electrical safety specifications. Choose the Electrical Certification that applies to your configuration.		
A	>>	CA - CSA Intrinsically Safe CD - CSA Explosionproof CN - CSA Division 2 FA - FM Intrinsically Safe FD - FM Explosionproof FN - FM Nonincendive
E	>>	AA - ATEX Intrinsically Safe
Z	>>	YY - CE mark; PED control and records ZZ - No CE mark; Do not install in European Union countries
Optional Cable Length for Remote Mounted Electronics: Choose the same optional cable length for remote mounted electronics option as the existing Model 83 flowmeter.		
-B	>>	-B
-D	>>	-D
-E	>>	-E
-G	>>	-G
Optional Cable Connections: Choose the same optional cable connections option as the existing Model 83 flowmeter.		
-P	>>	-P

5. For detailed information on the Conversion Kit Model Code, see 83V84CF (Flanged) Conversion Kit, page 20

Table 2 - Configure the 83V84CF (Flanged) Conversion Kit (Continued)

If the Value in the Model Code for the Model 83F is:	>>	Then, select the following Value in BuyAutomation to configure Conversion Kit 83V84CF:⁶
Optional Sensor Plating: Choose the same optional cable connections option as the existing Model 83 flowmeter.		
-J	>>	-J

Table 3 - Configure the 83V84CW (Wafer) Conversion Kit

If the Value in the Model Code for the Model 83F is:	>>	Then, select the following Value in BuyAutomation to configure Conversion Kit 83V84CW:⁷
Selection Name		
Electronic/Protocol Type: The default option is -T. The resulting flowmeter will use the HART communication protocol with 4 to 20 mA and pulse output capability.		
-T	>>	-T
Nominal Line Size: Choose the same nominal line size as the existing Model 83 flowmeter.		
3Q	>>	-008
01	>>	-010
1H	>>	-015
02	>>	-020
03	>>	-030
04	>>	-040
06	>>	-060
08	>>	-080
Pulse Output: No selection was needed for Model 83, but the Model 84C Model Code needs this selection.		
Not specified	>>	P
Body and Shedder Material: Choose the same body and shedder material as the existing Model 83 flowmeter.		
S	>>	R
H	>>	H
Mounting and End Connection: Choose the same end connection option as the existing Model 83 flowmeter.		
1	>>	W1
9	>>	W9
3	>>	W3
4	>>	W4
5	>>	W5
Isolation Manifold: Choose the same isolation manifold option as the existing Model 83 flowmeter.		
S	>>	S
K	>>	K ⁸

6. For detailed information on the Conversion Kit Model Code, see 83V84CF (Flanged) Conversion Kit, page 20
 7. For detailed information on the Conversion Kit Model Code, see 83V84CW (Wafer) Conversion Kit, page 23
 8. Contact Global Customer Support for availability.

Table 3 - Configure the 83V84CW (Wafer) Conversion Kit (Continued)

If the Value in the Model Code for the Model 83F is:	>>	Then, select the following Value in BuyAutomation to configure Conversion Kit 83V84CW: ⁹
<p align="center">Multi-Variable Selections: No selection was needed for Model 83, but the Model 84C Model Code needs this selection.</p>		
Not specified	>>	N
<p align="center">Sensor Fill, Temperature Range, and Material: Choose the same sensor fill, temperature range, and material option as the existing Model 83 flowmeter.</p>		
D	>>	D
F	>>	F
R	>>	R
S	>>	S
C	>>	E
T	>>	G
<p align="center">Mounting/Conduit Openings for Electronic Housing: Choose the appropriate mounting/conduit openings for electronic housing option. Two new options, V and W have been added to the Conversion Kit.</p>		
T	>>	T or V
R	>>	R or W
<p align="center">Display/Output Indicator: Choose the local digital indicator/configurator preference. If your existing Model 83 flowmeter does not have a digital indicator, you can add one to the conversion kit. Choose N to order the conversion kit without a digital indicator or choose J to order the kit with a digital indicator.</p>		
N	>>	N
J	>>	J
<p align="center">Electrical Certifications: The Electrical Certifications for the Model 84C flowmeter are more narrowly defined than the Model 83 electrical safety specifications. Choose the Electrical Certification that applies to your configuration.</p>		
A	>>	CA - CSA Intrinsically Safe CD - CSA Explosionproof CN - CSA Division 2 FA - FM Intrinsically Safe FD - FM Explosionproof FN - FM Nonincendive
E	>>	AA - ATEX Intrinsically Safe
Z	>>	YY - CE mark; PED control and records ZZ - No CE mark; Do not install in European Union countries
<p align="center">Optional Cable Length for Remote Mounted Electronics: Choose the same optional cable length for remote mounted electronics option as the existing Model 83 flowmeter.</p>		
-B	>>	-B
-D	>>	-D
-E	>>	-E
-G	>>	-G
<p align="center">Optional Cable Connections: Choose the same optional cable connections option as the existing Model 83 flowmeter.</p>		

9. For detailed information on the Conversion Kit Model Code, see 83V84CW (Wafer) Conversion Kit, page 23

Table 3 - Configure the 83V84CW (Wafer) Conversion Kit (Continued)

If the Value in the Model Code for the Model 83F is:	>>	Then, select the following Value in BuyAutomation to configure Conversion Kit 83V84CW:¹⁰
-P	>>	-P
Optional Sensor Plating: Choose the same optional cable connections option as the existing Model 83 flowmeter.		
-J	>>	-J

NOTE: When you receive your conversion kit and prepare to install it, be sure to make note of the original Model 83 flowmeter’s configuration and settings. When the conversion kit arrives, begin by confirming the new Model 84C model number and Reference K-Factor located on the new Model 84C data plate are entered into the Model 84C electronics. Then, continue with configuring the application data and range. For more information, see MI 019–226, *Kits for Converting to Vortex Model 84C – Installing*.

Building the Model Code of the Conversion Kit

The table shows an example of how to build the model code for the 83V84CF Conversion Kit (flanged) being ordered to replace an existing Model 83F flowmeter. With each row, the next option in the model code is added to build out the conversion kit model code.

Table 4 - Building the 83V84CF Conversion Kits Model Code from an Existing Model 83F Model Code

Model 83F Flowmeter	Option	83V84CF Conversion Kit	Option
83F	Flanged	83V84CF	Flanged
83F-T	HART Communication Protocol	83V84CF-T	HART Communication Protocol
83F-T02	2 in (50 mm) Line Size	83V84CF-T-020	2 in (50 mm) Line Size
83F-T02	Not specified ¹¹	83V84CF-T-020P	Pulse Output
83F-T02S	Cast 316ss (CF8M) Material	83V84CF-T-020PR	Cast 316ss (CF8M) Material
83F-T02S1	ANSI Class 150 End Connection	83V84CF-T-020PRF1	ANSI Class 150 End Connection
83F-T02S1S	Single measurement; no isolation valve	83V84CF-T-020PRF1S	Single measurement; no isolation valve
83F-T02S1S	Not specified ¹²	83V84CF-T-020PRF1SN	Multi-variable - None
83F-T02S1SD	Standard temperature; fluorolube fill	83V84CF-T-020PRF1SND	Standard temperature; fluorolube fill
83F-T02S1SDR	Remote mounted	83V84CF-T-020PRF1SNDR	Remote mounted
83F-T02S1SDRN	No digital display	83V84CF-T-020PRF1SNDRN	No digital display
83F-T02S1SDRNA	FM Intrinsically Safe	83V84CF-T-020PRF1SNDRNFA	FM Intrinsically Safe
83F-T02S1SDRNA-B	20 foot remote cable	83V84CF-T-020PRF1SNDRNFA-B	20 foot remote cable
83F-T02S1SDRNA-BJ	Gold-plated sensor	83V84CF-T-020PRF1SNDRNFA-BJ	Gold-plated sensor

10. For detailed information on the Conversion Kit Model Code, see 83V84CW (Wafer) Conversion Kit, page 23
 11. No selection was needed for Pulse Output in the Model 83. A selection is required for the conversion kits.
 12. No selection was needed for Multi-variable Selection in the Model 83. A selection is required for the conversion kits.

