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** **Attention:** Minh Do	**Issued by:**	*Anil Sodhi* Anil Sodhi, P. Eng.

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

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 – ddeffghjlpsstttvww + #**#
O8a3bcc – ddeffghjlpsstttvwwyy + #**# for OEM-version
8x3bxx – ddeffghjlprrsww + #**# for replacement transmitter
O8x3bxx – ddeffghjlprrswwyy + #**# for replacement transmitter OEM

Extended order code Proline Promass 500 and Cubemass 500:

8a5bcc – ddeffghijkmnopssttvww + #**#
O8a5bcc – ddeffghijkmnopssttvwwyy + #**# for OEM-version
8x5bxx – ddeffghijkmopqqrrsww + #**# for replacement transmitter
O8x5bxx – ddeffghijkmopqqrrswwyy + #**# 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

dd	=	**Approval** Proline Promass/Cubemass 300 (compact version): 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 Proline Promass/Cubemass 500 (remote version, ISEM in transmitter): 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) Proline Promass/Cubemass 500 Digital (remote version, ISEM in sensor): 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

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

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 – ddzeffghijkmnopstttuvww + ##**

O5a5bcc – ddzeffghijkmnopstttuvwwyy + ##** for OEM-version

5x5bxx – ddeffghijkmopqqww + ##** for replacement transmitter only

O5x5bxx – ddeffghijkmopqqwwyy + ##** 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
dd	=	**Approval** Proline Promag 300 (compact version): 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 Proline Promag 500 (remote version, ISEM in transmitter): 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) - Proline Promag 500 Digital (remote version, ISEM in 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)
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

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

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 – ddeffghjlpsstuuuvww + ##**
O9G3bcc – ddeffghjlpsstuuuvwwyy + ##** for OEM-version
9x3bxx – ddeffghjlprrssww + ##** for replacement transmitter
O9x3bxx – ddeffghjlprrsswwyy + ##** for replacement transmitter OEM

Extended order code Proline Prosonic Flow G 500:

9G5bcc – ddeffghijkmnopsstuuuvww + ##**
O9G5bcc – ddeffghijkmnopsstuuuvwwyy + ##** for OEM-version
9x5bxx – ddeffghijkmopqqrrsww + ##** for replacement transmitter
O9x5bxx – ddeffghijkmopqqrrsswwyy + ##** for replacement transmitter OEM

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

dd	=	**Approval** Proline Prosonic Flow G 300 (compact version): 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 Proline Prosonic Flow G 500 Digital (remote version, ISEM in 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
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 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**

Part C2 - Proline Prosonic Flow P 500

Extended order code Proline Prosonic Flow P 500:

9P5bcc – ddeffghjkmosstuuvvww + ##**
O9P5bcc – ddeffghjkmosstuuvvwwyy + ##** for OEM-version
9x5bxx – ddeffghijkmnopprrsww + ##** for replacement transmitter
O9x5bxx – ddeffghijkmnopprrswwyy + ##** 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

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

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 – ddqqrwwyy + ##** 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

#, +	**=**	**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 – ddeffghjlpsstttvww + ##**
6I3bcc – ddeffghjlpsstttuuvww + ##**
O6F3bcc – ddeffghjlpsstttvwwyy + ##** for OEM-version
O6I3bcc – ddeffghjlpsstttuuvwwyy + ##** 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 – ddeffghijkmopsww + ##** for replacement transmitter
O6x5bxx – ddeffghijkmopswwyy + ##** 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

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** (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 – ddeffghjlpstttww + ##**

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

Extended order code Proline Teqwave M 500:
4a5bcc – ddeffghijkmnopstttww + #**#
O4a5bcc – ddeffghijkmnopstttwwyy + #**# 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	=	Proline Teqwave M 300: CS = Cl.I Div.2, GP A-D Proline Teqwave M 500: CS = Cl.I 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

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 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
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 – ddeffghjlpssttvww + #**#

O8a3bcc – ddeffghjlpssttvwwyy + #**# for OEM-version
8x3bxx – ddeffghjlprrsww + #**# for replacement transmitter
O8x3bxx – ddeffghjlprrswwyy + #**# for replacement transmitter OEM

Extended order code Proline Promass 500 and Cubemass 500:
8a5bcc – ddeffghijkmnopssttvww + #**#
O8a5bcc – ddeffghijkmnopssttvwwyy + #**# for OEM-version
8x5bxx – ddeffghijkmopqqrrsww + #**# for replacement transmitter
O8x5bxx – ddeffghijkmopqqrrswwyy + #**# 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

dd	=	**Approval** Proline Promass/Cubemass 300 (compact version): 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 Proline Promass/Cubemass 500 (remote version, ISEM in transmitter): 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) Proline Promass/Cubemass 500 Digital (remote version, ISEM in sensor): 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)

