

CSA-D-IS Installation Instructions, MVD™ Transmitters

Preparation

Safety and approval information

This Micro Motion product complies with all applicable European directives when properly installed in accordance with the instructions in this manual. Refer to the EU declaration of conformity for directives that apply to this product. The EU declaration of conformity, with all applicable European directives, and the complete ATEX Installation Drawings and Instructions are available on the internet at www.emerson.com or through your local Micro Motion support center.

Information affixed to equipment that complies with the Pressure Equipment Directive, can be found on the internet at www.emerson.com.

For hazardous installations in Europe, refer to standard EN 60079-14 if national standards do not apply.

Other information

Full product specifications can be found in the product data sheet. Troubleshooting information can be found in the configuration manual. Product data sheets and manuals are available from the Micro Motion web site at www.emerson.com.

Return policy

Follow Micro Motion procedures when returning equipment. These procedures ensure legal compliance with government transportation agencies and help provide a safe working environment for Micro Motion employees. Micro Motion will not accept your returned equipment if you fail to follow Micro Motion procedures.

Return procedures and forms are available on our web support site at www.emerson.com, or by phoning the Micro Motion Customer Service department.

Emerson Flow customer service

Email:

- Worldwide: flow.support@emerson.com
- Asia-Pacific: APflow.support@emerson.com

Telephone:

North and South America		Europe and Middle East		Asia Pacific	
United States	800-522-6277	U.K.	0870 240 1978	Australia	800 158 727
Canada	+1 303-527-5200	The Netherlands	+31 (0) 704 136 666	New Zealand	099 128 804
Mexico	+41 (0) 41 7686 111	France	0800 917 901	India	800 440 1468
Argentina	+54 11 4837 7000	Germany	0800 182 5347	Pakistan	888 550 2682
Brazil	+55 15 3413 8000	Italy	8008 77334	China	+86 21 2892 9000
		Central & Eastern	+41 (0) 41 7686 111	Japan	+81 3 5769 6803
		Russia/CIS	+7 495 981 9811	South Korea	+82 2 3438 4600
		Egypt	0800 000 0015	Singapore	+65 6 777 8211
		Oman	800 70101	Thailand	001 800 441 6426
		Qatar	431 0044	Malaysia	800 814 008
		Kuwait	663 299 01		
		South Africa	800 991 390		
		Saudi Arabia	800 844 9564		
		UAE	800 0444 0684		

Contents

Chapter 1	Planning the installation.....	7
	1.1 About this document.....	7
	1.2 Installation architecture.....	7
	1.3 Hazardous area installations.....	8
Chapter 2	Transmitter output installation.....	9
	2.1 1700/2700 fieldbus.....	10
	2.2 1700/2700 IS.....	11
	2.3 1700/2700 mA0.....	12
	2.4 1700/2700 Profibus-PA.....	13
	2.5 2700 CIO.....	14
	2.6 2750 CIO.....	15
	2.7 4200 2-wire.....	16
	2.8 5700 CIO.....	17
	2.9 5700 Ethernet.....	18
	2.10 5700 fieldbus.....	19
	2.11 5700 fieldbus (FISCO).....	20
	2.12 5700 IS.....	21
Chapter 3	Direct host 4-wire installation.....	23
	3.1 ECP to direct host through a safety barrier.....	24
	3.2 CP to direct host through a safety barrier.....	25
Chapter 4	800 ECP.....	27
Chapter 5	1500/2500 4-wire installation.....	29
	5.1 Remote 1500/2500 with ECP.....	30
	5.2 Remote 1500/2500 4-wire CP to CMF, F, H, R, CNG, or T.....	31
	5.3 Remote 1500/2500 4-wire CP to CMF400 with booster amplifier.....	32
	5.4 Remote 1500/2500 4-wire CP to D600.....	33
Chapter 6	1700/2700 4-wire installation.....	35
	6.1 Remote 1700/2700 4-wire CP.....	36
	6.2 Remote 1700/2700 with CP and a CMF400.....	37
	6.3 Remote 1700/2700 with CP and a D600.....	38
	6.4 Remote 1700/2700 with ECP.....	39
Chapter 7	2750 4-wire ECP installation.....	41
Chapter 8	3500 4-wire installation.....	43
	8.1 Remote 3500 with CP and CMF400.....	44
	8.2 Remote 3500 with CP and a D600.....	45
	8.3 Remote 3500 with CP on CMF, F, H, R, CNG, and T.....	46

	8.4 Remote 3500 with ECP.....	47
Chapter 9	3700 4-wire installation.....	49
	9.1 Remote 3700 with CP and CMF400.....	50
	9.2 Remote 3700 with CP and D600	51
	9.3 3700 with CP and CMF, F, H, R, CNF, or T.....	52
	9.4 3700 with ECP.....	53
Chapter 10	5700 4-wire installation.....	55
	10.1 5700 to RCP - sensor with junction box.....	56
	10.2 Remote 5700 with CP.....	57
Chapter 11	LFT 4-wire to LF sensor installation.....	59
	11.1 Remote LFT CIO.....	60
	11.2 Remote LFT on a DIN rail.....	61
	11.3 Remote LFT fieldbus.....	62
	11.4 Remote LFT mAO/FO.....	63
	11.5 Remote LFT Profibus-PA.....	64
Chapter 12	1500/2500 9-wire junction box installation.....	65
	12.1 1500/2500 CP with 9-wire D600 junction box.....	66
	12.2 1500/2500 CP with 9-wire DT junction box.....	67
	12.3 1500/2500 to RCP with 9-wire CMF400 junction box and booster amplifier.....	68
	12.4 1500/2500 to RCP with 9-wire CMF, D, DL, F, H, or T junction box.....	69
Chapter 13	1700/2700 integral with 9-wire junction box installation.....	71
	13.1 1700/2700 with integral CP and a CMF400.....	72
	13.2 1700/2700 with integral CP and a D600.....	73
	13.3 1700/2700 with integral CP and a DT.....	74
	13.4 1700/2700 with integral CP and a CMF, F, H, T, D, or DL.....	75
Chapter 14	1700/2700 to RCP with 9-wire junction box installation	77
	14.1 1700/2700 with RCP and a CMF400.....	78
	14.2 1700/2700 with RCP and a D600.....	79
	14.3 1700/2700 with RCP and a DT.....	80
	14.4 1700/2700 with RCP and a CMF, F, T, D, or DL.....	81
Chapter 15	3500 to RCP with 9-wire junction box installation.....	83
	15.1 3500 to RCP with 9-wire CMF400 junction box with booster amplifier.....	84
	15.2 3500 to RCP with 9-wire D600 junction box.....	86
	15.3 3500 to RCP with 9-wire DT junction box.....	87
	15.4 3500 to RCP with 9-wire CMF, D, DL, H, or T junction box.....	88
Chapter 16	3700 to RCP with 9-wire junction box installation.....	89
	16.1 3700 to RCP with 9-wire CMF300A junction box.....	90
	16.2 3700 to RCP with 9-wire CMF400 junction box.....	91
	16.3 3700 to RCP with 9-wire D600 junction box.....	92

	16.4 3700 to RCP with 9-wire DT junction box.....	93
	16.5 3700 to RCP with 9-wire CMF, D, DL, F, H, or T junction box.....	94
Chapter 17	5700 to RCP with 9-wire junction box installation.....	95
Chapter 18	D600 remote mount booster amplifier.....	97
	18.1 RCP with remote mount booster amplifier - D600.....	98
	18.2 Remote mount booster amplifier with junction box - D600.....	99
Appendix A	List of drawings.....	101

1 Planning the installation

1.1 About this document

Use this manual to ensure that any applicable Micro Motion MVD flowmeter installation complies with Canadian Standards Association (CSA) approval.

MVD applies to all flowmeter installations that include a core processor.

The information in this document assumes that users understand:

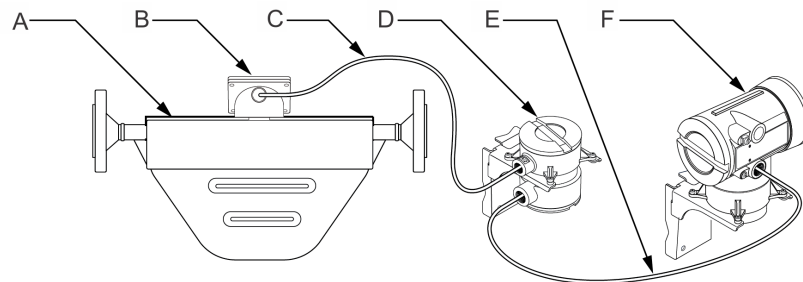
- Basic transmitter and sensor installation concepts and procedures
- All corporate and government safety standards and requirements that guard against injuries and death

This manual provides only information associated with installation of MVD transmitters through CSA-D-IS instructions. For complete information on flowmeter installation, see the documentation provided with your sensor and transmitter.

1.2 Installation architecture

Information in this manual applies only to 4-wire and 9-wire CSA-approved installations involving a core processor mounted to a Micro Motion sensor and transmitter.

Figure 1-1: MVD remote core processor with remote transmitter



- A. Sensor
- B. Junction box
- C. 9-wire cable
- D. Core processor
- E. 4-wire cable
- F. Transmitter

1.3 Hazardous area installations

If your cable will be installed in a hazardous area, ensure that it meets the hazardous area requirements.



WARNING

Failure to maintain intrinsic safety in a hazardous area could result in an explosion.

To keep sensor wiring intrinsically safe:

- Keep intrinsically safe (IS) sensor wiring separate from power supply wiring and output wiring.
- Do not install power cable in the same conduit or cable tray as flowmeter cable.
- Use this document with the appropriate approvals documentation. These manuals are shipped with the flowmeter or available on the Emerson web site: www.emerson.com.
- For hazardous area installations in Europe, refer to standard EN 60079-14 if national standards do not apply.

2 Transmitter output installation

Use CSA diagrams for installing the following meters.

Table 2-1: List of drawings

Transmitter	Drawing
1700/2700 fieldbus	EB-3600476, Revision DA
1700/2700 IS	EB-3600629, Revision DA
1700/2700 mA0	EB-3600479, Revision CA
1700/2700 Profibus-PA	EB-3600473, Revision DA
2700 CIO	EB-3600667, Revision BA
2750 CIO	EB-20011794, Revision A
4200 2-wire	EB-20057521, Revision AA
5700 CIO	EB-20028175, Revision AA
5700 Ethernet	EB-20030708, Revision AA
5700 fieldbus (FISCO)	EB-20030804, Revision AA
5700 fieldbus	EB-20030711, Revision AA
5700 IS	EB-20045787, Revision AA

2.1 1700/2700 fieldbus

This drawing describes an outputs installation for a 1700 or 2700 transmitter with fieldbus outputs.

COPYRIGHT 2018 MICRO MOTION, INC.
ALL RIGHTS RESERVED

MODEL 1700/2700
WITH FIELDBUS OUTPUTS

Installation Instructions
Type CSA-D-IS

MODEL 1700/2700 WITH FIELDBUS IN HAZARDOUS LOCATION

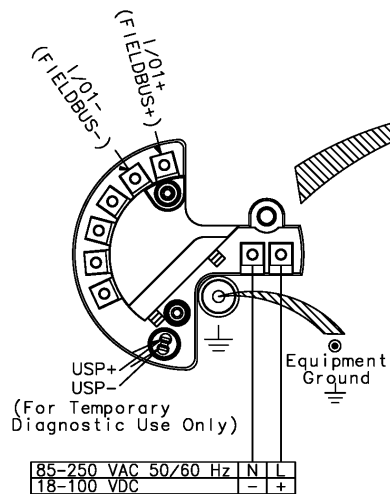
(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

DIVISION 1 I.S. FIELDBUS PARAMETERS	DIVISION 2 NON-INCENDIVE FIELDBUS PARAMETERS
VMAX 30 Vdc	VMAX 30 Vdc
I _{max} 300 mA	
P _{max} 1.3W	
C _i 0.0μF	C _i 0.0μF
L _i 0.0μH	L _i 0.0μH

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
Div 1 Temp. Code T4A
Div 2 Temp. Code T5

Note:
Hazardous area classification on an integrally mounted 1700/2700 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

Warning:
This compartment contains non-intrinsically safe circuits. Use of conduit seals are required within 18 inches of the conduit openings when installed in Division 1.



This unit is provided with an external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Electronics: 1700/2700 FIELDBUS

EB-3600476 Rev. DA
SHT 1 OF 1

2.2 1700/2700 IS

This drawing describes an outputs installation for a 1700 or 2700 transmitter with intrinsically safe outputs.

COPYRIGHT 2018 MICRO MOTION, INC.
ALL RIGHTS RESERVED

MODEL 1700/2700
WITH I.S. OUTPUTS

Installation Instructions
Type CSA-D-IS

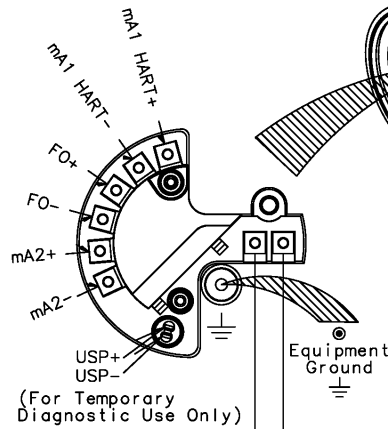
MODEL 1700/2700 WITH I.S. OUTPUTS IN HAZARDOUS LOCATION
(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

DIVISION 1 I.S. OUTPUT ENTITY PARAMETERS			DIVISION 2 NON-INCENDIVE PARAMETERS		
	mA1 HART, mA2	FO		mA1 HART, mA2	FO
VMAX	30 Vdc	30 Vdc	VMAX	30 Vdc	30 Vdc
I _{max}	300 mA	100 mA			
P _{max}	1.0W	0.75W			
C _i	0.0005μF	0.0005μF	C _i	0.0005μF	0.0005μF
L _i	0.0μH	0.0μH	L _i	0.0μH	0.0μH

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
Div 1 Temp. Code T4A
Div 2 Temp. Code T5

Note:
Hazardous area classification on an integrally mounted 1700/2700 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

Warning:
This compartment contains non-intrinsically safe circuits. Use of conduit seals are required within 18 inches of the conduit openings when installed in Division 1.



85-250 VAC 50/60 Hz	N	L
18-100 VDC	-	+

This unit is provided with an external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Electronics: 1700/2700 I.S. OUTPUT

EB-3600629 Rev. DA
SHT 1 OF 1

2.3 1700/2700 mAO

This drawing describes an outputs installation for a 1700 or 2700 transmitter with mA Outputs.

COPYRIGHT 2018 MICRO MOTION, INC.
ALL RIGHTS RESERVED

MODEL 1700/2700
WITH ANALOG OUTPUTS

Installation Instructions
Type CSA-D-IS

MODEL 1700/2700 WITH ANALOG OUTPUTS IN HAZARDOUS LOCATION

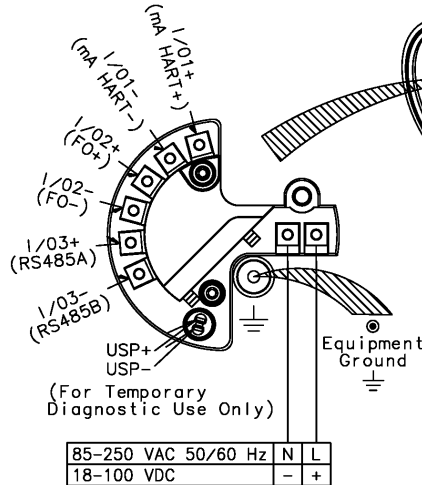
(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

DIV 2 NON-INCENDIVE PARAMETERS		mA HART	FO	RS485
Voc (Vdc)		24	24	3.1
Isc (mA)		25	11	1.0
Po (W)		-	-	-
Ca (μ F)	A,B	0.345	0.345	-
	C	2.06	2.06	-
	D	8.25	8.25	-
La (H)	A,B	0.128	0.661	-
	C	0.384	1	-
	D	1	1	-
Vmax (Vdc)		-	30	12
Imax (mA)		-	500	250
Ci (μ F)		-	0.0	0.0005
Li (μ H)		-	0.0	0.0

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
Div 1 Temp. Code T4A
Div 2 Temp. Code T5

Note:
Hazardous area classification on an integrally mounted 1700/2700 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

Warning:
This compartment contains non-intrinsically safe circuits. Use of conduit seals are required within 18 inches of the conduit openings when installed in Division 1.



This unit is provided with an external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Electronics: 1700/2700 ANALOG

EB-3600479 Rev. CA
SHT 1 OF 1

2.4 1700/2700 Profibus-PA

This drawing describes an outputs installation for a 1700 or 2700 transmitter with Profibus-PA outputs.

COPYRIGHT 2018 MICRO MOTION, INC.
ALL RIGHTS RESERVED

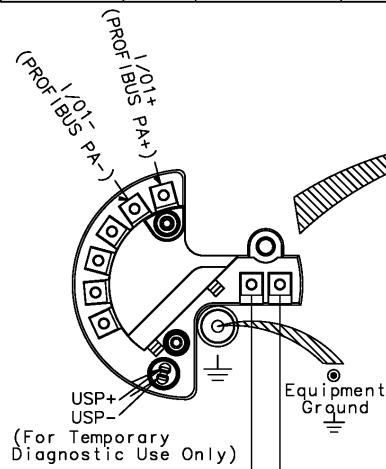
MODEL 1700/2700
WITH PROFIBUS PA OUTPUTS

Installation Instructions
Type CSA-D-1S

MODEL 1700/2700 WITH PROFIBUS PA IN HAZARDOUS LOCATION

(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

DIVISION 1 I.S. PROFIBUS PA PARAMETERS		DIVISION 2 NON-INCENDIVE PROFIBUS PA PARAMETERS	
VMAX	30 Vdc	VMAX	30 Vdc
I _{max}	300 mA		
P _{max}	1.3W		
C _i	0.0μF	C _i	0.0μF
L _i	0.0μH	L _i	0.0μH



85-250 VAC	50/60 Hz	N	L
18-100 VDC		-	+

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
Div 1 Temp. Code T4A
Div 2 Temp. Code T5

Note:
Hazardous area classification on an integrally mounted 1700/2700 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

Warning:
This compartment contains non-intrinsically safe circuits. Use of conduit seals are required within 18 inches of the conduit openings when installed in Division 1.

This unit is provided with an external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Electronics: 1700/2700 PROFIBUS PA

EB-3600473 Rev. DA
SHT 1 OF 1

2.5 2700 CIO

This drawing describes an outputs installation for a 2700 transmitter with configurable inputs and outputs.

COPYRIGHT 2018 MICRO MOTION, INC.
ALL RIGHTS RESERVED

MODEL 1700/2700
WITH CONFIG I/O

Installation Instructions
Type CSA-D-1S

MODEL 2700 WITH CONFIG I/O IN HAZARDOUS LOCATION

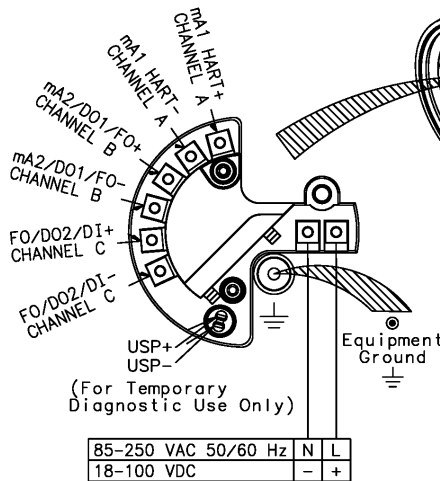
(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

DIV 2 NON-INCENDIVE PARAMETERS		mA HART	CHB	CHC
Voc (Vdc)		24	15	15
Isc (mA)		25	25	7.0
Po (W)		-	-	-
Ca (μ F)	A, B	0.345	2.25	-
	C	2.06	15.15	-
	D	8.25	75	-
La (H)	A, B	0.096	0.096	-
	C	0.384	0.384	-
	D	0.768	0.768	-
Vmax (Vdc)		-	30	30
Imax (mA)		-	500	500
Ci (μ F)		-	0.0011	0
Li (μ H)		-	4.0	4.0

Hazardous Area
Class I Div. 1 Groups C, D
Class I Div. 2 Groups A, B, C, D
Class II Groups E, F, G
Div 1 Temp. Code T4A
Div 2 Temp. Code T5

Note:
Hazardous area classification on an integrally mounted 1700/2700 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

Warning:
This compartment contains non-intrinsically safe circuits. Use of conduit seals are required within 18 inches of the conduit openings when installed in Division 1.



This unit is provided with an external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Electronics: 1700/2700 CONFIG

EB-3600667 Rev. BA
SHT 1 OF 1

2.6 2750 CIO

This drawing describes an outputs installation for a 2750 transmitter with configurable inputs and outputs.

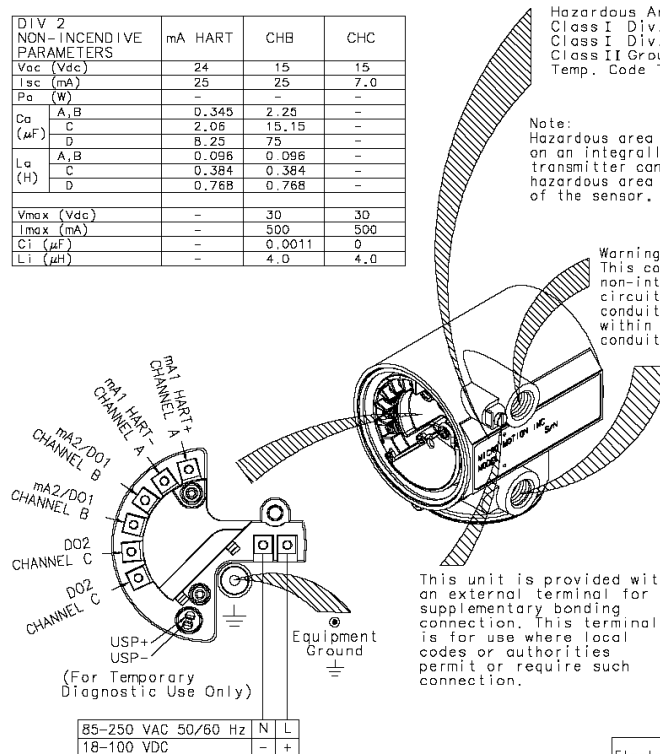
MODEL 2750 WITH CONFIG I/O IN HAZARDOUS LOCATION
(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

DIV 2 NON-INCENDIVE PARAMETERS		mA HART	CHB	CHC
Vac (Vdc)		24	15	15
Isc (mA)		25	25	7.0
Po (W)		-	-	-
Ca (μ F)	A,B	0.345	2.25	-
	C	2.06	15.15	-
	D	8.25	75	-
La (H)	A,B	0.096	0.096	-
	C	0.384	0.384	-
	D	0.768	0.768	-
Vmax (Vdc)		-	30	30
Imax (mA)		-	500	500
Ct (μ F)		-	0.0011	0
Li (μ H)		-	4.0	4.0

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
Temp. Code T4A

Note:
Hazardous area classification on an integrally mounted 2750 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

Warning:
This compartment contains non-intrinsically safe circuits. Use of conduit seals are required within 18 inches of the conduit openings.



This unit is provided with an external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Electronics: 2750 CONFIG I/O

EB-20011794 Rev. A
SHT 1 OF 1

2.7 4200 2-wire

This drawing describes an outputs installation for a 4200 2-wire transmitter.

MODEL 4200 2 WIRE Installation Instructions Type CSA-D-IS

MODEL 4200 2 WIRE OUTPUTS IN HAZARDOUS LOCATION

for 4200****AB**** only:
Div 1 I.B. Entity Parameters

input	
Ui	30Vdc
Ii	300mA
Pi	1,0 W
Ci	1200 pF
Li	7,5 uH

Div 2 Non-incendive Parameters

	ChA	ChB
	mA/H	mA/FO/DO
output		
Vmax	30Vdc	30Vdc
Isc	22mA	22mA
input		
Vmax	-	-
Imax	-	-

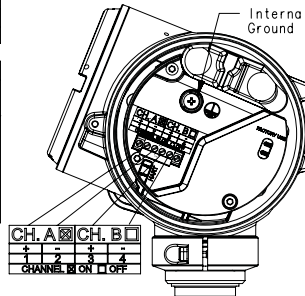
for 4200****AB**** only:
WARNING: SUBSTITUTION OF COMPONENTS
MAY IMPAIR INTRINSIC SAFETY
AVERTISSEMENT: LA SUBSTITUTION
DE COMPOSANTS PEUT COMPROMETTRE
LA SECURITE INTRINSEQUE

Hazardous Area
4200****AA****
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Div. 1 Groups E,F,G
Temp. Code Div 1: T6
Temp. Code Div 2: T8.

4200****AB****
Class I Div. 1 Groups A,B,C,D
Class I Div. 2 Groups A,B,C,D
Class II Div. 1 Groups E,F,G
Temp. Code Div 1: T4A
Temp. Code Div 2: T8.

4200****2A****
Class I Div. 2 Groups A,B,C,D
Class II Div. 2 Groups F,G
Temp Code Div. 2: T6

Note:
Hazardous area classification on an integrally mounted 4200 Transmitter can be limited by hazardous classification of the sensor. Refer to sensor tag.



4200 TERMINAL COMPARTMENT

For Screw terminal Connections:
Wire Strip Length: 0.28" (7mm)
Screw Torque: 0.37-0.44 lb/ft
(0.5-0.6Nm)

For connection of one, solid or stranded conductors use 26 AWG (0.129 mm²) to 14 AWG(2.08 mm²)

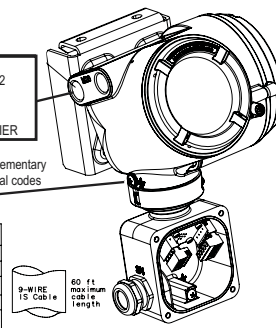
For connection of two, solid or stranded conductors use 26 AWG(0.129 mm²) to 17 AWG(1.04 mm²)

For 4200****AA**** only:
WARNING - A SEAL SHALL BE INSTALLED WITHIN 2 INCHES (50MM) OF THE ENCLOSURE
AVERTISSEMENT - UN SCELLEMENT DOIT ETRE INSTALLE A MOINS DE 2 POUCES (50mm) DU BOITIER

This unit is provided with an external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection

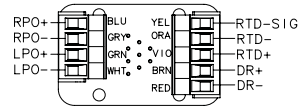
ASSOCIATED APPARATUS PARAMETER LIMITS

Voc < = Vmax
Isc < = Imax
(Voc x Isc) / 4 < = Pmax
*Ca > = Ccable + Ci + Ci + ... + Ci
*La > = Lcable + Li + Li + ... + Li



4200 9 WIRE REMOTE

FOR 4200****AA**** and 4200****2A**** only:
WARNING - EXPLOSION HAZARD DO NOT DISCONNECT WHILE CIRCUIT IS LIVE OR UNLESS THE AREA IS FREE OF IGNITIBLE CONCENTRATIONS
AVERTISSEMENT - RISQUE D'EXPLOSION. NE PAS DEBRANCHER PENDANT QUE LE CIRCUIT EST SOUS TENSION OU A MOINS QUE L'EMPLACEMENT NE SOIT EXEMPT DE CONCENTRATIONS INFLAMMABLES



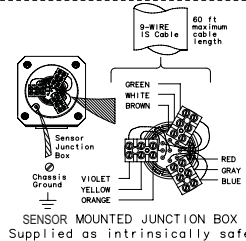
*The total Ci is equal to the sum of all Ci's of all devices on the network, Ccable is the total capacitance of all cable on the network.
*The total Li is equal to the sum of all Li's of all devices on the network, Lcable is the total inductance of all cable on the network.
If the electrical parameters of the cable are unknown, then following values may be used:

Cable Capacitance= 60pF/ft Cable Inductance= 0.20uH/ft
This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.
Per 61010 clause 8.4.2d.

Pollution degree 4;
Installation category I;
Altitude 6562 feet (2000m)
Humidity 5 to 95% relative humidity non-condensing between -40°F (-40°C) to +149°F (+65°C);
Temperature Range: -40°F(-40°C) to +149°F (+65°C);
Suitable for use outdoors within the limits and ratings described herein
Supply voltage fluctuations are not to exceed ±10% of the nominal supply voltage
Electrical supply: 30V (loop powered)
Use of this equipment in a manner not specified by the manufacturer, the protection provided may be impaired.

CAUTION:

To maintain intrinsic safety, the intrinsically safe wiring must be separated from all other wiring, and the Transmitter and Sensor must be properly grounded.



SENSOR MOUNTED JUNCTION BOX Supplied as intrinsically safe

Hazardous Area
Class I Div. 1 Groups A,B,C,D
Class I Div. 2 Groups A,B,C,D
Class II Div. 1 Groups E,F,G

Micro Motion mass flowmeter system connection for intrinsically safe operation.

Electronics: 4200 2 WIRE

EB-20057521 Rev. AA SHT 1 OF 1

2.8 5700 CIO

This drawing describes an outputs installation for a 5700 transmitter with configurable inputs and outputs.

COPYRIGHT 2014 MICRO MOTION, INC. ALL RIGHTS RESERVED
MODEL 5700 WITH ANALOG OUTPUTS
Installation Instructions Type CSA-D-1S

MODEL 5700 WITH ANALOG OUTPUTS IN HAZARDOUS LOCATION
(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

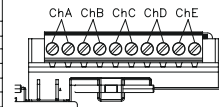
Warning:
This compartment contains non-intrinsically safe circuits. Use of conduit seals are required within 2 inches of the conduit openings.

