SYMMONS® Evolution
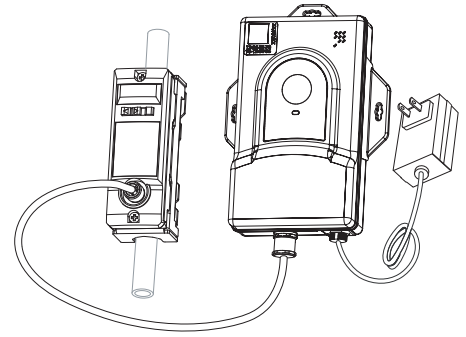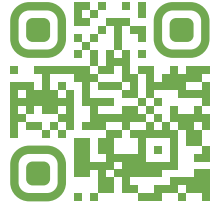
EVOFQ038KIT, EVOFQ075KIT, EVOFQ125KIT, EVOFQ200KIT
Evolution Flow Sensor Module, Clamp-on Meter
Installation Guide

Model Numbers

☐ **EVOFQ038KIT**   FLOW SENSOR, Clamp-on Meter, 1/4" to 3/8"

☐ **EVOFQ075KIT**   FLOW SENSOR, Clamp-on Meter, 1/2" to 3/4"

☐ **EVOFQ125KIT**   FLOW SENSOR, Clamp-on Meter, 1" to 1-1/4"

☐ **EVOFQ200KIT**   FLOW SENSOR, Clamp-on Meter, 1-1/2" to 2"

Repair Parts

☐ **EVOAPWR24**   Replacement Power Supply 24VDC

Feature Highlights

- Flow Sensor Meter
- 24V DC Power Supply 60"
- 30 Foot M12 Cable
- Clamp-On Meter - Pipe Sizes ranging from 1/4" to 1-1/2" - Please see "Supported Pipe Diameter" Chart on dimension page for appropriate sizing.

Warranty

Limited Lifetime - to the original end purchaser in consumer/residential installations.
10 Years - for commercial/industrial installations. Refer to www.symmons.com/warranty for complete warranty information.

Compliance

- IC: 24889-WW08189
- FCC ID: 2ASQP-WW08189

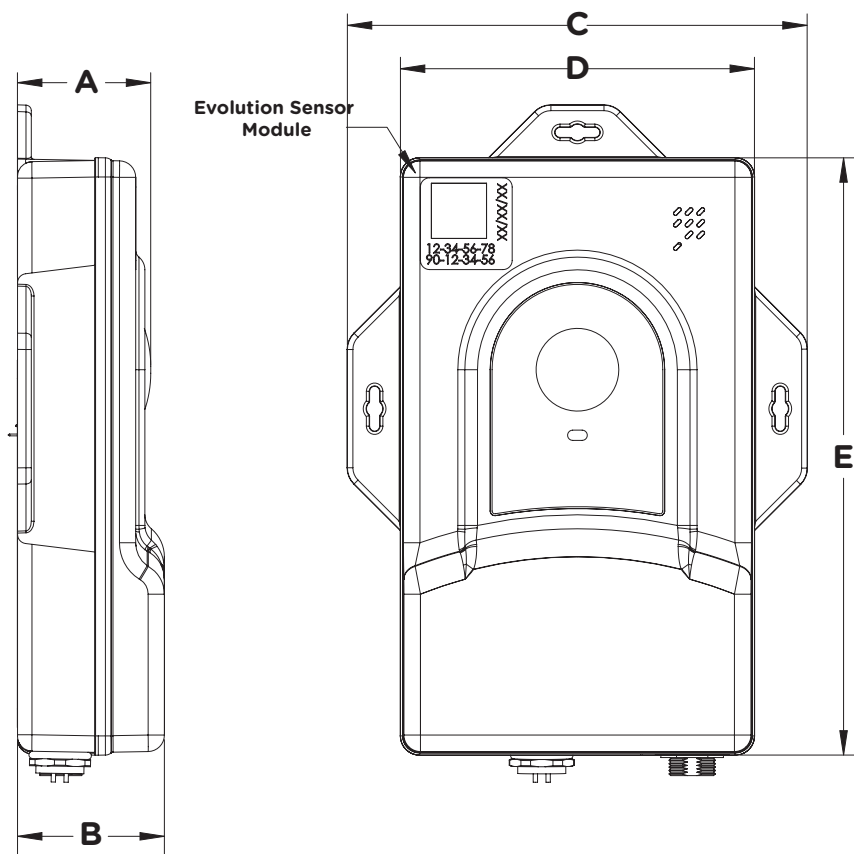This device complies with part 15 of the FCC Rules.