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

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

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 – ddzeffghjlpsttuvww + ##**	
O5a3bcc – ddzeffghjlpsttuvwwyy + ##**	for OEM-version
5x3bxx – ddeffghjlpww + ##**	for replacement transmitter only
O5x3bxx – ddeffghjlpwwyy + ##**	for replacement transmitter OEM

Extended order code Proline Promag 500:

5a5bcc – ddzeffghijkmnopsttuvww + ##**	
O5a5bcc – ddzeffghijkmnopsttuvwwyy + ##**	for OEM-version
5x5bxx – ddeffghijkmopqqww + ##**	for replacement transmitter only
O5x5bxx – ddeffghijkmopqqwwyy + ##**	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

dd	=	**Approval** Proline Promag 300 (compact version): 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 Proline Promag 500 (remote version, ISEM in transmitter): 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) Proline Promag 500 Digital (remote version, ISEM in 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) 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

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

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**

Part C - Proline Prosonic Flow 300/500
Part C1 - Proline Prosonic Flow G 300/500

Extended order code Proline Prosonic Flow G 300:

9G3bcc – ddeffghjlpsstuuuvww + ##**
O9G3bcc – ddeffghjlpsstuuuvwwyy + ##** for OEM-version
9x3bxx – ddeffghjlprrsww + ##** for replacement transmitter
O9x3bxx – ddeffghjlprrsswwyy + ##** for replacement transmitter OEM

Extended order code Proline Prosonic Flow G 500:

9G5bcc – ddeffghijkmnopsstuuuvww + ##**
O9G5bcc – ddeffghijkmnopsstuuuvwwyy + ##** for OEM-version
9x5bxx – ddeffghijkmopqqrrsww + ##** for replacement transmitter
O9x5bxx – ddeffghijkmopqqrrsswwyy + ##** 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

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** (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**

Part C2 - Proline Prosonic Flow P 500

Extended order code Proline Prosonic Flow P 500:

9P5bcc – ddeffghjkmosstuuvvww + ##**
O9P5bcc – ddeffghjkmosstuuvvwwyy + ##** for OEM-version
9x5bxx – ddeffghijkmnopprrsswww + ##** for replacement transmitter
O9x5bxx – ddeffghijkmnopprrsswwyy + ##** 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

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

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 – ddqqrwwyy + ##** 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 – ddeffghjlpssttvww + ##**

6I3bcc – ddeffghjlpssttuuvww + ##**

O6F3bcc – ddeffghjlpssttvwwyy + ##** for OEM-version

O6I3bcc – ddeffghjlpssttuuvwwyy + ##** for OEM-version

6x3bxx – ddeffghjlpssww + ##** for replacement transmitter

O6x3bxx – ddeffghjlpsswwyy + ##** for replacement transmitter OEM

Extended order code Proline t-mass 500:

6F5bcc – ddeffghijkmnopssttvww + ##**
6I5bcc – ddeffghijkmnopssttuuvww + ##**
O6F5bcc – ddeffghijkmnopssttvwwyy + ##** for OEM-version
O6I5bcc – ddeffghijkmnopssttuuvwwyy + ##** 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** Proline t-mass 300: 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 Proline t-mass 500 Digital: 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

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** (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 – ddeffghjlpsttww + ##**

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

Extended order code Proline Teqwave M 500:
4a5bcc – ddeffghijkmnopstttww + #**#
O4a5bcc – ddeffghijkmnopstttwwyy + #**# 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	=	Proline Teqwave M 300: CS = Cl.I Div.2, GP A-D CZ = Ex ec IIC T5…T1 Gc Proline Teqwave M 500: CS = Cl.I 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

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 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
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 – ddeffghjlpssttvww + #**#
O8a3bcc – ddeffghjlpssttvwwyy + #**# for OEM-version
8x3bxx – ddeffghjlprrssww + #**# for replacement transmitter

O8x3bxx – ddeffghjlprrsswwyy + #**# for replacement transmitter OEM

Extended order code Proline Promass 500 and Cubemass 500:

8a5bcc – ddeffghijkmnopssttvww + #**#
O8a5bcc – ddeffghijkmnopssttvwwyy + #**# for OEM-version
8x5bxx – ddeffghijkmopqqrrsww + #**# for replacement transmitter
O8x5bxx – ddeffghijkmopqqrrswwyy + #**# 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

dd	=	**Approval** Proline Promass/Cubemass 300 (compact version): 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 Proline Promass/Cubemass 500 (remote version, ISEM in transmitter): 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) Proline Promass/Cubemass 500 Digital (remote version, ISEM in sensor): 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)
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
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
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 – ddzeffghjlpsttuvww + #**#	
O5a3bcc – ddzeffghjlpsttuvwwyy + #**#	for OEM-version
5x3bxx – ddeffghjlpww + #**#	for replacement transmitter only
O5x3bxx – ddeffghjlpwwyy + #**#	for replacement transmitter OEM

Extended order code Proline Promag 500:

5a5bcc – ddzeffghijkmnopsttuvww + #**#	
O5a5bcc – ddzeffghijkmnopsttuvwwyy + #**#	for OEM-version
5x5bxx – ddeffghijkmopqqww + #**#	for replacement transmitter only
O5x5bxx – ddeffghijkmopqqwwyy + #**#	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

dd	=	**Approval** Proline Promag 300 (compact version): 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 Proline Promag 500 (remote version, ISEM in transmitter): 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) Proline Promag 500 Digital (remote version, ISEM in sensor): 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

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

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**

Part C - Proline Prosonic Flow 300/500
Part C1 - Proline Prosonic Flow G 300/500

Extended order code Proline Prosonic Flow G 300:

9G3bcc – ddeffghjlpsstuuuvww + ##**
O9G3bcc – ddeffghjlpsstuuuvwwyy + ##** for OEM-version
9x3bxx – ddeffghjlprrsww + ##** for replacement transmitter
O9x3bxx – ddeffghjlprrswwyy + ##** for replacement transmitter OEM

Extended order code Proline Prosonic Flow G 500:

9G5bcc – ddeffghijkmnopsstuuuvww + ##**
O9G5bcc – ddeffghijkmnopsstuuuvwwyy + ##** for OEM-version
9x5bxx – ddeffghijkmopqqrrsww + ##** for replacement transmitter
O9x5bxx – ddeffghijkmopqqrrswwyy + ##** for replacement transmitter OEM

b	=	**Generation** B = Generation of Flowmeter
cc	=	**Size** any double digits with combination of number or letter
dd	=	**Approval** Proline Prosonic Flow G 300 (compact version): 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 Proline Prosonic Flow G 500 Digital (remote version, ISEM in sensor): 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

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** (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**

Part C2 - Proline Prosonic Flow P 500

Extended order code Proline Prosonic Flow P 500:

9P5bcc – ddeffghjkmosstuuvvww + #**#
O9P5bcc – ddeffghjkmosstuuvvwwyy + #**# for OEM-version
9x5bxx – ddeffghijkmnopprrsswww + #**# for replacement transmitter
O9x5bxx – ddeffghijkmnopprrsswwyy + #**# 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

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

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 – ddqqrwwyy + ##** 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 – ddeffghjlpssttvww + ##**
6I3bcc – ddeffghjlpssttuuvww + ##**
O6F3bcc – ddeffghjlpssttvwwyy + ##** for OEM-version
O6I3bcc – ddeffghjlpssttuuvwwyy + ##** for OEM-version
6x3bxx – ddeffghjlpssww + ##** for replacement transmitter
O6x3bxx – ddeffghjlpsswwyy + ##** for replacement transmitter OEM

Extended order code Proline t-mass 500:

6F5bcc – ddeffghijkmnopssttvww + ##**
6I5bcc – ddeffghijkmnopssttuuvww + ##**
O6F5bcc – ddeffghijkmnopssttvwwyy + ##** for OEM-version
O6I5bcc – ddeffghijkmnopssttuuvwwyy + ##** for OEM-version
6x5bxx – ddeffghijkmopsww + ##** for replacement transmitter
O6x5bxx – ddeffghijkmopswwyy + ##** 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** Proline t-mass 300: 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 Proline t-mass 500 Digital: 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

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** (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

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″

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-directionalRF 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 tolocal 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.

- 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.

