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EXPLOSION PROTECTION

CERTIFICATE OF CONFORMITY

Cert No. GYJ22.1051X

Manufacturer	Endress + Hauser Flowtec AG (Address: CH-4153, Reinach BL1, Switzerland)
Product	Electromagnetic Flowmeter
Model	Proline Promag 300/500
Ex marking	Refer to the attachment for details
Product standard	/
Drawing number	961001814-E, 961002020-F, 961002023-D, 961002082-B, 961001825-B, 340884-0003-ZAA, 341541-0001ZAA, 341541- 1000ZBB, 341561-0001ZAA, 341562-0001ZAA, 341568- 0001ZAA

The product was found to comply with the following standard(s):

GB/T 3836.1-2021, GB/T 3836.2-2021, GB/T 3836.3-2021, GB/T 3836.4-2021, GB/T 3836.8-2021, GB/T 3836.31-2021

Valid until: 2027.02.16

Remarks

1. Conditions for safe use are specified in the attachment(s) to this certificate.
2. Symbol "X" placed after the certification number denotes specific conditions of use, which are specified in the attachment(s) to this certificate.
3. Model designation is specified in the attachment(s) to this certificate.
4. Safe parameters specified in the attachment(s) to this certificate.
5. This certificate is also applicable for the product with the same type manufactured by Endress+Hauser Flowtec (China) Co., Ltd. (address: Su Hong Zhong Lu No.465, Suzhou-SIP, China) and Endress+Hauser Flowtec (India) Pvt. Ltd. (address: M 171-176, Waluj MIDC, Industrial Area Aurangabad -, Maharashtra State 431136, India)..
6. [Variation I] Change of standard version. issued on 2023.1.13
7. [Variation I] Change of parameters. issued on 2023.1.13

Approval

Shanghai Inspection and Testing Institute of
Instruments and Automation Systems Co., Ltd.

National Supervision and Inspection Center for
Explosion Protection and Safety of Instrumentation

Date of issue 2022.02.17

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

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(GYJ22.1051X)

(Attachment III)

Attachment III to GYJ22.1051X

1. Description

Proline Promag 300/500 Series Electromagnetic Flowmeter, manufactured by Endress+Hauser Flowtec AG, has been accords with following standards:

GB/T 3836.1-2021 Explosive atmospheres-Part 1: Equipment-General requirements

GB/T 3836.2-2021 Explosive atmospheres-Part 2: Equipment protection by flameproof enclosure“d”

GB/T 3836.3-2021 Explosive atmospheres-Part 3: Equipment protection by increased safety“e”

GB/T 3836.4-2021 Explosive atmospheres-Part 4: Equipment protection by intrinsic safety“i”

GB/T 3836.8-2021 Explosive atmospheres-Part 8: Equipment protection by type of protection“n”

GB/T 3836.31-2021 Explosive atmospheres-Part 31: Equipment dust ignition protection by enclosure“t”

Its certificate number is GYJ22.1051X.

Type approved in this certificate is detailed as below:

Proline Promag 300:

5a3b cc -dd z e ff g h j l p s ttt u v ww+###

O5a3b cc -dd z e ff g h j l p s ttt u v ww yy+###

for OEM-version

5x3bxx-dd e ff g h j l p ww+###

for replacement transmitter only

O5x3bxx-dd e ff g h j l p ww yy+###

for replacement transmitter OEM

Proline Promag 500:

5a5b cc -dd z e ff g h i j k m n o p s ttt u v ww+###

O5a5b cc -dd z e ff g h i j k m n o p s ttt u v ww yy+###

for OEM-version

5x5bxx-dd e ff g h i j k m o p qq ww+###

for replacement transmitter only

O5x5bxx-dd e ff g h i j k m o p qq ww yy+###

for replacement transmitter OEM

a indicates type of sensor, including H = Promag H, P = Promag P, W = Promag W;

b indicates generation, including B = Generation of Flowmeter;

cc indicates size, any combination of number and/or letter up to DN3000;

dd indicates NEPSI approval code, refer to Clause 3.4 for the detail;

z indicates design (Proline W 300 and Proline W 500 only), any single number or letter;

e indicates power supply, including D = 24Vdc, E = 100~230Vac, I = 100~230Vac/ 24Vdc, X = sensor only;

ff indicates input/output 1, including 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 indicates input/output 2, including 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 indicates input/output 3, including 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 indicates input/output 4, including A = without input/output 4;
(Proline 500 only)

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 indicates display/operation, including O (with remote display) or any single number or letter except O (without remote display);

k indicates integrated ISEM electronic (Proline 500 only), including A = Sensor, B = Transmitter;

l indicates housing (Proline 300 only), any single number or letter;

m indicates transmitter housing (Proline 500 only), any single number or letter;

n indicates sensor housing (Proline 500 only), any single number or letter;

o indicates cable sensor connection (Proline 500 only), any single number or letter;

p indicates cable entry, any single number or letter;

qq indicates upgrade kit, any double digits with combination of number or letter;

s indicates liner material, any single number or letter;

ttt indicates process connection, any triple digits with combination of number or letter;

u indicates electrode, any single number or letter;

v indicates calibration, any single number or letter;

ww indicates device model, including A1 = product version 1

A2 = product version 2

yy indicates customer version, any double digits with combination of number and/or letter;

** indicates option in two digits, any combination of number and/or letter;

#, + indicates signs used as indicator for optional abbreviation of extended order codes.

For the details, see the instruction manual.

2. Special Conditions for Safe Use

The suffix "X" placed after the certificate number indicates that this product is subject to special conditions for safe use, that is:

2.1 The isolated safety barrier should be preferred for the associated equipment. If the Zener type safety gate is selected, it should meet the requirements of GB/T 3836.15-2017 standard on the grounding of the intrinsic safety circuit.

2.2 The flameproof joints are not intended to be repaired.

2.3 The sensors may only be used for those process media, for which the wetted parts are known to be suitable.

2.4 Plastic transmitter enclosures of product Proline 500 with approval code **dd** = NJ, shall be installed in an area of at least pollution degree 2.

2.5 For remote versions of Promag flowmeters with a flat gasket within the sensor terminal box, 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.

2.6 If the flowmeter system is connected to remote display type (O)DKX001, they should be paired as the following:

Approval code dd of Proline Promag 300	Approval code bb of remote display (O)DKX001 as covered by GYJ21.1084
NB, ND, N7 or N8	NE, NF or NG
NS	NS

2.7 The Proline 300/500 Flowmeter that may include, stainless steel label tag with rope, when not bonded to earth used on coated transmitter and/or sensor enclosure, shall be prevented from risk of electrostatic charging caused by friction and/or cleaning.

2.8 Only use battery Renata type lithium CR1632, 3V.

3. Conditions for Safe Use

3.1 All the sensors can be assigned to sensor group I1 or I2.

Proline Promag H/P/W 300

5(H/P)3B** - dd...
5W3B** - dd...
with approval option

High temperature version with sensor not insulated:

Sensor	Size / DN	Liner	T _{min} [°C]	T _{max} [°C]	T _{medium} [°C] (2)						
					T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)	
Promag P	15...600	PTFE	-40	(1)	50	60	95	130	130	130	130
Promag W	15...600	PTFE	-40	(1)	55	---	95	130	130	130	130
Promag W	25...200	PFA	-40	(1)	60	---	---	100	100	100	100
Promag W	25...200	PFA	-40	(1)	45	60	95	130	150	150	150
Promag W	50...3000	HG	-20	(1)	50	60	95	130	150	150	150
Promag W	50...3000	HG	-20	(1)	60	---	---	100	100	100	100
Promag W	25...1000	PU	-20	(1)	60	---	80	80	80	80	80
Promag W	25...3000	ETFE	-40	(1)	50	50	50	50	50	50	50
Promag W	25...3000	ETFE	-40	(1)	45	80	95	120	120	120	120
Promag W	25...3000	(3)	---	(1)	55	---	95	120	120	120	120
Promag W	25...3000	(3)	---	(1)	60	---	95	100	100	100	100

Notes: (1) T_{min} = -40°C (for limitation see name plate)
(2) T_{max} may be reduced by versions. For limitation of range for T_{max} see name plate
(3) Limitation of T_{max} = 120°C depending on process pressure, see nameplate

High temperature version with sensor insulated
(insulation not in compliance to manual of E+H Flowtec):

(2) reference point

Notes:
 (1) $T_{a, \min} = -40^{\circ}\text{C}$ (for limitation see name plate)
 (2) location of reference point
 (3) Limitation of $T_{\text{med}/\text{max}} = 120^{\circ}\text{C}$ depending on process pressure (see nameplate)

Änderungen: Alle gesetzlichen Umänderungen, vorbehalten. Diese Zeichnung darf ohne unsere Genehmigung weder vervielfältigt werden noch dritten Personen und Kommunikation zugänglich gemacht werden.	A	28.10.2016	/ EKE	F	15.07.2024	BEDE	Ersetzt durch: Ersetzt für: Ersteller: FES / EKE FILE: M:\Zeichnung\FES0285F\FES0285F.dwg
	B	-		G			
	C	02.11.2017	/ EKE	H			
	D	14.01.2019	/ EKE	J			
	E	16.09.2022	BEDE	K			
Installation Drawing NEPSI (acc. to FES0260F) Zone 1, Zone 21 Thermal Parameter Proline Promag 300/500							
 Elnieder AG, Kämmstrasse 7, CH-4153 Balmucc, BL 1, Dorfesch							
FES0285F							1/3

Proline Promag H/P/W 500**Notes:**

This page applies to versions with extended order code covering:

5(H/P)5B** - dd*****B...
 5W5B** - dd*****B...
 with approval option: dd = NB, ND, N7, N8

O5(H/P)5B** - dd*****B...
 O5W5B** - dd*****B...

O5x5Bxx - dd*****B...
 O5x5Bxx - dd*****B...

