



Certificate of Compliance

Certificate: 2551823

Master Contract: 160686

Project: 80195020

Date Issued: 2024-04-23

Issued To: Endress + Hauser Flowtec AG
Kagenstrasse 7
Reinach., Basel-Country, 4153
Switzerland

Attention: Daniel Bosshard

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: *Anil Sodhi*
Anil Sodhi

PRODUCTS

CLASS 2258 03 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations

CLASS 2258 83 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations - CERTIFIED TO U.S. STANDARDS

Class I, Division 2, Groups A, B, C and D:

Product	<p>Proline Promag 400 Magnetic-inductive flow measuring system; compact version (<u>single board version</u>) providing exciter coil circuits and non-incendive electrode circuits to Integral Sensor Model Promag W, L, D.</p> <p>Proline Promag W 400, Model 5W4Bbb-ccdefMhiklllmn+### and O5W4Bbb-ccdefMhiklllmpp + ###</p>
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	<p>Proline Promag L 400, Model 5L4Bbb-ccefMhiklllmn+### and O5L4Bbb-ccefMhikllmnp + ###</p> <p>Proline Promag D 400, Model 5D4Bbb-ccefMhiklllmn+### and O5D4Bbb-ccefMhikllmnp + ###</p> <p>Note: Must be installed as per control drawing FES0196*</p>
Electrical Rating	<p>Rated input: 100-230V AC, 47-63Hz, 30VA 18-30 V AC, 44-66 Hz, 30 VA 24 V DC Nominal (18 to 30Vdc max), 8.0 W</p>
Enclosure rating	Type 4X, IP 66/67
Temp. code and ambient temperature	T4 (-20°C to + 50°C)
Process temperature and MWP	<p>Max process temperature: +80°C Maximum Working Pressure (MWP): 160bar (Sensors W, L), 25bar (sensor D)</p>

Product	<p>Proline Promag 400 Magnetic-inductive flow measuring system; remote version (single board version) providing exciter coil circuits and non-incendive electrode circuits to Remote Sensor, Model Promag W, L, D.</p> <p>Proline Promag W 400, Model 5W4Bbb-ccdefNhiklllmn+### and O5W4Bbb-ccdefNhikllmnp + ###</p> <p>Proline Promag L 400, Model 5L4Bbb-ccefNhiklllmn+### and O5L4Bbb-ccefNhikllmnp + ###</p> <p>Proline Promag D 400, Model 5D4Bbb-ccefNhiklllmn+### and O5D4Bbb-ccefNhikllmnp + ###</p> <p>Note: Must be installed as per control drawing FES0196*</p>
Electrical Rating	<p>Rated input: 100-230V AC, 47-63Hz, 30VA 18-30 V AC, 44-66 Hz, 30 VA 24 V DC Nominal (18 to 30Vdc max), 8.0 W</p>
Enclosure rating	<p>Transmitter Housing: Type 4X, IP 66/67 Sensor Housing: Type 4X, 6P, IP 66/68</p>
Temp. code and ambient temperature	<p>Transmitter Housing: T4 (-20°C to + 50°C) Sensor Housing: T6 or T5 (-20°C to + 60°C)</p>
Process temperature and MWP	<p>Max process temperature: +90°C Maximum Working Pressure (MWP): 160bar (Sensors W, L), 25bar (sensor D)</p>



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Product	<p>Proline Promag 400 Magnetic-inductive flow measuring system; compact version (<u>modular version</u>) providing exciter coil circuits and non-incendive electrode circuits to Integral Sensor Model Promag W, L, D.</p> <p>Proline Promag W 400, Model 5W4Cbb-ccdLfA/M/Q/Rhiklllmn+### and O5W4Cbb-ccdLfA/M/Q/Rhiklllmnpp + ###</p> <p>Proline Promag L 400, Model 5L4Cbb-ccLfA/M/Q/Rhiklllmn+### and O5L4Cbb-ccLfA/M/Q/Rhiklllmnpp + ###</p> <p>Proline Promag D 400, Model 5D4Cbb-ccLfA/M/Q/Rhiklllmn+### and O5D4Cbb-ccLfA/M/Q/Rhiklllmnpp + ###</p> <p>Note: Must be installed as per control drawing FES0196*</p>
Electrical Rating	<p>Rated input: 100-240 V AC, 50/60Hz (+/- 4Hz), 30VA 24 V AC, 50/60Hz (+/- 4Hz), 10VA 24 V DC, 8.0W</p>
Enclosure rating	Type 4X, IP 66/67
Temp. code and ambient temperature	T4 (-40°C to + 60°C)
Process temperature and MWP	<p>Max process temperature: +90°C Maximum Working Pressure (MWP): 160bar (Sensors W, L), 25bar (sensor D)</p>