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
Temp. Code Div 1: T6
Div 2: T5

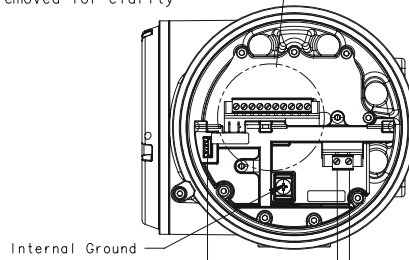
This unit is provided with an external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Note:
Hazardous area classification on an integrally mounted 5700 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

Div 2 Non-incendive Parameters					
	ChA mA/H	ChB mA/FO/DO	ChC mA/FO/DO/DI	ChD mA(in) IN/FO/DO/DI	ChE RS485
output					
V _{oc}	26Vdc	26Vdc	26V dc	26Vdc	6Vdc
I _{sc}	24mA	24mA	24mA	24mA	30mA
Input					
V _{max}	-	-	30Vdc	30Vdc	-
I _{max}	-	-	500mA	500mA	-



USB and power covers removed for clarity



Warning:
Do not connect or disconnect from USB part when in hazardous atmosphere

USB	85-250 Vac 50/60 Hz N L
output	
V _{oc}	6V
I _{sc}	120mA
Input	
V _{max}	6V
I _{max}	120mA

Electronics: 5700 ANALOG

EB-20028175 Rev. AA
SHT 1 OF 1

2.9 5700 Ethernet

This drawing describes an outputs installation for a 5700 transmitter with Ethernet outputs.

COPYRIGHT 2019 MICRO MOTION, INC.
ALL RIGHTS RESERVED

MODEL 5700
WITH ETHERNET OUTPUTS

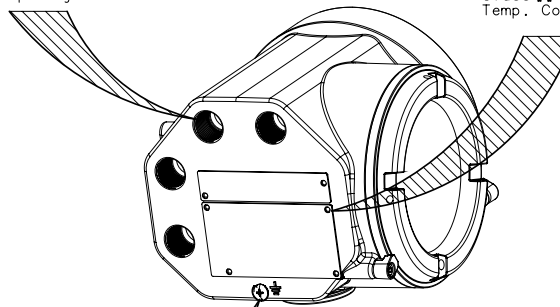
Installation Instructions
Type CSA-D-1S

MODEL 5700 WITH ETHERNET OUTPUTS IN HAZARDOUS LOCATION

(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

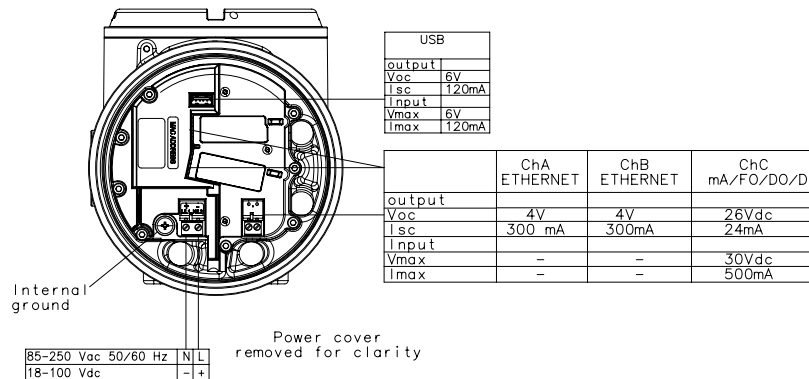
Warning:
This compartment contains non-intrinsically safe circuits. Use of conduit seals are required within 2 inches of the conduit openings.

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
Temp. Code Div 1: T6
Div 2: T4A



This unit is provided with an external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Note:
Hazardous area classification on an integrally mounted 5700 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.



Warning:
Do not connect or disconnect from USB port when in hazardous atmosphere

Electronics: 5700 ETHERNET

EB-20030708 Rev. AA
SHT 1 OF 1

2.10 5700 fieldbus

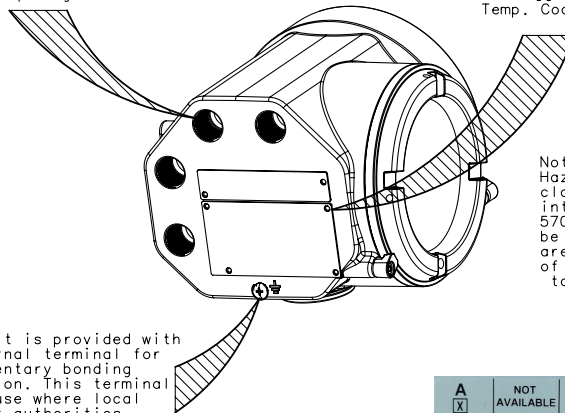
This drawing describes an outputs installation for a 5700 transmitter with fieldbus outputs.

COPYRIGHT 2015 MICRO MOTION, INC. ALL RIGHTS RESERVED
MODEL 5700 WITH FIELDBUS OUTPUTS
Installation Instructions Type CSA-D-IS

MODEL 5700 WITH FIELDBUS OUTPUTS IN HAZARDOUS LOCATION
 (WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

Warning:
This compartment contains non-intrinsically safe circuits. Use of conduit seals are required within 2 inches of the conduit openings.

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
Temp. Code Div 1: T6
Div 2: T4A



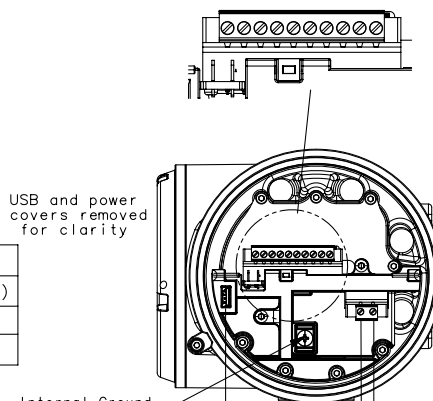
Note:
Hazardous area classification on an integrally mounted 5700 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

This unit is provided with an external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

A	NOT AVAILABLE			B	C			NOT USED	
<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
FOUNDATION FIELDBUS TERMINALS									
+		-		+		-			
1	2	3	4	5	6	7	8	9	10
<small>MMI-20026183 Rev. AC</small> <small>CHANNEL <input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF</small>									

DIVISION 1 I.S. PARAMETERS			
Parameter	FF	ChB	ChC
U_i	30V	30V	30V
I_i	300mA	484mA	484mA
P_i	1.3W	2.05W	2.05W
C_i	0.27nF	0.27nF	11.27nF
L_i	5uH	5uH	5uH

DIVISION 2 NON-INCENDIVE PARAMETERS			
Parameter	FF	ChB (mA)	ChC (FO/DO)
V max	33VDC	30VDC	30VDC
I max	25mA	2-22mA	20mA



Warning:
Do not connect or disconnect from USB port when in hazardous atmosphere

USB	85-250 Vac 50/60 Hz N L
output	18-100 Vdc - +
Vac	6V
Isc	120mA
Input	
Vmax	6V
I max	120mA

Electronics: 5700 FIELDBUS

EB-20030711 Rev. AA
SHT 1 OF 1

2.11 5700 fieldbus (FISCO)

This drawing describes an outputs installation for a 5700 transmitter with fieldbus (FISCO) outputs.

COPYRIGHT 2016 MICRO MOTION, INC.
ALL RIGHTS RESERVED

MODEL 5700
WITH FISCO FIELDBUS OUTPUTS

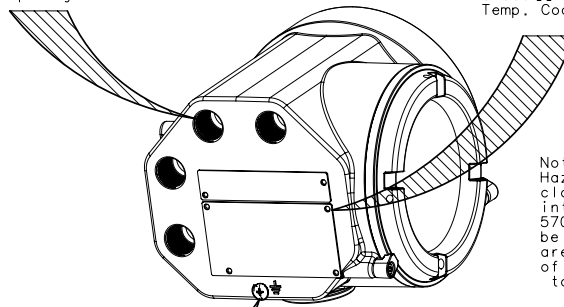
Installation Instructions
Type CSA-D-IS

MODEL 5700 WITH FISCO FIELDBUS OUTPUTS IN HAZARDOUS LOCATION

(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

Warning:
This compartment contains non-intrinsically safe circuits. Use of conduit seals are required within 2 inches of the conduit openings.

Hazardous Area
Class I Div. 1 Groups C,D
Class II Groups E,F,G
Temp. Code Div 1: T6

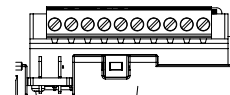


Note:
Hazardous area classification on an integrally mounted 5700 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

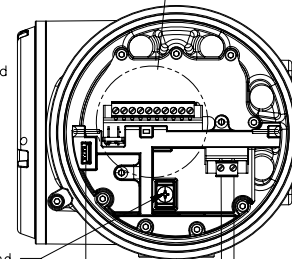
This unit is provided with an external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

A		NOT AVAILABLE		B		C		NOT USED	
[X]				[X]		[X]			
FOUNDATION FIELDBUS TERMINALS									
+	-			+	-	+	-		
1	2	3	4	5	6	7	8	9	10
MHI 2026183 Rev. AC									
CHANNEL <input type="checkbox"/> ON <input type="checkbox"/> OFF									

Fieldbus when installed according to FISCO requirements			
Parameter	FF	ChB	ChC
U_i	33V	30V	30V
I_i	380mA	484mA	484mA
P_i	5.32W	2.05W	2.05W
C_i	0.27nF	0.27nF	11.27nF
L_i	5uH	5uH	5uH



USB and power covers removed for clarity



Internal Ground

Warning:
Do not connect or disconnect from USB port when in hazardous atmosphere

USB	85-250 Vac 50/60 Hz	N	L
output			
Voc	6V		
Isc	120mA		
input			
Vmax	6V		
Imax	120mA		

Electronics: 5700 FISCO FIELDBUS

EB-20030804 Rev. AA
SHT 1 OF 1

2.12 5700 IS

This drawing describes an outputs installation for a 5700 transmitter with intrinsically safe outputs.

COPYRIGHT 2017 MICRO MOTION, INC.
ALL RIGHTS RESERVED

MODEL 5700
WITH IS I/O

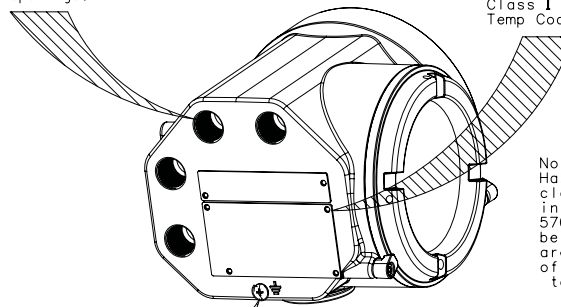
Installation Instructions
Type CSA-D-IS

MODEL 5700 WITH IS I/O IN HAZARDOUS LOCATION

(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

Warning:
This compartment contains non-intrinsically safe circuits. Use of conduit seals are required within 2 inches of the conduit openings.

Hazardous Area
Class I Div. 1 Groups C,D
Class II Groups E,F,C
Temp. Code Div 1: T6
Class I Div. 2 Groups A,B,C,D
Temp Code T5

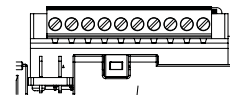


Note:
Hazardous area classification on an integrally mounted 5700 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

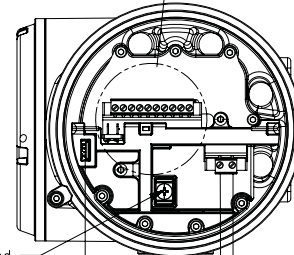
This unit is provided with an external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

A		B		C		D		NOT USED	
INTRINSICALLY SAFE TERMINALS									
+	-	+	-	+	-	+	-	+	-
1	2	3	4	5	6	7	8	9	10
MMI-20029559 Rev. AA									
CHANNEL <input type="checkbox"/> ON <input type="checkbox"/> OFF									

Parameter	ChA	ChB	ChC	ChD
U_i	30V	30V	30V	30V
I_i	484mA	484mA	484mA	484mA
P_i	2.05W	2.05W	2.05W	2.05W
C_i	150pF	150pF	150pF	150pF
L_i	0uH	0uH	0uH	0uH



USB and power covers removed for clarity



Internal Ground

Warning:
Do not connect or disconnect from USB port when in hazardous atmosphere

USB	85-250 Vac 50/60 Hz N L
	18-100 Vdc - +
Output	
Voc	6V
Isc	120mA
Input	
Vmax	6V
Imax	120mA

Electronics: 5700 IS I/O

EB-20045787 Rev. AA
SHT 1 OF 1

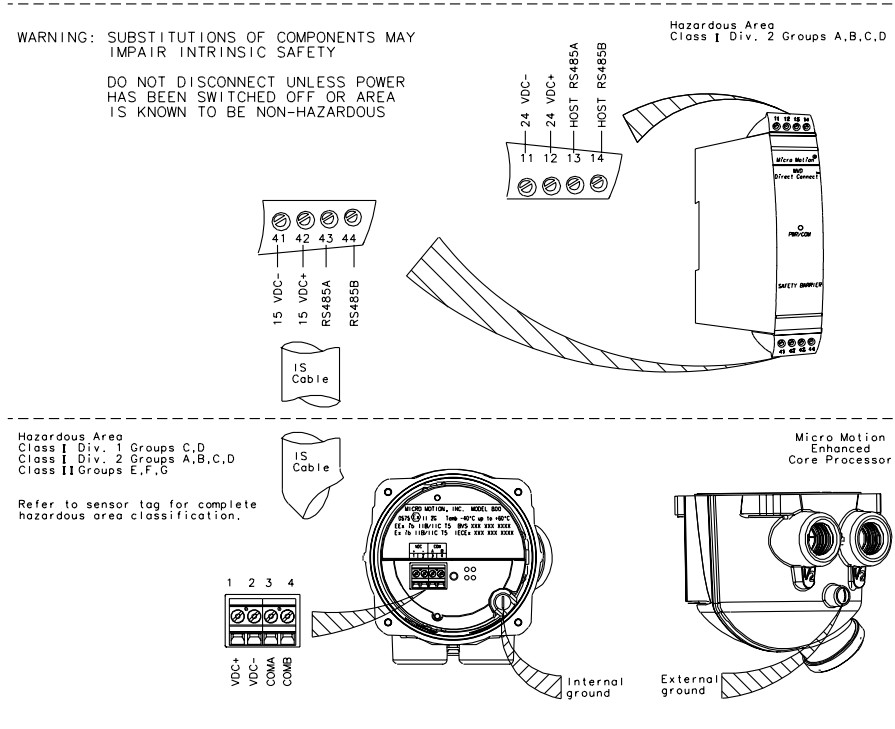
3 Direct host 4-wire installation

Table 3-1: List of drawings

Installation	Drawing
ECP to direct host through a safety barrier	EB-20003013, Revision A
CP to direct host through a safety barrier	EB-3600799, Revision CA

3.1 ECP to direct host through a safety barrier

This drawing describes an enhanced core processor to a 4-wire direct host through a safety barrier.



Maximum Cable Capacitance = 60pF/ft
Maximum Cable Inductance = 0.20µH/ft
Maximum cable length from core processor to safety barrier is 500 feet.
For cable runs greater than 500 feet, please contact Micro Motion.
This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

Micro Motion mass flowmeter system connection for intrinsically safe operation

Electronics: SAFETY BARRIER

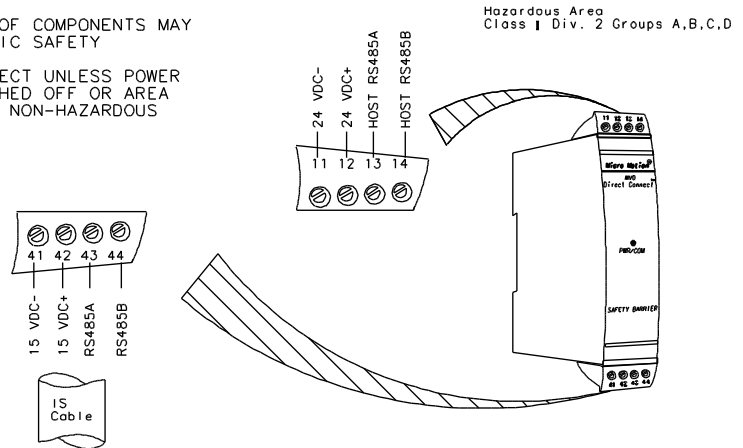
EB-20003013 Rev. A
SHT 1 OF 1

3.2 CP to direct host through a safety barrier

This drawing describes a core processor to a 4-wire direct host through a safety barrier.

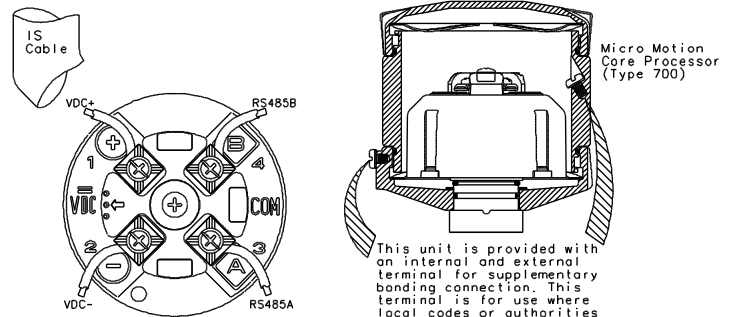
WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY

DO NOT DISCONNECT UNLESS POWER HAS BEEN SWITCHED OFF OR AREA IS KNOWN TO BE NON-HAZARDOUS



Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G

Refer to sensor tag for complete hazardous area classification.



This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Maximum Cable Capacitance = 60pF/ft
Maximum Cable Inductance = 0.20μH/ft

Maximum cable length from core processor to safety barrier is 500 feet. For cable runs greater than 500 feet, please contact Micro Motion.

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

Micro Motion mass flowmeter system connection for Intrinsically safe operation

Electronics: SAFETY BARRIER

EB-3600799 Rev. C
SHT 1 OF 1

4 800 ECP

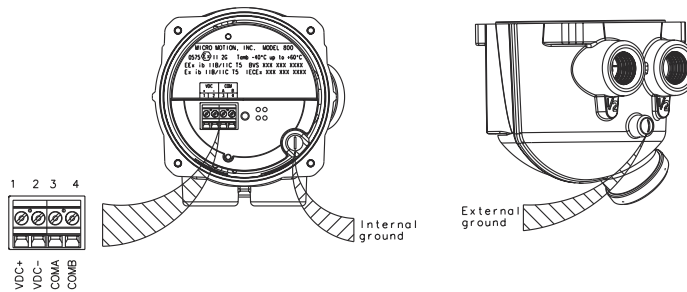
This drawing describes an 800 enhanced core processor installation.

800 ENHANCED CORE PROCESSOR IN HAZARDOUS LOCATION

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G

U.S. AND NON-INCENDIVE 800 ENHANCED CORE PROCESSOR (INPUT) ENTITY PRMTRS / 4-WIRE TERMINAL	
VMAX	17.22 Vdc
I _{max}	488 mA
P _{max}	2.1W
C _i	2200pF
L _i	30μH

ENHANCED CORE PROCESSOR



This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS	
V _{oc} <=	V _{max}
I _{sc} <=	I _{max}
(V _{oc} x I _{sc}) / 4 <=	P _{max}
*C _a >=	C _{able} + C _{i1} + C _{i2} + ... + C _{in}
*L _a >=	L _{able} + L _{i1} + L _{i2} + ... + L _{in}

*The total C_i is equal to the sum of all C_i's of all devices on the network. C_{able} is the total capacitance of all cable on the network.

*The total L_i is equal to the sum of all L_i's of all devices on the network. L_{able} is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:

Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

Electronics: ENHANCED CORE PROCESSOR

EB-20003427 Rev. A
SHT 1 OF 1

5 1500/2500 4-wire installation

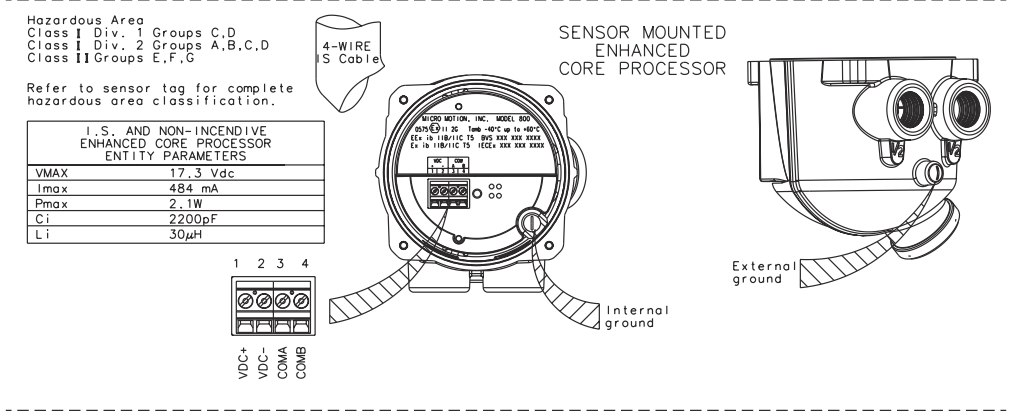
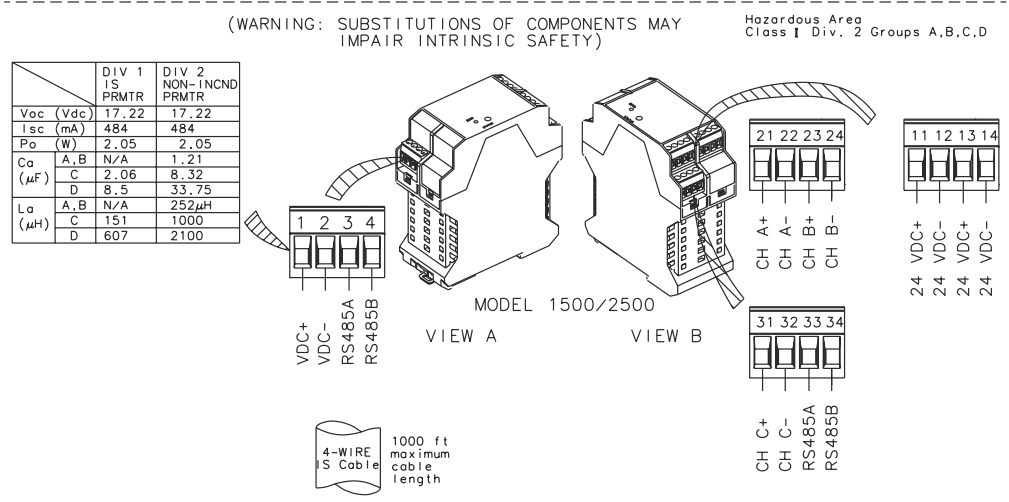
Table 5-1: List of drawings

Installation	Drawing
Remote 1500/2500 with ECP	EB-20003009, Revision A
Remote 1500/2500 4-wire CP to CMF400 with booster amplifier	EB-20001219, Revision A
Remote 1500/2500 4-wire CP to D600	EB-20001218, Revision A
Remote 1500/2500 4-wire CP to CMF, F, H, R, CNG, or T	EB-20001220, Revision A

5.1 Remote 1500/2500 with ECP

This drawing describes a remote 1500 or 2500 4-wire installation with an enhanced core processor mounted on a sensor.

MODEL 1500/2500 IN HAZARDOUS LOCATION



INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS	
Voc	<= Vmax
Isc	<= Imax
(Voc x Isc) / 4	<= Pmax
•Ca	>= Ccable + Ci1 + Ci2 + ... + Cin
•La	>= Lcable + Li1 + Li2 + ... + Lin

- The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.
- The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

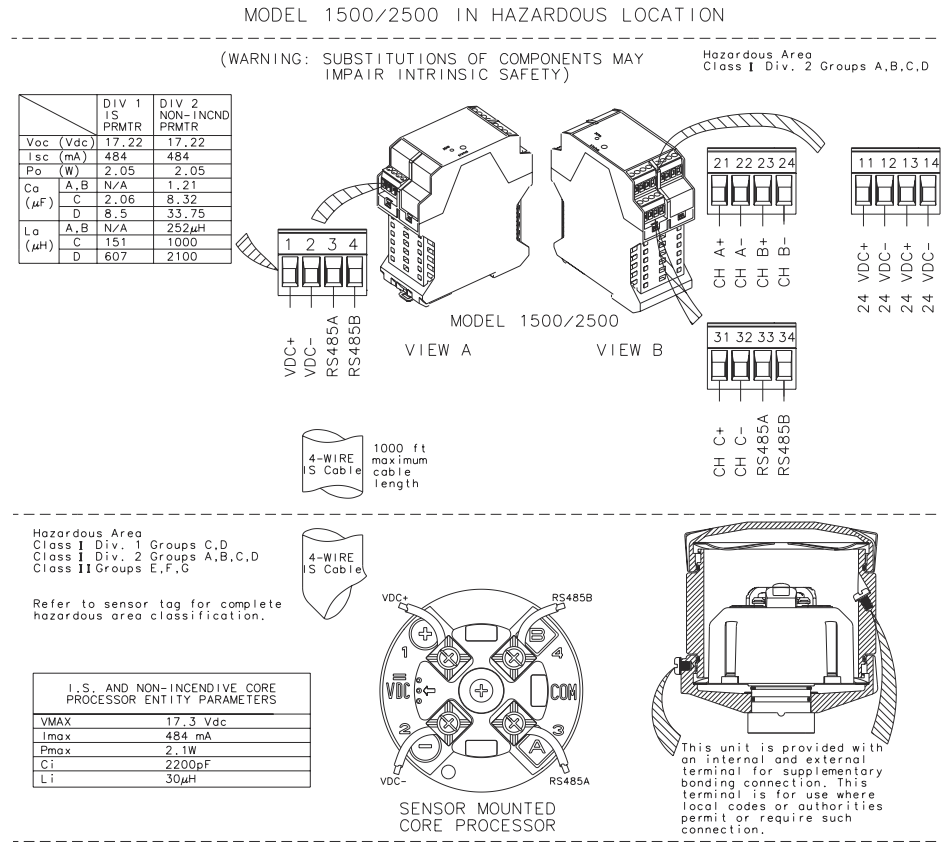
Micro Motion mass flowmeter system connection for intrinsically safe operation

Electronics: 1500/2500

EB-20003009 Rev. A

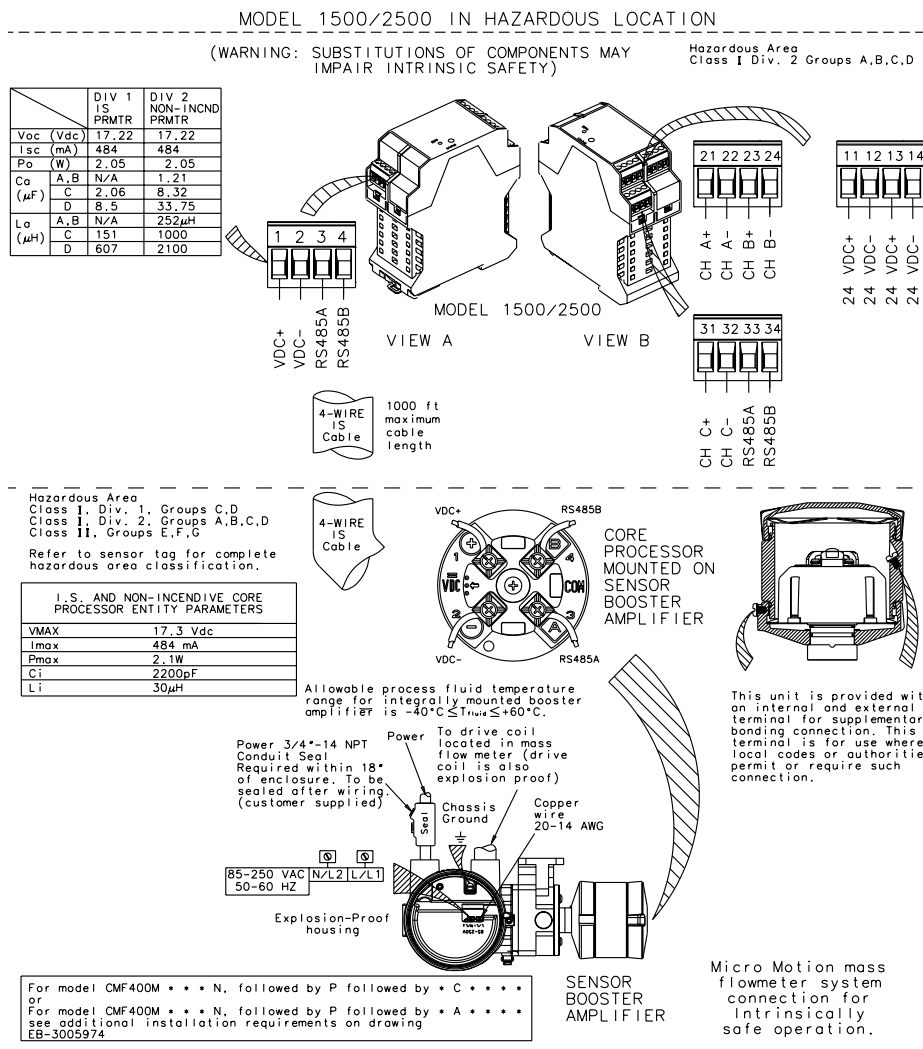
5.2 Remote 1500/2500 4-wire CP to CMF, F, H, R, CNG, or T

This drawing describes a remote 1500 or 2500 4-wire installation with a core processor mounted on a CMF, F-Series, H-Series, R-Series, CNG, or T-Series sensor.



5.3 Remote 1500/2500 4-wire CP to CMF400 with booster amplifier

This drawing describes a remote 1500 or 2500 4-wire installation with a core processor mounted on a CMF400 sensor, in addition to a booster amplifier.



INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS
Voc < = Vmax
Isc < = Imax
(Voc x Isc) / 4 < = Pmax
*Ca > = Ccable + C1 + C2 + ... + Cin
*La > = Lcable + L1 + L2 + ... + Lin

- *The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.
- *The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

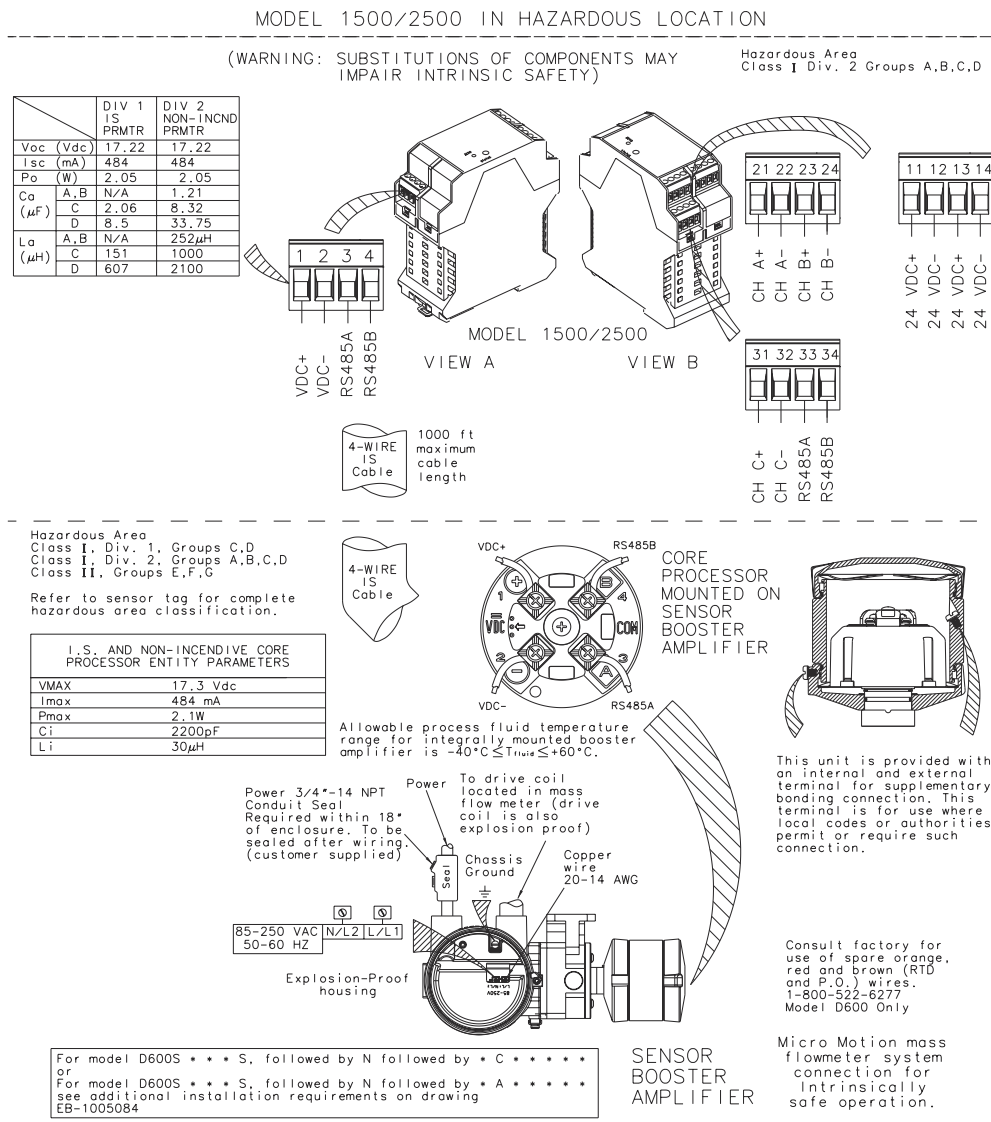
This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

Electronics: 1500/2500
Sensor: CMF400

EB-20001219 Rev. A

5.4 Remote 1500/2500 4-wire CP to D600

This drawing describes a remote 1500 or 2500 4-wire installation with a core processor mounted on a D600 sensor.



For model D600S * * * S, followed by N followed by * C * * * * *
or
For model D600S * * * S, followed by N followed by * A * * * * *
see additional installation requirements on drawing
EB-1005084

INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS
Voc <= Vmax
Isc <= Imax
(Voc x Isc) / 4 <= Pmax
Ca >= Ccable + Ci1 + Ci2 + ... + Cin
La >= Lcable + Li1 + Li2 + ... + Lin

*The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.

*The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

Electronics: 1500/2500
Sensor: D600

EB-20001218 Rev. A

6 1700/2700 4-wire installation

Table 6-1: List of drawings

Installation	Drawing
Remote 1700/2700 4-wire CP	EB-3600482, Revision B
Remote 1700/2700 with CP and a CMF400	EB-3005819, Revision C
Remote 1700/2700 with CP and a D600	EB-1005983, Revision B
Remote 1700/2700 with ECP	EB-20003010, Revision A

6.1 Remote 1700/2700 4-wire CP

This drawing describes a 1700 or 2700 4-wire remote transmitter installed with a core processor mounted on a sensor.

Important

This installation does not apply if you have either a D600 or a CMF400 sensor with a booster amplifier.

REMOTE MOUNT MODEL 1700/2700 IN HAZARDOUS LOCATION

(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

For proper installation including I/O, power, gland and hazardous area location, refer to appropriate 1700/2700 output option CSA-D-15 installation instructions

	DIV 1 IS PRMTR	DIV 2 NON-INCND PRMTR
V _{oc} (Vdc)	17.22	17.22
I _{sc} (mA)	484	484
P _o (W)	2.05	2.05
C _a (μF)	A, B	N/A
	C	2.06
	D	8.5
L _a (μH)	A, B	N/A
	C	151
	D	607

REMOTE INSTALLATION

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
Temp. Code T4A

Note:
Hazardous area classification on an integrally mounted 1700/2700 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

This unit is provided with an internal terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G

Refer to sensor tag for complete hazardous area classification.

I.S. AND NON-INCENDIVE CORE PROCESSOR ENTITY PARAMETERS	
V _{MAX}	17.3 Vdc
I _{max}	484 mA
P _{max}	2.1W
C ₁	2200pF
L ₁	30μH

This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS	
V _{oc} <=	V _{max}
I _{sc} <=	I _{max}
(V _{oc} x I _{sc}) / 4 <=	P _{max}
*C _a >=	C _{able} + C ₁ ¹ + C ₂ ² + ... + C _n ⁿ
*L _a >=	L _{able} + L ₁ ¹ + L ₂ ² + ... + L _n ⁿ

- *The total C_i is equal to the sum of all C_i's of all devices on the network. C_{able} is the total capacitance of all cable on the network.
- *The total L_i is equal to the sum of all L_i's of all devices on the network. L_{able} is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
 Cable Capacitance = 60pF/ft
 Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

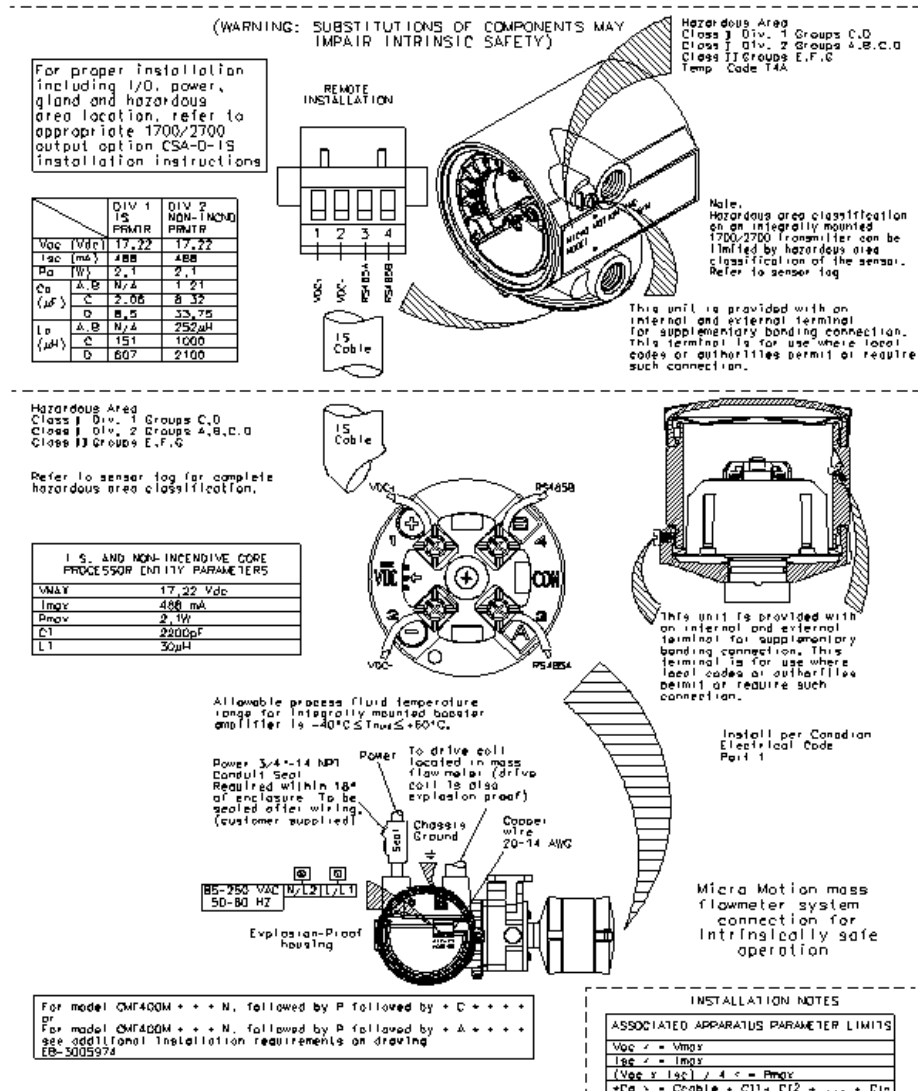
Micro Motion mass flowmeter system connection for intrinsically safe operation

Electronics: 1700/2700

6.2 Remote 1700/2700 with CP and a CMF400

This drawing describes a remote 1700 or 2700 4-wire installation with a core processor mounted on a CMF400 sensor, in addition to a booster amplifier.

REMOTE MOUNT MODEL 1700/2700 IN HAZARDOUS LOCATION



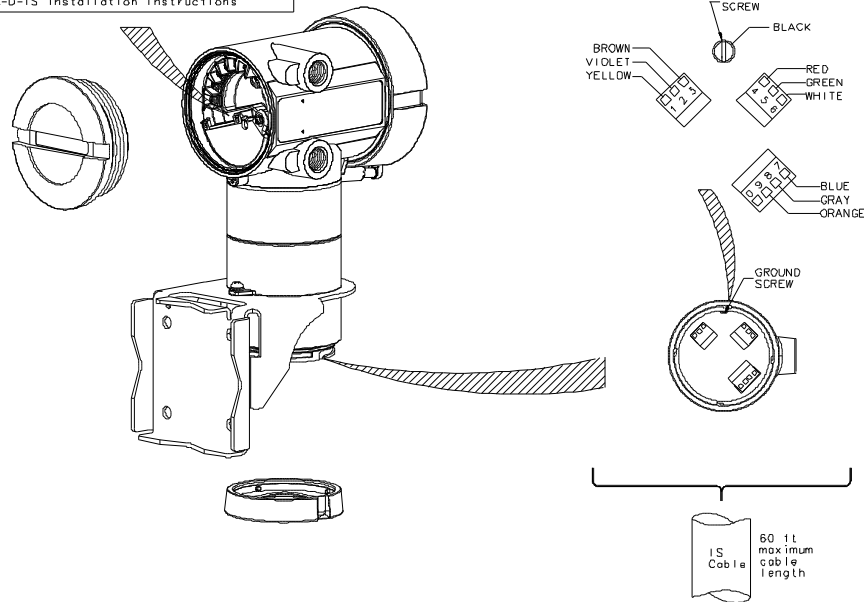
6.3 Remote 1700/2700 with CP and a D600

This drawing describes a remote 1700 or 2700 4-wire installation with a core processor mounted on a D600 sensor.

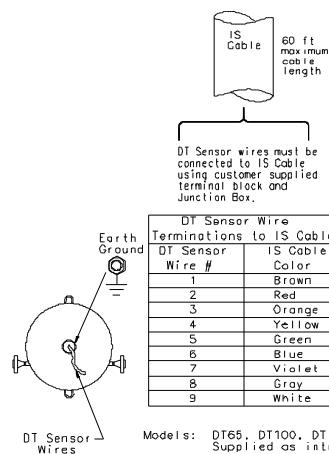
MODEL 1700/2700 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION

Hazardous Area
Class I Div. 1 Groups C and D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

For proper installation of I/O, power and ground terminals, refer to appropriate CSA-D-IS installation instructions.



Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G



CAUTION:
To maintain intrinsic safety, the intrinsically safe wiring must be separated from all other wiring, and the Transmitter and Sensor must be properly grounded.

Micro Motion mass flowmeter system connection for intrinsically safe operation

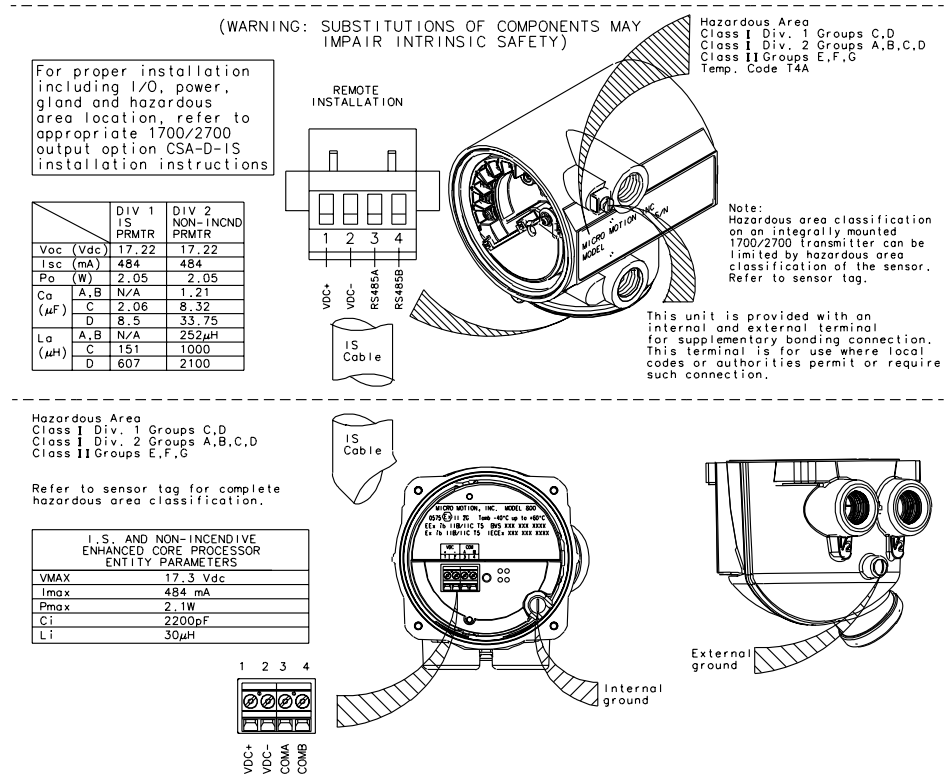
Electronics: 1700/2700

EB-3600538 Rev. B
SHT 1 OF 1

6.4 Remote 1700/2700 with ECP

This drawing describes a remote 1700 or 2700 4-wire remote transmitter installed with an enhanced core processor mounted on a sensor.

REMOTE MOUNT MODEL 1700/2700 IN HAZARDOUS LOCATION



INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS
Voc <= Vmax
Isc <= Imax
(Voc x Isc) / 4 <= Pmax
*Ca >= Ccable + Ci1 + Ci2 + ... + Cin
*La >= Lcable + Li1 + Li2 + ... + Lin

*The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.

*The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:

Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

Micro Motion mass flowmeter system connection for intrinsically safe operation

Electronics: 1700/2700

EB-20003010 Rev. A
SHT 1 OF 1

7 2750 4-wire ECP installation

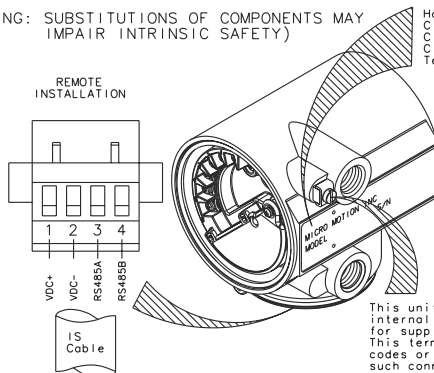
This drawing describes a remote 2750 4-wire installation with an enhanced core processor mounted on a sensor.

REMOTE MOUNT MODEL 2750 IN HAZARDOUS LOCATION

(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

For proper installation including I/O, power, gland and hazardous area location, refer to appropriate 2750 output option CSA-D-IS installation instructions

	DIV 1 IS PRMTR	DIV 2 NON-INCND PRMTR
Vac (Vdc)	17.22	17.22
Isc (mA)	484	484
Po (W)	2.05	2.05
Ca (μF)	A,B	N/A
	C	2.06
La (μH)	A,B	N/A
	C	151
	D	607
		2100



Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
Temp. Code T4A

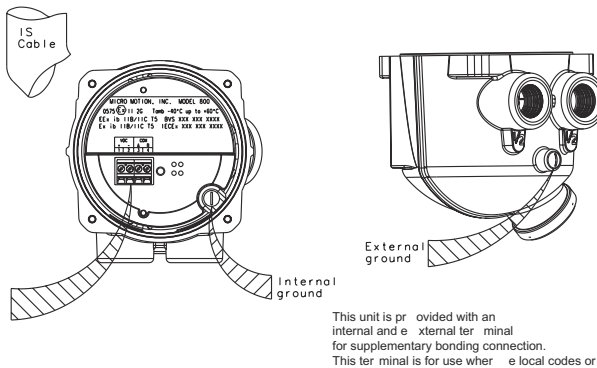
Note:
Hazardous area classification on an integrally mounted 2750 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G

Refer to sensor tag for complete hazardous area classification.

I.S. AND NON-INCENDIVE ENHANCED CORE PROCESSOR ENTITY PARAMETERS	
VMAX	17.3 Vdc
Imax	484 mA
Pmax	2.1W
Ci	2200pF
Li	30μH



This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS
Vac <= Vmax
Isc <= Imax
(Vac x Isc) / 4 <= Pmax
*Ca >= Ccable + Ci1 + Ci2 + ... + Cin
*La >= Lcable + Li1 + Li2 + ... + Lin

*The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.

*The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:

Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

Micro Motion mass flowmeter system connection for intrinsically safe operation

Electronics: 2750

EB-20011795 Rev. A
SHT 1 OF 1

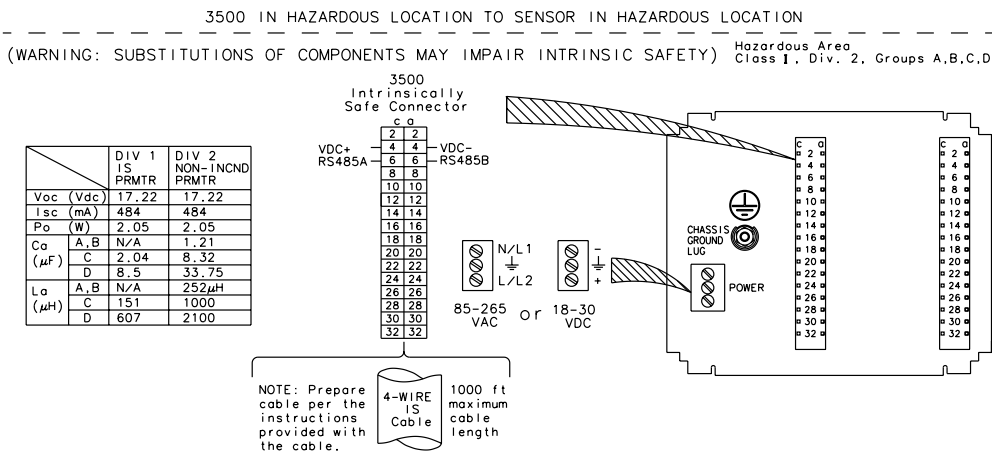
8 3500 4-wire installation

Table 8-1: List of drawings

Installation	Drawing
Remote 3500 with CP and CMF400	EB-20000244, Revision B
Remote 3500 with CP and a D600	EB-20000247, Revision B
Remote 3500 with CP on CMF, F, H, R, CNG, and T	EB-20000250, Revision B
Remote 3500 with ECP	EB-20003011, Revision A

8.1 Remote 3500 with CP and CMF400

This drawing describes a remote 3500 transmitter 4-wire installation with a core processor mounted on a CMF400 sensor, in addition to a booster amplifier.

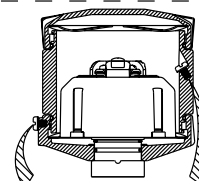
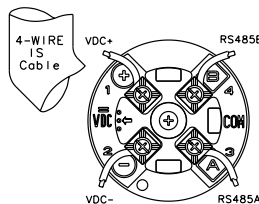


Hazardous Area
Class I, Div. 1, Groups C,D
Class II, Div. 2, Groups A,B,C,D
Class II, Groups E,F,G

Refer to sensor tag for complete hazardous area classification.

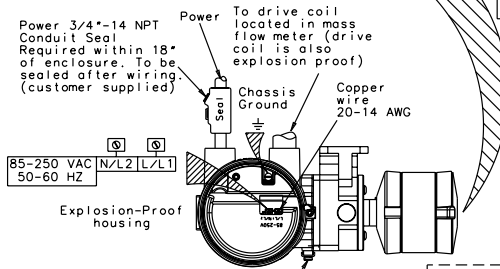
I, S, AND NON-INCENDIVE CORE PROCESSOR ENTITY PARAMETERS	
VMAX	17.3 Vdc
Imax	484 mA
Pmax	2.1W
Ci	2200pF
Li	30μH

1000 ft maximum cable length



This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Allowable process fluid temperature range for integrally mounted booster amplifier is $-40^{\circ}\text{C} \leq T_{\text{fluid}} \leq +60^{\circ}\text{C}$.



For model CMF400M***N, followed by N followed by *C or A*AZ* see additional installation requirements on drawing EB-3005974

Micro Motion mass flowmeter system connection for Intrinsically safe operation.

INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS	
Voc	$\leq V_{\text{max}}$
Isc	$\leq I_{\text{max}}$
$(V_{\text{oc}} \times I_{\text{sc}}) / 4$	$\leq P_{\text{max}}$
$C_{\text{a}} >$	$C_{\text{cable}} + C_{\text{i1}} + C_{\text{i2}} + \dots + C_{\text{in}}$
$L_{\text{a}} >$	$L_{\text{cable}} + L_{\text{i1}} + L_{\text{i2}} + \dots + L_{\text{in}}$

This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

*The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.

*The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

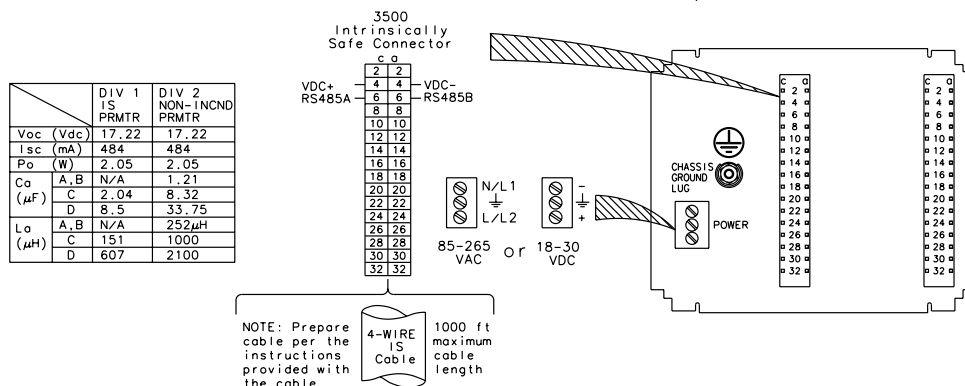
Electronics: 3500
Sensor: CMF400

EB-20000244 Rev. B
SHT 1 OF 1

8.2 Remote 3500 with CP and a D600

This drawing describes a remote 3500 4-wire installation with a core processor mounted on a D600 sensor.

3500 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION
(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY) Hazardous Area Class I, Div. 2, Groups A,B,C,D

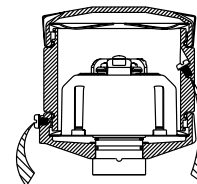
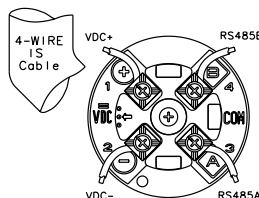


Hazardous Area Class I, Div. 1, Groups C,D
Class I, Div. 2, Groups A,B,C,D
Class II, Groups E,F,G

Refer to sensor tag for complete hazardous area classification.

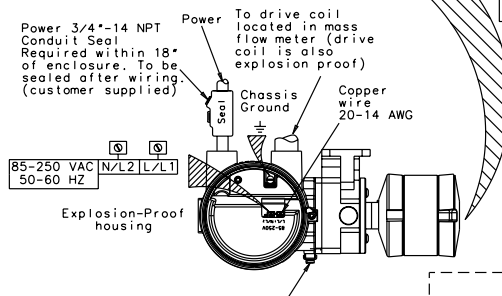
I.S. AND NON-INCNDIVE CORE PROCESSOR ENTITY PARAMETERS	
VMAX	17.3 Vdc
Imax	484 mA
Pmax	2.1W
Ci	2200pF
Li	30μH

1000 ft maximum cable length



This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Allowable process fluid temperature range for integrally mounted booster amplifier is $-40^{\circ}\text{C} \leq T_{\text{fluid}} \leq +60^{\circ}\text{C}$.



For model D600S***S, followed by N followed by *C or A*Z* see additional installation requirements on drawing EB-1005084

Micro Motion mass flowmeter system connection for intrinsically safe operation.

INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS	
Voc	$\leq V_{\text{max}}$
Isc	$\leq I_{\text{max}}$
$(V_{\text{oc}} \times I_{\text{sc}}) / 4$	$\leq P_{\text{max}}$
$\sum C_i$	$\leq C_{\text{cable}} + C_i + C_i^2 + \dots + C_i^n$
$\sum L_i$	$\leq L_{\text{cable}} + L_i + L_i^2 + \dots + L_i^n$

*The total C_i is equal to the sum of all C_i 's of all devices on the network. C_{cable} is the total capacitance of all cable on the network.

*The total L_i is equal to the sum of all L_i 's of all devices on the network. L_{cable} is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

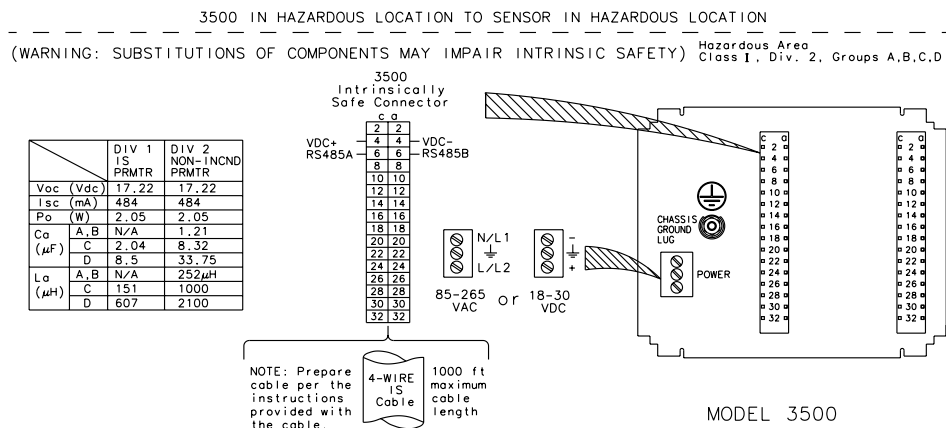
This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

Electronics: 3500
Sensor: D600

EB-20000247 Rev. B
SHT 1 OF 1

8.3 Remote 3500 with CP on CMF, F, H, R, CNG, and T

This drawing describes a remote 3500 transmitter 4-wire installation with a core processor mounted on a CMF, F-Series, H-Series, R-Series, CNG, or T-Series sensor.

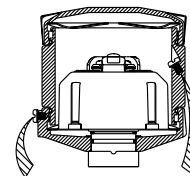
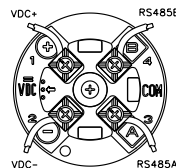


Hazardous Area
Class I, Div. 1, Groups C,D
Class I, Div. 2, Groups A,B,C,D
Class II, Groups E,F,G

Refer to sensor tag for complete hazardous area classification.

I, S, AND NON-INCENDIVE CORE PROCESSOR ENTITY PARAMETERS	
VMAX	17.3 Vdc
Imax	484 mA
Pmax	2.1W
Ci	2200pF
Li	30μH

1000 ft maximum cable length



This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

SENSOR MONTED CORE PROCESSOR

INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS
Voc < = Vmax
Isc < = Imax
(Voc x Isc) / 4 < = Pmax
•Co > = Ccable + Ci1 + Ci2 + ... + Cin
•Lo > = Lcable + Li1 + Li2 + ... + Lin

•The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.

