



Certificate of Compliance

Certificate:	70087366	Master Contract:	160686
Project:	80267439	Date Issued:	2026-01-28
Issued to:	Endress+Hauser Flowtec AG Kagenstrasse 7 Reinach, Basel-Country 4153 Switzerland	Issued by:	<i>Anil Sodhi</i> Anil Sodhi, P. Eng.

Attention: Minh Do

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.



PRODUCTS

Class 2258 02 PROCESS CONTROL EQUIPMENT - For Hazardous Locations
Class 2258 03 PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations
Class 2258 04 PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations
Class 2258 82 PROCESS CONTROL EQUIPMENT - For Hazardous Locations - Certified to US Standards
Class 2258 83 PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations - Certified to US Standards
Class 2258 84 PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations - Certified to US Standards

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations - Certified to US Standards

Model(s)

Proline Promass 300/500, Proline Cubemass 300/500, Proline Promag 300/500, Proline Prosonic Flow 300/500, Proline t-mass 300/500, Proline Teqwave M 300/500



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

Class I, Division 1, Group A, B, C, D T6...T1;

Class I, Division 2, Group A, B, C, D T6...T1;

Class II, Division 1, Groups E, F, G; Class III;

Proline Promass 300/500, Proline Cubemass 300/500, Proline Promag 300/500, Proline Prosonic Flow 300/500, Proline t-mass 300/500 and Proline Teqwave M 300/500 Flowmeter system available as compact and remote versions; product electrical ratings as listed under order code 'e'; hazardous locations designations as listed under order code 'dd'; ambient temperature as listed in the applicable control drawings. The product order codes are defined as shown below.

Part A - Proline Promass 300/500, Proline Cubemass 300/500

Extended order code Proline Promass 300 and Cubemass 300:

8a3bcc – ddefghjlpssstttvww + ###	
O8a3bcc – ddefghjlpssstttvwwy + ###	for OEM-version
8x3bxx – ddefghjlprrssww + ###	for replacement transmitter
O8x3bxx – ddefghjlprrsswwy + ###	for replacement transmitter OEM

Extended order code Proline Promass 500 and Cubemass 500:

8a5bcc – ddefghijkmnopsstttvww + ###	
O8a5bcc – ddefghijkmnopsstttvwwy + ###	for OEM-version
8x5bxx – ddefghijkmopqrrssww + ###	for replacement transmitter
O8x5bxx – ddefghijkmopqrrsswwy + ###	for replacement transmitter OEM

a	=	Type of sensor A = Promass A; C = Cubemass C; E = Promass E; F = Promass F; H = Promass H; I = Promass I; O = Promass O; P = Promass P; Q = Promass Q; S = Promass S; X = Promass X
b	=	Generation B = Promass A (type 8A*B**, O8A*B**); Cubemass C; Promass E; Promass F; Promass H; Promass I; Promass O; Promass P; Promass Q; Promass S; Promass X C = Promass A (type 8A*C**, O8A*C**)
cc	=	Size any double digits with combination of number or letter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

dd	=	Approval <u>Proline Promass/Cubemass 300 (compact version):</u> CC = CL.I Div.1, CL.II,III, GP C-G CD = CL.I Div.1, CL.II,III, GP A-G CE = CL.I Div.1, GP A-D CS = CL.I Div. 2, GP A-D <u>Proline Promass/Cubemass 500 (remote version, ISEM in transmitter):</u> CC = CL.I Div.1, CL.II,III, GP C-G (transmitter + sensor) CD = CL.I Div.1, CL.II,III, GP A-G (transmitter + sensor) CE = CL.I Div.1, GP A-D (transmitter + sensor) CS = CL.I Div. 2, GP A-D (transmitter + sensor) <u>Proline Promass/Cubemass 500 Digital (remote version, ISEM in sensor):</u> CM = CL.I Div. 2, GP A-D (transmitter) CL.I Div.1, CL.II,III, GP C-G (sensor) CN = CL.I Div. 2, GP A-D (transmitter) CL.I Div.1, CL.II,III, GP A-G (sensor) CS = CL.I Div. 2, GP A-D (transmitter + sensor)
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc X = sensor only
ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20mA HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex i SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only
h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only
i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEM electronic (Proline 500 only) A = Sensor B = Transmitter
l	=	Housing (Proline 300 only) any single number or letter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

m	=	Transmitter Housing (Proline 500 only) any single number or letter
n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
qq	=	Upgrade Kit any double digits with combination of number or letter
rr	=	Existing Product (see assignment of flowmeter to replacement transmitter) any double digits with combination of number or letter
ss	=	Measuring tube material any double digits with combination of number or letter
ttt	=	Process connection any triple digits with combination of number or letter
v	=	Calibration any single number or letter
ww	=	Device model (two digit) (refer to table below for assignment of flowmeter to replacement of transmitter) A1 = product version 1 A2 = product version 2
yy	=	Customer version (two digit) 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

Part B - Proline Promag 300/500

Extended order code Proline Promag 300:

5a3bcc – ddzeffghjlpstttuvww + ###	
O5a3bcc – ddzeffghjlpstttuvwwyy + ###	for OEM-version
5x3bxx – ddeffghjlpww + ###	for replacement transmitter only
O5x3bxx – ddeffghjlpwwyy + ###	for replacement transmitter OEM

Extended order code Proline Promag 500:

5a5bcc – ddzeffghijkmnpstttuvww + ###	
O5a5bcc – ddzeffghijkmnpstttuvwwyy + ###	for OEM-version
5x5bxx – ddeffghijkmopqww + ###	for replacement transmitter only
O5x5bxx – ddeffghijkmopqwwyy + ###	for replacement transmitter OEM

a	=	Type of sensor H = Sensor Promag H P = Sensor Promag P W = Sensor Promag W
b	=	Generation B = Generation of Flowmeter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

cc	=	Size any combination of number and/or letter up to size = DN3000
dd	=	Approval <u>Proline Promag 300 (compact version):</u> CD = CL.I Div.1, CL.II, III, GP A-G CE = CL.I Div.1, GP A-D CS = CL.I Div.2, GP A-D <u>Proline Promag 500 (remote version, ISEM in transmitter):</u> CD = CL.I Div.1, CL.II, III, GP A-G (transmitter + sensor) CE = CL.I Div.1, GP A-D (transmitter + sensor) CS = CL.I Div.2, GP A-D (transmitter + sensor) - <u>Proline Promag 500 Digital (remote version, ISEM in sensor):</u> CN = CL.I Div.2, GP A-D (transmitter) CL.I Div.1, CL.II, III, GP A-G (sensor) CS = CL.I Div.2, GP A-D (transmitter + sensor)
z	=	Design (Promag W 300 and Promag W 500 only) any single number or letter
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc X = sensor only
ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20mA HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex i SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only
h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only
i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEM electronic (Proline 500 only) A = Sensor B = Transmitter
l	=	Housing (Proline 300 only) any single number or letter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

m	=	Transmitter Housing (Proline 500 only) any single number or letter
n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
qq	=	Upgrade Kit any double digits with combination of number or letter
s	=	Liner material any single number or letter
ttt	=	Process connection any triple digits with combination of number or letter
u	=	Electrode any number or letter
v	=	Calibration any single number or letter
ww	=	Device Model (two digit) (refer to table below for assignment of flowmeter to replacement of transmitter) A1 = product version 1 A2 = product version 2
yy	=	Customer version (two digit) 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

Part C - Proline Prosonic Flow 300/500

Part C1 - Proline Prosonic Flow G 300/500

Extended order code Proline Prosonic Flow G 300:

9G3bcc – ddefghjlpssuuuvww + ###
O9G3bcc – ddefghjlpssuuuvwwyy + ### for OEM-version
9x3bxx – ddefghjlprrssww + ### for replacement transmitter
O9x3bxx – ddefghjlprrsswwyy + ### for replacement transmitter OEM

Extended order code Proline Prosonic Flow G 500:

9G5bcc – ddefghijkmnopssuuuvww + ###
O9G5bcc – ddefghijkmnopssuuuvwwyy + ### for OEM-version
9x5bxx – ddefghijkmopqrrssww + ### for replacement transmitter
O9x5bxx – ddefghijkmopqrrsswwyy + ### for replacement transmitter OEM

b	=	Generation B = Generation of Flowmeter
cc	=	Size any double digits with combination of number or letter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

dd	=	Approval <u>Proline Prosonic Flow G 300 (compact version):</u> CD = CL.I Div.1, CL.II, III, GP A-G CE = CL.I Div.1, GP A-D CS = CL.I Div.2, GP A-D <u>Proline Prosonic Flow G 500 Digital (remote version, ISEM in sensor):</u> CN = CL.I Div.2, GP A-D (transmitter) CL.I Div.1, CL.II, III, GP A-G (sensor) CS = CL.I Div.2, GP A-D (transmitter + sensor)
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc X = sensor only
ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20mA HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex i SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = sensor only
g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEM electronic (Proline 500 only) A = Sensor
l	=	Housing (Proline 300 only) any single number or letter
m	=	Transmitter Housing (Proline 500 only) any single number or letter
n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
qq	=	Upgrade Kit any double digits with combination of number or letter
rr	=	Existing Product (see assignment of flowmeter to replacement transmitter) GA = Prosonic Flow G 00 = not used
ss	=	Measuring tube material, sensor version any double digits with combination of number or letter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

t	=	Pressure component any single number or letter
uuu	=	Process connection any triple digits with combination of number or letter
v	=	Calibration any single number or letter
ww	=	Device model (two digit) A1 = product version 1 A2 = product version 2
yy	=	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

Part C2 - Proline Prosonic Flow P 500

Extended order code Proline Prosonic Flow P 500:

9P5bcc – ddefghjkmossuuuvvww + ###
O9P5bcc – ddefghjkmossuuuvvwwyy + ### for OEM-version
9x5bxx – ddefghjkmnoprrssww + ### for replacement transmitter
O9x5bxx – ddefghjkmnoprrsswwyy + ### for replacement transmitter OEM

b	=	Generation B = Generation of Flowmeter
cc	=	Mounting Type any double digits with combination of number and/or letter
dd	=	Approval Transmitter CD = Cl.I Div.1, Cl.II, III, GP A-G CS = Cl.I Div.2, GP A-D
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20mA HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex i SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = Sensor only
g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = Sensor only
h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = Sensor only
i	=	Input / Output 4 A = without Input/Output 4 X = Sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

j	=	Display / Operation any single number or letter
k	=	Integrated ISEM electronic A = Sensor B = Transmitter
m	=	Transmitter Housing any single number or letter
n	=	Cable Sensor Connection any single number or letter
o	=	Cable Entry any single number or letter
pp	=	Upgrade Kit AA = not used
rr	=	Existing Product (see assignment of flowmeter to replacement transmitter) PA = Prosonic Flow P 500 00 = not used
ss	=	Sensor type any double digits with combination of number and/or letter
t	=	Process Temperature any single number or letter
uu	=	Cable any double digits with combination of number and/or letter
vv	=	Installation set any double digits with combination of number and/or letter
ww	=	Device model (two digit) (see assignment of flowmeter to replacement transmitter) A2 = product version 2
yy	=	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

Extended order code Proline Prosonic Flow P 500 Clamp-On sensor:

DK9013 – ddqqrww + ###

ODK9013 – ddqqrwwy + ### for OEM-version

dd	=	Approval CD = Cl.I Div.1, Cl.II, III, GP A-G CS = Cl.I Div.2, GP A-D
qq	=	Sensor type any double digits with combination of number and/or letter
r	=	Process Temperature any single number or letter
ww	=	Device model (two digit) (see assignment of flowmeter to replacement transmitter) 00 = not used
yy	=	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



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

#, + =	Signs used as indicator for optional abbreviation of extended order code
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Note: Clamp-On sensor types DK9013 and ODK9013 are intended for use as replacement of sensors for Proline Prosonic Flow P 500 (ISEM in transmitter) types 9P5B and O9P5B or as extension of Proline Prosonic Flow P 500 (ISEM in transmitter) types 9P5B and O9P5B from one sensor set to two sensor sets.

Part D - Proline t-mass 300/500

Extended order code Proline t-mass 300:

6F3bcc – ddeffghjlpssstttvww + ###	
6I3bcc – ddeffghjlpssstttuuvww + ###	
O6F3bcc – ddeffghjlpssstttvwwyy + ###	for OEM-version
O6I3bcc – ddeffghjlpssstttuuvwwyy + ###	for OEM-version
6x3bxx – ddeffghjlpssww + ###	for replacement transmitter
O6x3bxx – ddeffghjlpsswwyy + ###	for replacement transmitter OEM

Extended order code Proline t-mass 500:

6F5bcc – ddeffghijkmnopsstttvww + ###	
6I5bcc – ddeffghijkmnopsstttuuvww + ###	
O6F5bcc – ddeffghijkmnopsstttvwwyy + ###	for OEM-version
O6I5bcc – ddeffghijkmnopsstttuuvwwyy + ###	for OEM-version
6x5bxx – ddeffghijkmopssww + ###	for replacement transmitter
O6x5bxx – ddeffghijkmopsswwyy + ###	for replacement transmitter OEM

b	=	Generation B = Generation of Flowmeter
cc	=	Size any combination of number and/or letter up to size = DN100 (t-mass F) / 1500mm (t-mass I)
dd	=	Approval <u>Proline t-mass 300:</u> CD = Cl.I Div.1, Cl.II, III, GP A-G CE = Cl.I Div.1, GP A-D CS = Cl.I Div.2, GP A-D <u>Proline t-mass 500 Digital:</u> CN = Cl.I Div.2, GP A-D (transmitter) Cl.I Div.1, Cl.II, III, GP A-G (sensor) CS = Cl.I Div.2, GP A-D (transmitter + sensor)
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

ff	=	Input / Output 1
		BA = 4-20mA HART
		BB = 4-20mA WHART
		CA = 4-20mA HART Ex i (passive)
		CB = 4-20mA WHART Ex i (passive)
		CC = 4-20mA HART Ex i (active)
		CD = 4-20mA WHART Ex i (active)
		GA = Profibus PA
		HA = Profibus PA Ex i
		LA = Profibus DP
		MA = Modbus RS485
		MB = Modbus TCP
		MC = Modbus TCP Ex i
		NA = EtherNet/IP
		RA = Profinet IO
		RB = Profinet
		RC = Profinet Ex i
		SA = Foundation Fieldbus
		TA = Foundation Fieldbus Ex i
		XX = sensor only
g	=	Input / Output 2
		A = without Input/Output 2
		B = 4-20mA
		C = 4-20mA Ex i (passive)
		D = Configurable IO
		E = Pulse/Frequency/Switch output
		F = Pulse output phase-shifted
		G = Pulse/Frequency/Switch output Ex i
		H = Relay
		I = 4-20mA input
		J = Status input
		K = Pulse output Ex i
		L = Pulse output
		X = sensor only
h	=	Input / Output 3
		A = without Input/Output 3
		B = 4-20mA
		C = 4-20mA Ex i (passive)
		D = Configurable IO
		E = Pulse/Frequency/Switch output
		F = Pulse output phase-shifted
		G = Pulse/Frequency/Switch output Ex i
		H = Relay
		I = 4-20mA input
		J = Status input
		K = Pulse output Ex i
		L = Pulse output
		X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEM electronic (Proline 500 only) A = Sensor
l	=	Housing (Proline 300 only) any single number or letter
m	=	Transmitter Housing (Proline 500 only) any single number or letter
n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
ss	=	material sensor any double digits with combination of number or letter
ttt	=	Process connection any triple digits with combination of number or letter
uu	=	gasket any double number or letter
v	=	Calibration any single number or letter
ww	=	Device Model (two digit) A1 = product version 1 A2 = product version 2
yy	=	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

Part E - Proline Teqwave M 300/500

Extended order code Proline Teqwave M 300:

4a3bcc – ddefghijlpstttww + ##**



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

O4a3bcc – ddefghjlpstttwwy + ### for OEM-version
4x3bxx – ddefghjlpww + ### for replacement transmitter
O4x3bxx – ddefghjlpwwy + ### for replacement transmitter OEM

Extended order code Proline Teqwave M 500:

4a5bcc – ddefghijkmnopsstttww + ###
O4a5bcc – ddefghijkmnopsstttwwy + ### for OEM-version
4x5bxx – ddefghijkmopww + ### for replacement transmitter
O4x5bxx – ddefghijkmopwwy + ### for replacement transmitter OEM

a	=	Type of sensor W = Teqwave MW
b	=	Generation B = Generation of Flowmeter
cc	=	Size any combination of number and/or letter up to size = DN300
dd	=	<u>Proline Teqwave M 300:</u> CS = CLI Div.2, GP A-D <u>Proline Teqwave M 500:</u> CS = CLI Div.2, GP A-D (transmitter + sensor)
e	=	Power Supply I = 100-230Vac / 24Vdc X = sensor only
ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20Ma HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex I SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEMelectronic (Proline 500 only) A = sensor
l	=	Housing (Proline 300 only) any single number or letter
m	=	Transmitter Housing (Proline 500 only) any single number or letter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
s	=	Design any single number or letter
ttt	=	Process connection any triple digits with combination of number or letter
ww	=	Device Model (two digits) (see assignment of flowmeter to replacement transmitter) A2 = product version 2
yy	=	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

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

Model(s)
Proline Promass 300/500, Proline Cubemass 300/500, Proline Promag 300/500, Proline Prosonic Flow 300/500, Proline t-mass 300/500, Proline Teqwave M 300/500

Class I, Division 2, Group A, B, C, D T6...T1; NI
Class I, Zone 1, AEx/Ex db eb [ia Ga] IIC T6... T1 Gb;
Class I, Zone 1, AEx/Ex db [ia Ga] IIC T6... T1 Gb;
Class I, Zone 2, AEx/Ex ec nC IIC T5... T1 Gc;
Class I, Zone 2, AEx/Ex ec nC [ic] IIC T5... T1 Gc;
Class I, Zone 2, AEx/Ex ec nC [ic] [ia Ga] IIC T5... T4 Gc;
Class I, Zone 2, AEx/Ex ec IIC T6... T1 Gc;
Class I, Zone 2, AEx/Ex ec nC IIC T6... T1 Gc;
Zone 21, AEx/Ex tb IIIC T** °C Db;
Zone 21, AEx/Ex tb [ia Da] IIIC T** °C Db;
Zone 21, AEx/Ex tb [ia Da] IIIC T85 °C Db;

Proline Promass 300/500, Proline Cubemass 300/500, Proline Promag 300/500, Proline Prosonic Flow 300/500, Proline t-mass 300/500 and Proline Teqwave M 300/500 Flowmeter system available as compact and remote versions; product electrical ratings as listed under order code 'e'; hazardous locations designations as listed under order code 'dd'; ambient temperature as listed in the applicable control drawings. The product order codes are defined as shown below.