- 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
C1, 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
C1, 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			
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0269	FES0264	FES0259
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			

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			
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0267	FES0261	FES0259
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			
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0267	FES0261	FES0259
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			
CZ	Transmitter & Sensor	Cl. I Zone 2	FES0320	FES0352	FES0259

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			

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

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

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 **Master Contract**: 160686

Project: 80267439 **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 Prosonic Flow G 300 (compact version)
Proline Prosonic Flow G 500 Digital (remote version)
Proline Prosonic Flow P 500 (remote version)

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

	flowmeter	**flowmeter OEM version**	**replacement transmitter**	**replacement transmitter OEM**
Proline Prosonic Flow G 300	9G3B** – ddeffgh…	O9G3B** – ddeffgh…	9x3Bxx – ddeffgh…	O9x3Bxx – ddeffgh…
Proline Prosonic Flow G 500 Digital (ISEM in sensor)	9G5B** – ddeffghi***A**…	O9G5B** – ddeffghi***A**…	9x5Bxx – ddeffghi***A**…	O9x5Bxx – ddeffghi***A**…
Proline Prosonic Flow P 500 (ISEM in transmitter)	9P5B** – ddeffgh***B**…	O9P5B** – ddeffgh***B**…	9x5Bxx – ddeffgh***B**…	O9x5Bxx – ddeffgh***B**…

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

1) General requirements

1. 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**
   - **FES0322 - THERMAL PARAMETERS (Proline Prosonic Flow G 300 and Proline Prosonic Flow G 500 Digital)**
   - **FES0352 - THERMAL PARAMETERS (Proline Prosonic Flow P 500)**
2. Install the Proline 300/500 devices in accordance with the Canadian Electrical Code (CEC) or the National Electrical Code (NEC) ANSI/NFPA 70.
3. 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.
4. 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 mm^2.
5. 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).
6. The Proline 300/500 devices shall be used only with process media for which the process-wetted parts are known to be suitable.

7. WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2
   AVERTISSEMENT – RISQUE D'EXPLOSION – LA SUBSTITUTION DE COMPOSANTS PEUT RENDRE CE MATÉRIEL INACCEPTABLE POUR LES EMPLACEMENTS DE CLASSE I, DIVISION 2
8. 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 device 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.
9. The 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
10. The Proline Prosonic Flow G 300 and Proline Prosonic Flow G 500 Digital (ISEM in sensor) devices are classified as Dual Seal devices. Refer to the device nameplate for the specified maximum working pressure.
11. For the Proline 500 Digital (ISEM in sensor) devices, all transmitter enclosure cover screws shall be tightened to a torque of 2.5 Nm.
12. Do not operate the I/O1 (Terminal 26, 27 or Port 1 (RJ45)) and Service Interface (CDI) / Port 2 (RJ45) simultaneously in hazardous locations.
13. 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 ec and Class I Div. 2 as part of the devices. Refer to the Safety Instructions XA*** for applicable models.

2) Specific requirements for Class I Division 2 or Ex ec / AEx ec (Zone 2)

1. 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.
2. 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.

3) Specific requirements for NIFW / Ex ic / AEx ic (Zone 2)

1. Observe the guidelines for interconnecting intrinsically safe circuits (e.g. CEC or NEC and other applicable standards).
2. 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.
3. Do not connect to the Service Interface / Port 2 (RJ45) in hazardous locations.

4) 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.

5) Specific requirements for Remote Display type DKX001 or ODKX001

1. 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.
2. 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 2	CS	CS
Class I Zone 2	CZ	CZ

6) 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.

1. Proline Prosonic Flow G 300

Notes: The chapter 1 applies to versions with extended order code covering:

9*3B** – **dd**…		(flowmeter)
O9*3B** – **dd** …		(flowmeter OEM version)
9x3Bxx – **dd**…		(replacement transmitter)
O9x3Bxx – **dd**…		(replacement transmitter OEM)
with "Approval"	**dd** = CS, CZ	(cCSAus / CSA)
	dd = BS	(IECEx / ATEX)

1.1. Ambient temperature range T_a

The rated ambient temperature range is indicated on the device's nameplate. This range is determined by factors such as sensor type, size, flange, maximum working pressure, and selected options. Additionally, this range may be further limited by the applied medium (process) temperature and temperature class. Refer to the temperature tables below for detailed limitations.

1.2. 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, maximum working pressure, and selected options. 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.