•The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

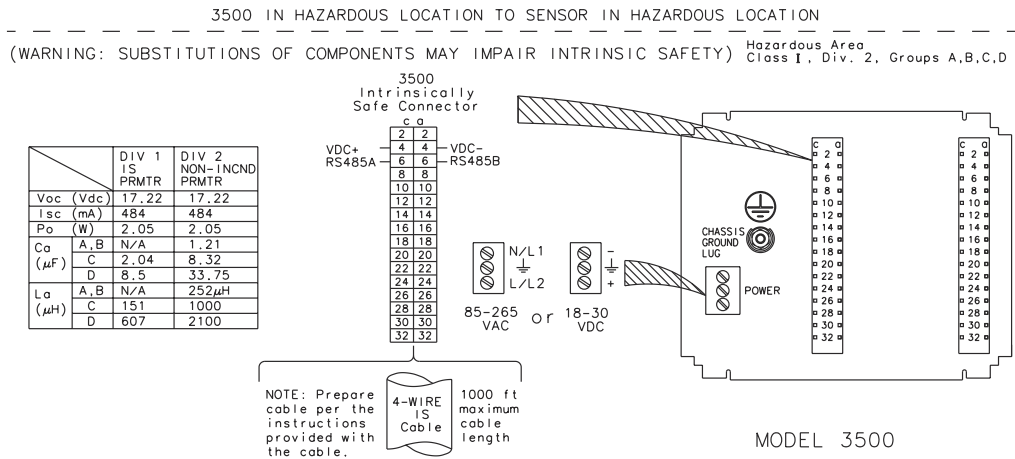
Micro Motion mass flowmeter system connection for Intrinsically safe operation.

Electronics: 3500

EB-20000250 Rev. B
SHT 1 OF 1

8.4 Remote 3500 with ECP

This drawing describes a remote 3500 4-wire installation with an enhanced core processor mounted on a sensor.



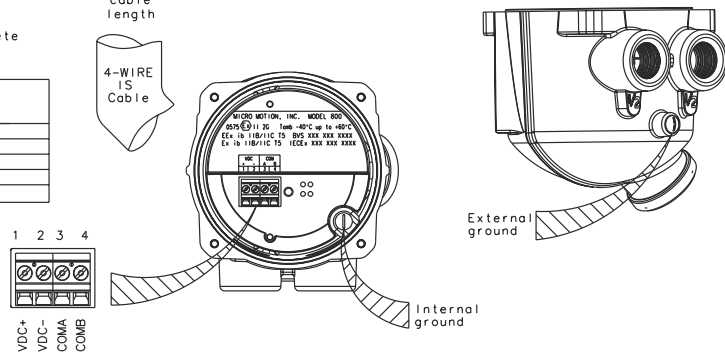
Hazardous Area
Class I, Div. 1, Groups C,D
Class I, Div. 2, Groups A,B,C,D
Class II, Groups E,F,G

Refer to sensor tag for complete hazardous area classification.

I.S. AND NON-INCENDIVE ENHANCED CORE PROCESSOR ENTITY PARAMETERS	
VMAX	17.3 Vdc
Imax	484 mA
Pmax	2.1W
Ci	2200pF
Li	30μH

1000 ft maximum cable length

SENSOR MOUNTED ENHANCED CORE PROCESSOR



INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS
Voc < = Vmax
Isc < = Imax
(Voc x Isc) / 4 < = Pmax
*Ca > = Ccable + Ci1 + Ci2 + ... + Cin
*La > = Lcable + Li1 + Li2 + ... + Lin

*The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.

*The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

Micro Motion mass flowmeter system connection for Intrinsically safe operation.

Electronics: 3500

EB-20003011 Rev. A
SHT 1 OF 1

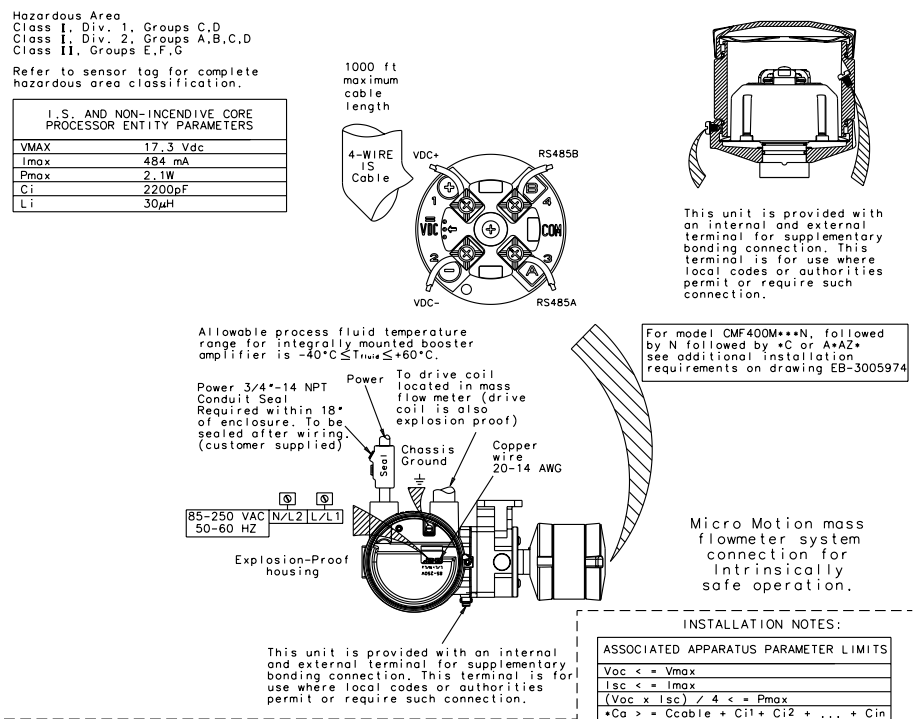
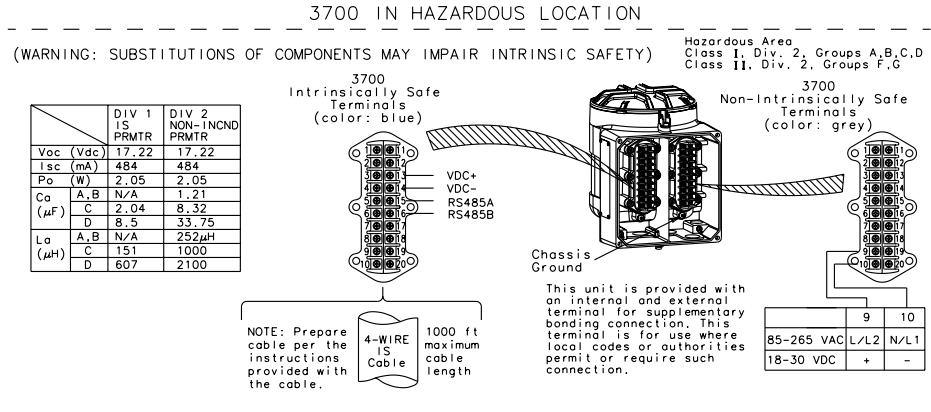
9 3700 4-wire installation

Table 9-1: List of drawings

Installation	Drawing
Remote 3700 with CP and CMF400	EB-20000218, Revision B
Remote 3700 with CP and D600	EB-20000221, Revision B
3700 with CP and CMF, F, H, R, CNF, or T	EB-20000224, Revision B
3700 with ECP	EB-20003012, Revision A

9.1 Remote 3700 with CP and CMF400

This drawing describes a remote 3700 4-wire installation with a core processor mounted on a CMF400 sensor, in addition to a booster amplifier.



- *The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.
- *The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
 Cable Capacitance = 60pF/ft
 Cable Inductance = 0.20μH/ft

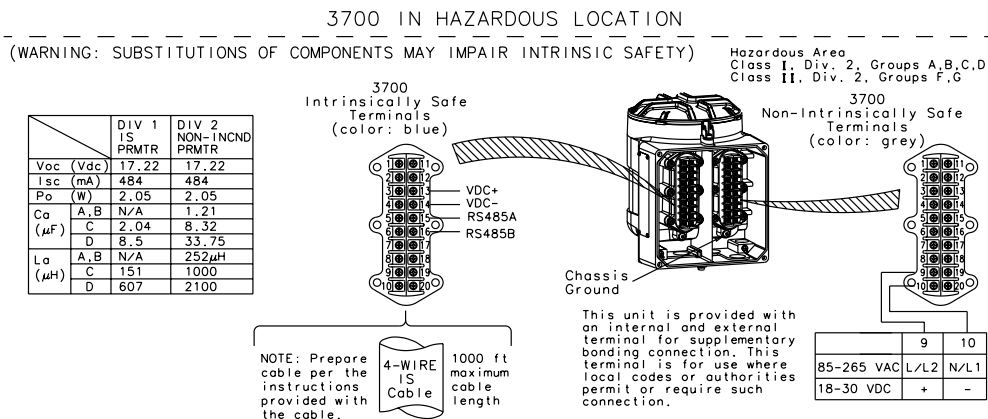
This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

Electronics: 3700
 Sensor: CMF400

EB-20000218 Rev. B
SHT 1 OF 1

9.2 Remote 3700 with CP and D600

This drawing describes a remote 3700 4-wire installation with a core processor mounted on a D600 sensor.

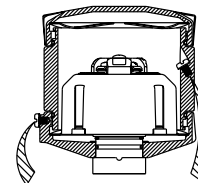
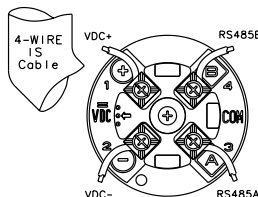


Hazardous Area
Class I, Div. 1, Groups C, D
Class I, Div. 2, Groups A, B, C, D
Class II, Groups E, F, G

Refer to sensor tag for complete hazardous area classification.

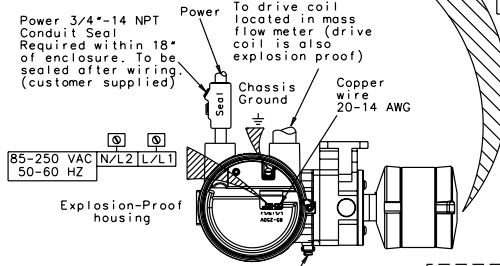
I. S. AND NON-INCNDIVE CORE PROCESSOR ENTITY PARAMETERS	
VMAX	17.3 Vdc
Imax	484 mA
Pmax	2.1W
Ci	2200pF
Li	30μH

1000 ft maximum cable length



This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Allowable process fluid temperature range for integrally mounted booster amplifier is $-40^{\circ}\text{C} \leq T_{\text{media}} \leq +60^{\circ}\text{C}$.



For model D600S***S, followed by N followed by *C or A+AZ* see additional installation requirements on drawing EB-1005084

Micro Motion mass flowmeter system connection for intrinsically safe operation.

This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS
Voc <= Vmax
Isc <= Imax
(Voc x Isc) / 4 <= Pmax
+Ca >= Ccable + Ci1 + Ci2 + ... + Cin
+La >= Lcable + Li1 + Li2 + ... + Lin

*The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.

*The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

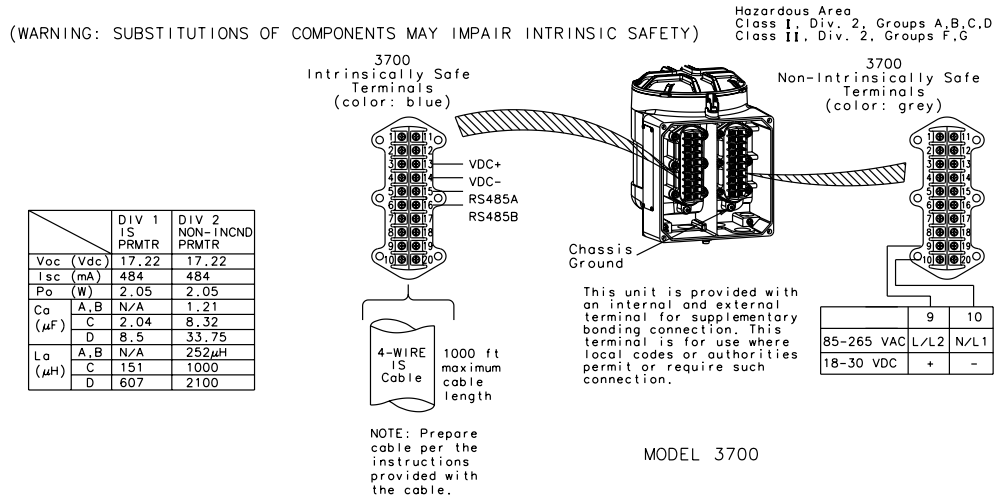
Electronics: 3700
Sensor: D600

EB-20000221 Rev. B
SHT 1 OF 1

9.3 3700 with CP and CMF, F, H, R, CNF, or T

This drawing describes a 3700 4-wire installation with a core processor mounted on a CMF, F-Series, H-Series, R-Series, CNF, or T-Series sensor.

3700 IN HAZARDOUS LOCATION

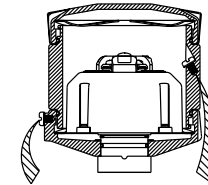
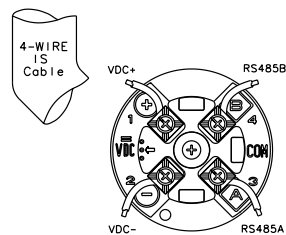


Hazardous Area
Class I, Div. 1, Groups C,D
Class I, Div. 2, Groups A,B,C,D
Class II, Groups E,F,G

Refer to sensor tag for complete hazardous area classification.

I.S. AND NON-INCENDIVE CORE PROCESSOR ENTITY PARAMETERS	
VMAX	17.3 Vdc
I _{max}	484 mA
P _{max}	2.1W
C _i	2200pF
L _i	30μH

1000 ft maximum cable length



This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

SENSOR MOUNTED CORE PROCESSOR

INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS
V _{oc} < = V _{max}
I _{sc} < = I _{max}
(V _{oc} x I _{sc}) / 4 < = P _{max}
*C _a > = C _{able} + C _{i1} + C _{i2} + ... + C _{in}
*L _a > = L _{able} + L _{i1} + L _{i2} + ... + L _{in}

*The total C_i is equal to the sum of all C_i's of all devices on the network. C_{able} is the total capacitance of all cable on the network.

*The total L_i is equal to the sum of all L_i's of all devices on the network. L_{able} is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

Micro Motion mass flowmeter system connection for Intrinsically safe operation.

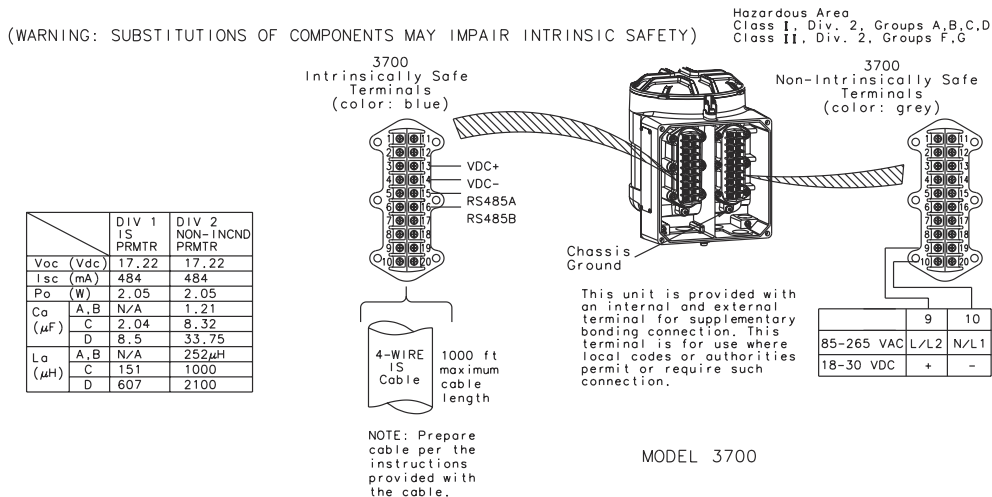
Electronics: 3700

EB-20000224 Rev. B
SHT 1 OF 1

9.4 3700 with ECP

This diagram describes a 3700 4-wire installation with an enhanced core processor mounted on a sensor.

3700 IN HAZARDOUS LOCATION



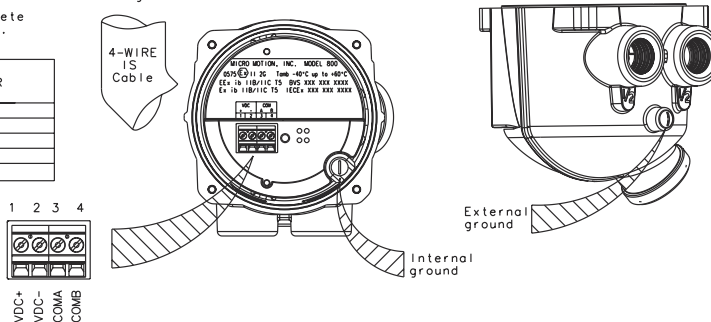
Hazardous Area
Class I, Div. 1, Groups C,D
Class I, Div. 2, Groups A,B,C,D
Class II, Groups E,F,G

Refer to sensor tag for complete hazardous area classification.

I.S. AND NON-INCENDIVE ENHANCED CORE PROCESSOR ENTITY PARAMETERS	
VMAX	17.3 Vdc
Imax	484 mA
Pmax	2.1W
Ci	2200pF
Li	30μH

1000 ft maximum cable length

SENSOR MOUNTED ENHANCED CORE PROCESSOR



INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS	
Voc < =	Vmax
Isc < =	Imax
(Voc x Isc) / 4 < =	Pmax
*Ca > =	Ccable + Ci1 + Ci2 + ... + Cin
*La > =	Lcable + Li1 + Li2 + ... + Lin

*The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.

*The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft
Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.

Micro Motion mass flowmeter system connection for Intrinsically safe operation.

Electronics: 3700

EB-20003012 Rev. A
SHT 1 OF 1

10 5700 4-wire installation

Table 10-1: List of drawings

Installation	Drawing
5700 to RCP - sensor with junction box	EB-20028178, Revision AA
Remote 5700 with CP	EB-20028177, Revision AA

10.1 5700 to RCP - sensor with junction box

This drawing describes a remote 5700 4-wire installation with a remote core processor mounted on a sensor with a junction box.

COPYRIGHT 2014 MICRO MOTION, INC.
ALL RIGHTS RESERVED

MODEL 5700 REMOTE MOUNT WITH
REMOTE CORE PROCESSOR AND
SENSOR WITH JBOX

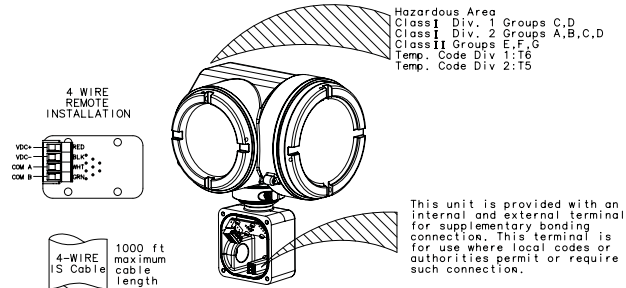
Installation Instructions
Type CSA-D-IS

REMOTE MOUNT MODEL 5700 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION

(WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

For proper installation including I/O, power, gland and hazardous area location, refer to appropriate 5700 output option CSA-D-IS installation instructions

	DIV 1 IS PRMTR	DIV 2 NON-INCND PRMTR
Voc (Vdc)	17.2	17.2
Isc (mA)	479	160
Po (W)	8.06	1.83
Cp (µF)	A, B	N/A
	C	8.04
Lb (µH)	A, B	N/A
	C	619.9
	D	1.024

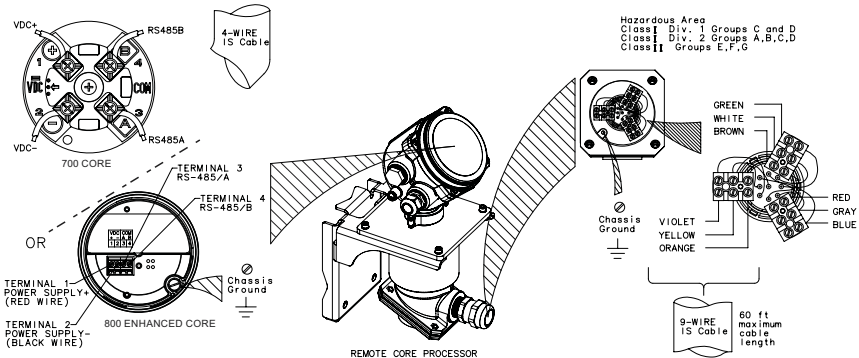


MODEL 5700

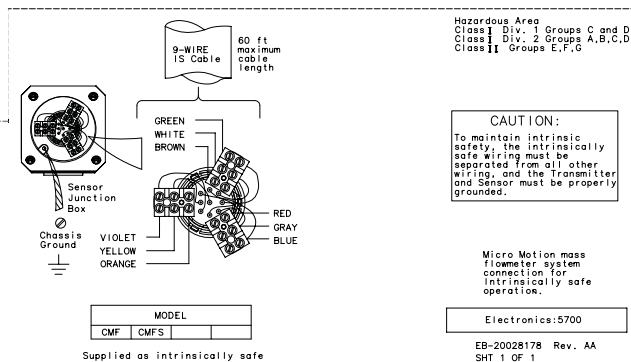
INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS	
Voc <=	Vmax
Isc <=	Imax
(Voc x Isc) / 4 <=	Pmax
Cc >=	Ccable + C1 + C2 + ... + Cn
Lc >=	Lcable + L1 + L2 + ... + Ln

*The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.
*The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.
If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft Cable Inductance = 0.20µH/ft
This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.



4-WIRE I, S, AND NON-INCENDITIVE CORE PROCESSOR ENTITY PARAMETERS	
Vmax	17.3 Vdc
Imax	484 mA
Pmax	2.1W
Ci	2200pF
Li	30µH



10.2 Remote 5700 with CP

This drawing describes a remote 5700 4-wire installation with a core processor mounted on a sensor.

COPYRIGHT 2014 MICRO MOTION, INC.
ALL RIGHTS RESERVED

MODEL 5700 REMOTE MOUNT
TO SENSOR MOUNTED
CORE PROCESSOR

Installation Instructions
Type CSA-D-IS

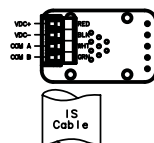
REMOTE MOUNT MODEL 5700 IN HAZARDOUS LOCATION

(WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

For proper installation including I/O, power, gland and hazardous area location, refer to appropriate 5700 output option CSA-D-IS installation instructions

	DIV 1 IS PRMTR	DIV 2 NON-INCND PRMTR
Voc (Vdc)	17.2	17.2
Isc (mA)	479	160
Pa (W)	2.06	1.83
Co (µF)	A,B	N/A
	C	3.04
La (µH)	D	8.5
	A,B	N/A
C	A,B	619.9
	D	1024

4 WIRE
REMOTE
INSTALLATION



MODEL 5700

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
Temp. Code Div 1:T6
Temp. Code Div 2:T5

Note:
Hazardous area classification on an integrally mounted 5700 transmitter can be limited by hazardous area classification of the sensor. Refer to sensor tag.

This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G

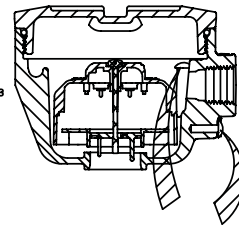
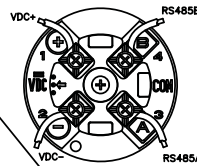
Refer to sensor tag for complete hazardous area classification.

4-WIRE I.S. AND NON-INCENDIVE CORE PROCESSOR ENTITY PARAMETERS	
V max	17.3 Vdc
I max	484 mA
P max	2.1W
CI	2200pF
LI	30µH

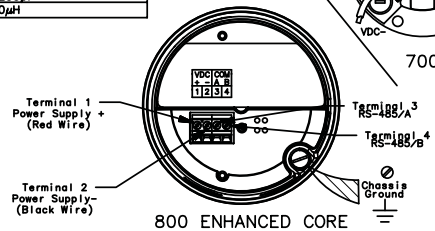


See note 5

SENSOR MOUNTED
CORE PROCESSOR



This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.



800 ENHANCED CORE

INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS	
Voc <=	Vmax
Isc <=	Imax
(Voc x Isc) / 4 <=	Pmax
*Ca >=	Ccable + C1 + C2 + ... + Cn
*La >=	Lcable + L1 + L2 + ... + Ln

- *The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.
- *The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.
- If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60 pF/ft
Cable Inductance = 0.20 µH/ft
- This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.
- Maximum cable length determined by entity parameters and maximum cable inductance.

Micro Motion mass
flowmeter system
connection for
Intrinsically safe
operation

Electronics: 5700

EB-20028177 Rev. AA

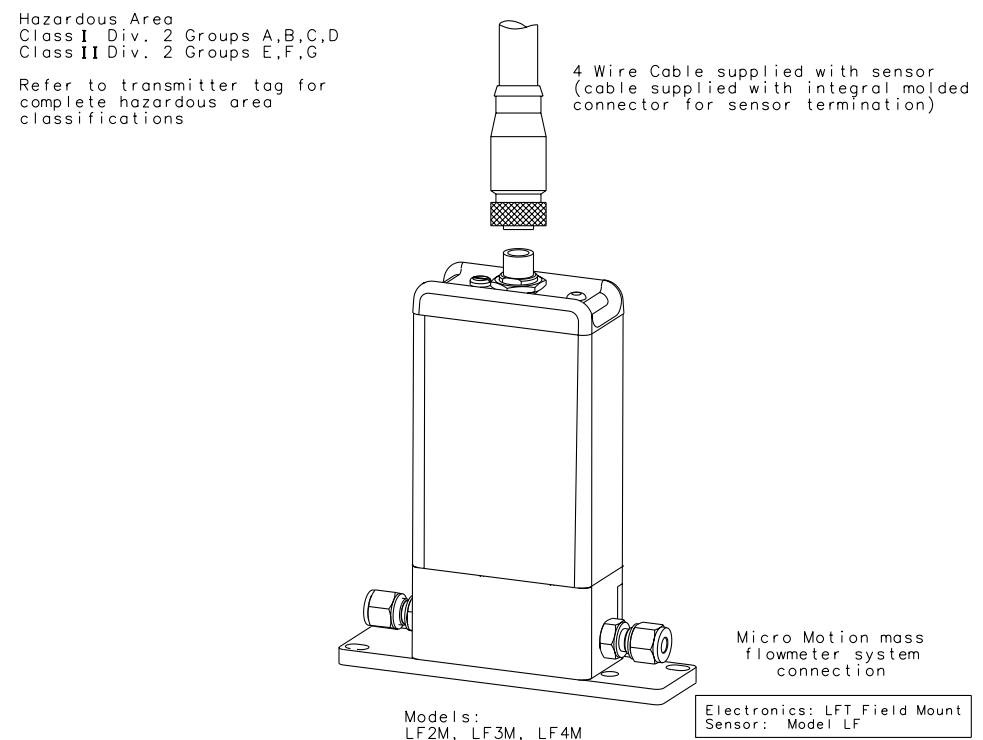
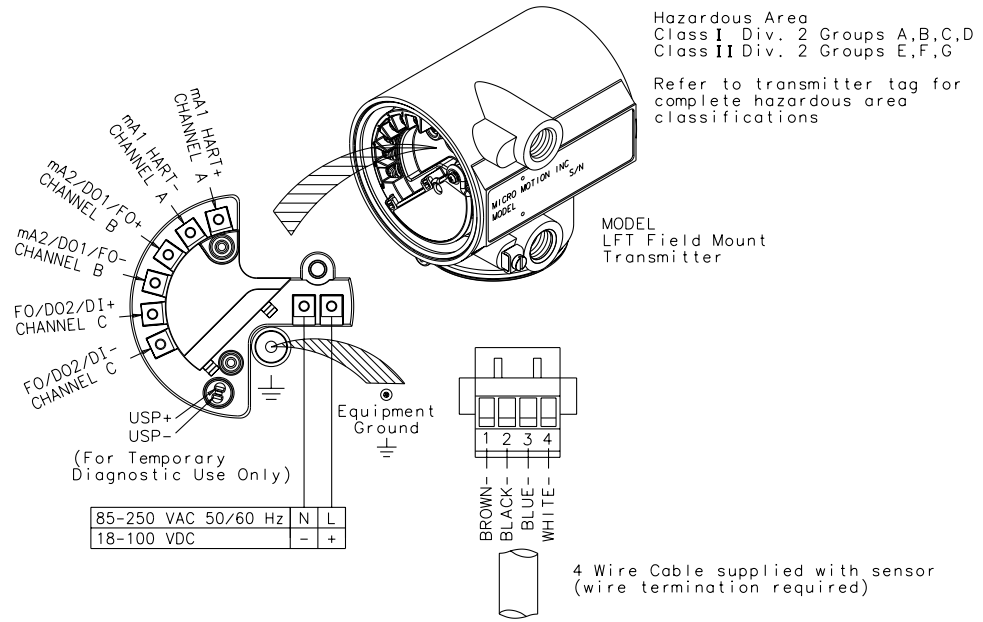
11 LFT 4-wire to LF sensor installation

Table 11-1: List of drawings

Installation	Drawing
Remote LFT CIO	EB-20002229, Revision A
Remote LFT on a DIN rail	EB-20002223, Revision A
Remote LFT fieldbus	EB-20002226, Revision A
Remote LFT mAO/FO	EB-20002227, Revision A
Remote LFT Profibus-PA	EB-20002225, Revision A