Product	<p>Proline Promag 400 Magnetic-inductive flow measuring system; remote version (<u>modular version</u>) providing exciter coil circuits and non-incendive electrode circuits to Remote Sensor, Model Promag W, L, D.</p> <p>Proline Promag W 400, Model 5W4Cbb-ccdLfN/Phiklllmn+### and O5W4Cbb-ccdLfN/Phiklllmnpp + ###</p> <p>Proline Promag L 400, Model 5L4Cbb-ccLfN/Phiklllmn+### and O5L4Cbb-ccLfN/Phiklllmnpp + ###</p> <p>Proline Promag D 400, Model 5D4Cbb-ccLfN/Phiklllmn+### and O5D4Cbb-ccLfN/Phiklllmnpp + ###</p> <p>Note: Must be installed as per control drawing FES0196*</p>
Electrical Rating	<p>Rated input: 100-240 V AC, 50/60Hz (+/- 4Hz), 30VA 24 V AC, 50/60Hz (+/- 4Hz), 10VA 24 V DC, 8.0W</p>
Enclosure rating	<p>Transmitter Housing: Type 4X, IP 66/67 Sensor Housing: Type 4X, 6P, IP 66/68</p>



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Temp. code and ambient temperature	Transmitter Housing: T4 (-40°C to + 60°C) Sensor Housing: T6 or T5 (-40°C to + 60°C)
Process temperature and MWP	Max process temperature: +90°C Maximum Working Pressure (MWP): 160bar (Sensors W, L), 25bar (sensor D)

Order Code Structure:

<u>Proline Promag W 400</u>	<u>Proline Promag L 400, Proline Promag D 400</u>
<p>5a4obb-ccdefghikllmn + ### O5a4obb-ccdefghikllmnpp + ###</p> <p><u>Proline Promag 400 - replacement transmitter</u> 5X4oXX-ccdgefhi + ### O5X4oXX-ccdgefhipp + ###</p> <p>a = Type of sensor W = Promag W</p> <p>o = Generation Index B = single board version C = modular version</p> <p>bb = Size (nominal tube diameter) any double number or letter</p> <p>cc = Approval C6 = CSA C/US NI CL.I Div.2 Gr. ABCD</p> <p>d = Design (options for length of tube) any single number or letter</p> <p>e = Power Supply (and sensor only option) A = 100-230Vac (single board version only) B = 24AC/DC (single board version only) L = 24-240V AC/DC (modular version only) X = sensor only (For customers ordering a replacement sensor.)</p> <p>f = Output/Input H,I,J = 4-20mA HART + configurable ports L = PROFIBUS DP M = Modbus RS485 N = Ethernet/IP</p>	<p>5a4obb-ccdefghikllmn + ### O5a4obb-ccdefghikllmnpp + ###</p> <p>a = Type of sensor L = Promag L D = Promag D</p> <p>o = Generation Index B = single board version C = modular version</p> <p>bb = Size (nominal tube diameter) any double number or letter</p> <p>cc = Approval C6 = CSA C/US NI CL.I Div.2 Gr. ABCD</p> <p>e = Power Supply (and sensor only option) A = 100-230Vac (single board version only) B = 24AC/DC (single board version only) L = 24-240V AC/DC (modular version only) X = sensor only (For customers ordering a replacement sensor.)</p> <p>f = Output/Input H,I,J = 4-20mA HART + configurable ports L = PROFIBUS DP M = Modbus RS485 N = Ethernet/IP O, P = Modbus/PFS/IOU X = sensor only (For customers ordering a replacement sensor.)</p> <p>g = Housing of Transmitter A = Compact, Alu M = Compact, Polymeric</p>