Sensor of Standard version with sensor not insulated										
Sensor	Size / DN	Liner	T _{med,min} [°C]	T _{max} [°C]	T _{med,max} [°C] (2)	T ₆	T ₅	T ₄	T ₃	T ₁
Promag P	15...600	PTFE	-40	60	80	80	95	130	130	130
Promag W	25...200	PFA	-40	50	80	80	95	130	150	150
	50...3000	HG	-20	60	80	80	95	130	130	130
	25...1000	PU	-20	50	50	50	50	50	50	50
	25...3000	ETFE	-40	60	80	80	95	120	120	120
Promag H	2...150	PFA	-40	45	80	80	95	130	150	150
				55 (3)	80 (3)	95	130	130	130	130
				60 (3)	80 (3)	95	110	110	110	110

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
 (2) T_{med,max} may be reduced by versions. For limitation of range for T_{med} see name plate
 (3) Promag H limited to T_{a,max} = 50°C @ class T6 and T_{med,max} = 50°C @ class T6 for optional versions available with medium temperature measurement
 (4) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor not insulated										
Sensor	Size / DN	Liner	T _{med,min} [°C]	T _{max} [°C]	T _{med,max} [°C] (2)	T ₆	T ₅	T ₄	T ₃	T ₁
Promag P	15...600	PTFE	-40	60	80	80	95	130	130	130
Promag W	25...200	PFA	-40	60	80	80	95	130	150	150
	50...3000	HG	-20	60	80	80	95	130	150	150
	25...1000	PU	-20	50	50	50	50	50	50	50
	25...3000	ETFE	-40	60	80	80	95	120	120	120

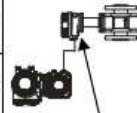
Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
 (2) T_{med,max} may be reduced by versions. For limitation of range for T_{med} see name plate
 (3) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor insulated										
Sensor	Size / DN	Liner	T _{med,min} [°C]	T _{max} [°C]	T _{med,max} [°C] (2)	T ₆	T ₅	T ₄	T ₃	T ₁
Promag P	15...600	PTFE	-40	60	80	80	95	130	130	130
Promag W	25...200	PFA	-40	60	80	80	95	130	150	150
	50...3000	HG	-20	60	80	80	95	130	150	150
	25...1000	PU	-20	50	50	50	50	50	50	50
	25...3000	ETFE	-40	55	80	80	95	120	120	120
				60	75	95	120	120	120	120

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
 (2) T_{med,max} may be reduced by versions. For limitation of range for T_{med} see name plate
 (3) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor insulated										
Sensor	Size / DN	Liner	T _{med,min} [°C]	T _{max} [°C]	T _{med,max} [°C] (1)	T ₆	T ₅	T ₄	T ₃	T ₁
Promag P	all	PTFE	-40	60	130	63.8	65.7	69	69	69
Promag W		PFA	-40	60	150	63.8	65.7	69	69	69
		HG	-20	60	80	63.8	65.7	69	69	69
		PU	-20	50	50	63.8	65.7	69	69	69
		ETFE	-40	60	120 (3)	63.8	65.7	68	68	68

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
 (2) Location of reference point
 (3) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)



(2) reference point

Installation Drawing NEPSI (acc. to FES0260F)										
Zone 1, Zone 21		Thermal Parameter								
Proline Promag 300/500		FES0285F								
Flowtec AG, Kägenstrasse 7, CH-4153 Reinach BL1, Postfach		2/3								

Proline Promag H/P/W 500**Notes:**

This page applies to versions with extended order code covering:

5(H/P)5B** - dd*****A...
5W5B** - dd*****A...
with approval option: dd = NJ, NNO5(H/P)5B** - dd*****A...
O5W5B** - dd*****A...O5x5Bxx - dd*****A...
O5x5Bxx - dd*****A...

Sensor of Standard version with sensor not insulated										
Sensor	Size / DN	Liner	T _{ind,max} [°C]	T _{max} [°C]	T ₆ (85°C)	T ₅ (100°C)	T ₄ (135°C)	T ₃ (200°C)	T ₂ (300°C)	T ₁ (450°C)
Promag P	15...600	PTFE	-40	60	80	95	130	130	130	130
Promag W	25...200	PFA	-40	50	80	95	130	150	150	150
	50...3000	HG	-20	60	80	95	130	130	130	130
	25...1000	PU	-20	60	80	80	80	80	80	80
	25...3000	ETFE	-40	60	80	95	120	120	120	120
Promag H	2...150	PFA	-40	35	80	95	130	150	150	150
				45	80	95	135	135	135	135
				60	80	95	115	115	115	115

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
(2) T_{ind,max} may be reduced by versions. For limitation of range for T_{ind} see name plate
(3) Promag H limited to T_{a,max} = 50°C @ class T6 and T_{ind,max} = 50°C @ class T6 for optional versions available with medium temperature measurement
(4) Limitation of T_{ind,max} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor not insulated:										
Sensor	Size / DN	Liner	T _{ind,max} [°C]	T _{max} [°C]	T ₆ (85°C)	T ₅ (100°C)	T ₄ (135°C)	T ₃ (200°C)	T ₂ (300°C)	T ₁ (450°C)
Promag P	15...600	PTFE	-40	60	80	95	130	130	130	130
Promag W	25...200	PFA	-40	60	80	95	130	150	150	150
	50...3000	HG	-20	60	80	80	80	80	80	80
	25...1000	PU	-20	50	50	50	50	50	50	50
	25...3000	ETFE	-40	60	80	95	120	120	120	120

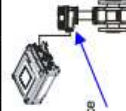
Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
(2) T_{ind,max} may be reduced by versions. For limitation of range for T_{ind} see name plate
(3) Limitation of T_{ind,max} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor insulated (for insulation refer to manual of E+H Flowtec)										
Sensor	Size / DN	Liner	T _{ind,max} [°C]	T _{max} [°C]	T ₆ (85°C)	T ₅ (100°C)	T ₄ (135°C)	T ₃ (200°C)	T ₂ (300°C)	T ₁ (450°C)
Promag P	15...600	PTFE	-40	60	75	95	130	130	130	130
Promag W	25...200	PFA	-40	60	75	95	130	150	150	150
	50...3000	HG	-20	60	75	80	80	80	80	80
	25...1000	PU	-20	50	50	50	50	50	50	50
	25...3000	ETFE	-40	60	70	95	120	120	120	120

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
(2) T_{ind,max} may be reduced by versions. For limitation of range for T_{ind} see name plate
(3) Limitation of T_{ind,max} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor insulated (insulation not in compliance to manual of E+H Flowtec):										
Sensor	Size / DN	Liner	T _{ind,max} [°C]	T _{max} [°C]	T ₆ (85°C)	T ₅ (100°C)	T ₄ (135°C)	T ₃ (200°C)	T ₂ (300°C)	T ₁ (450°C)
Promag P	all	PTFE	-40	60	130	63.8	65.7	69	70.9	70.9
Promag W		PFA	-40	60	150	63.8	65.7	69	70.9	70.9
		HG	-20	60	60	63.8	65.7	69	70.9	70.9
		PU	-20	50	50	63.8	65.7	69	70.9	70.9
		ETFE	-40	60	120 (3)					

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
(2) location of reference point
(3) Limitation of T_{ind,max} = 120°C depending on process pressure (see nameplate)



Anderungen:		A	28.10.2016 / EKE	F	15.07.2024/BEOE	Alle gesetzlichen Umformata, vorarbeiten. Diese Zeichnung darf ohne unsere Genehmigung weder vervielfältigt werden noch dritten Personen und Konturenziffern zugänglich gemacht werden.		Ersetzt durch: Ersatz für: Ersteller: FES / EKE FILE: M2schopf/FES0285F/FES0285F.doc	
Installation Drawing NEPSI (acc. to FES0260F)						Gezeichnet 28.10.2016 EKE			
Zone 1, Zone 21						Geprüft			
Thermal Parameter						Ex-geprüft 15.07.2024 BEOE			
Proline Promag 300/500						Gesehen			
 Flowtec AG, Kägerstrasse 7, CH-4153 Reinach BL1, Postfach						FES0285F			
						3/3			

Transmitter for all versions:				
Type of enclosure	T _{max}			
Ordinary location	T ₆ (85°C)	T ₅ (100°C)	T ₄ (135°C)	T ₄ (135°C)
aluminium	60	45	60	60
plastic	60	---	---	---

Notes: (1) aluminium enclosure: T_{a,min} = -50°C (for limitation see name plate)
plastic enclosure: T_{a,min} = -40°C

Proline Promag H/P/W 300

Notes:
This page applies to versions with extended order code covering:

5(H/P)3B** - dd...
5W3B** - dd...
with approval option: dd = NS

O5(H/P)3B** - dd...
O5W3B** - dd...

5x3Bxx - dd...
5x3Bxx - dd...

O5x3Bxx - dd...
O5x3Bxx - dd...

Standard version with sensor not insulated											
Sensor	Size / DN	Liner	T _{Transmit} [°C]	T _{max} [°C]	T _{Transmit} [°C]						
					T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)	
Promag P Promag W	15...600	PTFE	-40	(1)	---	90	130	130	130	130	130
				55	---	130	130	130	130	130	
	25...200	PFA	-40		60	---	---	100	100	100	100
				45	---	95	130	130	130	130	
	50...3000	HG	-20		50	---	80	80	80	80	80
				60	---	---	---	---	---	---	
	25...1000	PU	-20		50	---	50	50	50	50	50
				25...3000	ETFE	-40	50	---	90	120	120
	2...150	PFA	-40	(7)	60	---	---	100	100	100	100
					50	---	95 (4)	130	150	150	150
Promag H (5), (6)					55 (4)	---	80 (4)	130	150	150	150
					60 (4)	---	---	100	100	100	100

Notes: (1) T_{a,min} = -40°C (for initiation see name plate)
(2) T_{Transmit} and/or T_{max} may be reduced by variations. For limitation of range for T_{max} see name plate
(3) sensor Promag P with liner type PFA may be used for condition of process with
T_{med}=180°C/T_a=50°C for a short period of time (max. 10 min.)
(4) Promag H limited to T_{a,max} = 50°C @ class T6 and T_{med} max = 50°C @ class T6 for optional
versions available with medium temperature measurement
(5) versions with transmitter enclosure stainless steel (hygienic) only for installation where transmitter
is not installed above the sensor
(6) Versions with transmitter enclosure stainless steel (hygienic) installed in temperature class T5, a
degree of 3°C for ambient temperature shall be taken into account
(7) limitation of T_{max} = 20°C, depending on process pressure (see nameplate)

High temperature version with sensor not insulated											
Sensor	Size / DN	Liner	T _{max,lin} [°C]	T _{max} [°C]	T _{max,case} [°C] (2)						
					T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)	
Promag P Promag W	15...600	PTFE	-40	(1)	55	---	90	130	130	130	130
					60	---	---	100	100	100	100
	25...200	PFA	-40		45	---	95	130	180	180	180
					60	---	90	130	160	160	160
	50...3000	H-G	-20		50	---	80	80	80	80	80
					60	---	---	80	80	80	80
	25...1000	PU	-20		50	---	50	50	50	50	50
					60	---	---	---	---	---	---
	25...3000	ETFE	-40	(3)	50	---	90	120	120	120	120
					60	---	---	100	100	100	100

Notes: (1) Ta,lin = -40°C (for limitation see name plate)
(2) T_{max,case} and/or T_{max,lin} may be reduced by versions. For limitation of range for T_{max} see name plate

High temperature version with sensor insulated (for insulation refer to manual of F-H Sensor)												
Sensor	Size / DN	Liner	T _{insul, min} [°C]	T _{max}		T _{max, spec}						
				[°C]	(1)	T ₆ (85°C)	T ₅ (100°C)	T ₄ (135°C)	T ₃ (200°C)	T ₂ (300°C)	T ₁ (450°C)	
Promag P Promag W	15...600	PTFE	-40			50	---	90	130	130	130	130
						55	---	100	100	100	100	100
25...200	PFA	-40	---			45	---	95	130	170	170	170
						50	---	90	130	160	160	160
50...3000	HG	-20	---			60	---	---	100	100	100	100
						50	---	80	80	80	80	80
25...1000	PU	-20	---			60	---	---	---	---	---	---
						50	---	50	50	50	50	50
25...3000	ETFE	-40	---			50	---	---	90	120	120	120
						60	---	---	100	100	100	100

Notes: (1) T_{min} = 40°C (for limitation see name plate)
(2) T_{max} and T_{max, spec} may be reduced by versions. For limitation of range for T_{max} see name plate
(3) Limitation of T_{max, spec} = 230°C depending on process pressure. (see nameplate)