Enter Tags in BuyAutomation

From BuyAutomation.com, select the TAGS item and enter the required information on the Tag Menu. This information is required for tracking purposes.

NOTE: You must place a separate order for each conversion kit purchased.

1. Select TAGS.
2. On the Tag Menu that appears, enter the following:
 - **Serial Number of the existing Model 83 flowmeter** (obtained from the REF NO on the Model 83 data plate or the K-Factor data plate).
 - **K-Factor of the of the existing Model 83 flowmeter** (obtained from the REF K-FACTOR on the Model 83 data plate or FACTOR (REF.) on the K-Factor data plate).
 - **RMA #** (obtained in Get Return Material Authorization, page 12).
3. Also, enter the following information on the Tag Menu:
 - Customer Tag
 - Customer Item
 - Manufacturing Notes

Model Codes

These tables list all of the options for the Model 83 to Model 84C Conversion Kits.

83V84CF (Flanged) Conversion Kit

Table 5 - Model Code for 83V84CF (Flanged) Conversion Kit

Code	Description
Electronics Version	
83V84CF-T	HART Communication and 4 to 20 mA Output
Nominal Line Size	
008	DN15; 15 mm (3/4 in)
010	DN25; 25 mm (1 in)
015	DN40; 40 mm (1 1/2 in)
020	DN50; 50 mm (2 in)
030	DN80; 80 mm (3 in)
040	DN100; 100 mm (4 in)
060	DN150; 150 mm (6 in)
080	DN200; 200 mm (8 in)
100	DN250; 250 mm (10 in)
120	DN300; 300 mm (12 in)
Pulse Output	
P	Pulse Output Capability
Body, Shedder Bar, and Flange Material	
R	ASTM A351-CF8M (Cast 316 ss) Body and Shedder Bar <ul style="list-style-type: none"> 316 ss Flanges for Line Sizes 008 to 040 304 ss Flanges for Line Sizes 060 to 080
E	Fabricated 304 ss Body and Shedder Bar, with 304 ss Flanges (Line Sizes 100 to 120)
Y	316 ss with face-to-face lengths that are backwards compatible with Style A Model 84 Vortex Flowmeters ¹³ <ul style="list-style-type: none"> For Line Sizes 008 to 040, Cast 316 ss (CF8M) Body and Shedder Bar with 316 ss Flanges Line Sizes 060 to 120 already have backward-compatible face-to-face lengths
End Connections and Flange Pressure Rating	
F1	ANSI Class 150 Raised Face
F2	ANSI Class 300 Raised Face
F3	ANSI Class 600 Raised Face
B1	PN16 EN1092-1 Raised Face Finish Type B1 (not available with Line Sizes 008 to 040)
B3	PN40 EN1092-1 Raised Face Finish Type B1
B6	PN63 EN1092-1 Raised Face Finish Type B2 (not available with Line Sizes 008 to 015) ¹⁴
B7	PN100 EN1092-1 Raised Face Finish Type B2 ¹⁵

13. Selection Y is recommended *only* for replacement of Style A flowmeters that have lay-length differences greater than ± 6.35 mm (1/4 inch).

14. For Line Sizes 008, 010, and 015, select End Connection B7.

15. Use End Connectoin B7 for line sizes 008, 010, and 012..

Table 5 - Model Code for 83V84CF (Flanged) Conversion Kit (Continued)