Part A - Proline Promass 300/500, Proline Cubemass 300/500

Extended order code Proline Promass 300 and Cubemass 300:

8a3bcc – ddefghijlpstttvww + *#**



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

O8a3bcc – ddefghjlpsssttvwwyy + ###	for OEM-version
8x3bxx – ddefghjlprrssww + ###	for replacement transmitter
O8x3bxx – ddefghjlprrsswwyy + ###	for replacement transmitter OEM

Extended order code Proline Promass 500 and Cubemass 500:

8a5bcc – ddefghijkmnopssttvww + ###	
O8a5bcc – ddefghijkmnopssttvwwyy + ###	for OEM-version
8x5bxx – ddefghijkmopqrrssww + ###	for replacement transmitter
O8x5bxx – ddefghijkmopqrrsswwyy + ###	for replacement transmitter OEM

a	=	Type of sensor A = Promass A; C = Cubemass C; E = Promass E; F = Promass F; H = Promass H; I = Promass I; O = Promass O; P = Promass P; Q = Promass Q; S = Promass S; X = Promass X
b	=	Generation B = Promass A (type 8A*B**, O8A*B**); Cubemass C; Promass E; Promass F; Promass H; Promass I; Promass O; Promass P; Promass Q; Promass S; Promass X C = Promass A (type 8A*C**, O8A*C**)
cc	=	Size any double digits with combination of number or letter



Certificate: 70087366

Project: 80267439

Master Contract: 160686

Date Issued: 2026-01-28

dd	=	Approval
		<u>Proline Promass/Cubemass 300 (compact version):</u>
CC	=	CL.I Div.1, CL.II,III, GP C-G
CD	=	CL.I Div.1, CL.II,III, GP A-G
CE	=	CL.I Div.1, GP A-D
CS	=	CL.I Div. 2, GP A-D
CZ	=	Ex ec IIC T5...T1 Gc
C1	=	Ex db eb [ia] IIB T6...T1 Gb Ex tb IIIC T** Db
C2	=	Ex db eb [ia] IIC T6...T1 Gb Ex tb IIIC T** Db
C3	=	Ex db [ia] IIB T6...T1 Gb Ex tb IIIC T** Db
C4	=	Ex db [ia] IIC T6...T1 Gb Ex tb IIIC T** Db
		<u>Proline Promass/Cubemass 500 (remote version, ISEM in transmitter):</u>
CC	=	CL.I Div.1, CL.II,III, GP C-G (transmitter + sensor)
CD	=	CL.I Div.1, CL.II,III, GP A-G (transmitter + sensor)
CE	=	CL.I Div.1, GP A-D (transmitter + sensor)
CS	=	CL.I Div. 2, GP A-D (transmitter + sensor)
CZ	=	Ex ec IIC T5...T4 Gc (transmitter) Ex ec IIC T5...T1 Gc (sensor)
C1	=	Ex db eb [ia] IIB T6...T5 Gb (transmitter) Ex ia IIB T6...T1 Gb (sensor) Ex tb IIIC T** Db (transmitter + sensor)
C2	=	Ex db eb [ia] IIC T6...T5 Gb (transmitter) Ex ia IIC T6...T1 Gb (sensor) Ex tb IIIC T** Db (transmitter + sensor)
C3	=	Ex db [ia] IIB T6...T5 Gb (transmitter) Ex ia IIB T6...T1 Gb (sensor) Ex tb IIIC T** Db (transmitter + sensor)
C4	=	Ex db [ia] IIC T6...T5 Gb (transmitter) Ex ia IIC T6...T1 Gb (sensor) Ex tb IIIC T** Db (transmitter + sensor)
		<u>Proline Promass/Cubemass 500 Digital (remote version, ISEM in sensor):</u>
CM	=	CL.I Div. 2, GP A-D (transmitter) CL.I Div.1, CL.II,III, GP C-G (sensor)
CN	=	CL.I Div. 2, GP A-D (transmitter) CL.I Div.1, CL.II,III, GP A-G (sensor)
CS	=	CL.I Div. 2, GP A-D (transmitter + sensor)
CZ	=	Ex ec IIC T5...T4 Gc (transmitter) Ex ec IIC T5...T1 Gc (sensor)
C5	=	Ex ec IIC T5...T4 Gc (transmitter) Ex ia IIB T6...T1 Gb (sensor) Ex tb IIIC T** Db (sensor)
C6	=	Ex ec IIC T5...T4 Gc (transmitter) Ex ia IIC T5...T1 Gb (sensor) Ex tb IIIC T** Db (sensor)



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc X = sensor only
ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20mA HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex i SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = sensor only
g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only
i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEM electronic (Proline 500 only) A = Sensor B = Transmitter
l	=	Housing (Proline 300 only) any single number or letter
m	=	Transmitter Housing (Proline 500 only) any single number or letter
n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
qq	=	Upgrade Kit any double digits with combination of number or letter
rr	=	Existing Product (see assignment of flowmeter to replacement transmitter) any double digits with combination of number or letter
ss	=	Measuring tube material any double digits with combination of number or letter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

ttt	=	Process connection any triple digits with combination of number or letter
v	=	Calibration any single number or letter
ww	=	Device model (two digit) (refer to table below for assignment of flowmeter to replacement of transmitter) A1 = product version 1 A2 = product version 2
yy	=	Customer version (two digit) 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

Part B - Proline Promag 300/500

Extended order code Proline Promag 300:

5a3bcc – ddzeffghjlpstttuvww + ###	
O5a3bcc – ddzeffghjlpstttuvwwyy + ###	for OEM-version
5x3bxx – ddeffghjlpww + ###	for replacement transmitter only
O5x3bxx – ddeffghjlpwwyy + ###	for replacement transmitter OEM

Extended order code Proline Promag 500:

5a5bcc – ddzeffghjkmnopstttuvww + ###	
O5a5bcc – ddzeffghjkmnopstttuvwwyy + ###	for OEM-version
5x5bxx – ddeffghjkmopqww + ###	for replacement transmitter only
O5x5bxx – ddeffghjkmopqwwyy + ###	for replacement transmitter OEM

a	=	Type of sensor H = Sensor Promag H P = Sensor Promag P W = Sensor Promag W
b	=	Generation B = Generation of Flowmeter
cc	=	Size any combination of number and/or letter up to size = DN3000



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

dd	=	Approval <u>Proline Promag 300 (compact version):</u> CD = Cl.I Div.1, Cl.II, III, GP A-G CE = Cl.I Div.1, GP A-D CS = Cl.I Div.2, GP A-D CZ = Ex ec IIC T5...T1 Gb C2 = Ex db eb [ia] IIC T6...T1 Gb Ex tb IIIC T** Db C4 = Ex db [ia] IIC T6...T1 Gb Ex tb IIIC T** Db <u>Proline Promag 500 (remote version, ISEM in transmitter):</u> CD = Cl.I Div.1, Cl.II, III, GP A-G (transmitter + sensor) CE = Cl.I Div.1, GP A-D (transmitter + sensor) CS = Cl.I Div.2, GP A-D (transmitter + sensor) CZ = Ex ec IIC T5...T4 Gc (transmitter) Ex ec IIC T5...T1 Gc (sensor) C2 = Ex db eb [ia] IIC T6...T5 Gb (transmitter) Ex eb ia IIC T6...T1 Gb (sensor) Ex tb IIIC T** Db (transmitter + sensor) C4 = Ex db [ia] IIC T6...T5 Gb (transmitter) Ex eb ia IIC T6...T1 Gb (sensor) Ex tb IIIC T** Db (transmitter + sensor) C7 = Ex db eb [ia] IIC T6...T5 Gb (transmitter) Ex eb ia IIC T6...T1 Gb (sensor) C8 = Ex db [ia] IIC T6...T5 Gb (transmitter) Ex eb ia IIC T6...T1 Gb (sensor) <u>Proline Promag 500 Digital (remote version, ISEM in sensor):</u> CN = Cl.I Div.2, GP A-D (transmitter) Cl.I Div.1, Cl.II, III, GP A-G (sensor) CS = Cl.I Div.2, GP A-D (transmitter + sensor) CZ = Ex ec IIC T5...T4 Gc (transmitter) Ex ec IIC T5...T1 Gc (sensor) C6 = Ex ec IIC T5...T1 Gc (transmitter) Ex db ia IIC T6...T1 Gb (sensor) Ex tb IIIC T** Db (sensor)
z	=	Design (Promag W 300 and Promag W 500 only) any single number or letter
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

ff	=	Input / Output 1
		BA = 4-20mA HART
		BB = 4-20mA WHART
		CA = 4-20mA HART Ex i (passive)
		CB = 4-20mA WHART Ex i (passive)
		CC = 4-20mA HART Ex i (active)
		CD = 4-20mA WHART Ex i (active)
		GA = Profibus PA
		HA = Profibus PA Ex i
		LA = Profibus DP
		MA = Modbus RS485
		MB = Modbus TCP
		MC = Modbus TCP Ex i
		NA = EtherNet/IP
		RA = Profinet IO
		RB = Profinet
		RC = Profinet Ex i
		SA = Foundation Fieldbus
		TA = Foundation Fieldbus Ex i
		XX = sensor only
g	=	Input / Output 2
		A = without Input/Output 2
		B = 4-20mA
		C = 4-20mA Ex i (passive)
		D = Configurable IO
		E = Pulse/Frequency/Switch output
		F = Pulse output phase-shifted
		G = Pulse/Frequency/Switch output Ex i
		H = Relay
		I = 4-20mA input
		J = Status input
		L = Pulse output Ex i
		K = Pulse output
		X = sensor only
h	=	Input / Output 3
		A = without Input/Output 3
		B = 4-20mA
		C = 4-20mA Ex i (passive)
		D = Configurable IO
		E = Pulse/Frequency/Switch output
		F = Pulse output phase-shifted
		G = Pulse/Frequency/Switch output Ex i
		H = Relay
		I = 4-20mA input
		J = Status input
		L = Pulse output Ex i
		K = Pulse output
		X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEM electronic (Proline 500 only) A = Sensor B = Transmitter
l	=	Housing (Proline 300 only) any single number or letter
m	=	Transmitter Housing (Proline 500 only) any single number or letter
n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
qq	=	Upgrade Kit any double digits with combination of number or letter
s	=	Liner material any single number or letter
ttt	=	Process connection any triple digits with combination of number or letter
u	=	Electrode any number or letter
v	=	Calibration any single number or letter
ww	=	Device Model (two digit) (refer to table below for assignment of flowmeter to replacement of transmitter) A1 = product version 1 A2 = product version 2
yy	=	Customer version (two digit) 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



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

Part C - Proline Prosonic Flow 300/500

Part C1 - Proline Prosonic Flow G 300/500

Extended order code Proline Prosonic Flow G 300:

9G3bcc – ddefghjlpssuuuvww + ###	
O9G3bcc – ddefghjlpssuuuvwwyy + ###	for OEM-version
9x3bxx – ddefghjlprrssww + ###	for replacement transmitter
O9x3bxx – ddefghjlprrsswwyy + ###	for replacement transmitter OEM

Extended order code Proline Prosonic Flow G 500:

9G5bcc – ddefghijkmnopssuuuvww + ###	
O9G5bcc – ddefghijkmnopssuuuvwwyy + ###	for OEM-version
9x5bxx – ddefghijkmopqrrssww + ###	for replacement transmitter
O9x5bxx – ddefghijkmopqrrsswwyy + ###	for replacement transmitter OEM

b	=	Generation B = Generation of Flowmeter
cc	=	Size any double digits with combination of number or letter
dd	=	Approval <u>Proline Prosonic Flow G 300 (compact version):</u> CD = CL.I Div.1, CL.II, III, GP A-G CE = CL.I Div.1, GP A-D CS = CL.I Div.2, GP A-D CZ = Ex ec IIC T5...T1 Gc C2 = Ex db eb [ia] IIC T6...T1 Gb Ex tb IIIC T** Db C4 = Ex db [ia] IIC T6...T1 Gb Ex tb IIIC T** Db <u>Proline Prosonic Flow G 500 Digital (remote version, ISEM in sensor):</u> CN = CL.I Div.2, GP A-D (transmitter) CL.I Div.1, CL.II, III, GP A-G (sensor) CS = CL.I Div.2, GP A-D (transmitter + sensor) CZ = Ex ec IIC T5...T4 Gc (transmitter) Ex ec IIC T5...T1 Gc (sensor) C6 = Ex ec IIC T5...T4 Gc (transmitter) Ex db ia IIC T5...T1 Gb (sensor) Ex tb IIIC T** Db (sensor)
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20mA HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex i SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = sensor only
g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEM electronic (Proline 500 only) A = Sensor
l	=	Housing (Proline 300 only) any single number or letter
m	=	Transmitter Housing (Proline 500 only) any single number or letter
n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
qq	=	Upgrade Kit any double digits with combination of number or letter
rr	=	Existing Product (see assignment of flowmeter to replacement transmitter) GA = Prosonic Flow G 00 = not used
ss	=	Measuring tube material, sensor version any double digits with combination of number or letter
t	=	Pressure component any single number or letter
uuu	=	Process connection any triple digits with combination of number or letter
v	=	Calibration any single number or letter
ww	=	Device model (two digit) A1 = product version 1 A2 = product version 2
yy	=	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



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

Part C2 - Proline Prosonic Flow P 500

Extended order code Proline Prosonic Flow P 500:

9P5bcc – ddeffghjkmossuuuvvww + ###
09P5bcc – ddeffghjkmossuuuvvwwyy + ### for OEM-version
9x5bxx – ddeffghjkmnoprrssww + ### for replacement transmitter
09x5bxx – ddeffghjkmnoprrsswwyy + ### for replacement transmitter OEM

b	=	Generation B = Generation of Flowmeter
cc	=	Mounting Type any double digits with combination of number and/or letter
dd	=	Approval Transmitter CD = CL.I Div.1, CL.II, III, GP A-G CS = CL.I Div.2, GP A-D CZ = Ex ec IIC T5...T4 Gc (transmitter) Ex ic IIC T6...T1 Gc (sensor) C2 = Ex db eb [ia] IIC T6...T5 Gb (transmitter) Ex tb IIIC T** Db (transmitter) Ex ia IIC T6...T1 Gb (sensor) Ex ia IIIC T** Db (sensor) C4 = Ex db [ia] IIC T6...T5 Gb (transmitter) Ex tb IIIC T** Db (transmitter) Ex ia IIC T6...T1 Gb (sensor) Ex ia IIIC T** Db (Sensor)
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc
ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20mA HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex i SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = Sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = Sensor only
h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = Sensor only
i	=	Input / Output 4 A = without Input/Output 4 X = Sensor only
j	=	Display / Operation any single number or letter
k	=	Integrated ISEM electronic A = Sensor B = Transmitter
m	=	Transmitter Housing any single number or letter
n	=	Cable Sensor Connection any single number or letter
o	=	Cable Entry any single number or letter
pp	=	Upgrade Kit AA = not used
rr	=	Existing Product (see assignment of flowmeter to replacement transmitter) PA = Prosonic Flow P 500 00 = not used
ss	=	Sensor type any double digits with combination of number and/or letter
t	=	Process Temperature any single number or letter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

uu	=	Cable any double digits with combination of number and/or letter
vv	=	Installation set any double digits with combination of number and/or letter
ww	=	Device model (two digit) (see assignment of flowmeter to replacement transmitter) A2 = product version 2
yy	=	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

Extended order code Proline Prosonic Flow P 500 Clamp-On sensor:

DK9013 – ddqqrww + ###

ODK9013 – ddqqrwwy + ### for OEM-version

dd	=	Approval CD = Cl.I Div.1, Cl.II, III, GP A-G CS = Cl.I Div.2, GP A-D CZ = Ex ic IIC T6...T1 Gc C2 = Ex ia IIC T6...T1 Gb Ex ia IIIC T** °C Db C4 = Ex ia IIC T6...T1 Gb Ex ia IIIC T** °C Db
qq	=	Sensor type any double digits with combination of number and/or letter
r	=	Process Temperature any single number or letter
ww	=	Device model (two digit) (see assignment of flowmeter to replacement transmitter) 00 = not used
yy	=	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

Note: Clamp-On sensor types DK9013 and ODK9013 are intended for use as replacement of sensors for Proline Prosonic Flow P 500 (ISEM in transmitter) types 9P5B and O9P5B or as extension of Proline Prosonic Flow P 500 (ISEM in transmitter) types 9P5B and O9P5B from one sensor set to two sensor sets.

Part D - Proline t-mass 300/500

Extended order code Proline t-mass 300:

6F3bcc – ddeffghjlpstttvww + ###

6I3bcc – ddeffghjlpstttuuvw + ###

O6F3bcc – ddeffghjlpstttvwyy + ### for OEM-version

O6I3bcc – ddeffghjlpstttuuvwyy + ### for OEM-version

6x3bxx – ddeffghjlpssww + ### for replacement transmitter

O6x3bxx – ddeffghjlpsswwy + ### for replacement transmitter OEM



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

Extended order code Proline t-mass 500:

6F5bcc – ddeffghijkmnopstttvww + ###	
6I5bcc – ddeffghijkmnopstttuuvww + ###	
O6F5bcc – ddeffghijkmnopstttvwwyy + ###	for OEM-version
O6I5bcc – ddeffghijkmnopstttuuvwwyy + ###	for OEM-version
6x5bxx – ddeffghijkmopssww + ###	for replacement transmitter
O6x5bxx – ddeffghijkmopsswwyy + ###	for replacement transmitter OEM

b	=	Generation B = Generation of Flowmeter
cc	=	Size any combination of number and/or letter up to size = DN100 (t-mass F) / 1500mm (t-mass I)
dd	=	Approval <u>Proline t-mass 300:</u> CD = Cl.I Div.1, Cl.II, III, GP A-G CE = Cl.I Div.1, GP A-D CS = Cl.I Div.2, GP A-D CZ = Ex ec IIC T4...T1 Gc C2 = Ex db eb [ia] IIC T4...T1 Gb Ex tb IIIC T** Db C4 = Ex db [ia] IIC T4...T1 Gb Ex tb IIIC T** Db <u>Proline t-mass 500 Digital:</u> CN = Cl.I Div.2, GP A-D (transmitter) Cl.I Div.1, Cl.II, III, GP A-G (sensor) CS = Cl.I Div.2, GP A-D (transmitter + sensor) CZ = Ex ec IIC T5...T4 Gc (transmitter) Ex ec IIC T4...T1 Gc (sensor) C6 = Ex ec IIC T5...T4 Gc (transmitter) Ex db ia IIC T4...T1 Gb (sensor) Ex tb IIIC T** Db (sensor)
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20mA HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex i SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = sensor only
g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEM electronic (Proline 500 only) A = Sensor
l	=	Housing (Proline 300 only) any single number or letter
m	=	Transmitter Housing (Proline 500 only) any single number or letter
n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
ss	=	material sensor any double digits with combination of number or letter
ttt	=	Process connection any triple digits with combination of number or letter
uu	=	gasket any double number or letter
v	=	Calibration any single number or letter
ww	=	Device Model (two digit) A1 = product version 1 A2 = product version 2
yy	=	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

Part E - Proline Teqwave M 300/500

Extended order code Proline Teqwave M 300:

4a3bcc – ddefghjlpstttww + ####



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

O4a3bcc – ddeffghjlpstttwwyy + ### for OEM-version
4x3bxx – ddeffghjlpww + ### for replacement transmitter
O4x3bxx – ddeffghjlpwwyy + ### for replacement transmitter OEM

Extended order code Proline Teqwave M 500:

4a5bcc – ddeffghijkmnops tttww + ###
O4a5bcc – ddeffghijkmnops tttwwyy + ### for OEM-version
4x5bxx – ddeffghijkmopww + ### for replacement transmitter
O4x5bxx – ddeffghijkmopwwyy + ### for replacement transmitter OEM

a	=	Type of sensor W = Teqwave MW
b	=	Generation B = Generation of Flowmeter
cc	=	Size any combination of number and/or letter up to size = DN300
dd	=	<u>Proline Teqwave M 300:</u> CS = CLI Div.2, GP A-D CZ = Ex ec IIC T5...T1 Gc <u>Proline Teqwave M 500:</u> CS = CLI Div.2, GP A-D (transmitter + sensor) CZ = Ex ec IIC T5...T4 Gc (transmitter) Ex ec IIC T6...T1 Gc (sensor)
e	=	Power Supply I = 100-230Vac / 24Vdc X = sensor only
ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20Ma HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex I SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEMelectronic (Proline 500 only) A = sensor
l	=	Housing (Proline 300 only) any single number or letter
m	=	Transmitter Housing (Proline 500 only) any single number or letter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
s	=	Design any single number or letter
ttt	=	Process connection any triple digits with combination of number or letter
ww	=	Device Model (two digits) (see assignment of flowmeter to replacement transmitter) A2 = product version 2
yy	=	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

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

CLASS 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations – CERTIFIED TO U.S. STANDARDS

Model(s)
Proline Promass 300/500, Proline Cubemass 300/500, Proline Promag 300/500, Proline Prosonic Flow 300/500, Proline t-mass 300/500

Class I, Division 1, Group A, B, C, D T6...T1;
 Class II, Division 1, Groups E, F, G; Class III;
 Class I, Zone 1, AEx/Ex db eb ia [ia Ga] IIC T6... T1 Gb;
 Class I, Zone 1, AEx/Ex db ia [ia Ga] IIC T6... T1 Gb;
 Class I, Zone 1, AEx/Ex ia IIC T6... T1 Gb;
 Class I, Zone 1, AEx/Ex db ia IIC T6... T1 Gb;
 Class I, Zone 0/1, AEx/Ex db eb ia [ia Ga] IIC T6... T1 Ga/Gb;
 Class I, Zone 0/1, AEx/Ex db ia [ia Ga] IIC T6... T1 Ga/Gb;
 Class I, Zone 0/1, AEx/Ex ia IIC T6... T1 Ga/Gb;
 Zone 21, AEx/Ex ia tb IIIC T** °C Db;
 Zone 21, AEx/Ex ia IIIC T** °C Db;

Proline Promass 300/500, Proline Cubemass 300/500, Proline Promag 300/500, Proline Prosonic Flow 300/500, and Proline t-mass 300/500 Flowmeter system available as compact and remote versions; product electrical ratings as listed under order code 'e'; hazardous locations designations as listed under order code 'dd'; ambient temperature as listed in the applicable control drawings. The product order codes are defined as shown below.