11.1 Remote LFT CIO

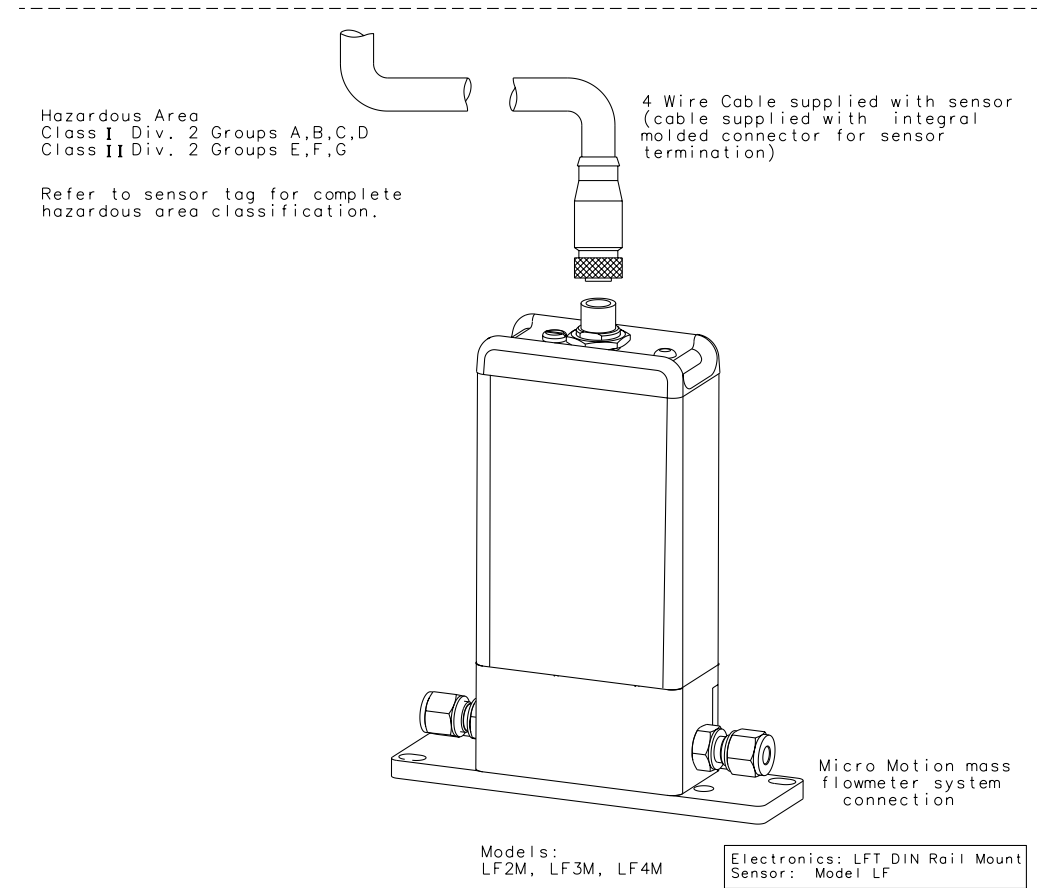
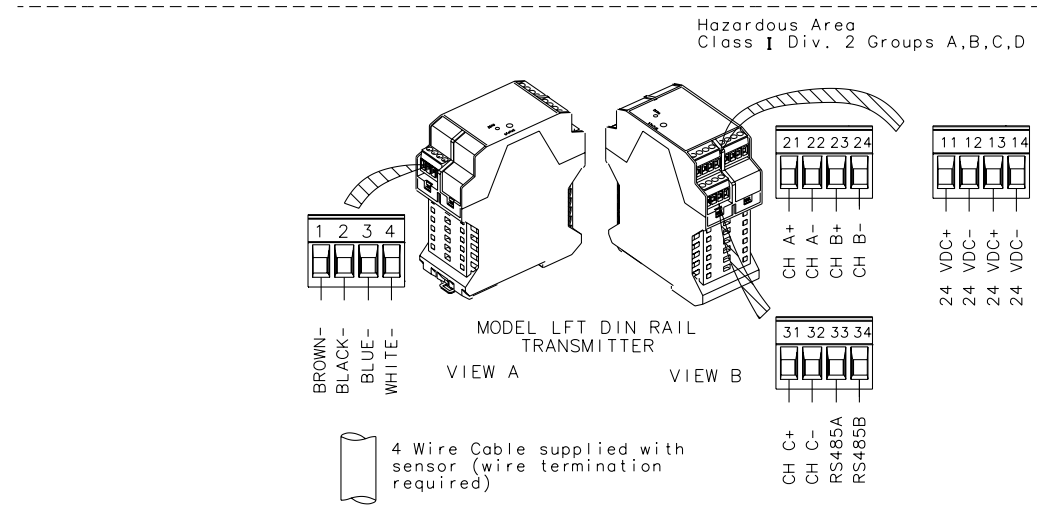
This drawing describes a remote LFT 4-wire configuration input/output (CIO) transmitter mounted to an LF sensor.



EB-20002229 Rev. A
 SHT 1 OF 1

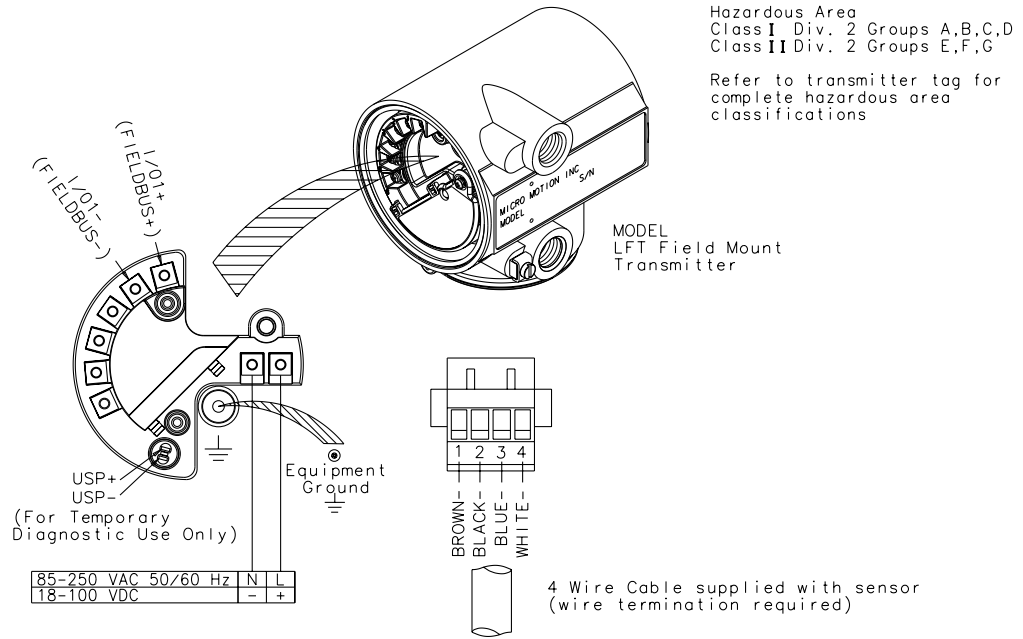
11.2 Remote LFT on a DIN rail

This drawing describes a remote LFT 4-wire transmitter on a DIN rail mounted to an LF sensor.



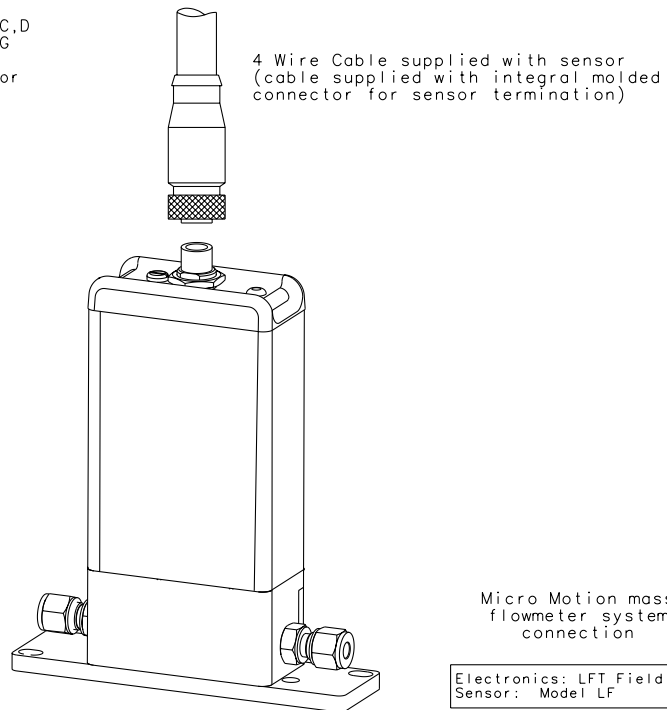
11.3 Remote LFT fieldbus

This drawing describes a remote LFT 4-wire FOUNDATION™ Fieldbus transmitter mounted to an LF sensor.



Hazardous Area
Class I Div. 2 Groups A,B,C,D
Class II Div. 2 Groups E,F,G

Refer to transmitter tag for complete hazardous area classifications

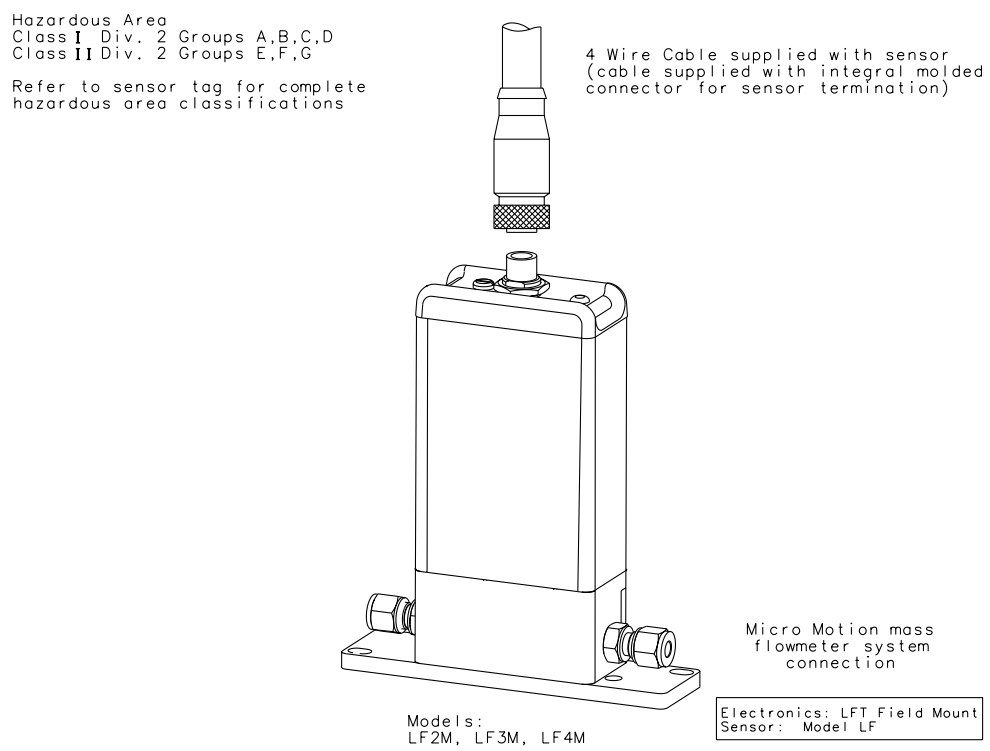
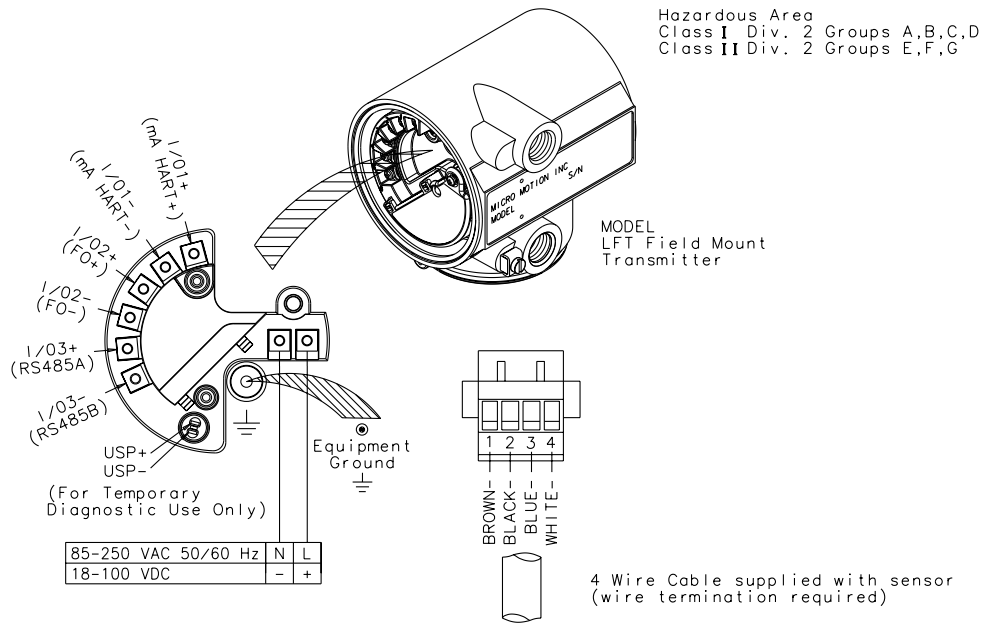


Models:
LF2M, LF3M, LF4M

EB-20002226 Rev. A
SHT 1 OF 1

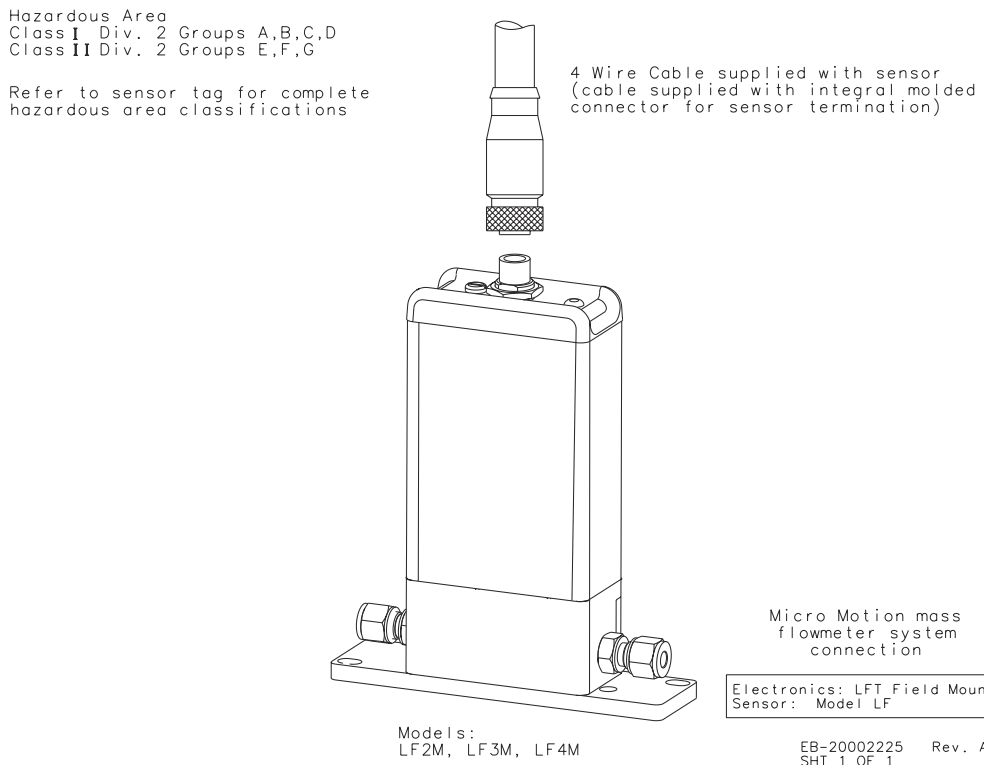
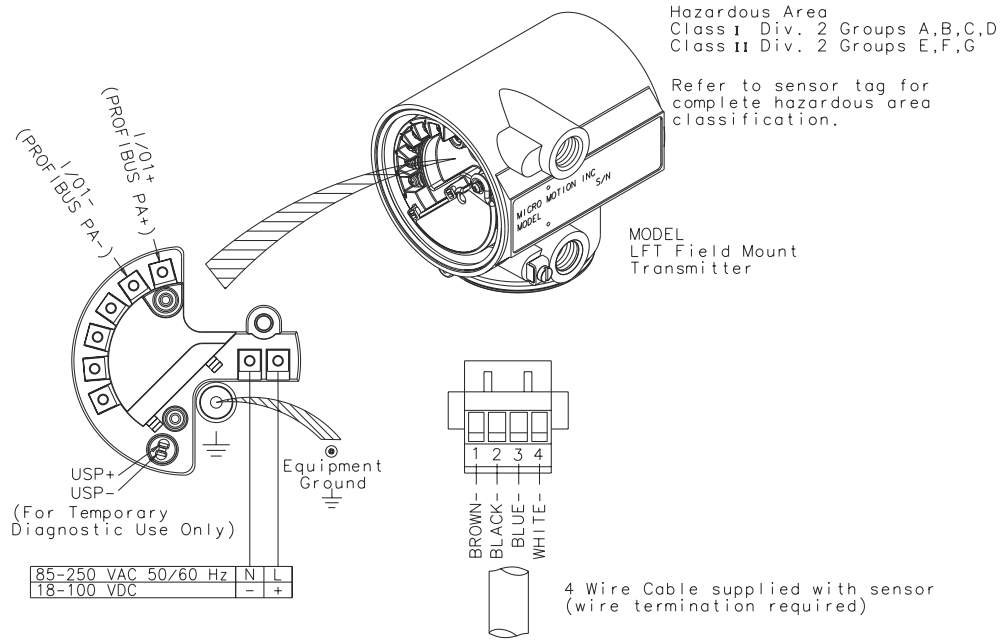
11.4 Remote LFT mA/FO

This drawing describes a remote LFT 4-wire mA Output/Frequency Output transmitter mounted to an LF sensor.



11.5 Remote LFT Profibus-PA

This drawing describes a remote LFT 4-wire Profibus-PA transmitter mounted to an LF sensor.



12 1500/2500 9-wire junction box installation

Table 12-1: List of drawings

Installation	Drawing
1500/2500 CP with 9-wire D600 junction box.	EB-20001222, Revision A
1500/2500 CP with 9-wire DT junction box	EB-20001225, Revision A
1500/2500 to RCP with 9-wire CMF400 junction box and booster amplifier	EB-20001223, Revision A
1500/2500 to RCP with 9-wire CMF, D, DL, F, H, or T junction box	EB-20001221 Revision BA

12.1 1500/2500 CP with 9-wire D600 junction box.

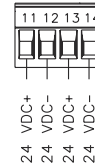
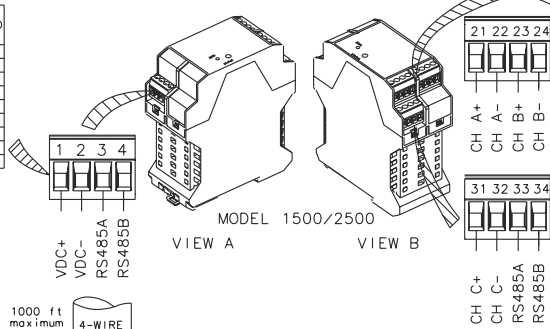
This drawing describes a 1500 or 2500 transmitter with a core processor that has a 9-wire junction box mounted on a D600 sensor.

MODEL 1500/2500 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION

(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

Hazardous Area
Class I Div. 2 Groups A,B,C,D

	DIV 1 IS PRMTR	DIV 2 NON-INCND PRMTR
Voc (Vdc)	17.22	17.22
Isc (mA)	484	484
Pa (W)	2.05	2.05
Ca (μF)	A,B N/A	1.21
	C 2.06	8.32
	D 8.5	33.75
La (μH)	A,B N/A	252
	C 151	1000
	D 607	2100



INSTALLATION NOTES:

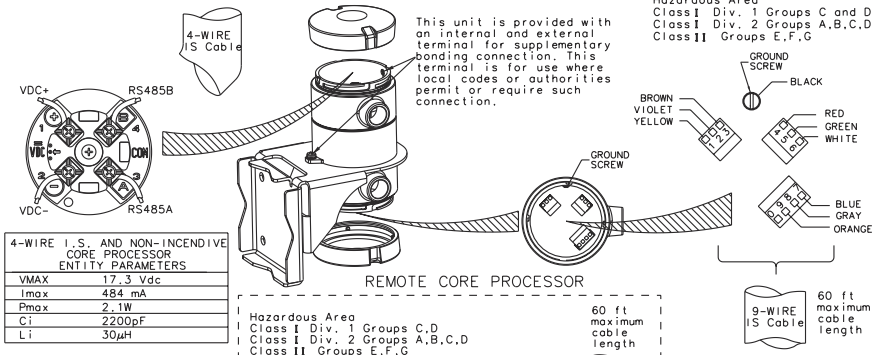
ASSOCIATED APPARATUS PARAMETER LIMITS	
Voc < = Vmax	
Isc < = Imax	
(Voc x Isc) / 4 < = Pmax	
Ca > = Ccable + C1 + C2 + ... + Cin	
La > = Lcable + L1 + L2 + ... + Lin	

The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.

The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

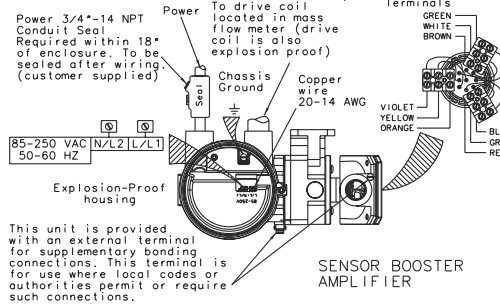
If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.



For model D600S . . . S, followed by P followed by . . . C
or
For model D600S . . . S, followed by P followed by . . . A
see additional installation requirements on drawing
EB-1005085

Allowable process fluid temperature range for integrally mounted booster amplifier is -20°C ≤ Tfluid ≤ +60°C.



CAUTION: To maintain intrinsic safety, the intrinsically safe wiring must be separated from all other wiring, and the Transmitter and Sensor must be properly grounded.

Install per Canadian Electrical Code Part 1

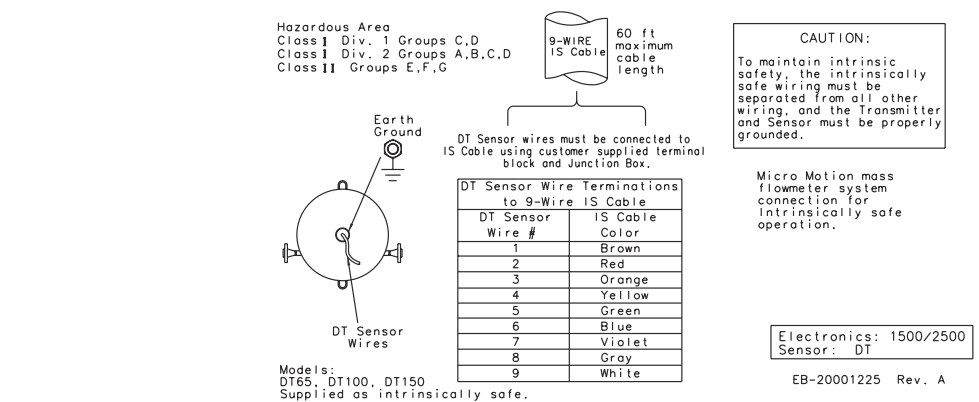
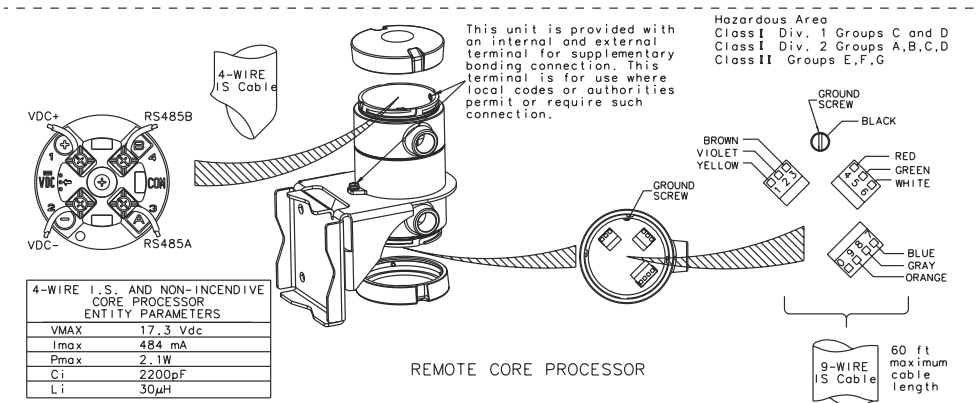
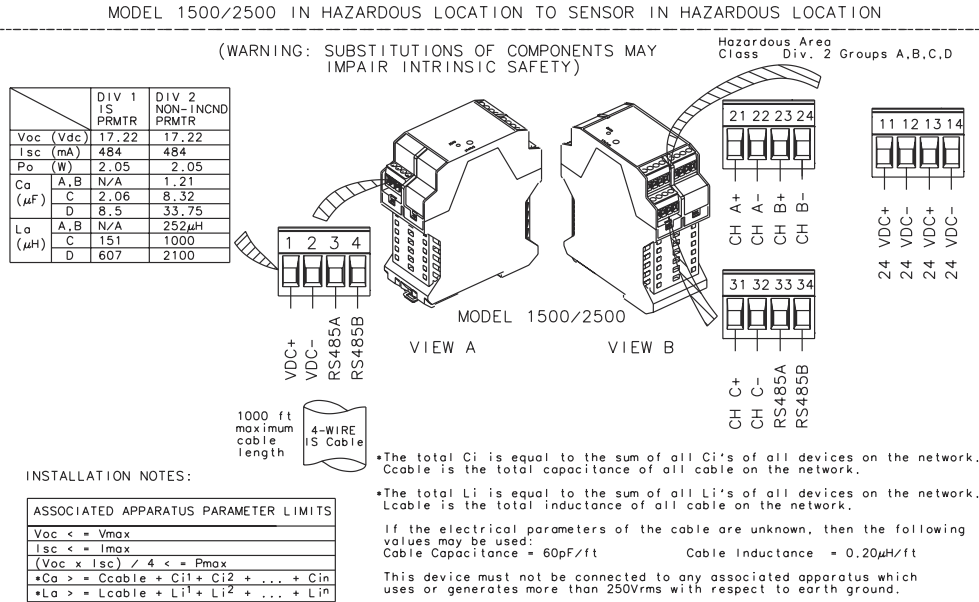
Micro Motion mass flowmeter system connection for intrinsically safe operation

Electronics: 1500/2500
Sensor: D600

EB-20001222 Rev. A

12.2 1500/2500 CP with 9-wire DT junction box

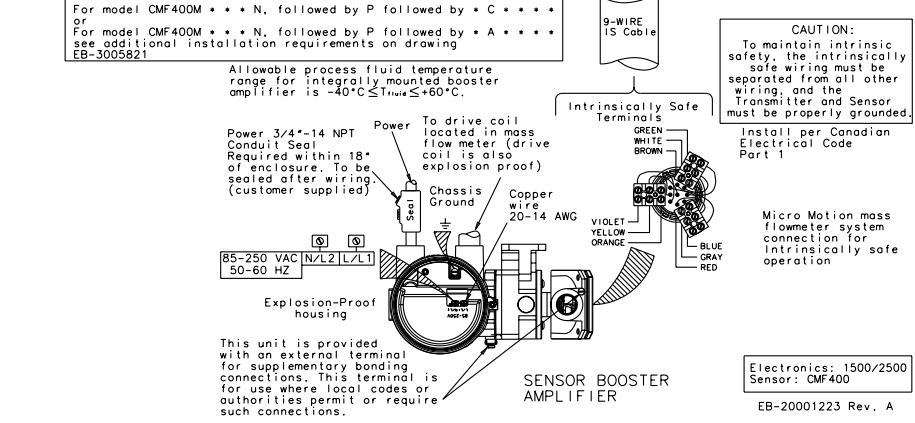
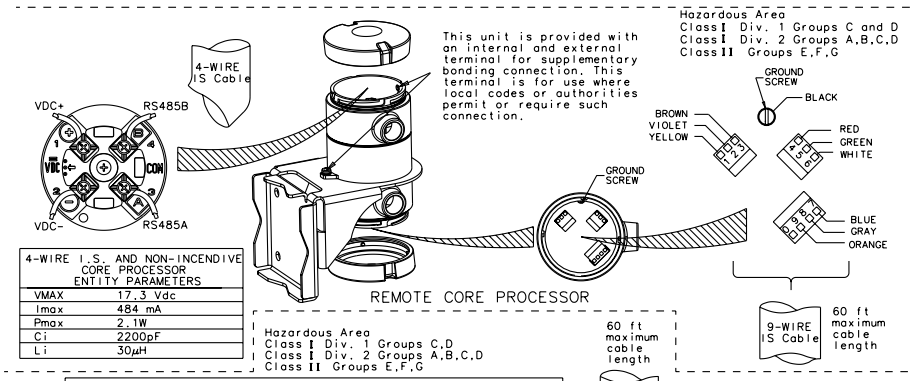
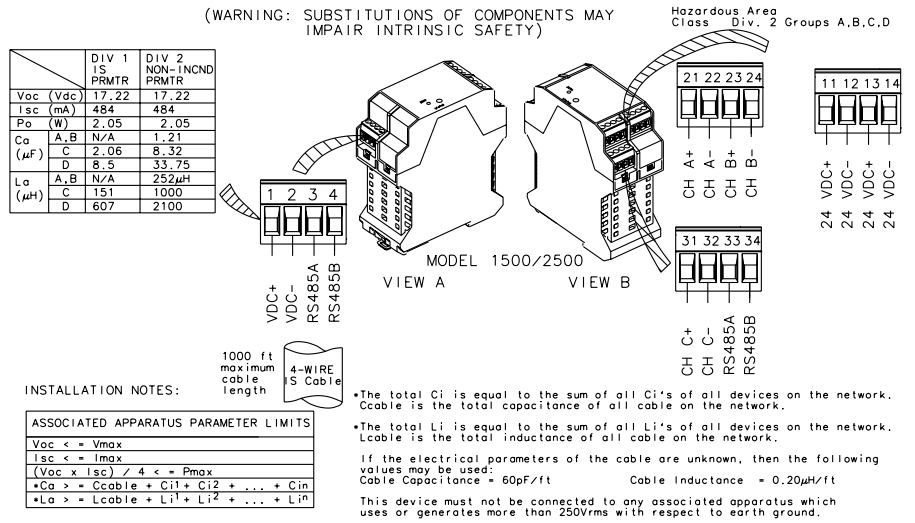
This drawing describes a 1500 or 2500 transmitter with a core processor that has a 9-wire junction box mounted on a DT sensor.