Code	Description
Single or Dual Measurement; Isolation Manifold	
S	Single Measurement; No Isolation Manifold
D	Dual Measurement; with Isolation Manifold ¹⁶
K	Single Measurement, with Isolation Manifold ASTM A351-CF8M (316 ss) ¹⁶
Multivariable Selection	
N	None
Sensor Fill, Temperature Range, and Material	
Standard Temperature Range (with Fill Fluid)	
D	Fluorolube Fill, -18 to +93°C (0 to 200°F), Cast Nickel Alloy CW2M ¹⁷
F	Fluorolube Fill, -18 to +93°C (0 to 200°F), Cast Stainless Steel CF3M
R	Silicone Fill, -18 to +204°C (0 to 400°F), Cast Nickel Alloy CW2M ¹⁷
S	Silicone Fill, -18 to +204°C (0 to 400°F), Cast Stainless Steel CF3M
Extended Temperature Range (No Fill Fluid)	
E	Unfilled, 149 to 427°C (300 to 800°F), Cast Nickel Alloy CW2M ¹⁷
G	Unfilled, 149 to 427°C (300 to 800°F), Cast Stainless Steel CF3M
Mounting and Conduit Openings for Electronics Housing	
T	Aluminum, Integral, Top-Mounted, with 1/2 NPT Conduit Connections
V	Aluminum, Integral, Top-Mounted, with M20 Conduit Connections
R	Aluminum, Remote-Mounted, with 1/2 NPT Conduit Connections ¹⁸
W	Aluminum, Remote-Mounted, with M20 Conduit Connections ¹⁸
Local Digital Indicator/Configurator	
N	No Digital Indicator/Configurator
J	Digital Indicator/Configurator
Electrical Certifications¹⁹	
AA	ATEX Intrinsically Safe
CA	CSA Intrinsically Safe
CD	CSA Explosionproof
CN	CSA Division 2
FA	FM Intrinsically Safe
FD	FM Explosionproof
FN	FM Nonincendive
YY	CE mark only; PED controls and records
ZZ	No CE mark; Do not install in European Union countries

16. Contact Global Customer Support for availability.

17. Equivalent to Hastelloy® C-4C. Hastelloy is a registered trademark of Haynes International, Inc.

18. For remote mounting, select a cable length with the Cable for Connecting to Remote-Mounted Electronics option.

19. For detailed information or status of testing laboratory approvals/certifications, contact Global Customer Support

Table 5 - Model Code for 83V84CF (Flanged) Conversion Kit (Continued)

Code	Description
Cable for Connecting to Remote-Mounted Electronics (Optional)²⁰	
-B	6 m (20 ft) Cable
-D	9 m (30 ft) Cable
-E	12 m (40 ft) Cable
-G	15 m (50 ft) Cable
Cable Connectors — with Mounting and Conduit Openings for Electronics Housing codes T and R only (1/2 NPT)	
-P	Hawke Cable Gland (available only with Electrical Certifications YY and ZZ)
Miscellaneous Optional Selections	
-J	Gold-Plated Sensor

20. For remote mounting, select a cable length with the Cable for Connecting to Remote-Mounted Electronics option.

83V84CW (Wafer) Conversion Kit

Table 6 - Model Code for 83V84CW (Wafer) Conversion Kit

Code	Description
Electronics Version	
83V84CW-T	HART Communication and 4 to 20 mA Output
Nominal Line Size	
008	DN15; 15 mm (3/4 in)
010	DN25; 25 mm (1 in)
015	DN40; 40 mm (1 1/2 in)
020	DN50; 50 mm (2 in)
030	DN80; 80 mm (3 in)
040	DN100; 100 mm (4 in)
060	DN150; 150 mm (6 in)
080	DN200; 200 mm (8 in)
Pulse Output	
P	Pulse Output Capability
Body and Shedder Bar Material	
R	ASTM A351-CF8M (Cast 316 ss) Body and Shedder Bar
H	ASTM A494-CW2M (Nickel Alloy) Body and Shedder Bar ²¹ (Line Sizes 008 to 040)
Mounting and Centering System	
W1	Centering for: <ul style="list-style-type: none"> ANSI Class 150, 300, and 600 Flanges (Line Sizes 008 to 040) PN16 Flanges (Line Sizes 010 to 030) PN40 Flanges (Line Sizes 010 to 030, 060, and 080) PN63 and PN100 Flanges (All Line Sizes)
W3	Centering for ANSI Class 600 Flanges (Line Sizes 060 to 080)
W4	Centering for PN16 Flanges (Line Sizes 040 to 080)
W5	Centering for PN40 Flanges (Line Size 040)
W9	Centering for PN16 and PN40 Flanges (Line Size 008)
Single or Dual Measurement; Isolation Manifold	
S	Single Measurement; No Isolation Manifold
K	Single Measurement, with Isolation Manifold ASTM A351-CF8M (316 ss) ²²
Multivariable Selection	
N	None