Part A - Proline Promass 300/500, Proline Cubemass 300/500

Extended order code Proline Promass 300 and Cubemass 300:

8a3bcc – ddeffghjlpssstttvww + *#**
08a3bcc – ddeffghjlpssstttvwwyy + *#** for OEM-version
8x3bxx – ddeffghjlprrssww + *#** for replacement transmitter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

O8x3bxx – ddefghjlprrsswwyy + ### for replacement transmitter OEM

Extended order code Proline Promass 500 and Cubemass 500:

8a5bcc – ddefghjklmnopstttvww + ###

O8a5bcc – ddefghjklmnopstttvwwyy + ### for OEM-version

8x5bxx – ddefghjkmopqrrssww + ### for replacement transmitter

O8x5bxx – ddefghjkmopqrrsswwyy + ### for replacement transmitter OEM

a	=	Type of sensor A = Promass A; C = Cubemass C; E = Promass E; F = Promass F; H = Promass H; I = Promass I; O = Promass O; P = Promass P; Q = Promass Q; S = Promass S; X = Promass X
b	=	Generation B = Promass A (type 8A*B**, O8A*B**); Cubemass C; Promass E; Promass F; Promass H; Promass I; Promass O; Promass P; Promass Q; Promass S; Promass X C = Promass A (type 8A*C**, O8A*C**)
cc	=	Size any double digits with combination of number or letter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

dd	=	Approval <u>Proline Promass/Cubemass 300 (compact version):</u> CC = CL.I Div.1, CL.II,III, GP C-G CD = CL.I Div.1, CL.II,III, GP A-G CE = CL.I Div.1, GP A-D C1 = Ex db eb [ia] IIB T6...T1 Gb Ex tb IIIC T** Db C2 = Ex db eb [ia] IIC T6...T1 Gb Ex tb IIIC T** Db C3 = Ex db [ia] IIB T6...T1 Gb Ex tb IIIC T** Db C4 = Ex db [ia] IIC T6...T1 Gb Ex tb IIIC T** Db <u>Proline Promass/Cubemass 500 (remote version, ISEM in transmitter):</u> CC = CL.I Div.1, CL.II,III, GP C-G (transmitter + sensor) CD = CL.I Div.1, CL.II,III, GP A-G (transmitter + sensor) CE = CL.I Div.1, GP A-D (transmitter + sensor) C1 = Ex db eb [ia] IIB T6...T5 Gb (transmitter) Ex ia IIB T6...T1 Gb (sensor) Ex tb IIIC T** Db (transmitter + sensor) C2 = Ex db eb [ia] IIC T6...T5 Gb (transmitter) Ex ia IIC T6...T1 Gb (sensor) Ex tb IIIC T** Db (transmitter + sensor) C3 = Ex db [ia] IIB T6...T5 Gb (transmitter) Ex ia IIB T6...T1 Gb (sensor) Ex tb IIIC T** Db (transmitter + sensor) C4 = Ex db [ia] IIC T6...T5 Gb (transmitter) Ex ia IIC T6...T1 Gb (sensor) Ex tb IIIC T** Db (transmitter + sensor) <u>Proline Promass/Cubemass 500 Digital (remote version, ISEM in sensor):</u> CM = CL.I Div. 2, GP A-D (transmitter) CL.I Div.1, CL.II,III, GP C-G (sensor) CN = CL.I Div. 2, GP A-D (transmitter) CL.I Div.1, CL.II,III, GP A-G (sensor) C5 = Ex ec IIC T5...T4 Gc (transmitter) Ex ia IIB T6...T1 Gb (sensor) Ex tb IIIC T** Db (sensor) C6 = Ex ec IIC T5...T4 Gc (transmitter) Ex ia IIC T5...T1 Gb (sensor) Ex tb IIIC T** Db (sensor)
	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

ff	=	Input / Output 1
		BA = 4-20mA HART
		BB = 4-20mA WHART
		CA = 4-20mA HART Ex i (passive)
		CB = 4-20mA WHART Ex i (passive)
		CC = 4-20mA HART Ex i (active)
		CD = 4-20mA WHART Ex i (active)
		GA = Profibus PA
		HA = Profibus PA Ex i
		LA = Profibus DP
		MA = Modbus RS485
		MB = Modbus TCP
		MC = Modbus TCP Ex i
		NA = EtherNet/IP
		RA = Profinet IO
		RB = Profinet
		RC = Profinet Ex i
		SA = Foundation Fieldbus
		TA = Foundation Fieldbus Ex i
		XX = sensor only
g	=	Input / Output 2
		A = without Input/Output 2
		B = 4-20mA
		C = 4-20mA Ex i (passive)
		D = Configurable IO
		E = Pulse/Frequency/Switch output
		F = Pulse output phase-shifted
		G = Pulse/Frequency/Switch output Ex i
		H = Relay
		I = 4-20mA input
		J = Status input
		L = Pulse output Ex i
		K = Pulse output
		X = sensor only
h	=	Input / Output 3
		A = without Input/Output 3
		B = 4-20mA
		C = 4-20mA Ex i (passive)
		D = Configurable IO
		E = Pulse/Frequency/Switch output
		F = Pulse output phase-shifted
		G = Pulse/Frequency/Switch output Ex i
		H = Relay
		I = 4-20mA input
		J = Status input
		L = Pulse output Ex i
		K = Pulse output
		X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEM electronic (Proline 500 only) A = Sensor B = Transmitter
l	=	Housing (Proline 300 only) any single number or letter
m	=	Transmitter Housing (Proline 500 only) any single number or letter
n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
qq	=	Upgrade Kit any double digits with combination of number or letter
rr	=	Existing Product (see assignment of flowmeter to replacement transmitter) any double digits with combination of number or letter
ss	=	Measuring tube material any double digits with combination of number or letter
ttt	=	Process connection any triple digits with combination of number or letter
v	=	Calibration any single number or letter
ww	=	Device model (two digit) (refer to table below for assignment of flowmeter to replacement of transmitter) A1 = product version 1 A2 = product version 2
yy	=	Customer version (two digit) 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



Certificate: 70087366

Project: 80267439

Master Contract: 160686

Date Issued: 2026-01-28

Part B - Proline Promag 300/500

Extended order code Proline Promag 300:

5a3bcc – ddzeffghjlpstttuvww + ###	
O5a3bcc – ddzeffghjlpstttuvwwyy + ###	for OEM-version
5x3bxx – ddeffghjlpww + ###	for replacement transmitter only
O5x3bxx – ddeffghjlpwwyy + ###	for replacement transmitter OEM

Extended order code Proline Promag 500:

5a5bcc – ddzeffghjklmnopstttuvww + ###	
O5a5bcc – ddzeffghjklmnopstttuvwwyy + ###	for OEM-version
5x5bxx – ddeffghjklmopqww + ###	for replacement transmitter only
O5x5bxx – ddeffghjklmopqwwyy + ###	for replacement transmitter OEM

a	=	Type of sensor H = Sensor Promag H P = Sensor Promag P W = Sensor Promag W
b	=	Generation B = Generation of Flowmeter
cc	=	Size any combination of number and/or letter up to size = DN3000



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

dd	=	Approval <u>Proline Promag 300 (compact version):</u> CD = CL.I Div.1, CL.II, III, GP A-G CE = CL.I Div.1, GP A-D C2 = Ex db eb [ia] IIC T6...T1 Gb Ex tb IIIC T** Db C4 = Ex db [ia] IIC T6...T1 Gb Ex tb IIIC T** Db <u>Proline Promag 500 (remote version, ISEM in transmitter):</u> CD = CL.I Div.1, CL.II, III, GP A-G (transmitter + sensor) CE = CL.I Div.1, GP A-D (transmitter + sensor) C2 = Ex db eb [ia] IIC T6...T5 Gb (transmitter) Ex eb ia IIC T6...T1 Gb (sensor) Ex tb IIIC T** Db (transmitter + sensor) C4 = Ex db [ia] IIC T6...T5 Gb (transmitter) Ex eb ia IIC T6...T1 Gb (sensor) Ex tb IIIC T** Db (transmitter + sensor) C7 = Ex db eb [ia] IIC T6...T5 Gb (transmitter) Ex eb ia IIC T6...T1 Gb (sensor) C8 = Ex db [ia] IIC T6...T5 Gb (transmitter) Ex eb ia IIC T6...T1 Gb (sensor) <u>Proline Promag 500 Digital (remote version, ISEM in sensor):</u> CN = CL.I Div.2, GP A-D (transmitter) CL.I Div.1, CL.II, III, GP A-G (sensor) C6 = Ex ec IIC T5...T1 Gc (transmitter) Ex db ia IIC T6...T1 Gb (sensor) Ex tb IIIC T** Db (sensor)
z	=	Design (Promag W 300 and Promag W 500 only) any single number or letter
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20mA HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex i SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = sensor only
g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only
h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only



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Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input L = Pulse output Ex i K = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEM electronic (Proline 500 only) A = Sensor B = Transmitter
l	=	Housing (Proline 300 only) any single number or letter
m	=	Transmitter Housing (Proline 500 only) any single number or letter
n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
qq	=	Upgrade Kit any double digits with combination of number or letter
s	=	Liner material any single number or letter
ttt	=	Process connection any triple digits with combination of number or letter
u	=	Electrode any number or letter
v	=	Calibration any single number or letter
ww	=	Device Model (two digit) (refer to table below for assignment of flowmeter to replacement of transmitter) A1 = product version 1 A2 = product version 2
yy	=	Customer version (two digit) 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



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

Part C - Proline Prosonic Flow 300/500

Part C1 - Proline Prosonic Flow G 300/500

Extended order code Proline Prosonic Flow G 300:

9G3bcc – ddefghjlpssuuuuvw + ###	
O9G3bcc – ddefghjlpssuuuuvwyy + ###	for OEM-version
9x3bxx – ddefghjlprrssww + ###	for replacement transmitter
O9x3bxx – ddefghjlprrsswwyy + ###	for replacement transmitter OEM

Extended order code Proline Prosonic Flow G 500:

9G5bcc – ddefghjkmnopssuuuuvw + ###	
O9G5bcc – ddefghjkmnopssuuuuvwyy + ###	for OEM-version
9x5bxx – ddefghjkmopqrrssww + ###	for replacement transmitter
O9x5bxx – ddefghjkmopqrrsswwyy + ###	for replacement transmitter OEM

b	=	Generation B = Generation of Flowmeter
cc	=	Size any double digits with combination of number or letter
dd	=	Approval <u>Proline Prosonic Flow G 300 (compact version):</u> CD = CL.I Div.1, CL.II, III, GP A-G CE = CL.I Div.1, GP A-D C2 = Ex db eb [ia] IIC T6...T1 Gb Ex tb IIIC T** Db C4 = Ex db [ia] IIC T6...T1 Gb Ex tb IIIC T** Db <u>Proline Prosonic Flow G 500 Digital (remote version, ISEM in sensor):</u> CN = CL.I Div.2, GP A-D (transmitter) CL.I Div.1, CL.II, III, GP A-G (sensor) C6 = Ex ec IIC T5...T4 Gc (transmitter) Ex db ia IIC T5...T1 Gb (sensor) Ex tb IIIC T** Db (sensor)
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20mA HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex i SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = sensor only
g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEM electronic (Proline 500 only) A = Sensor
l	=	Housing (Proline 300 only) any single number or letter
m	=	Transmitter Housing (Proline 500 only) any single number or letter
n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
qq	=	Upgrade Kit any double digits with combination of number or letter
rr	=	Existing Product (see assignment of flowmeter to replacement transmitter) GA = Prosonic Flow G 00 = not used
ss	=	Measuring tube material, sensor version any double digits with combination of number or letter
t	=	Pressure component any single number or letter
uuu	=	Process connection any triple digits with combination of number or letter
v	=	Calibration any single number or letter
ww	=	Device model (two digit) A1 = product version 1 A2 = product version 2
yy	=	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



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

Part C2 - Proline Prosonic Flow P 500

Extended order code Proline Prosonic Flow P 500:

9P5bcc – ddefghjkmossuuuvvww + ###
09P5bcc – ddefghjkmossuuuvvwwyy + ### for OEM-version
9x5bxx – ddefghjkmnoprrssww + ### for replacement transmitter
09x5bxx – ddefghjkmnoprrsswwyy + ### for replacement transmitter OEM

b	=	Generation B = Generation of Flowmeter
cc	=	Mounting Type any double digits with combination of number and/or letter
dd	=	Approval Transmitter CD = CL.I Div.1, CL.II, III, GP A-G C2 = Ex db eb [ia] IIC T6...T5 Gb (transmitter) Ex tb IIIC T** Db (transmitter) Ex ia IIC T6...T1 Gb (sensor) Ex ia IIIC T** Db (sensor) C4 = Ex db [ia] IIC T6...T5 Gb (transmitter) Ex tb IIIC T** Db (transmitter) Ex ia IIC T6...T1 Gb (sensor) Ex ia IIIC T** Db (Sensor)
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc
ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20mA HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex i SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = Sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = Sensor only
h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = Sensor only
i	=	Input / Output 4 A = without Input/Output 4 X = Sensor only
j	=	Display / Operation any single number or letter
k	=	Integrated ISEM electronic A = Sensor B = Transmitter
m	=	Transmitter Housing any single number or letter
n	=	Cable Sensor Connection any single number or letter
o	=	Cable Entry any single number or letter
pp	=	Upgrade Kit AA = not used
rr	=	Existing Product (see assignment of flowmeter to replacement transmitter) PA = Prosonic Flow P 500 00 = not used
ss	=	Sensor type any double digits with combination of number and/or letter
t	=	Process Temperature any single number or letter



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

uu	=	Cable any double digits with combination of number and/or letter
vv	=	Installation set any double digits with combination of number and/or letter
ww	=	Device model (two digit) (see assignment of flowmeter to replacement transmitter) A2 = product version 2
yy	=	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

Extended order code Proline Prosonic Flow P 500 Clamp-On sensor:

DK9013 – ddqqrww + ###

ODK9013 – ddqqrwwy + ### for OEM-version

dd	=	Approval CD = CL I Div.1, CL II, III, GP A-G CZ = Ex ic IIC T6...T1 Gc C2 = Ex ia IIC T6...T1 Gb Ex ia IIIC T** °C Db C4 = Ex ia IIC T6...T1 Gb Ex ia IIIC T** °C Db
qq	=	Sensor type any double digits with combination of number and/or letter
r	=	Process Temperature any single number or letter
ww	=	Device model (two digit) (see assignment of flowmeter to replacement transmitter) 00 = not used
yy	=	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

Note: Clamp-On sensor types DK9013 and ODK9013 are intended for use as replacement of sensors for Proline Prosonic Flow P 500 (ISEM in transmitter) types 9P5B and O9P5B or as extension of Proline Prosonic Flow P 500 (ISEM in transmitter) types 9P5B and O9P5B from one sensor set to two sensor sets.

Part D - Proline t-mass 300/500

Extended order code Proline t-mass 300:

6F3bcc – ddefghjlpsssttvww + ###

6I3bcc – ddefghjlpsssttuuvww + ###

O6F3bcc – ddefghjlpsssttvwwy + ### for OEM-version

O6I3bcc – ddefghjlpsssttuuvwwy + ### for OEM-version

6x3bxx – ddefghjlpssww + ### for replacement transmitter

O6x3bxx – ddefghjlpsswwy + ### for replacement transmitter OEM



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

Extended order code Proline t-mass 500:

6F5bcc – ddeffghijkmnopstttvww + ###	
6I5bcc – ddeffghijkmnopstttuuvww + ###	
O6F5bcc – ddeffghijkmnopstttvwwyy + ###	for OEM-version
O6I5bcc – ddeffghijkmnopstttuuvwwyy + ###	for OEM-version
6x5bxx – ddeffghijkmopssww + ###	for replacement transmitter
O6x5bxx – ddeffghijkmopsswwyy + ###	for replacement transmitter OEM

b	=	Generation B = Generation of Flowmeter
cc	=	Size any combination of number and/or letter up to size = DN100 (t-mass F) / 1500mm (t-mass I)
dd	=	Approval <u>Proline t-mass 300:</u> CD = Cl.I Div.1, Cl.II, III, GP A-G CE = Cl.I Div.1, GP A-D C2 = Ex db eb [ia] IIC T4...T1 Gb Ex tb IIIC T** Db C4 = Ex db [ia] IIC T4...T1 Gb Ex tb IIIC T** Db <u>Proline t-mass 500 Digital:</u> CN = Cl.I Div.2, GP A-D (transmitter) Cl.I Div.1, Cl.II, III, GP A-G (sensor) C6 = Ex ec IIC T5...T4 Gc (transmitter) Ex db ia IIC T4...T1 Gb (sensor) Ex tb IIIC T** Db (sensor)
e	=	Power Supply D = 24Vdc E = 100-230Vac I = 100-230Vac / 24Vdc X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

ff	=	Input / Output 1 BA = 4-20mA HART BB = 4-20mA WHART CA = 4-20mA HART Ex i (passive) CB = 4-20mA WHART Ex i (passive) CC = 4-20mA HART Ex i (active) CD = 4-20mA WHART Ex i (active) GA = Profibus PA HA = Profibus PA Ex i LA = Profibus DP MA = Modbus RS485 MB = Modbus TCP MC = Modbus TCP Ex i NA = EtherNet/IP RA = Profinet IO RB = Profinet RC = Profinet Ex i SA = Foundation Fieldbus TA = Foundation Fieldbus Ex i XX = sensor only
g	=	Input / Output 2 A = without Input/Output 2 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
h	=	Input / Output 3 A = without Input/Output 3 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

i	=	Input / Output 4 (Proline 500 only) A = without Input/Output 4 B = 4-20mA C = 4-20mA Ex i (passive) D = Configurable IO E = Pulse/Frequency/Switch output F = Pulse output phase-shifted G = Pulse/Frequency/Switch output Ex i H = Relay I = 4-20mA input J = Status input K = Pulse output Ex i L = Pulse output X = sensor only
j	=	Display / Operation with remote Display : O without remote Display : any single number or letter except O
k	=	Integrated ISEM electronic (Proline 500 only) A = Sensor
l	=	Housing (Proline 300 only) any single number or letter
m	=	Transmitter Housing (Proline 500 only) any single number or letter
n	=	Sensor Housing (Proline 500 only) any single number or letter
o	=	Cable Sensor Connection (Proline 500 only) any single number or letter
p	=	Cable Entry any single number or letter
ss	=	material sensor any double digits with combination of number or letter
ttt	=	Process connection any triple digits with combination of number or letter
uu	=	gasket any double number or letter
v	=	Calibration any single number or letter
ww	=	Device Model (two digit) A1 = product version 1 A2 = product version 2
yy	=	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

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 61010-1-12, UPD1:2015, UPD2:2016, AMD1:2018 - Safety requirements for electrical equipment for



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

measurement, control, and laboratory use — Part 1: General requirements

CAN/CSA-C22.2 No. 213-17 + UPD 1 (2018) + UPD 2 (2019) + UPD 3 (2021) (R2022) - Non-incendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations

CSA C22.2 No. 25:17 - Fourth Edition - Enclosures for use in Class II, Division 1, Groups E, F, and G hazardous locations

CSA C22.2 No. 30-20 - Fourth edition - Explosion-proof equipment

CAN/CSA C22.2 No. 60079-0:19 - Explosive atmospheres - Part 0: Equipment - General requirements

CSA C22.2 No. 60079-1:16 - Third Edition - Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

CAN/CSA C22.2 No. 60079-7:16 - Second Edition - Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

CAN/CSA-C22.2 No 60079-11:14 - Explosive Atmospheres - Part 11: Equipment protection by intrinsic safety "i"

CAN/CSA -C22.2 No. 60079-15:18 - Third Edition - Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

CAN/CSA C22.2 No. 60079-26:16 - Explosive Atmospheres - Part 26: Equipment with Equipment Protection Level (EPL) Ga

CSA C22.2 No. 60079-31:15 - Second Edition - Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

CAN/CSA C22.2 No. 60079-47:22 - Explosive atmospheres - Part 47: Non-electrical equipment for explosive atmospheres - Non-electrical Type of Protection Constructional Safety 'c', Control of ignition sources 'b', Liquid immersion 'k'

CSA C22.2 No. 94.2:15 - Second Edition - Enclosures for electrical equipment, environmental considerations

UL 61010-1:2012 - Third Edition - Including revisions through November 21, 2018 - Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements

ANSI/UL 121201:2017 - Ninth Edition - Including Revisions Through April 1, 2021 - UL Standard for Safety 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 3615:2022 - Explosionproof Electrical Equipment – General Requirements

FM 3610:2021 - Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous (Classified) Locations

FM 3616:2022 - Dust-Ignitionproof Electrical Equipment – General Requirements

ANSI/UL 60079-0:2019 - Seventh Edition - Including revisions through APRIL 15, 2020 - UL Standard for Safety Explosive atmospheres – Part 0: Equipment – General requirements

ANSI/UL 60079-1:2015 - Seventh Edition - Explosive Atmospheres – Part 1: Equipment Protection by Flameproof Enclosures “d”

ANSI/UL 60079-7:2017 - Fifth Edition - Including revisions through June 3, 2021 - Explosive Atmospheres – Part 7: Equipment protection by increased safety "e"

ANSI/UL 60079-11 (Sixth Edition; Reprint with Revisions Through and Including September 14, 2018) - Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety "i"



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

ANSI/UL 60079-15-2020; Fifth Edition - Explosive Atmospheres - Part 15: Equipment protection by type of protection 'n'

UL 60079-26:2017 - Third Edition - UL Standard for Safety Explosive Atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga

UL 60079-31:2015 - Second Edition - Standard for Safety Explosive Atmospheres – Part 31: Equipment Dust Ignition Protection by Enclosure ‘t’

UL 60079-47:2022 - First Edition - Safety Explosive Atmospheres – Part 47: Equipment Protection by 2-Wire Intrinsically Safe Ethernet Concept (2-WISE)

UL 50E:2015 - Second Edition - UL Standard for Safety Enclosures for Electrical Equipment, Environmental Considerations

ANSI/UL 122701 (Third Edition) - UL Standard for Safety Requirements for Process Sealing Between Electrical Systems and Flammable or Combustible Process Fluids

Conditions Of Acceptability

Applicable to all Proline 300/500 Flowmeters:

- All equipment of the measurement system shall be included in the equipotential bonding. Along the intrinsically safe sensor circuits potential equalization must exist.
- The sensors may only be used for those process media, for which the wetted parts are known to be suitable.
- The equipment may have non-conductive surfaces which are a potential electrostatic charging hazard – see instructions for guidance.
- Antenna supplied by Endress+Hauser shall be used only. As an alternative, 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 50 Ω
 - The rated frequency range of the antenna shall not exceed 1710 MHz ... 6000 MHz
 - The RF antenna or the RF antenna cable shall be fitted with a Type N connector plug (MIL-STD-348)
- The antenna bushing type H337 shall be mounted wrench tight to the transmitter enclosure to maintain the ingress protection of the enclosure.
- The coupling nut of the Type N plug connector shall be hand tightened only.
- The metal enclosure of the Antenna Bushing H337 shall be securely connected to local earth, typically via the enclosure to which it is connected.
- If the Proline 300 flowmeter is connected to a Remote Display type DKX001 or ODKX001, the order code “Approval dd” of the flowmeter shall be paired to the order code “Approval bb” of the Remote Display as follows:

Proline Promass 300, Proline Cubemass 300, Proline Promag 300, Proline Prosonic Flow G 300, Proline t-mass 300 and Proline Teqwave M 300 with order code “Approval dd” =	Remote Display DKX001 or ODKX001 (as covered by CSA 160686-70030937) with order code “Approval bb” =
CC, CD or CE	CE or CG
C1, C2, C3, C4, C7, C8	CI, CK or CL
CS	CS
CZ	CZ

- The flameproof joints are not intended to be repaired.
- For the Proline Promass/Cubemass 300, Proline Promass/Cubemass 500 (ISEM in transmitter) and Proline Promass/Cubemass 500 Digital (ISEM in sensor) flowmeters with order code “Approval dd” = C1, C2, C3, C4, C5 & C6, which are marked with zone separation Ga/Gb: EPL Ga (Zone 0) is only applicable to sensors with process medium in the measuring tube.



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

- For Proline t-mass 300, Proline t-mass 500 (ISEM in transmitter) and Proline t-mass 500 Digital (ISEM in sensor) with order code 'dd' = C2, C4 & C6, which are marked with zone separation Ga/Gb: EPL Ga (Zone 0) is only applicable to sensors with process medium in the measuring tube.
- For the Proline 300 and Proline 500 (ISEM in transmitter) flowmeters with order code "Approval dd" = C1, C2, C7 in combination with "Power supply" code e = D (24 V version) and intrinsically safe input/outputs (I/O1, I/O2, I/O3): the Ex eb terminal compartment of the transmitter may be opened for a short period to access intrinsically safe terminals of the inputs/outputs. This option is limited to I/Os in gas application only.
- Do not operate the I/O1 (Terminal 26, 27 or Port 1 (RJ45)) and Service Interface (CDI) / Port 2 (RJ45) simultaneously in hazardous locations.

Additional conditions applicable to Proline Promass 300/500 and Proline Cubemass 300/500:

- All transmitters certified for Class I, Division 1 are factory sealed and do not require external seals. These factory seals are only valid when used in -40°C or higher ambient temperatures.
- All sensors for the Proline Promass/Cubemass 300/500 flowmeter systems are assessed as dual seal devices. Refer to the markings on the sensor for the maximum working pressures.
- For remote versions of Promass/Cubemass flowmeters with a flat gasket within the sensor terminal enclosure, the user shall ensure that flat cover seals are not bent into the seal surface before securing the cover. Seals that are not flat shall be replaced.

Additional conditions applicable to Proline Promag 300/500:

- All transmitters certified for Class I, Division 1 are factory sealed and do not require external seals. These factory seals are only valid when used in -40°C or higher ambient temperatures. Remote enclosures assembled on the sensor certified for Class I, Division 1 are also factory sealed however they do not have an ambient temperature limitation.
- All sensors for the Proline Promag 300/500 flowmeter systems are assessed as single seal devices. Refer to the markings on the sensor for the maximum working pressures.
- For remote versions of Promag flowmeters with a flat gasket within the sensor terminal enclosure, the user shall ensure that flat cover seals are not bent into the seal surface before securing the cover. Seals that are not flat shall be replaced.
- The Proline Promag 300/500 flowmeter that may include non-conductive surfaces of sensor enclosure housing, shall be prevented from risk of electrostatic charging caused by friction and/or cleaning. The equipment nameplate shall bear the following warning: WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS

Additional conditions applicable to Proline Prosonic Flow 300/500:

- All transmitters certified for Class I, Division 1 are factory sealed and do not require external seals. These factory seals are only valid when used in -40°C or higher ambient temperatures. Remote enclosures assembled on the sensor certified for Class I, Division 1 are also factory sealed however they do not have an ambient temperature limitation.
- The sensor for the Proline Prosonic Flow G 300/500 flowmeter system is assessed as dual seal devices. Refer to the markings on the sensor for the maximum working pressures.

Additional conditions applicable to Proline t-mass 300/500:

- All transmitters certified for Class I, Division 1 are factory sealed and do not require external seals. These factory seals are only valid when used in -40°C or higher ambient temperatures. Remote enclosures assembled on the sensor certified for Class I, Division 1 are also factory sealed however they do not have an ambient temperature limitation.
- All sensors for the Proline t-mass 300/500 flowmeter systems are assessed as single seal devices. Refer to the markings on the sensor for the maximum working pressures.

Applicable for Proline transmitter hygienic SS enclosure housing G306:

- For the G306 enclosure when forming part of an Ex-Equipment, first the covers shall be made hand-tight and then an additional 45 degrees turn tightening shall be applied to them.
- The thread form of the threaded entries of the G306 enclosure when forming part of an Ex-Equipment shall be marked on the equipment or shall appear in the installation instructions.



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

- Transmitter shall not be installed vertically above the sensor.

Markings

The applicable control drawings and level of protection applicable to each product are given in the following table:

Proline Promass 300, Proline Cubemass 300:

Order code “Approval” dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
Cl, C2, C3, C4	Transmitter & Sensor	Cl. I Zone 1 or Zone 0/1, Zone 21	FES0268	FES0263	FES0259
CC, CD	Transmitter & Sensor	Cl. I Div. 1, Cl. II, III			
CE	Transmitter & Sensor	Cl. I Div. 1			
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0269	FES0264	FES0259
CS	Transmitter & Sensor	Cl. I Div. 2			

Proline Promass 500 (with ISEM in transmitter), Proline Cubemass 500 (with ISEM in transmitter):

Order code “Approval” dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
Cl, C2, C3, C4	Transmitter	Cl. I Zone 1, Zone 21	FES0268	FES0263	FES0259
	Sensor	Cl. I Zone 1 or Zone 0/1, Zone 21			
CC, CD	Transmitter & Sensor	Cl. I Div. 1, Cl. II, III			
CE	Transmitter & Sensor	Cl. I Div. 1			
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0269	FES0264	FES0259
CS	Transmitter & Sensor	Cl. I Div. 2			

Proline Promass 500 Digital (with ISEM in sensor), Proline Cubemass 500 Digital (with ISEM in sensor):

Order code “Approval” dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
C5, C6	Transmitter	Cl. I Zone 2	FES0268	FES0263	FES0259
	Sensor	Cl. I Zone 1 or Zone 0/1, Zone 21			
CM, CN	Transmitter	Cl. I Div. 2			
	Sensor	Cl. I Div. 1, Cl. II, III	FES0269	FES0264	FES0259
CZ	Transmitter & Sensor	Cl. I Zone 2			
CS	Transmitter & Sensor	Cl. I Div. 2			

Proline Promag 300:

Order code “Approval” dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
C2, C4	Transmitter & Sensor	Cl. I Zone 1, Zone 21	FES0266	FES0260	FES0259
CD	Transmitter & Sensor	Cl. I Div. 1, Cl. II, III			



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

CE	Transmitter & Sensor	Cl. I Div. 1			
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0267	FES0261	FES0259
CS	Transmitter & Sensor	Cl. I Div. 2			

Proline Promag 500 (with ISEM in transmitter):

Order code "Approval" dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
C2, C4	Transmitter	Cl. I Zone 1, Zone 21	FES0266	FES0260	FES0259
	Sensor	Cl. I Zone 1, Zone 21			
C7, C8	Transmitter	Cl. I Zone 1			
	Sensor	Cl. I Zone 1			
CD	Transmitter & Sensor	Cl. I Div. 1, Cl. II, III			
CE	Transmitter & Sensor	Cl. I Div. 1	FES0267	FES0261	FES0259
CZ	Transmitter & Sensor	Cl. I Zone 2			
CS	Transmitter & Sensor	Cl. I Div. 2			

Proline Promag 500 Digital (with ISEM in sensor):

Order code "Approval" dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
C6	Transmitter	Cl. I Zone 2	FES0266	FES0260	FES0259
	Sensor	Cl. I Zone 1, Zone 21			
CN	Transmitter	Cl. I Div. 2			
	Sensor	Cl. I Div. 1, Cl. II, III	FES0267	FES0261	FES0259
CZ	Transmitter & Sensor	Cl. I Zone 2			
CS	Transmitter & Sensor	Cl. I Div. 2			

Proline Prosonic Flow G 300:

Order code "Approval" dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
C2, C4	Transmitter & Sensor	Cl. I Zone 1, Zone 21	FES0319	FES0321	FES0259
CD	Transmitter & Sensor	Cl. I Div. 1, Cl. II, III			
CE	Transmitter & Sensor	Cl. I Div. 1			
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0320	FES0322	FES0259
CS	Transmitter & Sensor	Cl. I Div. 2			

Proline Prosonic Flow P 500 (with ISEM in transmitter):

Order code "Approval" dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
C2, C4	Transmitter	Cl. I Zone 1, Zone 21	FES0319	FES0351	FES0259
	Sensor	Cl. I Zone 1, Zone 21			
CD	Transmitter & Sensor	Cl. I Div. 1, Cl. II, III	FES0320	FES0352	FES0259
CZ	Transmitter & Sensor	Cl. I Zone 2			



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

Order code “Approval” dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
CS	Transmitter & Sensor	Cl. I Div. 2			

Proline Prosonic Flow G 500 Digital (with ISEM in sensor):

Order code “Approval” dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
C6	Transmitter	Cl. I Zone 2	FES0319	FES0321	FES0259
	Sensor	Cl. I Zone 1, Zone 21			
CN	Transmitter	Cl. I Div. 2			
	Sensor	Cl. I Div. 1, Cl. II, III			
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0320	FES0322	FES0259
CS	Transmitter & Sensor	Cl. I Div. 2			

Proline t-mass 300:

Order code “Approval” dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
C2, C4	Transmitter & Sensor	Cl. I Zone 1 or Zone 0/1, Zone 21	FES0327	FES0331	FES0259
CD	Transmitter & Sensor	Cl. I Div. 1, Cl. II, III			
CE	Transmitter & Sensor	Cl. I Div. 1			
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0328	FES0332	FES0259
CS	Transmitter & Sensor	Cl. I Div. 2			

Proline t-mass 500 Digital (with ISEM in sensor):

Order code “Approval” dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
C6	Transmitter	Cl. I Zone 2	FES0327	FES0331	FES0259
	Sensor	Cl. I Zone 1 or Zone 0/1, Zone 21			
CN	Transmitter	Cl. I Div. 2			
	Sensor	Cl. I Div. 1, Cl. II, III			
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0328	FES0332	FES0259
CS	Transmitter & Sensor	Cl. I Div. 2			

Proline Teqwave M 300:

Order code “Approval” dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0421	FES0422	F0259
CS	Transmitter & Sensor	Cl. I Div. 2			



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

Proline Teqwave M 500 Digital (with ISEM in sensor):

Order code “Approval” dd =	Parts of Device	Hazardous Locations	Control / Installation Drawings	Thermal Parameter Drawings	Electrical Parameter Drawings
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0421	FES0422	F0259
CS	Transmitter & Sensor	Cl. I Div. 2			

Assignment of Replacement Transmitter

The replacement transmitters are assigned to the flowmeters Proline Promass 300/500, Proline Cubemass 300/500, Proline Promag 300/500, Proline Prosonic Flow 300/500, Proline t-mass 300/500 and Proline Teqwave M 300/500 as follows:

Product flowmeters			Replacement transmitter type			
Order code	Generation code b =	Device model code ww =	Order code	Generation code b =	Existing product rr =	Device model code ww =
4W*b**-...ww, O4W*b**-...ww	B	A2	4x*bxx-...ww, O4x*bxx-...ww	B	n.a.	A2
5H*b**-...ww, O5H*b**-...ww	B	A1 / A2	5x*bxx-...ww, O5x*bxx-...ww	B	n.a.	A1 / A2
5P*b**-...ww, O5P*b**-...ww	B	A1 / A2	5x*bxx-...ww, O5x*bxx-...ww	B	n.a.	A1 / A2
5W*b**-...ww, O5W*b**-...ww	B	A1 / A2	5x*bxx-...ww, O5x*bxx-...ww	B	n.a.	A1 / A2
6F*b**-...ww, O6F*b**-...ww	B	A1 / A2	6x*bxx-...ww, O6x*bxx-...ww	B	n.a.	A1 / A2
6I*b**-...ww, O6I*b**-...ww	B	A1 / A2	6x*bxx-...ww, O6x*bxx-...ww	B	n.a.	A1 / A2
8A*b**-...ww, O8A*b**-...ww	B	A1 / A2	8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	AA (all sizes)	A1 / A2
8A*b**-...ww, O8A*b**-...ww	C	A1 / A2	8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	AB (all sizes)	A1 / A2
8C*b**-...ww, O8C*b**-...ww	B	A1 / A2	8x*bxx-...rr... ww, O8x*bxx-...rr ...ww	B	CA (all sizes)	A1 / A2
8E*b**-...ww, O8E*b**-...ww	B	A1 / A2	8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	EA (DN8... 15)	A1 / A2
			8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	EB (DN25... 50)	A1 / A2
			8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	EC (DN80)	A1 / A2



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

Product flowmeters			Replacement transmitter type			
Order code	Generation code b =	Device model code ww =	Order code	Generation code b =	Existing product rr =	Device model code ww =
8F*b**-...ww, O8F*b**-...ww	B	A1 / A2	8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	FA (DN8... 15)	A1 / A2
			8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	FB (DN25... 50)	A1 / A2
			8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	FC (DB80... 250)	A1 / A2
8H*b**-...ww, O8H*b**-...ww	B	A1 / A2	8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	HA (DN8... 40)	A1 / A2
			8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	HB (DN50)	A1 / A2
8I*b**-...ww, O8I*b**-...ww	B	A1 / A2	8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	IA (DN8...40)	A1 / A2
			8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	IB (DN40FB... 80)	A1 / A2
8O*b**-...ww, O8O*b**-...ww	B	A1 / A2	8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	OA (all sizes)	A1 / A2
8P*b**-...ww, O8P*b**-...ww	B	A1 / A2	8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	PA (DN8... 40)	A1 / A2
			8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	PB (DN50)	A1 / A2
8Q*b**-...ww, O8Q*b**-...ww	B	A1 / A2	8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	QA (DN25... 50)	A1 / A2
			8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	QB (DN80... 100)	A1 / A2
			8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	QC (DN150... 250)	A1 / A2
8S*b**-...ww, O8S*b**-...ww	B	A1 / A2	8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	SA (DN8... 40)	A1 / A2



Certificate: 70087366

Master Contract: 160686

Project: 80267439

Date Issued: 2026-01-28

Product flowmeters			Replacement transmitter type			
Order code	Generation code b =	Device model code ww =	Order code	Generation code b =	Existing product rr =	Device model code ww =
			8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	SB (DN50)	A1 / A2
8X*b**-...ww, O8X*b**-...ww	B	A1 / A2	8x*bxx-...rr... ww, O8x*bxx-... rr...ww	B	XA (all sizes)	A1 / A2
9G*b**-...ww, O9G*b**-...ww	B	A1 / A2	9x*bxx-...pp... ww, O9x*bxx-... pp...ww	B	GA (all sizes)	A1 / A2
9P*b**-...ww, O9P*b**-...ww	B	A1 / A2	9x*bxx-...pp... ww, O9x*bxx-... pp...ww	B	PA (all versions)	A1 / A2

The Proline 300/500 devices are rated IP66, IP67 and Type 4X protection. In addition, the remote sensors of the Proline Promag 500 Digital, Proline t-mass 500 Digital and Proline Prosonic Flow P 500 are available with IP68 and Type 6P protection.