12.3 1500/2500 to RCP with 9-wire CMF400 junction box and booster amplifier

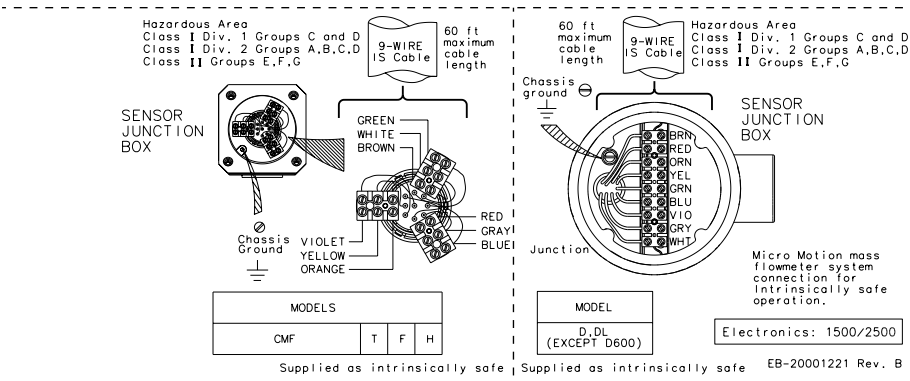
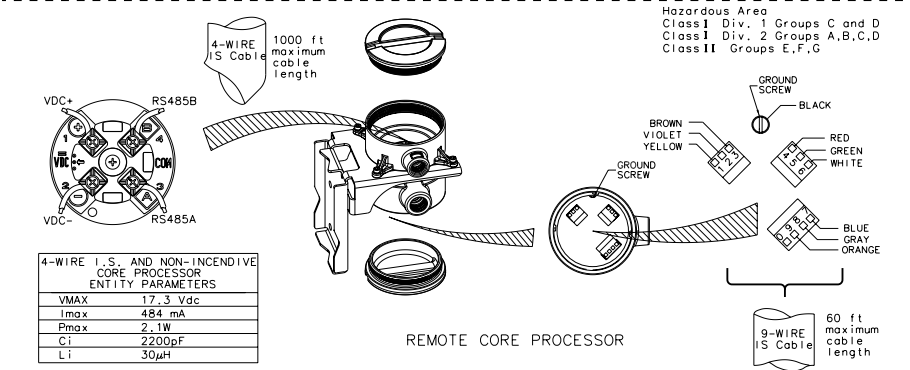
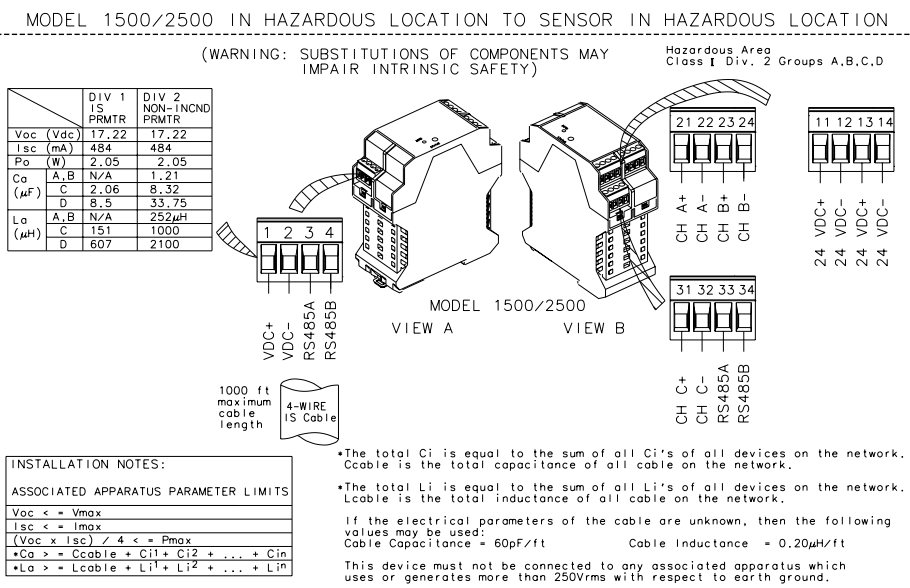
This drawing describes a 1500 or 2500 transmitter connected to a remote core processor with a 9-wire junction box mounted on a CMF400 sensor, in addition to a booster amplifier.

MODEL 1500/2500 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION



12.4 1500/2500 to RCP with 9-wire CMF, D, DL, F, H, or T junction box

This drawing describes a 1500 or 2500 transmitter connected to a remote core processor with a 9-wire junction box mounted on a CMF, D (except D600), DL, F-Series, H-Series, or T-Series sensor.



13 1700/2700 integral with 9-wire junction box installation

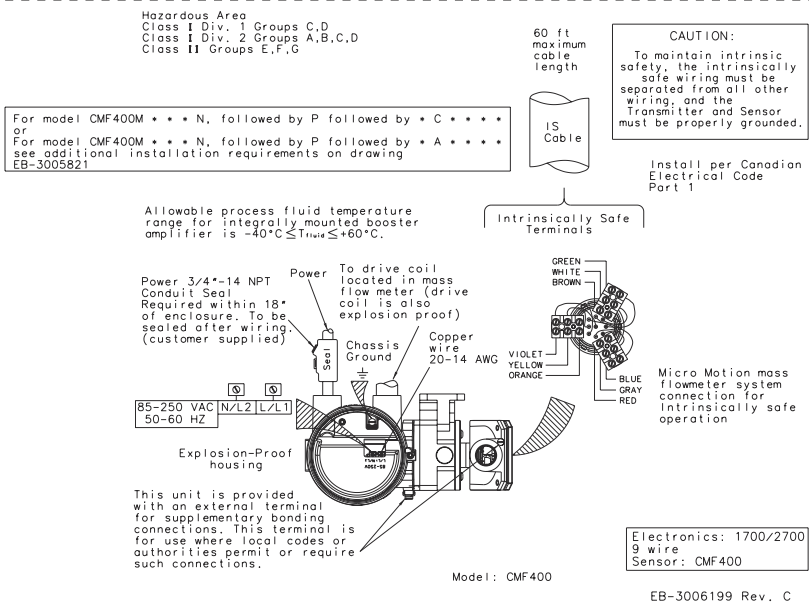
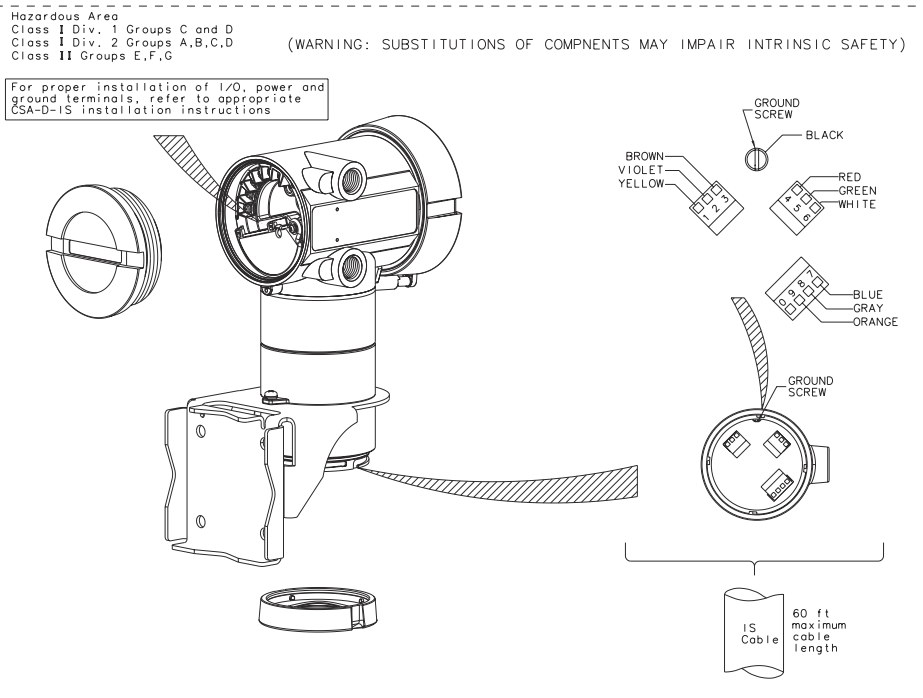
Table 13-1: List of drawings

Installation	Drawing
1700/2700 with integral CP and a CMF400	EB-30006199, Revision A
1700/2700 with integral CP and a D600	EB-10005117, Revision A
1700/2700 with integral CP and a DT	EB-36000538, Revision A
1700/2700 with integral CP and a CMF, F, H, T, D, or DL	EB-20001058 Revision C

13.1 1700/2700 with integral CP and a CMF400

This drawing describes a 1700 or 2700 transmitter with an integrally-mounted core processor that has a 9-wire junction box mounted on a CMF400 sensor, in addition to a booster amplifier.

MODEL 1700/2700 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION



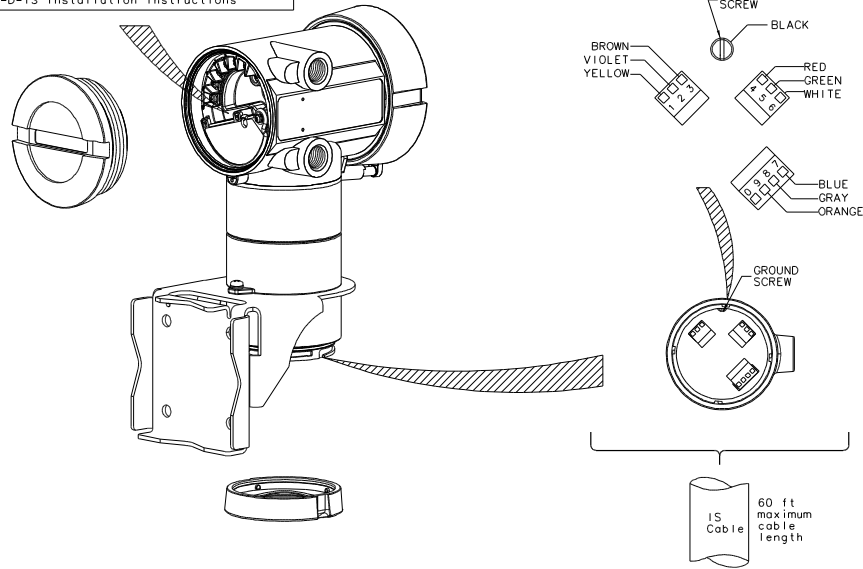
13.2 1700/2700 with integral CP and a D600

This drawing describes a 1700 or 2700 transmitter with an integrally-mounted core processor that has a 9-wire junction box mounted on a D600 sensor.

MODEL 1700/2700 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION

Hazardous Area
Class I Div. 1 Groups C and D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G (WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

For proper installation of I/O, power and ground terminals, refer to appropriate CSA-D-IS installation instructions



Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G

For model D600S * * * S, followed by P followed by * C * * * * *
or
For model D600S * * * S, followed by P followed by * A * * * * *
see additional installation requirements on drawing
EB-1005085

60 ft maximum cable length
IS Cable

CAUTION:
To maintain intrinsic safety, the intrinsically safe wiring must be separated from all other wiring, and the Transmitter and Sensor must be properly grounded.

Install per Canadian Electrical Code Part 1

Allowable process fluid temperature range for integrally mounted booster amplifier is -20°C to $+60^{\circ}\text{C}$.

Power 3/4"-14 NPT Conduit Seal Required within 18" of enclosure. To be sealed after wiring (customer supplied)

To drive coil located in mass flow meter (drive coil is also explosion proof)

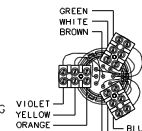
85-250 VAC [N/L2] [L/L1] 50-60 HZ

Copper wire 20-14 AWG

Explosion-Proof housing

This unit is provided with an external terminal for supplementary bonding connections. This terminal is for use where local codes or authorities permit or require such connections.

Intrinsically Safe Terminals



Micro Motion mass flowmeter system connection for intrinsically safe operation

Electronics: 1700/2700
9 wire
Sensor: D600

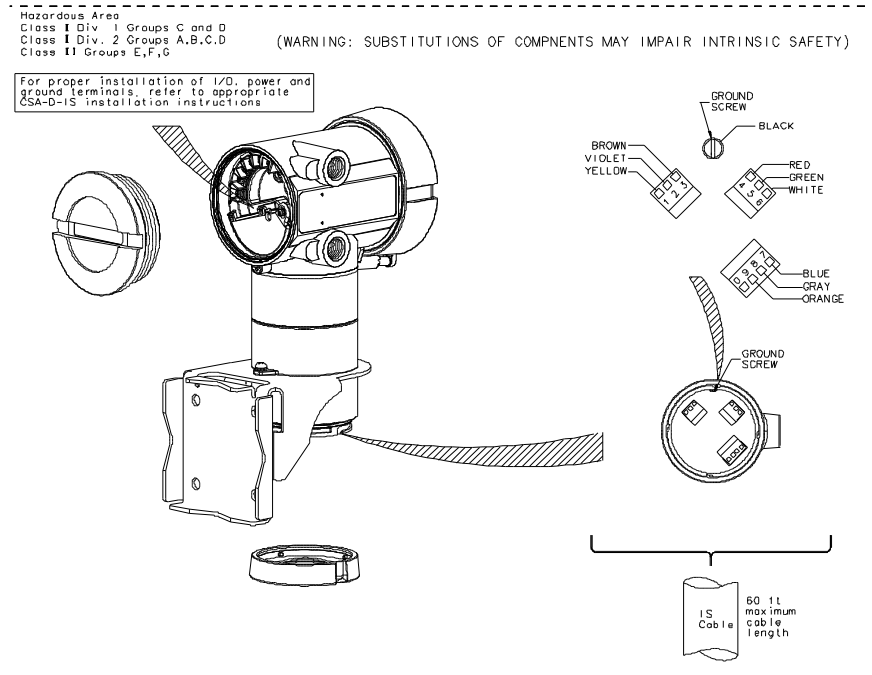
Model: D600

EB-1005117 Rev. B

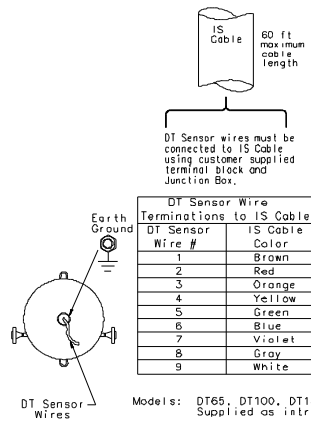
13.3 1700/2700 with integral CP and a DT

This drawing describes a 1700 or 2700 transmitter with an integrally-mounted core processor that has a 9-wire junction box mounted on a DT sensor.

MODEL 1700/2700 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION



Hazardous Area
 Class I Div. 1 Groups C,D
 Class I Div. 2 Groups A,B,C,D
 Class II Groups E,F,G



CAUTION:
 To maintain intrinsic safety, the intrinsically safe wiring must be separated from all other wiring, and the Transmitter and Sensor must be properly grounded.

Micro Motion mass flowmeter system connection for intrinsically safe operation

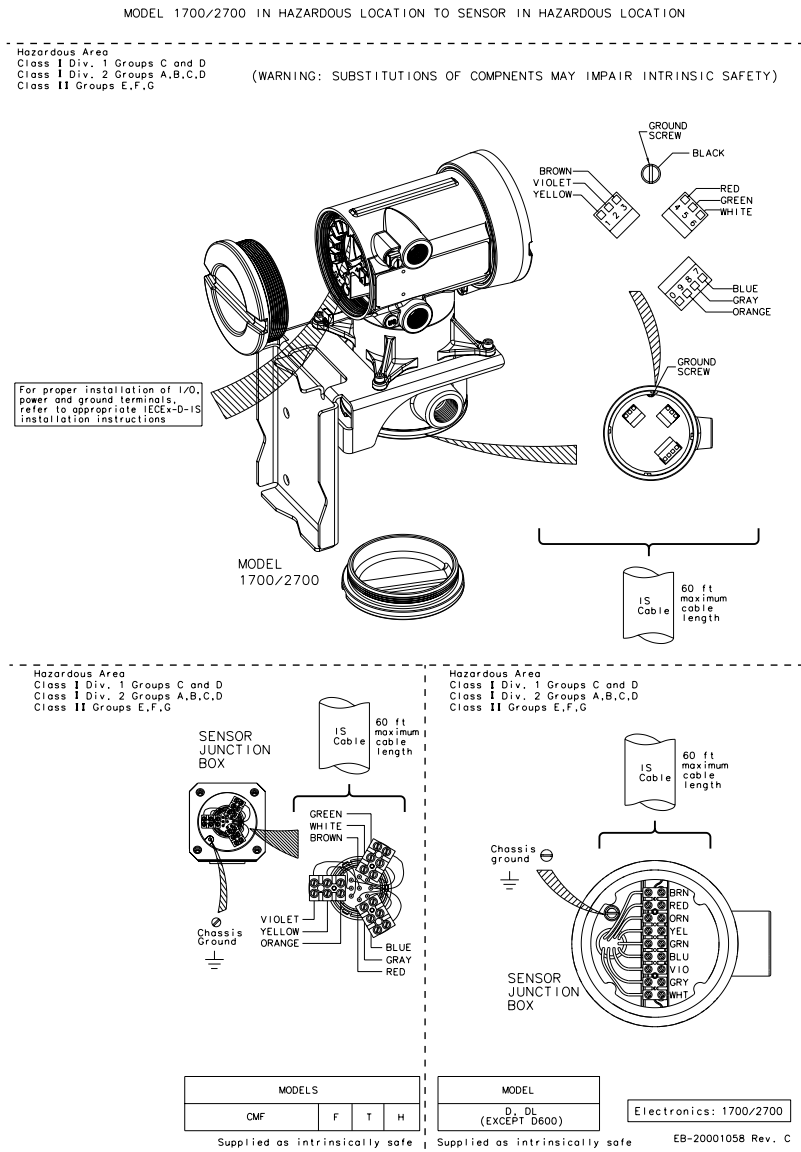
Electronics: 1700/2700
 EB-3600538 Rev. 8
 SHT 1 OF 1

13.4 1700/2700 with integral CP and a CMF, F, H, T, D, or DL

This drawing describes a 1700 or 2700 transmitter with an integrally-mounted core processor connected to a 9-wire junction box mounted on a CMF, F-Series, H-Series, T-Series, D-Series, or DL sensor.

Note

This installation does not apply to CMF400 sensors with a booster amplifier nor to D600 sensors.



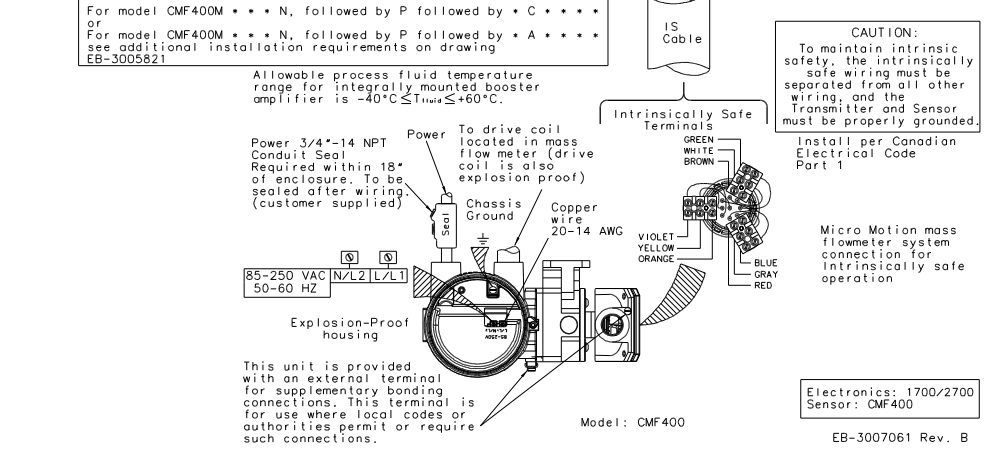
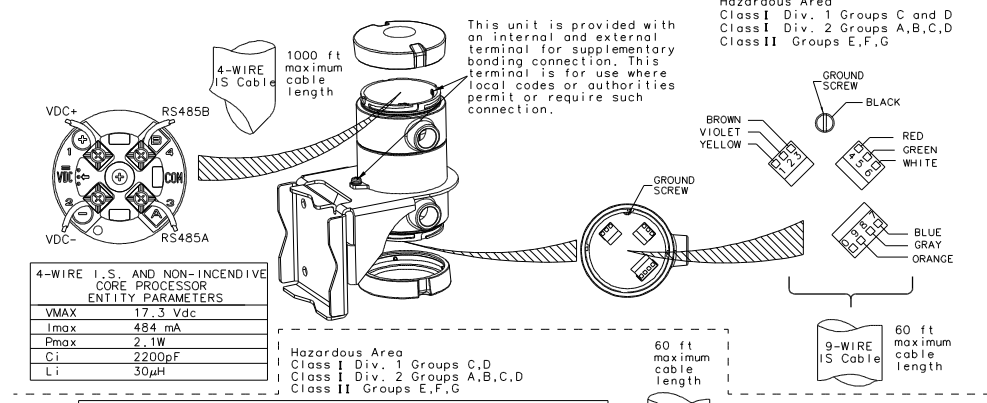
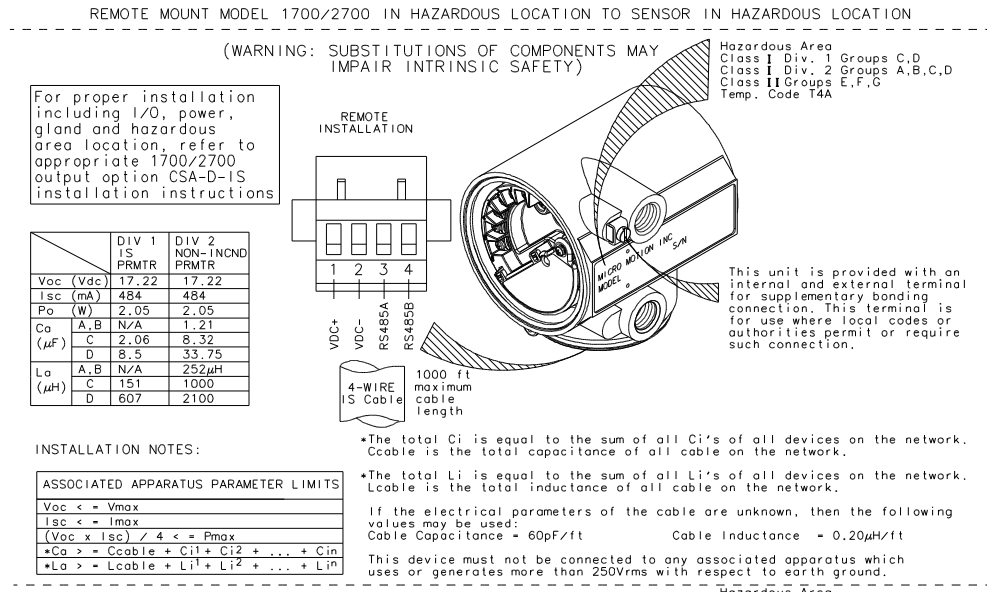
14 1700/2700 to RCP with 9-wire junction box installation

Table 14-1: List of drawings

Installation	Drawing
1700/2700 with RCP and a CMF400	EB-3007061, Revision B
1700/2700 with RCP and a D600	EB-10005119, Revision B
1700/2700 with RCP and a DT	EB-3600674, Revision C
1700/2700 with RCP and a CMF, F, T, D, or DL	EB-20001060 Revision BA

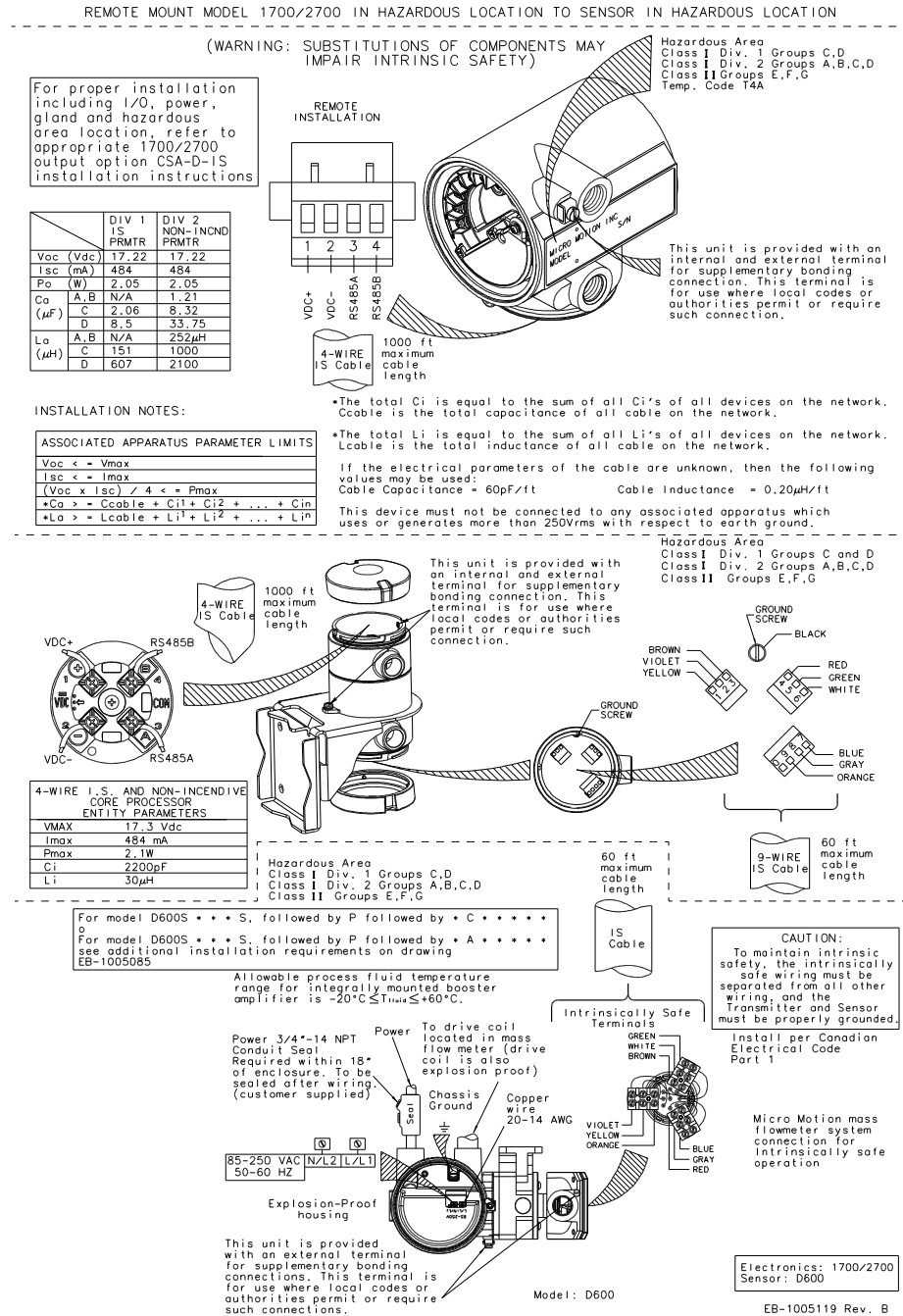
14.1 1700/2700 with RCP and a CMF400

This drawing describes a 1700 or 2700 transmitter connected to a remote mount core processor that has a 9-wire junction box mounted on a CMF400 sensor, in addition to a booster amplifier.



14.2 1700/2700 with RCP and a D600

This drawing describes a 1700 or 2700 transmitter connected to a remote core processor that has a 9-wire junction box mounted on a D600 sensor.



14.3 1700/2700 with RCP and a DT

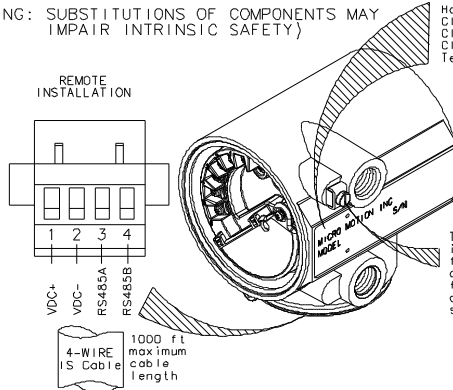
This drawing describes a 1700 or 2700 transmitter connected to a remote core processor that has a 9-wire junction box mounted on a DT sensor.