Notes: (1) $T_{a,min} = -40^{\circ}\text{C}$ (for limitation see name plate)
 (2) $T_{mixed,max}$ and/or $T_{mixed,min}$ may be reduced by vers
 (3) Limitation of $T_{mixed,max} = 120^{\circ}\text{C}$ depending on pro

High temperature version with sensor insulated (insulation not in compliance to manual of E+H Flowtec)											
Sensor	Size / DN	Line	T _{fluid,min} [°C]	T _{fluid,max} [°C]	T _{fluid,max} @ T1 [°C]	T _{max} to be measured at reference point at sensor neck [°C]					
						T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)
Pronag P Pronag W	all	PTFE	-40	55	130	---	62.2	74.0	75.6	75.6	75.6
		PFA	-40	50	150	---	62.2	74.0	75.6	75.6	75.6
		HG	-20	60	80	---	62.2	74.0	75.6	75.6	75.6
		PU	-20	50	50	---	62.2	74.0	75.6	75.6	75.6
		ETFE	-40	50	120 (3)	---	62.2	74.0	74.0	74.0	74.0

Notes:

- (1) T_{a,min} = -40°C (for limitation see name plate)
- (2) location of reference point
- (3) Limitation of T_{fluid,max} = 120°C depending on process pressure (see nameplate)



(2) reference point

Notes:

- (1) $T_{a,min} = -40^{\circ}\text{C}$ (for limitation see name plate)
- (2) location of reference point
- (3) Limitation of $T_{med,max} = 120^{\circ}\text{C}$ depending on process pressure (see nameplate)

Änderungen:	A	28.10.2016 / EKE	F	15.07.2024 / BEOE	Alle gesetzlichen Überschriften, Vorbehalten, Diese Zeichnung darf ohne unsere Genehmigung weder vervielfältigt werden noch dritten Personen und Konkurrenzfirmen zugänglich gemacht werden. Erstellt durch: Erstellt für: Erstellt: FES / EKE FILE: W-Zeichnung\FES\Bauer\FES2024\FES2024\FES2024.dwg
	B	02.11.2017 / EKE	G		
	C	15.01.2018 / EKE	H		
	D	14.01.2019 / EKE	J		
	E	18.09.2022 / BEOE	K		
	F				
Installation Drawing NEPSI (acc. to FES0261F) Zone 2 Thermal Parameter Proline Promag 300/500					Gezeichnet 28.10.2016 EKE Geprüft Ex-gemüß 15.07.2024 BEOE Gesehen
Fluorier-AG, Känenstrasse 7, CH-4153 Reinach RU 1, Postfach					FES0286F 1/3

Proline Promag H/PW 500

Notes: This page applies to versions with extended order code covering:

5(H/P)5B** - dd*****B...
5W5B** - dd*****B...
with approval option: dd = NS

O5(H/P)5B** - dd*****B...
O5W5B** - dd*****B...
O5x5Bxx - dd*****B...
O5x5Bxx - dd*****B...

Sensor of Standard version with sensor not insulated										
Sensor	Size / DN	Liner	T _{med,min} [°C]	T _{max} [°C]	T _{med,max} [°C] (2)	T ₆ (85°C)	T ₅ (100°C)	T ₄ (135°C)	T ₃ (200°C)	T ₁ (450°C)
Promag P	15...600	PTFE	-40	60	80	80	95	130	130	130
Promag W	25...200	PFA	-40	50	80	80	95	130	180	180
	50...3000	HG	-20	60	80	80	95	130	130	130
	25...1000	PU	-20	50	80	80	95	130	130	130
	25...3000	ETFE	-40	60	80	80	95	130	130	130
Promag H	2...150	PFA	-40	45	80 (3)	80 (3)	95	130	150	150
				55 (3)	80 (3)	80 (3)	95	130	130	130
				60 (3)	80 (3)	80 (3)	95	110	110	110

Notes: (1) T_{max} = -40°C (for limitation see name plate)
(2) T_{med,max} and/or T_{med,min} may be reduced by versions. For limitation of range for T_{med} see name plate
(3) Promag H limited to T_{max} = 50°C @ class T6 and T_{med,max} = 50°C @ class T6 for optional versions available with medium temperature measurement
(4) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor not insulated										
Sensor	Size / DN	Liner	T _{med,min} [°C]	T _{max} [°C]	T _{med,max} [°C] (2)	T ₆ (85°C)	T ₅ (100°C)	T ₄ (135°C)	T ₃ (200°C)	T ₁ (450°C)
Promag P	15...600	PTFE	-40	60	80	80	95	130	130	130
Promag W	25...200	PFA	-40	50	80	80	95	130	180	180
	50...3000	HG	-20	60	80	80	95	130	150	150
	25...1000	PU	-20	50	80	80	95	130	130	130
	25...3000	ETFE	-40	60	80	80	95	120	120	120

Notes: (1) T_{max} = -40°C (for limitation see name plate)
(2) T_{med,max} and/or T_{med,min} may be reduced by versions. For limitation of range for T_{med} see name plate
(3) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

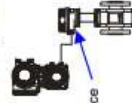
Sensor of High temperature version with sensor insulated (for insulation refer to manual of E+H Flowtec)										
Sensor	Size / DN	Liner	T _{med,min} [°C]	T _{max} [°C]	T _{med,max} [°C] (2)	T ₆ (85°C)	T ₅ (100°C)	T ₄ (135°C)	T ₃ (200°C)	T ₁ (450°C)
Promag P	15...600	PTFE	-40	60	75	75	95	130	130	130
Promag W	25...200	PFA	-40	35	60	60	95	130	180	180
	50...3000	HG	-20	60	75	75	95	130	170	170
	25...1000	PU	-20	50	60	60	95	130	150	150
	25...3000	ETFE	-40	55	80	80	95	120	120	120

Notes: (1) T_{max} = -40°C (for limitation see name plate)
(2) T_{med,max} and/or T_{med,min} may be reduced by versions. For limitation of range for T_{med} see name plate
(3) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor insulated
(insulation not in compliance to manual of E+H Flowtec)

Sensor	Size / DN	Liner	T _{med,min} [°C]	T _{max} [°C]	T _{med,max} [°C]	T ₆ (85°C)	T ₅ (100°C)	T ₄ (135°C)	T ₃ (200°C)	T ₂ (300°C)	T ₁ (450°C)
Promag P	all	PTFE	-40	60	130	63.8	65.7	69	70.9	70.9	70.9
Promag W		PFA	-40	60	150	63.8	65.7	69	70.9	70.9	70.9
		HG	-20	60	80	63.8	65.7	69	70.9	70.9	70.9
		PU	-20	50	50	63.8	65.7	69	70.9	70.9	70.9
		ETFE	-40	60	120 (3)	63.8	65.7	68	68	68	68

Notes: (1) T_{max} = -40°C (for limitation see name plate)
(2) location of reference point
(3) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)



(2) reference point

Anderungen:		A	28.10.2016 / EKE	F	17.07.2024/BEDE	Alle gesetzlichen Umkreisverordnungen, vorbehaltlich: Diese Zeichnung darf ohne unsere Genehmigung weder vervielfältigt werden noch an Dritte Personen und Konstrukteure zugänglich gemacht werden.		Erstellt für: Ersteller: FES / EKE FILE: M:\Zoning\FES0286\FES0286F.doc	
Erreicht durch:		B	02.11.2017 / EKE	G					
		C	15.01.2018 / EKE	H					
		D	14.01.2019 / EKE	J					
		E	16.09.2022/BEDE	K					
Installation Drawing NEPSI (acc. to FES0261F)						Gezeichnet			
Zone 2						28.10.2016			
Thermal Parameter						Geprüft			
Proline Promag 300/500						15.07.2024			
						BEOE			
						Gelesen			
						FES0286F			
						2/3			



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

Proline Promag H/P/W 500

Notes: This page applies to versions with extended order code covering:
 5(H/P)5B** - dd*****A...
 5W5B** - dd*****A...
 with approval option: dd = NL, NS

05(H/P)5B** - dd*****A...
 05W5B** - dd*****A...

5x5Bxx - dd*****A...
 05x5Bxx - dd*****A...

Sensor of Standard version with sensor not insulated

Sensor	Size / DN	Liner	T _{med,min} [°C]	T _{max} [°C]	T _{med,max} [°C] (2)						
					T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)	
Promag P	15...600	PTFE	-40	(1)	60	95	130	130	130	130	130
Promag W	25...200	PFA	-40	(1)	60	95	130	150 (3)	150 (3)	130	130
	50...3000	HG	-20	(1)	60	95	130	130	130	130	130
	25...1000	PU	-20	(1)	60	95	130	130	130	130	130
	25...3000	ETFE	-40	(1)	60	95	130	130	130	130	130
Promag H	2...150	PFA	-40	(1)	60	95	130	150	150	150	150
				(1)	60	95	130	145	145	145	145
				(1)	60	95	115	115	115	115	115
				(1)	60	95	115	115	115	115	115

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
 (2) T_{med,max} and/or T_{med,min} may be reduced by versions. For limitation of range for T_{med} see name plate
 (3) sensor Promag P with liner type PFA may be used for condition of process with T_{med}=180°C @ 1a=50°C for a short period of time (max. 10 min.)
 (4) Promag H limited to T_{a,max} = 50°C @ class T6 and T_{med,max} = 50°C @ class T6 for optional versions available with medium temperature measurement
 (5) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor not insulated

Sensor	Size / DN	Liner	T _{med,min} [°C]	T _{max} [°C]	T _{med,max} [°C] (2)						
					T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)	
Promag P	15...600	PTFE	-40	(1)	60	95	130	130	130	130	130
Promag W	25...200	PFA	-40	(1)	60	95	130	180	180	180	180
	50...3000	HG	-20	(1)	60	95	130	150	150	150	150
	25...1000	PU	-20	(1)	60	95	130	130	130	130	130
	25...3000	ETFE	-40	(1)	60	95	130	130	130	130	130
				(1)	60	95	130	150	150	150	150
				(1)	60	95	115	115	115	115	115
				(1)	60	95	115	115	115	115	115

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
 (2) T_{med,max} and/or T_{med,min} may be reduced by versions. For limitation of range for T_{med} see name plate
 (3) sensor Promag P with liner type PFA may be used for condition of process with T_{med}=180°C @ 1a=50°C for a short period of time (max. 10 min.)
 (4) Promag H limited to T_{a,max} = 50°C @ class T6 and T_{med,max} = 50°C @ class T6 for optional versions available with medium temperature measurement
 (5) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

Sensor of Standard version with sensor insulated
 (for insulation refer to manual of E+H Flowtec)

Sensor	Size / DN	Liner	T _{med,min} [°C]	T _{max} [°C]	T _{med,max} [°C] (2)						
					T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)	
Promag P	15...600	PTFE	-40	(1)	60	95	130	130	130	130	130
Promag W	25...200	PFA	-40	(1)	60	95	130	180	180	180	180
	50...3000	HG	-20	(1)	60	95	130	150	150	150	150
	25...1000	PU	-20	(1)	60	95	130	130	130	130	130
	25...3000	ETFE	-40	(1)	60	95	130	130	130	130	130
				(1)	60	95	130	150	150	150	150
				(1)	60	95	115	115	115	115	115
				(1)	60	95	115	115	115	115	115