Certificate: 70087366

Project: 80267439

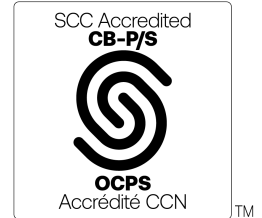
Master Contract: 160686

Date Issued: 2026-01-28

Notes:

Products certified under Class(es) C225802, C225803, C225804, C225882, C225883, C225884 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC).

www.scc.ca



Proline Promag 300 (compact version)
Proline Promag 500 (remote version)
Proline Promag 500 Digital (remote version)

This Control Drawing applies to the Proline Promag 300/500 devices with extended order code covering:

	flowmeter	flowmeter OEM version	replacement transmitter	replacement transmitter OEM
Proline 300:				
Proline Promag H 300	5H3B** – ddeffgh...	O5H3B** – ddeffgh...	5x3Bxx – ddeffgh...	O5x3Bxx – ddeffgh...
Proline Promag P 300	5P3B** – ddeffgh...	O5P3B** – ddeffgh...	5x3Bxx – ddeffgh...	O5x3Bxx – ddeffgh...
Proline Promag W 300	5W3B** – dd*effgh...	O5W3B** – dd*effgh...	5x3Bxx – dd*effgh...	O5x3Bxx – dd*effgh...
Proline 500 (ISEM in transmitter):				
Proline Promag H 500	5H5B** – ddeffgh**B...	O5H5B** – ddeffgh**B...	5x5Bxx – ddeffgh**B...	O5x5Bxx – ddeffgh**B...
Proline Promag P 500	5P5B** – ddeffgh**B...	O5P5B** – ddeffgh**B...	5x5Bxx – ddeffgh**B...	O5x5Bxx – ddeffgh**B...
Proline Promag W 500	5W5B** – dd*effgh**B...	O5W5B** – dd*effgh**B...	5x5Bxx – dd*effgh**B...	O5x5Bxx – dd*effgh**B...
Proline 500 Digital (ISEM in sensor):				
Proline Promag H 500 Digital	5H5B** – ddeffghi*A...	O5H5B** – ddeffghi*A...	5x5Bxx – ddeffghi*A...	O5x5Bxx – ddeffghi*A...
Proline Promag P 500 Digital	5P5B** – ddeffghi*A...	O5P5B** – ddeffghi*A...	5x5Bxx – ddeffghi*A...	O5x5Bxx – ddeffghi*A...
Proline Promag W 500 Digital	5W5B** – dd*effghi*A...	O5W5B** – dd*effghi*A...	5x5Bxx – dd*effghi*A...	O5x5Bxx – dd*effghi*A...

where **dd** = "Approval" code, **e** = "Power Supply" code, **ff** = "IO1" code, **g** = "IO2" code, **h** = "IO3" code, **i** = "IO4" code

1) General requirements

- This Control Drawing must be read in conjunction with the Safety Instructions (XA...) specified on the device's nameplate and the following documents:
 - FES0259 - ELECTRICAL PARAMETERS**
 - FES0260 - THERMAL PARAMETERS**
- Install the Proline 300/500 devices in accordance with the Canadian Electrical Code (CEC) or the National Electrical Code (NEC) ANSI/NFPA 70.
- The Proline 300/500 devices shall be connected to the potential equalization system using designated protective earth (PE) connection facilities or, alternatively, through a metallic piping system, provided that the pipe meets the grounding requirements of applicable national regulations.
- Control room equipment shall not supply or generate more than 250 V AC RMS or 250 V DC.
- Requirements for connection cables (power supply cable, signal cable, remote connection cable, PE conductor):
 - Use cable or conductors with insulation rated for at least 20°C above the maximum ambient temperature at the installation location.
 - The cross-sectional area of the protective earth (PE) conductor connected to the device's internal and external earthing (grounding) facilities shall not exceed 4 mm².

 Endress+Hauser People for Process Automation		Control Drawing - CSA, cCSAus	Document No.:	FES0266
		Proline Promag 300/500	Rev.:	G
		General Requirements	Date:	15.04.2025
		Cl. I Div. 1, Cl. II Div. 1, Cl. III; Cl. I Zone 1, Zone 21	Page:	1/6

Endress+Hauser Flow
Kägenstrasse 7, 4153 Reinach, Basel-Landschaft, Switzerland

6. Requirements for cable glands, blanking elements and thread adapters:
- Only use separately Ex certified cable glands, Ex blanking elements and Ex thread adapters that are suitable for the intended application (see device's nameplates). All Ex cable glands, Ex blanking elements and Ex thread adapters must be rated for the required ingress of protection (IP, Type), level of protection and an operating temperature range from the minimum specified ambient temperature (Ta) to the maximum specified ambient temperature Ta + 20°C (see device's nameplates).
 - All unused cable entries must be closed with suitable Ex certified blanking elements that are compatible with the device's application (see device's nameplates).
7. The Proline 300/500 devices shall be used only with process media for which the process-wetted parts are known to be suitable.
8. **WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY**
AVERTISSEMENT – RISQUE D'EXPLOSION – LA SUBSTITUTION DES COMPOSANTS RISQUE DE NUIRE À LA SÉCURITÉ INTRINSÈQUE DU PRODUIT
9. Avoidance of electrostatic charges which could result in electrostatic discharges while installing, operating, cleaning or maintaining:
- For external non-metallic surfaces, e.g. housing, attached additional plates, RFID tag.
 - For attached external metallic parts that are not integrated into the local potential equalization system, e.g. nameplate tag, RFID tag.
 - Do not use in areas where the devices are exposed to highly charge-generating processes, pneumatically conveyed dusts and/or charge spraying in an electrostatic coating process.
 - Control of environmental humidity to minimize the generation of static electricity.
 - Protection from direct airflow causing a charge transfer.
 - Means to continuously drain off electrostatic charges.
 - Clean the devices only with a damp cloth.
 - If the stainless-steel nameplate or tag is not directly bonded to earth (ground), the maximum capacitance of the nameplate or tag shall not exceed 30 pF when mounted on a coated metallic enclosure, or 20 pF when mounted on a polymeric enclosure. These values shall be considered in the electrostatic assessment for use in hazardous areas in accordance with national bonding and grounding requirements.
10. The Proline 300/500 devices are designed for the following range of environmental conditions:
- Outdoor use
 - Pollution Degree: 4 (Macro), 2 (Micro) for all versions
 - Pollution Degree: 2 (Macro), 2 (Micro) for plastic transmitter enclosures with Ex ic sensor outputs
 - Overvoltage category II
 - Mode of operation: Continuous
 - Maximum installation altitude: 2000 m
11. For the Proline Promag W 500 (ISEM in transmitter) devices installed in Class I Division 1 hazardous locations, the polymeric sensor terminal enclosure shall not be exposed to atmospheres containing acetone or ethyl acetate.
12. For the Proline 500 (ISEM in transmitter) and Proline 500 Digital (ISEM in sensor) devices, which use a flat gasket within the sensor terminal enclosure, the end user shall ensure that the flat cover seals are not bend before securing the cover. Any seals that are not flat or are damaged must be replaced prior to reassembly.
13. For the Proline 500 Digital (ISEM in sensor) devices, all transmitter enclosure cover screws shall be tightened to a torque of 2.5 Nm.
14. Do not operate the I/O1 (Terminal 26, 27 or Port 1 (RJ45)) and Service Interface (CDI) / Port 2 (RJ45) simultaneously in hazardous locations.
15. For information: the Proline 300/500 flowmeters are equipped with factory-mounted metallic thread extensions and/or blanking elements. These thread extensions and blanking elements have been tested and certified as Ex db / XP, Ex eb, Ex ec, Ex tb, Class I, Class II and Class III as part of the complete devices. Refer to the Safety Instructions XA*** for applicable models.

 Endress+Hauser People for Process Automation	Endress+Hauser Flow Kägenstrasse 7, 4153 Reinach, Basel-Landschaft, Switzerland	Control Drawing - CSA, cCSA_{us}	Document No.:	FES0266
		Proline Promag 300/500	Rev.:	G
		General Requirements	Date:	15.04.2025
		Cl. I Div. 1, Cl. II Div. 1, Cl. III; Cl. I Zone 1, Zone 21	Page:	2/6

2) Specific requirements for XP / Ex db / AEx db (Zone 1)

1. When using conduit systems, sealing fittings shall be installed immediately adjacent to the enclosure.
2. Sensor terminal enclosures with XP rating are factory sealed. Transmitter enclosures with XP rating are only factory sealed when used in ambient temperatures not lower than -40°C (-40°F).
3. Only open the cover of the Ex db / XP enclosures if one of the following conditions is met:
 - An explosive atmosphere is not present
 - A waiting time of 10 minutes is observed after switching off the power supply. The following warning notice is on the device:
WARNING – AFTER DE-ENERGIZING, DELAY 10 MINUTES BEFORE OPENING ENCLOSURE IN TYPE OF PROTECTION EX D
AVERTISSEMENT – APRÈS AVOIR COUPÉ L'ALIMENTATION, ATTENDRE 10 MINUTES AVANT D'OUVRIER UN BOITIER DE PROTECTION DE TYPE EX D
4. Flameproof joints shall not be repaired under any circumstances. The device with damaged flameproof joints must be removed from service and replaced with fully certified, undamaged devices.
5. For information: the Proline 300/500 flowmeters are equipped with factory-mounted Ex db / XP metallic thread extensions and/or Ex db / XP blanking elements. These thread extensions and blanking elements are tested and certified as part of the devices. For identification purposes, these thread extensions or sealing plugs are marked as follows:
 - Thread form M20x1.5: Md
 - Thread form NPT1/2": d or NPTd

3) Specific requirements for Ex eb / AEx eb (Zone 1)

1. For the Proline Promag 300 and Proline Promag 500 (ISEM in transmitter) devices with order code "Approval dd" = C2, C7 in combination with "Power supply" code e = D (24 V version) and intrinsically safe input/outputs (I/O1, I/O2, I/O3):
 - The Ex eb terminal compartment of the transmitter may be opened for a short period to access intrinsically safe terminals of the inputs/outputs. This option is limited to I/Os in gas application only.
 - The Ex eb terminal compartment may only be opened only in controlled environment:
 - Ambient temperature range from 5 °C to 40 °C,
 - Maximum relative humidity 80 % for temperatures up to 31 °C decreasing linearly to 50 % relative humidity at 40 °C,
 - Applicable pollution degree 2 (only non-conductive pollution occurs except that occasionally a temporary conductivity caused by condensation is expected),During this time, suitable precautions shall be taken to prevent the ingress of dust into the electronic compartment, to maintain compliance with the enclosure's certified protection rating.
 - The power supply compartment, which is in the Ex eb terminal compartment of the transmitter enclosure, contains non-intrinsically safe circuits. The cover of the power supply compartment is labeled "WARNING – DO NOT OPEN WHEN ENERGIZED". Do not open the power supply compartment in hazardous locations.

 Endress+Hauser People for Process Automation	Endress+Hauser Flow Kägenstrasse 7, 4153 Reinach, Basel-Landschaft, Switzerland	Control Drawing - CSA, cCSAus	Document No.:	FES0266
		Proline Promag 300/500	Rev.:	G
		General Requirements	Date:	15.04.2025
		Cl. I Div. 1, Cl. II Div. 1, Cl. III; Cl. I Zone 1, Zone 21	Page:	3/6

4) Specific requirements for IS / Ex i / AEx i (Zone 0, Zone 1 or Zone 21)

1. Observe the guidelines for interconnecting intrinsically safe circuits (e.g. CEC or NEC and other applicable standards).
2. The following circuits of the Proline 300/500 devices are rated as IS, Ex/AEx ia IIC Ga and/or Ex/AEx ia IIIC Da:
 - Input/Output circuits
 - Output circuit for Remote Display DKX001 or ODKX001
 - Output circuit for external antenna, via antenna feedthrough H337
 - Service Interface / Port 2 (RJ45)

Refer to drawing "FES0259", which serves as a supplement to this control drawing, for entity parameters and installation instructions. When these circuits are connected to certified apparatus rated Ex/AEx ib IIC Gb and/or Ex/AEx ib IIIC Db, the overall system's level of protection becomes Ex/AEx ib IIC Gb and/or Ex/AEx ib IIIC Db, respectively.

3. When installed in potentially explosive atmospheres, the Service Interface / Port 2 (RJ45) circuit can only be connected to or operated if it is rated as intrinsically safe and be assessed as part of an intrinsically safe system. In any other configuration, connection to or operation with Service Interface / Port 2 (RJ45) is not permitted.

5) Specific requirements for Class II, Class III / Ex tb / AEx tb (Zone 21)

1. For installation in Class II Group G hazardous locations, the maximum temperature of process (medium) shall not exceed 165°C (329°F), to remain below the minimum ignition temperature of Group G combustible dusts and maintain compliance with temperature classification requirements.
2. The enclosure may only be opened for a brief maintenance or inspection activities, and only where the area is confirmed to be free of combustible dust. During this time, suitable precautions shall be taken to prevent the ingress of dust into the electronic compartment, to maintain compliance with the enclosure's certified protection rating.
3. A dust-tight conduit seal shall be installed at the point of entry when the equipment is used in Class II or Class III hazardous locations.

6) Specific requirements for the devices using stainless steel hygienic enclosure

1. All covers shall be first closed hand-tight and then tightened with an additional 45° turn, using an appropriate tool.
2. In the case of a horizontal orientation, the transmitter shall not be installed vertically above the sensor.

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		Proline Promag 300/500	Rev.:	G
		General Requirements	Date:	15.04.2025
		Cl. I Div. 1, Cl. II Div. 1, Cl. III; Cl. I Zone 1, Zone 21	Page:	4/6

7) Specific requirements for transmitter installed in Class I Division 2 or Ex ec / AEx ec (Zone 2)

- For the M12 receptacle (plug-in connector), approved for use in hazardous locations:
 - The connection shall be in accordance with the Canadian Electrical Code (CEC) or the National Electrical Code (NEC) ANSI/NFPA 70.
 - The M12 mating connector, supplied by the user, must be approved for use in hazardous locations and must be rated for ingress of protection Type 4X and IP66/IP67. It must also be equipped with a mechanical retention system to prevent unintentional disconnection under normal operating conditions.
 - Unused M12 receptacle must be closed with a suitable Ex certified blanking element.
- For the M12 receptacle (plug-in connector), used in non-hazardous (unclassified) locations:
 - The connection shall be in accordance with the Canadian Electrical Code (CEC) or the National Electrical Code (NEC) ANSI/NFPA 70.
 - The M12 mating connector, supplied by the user, must be rated for ingress of protection Type 4X and IP66/IP67.
 - Unused M12 receptacle must be closed with a suitable Ex certified blanking element.

8) Specific requirements for transmitter installed in NIFW / Ex ic / AEx ic (Zone 2)

- Observe the guidelines for interconnecting intrinsically safe circuits (e.g. CEC or NEC and other applicable standards).
- For the device with I/O circuits rated as NIFW and Ex/AEx ic IIC Gc, refer to drawing "FES0259" for entity parameters and installation details, which must be read in conjunction with this control drawing.
- Do not connect to the Service Interface / Port 2 (RJ45) in hazardous locations.

9) Specific requirements for Remote Display type DKX001 or ODKX001

- When using a Remote Display type DKX001 or ODKX001:
 - The corresponding control drawing specified on the remote display's nameplate shall be consulted and followed, in addition to this control drawing.
 - The internal display module must be removed.
- If a separately ordered Remote Display type DKX001 or ODKX001 is connected to a Proline 300 flowmeter, the order code "Approval bb" of the Remote Display must match with the order code "Approval dd" of the Proline 300 flowmeter as given in the table below. Only matched approval combinations are permitted for use in hazardous locations.

Hazardous locations	Proline 300 with order code "Approval" dd =	Remote Display type DKX001 or ODKX001 (as covered by certificate CSA 160686-70030937) with order code "Approval" bb =
Class I Division 1, Class II, Class III	CD, CE	CE, CG
Class I Zone 1, Zone 21	C2, C4	CI, CK, CL

- The Proline 300/500 flowmeters have an output circuit for remote display that is rated Ex/AEx ia IIC Ga and/or Ex/AEx ia IIIC Da. When connected to the Remote Display type DKX001 or ODKX001, which is rated Ex/AEx ia IIC Gb and/or Ex/AEx ia IIIC Db, the overall system's level of protection becomes Ex/AEx ia IIC Gb and/or Ex/AEx ia IIIC Db, respectively.

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		Proline Promag 300/500	Rev.:	G
		General Requirements	Date:	15.04.2025
		Cl. I Div. 1, Cl. II Div. 1, Cl. III; Cl. I Zone 1, Zone 21	Page:	5/6

10) Specific requirements for External Antenna and Antenna Feedthrough (Antenna Bushing H337)

External Antenna:

1. Only use the external antenna (with or without an extension cable) supplied by Endress+Hauser. This antenna meets the Proline 300/500 device's specific requirements.
2. Alternatively, any passive, omni-directional RF external antenna, with or without an extension cable, may be connected to the Type N female connector of the antenna bushing H337, provided the following conditions are met:
 - a) The external antenna shall have an impedance of at least 50 Ω .
 - b) The rated frequency range of the external antenna shall not exceed 1710 MHz ... 6000 MHz.
 - c) The external antenna (with or without an extension cable) shall be equipped with a Type N male connector (MIL-STD-348).
3. The coupling nut of the Type N male connector shall be hand tightened only.

Antenna Feedthrough (Antenna Bushing H337):

4. The antenna bushing H337 shall be installed wrench tight to the transmitter enclosure cable entry M20x1.5 to maintain the enclosure's certified ingress of protection.
5. The antenna bushing enclosure shall be securely connected to local earth (ground). This is typically achieved through mechanical contact and bonding with the transmitter enclosure to which the antenna bushing is installed.
6. The antenna feedthrough is not suitable for Ex db / XP application. Do not install the antenna feedthrough in an Ex db / XP connection compartment of the Proline 300/500 devices.

 Endress+Hauser People for Process Automation	Endress+Hauser Flow Kägenstrasse 7, 4153 Reinach, Basel-Landschaft, Switzerland	Control Drawing - CSA, cCSA_{US}	Document No.:	FES0266
		Proline Promag 300/500	Rev.:	G
		General Requirements	Date:	15.04.2025
		Cl. I Div. 1, Cl. II Div. 1, Cl. III; Cl. I Zone 1, Zone 21	Page:	6/6

1.4. Proline Promag P/W 300 – High temperature version (with extended neck)

1.4.1. Version without thermal insulation

Temperature class vs. Max. ambient temperature (T _{a, max}) and Max. permitted medium temperature (T _{m, max permitted})												
Device	Size / DN	Liner	Medium range T _m ⁽²⁾		Ambient range T _a ⁽¹⁾		T _{m, max permitted} (°C)					
			min. (°C)	max. (°C)	min. (°C)	max. (°C)	T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)
Promag P Promag W	15...600	PTFE	-40	150	-40	50	60	95	130	130	130	130
						55	---	95	130	130	130	130
						60	---	---	100	100	100	100
	25...200	PFA	-40	180		45	80	95	130	150	150	150
						50	60	95	130	150	150	150
						60	---	---	100	100	100	100
	50...3000	HG (Hard rubber)	-20	80		50	60	80	80	80	80	80
						60	---	80	80	80	80	80
						50	50	50	50	50	50	50
	25...1000	PU	-20	50		45	80	95	120	120	120	120
						55	---	95	120	120	120	120
						60	---	95	100	100	100	100
	25...3000	ETFE	-40	120 ⁽³⁾		50	60	60	60	60	60	60
						60	---	60	60	60	60	60
						60	---	60	60	60	60	60
	25...3000	PE	-40	60		50	60	60	60	60	60	60
						60	---	60	60	60	60	60
						60	---	60	60	60	60	60

Notes:

(1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).

(2) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).

(3) For ETFE: T_{m, max} = 120°C may be reduced depending on the maximum working process pressure (see the nameplate on the sensor housing).

1.4.2. Version with thermal insulation in accordance with E+H's specifications

Note: for thermal insulation specifications, refer to E+H's manuals.