REMOTE MOUNT MODEL 1700/2700 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION

(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

For proper installation including I/O, power, gland and hazardous area location, refer to appropriate 1700/2700 output option CSA-D-IS installation instructions

	DIV 1 IS PRMTR	DIV 2 NON-INCND PRMTR
Voc (Vdc)	17.22	17.22
Isc (mA)	484	484
Po (W)	2.05	2.05
Ca (µF)	A, B C D	N/A 1.21 8.32 33.75
La (µH)	A, B C D	N/A 252 1000 2100



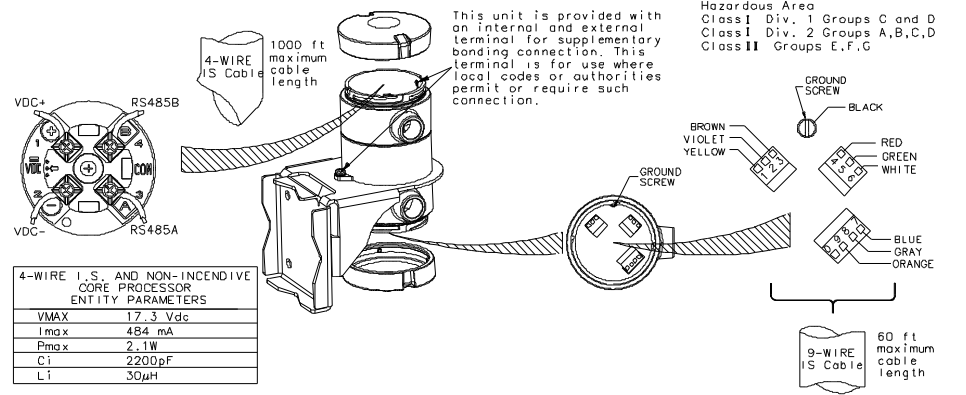
Hazardous Area
Class I Div. 1 Groups C, D
Class I Div. 2 Groups A, B, C, D
Class II Groups E, F, G
Temp. Code T4A

This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

INSTALLATION NOTES:

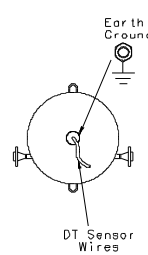
ASSOCIATED APPARATUS PARAMETER LIMITS	
Voc < -	Vmax
Isc < -	Imax
(Voc x Isc) / 4 < -	Pmax
Ca > -	Ccable + C1 + C2 + ... + Cin
La > -	Lcable + L1 + L2 + ... + Lin

- The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.
 - The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.
- If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft Cable Inductance = 0.20µH/ft
- This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.



4-WIRE I.S. AND NON-INCENDIVE CORE PROCESSOR ENTITY PARAMETERS	
VMAX	17.3 Vdc
Imax	484 mA
Pmax	2.1W
Ci	2200pF
Li	30µH

Hazardous Area
Class I Div. 1 Groups C, D
Class I Div. 2 Groups A, B, C, D
Class II Groups E, F, G



DT Sensor wires must be connected to IS Cable using customer supplied terminal block and Junction Box.

DT Sensor Wire Terminations to 9-Wire IS Cable	
DT Sensor Wire #	IS Cable Color
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Violet
8	Gray
9	White

CAUTION:
To maintain intrinsic safety, the intrinsically safe wiring must be separated from all other wiring, and the Transmitter and Sensor must be properly grounded.

Micro Motion mass flowmeter system connection for intrinsically safe operation.

Electronics:1700/2700

Models: DT65, DT100, DT150
Supplied as intrinsically safe.

EB-3600674 Rev. C
SHT 1 OF 1

14.4 1700/2700 with RCP and a CMF, F, T, D, or DL

This drawing describes a 1700 or 2700 transmitter connected to a remote core processor that has a 9-wire junction box mounted on a CMF, F-Series, T-Series, D-Series, or DL sensor.

Note

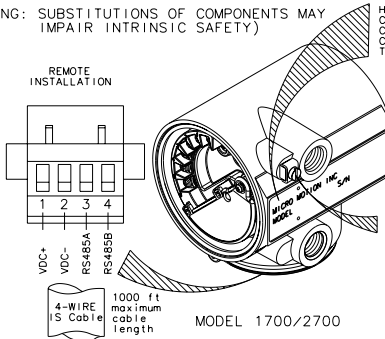
This installation does not apply to CMF400 sensors with a booster amplifier nor to D600 sensors.

REMOTE MOUNT MODEL 1700/2700 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION

(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

For proper installation including I/O, power, gland and hazardous area location, refer to appropriate 1700/2700 output option CSA-D-IS installation instructions

	DIV 1 IS PRMTR	DIV 2 NON-INCND PRMTR
Voc (Vdc)	17.22	17.22
Isc (mA)	484	484
Po (W)	2.05	2.05
Co (μF)	A,B N/A C 2.06 D 8.5	1.21 8.32 33.75
Lo (μH)	A,B N/A C 151 D 607	252 1000 2100



INSTALLATION NOTES:

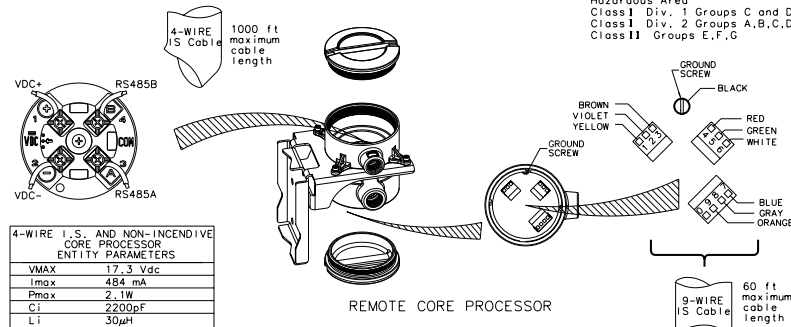
ASSOCIATED APPARATUS PARAMETER LIMITS
Voc < = Vmax
Isc < = Imax
(Voc x Isc) / 4 < = Pmax
Co > = Ccable + C1 + C2 + ... + Cin
Lo > = Lcable + L1 + L2 + ... + Lin

*The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.

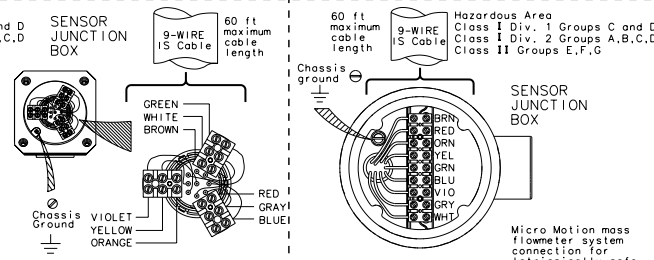
*The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.

If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft Cable Inductance = 0.20μH/ft

This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.



Hazardous Area Class I Div. 1 Groups C and D Class II Groups E,F,G



MODELS	MODEL	Electronics:1700/2700
CMF F T H	D, DL (EXCEPT D600)	

Supplied as intrinsically safe | Supplied as intrinsically safe | EB-20001060 Rev. B

15 3500 to RCP with 9-wire junction box installation

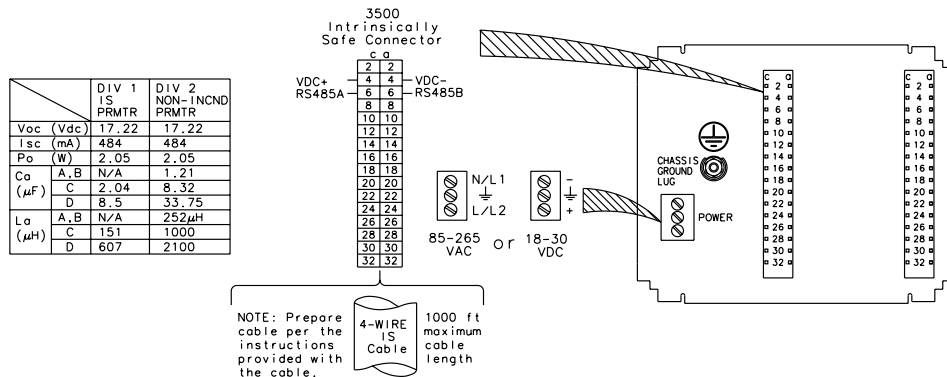
Table 15-1: List of drawings

Installation	Drawing
3500 to RCP with 9-wire CMF400 junction box with booster amplifier	EB-20000229, Revision BA
3500 to RCP with 9-wire D600 junction box	EB-20000232, Revision B
3500 to RCP with 9-wire DT junction box	EB-20000241, Revision B
3500 to RCP with 9-wire CMF, D, DL, H, or T junction box	EB-20001051, Revision CA

15.1 3500 to RCP with 9-wire CMF400 junction box with booster amplifier

This drawing describes a 3500 transmitter connected to a remote core processor that has a 9-wire junction box mounted on a CMF400 sensor, in addition to a boost amplifier.

3500 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION
(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY) Hazardous Area Class I, Div. 2, Groups A,B,C,D



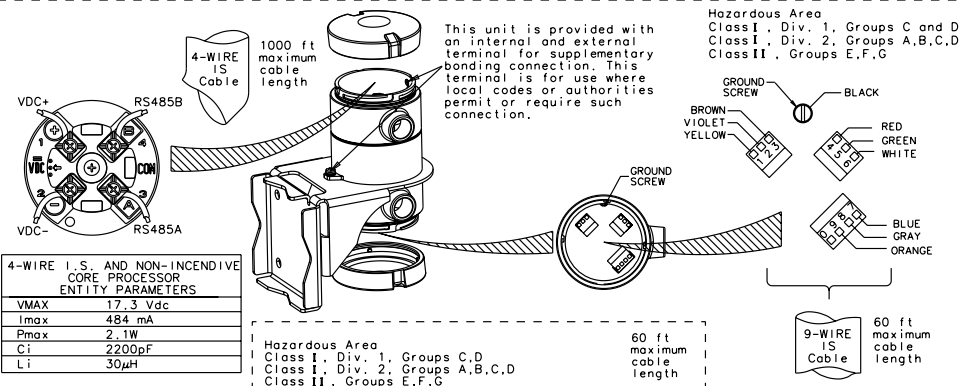
	DIV 1 IS PRMTR	DIV 2 NON-INCND PRMTR
Voc (Vdc)	17.22	17.22
Isc (mA)	484	484
Po (W)	2.05	2.05
Co (μF)	A, B	N/A
	C	2.04
	D	8.5
La (μH)	A, B	N/A
	C	151
	D	607

NOTE: Prepare cable per the instructions provided with the cable.
4-WIRE IS Cable
1000 ft maximum cable length

INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS	
Voc <=	Vmax
Isc <=	Imax
(Voc x Isc) / 4 <=	Pmax
Co >=	Ccable + Ci1 + Ci2 + ... + Cin
La >=	Lcable + Li1 + Li2 + ... + Lin

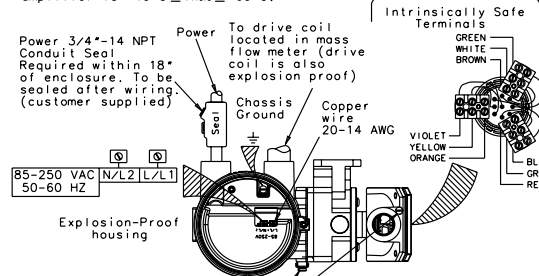
*The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.
*The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.
If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft Cable Inductance = 0.20μH/ft
This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.



4-WIRE I.S. AND NON-INCENDIVE CORE PROCESSOR ENTITY PARAMETERS	
VMAX	17.3 Vdc
Imax	484 mA
Pmax	2.1W
Ci	2200pF
Li	30μH

For model CMF400***N, followed by P followed by *C OR *AZ* see additional installation requirements on drawing EB-3005821

Allowable process fluid temperature range for integrally mounted booster amplifier is -40°C ≤ T_{max} ≤ +60°C.



CAUTION: To maintain intrinsic safety, the intrinsically safe wiring must be separated from all other wiring, and the Transmitter and Sensor must be properly grounded.

Micro Motion mass flowmeter system connection for intrinsically safe operation.

This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

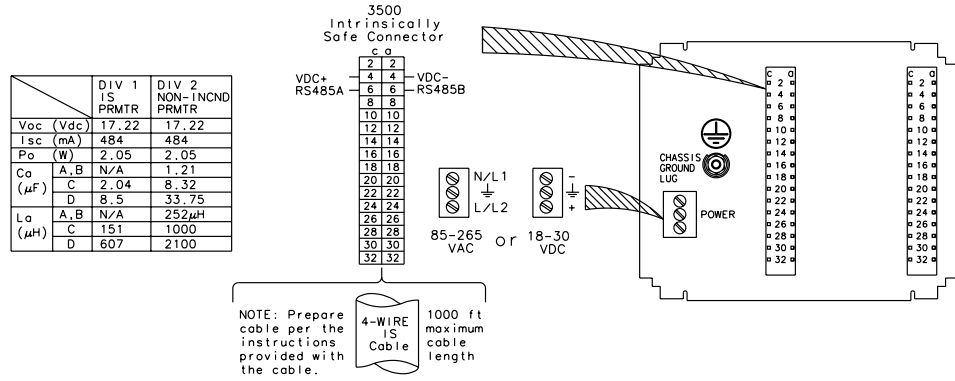
Model: CMF400

Electronics: 3500
Sensor: CMF400
EB-20000229 Rev. B
SHT 1 OF 1

15.2 3500 to RCP with 9-wire D600 junction box

This drawing describes a 3500 transmitter connected to a remote mount core processor that has a 9-wire junction box mounted on a D600 sensor.

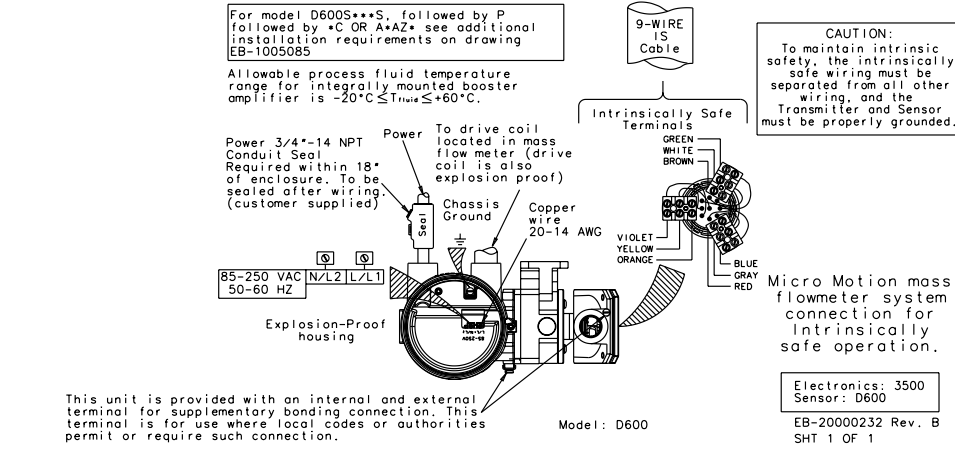
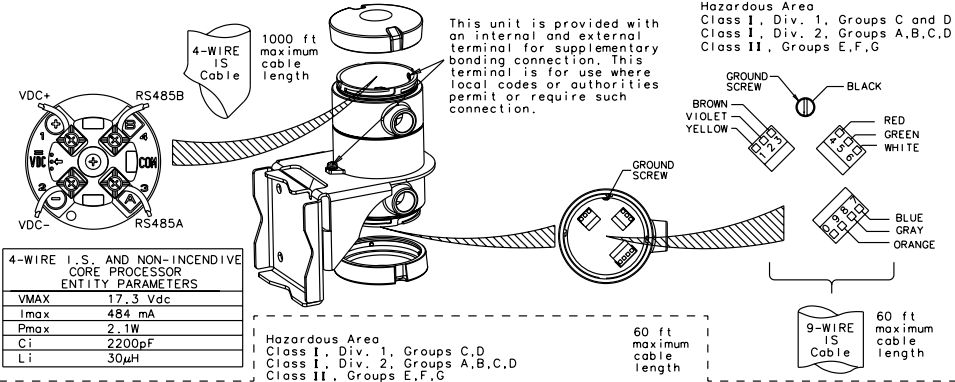
3500 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION
(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY) Hazardous Area Class I, Div. 2, Groups A,B,C,D



INSTALLATION NOTES:

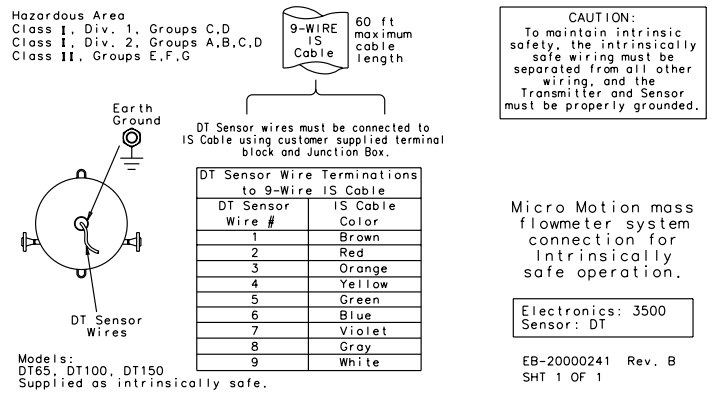
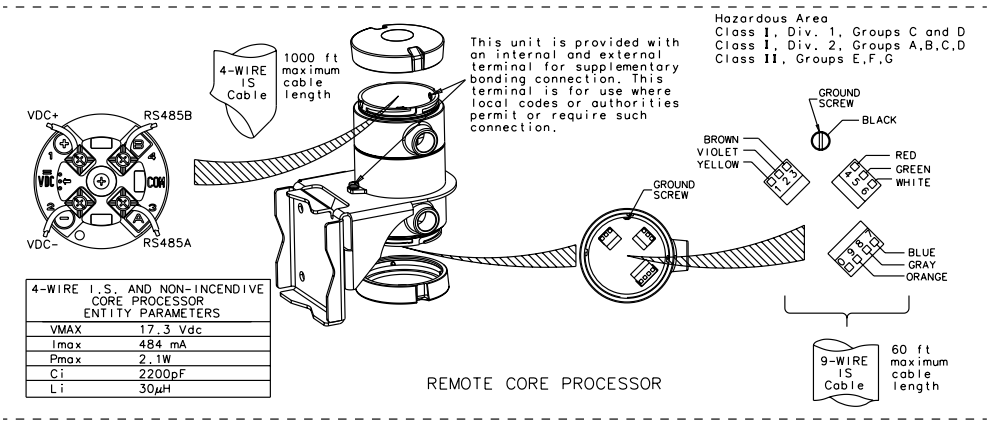
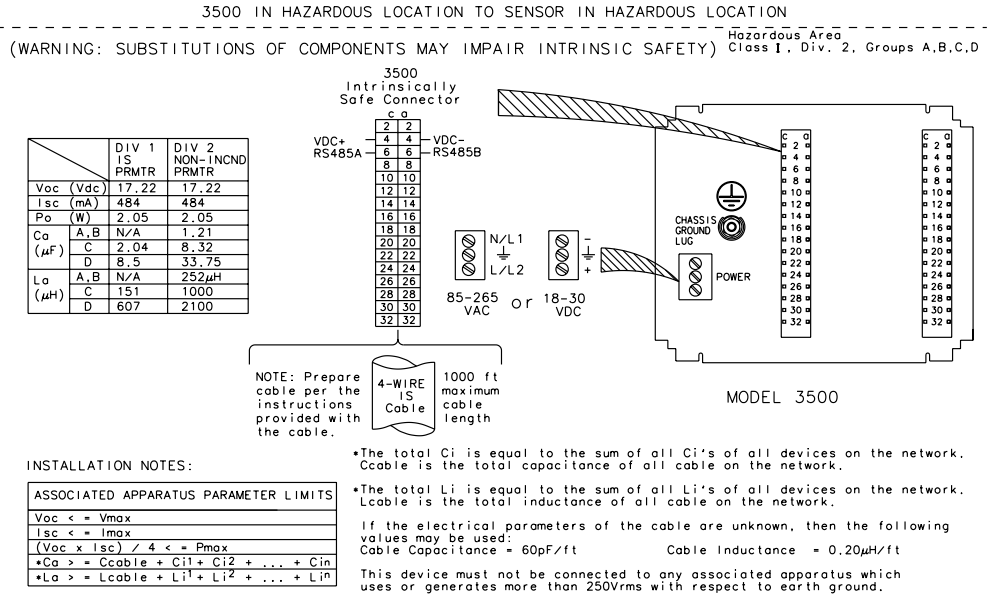
ASSOCIATED APPARATUS PARAMETER LIMITS
Voc < = Vmax
Isc < = Imax
(Voc x Isc) / 4 < = Pmax
Cc > = Ccable + C1 + C2 + ... + Cin
Li > = Lcable + L1 + L2 + ... + Lin

*The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.
*The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.
If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft Cable Inductance = 0.20μH/ft
This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.



15.3 3500 to RCP with 9-wire DT junction box

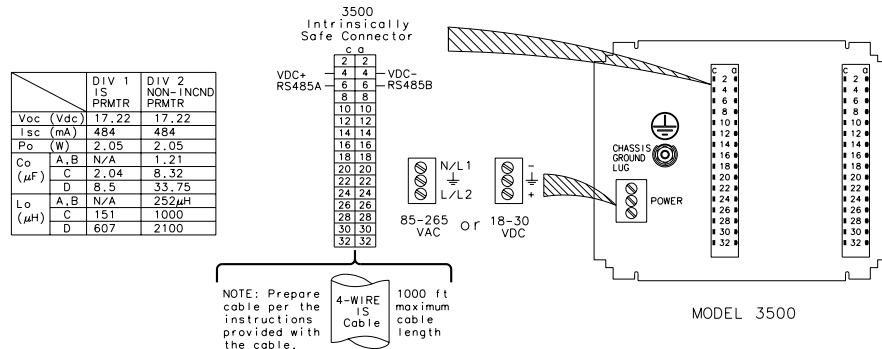
This diagram describes a 3500 transmitter connected to a remote mount core processor that has a 9-wire junction box mounted on a DT sensor.



15.4 3500 to RCP with 9-wire CMF, D, DL, H, or T junction box

This drawing shows a 3500 transmitter connected to a remote core processor that has a 9-wire junction box mounted on a CMF, D-Series (except D600), DL, H-Series, or T-Series sensor.

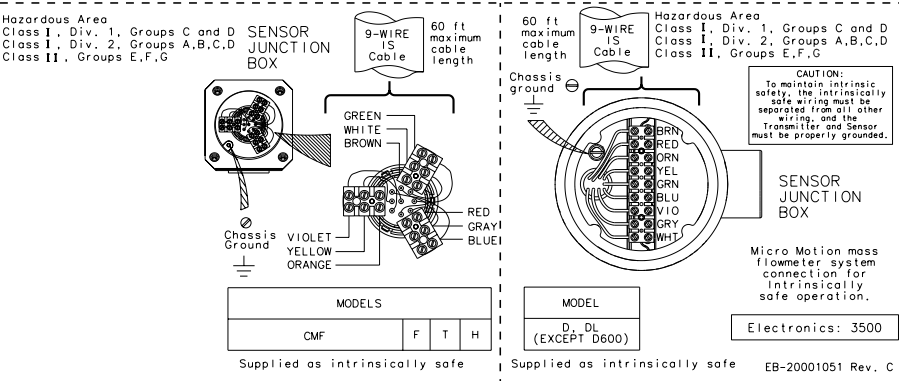
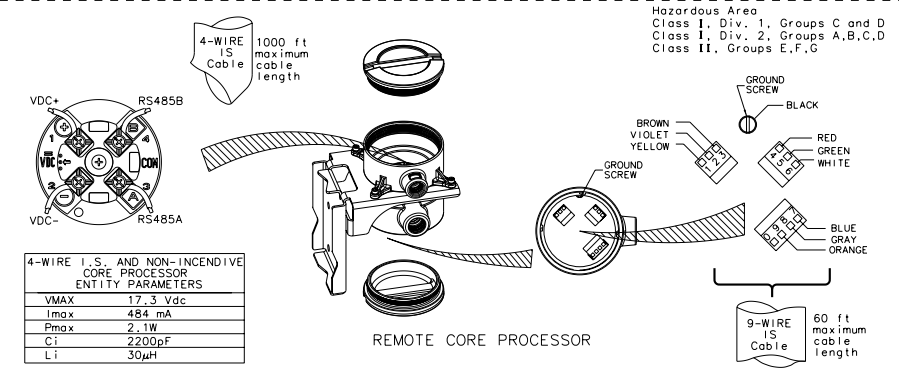
3500 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION
(WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY) Hazardous Area Class I, Div. 2, Groups A,B,C,D



INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS
Vac <= Vmax
Isc <= Imax
(Vac x Isc) / 4 <= Pmax
Cc >= Ccable + Cc1 + Cc2 + ... + Ccin
Lo >= Lcable + Ll1 + Ll2 + ... + Llin

The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.
The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.
If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft Cable Inductance = 0.20μH/ft
This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.



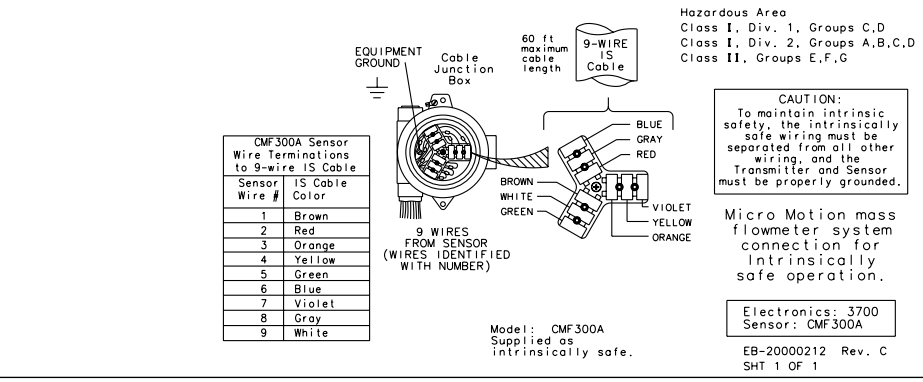
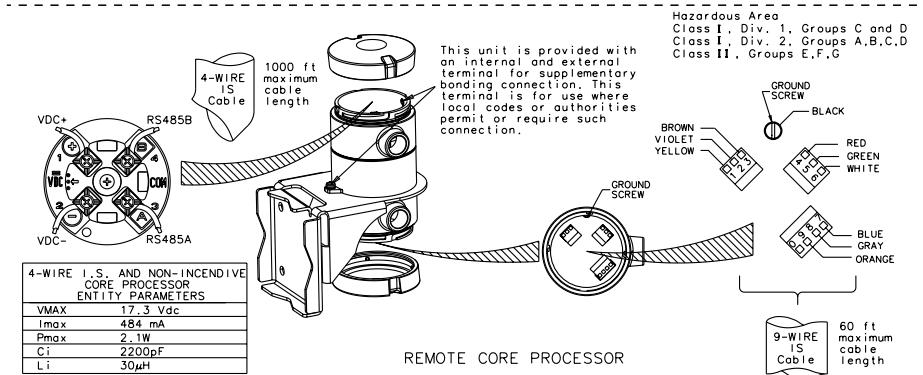
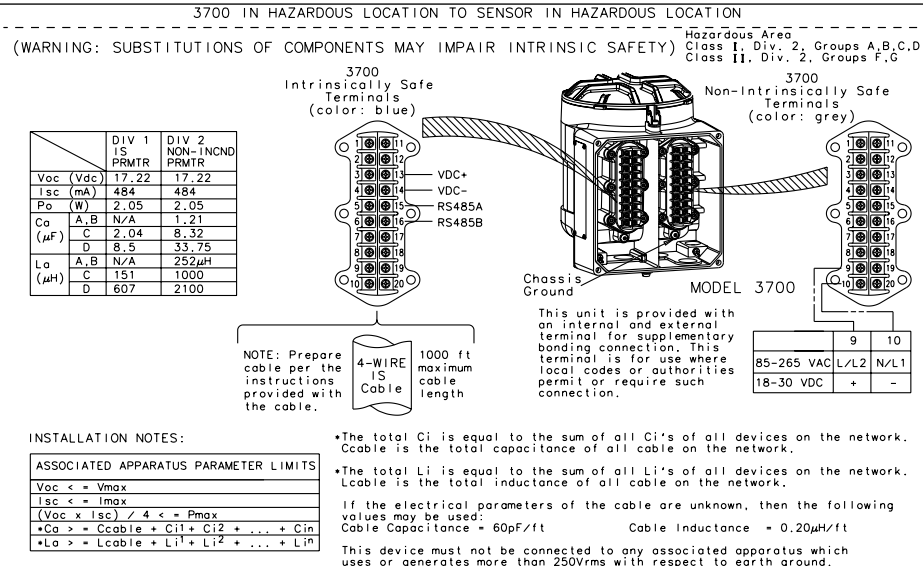
16 3700 to RCP with 9-wire junction box installation

Table 16-1: List of drawings

Installation	Drawing
3700 to RCP with 9-wire CMF300A junction box	EB-20000212, Revision C
3700 to RCP with 9-wire CMF400 junction box	EB-20000203, Revision B
3700 to RCP with 9-wire D600 junction box	EB-20000206, Revision B
3700 to RCP with 9-wire DT junction box	EB-20000215, Revision B
3700 to RCP with 9-wire CMF, D, DL, F, H, or T junction box	EB-20001053, Revision CA

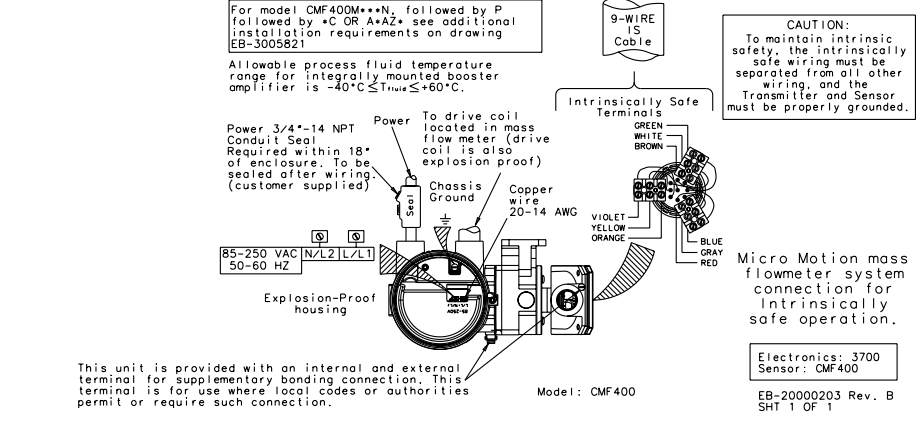
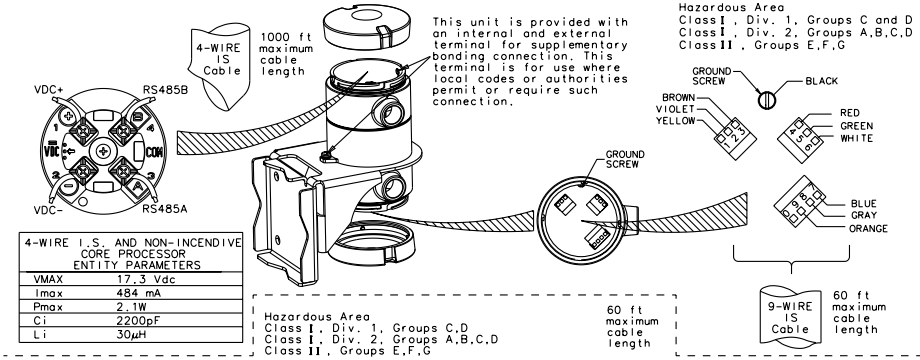
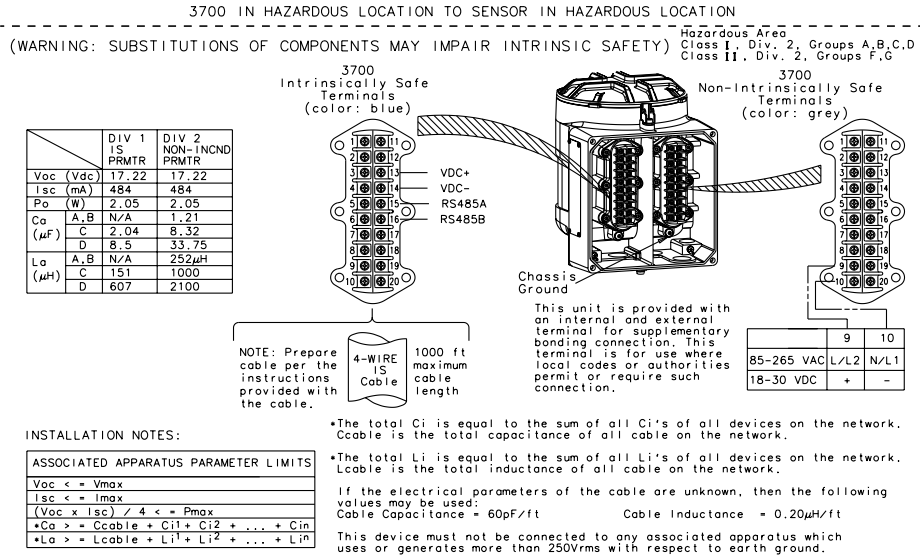
16.1 3700 to RCP with 9-wire CMF300A junction box

This drawing describes a 3700 transmitter connected to a remote mount core processor that has a 9-wire junction box mounted on a CMF300A sensor.



