Safety Instructions Proline Promag 300

JPN: Zone 1 Zone 21



XA01775D/06/EN/03.23-00

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Proline Promag 300

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Associated documentation

For an overview of the scope of the associated Technical Documentation, refer to the following:

- *Device Viewer* (www.endress.com/deviceviewer): Enter serial number from nameplate.
- *Endress+Hauser Operations app*: Enter serial number from nameplate or scan matrix code on nameplate.

To commission the device, please observe the Operating Instructions pertaining to the device:

Measuring device	Documentation code			
	HART	FOUNDATION Fieldbus	PROFIBUS PA	PROFIBUS DP
Promag H 300	BA01392D	BA01477D	BA01396D	BA01865D
Promag P 300	BA01393D	BA01478D	BA01397D	BA01853D
Promag W 300	BA01918D	BA01938D	BA01928D	BA01940D

Measuring device	Documentation code		
	Modbus RS485	EtherNet/IP	PROFINET
Promag H 300	BA01394D	BA01716D	BA01718D
Promag P 300	BA01395D	BA01717D	BA01719D
Promag W 300	BA01939D	BA01937D	BA01941D

Additional documentation

Contents	Document type	Documentation code
Remote display and operating module	Special documentation	SD01763D
DKX001	Safety Instructions	XA01781D
	Ex ia, Ex tb	
Explosion Protection	Brochure	CP00021Z/11
Ethernet-APL Installation Drawing	Installation Drawing	HE_01622

Please note the documentation associated with the device.

Certificates and JPN Type Examination Certificate

declarations

Certificate number:

CML 17JPN2346X

Affixing the certificate number certifies conformity with the standards (depending on the device version).

	JNIOSH-TR-46-1: 2020
	JNIOSH-TR-46-2: 2018
	JNIOSH-TR-46-5: 2018
•	JNIOSH-TR-46-6: 2015

JNIOSH-TR-46-9: 2018

Certificate holder	Endress+Hauser Flowtec AG
	Kägenstrasse 7
	4153 Reinach BL
	Switzerland

ExtendedThe extended order code is indicated on the nameplate, which is affixedorder codeto the device in such a way that it is clearly visible. Additional
information about the nameplate is provided in the associated
Operating Instructions.

Structure of the extended order code

* * * * * *	_ **********	+	A*B*C*D*E*F*G*
(Device type)	(Basic specifications)		(Optional specifications)
* =	Placeholder At this position, an option (number specification is displayed instead of t		,

Device type

The device and the device design is defined in the "Device type" section (Product root).

Basic specifications

The features that are absolutely essential for the device (mandatory features) are specified in the basic specifications. The number of positions depends on the number of features available. The selected option of a feature can consist of several positions.

Optional specifications

The optional specifications describe additional features for the device (optional features). The number of positions depends on the number of features available. The features have a 2-digit structure to aid identification (e.g. JA). The first digit (ID) stands for the feature group and consists of a number or a letter (e.g. J = Test, Certificate). The second digit constitutes the value that stands for the feature within the group (e.g. A = 3.1 material (wetted parts), inspection certificate).

More detailed information about the device is provided in the following tables. These tables describe the individual positions and IDs in the extended order code which are relevant to hazardous locations.

Position	Order code for	Option selected	Description
1	Instrument family	5	Electromagnetic flowmeter
2	Sensor	H, P, W ¹⁾	Sensor type
3	Transmitter	3	Transmitter type: 4-wire, compact version
4	Generation index	В	Platform generation
5, 6	Nominal diameter	Examples: 02, 04, 40, 50, 1H, 1Z, T0, E4 ^{2) 3)}	Nominal diameter of sensor

Device type

1) For replacement transmitter only: X

2) For the exact specification of the nominal diameter, see nameplate

3) For replacement transmitter only: XX

Basic specifications

Position 1, 2 Order code for "Approval" Selected option	Position 4, 5 Order code for "Output, input 1" Selected option	Type of protection Transmitter Sensor	
JD ¹⁾	BA, BB, GA, LA, MA, MB, NA, RA, RB, SA	Ex db eb ia IIC T6T1 Gb Ex tb IIIC T**°C Db $^{2)}$	Ex eb ia IIC T6T1 Gb Ex ia tb IIIC T**°C Db ²⁾
	CA, CB, CC, HA, MC, RC, TA	Ex db eb ia [ia Ga] IIC T6T1 Gb Ex tb [ia Da] IIIC T**°C Db ²⁾	

1) Connection compartment of the transmitter Ex db

2) The marking may be applied depending on users' applications.