Temperature class vs. Max. ambient temperature (T _{a, max}) and Max. permitted medium temperature (T _{m, max permitted})												
Device	Size / DN	Liner	Medium range T _m ⁽²⁾		Ambient range T _a ⁽¹⁾		T _{m, max permitted} (°C)					
			min. (°C)	max. (°C)	min. (°C)	max. (°C)	T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)
Promag P Promag W	15...600	PTFE	-40	150	-40	50	60	95	130	130	130	130
						55	---	95	130	130	130	130
						60	---	---	100	100	100	100
	25...200	PFA	-40	180		45	80	95	130	150	150	150
						50	60	95	130	150	150	150
						60	---	---	100	100	100	100
	50...3000	HG (Hard rubber)	-20	80		50	60	80	80	80	80	80
						60	---	80	80	80	80	80
						50	50	50	50	50	50	50
	25...1000	PU	-20	50		45	80	95	120	120	120	120
						55	---	95	120	120	120	120
						60	---	95	100	100	100	100
	25...3000	ETFE	-40	120 ⁽³⁾		50	60	60	60	60	60	60
						60	---	60	60	60	60	60
						60	---	60	60	60	60	60
	25...3000	PE	-40	60		50	60	60	60	60	60	60
						60	---	60	60	60	60	60
						60	---	60	60	60	60	60

Notes:

(1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).

(2) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).

(3) For ETFE: T_{m, max} = 120°C may be reduced depending on the maximum working process pressure (see the nameplate on the sensor housing).



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Control Drawing - IECEx, ATEX, CSA, cCSAus

Proline Promag 300/500

Thermal Parameter

EPL Gb (Zone 1); EPL Db (Zone 21); Cl. I Div. 1, Cl. II Div. 1, Cl. III;
Cl. I Zone 1, Zone 21

Document No.: FES0260

Rev.: G

Date: 15.04.2025

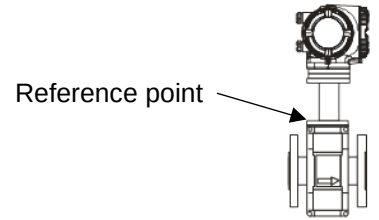
Page: 2/9

1.4.3. Version with thermal insulation NOT in accordance with E+H's specifications

Temperature class vs. Max. ambient temperature ($T_{a, \max}$) and Max. permitted reference temperature ($T_{\text{ref, max permitted}}$)

Device	Size / DN	Liner	Medium range $T_m^{(4)}$		Ambient range $T_a^{(1)}$		Reference temperature $T_{\text{ref, max permitted}}^{(2)} (^\circ\text{C})$					
			min. ($^\circ\text{C}$)	max. ($^\circ\text{C}$)	min. ($^\circ\text{C}$)	max. ($^\circ\text{C}$)	T6 (85 $^\circ\text{C}$)	T5 (100 $^\circ\text{C}$)	T4 (135 $^\circ\text{C}$)	T3 (200 $^\circ\text{C}$)	T2 (300 $^\circ\text{C}$)	T1 (450 $^\circ\text{C}$)
Promag P	15...600	PTFE	-40	150	-40	60	56.4	71.3	72.0	72.0	72.0	72.0
Promag W	25...200	PFA	-40	180		60	56.4	71.3	72.0	72.0	72.0	72.0
	50...3000	HG (Hard rubber)	-20	80		60	56.4	71.3	72.0	72.0	72.0	72.0
	25...1000	PU	-20	50		60	56.4	71.3	72.0	72.0	72.0	72.0
	25...3000	ETFE	-40	120 ⁽³⁾		60	56.4	71.3	72.0	72.0	72.0	72.0
	25...3000	PE	-40	60		60	56.4	71.3	72.0	72.0	72.0	72.0

- Notes:
- (1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).
 - (2) $T_{\text{ref, max permitted}}$: the maximum temperature measured at the reference point at the sensor neck. To maintain the assigned temperature class rating, the $T_{\text{ref, max permitted}}$ shall not exceed the values given in this table.
 - (3) For ETFE: $T_{m, \max} = 120^\circ\text{C}$ may be reduced depending on the maximum working process pressure (see the nameplate on the sensor housing).
 - (4) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).



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Control Drawing - IECEx, ATEX, CSA, cCSA_{US}

Proline Promag 300/500

Thermal Parameter

EPL Gb (Zone 1); EPL Db (Zone 21); Cl. I Div. 1, Cl. II Div. 1, Cl. III;
Cl. I Zone 1, Zone 21

Document No.: FES0260

Rev.: G

Date: 15.04.2025

Page: 3/9

2. Proline Promag H/P/W 500 (ISEM in transmitter, defined by order code "Integrated ISEM Electronic" k = B)

Notes: The chapter 2 applies to Proline Promag H/P/W 500 versions with extended order code covering:

	flowmeter	flowmeter OEM version	replacement transmitter	replacement transmitter OEM
Proline Promag H 500	5H5B** – dd*****B...	O5H5B** – dd*****B...	5x5Bxx – dd*****B...	O5x5Bxx – dd*****B...
Proline Promag P 500	5P5B** – dd*****B...	O5P5B** – dd*****B...	5x5Bxx – dd*****B...	O5x5Bxx – dd*****B...
Proline Promag W 500	5W5B** – dd*****B...	O5W5B** – dd*****B...	5x5Bxx – dd*****B...	O5x5Bxx – dd*****B...
with "Approval"	dd = CD, CE, C2, C4, C7, C8 dd = BB, BD, B7, B8	(cCSAus / CSA) (IECEX / ATEX)		

2.1. Ambient temperature range T_a

The applicable ambient temperature range is determined by factors such as sensor type, size, flange, liner material, maximum working pressure, and selected options when ordering. Additionally, this range may be further limited by the applied medium (process) temperature, thermal insulation and temperature class as shown in the temperature tables below. The rated ambient temperature range is indicated on the device's nameplate.

2.2. Medium (process) temperature range T_m

The allowable medium temperature range is specified on the device's nameplate. This range is determined by factors such as sensor type, size, flange, liner material, maximum working pressure, and selected options when ordering. Additionally, depending on the applied ambient temperature and temperature class, this range may be further limited. Refer to the temperature tables below for detailed limitations.

2.3. Proline Promag H/P/W 500 – Standard version

Note: without thermal insulation.

Transmitter temperature class vs. Maximum ambient temperature ($T_{a, \max}$)

Transmitter	$T_{a, \max}$ (°C)	Temperature class
Proline Promag P	60	T5 (100°C)
Proline Promag W	55	T6 (85°C)
Proline Promag H		

Notes: $T_{a, \min}$ = -50°C or may be further limited (see the nameplate on the transmitter housing)

Sensor temperature class vs. Max. ambient temperature ($T_{a, \max}$) & Max. permitted medium temperature ($T_{m, \max}$ permitted)

Sensor	Size / DN	Liner	Medium range T_m ⁽²⁾		Ambient range T_a ⁽¹⁾		$T_{m, \max}$ permitted (°C)					
			min. (°C)	max. (°C)	min. (°C)	max. (°C)	T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)
Promag P Promag W	15...600	PTFE	-40	150	-40	60	80	95	130	130	130	130
	25...200	PFA	-40	180		50	80	95	130	150	150	150
						60	80	95	130	130	130	130
	50...3000	HG (Hard rubber)	-20	80		60	80	80	80	80	80	80
	25...1000	PU	-20	50		50	50	50	50	50	50	50
	25...3000	ETFE	-40	120 ⁽⁴⁾		60	80	95	120	120	120	120
Promag H	2...150	PE	-40	60		60	60	60	60	60	60	60
		PFA	-40	180		45	80	95	130	150	150	150
						55 ⁽³⁾	80 ⁽³⁾	95	130	130	130	130
						60 ⁽³⁾	80 ⁽³⁾	95	110	110	110	110

Notes: (1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).
(2) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).
(3) For the Proline Promag H 300 with the medium temperature measurement option, to maintain a temperature class T6 rating, the maximum applied temperature shall be limited as follows: $T_{a, \max}$ = 50°C and $T_{m, \max}$ = 50°C.
(4) For ETFE: $T_{m, \max}$ = 120°C may be reduced depending on the maximum working process pressure (see the nameplate on the sensor housing).



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Control Drawing - IECEx, ATEX, CSA, cCSAus

Proline Promag 300/500

Thermal Parameter

EPL Gb (Zone 1); EPL Db (Zone 21); Cl. I Div. 1, Cl. II Div. 1, Cl. III;
Cl. I Zone 1, Zone 21

Document No.: FES0260

Rev.: G

Date: 15.04.2025

Page: 4/9

2.4. Proline Promag P/W 500 – High temperature version (with extended neck)

2.4.1. Version without thermal insulation

Transmitter temperature class vs. Maximum ambient temperature ($T_{a, \max}$)

Transmitter	$T_{a, \max}$ (°C)	Temperature class
Proline Promag P	60	T5 (100°C)
Proline Promag W	55	T6 (85°C)

Notes: $T_{a, \min} = -50^{\circ}\text{C}$ or may be further limited (see the nameplate on the transmitter housing)

Sensor temperature class vs. Max. ambient temperature ($T_{a, \max}$) & Max. permitted medium temperature ($T_{m, \max}$ permitted)

Sensor	Size / DN	Liner	Medium range $T_m^{(2)}$		Ambient range $T_a^{(1)}$		$T_{m, \max}$ permitted (°C)					
			min. (°C)	max. (°C)	min. (°C)	max. (°C)	T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)
Promag P Promag W	15...600	PTFE	-40	150	-40	60	80	95	130	130	130	130
	25...200	PFA	-40	180		60	80	95	130	150	150	150
	50...3000	HG (Hard rubber)	-20	80		60	80	80	80	80	80	80
	25...1000	PU	-20	50		50	50	50	50	50	50	50
	25...3000	ETFE	-40	120 ⁽³⁾		60	80	95	120	120	120	120
	25...3000	PE	-40	60		60	60	60	60	60	60	60

Notes: (1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).

(2) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).

(3) For ETFE: $T_{m, \max} = 120^{\circ}\text{C}$ may be reduced depending on the maximum working process pressure (see the nameplate on the sensor housing).

2.4.2. Version with thermal insulation in accordance with E+H's specifications

Note: for thermal insulation specifications, refer to E+H's manuals.

Transmitter temperature class vs. Maximum ambient temperature ($T_{a, \max}$)

Transmitter	$T_{a, \max}$ (°C)	Temperature class
Proline Promag P	60	T5 (100°C)
Proline Promag W	55	T6 (85°C)

Notes: $T_{a, \min} = -50^{\circ}\text{C}$ or may be further limited (see the nameplate on the transmitter housing)

Sensor temperature class vs. Max. ambient temperature ($T_{a, \max}$) & Max. permitted medium temperature ($T_{m, \max}$ permitted)

Sensor	Size / DN	Liner	Medium range $T_m^{(2)}$		Ambient range $T_a^{(1)}$		$T_{m, \max}$ permitted (°C)					
			min. (°C)	max. (°C)	min. (°C)	max. (°C)	T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)
Promag P Promag W	15...600	PTFE	-40	150	-40	60	75	95	130	130	130	130
	25...200	PFA	-40	180		60	75	95	130	150	150	150
	50...3000	HG (Hard rubber)	-20	80		60	75	80	80	80	80	80
	25...1000	PU	-20	50		50	50	50	50	50	50	50
	25...3000	ETFE	-40	120 ⁽³⁾		55	80	95	120	120	120	120
	25...3000	PE	-40	60		60	75	95	120	120	120	120
						60	60	60	60	60	60	60

Notes: (1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).

(2) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).

(3) For ETFE: $T_{m, \max} = 120^{\circ}\text{C}$ may be reduced depending on the maximum working process pressure (see the nameplate on the sensor housing).



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Control Drawing - IECEx, ATEX, CSA, cCSA_{US}

Proline Promag 300/500

Thermal Parameter

EPL Gb (Zone 1); EPL Db (Zone 21); Cl. I Div. 1, Cl. II Div. 1, Cl. III;
Cl. I Zone 1, Zone 21

Document No.: FES0260

Rev.: G

Date: 15.04.2025

Page: 5/9

2.4.3. Version with thermal insulation NOT in accordance with E+H's specifications

Transmitter temperature class vs. Maximum ambient temperature ($T_{a, \max}$)

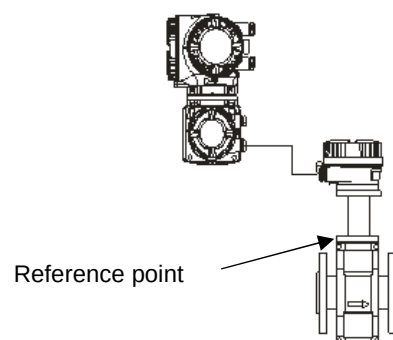
Transmitter	$T_{a, \max}$ (°C)	Temperature class
Proline Promag P	60	T5 (100°C)
Proline Promag W	55	T6 (85°C)

Notes: $T_{a, \min} = -50^{\circ}\text{C}$ or may be further limited (see the nameplate on the transmitter housing)

Sensor temperature class vs. Max. ambient temperature ($T_{a, \max}$) & Max. permitted reference temperature ($T_{\text{ref, max permitted}}$)

Sensor	Size / DN	Liner	Medium range $T_m^{(4)}$		Ambient range $T_a^{(1)}$		Reference temperature $T_{\text{ref, max permitted}}^{(2)}$ (°C)					
			min. (°C)	max. (°C)	min. (°C)	max. (°C)	T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)
Promag P Promag W	15...600	PTFE	-40	150	-40	60	63.8	65.7	69	69	69	69
	25...200	PFA	-40	180		60	63.8	65.7	69	69	69	69
	50...3000	HG (Hard rubber)	-20	80		60	63.8	65.7	69	69	69	69
	25...1000	PU	-20	50		60	63.8	65.7	69	69	69	69
	25...3000	ETFE	-40	120 ⁽³⁾		60	63.8	65.7	69	69	69	69
	25...3000	PE	-40	60		60	63.8	65.7	69	69	69	69

- Notes:
- (1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).
 - (2) $T_{\text{ref, max permitted}}$: the maximum temperature measured at the reference point at the sensor neck. To maintain the assigned temperature class rating, the $T_{\text{ref, max permitted}}$ shall not exceed the values given in this table.
 - (3) For ETFE: $T_{m, \max} = 120^{\circ}\text{C}$ may be reduced depending on the maximum working process pressure (see the nameplate on the sensor housing).
 - (4) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).



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Control Drawing - IECEx, ATEX, CSA, cCSA_{US}

Proline Promag 300/500

Thermal Parameter

EPL Gb (Zone 1); EPL Db (Zone 21); Cl. I Div. 1, Cl. II Div. 1, Cl. III;
Cl. I Zone 1, Zone 21

Document No.: FES0260

Rev.: G

Date: 15.04.2025

Page: 6/9

3. Proline Promag H/P/W 500 Digital (ISEM in sensor, defined by order code "Integrated ISEM Electronic" k = A)

Notes: The chapter 3 applies to Proline Promag H/P/W 500 Digital versions with extended order code covering:

	flowmeter	flowmeter OEM version	replacement transmitter	replacement transmitter OEM
Proline Promag H 500	5H5B** – dd*****A...	O5H5B** – dd*****A...	5x5Bxx – dd*****A...	O5x5Bxx – dd*****A...
Proline Promag P 500	5P5B** – dd*****A...	O5P5B** – dd*****A...	5x5Bxx – dd*****A...	O5x5Bxx – dd*****A...
Proline Promag W 500	5W5B** – dd*****A...	O5W5B** – dd*****A...	5x5Bxx – dd*****A...	O5x5Bxx – dd*****A...

with "Approval" **dd** = CN, C6 (cCSAus / CSA)
 dd = BJ, BN (IECEX / ATEX)

3.1. Ambient temperature range T_a

The applicable ambient temperature range is determined by factors such as sensor type, size, flange, liner material, maximum working pressure, and selected options when ordering. Additionally, this range may be further limited by the applied medium (process) temperature, thermal insulation and temperature class as shown in the temperature tables below. The rated ambient temperature range is indicated on the device's nameplate.

3.2. Medium (process) temperature range T_m

The allowable medium temperature range is specified on the device's nameplate. This range is determined by factors such as sensor type, size, flange, liner material, maximum working pressure, and selected options when ordering. Additionally, depending on the applied ambient temperature and temperature class, this range may be further limited. Refer to the temperature tables below for detailed limitations.

3.3. Proline Promag H/P/W 500 Digital - Standard version

Note: without thermal insulation.

Transmitter temperature class vs. Maximum ambient temperature ($T_{a, \max}$)				
Transmitter	Type of enclosure	$T_{a, \min}$ (°C)	$T_{a, \max}$ (°C)	Temperature class
Proline Promag P 500 Digital	Aluminium or Plastic	-50 / -40 ⁽¹⁾	60	T4 (135°C)
Proline Promag W 500 Digital			45	T5 (100°C)
Proline Promag H 500 Digital				

Notes: (1) $T_{a, \min}$ = -50°C for aluminium enclosure, $T_{a, \min}$ = -40°C for plastic enclosure.
For versions with the transmitter installed in non-hazardous areas (with order code "Approval" dd = BJ): $T_{a, \max}$ = 60°C.
Applicable ambient temperature range may be further limited (see the nameplate on the transmitter housing).

Sensor temperature class vs. Max. ambient temperature (T _{a, max}) & Max. permitted medium temperature (T _{m, max permitted})												
Sensor	Size / DN	Liner	Medium range T _m ⁽²⁾		Ambient range T _a ⁽¹⁾		T _{m, max permitted} (°C)					
			min. (°C)	max. (°C)	min. (°C)	max. (°C)	T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)
Promag P	15...600	PTFE	-40	150	-40	60	80	95	130	130	130	130
Promag W	25...200	PFA	-40	180		50	80	95	130	150	150	150
						60	80	95	130	130	130	130
	50...3000	HG (Hard rubber)	-20	80		60	80	80	80	80	80	80
	25...1000	PU	-20	50		50	50	50	50	50	50	50
	25...3000	ETFE	-40	120 ⁽⁴⁾		60	80	95	120	120	120	120
	25...3000	PE	-40	60		60	60	60	60	60	60	60
Promag H	2...150	PFA	-40	180		35	80 ⁽³⁾	95	130	150	150	150
					45	80 ⁽³⁾	95	135	135	135	135	
					60 ⁽³⁾	80 ⁽³⁾	95	115	115	115	115	

Notes:

(1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).

(2) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).

(3) For the Proline Promag H 500 with the medium temperature measurement option, to maintain a temperature class T6 rating, the maximum applied temperature shall be limited as follows: T_{a, max} = 50°C and T_{m, max} = 50°C.

(4) For ETFE: T_{m, max} = 120°C may be reduced depending on the maximum working process pressure (see the nameplate on the sensor housing).



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Control Drawing - IECEx, ATEX, CSA, cCSAus

Proline Promag 300/500

Thermal Parameter

EPL Gb (Zone 1); EPL Db (Zone 21); Cl. I Div. 1, Cl. II Div. 1, Cl. III;
Cl. I Zone 1, Zone 21

Document No.: FES0260

Rev.: G

Date: 15.04.2025

Page: 7/9

3.4. Proline Promag H/P/W 500 Digital – High temperature version (with extended neck)

3.4.1. Version without thermal insulation

Transmitter temperature class vs. Maximum ambient temperature ($T_{a, \max}$)				
Transmitter	Type of enclosure	$T_{a, \min}$ (°C)	$T_{a, \max}$ (°C)	Temperature class
Proline Promag P 500 Digital	Aluminium or Plastic	-50 / -40 ⁽¹⁾	60	T4 (135°C)
Proline Promag W 500 Digital			45	T5 (100°C)

Notes: (1) $T_{a, \min} = -50^{\circ}\text{C}$ for aluminium enclosure, $T_{a, \min} = -40^{\circ}\text{C}$ for plastic enclosure.
For versions with the transmitter installed in non-hazardous areas (with order code "Approval" dd = BJ): $T_{a, \max} = 60^{\circ}\text{C}$.
Applicable ambient temperature range may be further limited (see the nameplate on the transmitter housing).