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<p>O, P = Modbus/PFS/IOU X = sensor only (For customers ordering a replacement sensor.)</p> <p>g = Housing of Transmitter A = Compact, Alu M = Compact, Polymeric N = Remote, Polymeric P = Remote, Alu Q = Compact, Polymeric, 22.5° angle R = Compact, Alu, 22.5° angle</p> <p>h = Cable, Remote Version (options for length and quality of cable) any single number or letter</p> <p>i = Cable Glands D = Thread NPT1/2" L = Thread NPT1/2" + M12x1 receptacle for ethernet</p> <p>k = Liner Material (covers the inside of measurement tube) any single number or letter</p> <p>lll = Process Connection (= flange) any triple number or letter</p> <p>m = Electrodes (shape and material of electrodes contacting the fluid) any single number or letter</p> <p>n = Calibration Flow any single number or letter</p> <p>pp = Customer version any double number or letter</p> <p>** = Option in two digits (none, two or multiple of two digits); any combination of number or letter</p> <p>+, # = Signs used as indicator for optional abbreviation of extended order code</p>	<p>N = Remote, Polymeric P = Remote, Alu Q = Compact, Polymeric, 22.5° angle R = Compact, Alu, 22.5° angle</p> <p>h = Cable, Remote Version (options for length and quality of cable) any single number or letter</p> <p>i = Cable Glands D = Thread NPT1/2" L = Thread NPT1/2" + M12x1 receptacle for ethernet</p> <p>k = Liner Material (covers the inside of measurement tube) any single number or letter</p> <p>lll = Process Connection (= flange) any triple number or letter</p> <p>m = Electrodes (shape and material of electrodes contacting the fluid) any single number or letter</p> <p>n = Calibration Flow any single number or letter</p> <p>pp = Customer version any double number or letter</p> <p>** = Option in two digits (none, two or multiple of two digits); any combination of number or letter</p> <p>+, # = Signs used as indicator for optional abbreviation of extended order code</p>
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Product	<p>Proline Prosonic Flow ultrasonic flow measuring system; remote version providing non incendive circuits to sensors Prosonic Flow W and Prosonic Flow I.</p> <p>Proline Prosonic W 400, Model 9W4Bcc-ddefghikkllmmnpp + #### and O9W4Bcc-ddefghikkllmmnppqq + ####</p> <p>Proline Prosonic I 400, Model 9I4Bcc-ddefghikkllmmnoopp + #### and O9I4Bcc-ddefghikkllmmnooppqq + ####</p>
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	Note: Must be installed as per control drawing FES0233*
Electrical Rating	Rated input: 100-240 V AC, 50/60Hz (+/- 4Hz), 30VA 24 V AC, 50/60Hz (+/- 4Hz), 10VA 24 V DC, 8.0W
Enclosure rating	Transmitter Housing: Type 4X, IP 66/67 Sensor : Type 4X/ 6P/ IP 66/68
Temp. code and ambient temperature	Transmitter Housing: T4 (-40°C to + 60°C) Sensor Housing: T6-T1, see control drawing FES0233*
Process temperature and MWP	See control drawing FES0233*

Order Code Structure:

Proline Prosonic Flow W 400

9W4Bcc-ddefghikklmmnpp + ###
 09W4Bcc-ddefghikklmmnppqq + ###

Proline Prosonic Flow I 400

9I4Bcc-ddefghikklmmnoopp + ###
 09I4Bcc-ddefghikklmmnooppqq + ###

Proline Prosonic Flow 400 - replacement transmitter

9X4BXX-ddefghipp + ###
 09X4BXX-ddefghippqq + ###

cc	Number of Sensorsets any double number or letter
dd	Approval C6 = CSA C/US NI CL.I Div.2 Gr. ABCD
e	Power Supply L = 100..240 VAC or 24V AC/DC X = Sensor only (Not for replacement transmitter)
f	Output/Input H,I = 4-20mA HART + configurable ports L = Profibus DP M = Modbus RS485 N = Ethernet/IP