Position	Order code for	Option selected	Description
4, 5	Output, input 1	BA	4-20mA HART
		CA	4-20mA HART Ex-i passive
		СС	4-20mA HART Ex-i active
		GA	PROFIBUS PA
		HA	PROFIBUS PA Ex-i
		LA	PROFIBUS DP
		MA	Modbus RS485

Position	Order code for	Option selected	Description
		MB	Modbus TCP with Ethernet-APL
		MC	Modbus TCP with Ethernet-APL Ex i
		NA	EtherNet/IP 2-port switch integrated
		RA	PROFINET IO 2-port switch integrated
		RB	PROFINET with Ethernet-APL
		RC	PROFINET with Ethernet-APL Ex i
		SA	FOUNDATION Fieldbus
		TA	FOUNDATION Fieldbus Ex-i
6	Output, input 2	А	W/o
		В	4-20mA
		С	4-20mA Ex-i passive
		D	Configurable I/O initial setting off
		Е	Pulse/frequency/switch output
		F	Pulse output, phase-shifted
		G	Pulse/frequency/switch output Ex-i passive
		Н	Relay
		Ι	4-20mA input
		J	Status input
7	Output, input 3	А	W/0
		В	4-20mA
		С	4-20mA Ex-i passive
		D	Configurable I/O initial setting off
		Е	Pulse/frequency/switch output
		F	Pulse output, phase-shifted
		G	Pulse/frequency/switch output Ex-i passive
		Н	Relay
		Ι	4-20mA input
		J	Status input
8	Display; Operation	А	W/o; via communication
		F	4-line, illuminated; touch control
		G	4-line, illuminated; touch control + WLAN
		М	W/o; prepared for remote display DKX001 ¹⁾

Position	Order code for	Option selected	Description
		0	Separate, with remote display DKX001 $^{\rm 1)},$ 4-line, illuminated; 10 m / 30 ft cable; touch control
9	Housing	А	Alu, coated
11	Liner	А	PFA
		В	PFA High-temperature
		Е	PTFE
		Н	Hard rubber
		Q	PTFE 90°C
		U	Polyurethane
17, 18	Device Model	A1	1
		A2	2

1) DKX001 is approved according to CML 17JPN2349.

Safety instructions: General

- Staff must meet the following conditions for mounting, electrical installation, commissioning and maintenance of the device:
 - Be suitably qualified for their role and the tasks they perform
 - Be trained in explosion protection
 - Be familiar with national regulations or guidelines (e.g. JNIOSH-TR-NO.44)
- Install the device according to the manufacturer's instructions and national regulations.
- Do not operate the device outside the specified electrical, thermal and mechanical parameters.
- Only use the device in media to which the wetted materials have sufficient durability.
- Refer to the temperature tables for the relationship between the permitted ambient temperature for the sensor and/or transmitter, depending on the range of application, and the temperature classes.
- Alterations to the device can affect the explosion protection and must be carried out by staff authorized to perform such work by Endress+Hauser.
- When using in hybrid mixtures (gas and dust occurring simultaneously), observe additional measures for explosion protection.

- Open the housing cover of the transmitter housing in explosion protection Ex db only if one of the following conditions is met:
 - An explosive atmosphere is not present.
 - A waiting time of 10 minutes is observed after switching off the power supply.
 The following warning notice is on the device:
 WARNING – AFTER DE-ENERGIZING, DELAY 10 MINUTES

BEFORE OPENING ENCLOSURE IN TYPE OF PROTECTION EX D

- In devices with damaged Ex d threads:
 - Use in hazardous areas is not permitted.
 - Repair of Ex d threads is not permitted.
- Observe all the technical data of the device (see nameplate).

Safety instructions: Installation

- Continuous service temperature of the connecting cable: -40 to +80 °C; in accordance with the range of service temperature taking into account additional influences of the process conditions $(T_{a,min} \text{ and } T_{a,max} + 20 \text{ K}).$
- Only use certified cable entries suitable for the application. Observe selection criteria as per JNIOSH-TR-NO.44.
- The following applies when connecting the transmitter with a connection compartment in Ex db:
 Only use separately certified cables and wire entries (Ex db IIC) which are suitable for operating temperatures up to 85 °C and for IP 66/67.