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
 (2) T_{med,max} and/or T_{med,min} may be reduced by versions. For limitation of range for T_{med} see name plate
 (3) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor insulated
 (insulation not in compliance to manual of E+H Flowtec)

Sensor	Size / DN	Liner	T _{med,min} [°C]	T _{max} [°C]	T _{med,max} [°C] (2)						
					T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)	
Promag P	15...600	PTFE	-40	(1)	60	95	130	130	130	130	130
Promag W	25...200	PFA	-40	(1)	60	95	130	180	180	180	180
	50...3000	HG	-20	(1)	60	95	130	150	150	150	150
	25...1000	PU	-20	(1)	60	95	130	130	130	130	130
	25...3000	ETFE	-40	(1)	60	95	130	130	130	130	130
				(1)	60	95	130	150	150	150	150
				(1)	60	95	115	115	115	115	115
				(1)	60	95	115	115	115	115	115

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
 (2) T_{med,max} and/or T_{med,min} may be reduced by versions. For limitation of range for T_{med} see name plate
 (3) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

Transmitter for all versions

Type of enclosure	Ordinary location (°C)	T _{max}			
		T6 (85°C)	T5 (100°C)	T4 (135°C)	T1 (450°C)
aluminium	60	---	45	60	---
plastic	60	---	---	---	---

Notes: (1) aluminium enclosure: T_{a,min} = -50°C (for limitation see name plate)
 plastic enclosure: T_{a,min} = -40°C

Installation Drawing NEPSI (acc. to FES0261F)

Zone 2

Thermal Parameter

Proline Promag 300/500

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

FES0286F

3/3

3.4 The Ex marking of this product is detailed as following:

Promag 300:

dd code	ff code	Marking Gas	Marking Dust
NB	CA, CB, CC, CD, HA, TA, MC, RC	Ex db eb ia [ia Ga] II C T1...T6 Gb	Ex tb [ia Da] III C T**°C Db
	BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	Ex db eb ia II C T1...T6 Gb	Ex tb III C T**°C Db
ND	CA, CB, CC, CD, HA, TA, MC, RC	Ex db eb ia [ia Ga] II C T1...T6 Gb	Ex tb [ia Da] III C T**°C Db
	BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	Ex db eb ia II C T1...T6 Gb	Ex tb III C T**°C Db
NS	CA, CB, CC, CD, HA, TA, MC, RC	Ex ec nC ic [ic] II C T1...T5 Gc	---
	BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	Ex ec nC ic II C T1...T5 Gc	---

Promag 500 with ISEM integrated in transmitter:

dd code	ff code	Transmitter	Sensor
		Marking Gas & Dust	Marking Gas & Dust
NB	CA, CB, CC, CD, HA, TA, BA, BB, GA, LA, NA, RA, RB, RC, SA, MA, MB, MC	Ex db eb [ia Ga] II C T5...T6 Gb Ex tb [ia Da] III C T85°C Db	Ex eb ia II C T1...T6 Gb Ex ia tb III C T**°C Db
ND	CA, CB, CC, CD, HA, TA, BA, BB, GA, LA, NA, RA, RB, RC, SA, MA, MB, MC	Ex db eb [ia Ga] II C T5...T6 Gb Ex tb [ia Da] III C T85°C Db	Ex eb ia II C T1...T6 Gb Ex ia tb III C T**°C Db
NS	CA, CB, CC, CD, HA, TA, BA, BB, GA, LA, NA, RA, RB, RC SA, MA, MB, MC	Ex ec nC [ic] II C T4...T5 Gc	Ex ec ic II C T1...T6 Gc
N7	CA, CB, CC, CD, HA, TA, BA, BB, GA, LA, NA, RA, RB, RC, SA, MA, MB, MC	Ex db eb [ia Ga] II C T5...T6 Gb	Ex eb ia II C T1...T6 Gb
N8	CA, CB, CC, CD, HA, TA, BA, BB, GA, LA, NA, RA, RB, RC, SA, MA, MB, MC	Ex db eb [ia Ga] II C T5...T6 Gb	Ex eb ia II C T1...T6 Gb

Promag 500 with ISEM integrated in sensor:

dd code	ff code	Transmitter	Sensor
		Marking Gas & Dust	Marking Gas & Dust
NJ	CA, CB, CC, CD, HA, TA, BA, BB, GA, LA, NA, RA, RB, RC, SA, MA, MB, MC	non-Ex	Ex db ia II C T1...T6 Gb Ex ia tb IIIC T**°C Db
NL	CA, CB, CC, CD, HA, TA, MC, RC	[Ex ic] II C	Ex ec ic II C T1...T6 Gc
	BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	non-Ex	
NN	CA, CB, CC, CD, HA, TA, MC, RC	Ex ec nC [ic] II C T4...T5 Gc	Ex db ia II C T1...T6 Gb Ex ia tb IIIC T**°C Db
	BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	Ex ec nC II C T4...T5 Gc	
NS	CA, CB, CC, CD, HA, TA, MC, RC	Ex ec nC [ic] II C T4...T5 Gc	Ex ec ic II C T1...T6 Gc
	BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	Ex ec nC II C T4...T5 Gc	

3.5 Electrical parameters

Power supply		
dd e code	terminal no.	values
NBD, NDD N7D, N8D	No. 1(L+/L), 2(L-/N)	U _N = 19.2~28.8Vdc U _M = 250Vac
NBE, NDE N7E, N8E	No. 1(L+/L), 2(L-/N)	U _N = 85~264Vac U _M = 250Vac
NSI, NJI NLI, NNI	No. 1(L+/L), 2(L-/N)	U _N = 19.2~28.8Vdc/ 85~264Vac U _M = 250Vac

Input/output 1		
ff code	terminal no.	values
BA, BB, MA	No. 26, 27	$U_N = 30V_{dc}$ $U_M = 250V_{ac}$
LA, GA, SA	No. 26, 27	$U_N = 32V_{dc}$ $U_M = 250V_{ac}$
CA, CB	No. 26, 27	$U_i = 30V$ $I_i = 100mA$ $P_i = 1.25W$ $L_i = 0$ $C_i = 6nF$
CC, CD	No. 26, 27	$dd = NB, ND, N7, N8:$ $U_o = 21.8V$ $I_o = 90mA$ $P_o = 491mW$ $L_o = 4.1mH$ (IIC)/ 15mH (IIB) $C_o = 160nF$ (IIC)/ 1160nF (IIB) $U_i = 30V$ $I_i = 10mA$ $P_i = 0.3W$ $L_i = 5mH$ $C_i = 6nF$ $dd = NS, NN:$ $U_o = 21.8V$ $I_o = 90mA$ $P_o = 491mW$ $L_o = 9mH$ (IIC)/ 39mH (IIB) $C_o = 600nF$ (IIC)/ 4000nF (IIB) $U_i = 30V$ $I_i = 10mA$ $P_i = 0.3W$ $L_i = 5mH$ $C_i = 6nF$
HA, TA	No. 26, 27	$dd = NB, ND, N7, N8:$ PA/FF $U_i = 30V$ $I_i = 570mA$ $P_i = 8.5W$ $L_i = 10\mu H$ $C_i = 5nF$ $dd = NS, NN:$ PA/FF $U_i = 32V$ $I_i = 570mA$ $P_i = 8.5W$ $L_i = 10\mu H$ $C_i = 5nF$
MB, RB	No. 26, 27	APL port profile SLAX/SPE PoDL classes 10, 11, 12 $U_N = 30V_{DC}$ $U_M = 250V_{AC}$
MC, RC	No. 26, 27	$dd = NB, ND, N7, N8:$ 2-WISE power load APL port profile SLAA $U_i = 17.5V$ $I_i = 380mA$ $P_i = 5.32W$ $L_i \leq 10\mu H$ $C_i \leq 5nF$ $dd = NS, NN:$ 2-WISE power load APL port profile SLAC $U_i = 17.5V$ $I_i = 380mA$ $P_i = 5.32W$ $L_i \leq 10\mu H$ $C_i \leq 5nF$
NA, RA	IO1 / RJ45	$U_N = 30V_{dc}$

		$U_M = 250V_{ac}$
--	--	-------------------

Input/output 2		
g code	terminal no.	values
C, G, K	No. 24, 25	$U_i = 30V$ $I_i = 100mA$ $P_i = 1.25W$ $L_i = 0$ $C_i = 0$
B, D, E, F, I, J, L	No. 24, 25	$U_N = 30V_{dc}$ $U_M = 250V_{ac}$
H	No. 24, 25	$U_N = 30V_{dc}$ $I_N = 100mA / 500mA$ $U_M = 250V_{ac}$

Input/output 3		
h code	terminal no.	values
C, G, K	No. 22, 23	$U_i = 30V$ $I_i = 100mA$ $P_i = 1.25W$ $L_i = 0$ $C_i = 0$
B, D, E, F, I, J, L	No. 22, 23	$U_N = 30V_{dc}$ $U_M = 250V_{ac}$
H	No. 22, 23	$U_N = 30V_{dc}$ $I_N = 100mA / 500mA$ $U_M = 250V_{ac}$

Input/output 4		
i code	terminal no.	values
C, G, K	No. 20, 21	$U_i = 30V$ $I_i = 100mA$ $P_i = 1.25W$ $L_i = 0$ $C_i = 0$
B, D, E, F, I, J, L	No. 20, 21	$U_N = 30V_{dc}$ $U_M = 250V_{ac}$
H	No. 20, 21	$U_N = 30V_{dc}$ $I_N = 100mA / 500mA$ $U_M = 250V_{ac}$

Service interface		
dd code	terminal no.	values
NB,N7	Service interface	Service interface shall only be installed in areas which are known to be non hazardous with a non intrinsically safe circuit. $U_N = 3.3V$, $U_M = 250VAC$ or to an intrinsically safe circuit with $U_i = 10V$, $I_i = n.a.$, $P_i = n.a.$, $C_i = 200nF$, $L_i = 0$
ND,N8	Service interface	Service interface shall only be installed to a non intrinsically safe circuit with $U_N = 3.3V$, $U_M = 250VAC$ or to an intrinsically safe circuit with $U_i = 10V$, $I_i = n.a.$, $P_i = n.a.$, $C_i = 200nF$, $L_i = 0$
NS,NJ,NL,NN	Service interface	$U_N = 3.3V$

Antenna bushing		
dd code	terminal no.	values
NB, NJ, NL, NN, NS, N7	N connector	RF antenna supplied by Endress+Hauser; As an alternate, any passive omni-directional RF antenna is permitted to be connected when meeting the following parameters: - have an impedance of at least 50Ω - frequency range not exceeding 1710MHz ...6000MHz - rated power at least 100mW

Remote display		
dd code	terminal no.	values
NB, ND, N7, N8	No. 81, 82, 83, 84	$U_o = 3.9V$ $I_o = 1.5A$ (spark) 200mA (power) $P_o = 600mW$ $R_i = 2.6\Omega$ $L_o = 0$ $C_o = 670\mu F$
NS	No. 81, 82, 83, 84	$U_N = 3.3V$ $I_N = 150mA$

For transmitter with approval code **dd** = NB, ND, N7 and N8 connected to the remote display of Endress+Hauser, Type DKX001 or ODKX001, the cable parameter with ration $L/R \leq 0.024 \text{mH}/\Omega$ applies. Remote display type DKX001 or ODKX001 is not intended to be connected to the transmitter electronics with approval code **dd** = BJ, BL, BN.

