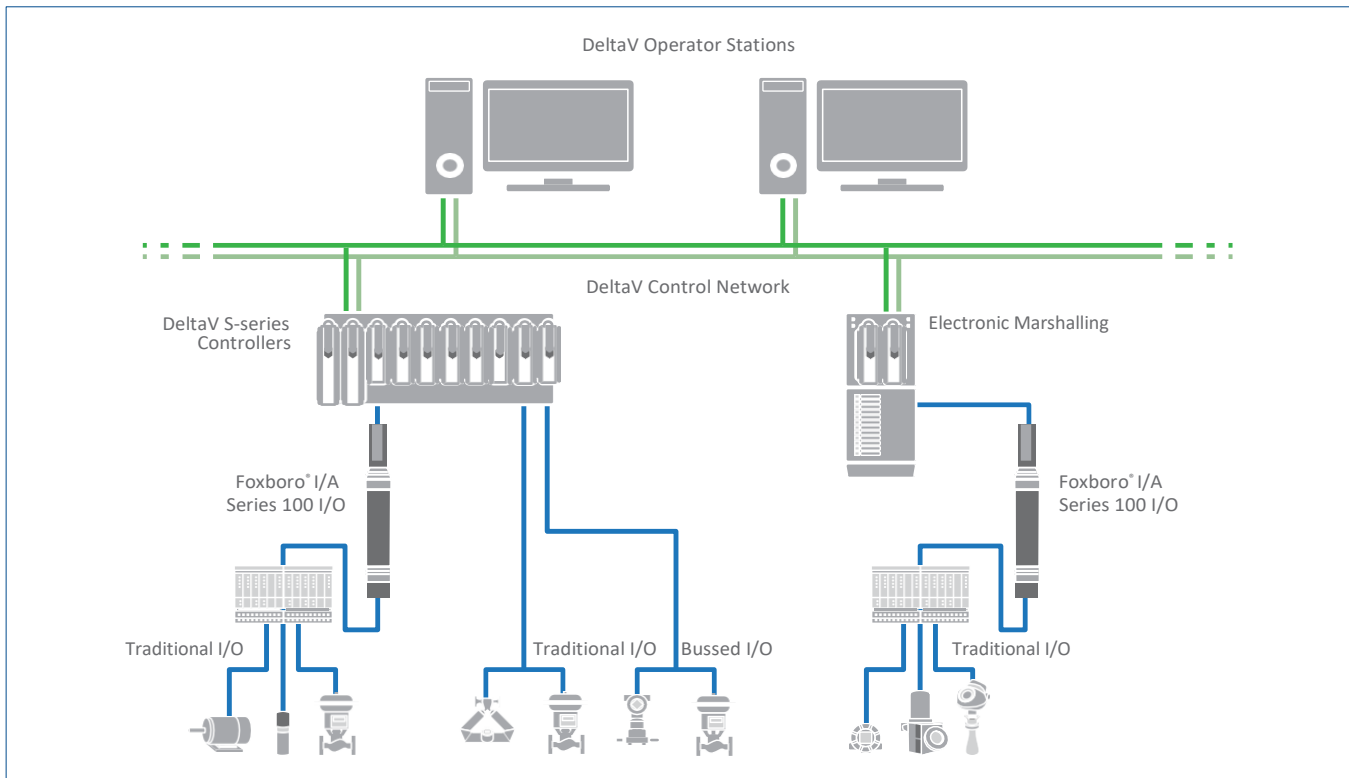


# DeltaV™ Flex.CONNECT Solutions for Foxboro® I/A Series 100 I/O



*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 100 Series 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 nosecone adapters and cables connect FBM terminal blocks to standard DeltaV AI, AO, DI and DO

CHARM terminal blocks via a passive 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.CONNNECT solutions for specific Foxboro FBM Models are indicated in the following table:

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

Flex.CONNNECT Solution #	Foxboro 100 Series FBM Types	Foxboro I/A 100 Series Signals	DeltaV I/O CHARM Types	Flex.CONNNECT Solutions Drawing Numbers
2905862	Group A Adapter	Analog Input / Output	8 AI or 4 AI, 4 AO	FC-F1-FBM01 FC-F1-FBM01-CAB FC-F1-FBM04 FC-F1-FBM04-CAB
2905863	Group B Adapter	Digital Input	16 DI	FC-F1-FBM08_13 FC-F1-FBM08_13-CAB
2905864	Group C Adapter	Digital Input Digital Output	8 DI 8 DO	FC-F1-FBM10_15 FC-F1-FBM10_15-CAB
2905865	Group D Adapter	Digital Input Digital Output	16 DI or 8 DI, 8 DO	FC-F1-FBM07A FC-F1-FBM07A-CAB FC-F1-FBM07B FC-F1-FBM07B-CAB FC-F1-FBM09A FC-F1-FBM09A-CAB FC-F1-FBM09B FC-F1-FBM09B-CAB FC-F1-FBM09C FC-F1-FBM09C-CAB FC-F1-FBM09D FC-F1-FBM09D-CAB
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)

Manufactured cables are available in the following lengths; 1, 3, 5, 10, 15, and 30 meters. For analog I/O we recommend the twisted-pair versions. For discrete I/O we recommend non-twisted pair. These cables are all 37-Pin female D-SUB on one end, right-angle connector, open-end / flying lead on the other end, all open wires marked with the corresponding D-SUB pin number and have ferrules on each wire, 22 AWG, shielded, and 16 inches of 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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