Sensor temperature class vs. Max. ambient temperature ($T_{a, \max}$) & Max. permitted medium temperature ($T_{m, \max}$ permitted)												
Sensor	Size / DN	Liner	Medium range T_m ⁽²⁾		Ambient range T_a ⁽¹⁾		$T_{m, \max}$ permitted (°C)					
			min. (°C)	max. (°C)	min. (°C)	max. (°C)	T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)
Promag P	15...600	PTFE	-40	150	-40	60	80	95	130	130	130	130
Promag W	25...200	PFA	-40	180		60	80	95	130	150	150	150
	50...3000	HG (Hard rubber)	-20	80		60	80	80	80	80	80	80
	25...1000	PU	-20	50		50	50	50	50	50	50	50
	25...3000	ETFE	-40	120 ⁽³⁾		60	80	95	120	120	120	120
	25...3000	PE	-40	60		60	60	60	60	60	60	60

Notes: (1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).
(2) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).
(3) For ETFE: $T_{med, \max} = 120^{\circ}\text{C}$ may be reduced depending on the maximum working process pressure (see the nameplate on the sensor housing).

3.4.2. Version with thermal insulation in accordance with E+H's specifications

Note: for thermal insulation specifications, refer to E+H's manuals.

Transmitter temperature class vs. Maximum ambient temperature ($T_{a, \max}$)				
Transmitter	Type of enclosure	$T_{a, \min}$ (°C)	$T_{a, \max}$ (°C)	Temperature class
Proline Promag P 500 Digital	Aluminium or Plastic	-50 / -40 ⁽¹⁾	60	T4 (135°C)
Proline Promag W 500 Digital			45	T5 (100°C)

Notes: (1) $T_{a, \min} = -50^{\circ}\text{C}$ for aluminium enclosure, $T_{a, \min} = -40^{\circ}\text{C}$ for plastic enclosure.
For versions with the transmitter installed in non-hazardous areas (with order code "Approval" dd = BJ): $T_{a, \max} = 60^{\circ}\text{C}$.
Applicable ambient temperature range may be further limited (see the nameplate on the transmitter housing).

Sensor temperature class vs. Max. ambient temperature ($T_{a, \max}$) & Max. permitted medium temperature ($T_{m, \max}$ permitted)												
Sensor	Size / DN	Liner	Medium range T_m ⁽²⁾		Ambient range T_a ⁽¹⁾		$T_{m, \max}$ permitted (°C)					
			min. (°C)	max. (°C)	min. (°C)	max. (°C)	T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)
Promag P	15...600	PTFE	-40	150	-40	60	70	95	130	130	130	130
Promag W	25...200	PFA	-40	180		60	75	95	130	150	150	150
	50...3000	HG (Hard rubber)	-20	80		60	75	80	80	80	80	80
	25...1000	PU	-20	50		50	50	50	50	50	50	50
	25...3000	ETFE	-40	120 ⁽³⁾		60	70	95	120	120	120	120
	25...3000	PE	-40	60		60	60	60	60	60	60	60

Notes: (1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).
(2) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).
(3) For ETFE: $T_{med, \max} = 120^{\circ}\text{C}$ may be reduced depending on the maximum working process pressure (see the nameplate on the sensor housing).



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Control Drawing - IECEx, ATEX, CSA, cCSAus

Proline Promag 300/500

Thermal Parameter

EPL Gb (Zone 1); EPL Db (Zone 21); Cl. I Div. 1, Cl. II Div. 1, Cl. III;
Cl. I Zone 1, Zone 21

Document No.: FES0260

Rev.: G

Date: 15.04.2025

Page: 8/9

3.4.3. Version with thermal insulation NOT in accordance with E+H's specifications

Transmitter temperature class vs. Maximum ambient temperature ($T_{a, \max}$)

Transmitter	Type of enclosure	$T_{a, \min}$ (°C)	$T_{a, \max}$ (°C)	Temperature class
Proline Promag P 500 Digital	Aluminium or Plastic	-50 / -40 ⁽¹⁾	60	T4 (135°C)
Proline Promag W 500 Digital			45	T5 (100°C)

Notes: (1) $T_{a, \min} = -50^{\circ}\text{C}$ for aluminium enclosure, $T_{a, \min} = -40^{\circ}\text{C}$ for plastic enclosure.

For versions with the transmitter installed in non-hazardous areas (with order code "Approval" dd = BJ): $T_{a, \max} = 60^{\circ}\text{C}$.
Applicable ambient temperature range may be further limited (see the nameplate on the transmitter housing).

Sensor temperature class vs. Max. ambient temperature ($T_{a, \max}$) & Max. permitted reference temperature ($T_{\text{ref, max permitted}}$)

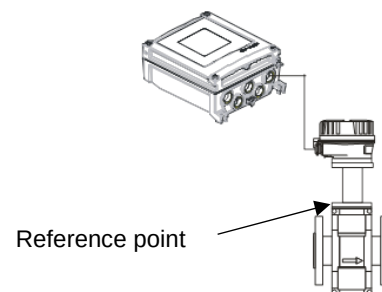
Sensor	Size / DN	Liner	Medium range T_m ⁽⁴⁾		Ambient range T_a ⁽¹⁾		Reference temperature $T_{\text{ref, max permitted}}$ ⁽²⁾ (°C)					
			min. (°C)	max. (°C)	min. (°C)	max. (°C)	T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)
Promag P Promag W	15...600	PTFE	-40	150	-40	60	63.8	65.7	69	70.9	70.9	70.9
	25...200	PFA	-40	180		60	63.8	65.7	69	70.9	70.9	70.9
	50...3000	HG (Hard rubber)	-20	80		60	63.8	65.7	69	70.9	70.9	70.9
	25...1000	PU	-20	50		60	63.8	65.7	69	70.9	70.9	70.9
	25...3000	ETFE	-40	120 ⁽³⁾		60	63.8	65.7	69	70.9	70.9	70.9
	25...3000	PE	-40	60		60	63.8	65.7	69	70.9	70.9	70.9

Notes: (1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).

(2) $T_{\text{ref, max permitted}}$: the maximum temperature measured at the reference point at the sensor neck. To maintain the assigned temperature class rating, the $T_{\text{ref, max permitted}}$ shall not exceed the values given in this table.

(3) For ETFE: $T_{m, \max} = 120^{\circ}\text{C}$ may be reduced depending on the maximum working process pressure (see the nameplate on the sensor housing).

(4) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).



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Control Drawing - IECEx, ATEX, CSA, cCSA_{US}

Proline Promag 300/500

Thermal Parameter

EPL Gb (Zone 1); EPL Db (Zone 21); Cl. I Div. 1, Cl. II Div. 1, Cl. III;
Cl. I Zone 1, Zone 21

Document No.: FES0260

Rev.: G

Date: 15.04.2025

Page: 9/9

1. Proline 300 – Compact version

1.1. Devices installed in EPL Gb (Zone 1), Db (Zone 21); Cl. I Div. 1, Cl. I Zone 1; Cl. II, III, Zone 21

This section applies to Proline 300 versions with extended order code covering:

	flowmeter	flowmeter OEM version	replacement transmitter	replacement transmitter OEM
Proline Promag 300	5*3*** – dd*effgh...	O5*3*** – dd*effgh...	5x3bxx – ddeffgh...	O5x3bxx – ddeffgh...
Proline Promass 300	8*3*** – ddeffgh...	O8*3*** – ddeffgh...	8x3bxx – ddeffgh...	O8x3bxx – ddeffgh...
Proline Prosonic Flow G 300	9*3*** – ddeffgh...	O9*3*** – ddeffgh...	9x3bxx – ddeffgh...	O9x3bxx – ddeffgh...
Proline t-mass 300	6*3*** – ddeffgh...	O6*3*** – ddeffgh...	6x3bxx – ddeffgh...	O6x3bxx – ddeffgh...
Proline Teqwave M 300	4*3*** – ddeffgh...	O4*3*** – ddeffgh...	4x3bxx – ddeffgh...	O4x3bxx – ddeffgh...

with “Approval” options **dd** = CC, CD, CE, C1, C2, C3, C4 (cCSAus / CSA)
dd = BA, BB, BC, BD (IECEX / ATEX)
e = “Power Supply” code, **ff** = “IO1” code, **g** = “IO2” code, **h** = “IO3” code, **i** = “IO4” code

1.1.1. Power Supply

Order code “Power supply” e =	Terminal No.	Type of protection	Values
D	1(L+) and 2(L-)	Non-intrinsically safe	U _N = DC 19.2...28.8 V U _M = AC 250 V
E	1(L) and 2(N)		U _N = AC 85...264 V U _M = AC 250 V

1.1.2. Input/Output

Input/Output 1			
Order code “Input/Output 1” ff =	Terminal No.	Type of protection	Values
HA, TA	I/O1 (Terminal 26, 27)	Intrinsically safe (IS, Ex ia, AEx ia)	U _i = 30 V, I _i = 570 mA, P _i = 8.5 W, L _i = 10 µH, C _i = 5 nF
CA, CB			U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 6 nF
CC, CD			U _o = 21.8 V, I _o = 90 mA, P _o = 491 mW, L _o = 4.1 mH (IIC) / 15 mH (IIB), C _o = 160 nF (IIC) / 1160 nF (IIB)
			U _i = 30 V, I _i = 10 mA, P _i = 0.3 W, L _i = 5 µH, C _i = 6 nF
RC, MC		Non-intrinsically safe	2-WISE power load APL port profile SLAA (see Note 1): U _i = 17.5 V, I _i = 380 mA, P _i = 5.32 W, L _i = 10 µH, C _i = 5 nF
BA, BB, MA			U _N = DC 30 V, U _M = AC 250 V
LA, GA, SA			U _N = DC 32 V, U _M = AC 250 V
RB, MB			APL port profile SLAX / SPE PoDL classes 10, 11, 12: U _N = AC 3.3 V, U _M = AC 250 V
NA, RA	I/O1 (Port 1 (RJ45))		U _N = AC 3.3 V, U _M = AC 250 V

Input/Output 2			
Order code “Input/Output 2” g =	Terminal No.	Type of protection	Values
C, G, K	I/O2 (Terminal 24, 25)	Intrinsically safe (IS, Ex ia, AEx ia)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Input/Output 3			
Order code “Input/Output 3” h =	Terminal No.	Type of protection	Values
C, G, K	I/O3 (Terminal 22, 23)	Intrinsically safe (IS, Ex ia, AEx ia)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Note 1: for devices with the order code “Output; Input 1” ff = RC and MC, the installation instructions in “Ethernet-APL Installation Drawing - Device End Users v1.0” for option 2-WISE power load port (6) must be followed. This document is available for download at <https://www.ethernet-apl.org/library/>.

 Endress+Hauser People for Process Automation Endress+Hauser Flow Kägenstrasse 7, 4153 Reinach, Basel-Landschaft, Switzerland	Control Drawing - IECEx, ATEX, CSA, cCSAus	Document No.:	FES0259
	Proline 300/500	Rev.:	G
	Electrical Parameters	Date:	15.04.2025
	EPL Gb (Zone 1), EPL Gc (Zone 2), EPL Db (Zone 21); Cl. I Div. 1, Div. 2, Cl. I Zone 1; Zone 2, Cl. II, III, Zone 21	Page:	1/11

1.1.3. Service interface

Order code “Approval” dd =	Terminal no.	Type of protection	Values
BA, BB, C1, C2	Service Interface (CDI) or Port 2 (RJ45)	Intrinsically safe (IS, Ex ia, AEx ia)	Ui = 10 V, li = n.a., Pi = n.a., Ci = 200 nF, Li = 0
		Non-intrinsically safe	UN = AC 3.3 V, UM = AC 250 V Connect only to a non-intrinsically safe circuit in areas which are known to be non-hazardous
BC, BD, CC, CD, CE, C3, C4		Intrinsically safe (IS, Ex ia, AEx ia)	Ui = 10 V, li = n.a., Pi = n.a., Ci = 200 nF, Li = 0
		Non-intrinsically safe	UN = AC 3.3 V, UM = AC 250 V

1.1.4. Output for external antenna (via Antenna Bushing H337)

Order code "Approval" dd =	Terminal no.	Type of protection	Values
BA, BB, C1, C2	Type N connector	Intrinsically safe (IS, Ex ia, AEx ia)	Use only external antenna supplied by Endress+Hauser (refer to E+H Safety Instructions for more details)

1.1.5. Output for Remote Display DKX001 or ODKX001

Order code "Approval" dd =	Terminal no.	Type of protection	Values
BA, BB, BC, BD, CC, CD, CE, C1, C2, C3, C4	81, 82, 83, 84	Intrinsically safe (IS, Ex ia, AEx ia)	$U_o = 3.9 \text{ V}$ $I_o = 1.5 \text{ A (spark)}$ 200 mA (power) $P_o = 600 \text{ mW}$ $R_i = 2.6 \Omega$ $C_o = 670 \mu\text{F}$ $L_o = 0$ Note: a connection cable with a ratio $L_{\text{cable}}/R_{\text{cable}} \leq 0.024$ mH/Ω and $C_{\text{cable}} \leq 600 \mu\text{F}$ must be used when connecting the Remote Display DKX001 or ODKX001



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Control Drawing - IECEx, ATEX, CSA, cCSAus

Proline 300/500

Electrical Parameters

EPL Gb (Zone 1), EPL Gc (Zone 2), EPL Db (Zone 21); Cl. I Div. 1,
Div. 2, Cl. I Zone 1; Zone 2, Cl. II, III, Zone 21

Document No.: FES0259

Rev.: G

Date: 15.04.2025

Page: 2/11

1.2. Devices installed in EPL Gc (Zone 2); Cl. I Div. 2, Cl. I Zone 2

This section applies to Proline 300 versions with extended order code covering:

	flowmeter	flowmeter OEM version	replacement transmitter	replacement transmitter OEM
Proline Promag 300	5*3*** – dd*effgh...	O5*3*** – dd*effgh...	5x3bxx – ddeffgh...	O5x3bxx – ddeffgh...
Proline Promass 300	8*3*** – ddeffgh...	O8*3*** – ddeffgh...	8x3bxx – ddeffgh...	O8x3bxx – ddeffgh...
Proline Prosonic Flow G 300	9*3*** – ddeffgh...	O9*3*** – ddeffgh...	9x3bxx – ddeffgh...	O9x3bxx – ddeffgh...
Proline t-mass 300	6*3*** – ddeffgh...	O6*3*** – ddeffgh...	6x3bxx – ddeffgh...	O6x3bxx – ddeffgh...
Proline Teqwave M 300	4*3*** – ddeffgh...	O4*3*** – ddeffgh...	4x3bxx – ddeffgh...	O4x3bxx – ddeffgh...

with "Approval" options **dd** = CS, CZ, (cCSAus / CSA)
 dd = BS (IECEX / ATEX)
e = "Power Supply" code, **ff** = "IO1" code, **g** = "IO2" code, **h** = "IO3" code, **i** = "IO4" code

1.2.1. Power Supply

Order code "Power supply" e =	Terminal No.	Type of protection	Values
I	1(L+/L) and 2(L-/N)	Non-intrinsically safe	U _N = DC 19.2...28.8 V / AC 85...264 V U _M = AC 250 V

1.2.2. Input/Output

Input/Output 1			
Order code "Input/Output 1" ff =	Terminal No.	Type of protection	Values
HA, TA	I/O1 (Terminal 26, 27)	Intrinsically safe (NIFW, Ex ic, AEx ic)	U _i = 30 V, I _i = 570 mA, P _i = 8.5 W, L _i = 10 µH, C _i = 5 nF
CA, CB			U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 6 nF
CC, CD			U _o = 21.8 V, I _o = 90 mA, P _o = 491 mW, L _o = 4.1 mH (IIC) / 15 mH (IIB), C _o = 160 nF (IIC) / 1160 nF (IIB)
RC, MC			U _i = 30 V, I _i = 10 mA, P _i = 0.3 W, L _i = 5 µH, C _i = 6 nF
BA, BB, MA		Non-intrinsically safe	2-WISE power load APL port profile SLAC (see Note 1): U _i = 17.5 V, I _i = 380 mA, P _i = 5.32 W, L _i = 10 µH, C _i = 5 nF
LA, GA, SA			U _N = DC 30 V, U _M = AC 250 V
RB, MB			U _N = DC 32 V, U _M = AC 250 V
NA, RA			APL port profile SLAX / SPE PoDL classes 10, 11, 12: U _N = AC 3.3 V, U _M = AC 250 V
	I/O1 (Port 1 (RJ45))		U _N = AC 3.3 V, U _M = AC 250 V

Input/Output 2			
Order code "Input/Output 2" g =	Terminal No.	Type of protection	Values
C, G, K	I/O2 (Terminal 24, 25)	Intrinsically safe (NIFW, Ex ic, AEx ic)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Input/Output 3			
Order code "Input/Output 3" h =	Terminal No.	Type of protection	Values
C, G, K	I/O3 (Terminal 22, 23)	Intrinsically safe (NIFW, Ex ic, AEx ic)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Note 1: for devices with the order code "Output; Input 1" ff = RC and MC, the installation instructions in "Ethernet-APL Installation Drawing - Device End Users v1.0" for option 2-WISE power load port (6) must be followed. This document is available for download at <https://www.ethernet-apl.org/library/>.



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Control Drawing - IECEx, ATEX, CSA, cCSAus

Proline 300/500

Electrical Parameters

EPL Gb (Zone 1), EPL Gc (Zone 2), EPL Db (Zone 21); Cl. I Div. 1,
Div. 2, Cl. I Zone 1; Zone 2, Cl. II, III, Zone 21

Document No.: FES0259

Rev.: G

Date: 15.04.2025

Page: 3/11

1.2.3. Service interface

Order code "Approval" dd =	Terminal no.	Type of protection	Values
BS, CS, CZ	Service Interface (CDI) or Port 2 (RJ45)	Non-intrinsically safe	$U_N = AC\ 3.3\ V$, $U_M = AC\ 250\ V$

1.2.4. Output for external antenna (via Antenna Bushing H337)

Order code "Approval" dd =	Terminal no.	Type of protection	Values
BS, CS, CZ	Type N connector	Intrinsically safe (NIFW, Ex ic, AEx ic)	Use only external antenna supplied by Endress+Hauser (refer to E+H Safety Instructions for more details)

1.2.5. Output for Remote Display DKX001 or ODKX001

Order code "Approval" dd =	Terminal no.	Type of protection	Values
BS, CS, CZ	81, 82, 83, 84	Non-intrinsically safe	$U_N = 3.3\ V$ $I_N = 150\ mA$



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Control Drawing - IECEx, ATEX, CSA, cCSA_{US}

Proline 300/500

Electrical Parameters

EPL Gb (Zone 1), EPL Gc (Zone 2), EPL Db (Zone 21); Cl. I Div. 1,
Div. 2, Cl. I Zone 1; Zone 2, Cl. II, III, Zone 21

Document No.: FES0259

Rev.: G

Date: 15.04.2025

Page: 4/11

2. Proline 500 (ISEM in transmitter) – Remote version

2.1. Transmitter and sensor installed in EPL Gb (Zone 1), Db (Zone 21); Cl. I Div. 1, Cl. I Zone 1; Cl. II, III, Zone 21

This section applies to Proline 500 versions (ISEM in transmitter) with extended order code covering:

	flowmeter	flowmeter OEM version	replacement transmitter	replacement transmitter OEM
Proline Promag 500	5*5*** – dd*effghi.B...	O5*5*** – dd*effghi.B...	5x5bxx – ddeffghi.B...	O5x5bxx – ddeffghi.B...
Proline Promass 500	8*5*** – ddeffghi.B...	O8*5*** – ddeffghi.B...	8x5bxx – ddeffghi.B...	O8x5bxx – ddeffghi.B...
Proline Prosonic Flow P 500	9*5*** – ddeffghi.B...	O9*5*** – ddeffghi.B...	9x5bxx – ddeffghi.B...	O9x5bxx – ddeffghi.B...

with "Approval" options

dd = CC, CD, CE, C1, C2, C3, C4, C7, C8 (cCSAus / CSA)

dd = BA, BB, BC, BD, B7, B8 (IECEX / ATEX)

e = "Power Supply" code, **ff** = "IO1" code, **g** = "IO2" code, **h** = "IO3" code, **i** = "IO4" code

2.1.1. Power Supply

Order code "Power supply" e =	Terminal No.	Type of protection	Values
D	1(L+) and 2(L-)	Non-intrinsically safe	U _N = DC 19.2...28.8 V U _M = AC 250 V
E	1(L) and 2(N)		U _N = AC 85...264 V U _M = AC 250 V

2.1.2. Input/Output

Input/Output 1			
Order code "Input/Output 1" ff =	Terminal No.	Type of protection	Values
HA, TA	I/O1 (Terminal 26, 27)	Intrinsically safe (IS, Ex ia, AEx ia)	U _i = 30 V, I _i = 570 mA, P _i = 8.5 W, L _i = 10 µH, C _i = 5 nF
CA, CB			U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 6 nF
CC, CD			U _o = 21.8 V, I _o = 90 mA, P _o = 491 mW, L _o = 4.1 mH (IIC) / 15 mH (IIB), C _o = 160 nF (IIC) / 1160 nF (IIB)
			U _i = 30 V, I _i = 10 mA, P _i = 0.3 W, L _i = 5 µH, C _i = 6 nF
RC, MC		Non-intrinsically safe	2-WISE power load APL port profile SLAA (see Note 1): U _i = 17.5 V, I _i = 380 mA, P _i = 5.32 W, L _i = 10 µH, C _i = 5 nF
BA, BB, MA			U _N = DC 30 V, U _M = AC 250 V
LA, GA, SA			U _N = DC 32 V, U _M = AC 250 V
RB, MB			APL port profile SLAX / SPE PoDL classes 10, 11, 12: U _N = AC 3.3 V, U _M = AC 250 V
NA, RA	I/O1 (Port 1 (RJ45))		U _N = AC 3.3 V, U _M = AC 250 V

Input/Output 2			
Order code "Input/Output 2" g =	Terminal No.	Type of protection	Values
C, G, K	I/O2 (Terminal 24, 25)	Intrinsically safe (IS, Ex ia, AEx ia)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Input/Output 3			
Order code "Input/Output 3" h =	Terminal No.	Type of protection	Values
C, G, K	I/O3 (Terminal 22, 23)	Intrinsically safe (IS, Ex ia, AEx ia)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Input/Output 4			
Order code "Input/Output 4" i =	Terminal No.	Type of protection	Values
C, G, K	I/O4 (Terminal 20, 21)	Intrinsically safe (IS, Ex ia, AEx ia)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Note 1: for devices with the order code "Output; Input 1" ff = RC and MC, the installation instructions in "Ethernet-APL Installation Drawing - Device End Users v1.0" for option 2-WISE power load port (6) must be followed. This document is available for download at <https://www.ethernet-apl.org/library/>.



