

# Replacement of TopWorx™ 4310 Series Wireless Position Monitors with Fisher™ 4320 Series

## Table of Contents

- Management of Change .....2
- Background.....2
- Question & Answer Checklist .....2
- Comparison of TopWorx 4310 Wireless Position Monitor Series to Fisher 4320 Series .....4
  - Hardware Difference ..... 4
  - Hazardous Area Approval Differences ..... 4
  - Mountings Differences ..... 4
  - Electronics Differences ..... 4
  - Power Module Differences..... 4
  - On/Off Control Option Differences ..... 4
  - Functionality Differences ..... 4
  - Device Descriptor Impact ..... 5
- Conclusion .....5



## Management of Change

Management of Change (MOC) is a procedure used to proactively manage changes that can potentially affect safety or general procedure within a process plant. Product changes often have a significant impact on plant efficiency throughout the transition period. In lieu of the complexity of completing an MOC approval process, this MOC Guide has been developed to prevent delays and difficulties while ensuring a successful product change.

## Background

To simplify and streamline our wireless product offerings, the TopWorx 4310 wireless product line will move to the Supported lifecycle status effective October 1, 2016. The Fisher 4320 product line will replace the TopWorx 4310. The Fisher 4320 uses the same mounting, electronics, power module, housing, and incorporates all the functionality of the TopWorx 4310, while providing precision valve position feedback throughout the entire travel range. Technical support and spare parts for the TopWorx 4310 will remain available in Supported status.

Please reference below for definition of the lifecycle stages and associated support available.

- **Current:** A product in this lifecycle stage is the most current generation product available.
- **Active:** A product in this lifecycle stage can still be purchased, but it is not the latest generation.
- **Supported:** A product in this lifecycle stage can no longer be purchased new. Spare parts and technical support are still made available for up to seven years.
- **Retired:** A product in this lifecycle stage can no longer be purchased new. Spare parts and technical support are not available.

The following sections are design comparisons between the Fisher 4320 product line and the TopWorx 4310 product line. These comparisons demonstrate how users of the TopWorx 4310 can quickly and efficiently transition to Fisher 4320.

## Question and Answer Checklist

- 1 **Q:** Does the proposed modification cause any changes to the piping and instrumentation diagrams (P&IDs)?  
**A:** No, the P&IDs do not change. However, the supporting wiring diagrams and other documents that specifically identify product types would need to be updated.

- 2** Q: Does the proposed modification change process chemistry, technology, or operating and control philosophies?  
A: No.
- 3** Q: Have the operating and design limits of the proposed modification changed?  
A: No.
- 4** Q: Have the codes and standards to which the new equipment has been designed changed?  
A: No.
- 5** Q: Does the proposed modification change the Hazardous Electrical Area classification?  
A: No.
- 6** Q: Does the proposed modification change existing or create new demands for battery backup or other power supply redundancy or reliability?  
A: No.
- 7** Q: Does the proposed modification introduce new equipment that needs to be operated and has a new operations list been stated?  
A: No.
- 8** Q: Does the proposed modification introduce new equipment items that require spare parts, training manuals, maintenance procedures, or training to teach the maintenance department how to maintain them?  
A: Yes. The device descriptor (DD) will need to be updated in the 475 Field communicator or AMS Device Manager Software.
- 9** Q: Does the proposed modification change the spares for existing pieces of equipment?  
A: No.
- 10** Q: Does the proposed modification introduce new equipment items that require periodic predictive maintenance?  
A: No.

## Comparison of TopWorx 4310 Wireless Position Monitor Series to Fisher 4320 Series

Hardware Difference – None

Hazardous Area Approval Differences – None

Mountings Differences – None

Electronics Differences – None

Power Module Differences – None

On/Off Control Option Differences – None

### Functionality Differences

- The 4310 has the measurement output option of 2 discrete switches.
- The 4320 has the measurement output option of 2 discrete switches and an Analog 0-100%.

The initial dynamic variable assignments shown in the tables below are different between the 4310 and the 4320. The 4320 dynamic variables can be reassigned using the device DD to match those of the 4310.

Table 1. 4310 Wireless Position Monitor - Initial Dynamic Variable Assignments (Default)

Dynamic Variable Assignment	Control	Device Structure	
		Snap Control	Monitor
Primary (PV)	Switch States	Switch States	Switch States
Secondary (SV)	Set Point	Set Point	Switch States
Tertiary (TV)	Cycle Counter	Cycle Counter	Cycle Counter
Quaternary (QV)	Supply Voltage	Supply Voltage	Supply Voltage

Table 2. 4320 Wireless Position Monitor - Initial Dynamic Variable Assignments (Default)

Dynamic Variable Assignment	Control	Device Structure	
		Snap Control	Monitor
Primary (PV)	Position	Position	Position
Secondary (SV)	Set Point	Set Point	Switch States
Tertiary (TV)	Switch States	Switch States	Cycle Counter
Quaternary (QV)	Supply Voltage	Supply Voltage	Supply Voltage

## Device Descriptor (DD) Impact

In order to utilize use the 4320, a new DD will need to be installed.

Table 3. Device Descriptions

4310 = Device Type E0CE	4320 = Device Type 1308
Device Revision 4, DD Rev 1	Device Revision 3, DD Rev 1

## Conclusion

The Fisher 4320 Wireless Position Monitor with and without on/off control option provides form, fit, and functional replacement capability of the TopWorx 4310 wireless position monitor.

Please refer to the Fisher 4320 wireless position monitor [product bulletin](#) and [instruction manual](#) available from your Emerson Process Management sales office or at [www.Fisher.com](http://www.Fisher.com) for complete features.

 <http://www.Facebook.com/FisherValves>

 <http://www.Twitter.com/FisherValves>

 <http://www.YouTube.com/user/FisherControlValve>

 <http://www.Linkedin.com/groups/Fisher-3941826>

To find the Emerson sales contact in your area, scan or click the QR code.



© 2016 Fisher Controls International LLC. All rights reserved.

Fisher and TopWorx are marks owned by one of the companies in the Emerson Process Management business unit of Emerson Electric Co. Emerson Process Management, Emerson, and the Emerson logo are trademarks and service marks of Emerson Electric Co. All other marks are the property of their respective owners.

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, nothing herein is to be construed as a warranty or guarantee, express or implied, regarding the products or services described herein or their use, performance, merchantability or fitness for a particular purpose. Individual results may vary. All sales are governed by our terms and conditions, which are available upon request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice. Responsibility for proper selection, use and maintenance of any product or service remains solely with the purchaser and end user.

**Emerson Process Management**

Marshalltown, Iowa 50158 USA  
Sorocaba, 18087 Brazil  
Cernay, 68700 France  
Dubai, United Arab Emirates  
Singapore 128461 Singapore  
[www.Fisher.com](http://www.Fisher.com)