Architectural/ Engineering Specification

Symmons Evolution EVOFQ038KIT, EVOFQ075KIT, EVOFQ125KIT, EVOFQ200KIT Includes flow sensor module, 24 V DC power supply, 30 foot M12 cable, and clamp-on meter (pipe sizes ranging from 1/4" to 1-1/2"). 10 Year Commercial Warranty. FCC rules compliant.
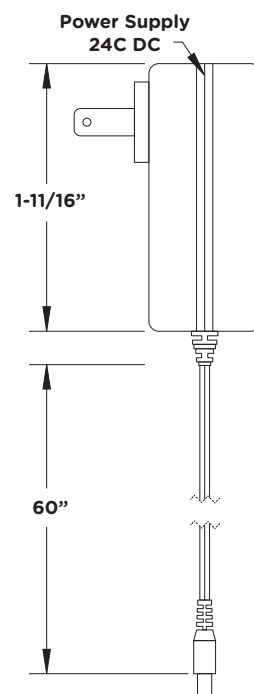
Dimensions - Flow Sensor (Included in Kit)

Measurement	
A	1-7/16"
B	1-5/8"
C	5"
D	3-7/8"
E	6-1/2"

Mounting Hardware

X 12   X 4

Evolution Sensor Module

12-34-56-78
90-12-34-56
XX/XX/XX

PCBA Plug

Power Jack

Power Supply 24C DC
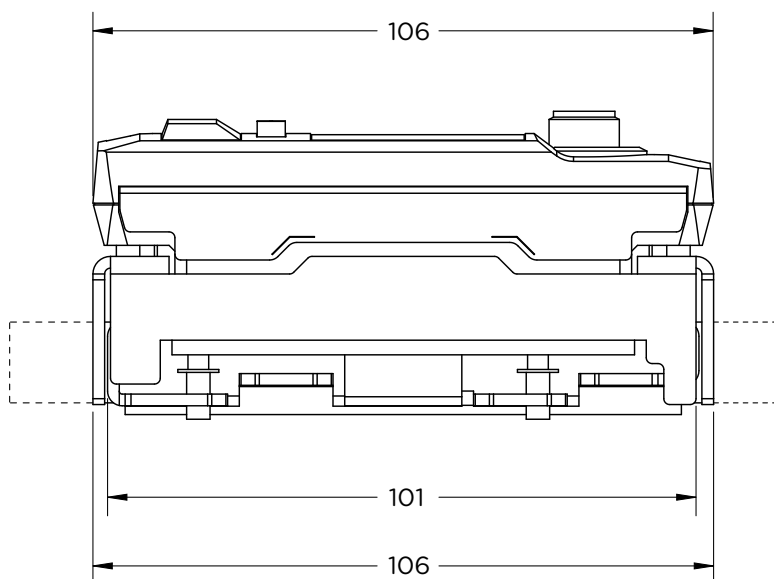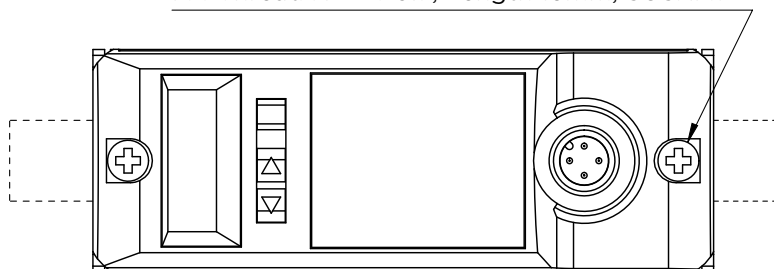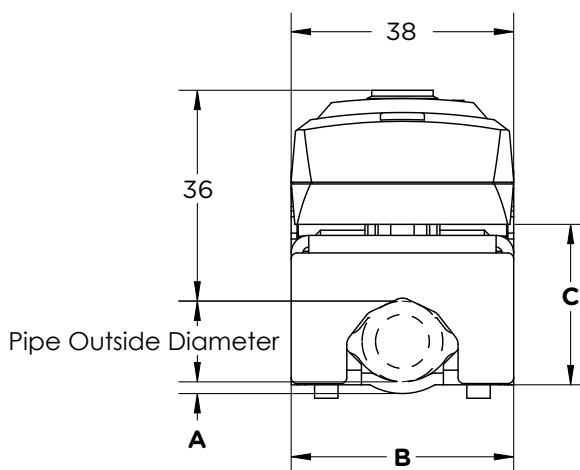
1-11/16"