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Control Drawing - IECEX, ATEX, CSA, cCSAus

Document No.: FES0259

Proline 300/500

Rev.: G

Electrical Parameters

Date: 15.04.2025

EPL Gb (Zone 1), EPL Gc (Zone 2), EPL Db (Zone 21); Cl. I Div. 1, Div. 2, Cl. I Zone 1; Zone 2, Cl. II, III, Zone 21

Page: 5/11

2.1.3. Service interface

Order code “Approval” dd =	Terminal no.	Type of protection	Values
BA, BB, B7, C1, C2, C7	Service Interface (CDI) or Port 2 (RJ45)	Intrinsically safe (IS, Ex ia, AEx ia)	Ui = 10 V, li = n.a., Pi = n.a., Ci = 200 nF, Li = 0
		Non-intrinsically safe	UN = AC 3.3 V, UM = AC 250 V Connect only to a non-intrinsically safe circuit in areas which are known to be non-hazardous
BC, BD, B8, CC, CD, CE, C3, C4, C8		Intrinsically safe (IS, Ex ia, AEx ia)	Ui = 10 V, li = n.a., Pi = n.a., Ci = 200 nF, Li = 0
		Non-intrinsically safe	UN = AC 3.3 V, UM = AC 250 V

2.1.4. Output for external antenna (via Antenna Bushing H337)

Order code "Approval" dd =	Terminal no.	Type of protection	Values
BA, BB, B7, C1, C2, C7	Type N connector	Intrinsically safe (IS, Ex ia, AEx ia)	Use only external antenna supplied by Endress+Hauser (refer to E+H Safety Instructions for more details)

2.1.5. Output for Remote Display DKX001 or ODKX001

The Remote Display DKX001 or ODKX001 is not intended for connection to the Proline 500.



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Control Drawing - IECEx, ATEX, CSA, cCSA_{US}

Proline 300/500

Electrical Parameters

EPL Gb (Zone 1), EPL Gc (Zone 2), EPL Db (Zone 21); Cl. I Div. 1,
Div. 2, Cl. I Zone 1; Zone 2, Cl. II, III, Zone 21

Document No.: FES0259

Rev.: G

Date: 15.04.2025

Page: 6/11

2.2. Transmitter and sensor installed in EPL Gc (Zone 2); Cl. I Div. 2, Cl. I Zone 2

This section applies to Proline 500 versions (ISEM in transmitter) with extended order code covering:

	flowmeter	flowmeter OEM version	replacement transmitter	replacement transmitter OEM
Proline Promag 500	5*5*** – dd*effghi.B...	O5*5*** – dd*effghi.B...	5x5bxx – ddeffghi.B...	O5x5bxx – ddeffghi.B...
Proline Promass 500	8*5*** – ddeffghi.B...	O8*5*** – ddeffghi.B...	8x5bxx – ddeffghi.B...	O8x5bxx – ddeffghi.B...
Proline Prosonic Flow P 500	9*5*** – ddeffghi.B...	O9*5*** – ddeffghi.B...	9x5bxx – ddeffghi.B...	O9x5bxx – ddeffghi.B...

with "Approval" options

dd = CS, CZ (cCSAus / CSA)

dd = BS (IECEX / ATEX)

e = "Power Supply" code, ff = "IO1" code, g = "IO2" code, h = "IO3" code, i = "IO4" code

2.2.1. Power Supply

Order code "Power supply" e =	Terminal No.	Type of protection	Values
I	1(L+/L) and 2(L-/N)	Non-intrinsically safe	U _N = DC 19.2...28.8 V / AC 85...264 V U _M = AC 250 V

2.2.2. Input/Output

Input/Output 1			
Order code "Input/Output 1" ff =	Terminal No.	Type of protection	Values
HA, TA	I/O1 (Terminal 26, 27)	Intrinsically safe (NIFW, Ex ic, AEx ic)	U _i = 30 V, I _i = 570 mA, P _i = 8.5 W, L _i = 10 µH, C _i = 5 nF
CA, CB			U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 6 nF
CC, CD			U _o = 21.8 V, I _o = 90 mA, P _o = 491 mW, L _o = 4.1 mH (IIC) / 15 mH (IIB), C _o = 160 nF (IIC) / 1160 nF (IIB)
			U _i = 30 V, I _i = 10 mA, P _i = 0.3 W, L _i = 5 µH, C _i = 6 nF
RC, MC		Non-intrinsically safe	2-WISE power load APL port profile SLAC (see Note 1): U _i = 17.5 V, I _i = 380 mA, P _i = 5.32 W, L _i = 10 µH, C _i = 5 nF
BA, BB, MA			U _N = DC 30 V, U _M = AC 250 V
LA, GA, SA			U _N = DC 32 V, U _M = AC 250 V
RB, MB			APL port profile SLAX / SPE PoDL classes 10, 11, 12: U _N = AC 3.3 V, U _M = AC 250 V
NA, RA	I/O1 (Port 1 (RJ45))		U _N = AC 3.3 V, U _M = AC 250 V

Input/Output 2			
Order code "Input/Output 2" g =	Terminal No.	Type of protection	Values
C, G, K	I/O2 (Terminal 24, 25)	Intrinsically safe (NIFW, Ex ic, AEx ic)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Input/Output 3			
Order code "Input/Output 3" h =	Terminal No.	Type of protection	Values
C, G, K	I/O3 (Terminal 22, 23)	Intrinsically safe (NIFW, Ex ic, AEx ic)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Input/Output 4			
Order code "Input/Output 4" i =	Terminal No.	Type of protection	Values
C, G, K	I/O4 (Terminal 20, 21)	Intrinsically safe (NIFW, Ex ic, AEx ic)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Note 1: for devices with the order code "Output; Input 1" ff = RC and MC, the installation instructions in "Ethernet-APL Installation Drawing - Device End Users v1.0" for option 2-WISE power load port (6) must be followed. This document is available for download at <https://www.ethernet-apl.org/library/>.



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Control Drawing - IECEx, ATEX, CSA, cCSAus

Proline 300/500

Electrical Parameters

EPL Gb (Zone 1), EPL Gc (Zone 2), EPL Db (Zone 21); Cl. I Div. 1,
Div. 2, Cl. I Zone 1; Zone 2, Cl. II, III, Zone 21

Document No.: FES0259

Rev.: G

Date: 15.04.2025

Page: 7/11

2.2.3. Service interface

Order code "Approval" dd =	Terminal no.	Type of protection	Values
BS CS, CZ	Service Interface (CDI) or Port 2 (RJ45)	Non-intrinsically safe	$U_N = AC\ 3.3\ V$, $U_M = AC\ 250\ V$

2.2.4. Output for external antenna (via Antenna Bushing H337)

Order code "Approval" dd =	Terminal no.	Type of protection	Values
BS, CS, CZ	Type N connector	Intrinsically safe (NIFW, Ex ic, AEx ic)	Use only external antenna supplied by Endress+Hauser (refer to E+H Safety Instructions for more details)

2.2.5. Output for Remote Display DKX001 or ODKX001

The Remote Display DKX001 or ODKX001 is not intended for connection to the Proline 500.



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Proline 300/500

Electrical Parameters

EPL Gb (Zone 1), EPL Gc (Zone 2), EPL Db (Zone 21); Cl. I Div. 1,
Div. 2, Cl. I Zone 1; Zone 2, Cl. II, III, Zone 21

Document No.: FES0259

Rev.: G

Date: 15.04.2025

Page: 8/11

3. Proline 500 Digital (ISEM in sensor) – Remote version

3.1. Transmitter and sensor installed in EPL Gc (Zone 2); Cl. I Div. 2, Cl. I Zone 2

This section applies to Proline 500 Digital versions (ISEM in sensor) with extended order code covering:

	flowmeter	flowmeter OEM version	replacement transmitter	replacement transmitter OEM
Proline Promag 500 Digital	5*5*** – dd*effghi.A...	O5*5*** – dd*effghi.A...	5x5bxx – ddeffghi.A...	O5x5bxx – ddeffghi.A...
Proline Promass 500 Digital	8*5*** – ddeffghi.A...	O8*5*** – ddeffghi.A...	8x5bxx – ddeffghi.A...	O8x5bxx – ddeffghi.A...
Proline Prosonic Flow G 500 Digital	9*5*** – ddeffghi.A...	O9*5*** – ddeffghi.A...	9x5bxx – ddeffghi.A...	O9x5bxx – ddeffghi.A...
Proline t-mass 500 Digital	6*5*** – ddeffghi.A...	O6*5*** – ddeffghi.A...	6x5bxx – ddeffghi.A...	O6x5bxx – ddeffghi.A...
Proline Tegwave M 500 Digital	4*5*** – ddeffghi.A...	O4*5*** – ddeffghi.A...	4x5bxx – ddeffghi.A...	O4x5bxx – ddeffghi.A...

with "Approval" options

dd = CM, CN, CS, CZ, C5, C6 (cCSAus / CSA)

dd = BM, BN, BS (IECEX / ATEX)

e = "Power Supply" code, ff = "IO1" code, g = "IO2" code, h = "IO3" code, i = "IO4" code

3.1.1. Power Supply

Order code "Power supply" e =	Terminal No.	Type of protection	Values
I	1(L+/L) and 2(L-/N)	Non-intrinsically safe	U _N = DC 19.2...28.8 V / AC 85...264 V U _M = AC 250 V

3.1.2. Input/Output

Input/Output 1			
Order code "Input/Output 1" ff =	Terminal No.	Type of protection	Values
HA, TA	I/O1 (Terminal 26, 27)	Intrinsically safe (NIFW, Ex ic, AEx ic)	U _i = 30 V, I _i = 570 mA, P _i = 8.5 W, L _i = 10 µH, C _i = 5 nF
CA, CB			U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 6 nF
CC, CD			U _o = 21.8 V, I _o = 90 mA, P _o = 491 mW, L _o = 4.1 mH (IIC) / 15 mH (IIB), C _o = 160 nF (IIC) / 1160 nF (IIB)
			U _i = 30 V, I _i = 10 mA, P _i = 0.3 W, L _i = 5 µH, C _i = 6 nF
RC, MC		Non-intrinsically safe	2-WISE power load APL port profile SLAC (see Note 1): U _i = 17.5 V, I _i = 380 mA, P _i = 5.32 W, L _i = 10 µH, C _i = 5 nF
BA, BB, MA			U _N = DC 30 V, U _M = AC 250 V
LA, GA, SA			U _N = DC 32 V, U _M = AC 250 V
RB, MB			APL port profile SLAX / SPE PoDL classes 10, 11, 12: U _N = AC 3.3 V, U _M = AC 250 V
NA, RA	I/O1 (Port 1 (RJ45))		U _N = AC 3.3 V, U _M = AC 250 V

Input/Output 2			
Order code "Input/Output 2" g =	Terminal No.	Type of protection	Values
C, G, K	I/O2 (Terminal 24, 25)	Intrinsically safe (NIFW, Ex ic, AEx ic)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Input/Output 3			
Order code "Input/Output 3" h =	Terminal No.	Type of protection	Values
C, G, K	I/O3 (Terminal 22, 23)	Intrinsically safe (NIFW, Ex ic, AEx ic)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Input/Output 4			
Order code "Input/Output 4" i =	Terminal No.	Type of protection	Values
C, G, K	I/O4 (Terminal 20, 21)	Intrinsically safe (NIFW, Ex ic, AEx ic)	U _i = 30 V, I _i = 100 mA, P _i = 1.25 W, L _i = 0, C _i = 0
B, D, E, F, I, J, L		Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Note 1: for devices with the order code "Output; Input 1" ff = RC and MC, the installation instructions in "Ethernet-APL Installation Drawing - Device End Users v1.0" for option 2-WISE power load port (6) must be followed. This document is available for download at <https://www.ethernet-apl.org/library/>.



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Control Drawing - IECEx, ATEX, CSA, cCSAus

Proline 300/500

Electrical Parameters

EPL Gb (Zone 1), EPL Gc (Zone 2), EPL Db (Zone 21); Cl. I Div. 1,
Div. 2, Cl. I Zone 1; Zone 2, Cl. II, III, Zone 21

Document No.: FES0259

Rev.: G

Date: 15.04.2025

Page: 9/11

3.1.3. Service interface

Order code "Approval" dd =	Terminal no.	Type of protection	Values
BM, BN, BS CM, CN, CS, CZ, C5, C6	Service Interface (CDI) or Port 2 (RJ45)	Non-intrinsically safe	$U_N = AC\ 3.3\ V$, $U_M = AC\ 250\ V$

3.1.4. Output for external antenna (via Antenna Bushing H337)

Order code "Approval" dd =	Terminal no.	Type of protection	Values
BM, BN, BS, CM, CN, CS, CZ, C5, C6	Type N connector	Intrinsically safe (NIFW, Ex ic, AEx ic)	Use only external antenna supplied by Endress+Hauser (refer to E+H Safety Instructions for more details)

3.1.5. Output for Remote Display DKX001 or ODKX001

The Remote Display DKX001 or ODKX001 is not intended for connection to the Proline 500 Digital.



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Control Drawing - IECEx, ATEX, CSA, cCSA_{US}

Proline 300/500

Electrical Parameters

EPL Gb (Zone 1), EPL Gc (Zone 2), EPL Db (Zone 21); Cl. I Div. 1,
Div. 2, Cl. I Zone 1; Zone 2, Cl. II, III, Zone 21

Document No.: FES0259

Rev.: G

Date: 15.04.2025

Page: 10/11

3.2. Transmitter installed in non-hazardous areas and sensor in EPL Gb (Zone 1) or EPL Gc (Zone 2)

This section applies to Proline 500 Digital versions (ISEM in sensor) with extended order code covering:

	flowmeter	flowmeter OEM version	replacement transmitter	replacement transmitter OEM
Proline Promag 500 Digital	5*5*** – dd*effghi.A...	O5*5*** – dd*effghi.A...	5x5bxx – ddeffghi.A...	O5x5bxx – ddeffghi.A...
Proline Promass 500 Digital	8*5*** – ddeffghi.A...	O8*5*** – ddeffghi.A...	8x5bxx – ddeffghi.A...	O8x5bxx – ddeffghi.A...
Proline Prosonic Flow G 500 Digital	9*5*** – ddeffghi.A...	O9*5*** – ddeffghi.A...	9x5bxx – ddeffghi.A...	O9x5bxx – ddeffghi.A...
Proline t-mass 500 Digital	6*5*** – ddeffghi.A...	O6*5*** – ddeffghi.A...	6x5bxx – ddeffghi.A...	O6x5bxx – ddeffghi.A...
Proline Teqwave M 500 Digital	4*5*** – ddeffghi.A...	O4*5*** – ddeffghi.A...	4x5bxx – ddeffghi.A...	O4x5bxx – ddeffghi.A...

with "Approval" options

dd = BI, BJ, BL (IECEX / ATEX)

e = "Power Supply" code, **ff** = "IO1" code, **g** = "IO2" code, **h** = "IO3" code, **i** = "IO4" code

3.2.1. Power Supply

Order code "Power supply" e =	Terminal No.	Type of protection	Values
I	1(L+/L) and 2(L-/N)	Non-intrinsically safe	U _N = DC 19.2...28.8 V / AC 85...264 V U _M = AC 250 V

3.2.2. Input/Output

Input/Output 1			
Order code "Input/Output 1" ff =	Terminal No.	Type of protection	Values
BA, BB, MA	I/O1 (Terminal 26, 27)	Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
LA, GA, SA			U _N = DC 32 V, U _M = AC 250 V
RB, MB			APL port profile SLAX / SPE PoDL classes 10, 11, 12: U _N = AC 3.3 V, U _M = AC 250 V
NA, RA	I/O1 (Port 1 (RJ45))		U _N = AC 3.3 V, U _M = AC 250 V

Input/Output 2			
Order code "Input/Output 2" g =	Terminal No.	Type of protection	Values
B, D, E, F, I, J, L	I/O2 (Terminal 24, 25)	Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Input/Output 3			
Order code "Input/Output 3" h =	Terminal No.	Type of protection	Values
B, D, E, F, I, J, L	I/O3 (Terminal 22, 23)	Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

Input/Output 4			
Order code "Input/Output 4" i =	Terminal No.	Type of protection	Values
B, D, E, F, I, J, L	I/O4 (Terminal 20, 21)	Non-intrinsically safe	U _N = DC 30 V, U _M = AC 250 V
H			U _N = DC 30 V, I _N = DC 100 mA / AC 500 mA, U _M = AC 250 V

3.2.3. Service interface

Order code "Approval" dd =	Terminal No.	Type of protection	Values
BI, BJ, BL	Service Interface (CDI) or Port 2 (RJ45)	Non-intrinsically safe	U _N = AC 3.3 V, U _M = AC 250 V

3.2.4. Output for external antenna (via Antenna Bushing H337)

Order code "Approval" dd =	Terminal no.	Type of protection	Values
BI, BJ, BL	Type N connector	Non-intrinsically safe	Use only external antenna supplied by Endress+Hauser (refer to E+H Safety Instructions for more details)

3.2.5. Output for Remote Display DKX001 or ODKX001

The Remote Display DKX001 or ODKX001 is not intended for connection to the Proline 500 Digital.



Endress+Hauser
People for Process Automation

Endress+Hauser Flow
Kägenstrasse 7, 4153 Reinach, Basel-Landschaft,
Switzerland

Control Drawing - IECEx, ATEX, CSA, cCSA_{US}

Proline 300/500

Electrical Parameters

EPL Gb (Zone 1), EPL Gc (Zone 2), EPL Db (Zone 21); Cl. I Div. 1,
Div. 2, Cl. I Zone 1; Zone 2, Cl. II, III, Zone 21

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Page: 11/11