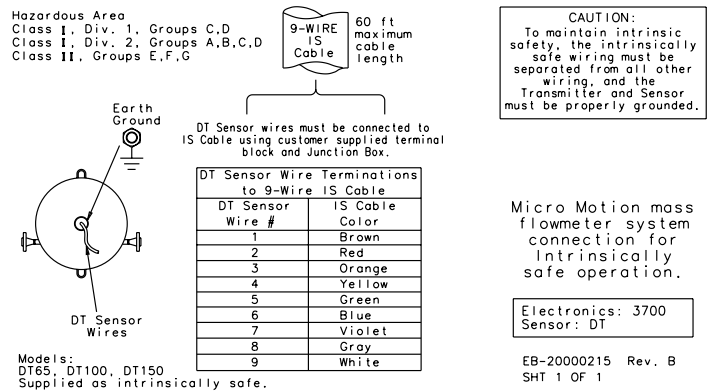
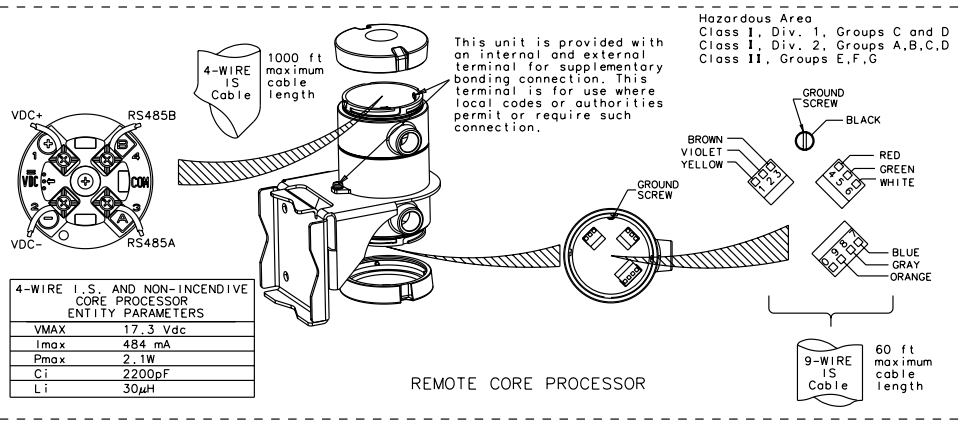
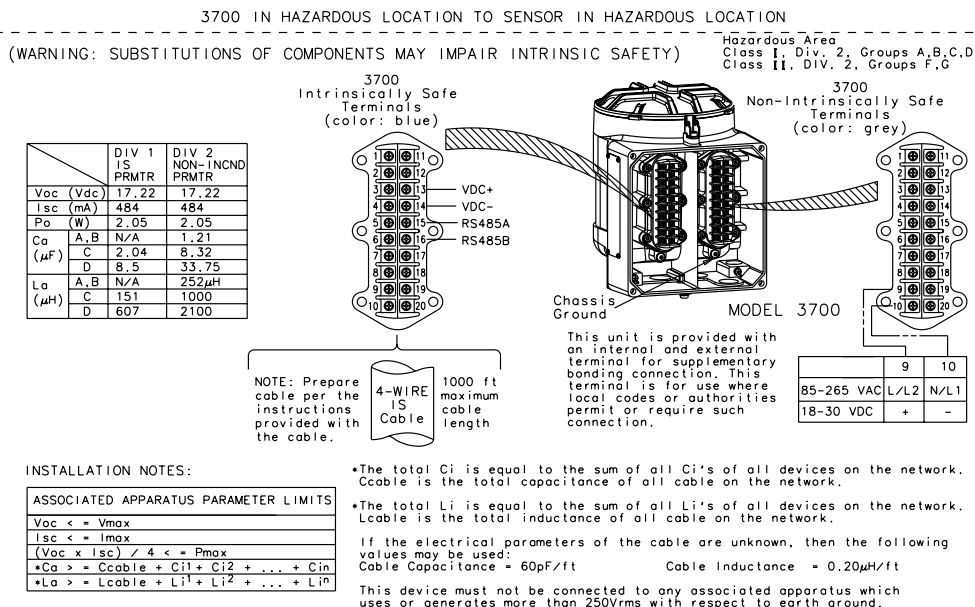
16.2 3700 to RCP with 9-wire CMF400 junction box

This drawing describes a 3700 transmitter connected to a remote core processor that has a 9-wire junction box mounted on a CMF400 sensor, in addition to a booster amplifier.



16.4 3700 to RCP with 9-wire DT junction box

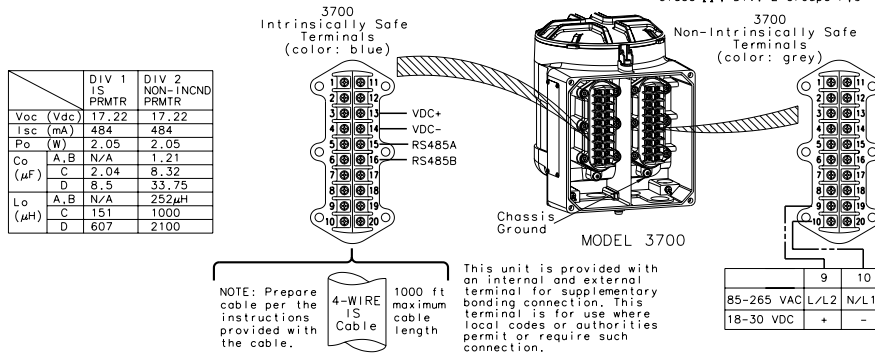
This drawing describes a 3700 transmitter connected to a remote core processor that has a 9-wire junction box mounted on a DT sensor.



16.5 3700 to RCP with 9-wire CMF, D, DL, F, H, or T junction box

This drawing describes a 3700 transmitter connected to a remote mount core processor that has a 9-wire junction box mounted on a CMF, D-Series (except D600), DL, F-Series, H-Series, or T-Series sensor.

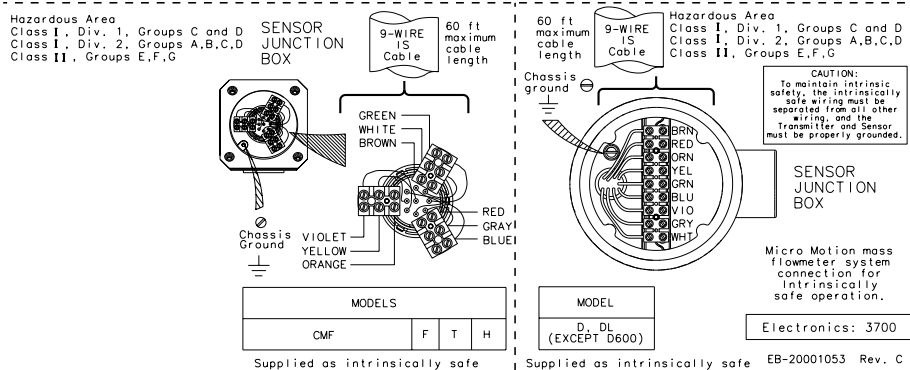
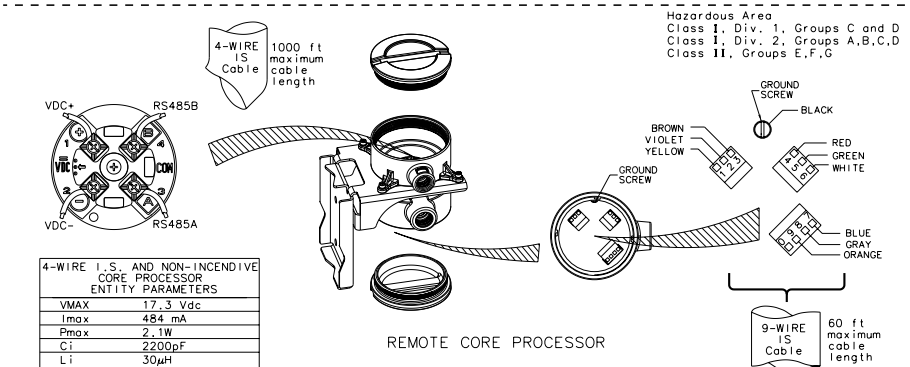
3700 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION
 (WARNING: SUBSTITUTIONS OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY) Hazardous Area Class I, Div. 2 Groups A,B,C,D Class II, Div. 2 Groups F,G



INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS	
Vac <=	Vmax
Isc <=	Imax
(Vac x Isc) / 4 <=	Pmax
Cc >=	Ccable + C1 + C2 + ... + Cn
Lo >=	Lcable + L1 + L2 + ... + Ln

- *The total Ci is equal to the sum of all Ci's of all devices on the network. Ccable is the total capacitance of all cable on the network.
 - *The total Li is equal to the sum of all Li's of all devices on the network. Lcable is the total inductance of all cable on the network.
- If the electrical parameters of the cable are unknown, then the following values may be used:
 Cable Capacitance = 60pF/ft Cable Inductance = 0.20μH/ft
- This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.



17 5700 to RCP with 9-wire junction box installation

This drawing describes a 5700 transmitter connected to a remote core processor that has a 9-wire junction box mounted on a sensor.

COPYRIGHT 2014 MICRO MOTION, INC. ALL RIGHTS RESERVED.

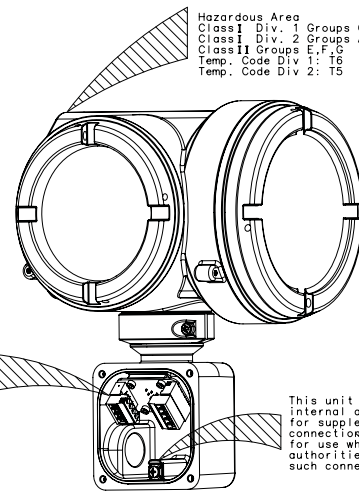
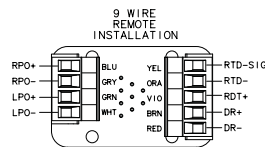
MODEL 5700 REMOTE MOUNT TO SENSOR WITH JBOX

Installation Instructions
Type CSA-D-IS

REMOTE MOUNT MODEL 5700 IN HAZARDOUS LOCATION TO SENSOR IN HAZARDOUS LOCATION

(WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY)

For proper installation including I/O, power, gland and hazardous area location, refer to appropriate 5700 output option CSA-D-IS installation instructions



Hazardous Area
Class I Div. 1 Groups C,D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G
Temp. Code Div 1: T6
Temp. Code Div 2: T5

This unit is provided with an internal and external terminal for supplementary bonding connection. This terminal is for use where local codes or authorities permit or require such connection.

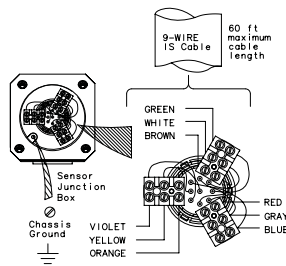
INSTALLATION NOTES:

ASSOCIATED APPARATUS PARAMETER LIMITS
$V_{oc} <= V_{max}$
$I_{sc} <= I_{max}$
$(V_{oc} \times I_{sc}) / 4 <= P_{max}$
$C_a >= C_{cable} + C_1 + C_2 + \dots + C_n$
$L_a >= L_{cable} + L_1 + L_2 + \dots + L_n$

60 ft maximum cable length
9-WIRE IS Cable

MODEL 5700

- *The total C_i is equal to the sum of all C_i 's of all devices on the network. C_{cable} is the total capacitance of all cable on the network.
 - *The total L_i is equal to the sum of all L_i 's of all devices on the network. L_{cable} is the total inductance of all cable on the network.
- If the electrical parameters of the cable are unknown, then the following values may be used:
Cable Capacitance = 60pF/ft Cable Inductance = 0.20µH/ft
- This device must not be connected to any associated apparatus which uses or generates more than 250Vrms with respect to earth ground.



Hazardous Area
Class I Div. 1 Groups C and D
Class I Div. 2 Groups A,B,C,D
Class II Groups E,F,G

CAUTION:
To maintain intrinsic safety, the intrinsically safe wiring must be separated from all other wiring, and the Transmitter and Sensor must be properly grounded.

Micro Motion mass flowmeter system connection for intrinsically safe operation.

MODEL	
CMF	CMFS

Electronics:5700

Supplied as intrinsically safe

EB-20028176 Rev. AA
SHT 1 OF 1

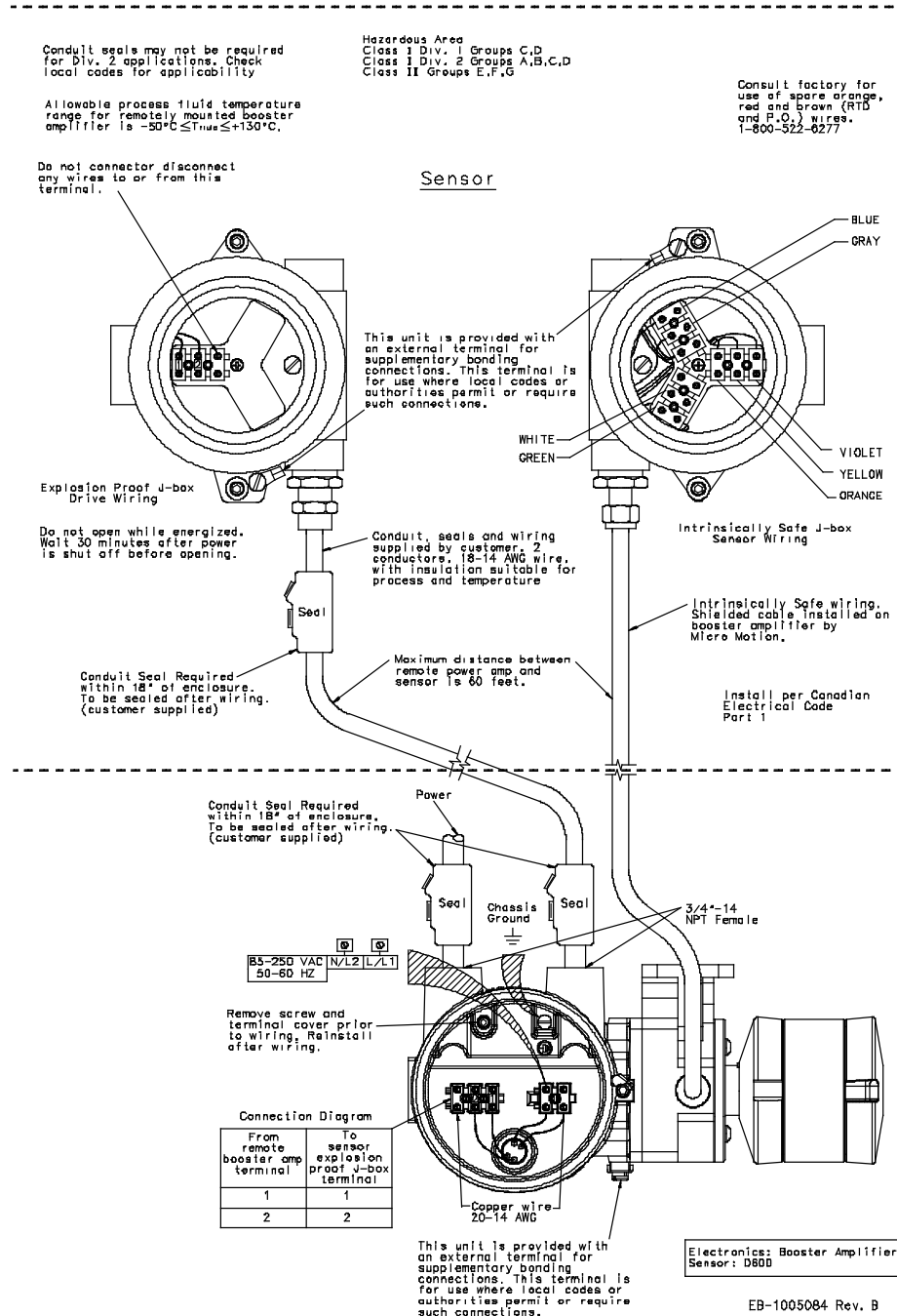
18 D600 remote mount booster amplifier

Table 18-1: List of drawings

Installation	Drawing
RCP with remote mount booster amplifier - D600	EB-1005084, Revision B
Remote mount booster amplifier with junction box - D600	EB-1005085, Revision B

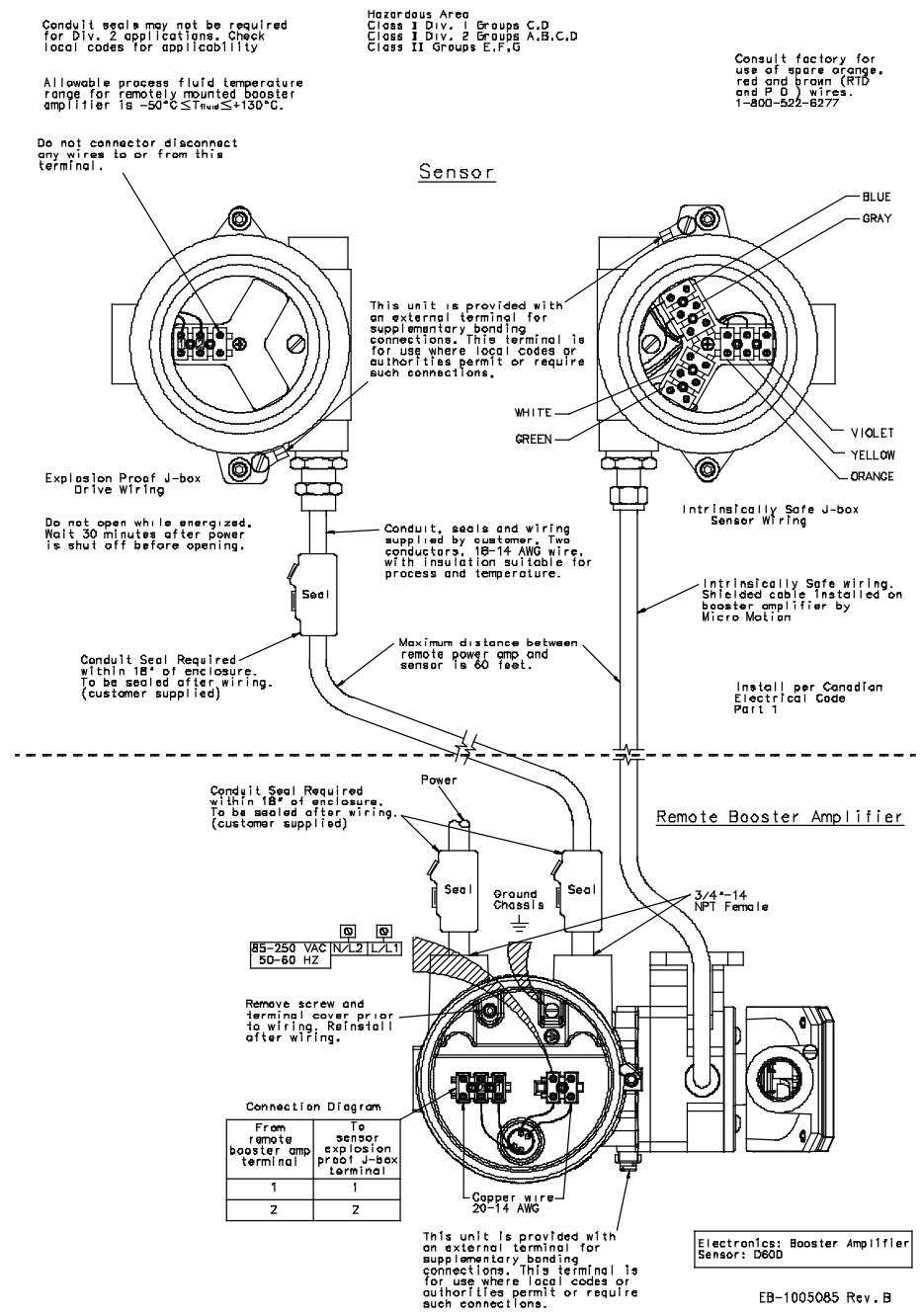
18.1 RCP with remote mount booster amplifier - D600

This drawing describes a remote booster amplifier with a core processor that is remotely mounted from the transmitter and the D600 sensor.



18.2 Remote mount booster amplifier with junction box - D600

This drawing describes a remote booster amplifier with a junction box that is remotely mounted from the transmitter and the D600 sensor.



A List of drawings

Table A-1: List of Drawings

Drawing name	Location
EB-10005117, Revision B	1700/2700 with integral CP and a D600
EB-1005084, Revision B	RCP with remote mount booster amplifier - D600
EB-1005085, Revision B	Remote mount booster amplifier with junction box - D600
EB-1005119, Revision B	1700/2700 with RCP and a D600
EB-20000206, Revision B	3700 to RCP with 9-wire D600 junction box
EB-20000215, Revision B	3700 to RCP with 9-wire DT junction box
EB-20000224, Revision B	3700 with CP and CMF, F, H, R, CNF, or T
EB-20000229, Revision BA	3500 to RCP with 9-wire CMF400 junction box with booster amplifier
EB-20000232, Revision B	3500 to RCP with 9-wire D600 junction box
EB-20000241, Revision B	3500 to RCP with 9-wire DT junction box
EB-20000244, Revision B	Remote 3500 with CP and CMF400
EB-20000247, Revision B	Remote 3500 with CP and a D600
EB-20000250, Revision B	Remote 3500 with CP on CMF, F, H, R, CNG, and T
EB-20001051, Revision C	3500 to RCP with 9-wire CMF, D, DL, H, or T junction box
EB-20001053, Revision C	3700 to RCP with 9-wire CMF, D, DL, F, H, or T junction box
EB-20001058, Revision, C	1700/2700 with integral CP and a CMF, F, H, T, D, or DL
EB-20001060, Revision, BA	1700/2700 with RCP and a CMF, F, T, D, or DL
EB-20001218, Revision A	Remote 1500/2500 4-wire CP to D600
EB-20001219, Revision A	Remote 1500/2500 4-wire CP to CMF400 with booster amplifier
EB-20001220, Revision A	Remote 1500/2500 4-wire CP to CMF, F, H, R, CNG, or T
EB-20001221 Revision B	1500/2500 to RCP with 9-wire CMF, D, DL, F, H, or T junction box
EB-20001222, Revision A	1500/2500 CP with 9-wire D600 junction box.
EB-20001223, Revision A	1500/2500 to RCP with 9-wire CMF400 junction box and booster amplifier
EB-20001225, Revision A	1500/2500 CP with 9-wire DT junction box
EB-2000203, Revision B	3700 to RCP with 9-wire CMF400 junction box
EB-2000218, Revision B	Remote 3700 with CP and CMF400
EB-2000221, Revision B	Remote 3700 with CP and D600
EB-20002223, Revision A	Remote LFT on a DIN rail
EB-20002225, Revision A	Remote LFT Profibus-PA
EB-20002226, Revision A	Remote LFT fieldbus

Table A-1: List of Drawings (continued)

Drawing name	Location
EB-20002227, Revision A	Remote LFT mAO/FO
EB-20002229, Revision A	Remote LFT CIO
EB-20003009, Revision A	Remote 1500/2500 with ECP
EB-20003010, Revision A	Remote 1700/2700 with ECP
EB-20003011, Revision A	Remote 3500 with ECP
EB-20003012, Revision A	3700 with ECP
EB-20003013, Revision A	ECP to direct host through a safety barrier
EB-20003427, Revision A	800 ECP
EB-20011794, Revision A	2750 CIO
EB-20011795, Revision A	2750 4-wire ECP installation
EB-20028175, Revision AA	5700 CIO
EB-20028176, Revision AA	5700 to RCP with 9-wire junction box installation
EB-20028177, Revision AA	Remote 5700 with CP
EB-20028178, Revision AA	5700 to RCP - sensor with junction box
EB-20030708, Revision AA	5700 Ethernet
EB-20030711, Revision AA	5700 fieldbus
EB-20030804, Revision AA	5700 fieldbus (FISCO)
EB-20057521_AA	4200 2-wire
EB-3005819, Revision C	Remote 1700/2700 with CP and a CMF400
EB-3006199, Revision C	1700/2700 with integral CP and a CMF400
EB-3007061, Revision B	1700/2700 with RCP and a CMF400
EB-3600473, Revision DA	1700/2700 Profibus-PA
EB-3600476, Revision DA	1700/2700 fieldbus
EB-3600479, Revision CA	1700/2700 mAO
EB-3600482, Revision BA	Remote 1700/2700 4-wire CP
EB-3600538, Revision B	1700/2700 with integral CP and a DT
EB-3600629, Revision D	1700/2700 IS
EB-3600667, Revision B	2700 CIO
EB-3600674, Revision C	1700/2700 with RCP and a DT
EB-3600799, Revision CA	CP to direct host through a safety barrier



MMI-20001965
Rev. EC
2019

Micro Motion Inc. USA

Worldwide Headquarters
7070 Winchester Circle
Boulder, Colorado USA 80301
T +1 303-527-5200
T +1 800-522-6277
F +1 303-530-8459
www.emerson.com

Micro Motion Europe

Emerson Automation Solutions
Neonstraat 1
6718 WX Ede
The Netherlands
T +31 (0) 318 495 555
T +31 (0) 70 413 6666
F +31 (0) 318 495 556
www.emerson.com/nl-nl

Micro Motion Asia

Emerson Automation Solutions
1 Pandan Crescent
Singapore 128461
Republic of Singapore
T +65 6363-7766
F +65 6770-8003

Micro Motion United Kingdom

Emerson Automation Solutions
Emerson Process Management Limited
Horsfield Way
Bredbury Industrial Estate
Stockport SK6 2SU U.K.
T +44 0870 240 1978
F +44 0800 966 181

©2019 Micro Motion, Inc. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Micro Motion, ELITE, ProLink, MVD and MVD Direct Connect marks are marks of one of the Emerson Automation Solutions family of companies. All other marks are property of their respective owners.

MICRO MOTION™

