

Certificate of Compliance

Certificate: 80074944 Master Contract: 160686

Project: 80131314 **Date Issued:** 2022-08-03

Issued To: Endress + Hauser Flowtec AG

Kagenstrasse 7

Reinach., Basel-Country, 4153

Switzerland

Attention: Frantz Bindler

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: Dimcho Genov Dimcho Genov



PRODUCTS

CLASS - C225206 - PROCESS CONTROL EQUIPMENT Process Control Equipment CLASS - C225286 - PROCESS CONTROL EQUIPMENT Certified to US Standards

Flowmeter, model Proline Promass K10, Proline Promag 10 (D, H, P or W) Ratings: 100 – 240 Vac (-15%, +10%), 50 / 60 Hz, 10W or 19.2 – 31.2 Vdc, 10W

Enclosure type 4X, IP 66/67 for transmitter enclosures G331, G332 and G333 (compact version), G331 and G333 (remote version) including enclosure G320;

Rated ambient temperature: -40° C to $+60^{\circ}$ C; (optional when using Promass sensors) -50° C/ -60° C to $+60^{\circ}$ C for G331 and G332 only;

Medium temperature: -50°C °C to +150°C when using Promass sensors (limited to -40°C for G333)

-40°C °C to +150°C when using Promag sensors



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Medium pressure: 10 MPa (100 bar) max when using Promass sensors 43 MPa (430 bar) max when using Promag sensors

Notes:

- 1. DC version of equipment, to be supplied by a Class 2 or Limited Energy Source in accordance with CSA 61010-1-12;
- 2. The above model is permanently connected, Overvoltage Category II; Pollution degree 4 (macro environment), 2 (micro-environment)
- 3. Mode of operation: continuous
- 4. Environmental Conditions: 2000 m max; maximum relative humidity up to 95%
- 5. Equipment has only been tested for electrical safety. No evaluation of functional safety and performance characteristics has been conducted.
- 6. Equipment is only to be installed by manufacturer trained personnel.
- 7. If at any time there is a conflict between the system safety provisions and any relevant local (national or regional) requirements, the local requirements always take precedence.
- 8. Equipment is not to be used with flammable liquids

Nomenclature:

1. Proline Promass 10

8aBbcc - eehiklnppqqqrss + #**#
O8aBbcc - eehiklnppqqqrsstt + #**# (for OEM-version)
8xBbdd - eehiklnooppss + #**# (for replacement transmitter)

O8xBbdd – eehiklnooppsstt + #**# (for replacement transmitter OEM)

- a = Type of sensor K = Promass K
- b = Generation

B = Generation of Flowmeter

- cc = Size (Nominal Diameter of the pipe) any double digits with combination of number or letter
- **dd** = **Assignment of replacement transmitter** any double digits with combination of number or letter
- ee = Approval CP = CSA C/US; GP (General Purpose)



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h = Power Supply

D = 24Vdc

E = 100-240 Vac

I = 100-240 Vac / 24 Vdc (2-chamber system)

M = 100-240 Vac / 24 Vdc

X = sensor only

i = Communication Input / Output

any single number or letter

k = Display / Operation

any single number or letter

1 = Housing of Transmitter

A = Compact, Aluminum IP66/67 Type 4X

D = Compact, Polycarbonate IP66/67 Type 4X

n = Cable Entry

A = Gland M20

B = M20 Blind

C = Thread G1/2

D = Thread NPT1/2

oo = Existing product

any double digits with combination of number or letter

pp = Measuring tube material in sensor

any double digits with combination of number or letter

qqq = Process connection (Flange material)

any triple digits with combination of number or letter

r = Calibration

any single number or letter

ss = Device model (two digit)

A1 = product version 1

tt = Customer version (two digits)

any double digits with combination of number or letter

** = Option in two digits (none, two or multiple of two digits)

any combination of number and/or letter



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#, + = Signs used as indicator for optional abbreviation of extended order code

2. Proline Promag 10

5aBbcc – eefghiklmnopppqrss + #**#
O5aBbcc – eefghiklmnopppqrsstt + #**# (for OEM-version)
5xBbdd – eeghiklmnss + #**# (for replacement transmitter)
O5xBbdd – eeghiklmnsstt + #**# (for replacement transmitter OEM)

a = Type of sensor

D = Promag D

H = Promag H

P = Promag P

W = Promag W

b = Generation

B = Generation of Flowmeter

cc = Size (Nominal Diameter of the pipe)

any combination of number and/or letter up to size = DN3000

dd = Assignment of replacement transmitter

any double digits with combination of number or letter

ee = Approval

CP = CSA C/US; GP (General Purpose)

f = Design of flanges

any single number or letter

g = Functionality

any single number or letter

h = Power Supply

D = 24Vdc

E = 100-240 Vac

I = 100-240Vac / 24Vdc (2-chamber system, enclosure G332)

M = 100-240 Vac / 24 Vdc

X = sensor only

i = Input / Output



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any single number or letter

k = **Display / Operation** any single number or letter

1 = Housing of Transmitter

A = Compact, Aluminum IP66/67 Type 4X M = Compact, Polycarbonate IP66/67 Type 4X N = Remote, Polycarbonate IP66/67 Type 4X P = Remote, Aluminum IP66/67 Type 4X

m = Cable Sensor Connection Remote Version

any single number or letter

n = Cable Entry

A = Gland M20 B = M20 Blind C = Thread G1/2 D = Thread NPT1/2

o = Liner material of sensor

any single number or letter

ppp = Process connection (Flange material)

any triple digits with combination of number or letter

q = Electrode of sensor

any number or letter

r = Calibration

any single number or letter

ss = Device model (two digit)

A1 = product version 1

tt = Customer version (two digits)

any double digits with combination of number or letter

** = Option in two digits (none, two or multiple of two digits)

any combination of number and/or letter

#, + = Signs used as indicator for optional abbreviation of extended order code



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APPLICABLE REQUIREMENTS

CSA Standards:

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

UL Standards:

UL 61010-1, 3rd edition (2012), AMD1: 2018 - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements

Notes:

Products certified under Class C225206, C225286 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca