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	O,P = Modbus/PFS/IOUT X = Sensor only (Not for replacement transmitter)
g	Display/Operation F = Display module G = Display module with WLAN X = Sensor only (Not for replacement transmitter)
h	Housing of Transmitter N = Remote, Polymeric enclosure P = Remote, Aluminum enclosure X = Sensor only (Not for replacement transmitter)
i	Cable Entries D = Thread NPT1/2" L = Thread NPT1/2" + M12x1 receptacle for Ethernet X = Sensor only (Not for replacement transmitter)
kk	Sensor Version any double number or letter
l	Process Temperature any single number or letter
mm	Cable any double number or letter
nn	Installation Set any double number or letter
oo	Sensor Holder any double number or letter
pp	Device Model any double number or letter
qq	Customer Version any double number or letter
+, #	Signs used as indicator for optional abbreviation of extended order code
**	Option in two digits (none, two or multiple of two digits); any combination of number or letter



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Proline Prosonic Flow 400 sensor set

DK9018-ddkkl00

dd	Approval C6 = CSA C/US NI CL.I Div.2 Gr. ABCD
kk	Sensor Version any double number or letter
l	Process Temperature any single number or letter
00	Reserved for future use

Note:

The modular version is optionally available with an antenna bushing for the connection of an external antenna.

Conditions of Acceptability:

1. Final installation shall be as per Canadian Electrical Code (CEC) or National Electrical Code (NEC). Refer to control drawing FES0196 and FES0233 for safe instructions.
2. For polymeric enclosures: Do not remove the reinforcement plate. This ensures grounding and mechanical stability of the conduit entries and the optional antenna bushing.
3. Antenna supplied by Endress+Hauser shall be used only. As an alternate, any passive omni-directional RF antenna with or without cable is permitted to be connected when meeting the following parameters:
 - a) The antenna shall have an impedance of at least 50Ω.
 - b) The rated frequency range of the antenna shall not exceed 1710MHz ... 6000MHz.
 - c) The RF antenna or the RF antenna cable shall be fitted with a Type N connector plug (male).
4. The antenna bushing type H337 shall be mounted wrench tight to the transmitter enclosure to maintain the ingress protection of the enclosure.
5. The coupling nut of the Type N plug connector shall be hand tightened only.
6. The metal enclosure of the Antenna Bushing H337 shall be securely connected to local earth, typically via the enclosure to which it is connected.



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APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 94.2-15	Enclosures for Electrical Equipment, Environmental Considerations
CAN/CSA-C22.2 No. 61010-1-12 UPD1:2015, UPD2:2016, AMD1:2018	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements
C22.2 No. 213- 2017 UPD1:2018 + UPD2:2019 + UPD3:2021	Nonincendive electrical equipment for use in Class I and II, Division 2 and Class III, Divisions 1 and 2 hazardous (classified) locations
ANSI/UL 121201- 2021, 9th Edition	Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations
FM 3600 – 2022	Electrical Equipment for Use in Hazardous (Classified) Locations, General Requirements
FM 3611 – 2021	Nonincendive Electrical Equipment for Use in Class I and Class II, Division 2, and Class III, Division 1 and 2 Hazardous (Classified) Locations
ANSI/UL 61010-1, Third Edition	Standard for Safety, Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements
ANSI/UL 50E (Second Ed.)	Enclosures for Electrical Equipment, Environmental Considerations

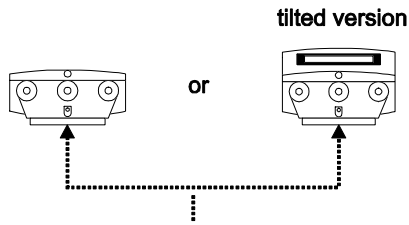
Notes:

Products certified under Class C225803, C225883 have been certified under CSA’s ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca



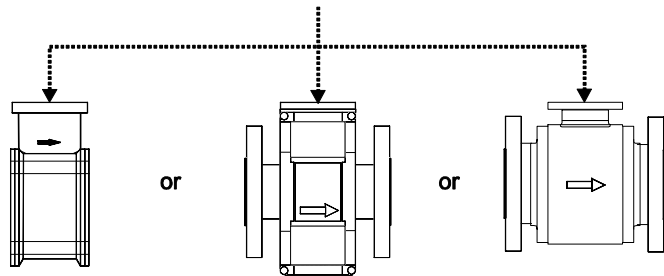
Hazardous Locations
Cl. I. Div. 2, Gps A,B,C,D

Transmitter
Promag 400
compact



Direct connection between transmitter and sensor

Sensors
Promag D, W, L



PROMAG W/D/L 400 - Compact version

Notes:

- 1) Install according to Canadian Electrical Code (CEC) or National Electrical Code (NEC) ANSI/NFPA 70.
- 2) Tightening torque for transmitter cover screws:

Metallic enclosure	Polymeric enclosure, flat version	Polymeric enclosure, tilted version
2.5 Nm	2.5 Nm	1.3 Nm

- 3) For polymeric enclosures: Do not remove the reinforcement plate. This ensures grounding and mechanical stability of the conduit entries and the optional antenna bushing.
- 4) Suitable for outdoor use.
- 5) Open housing for brief periods only. Avoid the ingress of foreign objects, moisture or contaminants.
Logement ouvert pour de brèves périodes seulement. Éviter la pénétration de corps étrangers, d'humidité ou de contaminants
- 6) The maximally allowed medium temperature T_m depends on the liner material used for the sensor. Refer to the sensor name plate.
- 7) Additional temperature restriction depending on temperature classes:

- a) Modular Design (Order code 5*4C**... or O5*4C**...)

Max. ambient temperature	Max. medium temperature						
	T6	T5	T4A	T4	T3C	T2	T1
80°C	95°C	115°C	130°C	155°C	290°C	440°C	
60°C/140°F *)	---	---	---	90°C / 194°F *)	90°C / 194°F	90°C / 194°F	90°C / 194°F

*) Exception for Sensor Promag D: Max. ambient temperature = 40°C/104°F, Max. medium temperature = 40°C/104°F

Minimally allowed ambient temperature depending on the material of the sensor flanges:

- stainless steel flanges: -40°C/ -40°F
- carbon steel flanges: -10°C/14°F

- b) Single Board Design (Order code 5*4B**... or O5*4B**...)

Max. ambient temperature	Max. medium temperature						
	T6	T5	T4A	T4	T3C	T2	T1
80°C	95°C	115°C	130°C	155°C	290°C	440°C	
50°C/122°F	---	---	---	---	80°C / 176°F	80°C / 176°F	80°C / 176°F
40°C/104°F	---	---	---	70°C/158°F *)	80°C / 176°F	80°C / 176°F	80°C / 176°F

*) Exception: 40°C/104°F in case of sensor Promag D

Minimally allowed ambient temperature depending on the material of the sensor flanges:

- stainless steel flanges: -20°C/ -4°F
- carbon steel flanges: -10°C/14°F

- 8) **WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2;**
AVERTISSEMENT - RISQUE D'EXPLOSION - LA SUBSTITUTION DE COMPOSANTS PEUT RENDRE CE MATÉRIEL INACCEPTABLE POUR LES EMPLACEMENTS DE CLASSE I, DIVISION 2;
- 9) **WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS;**
AVERTISSEMENT - RISQUE D'EXPLOSION - AVANT DE DÉCONNECTER L'EQUIPMENT, COUPER LE COURANT OU S'ASSURER QUE L'EMPLACEMENT EST DÉSIGNÉ NON DANGEREUX;

Aenderungen:

A	29.10.12/BDA	F	12.04.24/BDA
B	05.11.13/BDA	G	
C	03.03.14/BDA	H	
D	15.02.19/BDA	J	
E	27.07.21/BDA	K	

Ersteller: FES / **ID 1528**
FILE: M:\ZEICHNG\FES0196\E\FES0196F.doc

cCSA_{US} Control Drawing Class I Division 2

Compact version

PROMAG W/D/L 400

Endress+Hauser

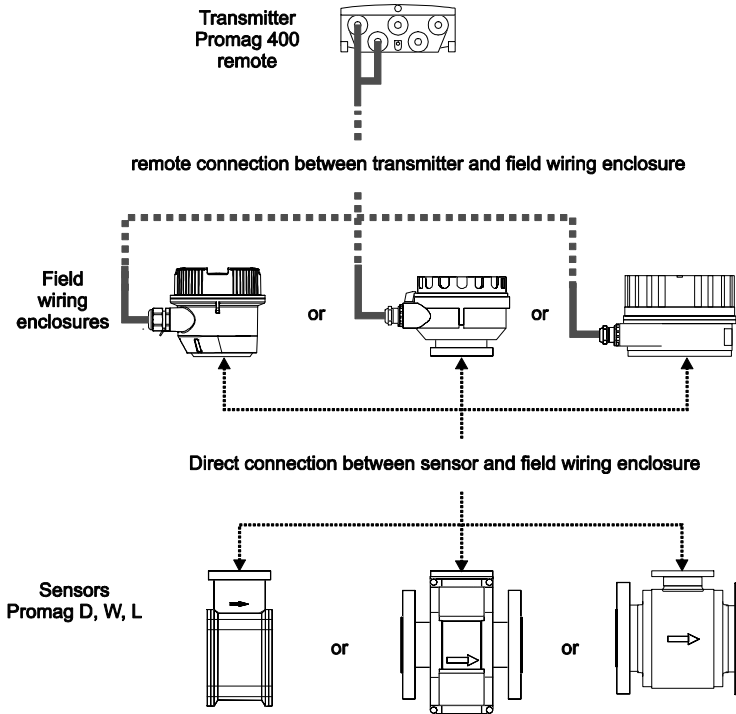
People for Process Automation

Flowtec AG, Kaegenstrasse 7, CH-4153 Reinach BL1, Postfach

Gezeichnet	29.10.2012	BDA
Gepüft		
Ex-geprüft	12.04.2024	BDA
Gesehen		

FES0196F

Hazardous Locations
Cl. I. Div. 2, Gps A,B,C,D



PROMAG W/D/L 400 - Remote version

Notes:

1. Install according to Canadian Electrical Code (CEC) or National Electrical Code (NEC) ANSI/NFPA 70.
2. Tightening torque for transmitter cover screws: 2.5 Nm
3. For polymeric enclosures: Do not remove the reinforcement plate. This ensures grounding and mechanical stability of the conduit entries and the optional antenna bushing.
4. Suitable for outdoor use.
5. Open housing for brief periods only. Avoid the ingress of foreign objects, moisture or contaminants
Logement ouvert pour de brèves périodes seulement. Éviter la pénétration de corps étrangers, d'humidité ou de contaminants
6. The maximally allowed medium temperature T_m depends on the liner material used for the sensor. Refer to the sensor name plate.
7. Additional temperature restriction depending on temperature classes

Sensor:

Max. ambient temperature	Max. medium temperature						
	T6	T5	T4A	T4	T3C	T2	T1
60°C/140°F	80°C / 176°F	90°C / 194°F	90°C / 194°F	90°C / 194°F	90°C / 194°F	90°C / 194°F	90°C / 194°F

Minimally allowed ambient temperature depending on the material of the sensor flanges:

- stainless steel flanges: -40°C / -40°F
- carbon steel flanges: -10°C / 14°F

Transmitter:

Temperature class for transmitter in remote version is T4 at 60°C / 140°F ambient temperature.

