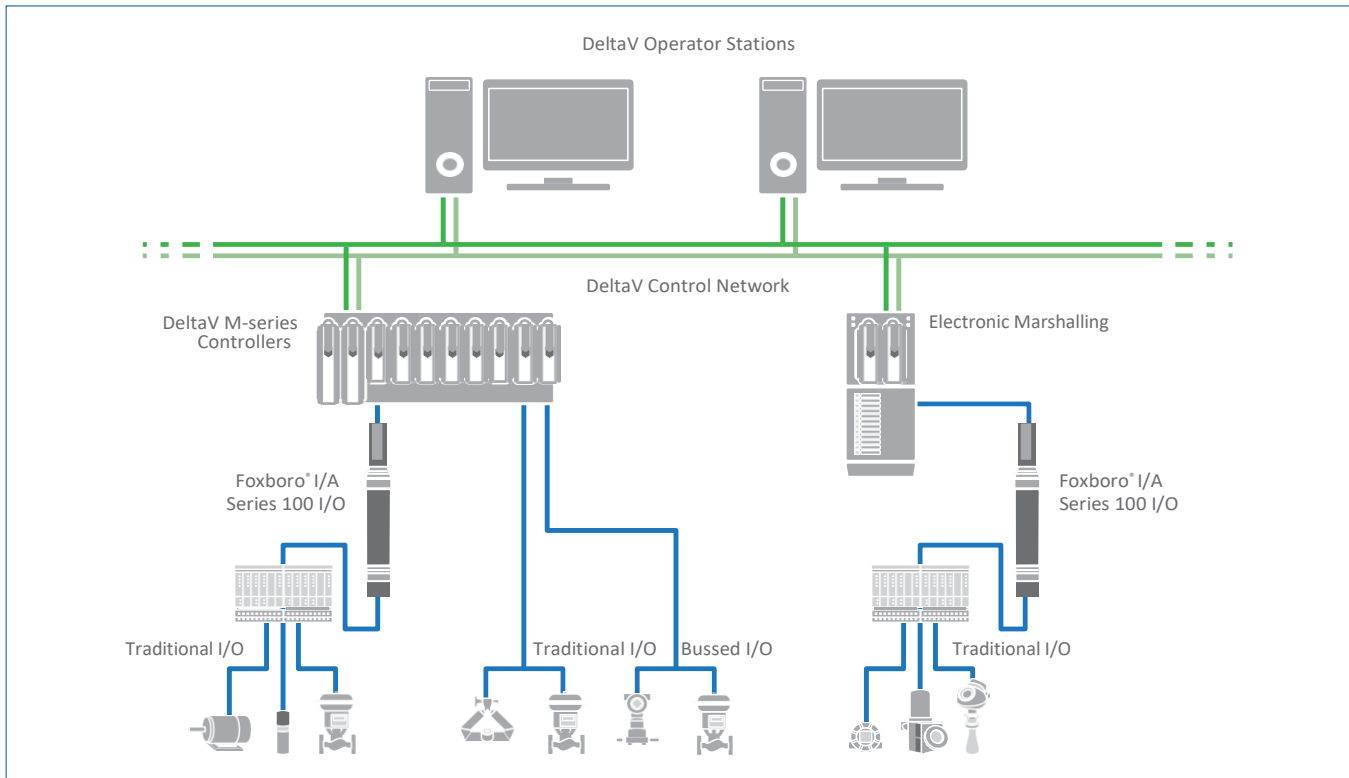


# DeltaV™ Flex.Connect Solutions for Foxboro® I/A Series 100 I/O



*DeltaV™ Flex.Connect Solutions protect your wiring investment as you convert from Foxboro® I/A Series 100 I/O to the DeltaV™ System*

- Reduce business risks by minimizing process downtime
- Save on installation costs
- Preserve HART® signals

## Introduction

If concerns about downtime and wiring costs are preventing you from migrating your Foxboro I/A Series 100 I/O to a new DeltaV™ system, consider DeltaV Flex.Connect solutions for Foxboro I/A Series 100 I/O.

## Benefits

**Reduce business risks by minimizing process downtime.** This solution brings device signals to DeltaV I/O from existing Foxboro I/A Series 100 Fieldbus Modules (FBMs). Keeping device wires intact accelerates the new system startup, enabling you to rapidly resume production.

**Save installation costs.** Eliminating new device wiring saves money and reduces the risk of errors. Time and material savings are significant.

**Preserve HART signals.** Use HART® Pass-through for complete diagnostics at the DeltaV workstations.

## Product Description and Specification

DeltaV Flex.Connect solutions provide direct connection from Foxboro I/A Series 100 I/O to DeltaV Electronic Marshalling.

The following Foxboro I/A Series 100 I/O FBM point types have DeltaV Flex.Connect solutions as described below:

### Series 100

DeltaV Flex.Connect solutions passive nosecone adapters and cables connect FBM terminal blocks to standard DeltaV AI, AO, DI, and DO CHARM terminal blocks via a passive DIN-rail mount nosecone adapter (see Figure 1).