1.3. Proline Prosonic Flow G 300 *without thermal insulation* OR *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 ($T_{m, max\ permitted}$)

Size / DN	Medium range T_m (3)		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)
With integrated pressure sensor:										
25...300	-50	90	-40 / -50	55	---	40	90	90	90	90
				60	---	---	90	90	90	90
Without integrated pressure sensor:										
25...300	-50	150	-40 / -50	50	---	85	120	150	150	150
				55	---	---	120	150	150	150
				60	---	---	(120) (2)	(150) (2)	(150) (2)	(150) (2)

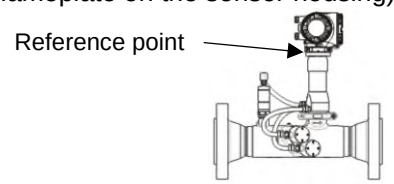
Notes: (1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).
(2) Values in brackets apply to installations where the transmitter is not installed above the sensor.
(3) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).

1.4. Proline Prosonic Flow G 300 *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 ($T_{ref, max\ permitted}$)

Size / DN	Medium range T_m (3)		Ambient range T_a (1)		Reference temperature $T_{ref, max\ permitted}$ (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)
With integrated pressure sensor:										
25...300	-50	90	-40 / -50	60	---	62	72	73	73	73
Without integrated pressure sensor:										
25...300	-50	150	-40 / -50	60	---	62	72	73	73	73

Notes: (1) Applicable ambient temperature range may be further limited (see the nameplate on the sensor housing).
(2) $T_{ref, max\ permitted}$: the maximum temperature measured at the reference point at the sensor neck. To maintain the assigned temperature class rating, the $T_{ref, max\ permitted}$ shall not exceed the values given in this table.
(3) Applicable medium temperature range may be further limited (see the nameplate on the sensor housing).



2. Proline Prosonic Flow G 500 Digital (ISEM in sensor, defined by the order code "ISEM electronic" k = A)

Notes: The chapter 2 applies to versions with extended order code covering:

9*5B** – **dd*********A…		(flowmeter)
O9*5B** – **dd*********A …		(flowmeter OEM version)
9x5Bxx – **dd*********A …		(replacement transmitter)
O9x5Bxx – **dd*********A …		(replacement transmitter OEM)
with "Approval"	**dd** = CS, CZ	(cCSAus / CSA)
	dd = BL, BS	(IECEx / ATEX)

2.1. Ambient temperature range T_a

The rated ambient temperature range is indicated on the device's nameplate. This range is determined by factors such as sensor type, size, flange, maximum working pressure, and selected options. Additionally, this range may be further limited by the applied medium (process) temperature and temperature class. Refer to the temperature tables below for detailed limitations.

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, maximum working pressure, and selected options. 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 Prosonic Flow G 500 Digital *without thermal insulation* OR *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 Prosonic Flow G Digital	Aluminium or Plastic	-50 / -40 (1)	60	T4 (135°C)
			45	T5 (100°C)

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 = BL): $T_{a, max}$ = 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 ($T_{m, max\ permitted}$)

Size / DN	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)
With integrated pressure sensor:										
25...300	-50	90	-50 / -40	55	---	40	90	90	90	90
				60	---	---	90	90	90	90
Without integrated pressure sensor:										
25...300	-50	150	-50 / -40	60	---	85	120	150	150	150

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).

2.4. Proline Prosonic Flow G 500 Digital *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 Prosonic Flow G Digital	Aluminium or Plastic	-50 / -40 (1)	60	T4 (135°C)
			45	T5 (100°C)

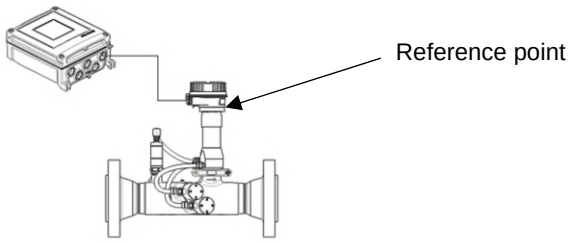
Notes: (1) $T_{a, min}$ = -50°C for aluminium enclosure, $T_{a, min}$ = -40°C for plastic enclosure. For versions with the transmitter installed in non-hazardous areas (with order code "Approval" dd = BL): $T_{a, max}$ = 60°C. Applicable ambient temperature range may be further limited (see the nameplate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

Sensor temperature class vs. Max. ambient temperature ($T_{a, max}$) & Max. permitted reference temperature ($T_{ref, max permitted}$)										
Size / DN	Medium range T_m (3)		Ambient range T_a (1)		Reference temperature $T_{ref, max permitted}$ (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)
With integrated pressure sensor:										
25...300	-50	90	-50 / -40	60	---	71	75	77	77	77
Without integrated pressure sensor:										
25...300	-50	150	-50 / -40	60	---	71	75	77	77	77

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

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

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



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)	Ui = 30 V, Ii = 570 mA, Pi = 8.5 W, Li = 10 µH, Ci = 5 nF
CA, CB			Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 6 nF
CC, CD			Uo = 21.8 V, Io = 90 mA, Po = 491 mW, Lo = 4.1 mH (IIC) / 15 mH (IIB), Co = 160 nF (IIC) / 1160 nF (IIB) Ui = 30 V, Ii = 10 mA, Pi = 0.3 W, Li = 5 µH, Ci = 6 nF
RC, MC			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		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**
C, G, K	I/O2 (Terminal 24, 25)	Intrinsically safe (IS, Ex ia, AEx ia)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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/.