3.6 Electrical parameters of remote transmitter and remote sensor (Proline 500)

dd k code	Transmitter:	
NBB, NDB, N7B, N8B	Terminals 4, 5, 6, 7, 8, 32, 33, 34, 35, 36, 37	$U_o = 26.6V$ $I_o = 19.2mA$ $P_o = 128mW$ $L_o = 20mH$ $C_o = 94nF$
		$U_o = 13.3V$ $I_o = 39.2mA$ $P_o = 131mW$ $L_o = 20mH$ $C_o = 94nF$
	Terminals 41, 42	$U_N = 60V$ $I_N = 90mA$
	Sensor:	
	Terminals 4, 5, 6, 7, 8, 32, 33, 34, 35, 36, 37	$U_i = 26.6V$ $I_i = n.a.$ $P_i = n.a.$ $L_i = 0$ $C_i = 0$
		Terminals 41, 42
Interconnection of circuit connected to terminals 4, 5, 6, 7, 8, 36, 37 for use of a cable with a maximum length of 200m is allowed when using a cable which has the following parameters: Cable inductance $\leq 1\text{ mH/km}$; Cable capacitance $\leq 0.42\text{ }\mu F/km$		
dd k code	Transmitter:	
NSB	Terminals 4, 5, 6, 7, 8, 32, 33, 34, 35, 36, 37	$U_o = 26.6V$ $I_o = 19.2mA$ $P_o = 128mW$ $L_o = 50mH$ $C_o = 325nF$
		$U_o = 13.3V$ $I_o = 39.2mA$ $P_o = 131mW$ $L_o = 50mH$ $C_o = 325nF$

	Terminals 41, 42	$U_N = 60V$
	Sensor:	
	Terminals 4, 5, 6, 7, 8, 32, 33, 34, 35, 36, 37	$U_i = 26.6V$ $I_i = 19.2mA$ $P_i = n.a.$ $L_i = 0$ $C_i = 0$ (+13.3V to -13.3V)
		$U_i = 13.3V$ $I_i = 39.2mA$ $P_i = n.a.$ $L_i = 0$ $C_i = 0$ (to ground)
Terminals 41, 42 $U_N = 60V$		
Interconnection of circuit connected to terminals 4, 5, 6, 7, 8, 36, 37 for use of a cable with a maximum length of 200m is allowed when using a cable which has the following parameters: Cable inductance ≤ 1 mH/km Cable capacitance ≤ 1 μF /km		

dd k code	Transmitter:	
NJA, NLA, NNA, NSA	Terminals 61, 62	$U_N = 35V$
	Terminals 63, 64	$U_N = 3.3V$
	Sensor:	
	Terminals 61, 62	$U_N = 35V$
	Terminals 63, 64	$U_N = 3.3V$

3.7 Suitable certified cable gland and blanking plug approved by ExTL according to GB/T 3836.1-2021 and GB/T 3836.3-2021 with Ex marking "Ex ec II C" shall be used and correctly installed; after installing, degree of protection of enclosure should be at least IP54 according to GB/T 4208-2017. Excess cable glands should be sealed with plug. After installation, the ingress protection shall be at least IP66/67 according to GB/T 4208-2017.

3.8 Any maintenance shall be done after power off or the area known to be non hazardous.

3.9 Clean the surface of this product termly when using in combustibile dust atmospheres.

3.10 The user shall not change the configuration in order to maintain/ensure the explosion protection performance of this product. Any change may impair safety.

3.11 For installation, use and maintenance of this product, the end user should observe the instruction manual and the following standards:

GB/T 3836.13-2021 "Explosive atmospheres- Part 13:Equipment repair,overhaul,reclamation and modification".

GB/T 3836.15-2017 "Explosive atmospheres- Part 15:Electrical installations design, selection and erection".

GB/T 3836.16-2022"Explosive atmospheres- Part 16:Electrical installations inspection and maintenance".

GB/T 3836.18-2017 "Explosive atmospheres-Part 18: Intrinsically safe electrical systems".

GB 50257-2014 "Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering".

GB 15577-2018 "Safety regulations for dust explosion prevention and protection". (Only if installed in dust hazardous areas)

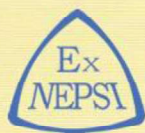
4. Manufacturer's Responsibility

4.1 Conditions for safe use and special conditions for safe use, as specified above, should be included in the documentation the user is provided with.

4.2 Manufacturing should be done according to the documentation approved by NEPSI.

Shanghai Inspection and Testing
Institute of Instruments and Automation Systems Co. Ltd.
National Supervision and Inspection Center
for Explosion Protection and Safety of Instrumentation
2024.07.22

Note: This annex replaces the original explosion-proof certificate Annex II



防爆合格证

证 号: GYJ22.1051X

制 造 商 恩德斯+豪斯公司

(地址: CH-4153, Reinach BL1, Switzerland)

产 品 名 称 电磁流量计

型 号 规 格 Proline Promag 300/500

防 爆 标 志 详见合格证附件

产 品 标 准 /

图 样 编 号 961001814-E, 961002020-F, 961002023-D, 961002082-B,
961001825-B, 340884-0003-ZAA, 341541-0001ZAA, 341541-
1000ZBB, 341561-0001ZAA, 341562-0001ZAA, 341568-
0001ZAA

经图样及技术文件的审查和样品检验, 确认上述产品符合下列标准:

GB/T 3836.1-2021, GB/T 3836.2-2021, GB/T 3836.3-2021, GB/T 3836.4-
2021, GB/T 3836.8-2021, GB/T 3836.31-2021

特颁发此证。

本证书有效期: 2022 年 02 月 17 日 至 2027 年 02 月 16 日

备 注

1. 安全使用注意事项见本证书附件。
2. 证书编号后缀“X”表明产品具有安全使用特殊条件, 内容见本证书附件。
3. 型号规格说明见本证书附件。
4. 电气安全参数见本证书附件。
5. 本证书同时适用于恩德斯豪斯流量仪表技术(中国)有限公司(地址: 苏州工业园区苏虹中路 465 号)和 Endress+Hauser Flowtec (India) Pvt. Ltd (地址: M 171-176, Waluj MIDC, Industrial Area Aurangabad -, Maharashtra State 431136, India) 生产的同型号产品。
6. [更改 I] 变更标准版本。2023 年 1 月 13 日签发。
7. [更改 II] 变更参数。2024 年 7 月 22 日签发。

批 准

上海仪器仪表自控系统检验测试所有限公司
国家级仪器仪表防爆安全监督检验站

颁 发 日 期 二 〇 二 二 年 二 月 十 七 日

本证书仅对与认可文件和样品一致的产品有效。

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(GYJ22.1051X)

(Attachment III)

GYJ22.1051X 防爆合格证附件III

由恩德斯+豪斯公司生产的Proline Promag 300/500电磁流量计，经检验符合下列标准：

GB/T 3836.1-2021 爆炸性环境 第1部分：设备 通用要求

GB/T 3836.2-2021 爆炸性环境 第2部分：由隔爆外壳“d”保护的设备

GB/T 3836.3-2021 爆炸性环境 第3部分：由增安型“e”保护的设备

GB/T 3836.4-2021 爆炸性环境 第4部分：由本质安全型“i”保护的设备

GB/T 3836.8-2021 爆炸性环境 第8部分：由“n”型保护的设备

GB/T 3836.31-2021 爆炸性环境 第31部分：由防粉尘点燃外壳“t”保护的设备

防爆合格证号GYJ22.1051X。

本证书认可的产品型号规格如下：

Proline Promag 300:

5a3b cc -dd z e ff g h j l p s ttt u v ww +###

O5a3b cc -dd z e ff g h j l p s ttt u v ww yy +###

OEM版本

5X3bXX-dd e ff g h j l p ww +###

可换转换器适用

O5X3bXX-dd e ff g h j l p ww yy +###

可换转换器（OEM）

Proline Promag 500:

5a5b cc -dd z e ff g h i j k m n o p s ttt u v ww +###

O5a5b cc -dd z e ff g h i j k m n o p s ttt u v ww yy +###

OEM版本

5X5bXX-dd e ff g h i j k m o p qq ww +###

可换转换器适用

O5X5bXX-dd e ff g h i j k m o p qq ww yy +###

可换转换器（OEM）

其中：a表示传感器型号，可为H = Promag H, P = Promag P, W = Promag W;

b表示产品代系识别码，可为B;

cc表示测量口径（最大到DN3000）;

dd表示NEPSI认证代码，详见第4条;

z表示类型（Proline W 300和Proline W 500适用）;

e表示电源，可为D = 24Vdc, E = 100~230Vac, I = 100~230Vac/24Vdc, X = 仅传感器;

ff表示输入/输出1，可为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 = 仅为传感器;

g表示输入/输出2, 可为A = 不带输入/输出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 = 仅为传感器;

h表示输入/输出3, 可为A = 不带输入/输出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 = 仅为传感器;

i表示输入/输出4, 可为A = 不带输入/输出4;
(Proline 500适用)

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 = 仅为传感器;

j表示显示/运行, 可为O (带远程显示) 或其它 (不带远程显示);

k表示内置ISEM模块 (Proline 500适用), 可为A = 传感器, B = 转换器;

l表示外壳 (Proline 300适用);

m表示转换器外壳 (Proline 500适用);

n表示传感器外壳 (Proline 500适用);

o表示传感器电缆连接 (Proline 500适用);

p表示电缆引入规格;

qq表示升级套组;

s表示内衬材质;

ttt表示过程连接;

v表示校准;

ww表示设备型号, 可为A1 = 版本1或A2 = 版本2;

yy表示客户信息;

******表示备选信息;

#, +表示扩展订购码。

详见产品规格说明书。

一、产品安全使用特殊条件

产品防爆合格证号后缀“X”表示产品有安全使用特殊要求，具体内容如下：

1、关联装置应优先选用隔离式安全栅；如选用齐纳式安全栅，应符合GB/T 3836.15-2017标准关于本安电路接地的要求。

2、涉及隔爆接合面的维修须联系产品制造商。

3、测量介质不得对产品接液部件有不良影响。

4、产品认证代码**dd**=NJ的转换器塑料外壳（Proline 500适用）应安装在污染等级最多为2级的区域。

5、对于分离型产品，用户应确保传感器接线盒配带的密封垫在固定接线盒盖时不会自行脱落到密封面上。不平整的密封垫应及时更换。

6、当产品配接远程显示单元(O)DKX001时，应满足以下匹配要求：

Promag 300代码 dd	远程显示单元(O)DKX001代码 bb （证号GYJ21.1084）
NB, ND, N7或N8	NE, NF或NG
NS	NS

7、产品转换器外壳或传感器外壳可带有不锈钢吊牌，应采取措施防止因摩擦或清洗引起的静电火花危险。

8、仅可使用Renata型CR1632,3V锂电池。

二、产品使用注意事项

1、所有传感器都可按传感器分组归为I1或I2。

第 5 页 / 共 19 页

Proline Promag H/P/W 300

Notes:

This page applies to versions with extended order code covering:

5(H/P)3B** - dd...
5W3B** - dd...
with approval option: dd = NB, ND

O5(H/P)3B** - dd...
O5W3B** - dd...