(Figure 1)

- Analog Inputs FBM01
  - 8 Analog Inputs connect to 8 4-20mA AI HART CHARMS
- Analog Inputs/Outputs FBM04
  - 4 Analog Inputs and 4 Analog Outputs connect to 4, 4-20mA DeltaV AI HART & 4, 4-20mA DeltaV AO HART CHARMS
- Digital Inputs FBM07A/12A
  - 16 Digital Inputs connect to 16, 24 VDC DeltaV DI 24 VDC Isolated CHARMS
- Digital Inputs FBM07B/12B
  - 16 Digital Inputs connect to 16 24VDC Low-Side Sense (dry contact) CHARMS
- Digital Inputs FBM08/13
  - 16 Digital Inputs connect to 16 120 VAC Isolated CHARMS
- Digital Inputs/Outputs FBM09A
  - 8 Digital Inputs (external power source) connect to 8 24VDC Isolated CHARMS and 8 Digital Outputs connect to 8 24VDC Isolated CHARMS
- Digital Inputs/Outputs FBM09B
  - 8 Digital Inputs (internal power source) connect to 8 24VDC Isolated CHARMS and 8 Digital Outputs connect to 8 24VDC Isolated CHARMS
- Digital Inputs FBM09C
  - 8 Digital Inputs (external power source) connect to 8 24VDC Low-Side Sense (dry contact) CHARMS and 8 Digital Outputs connect to 8, 24VDC Isolated CHARMS
- Digital Inputs FBM09D
  - 8 Digital Inputs (internal power source) connect to 8 24VDC Isolated CHARMS and 8 Digital Outputs connect to 8 24VDC Isolated CHARMS
- Digital Inputs FBM10/15
  - 8 Digital Inputs connect to 8 120VAC Isolated CHARMS and 8 Digital Outputs connect to 8 120VAC High Side CHARMS

## Ordering Information

For inquiries and ordering information, please contact your local Emerson sales office. Please specify required cable lengths on your request. Maximum cable length is 30 meters. DIN-rail is required and shall be provided by user for mounting nosecone adapters. DeltaV Flex.Connect solutions for specific Foxboro FBM Models are indicated in the following table:

(Note: DeltaV Flex.Connect solutions drawings are available upon request.)

Flex.Connect Solution #	Foxboro Series 100 FBM Types	Foxboro I/A Series 100 Signals	DeltaV I/O CHARM Types	Flex.Connect Solutions Drawing Numbers
See Below	Common Nosecone Adapter	Analog & Discrete Input / Output	See Below	See Below
FC-F1-CBL-1-10	AI, FBM01	8 Analog Input	8 AI	FC-F1-FBM01 FC-F1-FBM01-CAB
FC-F1-CBL-1-70	AI/AO, FBM04	4 Analog Input 4 Analog Output	4 AI 4 AO	FC-F1-FBM04 FC-F1-FBM04-CAB
FC-F1-CBL-2-50	DI, FBM07A and FBM12A	16 Digital input	16 DI	FC-F1-FBM07A FC-F1-FBM07A-CAB
FC-F1-CBL-2-51	DI, FBM07B and FBM12B	16 Digital Input	16 DI	FC-F1-FBM07B FC-F1-FBM07B-CAB
FC-F1-CBL-2-52	DI, FBM08 and FBM13	16 Digital Input	16 DI	FC-F1-FBM08_13 FC-F1-FBM08_13-CAB
FC-F1-CBL-2-80	DI, DO FBM09A	8 Digital Input 8 Digital Output	8 DI 8 DO	FC-F1-FBM09A FC-F1-FBM09A-CAB
FC-F1-CBL-2-81	DI, DO FBM09B	8 Digital Input 8 Digital Output	8 DI 8 DO	FC-F1-FBM09B FC-F1-FBM09B-CAB
FC-F1-CBL-2-82	DI, DO FBM09C	8 Digital Input 8 Digital Output	8 DI 8 DO	FC-F1-FBM09C FC-F1-FBM09C-CAB
FC-F1-CBL-2-83	DI, DO FBM09D	8 Digital Input 8 Digital Output	8 DI 8 DO	FC-F1-FBM09D FC-F1-FBM09D-CAB
FC-F1-CBL-2-84	DI, DO FBM10	8 Digital Input 8 Digital Output	8 DI 8 DO	FC-F1-FBM10_15 FC-F1-FBM10_15-CAB

## Ordering Information (Cont'd)

Cables are available in lengths required for your migration project. These cables can be pre-wired and tested to DeltaV I/O terminal blocks. These custom loomed cables are all connected to the nosecone adapter on one end, open-end / flying lead on the other end, all open wires marked with the corresponding pin number and have ferrules on each wire, 18-22 AWG can be specified, and flying-lead to connect to the DeltaV I/O. Contact your local Emerson representative for pricing and availability.

## Prerequisites

A preliminary site visit is required to survey installed control system architecture and electrical grounding practices, to document I/O models and numbers of each, and to review schedule constraints and turnaround objectives. Qualified Emerson engineers or technicians perform site reviews.

## Services

For help in planning, justifying, or implementing your system migration, contact your local Emerson representative. Expert consultants are available to advise you on a variety of concerns, including safety system design, implementation and standards compliance, digital buses, wireless applications, control performance, and process optimization.

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