60"

M12

30 Feet
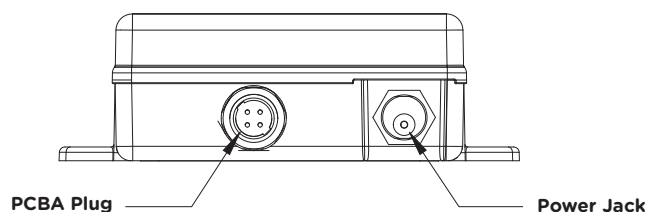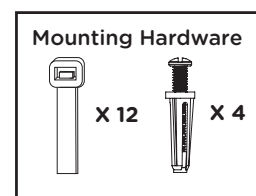
EVOFQ038KIT, EVOFQ075KIT, EVOFQ125KIT, EVOFQ200KIT

Dimensions - Clamp On Meter (Included in Kit)

For securing main body to pipe
M4 Thread X 2 - P0.7, Length 16mm, SUSXM7

Clamp on Meter Dimensions (mm)			
Model	A	B	C
EVOFQ038KIT	38	38	25.3
EVOFQ075KIT	MAX 2.5	48	30
EVOFQ125KIT	MAX 4.2	67	46.7
EVOFQ200KIT	MAX 3.6	88	56

Pipe Outside Diameter

Supported Pipe Diameter							
Model	EVOFQ038KIT		EVOFQ075KIT		EVOFQ125KIT		EVOFQ200KIT	
Outer Diameter (mm)	Ø12 to Ø16	Ø16 to Ø18	Ø18 to Ø23	Ø23 to Ø28	Ø28 to Ø37	Ø37 to Ø44	Ø44 to Ø52	Ø52 to Ø64
NPS (Nominal Pipe Size)	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
DN (Diameter Nominal)	8 A	10 A	15 A	20 A	25 A	32 A	40 A	50 A

SYMMONS® Evolution

EVOFQ038KIT, EVOFQ075KIT, EVOFQ125KIT, EVOFQ200KIT

Installation Training Checklist

Install Gateway

1. Open the Box and Find a location to plug in the Gateway
2. Unpack, assemble, and plug Gateway to 120VAC Supply

Setup Custom on Evolution App

3. Creates and Configure Customer Property
4. Creates Customer account and send Email Invitation
5. Customer Logs into water.symmons.com
6. Download the Evolution App for iOS or Android and Sign-In
7. Scan Gateway QR Code and Complete App Steps

Install Temperature Sensor

8. Plug a Temperature Probe into a Sensor Module and Turn ON
9. Install Temperature Sensor
10. Scan Temperature Sensor Module and Complete App Steps

Install Pipe Clamp-On Flow Sensor

11. Plug Clamp-on Keyence Sensor Probe into Sensor Module and plug power supply into a 120VAC outlet
12. Install Clamp-on Flow Sensor onto pipe
13. Scan Sensor Module and Complete App Steps

Configure System

14. Setup Other Users
15. Configure Alerts
16. Set Meeting for System follow-up (1-2 weeks from Training)

 SYMMONS® Evolution

EVOFQ038KIT, EVOFQ075KIT, EVOFQ125KIT, EVOFQ200KIT

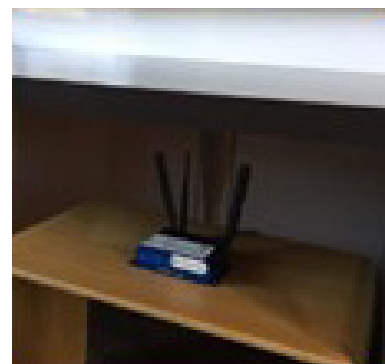### Install Gateway

1. Location

Find a central location for the Gateway. Location should be a secure area not enclosed in metal. Recommended locations include:

Mechanical Room

Admin. Office

Front Desk

1. Connect Gateway Hardware

A. Locate Gateway, Power Adapter, (1x) Thin Antenna, (2x) Wide Antennas

B. Connect Antennas and Power Adapter to the back of the Gateway

Note: After plugging the Gateway power adapter into an outlet, it could take a few minutes to boot up.