5x3Bxx - dd...
5x3Bxx - dd...

O5x3Bxx - dd...
O5x3Bxx - dd...

Standard version with sensor not insulated:

Sensor	Size / DN	Linear	T _{max} [°C]	T _{min} [°C]	T _{max} (1)	T _{min} (1)	T _{max} (2)	T _{min} (2)	T _{max} (3)	T _{min} (3)	T _{max} (4)	T _{min} (4)	T _{max} (5)	T _{min} (5)	T _{max} (6)	T _{min} (6)	T _{max} (7)	T _{min} (7)	T _{max} (8)	T _{min} (8)	T _{max} (9)	T _{min} (9)	T _{max} (10)	T _{min} (10)	T _{max} (11)	T _{min} (11)
Promag P	15...600	PTFE	-40	45	80	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
Promag W				55	60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
	25...200	PFA	-40	40	80	95	130	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
	50...3000	HG	-20	50	60	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
	25...1000	PU	-20	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	25...3000	ETFE	-40	45	80	95	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
Promag H	2...150	PFA	-40	50	80	80	95	130	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
				55	60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
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				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
				60	90	130	130	13																		

Proline Promag H/P/W 500**Notes:**

This page applies to versions with extended order code covering:

5(H/P)5B** - dd*****B... 05(H/P)5B** - dd*****B... 05x5Bxx - dd*****B...
 5W5B** - dd*****B... 05W5B** - dd*****B... 05x5Bxx - dd*****B...
 with approval option: dd = NB, ND, N7, N8

Sensor of Standard version with sensor not insulated											
Sensor	Size / DN	Liner	T _{medium} [°C]	T _{max} [°C]							T ₁
				T _{max} [°C] (1)	T ₆ (85°C)	T ₅ (100°C)	T ₄ (135°C)	T ₃ (200°C)	T ₂ (300°C)	T ₁ (450°C)	
Promag P	15...600	PTFE	-40	60	80	95	130	130	130	130	130
Promag W	25...200	PFA	-40	50	80	95	130	150	150	150	150
	50...3000	HG	-20	60	80	95	130	130	130	130	130
	25...1000	PU	-20	50	50	50	50	50	50	50	50
	25...3000	ETFE (4)	-40	60	80	95	120	120	120	120	120
Promag H	2...150	PFA	-40	45	80	95	130	150	150	150	150
				55 (3)	80 (3)	95	130	130	130	130	130
				60 (3)	80 (3)	95	110	110	110	110	110

Notes: (1) T_{max} = -40°C (for limitation see name plate)

(2) T_{max} may be reduced by versions. For limitation of range for T_{max} see name plate

(3) Promag H limited to T_{max} = 50 °C @ class 16 and T_{max} = 90 °C @ class 10 for optional

(4) Limitation of T_{max} = 120°C depending on process pressure (see nameplate)

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
 (2) T_{medium} may be reduced by versions. For limitation of range for T_{medium} see name plate
 (3) Promag H limited to T_{a,max} = 50°C @ class T6 and T_{medium} = 50°C @ class T6 for optional versions available with medium temperature measurement
 (4) Limitation of T_{medium} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor not insulated											
Sensor	Size / DN	Liner	T _{medium} [°C]	T _{6,max} [°C] (1)	T _{medium} [°C] (2)						
					T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)	
Promag P	15...600	PTFE	-40	60	80	95	130	130	130	130	
Promag W	25...200	PFA	-40	60	80	95	130	150	150	150	
	50...3000	HG	-20	60	80	80	80	80	80	80	
	25...1000	PU	-20	50	50	50	50	50	50	50	
	25...3000	ETFE (3)	-40	60	80	95	120	120	120	120	

Notes: (1) T_{6,min} = -40°C (for limitation see name plate)
(2) T_{6,max} may be reduced by versions. For limitation of range for T_{6,max} see name plate

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
 (2) T_{medium} may be reduced by versions. For limitation of range for T_{medium} see name plate
 (3) Limitation of T_{medium} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor insulated (for insulation refer to manual of E+H Flowtec)											
Sensor	Size / DN	Liner	T _{medium}	T _{max} (1)	T _{fluid max} (2)						
					T6 (85 °C)	T5 (110 °C)	T4 (135 °C)	T3 (120 °C)	T2 (300 °C)	T1 (450 °C)	
Promag P	15...600	PTFE	-40	60	75	95	130	130	130	130	130
Promag W	25...200	PFA	-40	60	80	95	130	150	150	150	150
	50...3000	HG	-20	60	75	80	80	80	80	80	80
	25...1000	PU	-20	50	50	50	50	50	50	50	50
	25...3000	ETFE	-40	55	80	95	120	120	120	120	120
		(3)		60	75	95	120	120	120	120	120

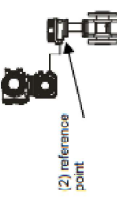
Notes: (1) T_{min} = -40 °C (for limitation see name plate)
(2) T_{fluid max} may be reduced by versions. For limitation of range for T_{fluid} see name plate
(3) Limitation of T_{fluid max} = 120 °C depending on process pressure (see nameplate)

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
 (2) T_{medium} may be reduced by versions. For limitation of range for T_{medium} see name plate
 (3) Limitation of T_{medium} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor insulated (insulation not in compliance to manual of F-H Flows)											
Sensor	Size / DN	Liner	T _{medium} [°C]	T _{max} to be measured at reference point at sensor neck [°C]							
				T _{max} @T1 [°C]	T5 (85 °C)	T5 (100 °C)	T5 (135 °C)	T4 (135 °C)	T3 (200 °C)	T2 (300 °C)	T1 (450 °C)
Promag P	all	PTFE	-40	60	130	63.8	65.7	69	69	69	69
Promag W		PFA	-40	60	150	63.8	65.7	69	69	69	69
		HG	-20	60	80	63.8	65.7	69	69	69	69
		PU	-20	50	50	63.8	65.7	69	69	69	69
		ETFE	-40	60	120 (3)	63.8	65.7	69	69	69	69

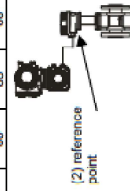
Notes:

- (1) T_{min} = -40 °C (for limitation see name plate)
- (2) location of reference point
- (3) Limitation of T_{medium} = 120 °C depending on process pressure (see nameplate)



(2) reference point

Notes: (1) T_{a,min} = -40°C (for limitation see name plate)
 (2) location of reference point
 (3) Limitation of T_{medium} = 120°C depending on process pressure (see nameplate)



Änderungen: A 28.10.2015 / EKE F 15.07.2024 BEOE B - G C 02.11.2017 / EKE H D 14.01.2019 / EKE J E 16.09.2022 BEOE K		Ersatz durch: Diese Zeichnung darf ohne unsere Genehmigung weder veröffentlicht werden noch ohne Passieren und Konturverfeinern zupilgert gemacht werden. Ersteller: FES / EKE FILE: M:\Zachg\FES0285F\FES0285F.dwg	
Installation Drawing NEPSI (acc. to FES0280F) Zone 1, Zone 21 Thermal Parameter Proline Promag 300/500			
Transmitter for all versions: (1) T _{max} T6 (85°C) 55 T5 (100°C) 60		Ersatzzeit: 28.10.2018 EKE Geprüft: 15.07.2024 BEOE Gezeichnet: EKE	
Notes: (1) T _{a,min} = -50°C (for limitation see name plate)		FES0285F 2/3	

Proline Promag H/P/W 500**Notes:**

This page applies to versions with extended order code covering:

5(H/P)5B** - dd*****A...
 5W5B** - dd*****A...
 with approval option: dd = NJ, NN

05(H/P)5B** - dd*****A...
 05W5B** - dd*****A...

05x5Bxx - dd*****A...
 05x5Bxx - dd*****A...

Sensor of Standard version with sensor not insulated

Sensor	Size / DN	Liner	T _{max} [°C]	T _{min} [°C]	T _{max} [°C] (2)					T _{min} [°C] (2)				
					T ₆ (85°C)	T ₅ (100°C)	T ₄ (135°C)	T ₃ (200°C)	T ₂ (300°C)	T ₁ (450°C)				
Promag P Promag W Promag W	15...600	PTFE	-40	60	80	95	130	130	130	130				
	25...200	PFA	-40	50	80	95	130	150	150	150				
	50...3000	HG	-20	60	80	95	130	130	130	130				
	25...1000	PU	-20	50	50	50	50	80	80	80				
	25...3000	ETFE (4)	-40	60	80	95	120	120	120	120				
Promag H	2...150	PFA	-40	35	80	95	130	150	150	150				
			-45	80	95	135	135	135	135	135				
			-60	80	95	145	145	145	145	145				

3、温度参数 (2区)

Proline Promag H/P/W 300

Notes:

This page applies to versions with extended order code covering:

5(H/P)3B** - dd...

5W3B** - dd...

with approval option: dd = NS

O5(H/P)3B** - dd...

O5W3B** - dd...

5x3Bxx - dd...

5x3Bxx - dd...

O5x3Bxx - dd...

O5x3Bxx - dd...

High temperature version with sensor insulated
(for insulation refer to manual of E-H Flowtec)

Sensor	Size / DN	Liner	T _{max} [°C]	T _{med,min} [°C]	T _{med,max} [°C]	T ₁ (450°C)	T ₂ (300°C)	T ₃ (200°C)	T ₄ (135°C)	T ₅ (100°C)	T ₆ (85°C)
Promag P	15...600	PTFE	-40	(2)	(1)	130	130	130	130	130	130
Promag W	25...200	PFA	-40	---	---	100	100	100	100	100	100
	50...3000	HG	-20	---	---	130	130	130	130	130	130
	25...1000	PU	-20	---	---	80	80	80	80	80	80
	25...3000	ETFE	-40	(7)	---	100	100	100	100	100	100
Promag H (5), (6)	2...150	PFA	-40	---	---	150	150	150	150	150	150

Notes: (1) T_{max} = 40°C (for limitation see name plate)
(2) T_{med,min} and/or T_{med,max} may be reduced by versions. For limitation of range for T_{med} see name plate
(3) sensor Promag H with liner type PFA may be used for condition of process with T_{med}=180°C@Ta=50°C for a short period of time (max. 10 min.)
(4) Promag H limited to T_{max} = 50°C @ class T6 and T_{med,max} = 50°C @ class T6 for optional versions available with medium temperature measurement
(5) versions with transmitter enclosure stainless steel (hygienic) only for installation where transmitter is not installed above the sensor
(6) Versions with transmitter enclosure stainless steel (hygienic) installed in temperature class T5, a degree of 3°C for ambient temperature shall be taken into account
(7) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

High temperature version with sensor insulated
(for insulation refer to manual of E-H Flowtec)

Sensor	Size / DN	Liner	T _{max} [°C]	T _{med,min} [°C]	T _{med,max} [°C]	T ₁ (450°C)	T ₂ (300°C)	T ₃ (200°C)	T ₄ (135°C)	T ₅ (100°C)	T ₆ (85°C)
Promag P	15...600	PTFE	-40	(2)	(1)	130	130	130	130	130	130
Promag W	25...200	PFA	-40	---	---	100	100	100	100	100	100
	50...3000	HG	-20	---	---	100	100	100	100	100	100
	25...1000	PU	-20	---	---	80	80	80	80	80	80
	25...3000	ETFE	-40	(3)	---	100	100	100	100	100	100