The minimum ambient temperature is -40°C/-40°F *1)

*1) Exception: -20°C/-4°F in case of single board version

(5*4B**_***** or O5*4B**_*****)

8. **WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2;**
AVERTISSEMENT – RISQUE D’EXPLOSION – LA SUBSTITUTION DE COMPOSANTS PEUT RENDRE CE MATÉRIEL INACCEPTABLE POUR LES EMPLACEMENTS DE CLASSE I, DIVISION 2;
9. **WARNING - EXPLOSION HAZARD – DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS;**
AVERTISSEMENT – RISQUE D’EXPLOSION – AVANT DE DÉCONNECTER L’EQUIPMENT, COUPER LE COURANT OU S’ASSURER QUE L’EMPLACEMENT EST DÉSIGNÉ NON DANGEREUX;

Aenderungen:	A	29.10.12/BDA	F	12.04.24/BDA	Ersteller: FES / ID 1528 FILE: M:\ZEICHNG\FES0196\E\FES0196F.doc
	B	05.11.13/BDA	G		
	C	03.03.14/BDA	H		
	D	15.02.19/BDA	J		
	E	27.07.21/BDA	K		

cCSA_{US} Control Drawing Class I Division 2

Remote version

PROMAG W/D/L 400

Endress+Hauser

People for Process Automation

Flowtec AG, Kaegenstrasse 7, CH-4153 Reinach BL1, Postfach

Gezeichnet	29.10.2012	BDA
Geprüft		
Ex-geprüft	12.04.2024	BDA
Gesehen		

FES0196F

PROMAG W/D/L 400 - Wiring Options

1) Cl. I. Div. 2, Gps A,B,C,D

a) Threaded Cable Entries NPT1/2":

- Install per Canadian Electrical Code (CEC) or National Electrical Code (NEC) ANSI/NFPA 70 and use supply wires suitable for 20 °C above ambient temperature.

b) Receptacle (plug-in connector) with thread M12x1, approved for Cl. I. Div.2:

- Install per Canadian Electrical Code (CEC) or National Electrical Code (NEC) ANSI/NFPA 70.
- The M12 mating connector which is sourced by the customer must also be approved for Cl. I. Div.2 and must be suitable for Type 4X, IP66/67. It must provide additional mechanical security to prevent accidental disconnection.

2) Non-hazardous classified areas

a) Threaded Cable Entries (e.g. NPT1/2" or M20x1.5):


- Install per Canadian Electrical Code (CEC) or National Electrical Code (NEC) ANSI/NFPA 70 and use supply wires suitable for 20 °C above ambient temperature.

b) Receptacle (plug-in connector) with thread M12x1:

- Install per Canadian Electrical Code (CEC) or National Electrical Code (NEC) ANSI/NFPA 70.
- The M12 mating connector which is sourced by the customer must be suitable for Type 4X, IP66/67.

3) Notes for External Antenna

- a) Antenna supplied by Endress+Hauser shall be used only. As an alternate, any passive omni-directional RF antenna with or without cable is permitted to be connected when meeting the following parameters:
- The antenna shall have an impedance of at least 50Ω
 - The rated frequency range of the antenna shall not exceed 1710MHz ... 6000MHz
 - The RF antenna or the RF antenna cable shall be fitted with a Type N connector plug (male)
- b) The antenna bushing type H337 shall be mounted wrench tight to the transmitter enclosure to maintain the ingress protection of the enclosure.
- c) The coupling nut of the Series N plug connector shall be hand tightened only.
- d) The metal enclosure of the Antenna Bushing H337 shall be securely connected to local earth, typically via the enclosure to which it is connected

Aenderungen:	A	29.10.12/BDA	F	12.04.24/BDA	Ersteller: FES / ID 1528 FILE: M:\ZEICHNG\FES0196\E\FES0196F.doc			
	B	05.11.13/BDA	G					
	C	03.03.14/BDA	H					
	D	15.02.19/BDA	J					
	E	27.07.21/BDA	K					
cCSA _{US} Control Drawing Compact version + Remote version PROMAG W/D/L 400					Gezeichnet	29.10.2012	BDA	
					Gepüft			
					Ex-geprüft	12.04.2024	BDA	
					Gesehen			
Endress+Hauser  People for Process Automation					Flowtec AG, Kaegenstrasse 7, CH-4153 Reinach BL1, Postfach		FES0196F	3/3