SYMMONS® Evolution

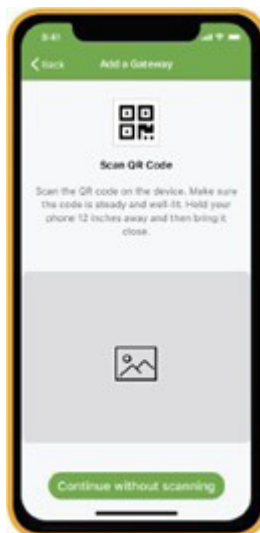## EVOFQ038KIT, EVOFQ075KIT, EVOFQ125KIT, EVOFQ200KIT

Customer App Setup

1. Create and Configure Customer Property
2. Create Customer account & send Email Invitation
3. Customer Logs into water.symmons.com
4. Download the Evolution App for iOS or Android and Sign-In

Scan the Provided QR Code with your Smartphone or camera to download the evolution App.

5. Scan Gateway QR Code and Complete In-app Steps

SYMMONS® Evolution

EVOFQ038KIT, EVOFQ075KIT, EVOFQ125KIT, EVOFQ200KIT

Installation - Pipe Clamp-On Flow Sensor

Tools Required

- Philips-head screwdriver
- The pipe measuring kit include in welcome pack
- Measuring tape to check mounting clearances

1. Setup Custom on Evolution App

A. Determine which sensor for your pipe size,

| Supported Pipe Diameter								
Model	**EVOFQ038KIT**		**EVOFQ075KIT**		**EVOFQ125KIT**		**EVOFQ200KIT**	
Outer Diameter (mm)	Ø12 to Ø16	Ø16 to Ø18	Ø18 to Ø23	Ø23 to Ø28	Ø28 to Ø37	Ø37 to Ø44	Ø44 to Ø52	Ø52 to Ø64
NPS (Nominal Pipe Size)	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
DN (Diameter Nominal)	8 A	10 A	15 A	20 A	25 A	32 A	40 A	50 A

2. Find the best location to mount.

A. The sensor connects to the module box with either a 10-foot or 30-foot cable and the module box has a 4-foot power cable that must be plugged into an electrical outlet.

B. Select a section of a straight pipe that is clean with no insulation, rust, or seams. If there is insulation on the pipe, cut away a space slightly larger then the sensor.

C. Look for a pipe that is horizontal or is vertical with an upward flow

D. There are two different types of brackets. FD-Q for smaller pipes and FD-R for larger pipes.
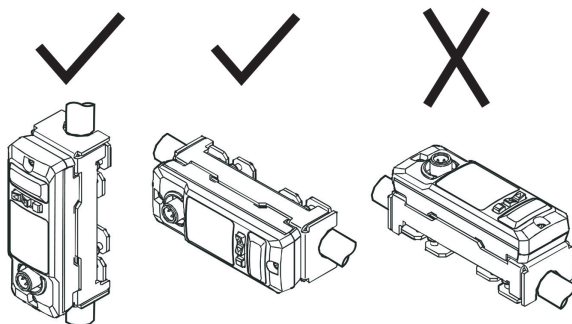
3.   Mounting EVOFQ038KIT, EVOFQ075KIT, EVOFQ125KIT and EVOFQ200KIT

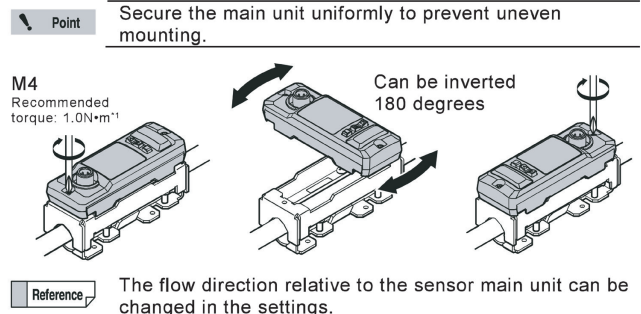(1) 1/4" (8A)   (2) 3/8" (10A)