Notes: (1) T_{max} = 40°C (for limitation see name plate)
(2) T_{med,min} and/or T_{med,max} may be reduced by versions. For limitation of range for T_{med} see name plate
(3) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

High temperature version with sensor insulated
(insulation not in compliance to manual of E-H Flowtec)

Sensor	Size / DN	Liner	T _{max} [°C]	T _{med,min} [°C]	T _{med,max} [°C]	T ₁ (450°C)	T ₂ (300°C)	T ₃ (200°C)	T ₄ (135°C)	T ₅ (100°C)	T ₆ (85°C)
Promag P	all	PTFE	-40	---	---	130	130	130	130	130	130
Promag W		PFA	-40	---	---	150	150	150	150	150	150
		HG	-20	---	---	80	80	80	80	80	80
		PJ	-20	---	---	50	50	50	50	50	50
		ETFE	-40	---	---	120	120	120	120	120	120

Notes: (1) T_{max} = 40°C (for limitation see name plate)
(2) location of reference point
(3) Limitation of T_{med,max} = 120°C depending on process pressure (see nameplate)

Ausgangspunkt:		A 28.10.2016 / EKE		F 15.07.2024/BECE		Ersetzter durch:	
B	02.11.2017 / EKE	G					
C	15.01.2018 / EKE	H					
D	14.01.2019 / EKE	J					
E	16.09.2022/BECE	K					

Installation Drawing NEPSI (acc. to FES0261F)

Zone 2

Thermal Parameter

Proline Promag 300/500

Gezeichnet: 28.10.2016

Geprüft:

Ex-geprüft: 15.07.2024

Gesehen:

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

FES0286F

1/3

Proline Promag H/P/W 500

Notes: This page applies to versions with extended order code covering:

5(H/P)SB** - dd*****B...
5WB** - dd*****B...
with approval option: dd = NS

Sensor of Standard version with sensor not insulated

Sensor	Size / DN	Linear	T _{max} [°C]	T _{ref.min} [°C]	T _{ref.max} [°C] (2)	T ₁	T ₂	T ₃	T ₄	T ₅	T ₆	T ₇	T ₈	T ₉	T ₁₀	T ₁₁
Promag P	15...600	PTFE	-40	(2)	(1)	130	130	130	130	130	130	130	130	130	130	130
Promag W	25...200	PFA	-40			130	130	130	130	130	130	130	130	130	130	130
	50...3000	HG	-20			80	80	80	80	80	80	80	80	80	80	80
	25...1000	PU	-20			50	50	50	50	50	50	50	50	50	50	50
	25...3000	ETFE	-40			80	80	80	80	80	80	80	80	80	80	80
Promag H	2...150	PFA	-40			130	130	130	130	130	130	130	130	130	130	130
			55 (3)			80 (3)	80 (3)	80 (3)	80 (3)	80 (3)	80 (3)	80 (3)	80 (3)	80 (3)	80 (3)	80 (3)

Notes: (1) T_{a.min} = -40°C (for limitation see name plate)
(2) T_{ref.max} and/or T_{ref.min} may be reduced by versions. For limitation of range for T_{ref} see name plate
(3) Promag H limited to T_{a.max} = 50°C @ class T6 and T_{ref.max} = 50°C @ class T6 for optional versions available with medium temperature measurement
(4) Limitation of T_{ref.max} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor not insulated

Sensor	Size / DN	Linear	T _{max} [°C]	T _{ref.min} [°C]	T _{ref.max} [°C] (2)	T ₁	T ₂	T ₃	T ₄	T ₅	T ₆	T ₇	T ₈	T ₉	T ₁₀	T ₁₁
Promag P	15...600	PTFE	-40	(2)	(1)	130	130	130	130	130	130	130	130	130	130	130
Promag W	25...200	PFA	-40			130	130	130	130	130	130	130	130	130	130	130
	50...3000	HG	-20			80	80	80	80	80	80	80	80	80	80	80
	25...1000	PU	-20			50	50	50	50	50	50	50	50	50	50	50
	25...3000	ETFE	-40			80	80	80	80	80	80	80	80	80	80	80

Notes: (1) T_{a.min} = -40°C (for limitation see name plate)
(2) T_{ref.max} and/or T_{ref.min} may be reduced by versions. For limitation of range for T_{ref} see name plate
(3) Limitation of T_{ref.max} = 120°C depending on process pressure (see nameplate)

Transmitter for all versions

T ₁	T ₂	T ₃	T ₄
T6 (85°C)	T5 (100°C)		T4 (135°C)
---	45		60

Notes: (1) T_{a.min} = -50°C (for limitation see name plate)

O5(H/P)SB** - dd*****B...
O5WB** - dd*****B...
with approval option: dd = NS

5x5Bxx - dd*****B...
5x5Bxx - dd*****B...

Sensor of High temperature version with sensor insulated
(for insulation refer to manual of E-H Flowtec)

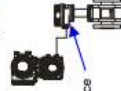
Sensor	Size / DN	Linear	T _{max} [°C]	T _{ref.min} [°C]	T _{ref.max} [°C] (2)	T ₁	T ₂	T ₃	T ₄	T ₅	T ₆	T ₇	T ₈	T ₉	T ₁₀	T ₁₁
Promag P	15...600	PTFE	-40	(2)	(1)	130	130	130	130	130	130	130	130	130	130	130
Promag W	25...200	PFA	-40			130	130	130	130	130	130	130	130	130	130	130
	50...3000	HG	-20			80	80	80	80	80	80	80	80	80	80	80
	25...1000	PU	-20			50	50	50	50	50	50	50	50	50	50	50
	25...3000	ETFE	-40			80	80	80	80	80	80	80	80	80	80	80

Notes: (1) T_{a.min} = -40°C (for limitation see name plate)
(2) T_{ref.max} and/or T_{ref.min} may be reduced by versions. For limitation of range for T_{ref} see name plate
(3) Limitation of T_{ref.max} = 120°C depending on process pressure (see nameplate)

Sensor of High temperature version with sensor insulated
(insulation not in compliance to manual of E-H Flowtec)

Sensor	Size / DN	Linear	T _{max} [°C]	T _{ref.min} [°C]	T _{ref.max} [°C] (2)	T ₁	T ₂	T ₃	T ₄	T ₅	T ₆	T ₇	T ₈	T ₉	T ₁₀	T ₁₁
Promag P	all	PTFE	-40			130	130	130	130	130	130	130	130	130	130	130
Promag W		PFA	-40			130	130	130	130	130	130	130	130	130	130	130
		HG	-20			80	80	80	80	80	80	80	80	80	80	80
		PU	-20			50	50	50	50	50	50	50	50	50	50	50
		ETFE	-40			80	80	80	80	80	80	80	80	80	80	80

Notes: (1) T_{a.min} = -40°C (for limitation see name plate)
(2) location of reference point
(3) Limitation of T_{ref.max} = 120°C depending on process pressure (see nameplate)



Änderungen:

A	28.10.2016 / EKE	F	17.07.2024/BEDE	Alle gesetzlichen Updates, vorarbeiten.	Erstellt durch:
B	02.11.2017 / EKE	G		Diese Zeichnung darf ohne unsere	Erstellt für:
C	15.01.2018 / EKE	H		Gestattung weder vervielfältigt werden noch	Ersteller: FES / EKE
D	14.01.2019 / EKE	J		durch Personen und Vorurteilen	FILE: MZuehgeFES0286FES0286F.doc
E	16.09.2022/BEDE	K		zugänglich gemacht werden.	

Installation Drawing NEPSI (acc. to FES0261F)

Zone 2

Thermal Parameter

Proline Promag 300/500



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

FES0286F

2/3

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

4、产品防爆标志详细如下：

Promag 300:

dd 代码	ff 代码	气体防爆标志	粉尘防爆标志
NB	CA, CB, CC, CD, HA, TA, MC, RC	Ex db eb ia [ia Ga] II C T1...T6 Gb	Ex tb [ia Da] III C T**°C Db
	BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	Ex db eb ia II C T1...T6 Gb	Ex tb III C T**°C Db
ND	CA, CB, CC, CD, HA, TA, MC, RC	Ex db eb ia [ia Ga] II C T1...T6 Gb	Ex tb [ia Da] III C T**°C Db
	BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	Ex db eb ia II C T1...T6 Gb	Ex tb III C T**°C Db
NS	CA, CB, CC, CD, HA, TA, MC, RC	Ex ec nC ic [ic] II C T1...T5 Gc	---
	BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	Ex ec nC ic II C T1...T5 Gc	---

dd 代码	ff 代码	转换器	传感器
		气体/粉尘防爆标志	气体/粉尘防爆标志
NB	CA, CB, CC, CD, HA, TA, BA, BB, GA, LA, NA, RA, RB, RC, SA, MA, MB, MC	Ex db eb [ia Ga] II C T5...T6 Gb Ex tb [ia Da] III C T85°C Db	Ex eb ia II C T1...T6 Gb Ex ia tb III C T**°C Db
ND	CA, CB, CC, CD, HA, TA, BA, BB, GA, LA, NA, RA, RB, RC, SA, MA, MB, MC	Ex db eb [ia Ga] II C T5...T6 Gb Ex tb [ia Da] III C T85°C Db	Ex eb ia II C T1...T6 Gb Ex ia tb III C T**°C Db
NS	CA, CB, CC, CD, HA, TA, BA, BB, GA, LA, NA, RA, RB, RC SA, MA, MB, MC	Ex ec nC [ic] II C T4...T5 Gc	Ex ec ic II C T1...T6 Gc
N7	CA, CB, CC, CD, HA, TA, BA, BB, GA, LA, NA, RA, RB, RC, SA, MA, MB, MC	Ex db eb [ia Ga] II C T5...T6 Gb	Ex eb ia II C T1...T6 Gb
N8	CA, CB, CC, CD, HA, TA, BA, BB, GA, LA, NA, RA, RB, RC, SA, MA, MB, MC	Ex db eb [ia Ga] II C T5...T6 Gb	Ex eb ia II C T1...T6 Gb

Promag 500 传感器外壳内置ISEM:

dd 代码	ff 代码	转换器	传感器
		气体/粉尘防爆标志	气体/粉尘防爆标志
NJ	CA, CB, CC, CD, HA, TA, BA, BB, GA, LA, NA, RA, RB, RC, SA, MA, MB, MC	non-Ex	Ex db ia II C T1...T6 Gb Ex ia tb III C T**°C Db
	CA, CB, CC, CD, HA, TA, MC, RC BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	[Ex ic] II C non-Ex	Ex ec ic II C T1...T6 Gc
NN	CA, CB, CC, CD, HA, TA, MC, RC BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	Ex ec nC [ic] II C T4...T5 Gc Ex ec nC II C T4...T5 Gc	Ex db ia II C T1...T6 Gb Ex ia tb III C T**°C Db
	CA, CB, CC, CD, HA, TA, MC, RC BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	Ex ec nC [ic] II C T4...T5 Gc Ex ec nC II C T4...T5 Gc	Ex ec ic II C T1...T6 Gc
NS	CA, CB, CC, CD, HA, TA, MC, RC BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	Ex ec nC [ic] II C T4...T5 Gc Ex ec nC II C T4...T5 Gc	Ex ec ic II C T1...T6 Gc
	CA, CB, CC, CD, HA, TA, MC, RC BA, BB, GA, LA, NA, RA, SA, MA, MB, RB	Ex ec nC [ic] II C T4...T5 Gc Ex ec nC II C T4...T5 Gc	Ex ec ic II C T1...T6 Gc