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, Ii = n.a., Pi = n.a., Ci = 200 nF, Li = 0
		Non-intrinsically safe	U_N = AC 3.3 V, U_M = 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, Ii = n.a., Pi = n.a., Ci = 200 nF, Li = 0
		Non-intrinsically safe	U_N = AC 3.3 V, U_M = 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)	Uo = 3.9 V Io = 1.5 A (spark) 200 mA (power) Po = 600 mW Ri = 2.6 Ω Co = 670 µF Lo = 0 Note: a connection cable with a ratio $L_{cable}/R_{cable} \leq 0.024$ mH/Ω and $C_{cable} \leq 600$ µF must be used when connecting the Remote Display DKX001 or ODKX001

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)	Ui = 30 V, Ii = 570 mA, Pi = 8.5 W, Li = 10 µH, Ci = 5 nF
CA, CB			Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 6 nF
CC, CD			Uo = 21.8 V, Io = 90 mA, Po = 491 mW, Lo = 4.1 mH (IIC) / 15 mH (IIB), Co = 160 nF (IIC) / 1160 nF (IIB) Ui = 30 V, Ii = 10 mA, Pi = 0.3 W, Li = 5 µH, Ci = 6 nF
RC, MC			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		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**
C, G, K	I/O2 (Terminal 24, 25)	Intrinsically safe (NIFW, Ex ic, AEx ic)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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/.

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

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)	Ui = 30 V, Ii = 570 mA, Pi = 8.5 W, Li = 10 µH, Ci = 5 nF
CA, CB			Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 6 nF
CC, CD			Uo = 21.8 V, Io = 90 mA, Po = 491 mW, Lo = 4.1 mH (IIC) / 15 mH (IIB), Co = 160 nF (IIC) / 1160 nF (IIB) Ui = 30 V, Ii = 10 mA, Pi = 0.3 W, Li = 5 µH, Ci = 6 nF
RC, MC			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		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**
C, G, K	I/O2 (Terminal 24, 25)	Intrinsically safe (IS, Ex ia, AEx ia)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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/.

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, Ii = n.a., Pi = n.a., Ci = 200 nF, Li = 0
		Non-intrinsically safe	U_N = AC 3.3 V, U_M = 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, Ii = n.a., Pi = n.a., Ci = 200 nF, Li = 0
		Non-intrinsically safe	U_N = AC 3.3 V, U_M = 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.

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)	Ui = 30 V, Ii = 570 mA, Pi = 8.5 W, Li = 10 µH, Ci = 5 nF
CA, CB			Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 6 nF
CC, CD			Uo = 21.8 V, Io = 90 mA, Po = 491 mW, Lo = 4.1 mH (IIC) / 15 mH (IIB), Co = 160 nF (IIC) / 1160 nF (IIB) Ui = 30 V, Ii = 10 mA, Pi = 0.3 W, Li = 5 µH, Ci = 6 nF
RC, MC			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		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**
C, G, K	I/O2 (Terminal 24, 25)	Intrinsically safe (NIFW, Ex ic, AEx ic)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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/.

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.

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 Teqwave 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)	Ui = 30 V, Ii = 570 mA, Pi = 8.5 W, Li = 10 µH, Ci = 5 nF
CA, CB			Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 6 nF
CC, CD			Uo = 21.8 V, Io = 90 mA, Po = 491 mW, Lo = 4.1 mH (IIC) / 15 mH (IIB), Co = 160 nF (IIC) / 1160 nF (IIB) Ui = 30 V, Ii = 10 mA, Pi = 0.3 W, Li = 5 µH, Ci = 6 nF
RC, MC			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		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**
C, G, K	I/O2 (Terminal 24, 25)	Intrinsically safe (NIFW, Ex ic, AEx ic)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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)	Ui = 30 V, Ii = 100 mA, Pi = 1.25 W, Li = 0, Ci = 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/.

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.

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.