180 degrees inversion
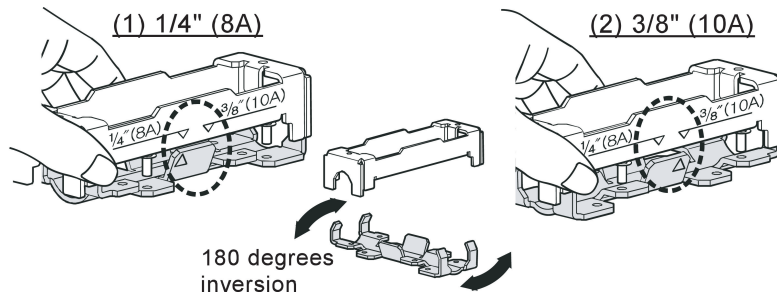
A. The brackets for FD-Q are designed to be used for two different pipe sizes. The mount can be changed between the two pipe sizes by flipping the bracket around as shown below. Ensure that the mount is set to the appropriate pipe size..

B. Take off the mounting ring to expose and remove the four bracket mounting screws.

C. Straddle the bracket on a clean section of the pipe. Make sure the bracket is oriented is such a way that it is not on top of a horizontal pipe as this will cause stability issues when the pipe is completely filled with fluid. Re-insert the screws and tighten them evenly until the bracket is snug.

Fix the sensor main unit to the brackets.

| ✎ Point | Secure the main unit uniformly to prevent uneven mounting. |

M4
Recommended torque: 1.0N•m*1

Can be inverted 180 degrees

| Reference | The flow direction relative to the sensor main unit can be changed in the settings. |

D. Slide the controller mounting ring back on and carefully re-place the controller within the bracket with the display screen upright and clearly visible.

E. Tighten the two screws evenly so the controller is securely attached to the bracket.

Installation - Pipe Clamp-On Flow Sensor & Module (Cont'd II)

4. Mounting Sensor Module

A. These modules have a 4-foot power cord so find a location that is within reach where the box will be accessible and visible. The boxes are splash proof but not waterproof so find a dry place.

B. The modules can be mounted by either screwing it into a wall or but using cable ties to attach them to an insulated pipe, bracket, or hanger.

C. Plug the cable from the flow sensor into the sensor module. Once the connector is plugged in, spinning the locking ring until it locks into place.

Power Supply 24C DC

PCBA Plug

Power Jack

M12
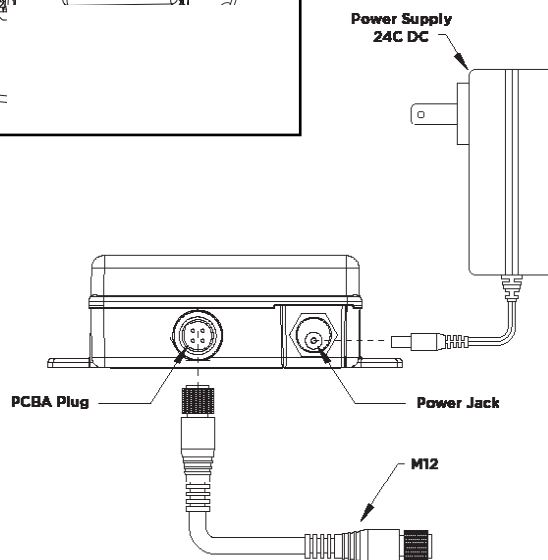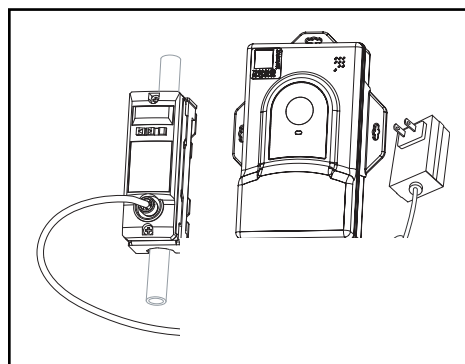
4. Sensor Module App Setup

A. Scan Sensor Module QR Code
B. Complete App Steps