21. Equivalent to Hastelloy® C-4C. Hastelloy is a registered trademark of Haynes International, Inc.

22. Contact Global Customer Support for availability

Table 6 - Model Code for 83V84CW (Wafer) Conversion Kit (Continued)

Code	Description
Sensor Fill, Temperature Range, and Material	
Standard Temperature Range (with Fill Fluid)	
D	Fluorolube Fill, -18 to +93°C (0 to 200°F), Cast Nickel Alloy CW2M ²³
F	Fluorolube Fill, -18 to +93°C (0 to 200°F), Cast Stainless Steel CF3M
R	Silicone Fill, -18 to +204°C (0 to 400°F), Cast Nickel Alloy CW2M ²³
S	Silicone Fill, -18 to +204°C (0 to 400°F), Cast Stainless Steel CF3M
Extended Temperature Range (No Fill Fluid)	
E	Unfilled, 149 to 427°C (300 to 800°F), Cast Nickel Alloy CW2M ²³
G	Unfilled, 149 to 427°C (300 to 800°F), Cast Stainless Steel CF3M
Mounting and Conduit Openings for Electronics Housing	
T	Aluminum, Integral, Top-Mounted, with 1/2 NPT Conduit Connections
V	Aluminum, Integral, Top-Mounted, with M20 Conduit Connections
R	Aluminum, Remote-Mounted, with 1/2 NPT Conduit Connections ²⁴
W	Aluminum, Remote-Mounted, with M20 Conduit Connections ²⁴
Local Digital Indicator/Configurator	
N	No Digital Indicator/Configurator
J	Digital Indicator/Configurator
Electrical Certifications²⁵	
AA	ATEX Intrinsically Safe
CA	CSA Intrinsically Safe
CD	CSA Explosionproof
CN	CSA Division 2
FA	FM Intrinsically Safe ²⁶
FD	FM Explosionproof
FN	FM Nonincendive
YY	CE mark only; PED controls and records
ZZ	No CE mark; Do not install in European Union countries
Cable for Connecting to Remote-Mounted Electronics (Optional)²⁷	
-B	6 m (20 ft) Cable
-D	9 m (30 ft) Cable
-E	12 m (40 ft) Cable
-G	15 m (50 ft) Cable
Cable Connectors — with Mounting and Conduit Openings for Electronics Housing codes T and R only (1/2 NPT) (Optional)	
-P	Hawke Cable Gland (available only with Electrical Certifications YY and ZZ)

23. Equivalent to Hastelloy® C-4C. Hastelloy is a registered trademark of Haynes International, Inc.

24. For remote mounting, select a cable length with the Cable for Connecting to Remote-Mounted Electronics option.

25. For detailed information or status of testing laboratory approvals/certifications, contact Global Customer Support

26. Not available with Modbus (Electronics Version -M).

27. For remote mounting, select a cable length with the Cable for Connecting to Remote-Mounted Electronics option.

Table 6 - Model Code for 83V84CW (Wafer) Conversion Kit (Continued)

Code	Description
Miscellaneous Optional Selections	
-J	Gold-Plated Sensor

Schneider Electric Systems USA, Inc.
38 Neponset Avenue
Foxboro, MA 02035
United States of America

1-866-746-6477 inside the U.S.
1-508-549-2424 outside the U.S.

pasupport.schneider-electric.com

As standards, specifications, and design change from time to time,
please ask for confirmation of the information given in this publication.

© 2020 – Schneider Electric Systems USA, Inc. All rights reserved.

MI 019-225