5、产品电气参数:

电源		
dd e 代码	端子	参数
NBD, NDD N7D, N8D	No. 1(L+/L), 2(L-/N)	U _N = 19.2~28.8Vdc U _M = 250Vac
NBE, NDE N7E, N8E	No. 1(L+/L), 2(L-/N)	U _N = 85~264Vac U _M = 250Vac
NSI, NJI NLI, NNI	No. 1(L+/L), 2(L-/N)	U _N = 19.2~28.8Vdc/ 85~264Vac U _M = 250Vac

输入/输出1			
ff 代码	端子	参数	
BA, BB, MA	No. 26, 27	$U_N = 30V_{dc}$ $U_M = 250V_{ac}$	
LA, GA, SA	No. 26, 27	$U_N = 32V_{dc}$ $U_M = 250V_{ac}$	
CA, CB	No. 26, 27	$U_i = 30V$ $I_i = 100mA$ $P_i = 1.25W$ $L_i = 0$ $C_i = 6nF$	
CC, CD	No. 26, 27	dd = NB, ND, N7, N8: $U_o = 21.8V$ $I_o = 90mA$ $P_o = 491mW$ $L_o = 4.1mH$ (IIC)/ 15mH (IIB) $C_o = 160nF$ (IIC)/ 1160nF (IIB) $U_i = 30V$ $I_i = 10mA$ $P_i = 0.3W$ $L_i = 5mH$ $C_i = 6nF$	dd = NS, NN: $U_o = 21.8V$ $I_o = 90mA$ $P_o = 491mW$ $L_o = 9mH$ (IIC)/ 39mH (IIB) $C_o = 600nF$ (IIC)/ 4000nF (IIB) $U_i = 30V$ $I_i = 10mA$ $P_i = 0.3W$ $L_i = 5mH$ $C_i = 6nF$
HA, TA	No. 26, 27	dd = NB, ND, N7, N8: PA/FF $U_i = 30V$ $I_i = 570mA$ $P_i = 8.5W$ $L_i = 10\mu H$ $C_i = 5nF$	dd = NS, NN: PA/FF $U_i = 32V$ $I_i = 570mA$ $P_i = 8.5W$ $L_i = 10\mu H$ $C_i = 5nF$
MB, RB	No. 26, 27	APL port profile SLAX/SPE PoDL classes 10,11,12 $U_N = 30V_{DC}$ $U_M = 250V_{AC}$	

MC,RC	No. 26, 27	$dd = NB, ND, N7, N8$: 2-WISE power load APL port profile SLAA $U_i = 17.5V$ $I_i = 380mA$ $P_i = 5.32W$ $L_i \leq 10\mu H$ $C_i \leq 5nF$	$dd = NS, NN$: 2-WISE power load APL port profile SLAA $U_i = 17.5V$ $I_i = 380mA$ $P_i = 5.32W$ $L_i \leq 10\mu H$ $C_i \leq 5nF$
NA, RA	IO1 / RJ45	$U_N = 30Vdc$ $U_M = 250Vac$	

输入/输出2		
g 代码	端子	参数
C, G, K	No. 24, 25	$U_i = 30V$ $I_i = 100mA$ $P_i = 1.25W$ $L_i = 0$ $C_i = 0$
B, D, E, F, I, J, L	No. 24, 25	$U_N = 30Vdc$ $U_M = 250Vac$
H	No. 24, 25	$U_N = 30Vdc$ $I_N = 100mA / 500mA$ $U_M = 250Vac$

输入/输出3		
h 代码	端子	参数
C, G, K	No. 22, 23	$U_i = 30V$ $I_i = 100mA$ $P_i = 1.25W$ $L_i = 0$ $C_i = 0$
B, D, E, F, I, J, L	No. 22, 23	$U_N = 30Vdc$ $U_M = 250Vac$
H	No. 22, 23	$U_N = 30Vdc$ $I_N = 100mA / 500mA$ $U_M = 250Vac$

输入/输出4		
i 代码	端子	参数
C, G, K	No. 20, 21	$U_i = 30V$ $I_i = 100mA$ $P_i = 1.25W$ $L_i = 0$ $C_i = 0$
B, D, E, F, I, J, L	No. 20, 21	$U_N = 30Vdc$ $U_M = 250Vac$
H	No. 20, 21	$U_N = 30Vdc$ $I_N = 100mA/ 500mA$ $U_M = 250Vac$

服务接口		
dd 代码	dd 代码	dd 代码
NB,N7	服务接口	服务接口仅能安装在非爆炸危险场所连接一个非本安回路： $U_N = 3.3V$, $U_M = 250VAC$ 或 连接一个本安回路： $U_i = 10V$, $I_i = n.a.$, $P_i = n.a.$, $C_i = 200nF$, $L_i = 0$
ND,N8	服务接口	服务接口仅可连接一个非本安回路： $U_N = 3.3V$, $U_M = 250VAC$ 或 连接一个本安回路： $U_i = 10V$, $I_i = n.a.$, $P_i = n.a.$, $C_i = 200nF$, $L_i = 0$
NS,NJ,NL,NN	服务接口	$U_N = 3.3V$

天线套管		
dd 代码	端子	参数
NB, NJ, NL, NN, NS, N7	N connector	使用Endress+Hauser提供的RF天线； 或使用符合下列要求的RF天线： – 最小阻抗$50\ \Omega$ – 频率范围不超过 1710MHz... 6000MHz – 额定功率不低于100mW

远程显示		
dd 代码	端子	参数
NB, ND, N7, N8	No. 81, 82, 83, 84	$U_o = 3.9V$ $I_o = 1.5A$ (spark) $200mA$ (power) $P_o = 600mW$ $R_i = 2.6\Omega$ $L_o = 0$ $C_o = 670\mu F$
NS	No. 81, 82, 83, 84	$U_N = 3.3V$ $I_N = 150mA$

认证代码 **dd** = NB、ND、N7 和 N8 的产品连接 E+H 公司远程显示单元 DKX001 或 ODKX001 时，连接电缆应满足 $L/R \leq 0.024mH/\Omega$ 的要求。认证代码 **dd** = NJ、NI 和 NN 的产品不连接远程显示单元 DKX001 或 ODKX001 使用。

6、远程变送器和远程传感器的电气参数（Proline 500）：

dd k 代码	转换器	
NBB, NDB, N7B, N8B	端子4, 5, 6, 7, 8, 32, 33, 34, 35, 36, 37	$U_o = 26.6V$ $I_o = 19.2mA$ $P_o = 128mW$ $L_o = 20mH$ $C_o = 94nF$
		$U_o = 13.3V$ $I_o = 39.2mA$ $P_o = 131mW$ $L_o = 20mH$ $C_o = 94nF$
	端子41, 42	$U_N = 60V$ $I_N = 90mA$
	传感器	
	端子4, 5, 6, 7, 8, 32, 33, 34, 35, 36, 37	$U_i = 26.6V$ $I_i = n.a.$ $P_i = n.a.$ $L_i = 0$ $C_i = 0$
		$U_N = 60V$ $I_N = 90mA$

接线端子4, 5, 6, 7, 8, 36, 37的连接电缆最长允许200m, 电缆参数如下:
分布电感 $L_c \leq 1 \text{ mH/km}$
分布电容 $C_c \leq 0.42 \text{ }\mu\text{F/km}$

dd k 代码	转换器	
NSB	端子4, 5, 6, 7, 8, 32, 33, 34, 35, 36, 37	$U_o = 26.6\text{V}$ $I_o = 19.2\text{mA}$ $P_o = 128\text{mW}$ $L_o = 50\text{mH}$ $C_o = 325\text{nF}$
		$U_o = 13.3\text{V}$ $I_o = 39.2\text{mA}$ $P_o = 131\text{mW}$ $L_o = 50\text{mH}$ $C_o = 325\text{nF}$
	端子41, 42	$U_N = 60\text{V}$
	传感器	
	端子4, 5, 6, 7, 8, 32, 33, 34, 35, 36, 37	$U_i = 26.6\text{V}$ $I_i = 19.2\text{mA}$ $P_i = \text{n.a.}$ $L_i = 0$ $C_i = 0 \quad (+13.3\text{V to } -13.3\text{V})$
		$U_i = 13.3\text{V}$ $I_i = 39.2\text{mA}$ $P_i = \text{n.a.}$ $L_i = 0$ $C_i = 0 \quad (\text{to ground})$
	端子41, 42	$U_N = 60\text{V}$
接线端子4, 5, 6, 7, 8, 36, 37的连接电缆最长允许200m, 电缆参数如下: 分布电感 $L_c \leq 1 \text{ mH/km}$ 分布电容 $C_c \leq 1 \text{ }\mu\text{F/km}$		

dd k 代码	转换器	
NJA, NLA, NNA, NSA	端子61, 62	$U_N = 35\text{V}$
	端子63, 64	$U_N = 3.3\text{V}$
	传感器	
	端子61, 62	$U_N = 35\text{V}$
	端子63, 64	$U_N = 3.3\text{V}$

7、现场安装时，电缆引入口须选用国家指定的防爆检验机构按检验认可、符合GB/T 3836.1-2021、GB/T 3836.3-2021要求且具有Ex ec IIC防爆等级、达到IP54外壳防护等级的电缆引入装置或堵封件，冗余电缆引入口须用堵封件有效密封。产品装配完整后，外壳防护等级不得低于GB/T 4208-2017规定的IP66/67。

8、产品在现场维护使用时应遵循“断电源后开盖”的原则。

9、产品在粉尘环境使用维护时，应定期采取清洁措施，以防止表面积聚粉尘。

10、用户不得自行随意更换该产品的电气零部件，应会同产品制造商共同解决运行中出现的故障，以免影响防爆性能和损坏现象的发生。

11、产品的安装、使用和维护应同时遵守产品使用说明书、GB/T 3836.13-2021“爆炸性环境 第13部分：设备的修理、检修、修复和改造”、GB/T 3836.15-2017“爆炸性环境 第15部分：电气装置的设计、选型和安装”、GB/T 3836.16-2022“爆炸性环境 第16部分：电气装置的检查与维护”、GB/T 3836.18-2017“爆炸性环境 第18部分：本质安全电气系统”、GB 50257-2014“电气设备安装工程爆炸和火灾危险环境电气装置施工及验收规范”及GB 15577-2018“粉尘防爆安全规程”的有关规定。

三、制造厂责任

1、产品制造厂必须将上述产品安全使用特殊条件和使用注意事项纳入该产品使用说明书；

2、制造厂必须严格按照NEPSI认可的文件资料生产。

上海仪器仪表自控系统检验测试所有限公司
国家级仪器仪表防爆安全监督检验站
二〇二四年七月二十二日

注：本附件替代原防爆合格证附件II