If using conduit entries, the associated sealing mechanisms must be mounted directly on the housing.

Plastic sealing plugs act as transport protection and have to be replaced by suitable, individually approved installation material. The mounted metal thread extensions and blind plugs are tested and certified as part of the housing for type of protection Ex db IIC. The thread extension or the blind plug labeled as follows for identification purposes:

- Md: M20 x 1.5
- d: NPT ½"
- Gd: G ½"
- The following cable glands approved by an Ex certification body may be installed on the device (for details, contact our service center):
 - Ex d, Ex t approved cable glands, e.g. EXTC-16MG
 - Ex d approved cable glands, e.g. KXBF-20-16
- Yellow cap attached to the cable glands is a transportation measure only, and is to be removed when the delivered device is installed.
- If the third cable gland is not used, remove it and seal the thread hole with Ex d blind plug (M20 x 1.5).

- Information on our service center: Service Desk, 5-70-3 Nisshin-cho, Fuchu-shi, Tokyo-to Tel: 042-314-1911
 Fax: 042-314-1951
- When the measuring device is connected, attention must be paid to explosion protection at the transmitter.
- Turning the transmitter housing
 - Loosen both hexagon socket screws until the transmitter housing can be turned.
 - Turn transmitter housing to desired position (mechanically limited); if necessary turn 270° in other direction.
 - Tighten both hexagon socket screws with a maximum of 7 Nm.
- When connecting through a conduit entry approved for this purpose, mount the associated sealing unit directly at the enclosure.
- Seal unused entry glands with approved sealing plugs that correspond to the type of protection. The plastic transport sealing plug does not meet this requirement and must therefore be replaced during installation.
- Only use certified sealing plugs. The metal sealing plugs supplied meet this requirement.

Intrinsic safety

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- Observe the guidelines for interconnecting intrinsically safe circuits (e.g. JNIOSH-TR-NO.44).
- When the intrinsically safe Ex ia circuits of the device are connected to certified intrinsically safe circuits of Category Ex ib for Equipment Groups IIC or IIB, the type of protection changes to Ex ib IIC or Ex ib IIB.
- The device can be connected to the remote display DKX001 which has explosion protection: refer to the Special documentation and Ex documentation.
 - When using the remote display and operating module DKX001 the internal display and operating module must be removed.
 - When using the separate approved, remote display and operating module DKX001, only use the following variants: Basic specification of the remote display and operating module DKX001, order code "Approval", option JE, JF, JG

Potential equalization

- Integrate the device into the potential equalization .
- If the ground connection has been established via the pipe as specified, it is also possible to integrate the sensor into the potential equalization system via the pipe.

Safety

DIV	[°C]	T6 [85 °C]	T5 [100 °C]	T4 [135 °C]	T3 [200 °C]	T2 [300 °C]	T1 [450 °C]					
Promag H DN	Ta		T _m [°C]									
				temperature s+Hauser sp		hout therma	l insulation					
		$T_{\rm m}$ for T	6T1 depen	ding on the n	naximum am	bient temper	rature T _a					
		Maximu	ım medium te	emperature								
		$T_{\rm m}$ = -40 to 0 °C depending on the selected device version (see nameplate!)										
		Minimu	m medium te	mperature								
		Mediun	n temperatu	re								
		$T_a = +60$ °C depending on the medium temperature and temperature class.										
			Maximum ambient temperature									
		$T_a = -40$	$T_a = -40 \text{ °C}$									
tables		Minimum ambient temperature										
Temperatu	ure	Ambier	it temperatu	re								
		as transport p y approved in ately certified pecification re to the remote s Ex ia IIIC ex 18 18	nstallation m d and marked equirements. e display and	aterial. 1 as operating								
		and se The n	 Only use certified cable entries. The metal cable entries, extensions and sealing plugs supplied meet this requirement. The metal extensions and blind plugs supplied are tested and certified as part of the enclosure for explosion protection Ex tb IIIC. Plastic 									
instructior Zone 21	 Only open all housing briefly, ensuring that no dust or moisture enters the housing. 											

• To ensure dust-tightness, securely seal all housing openings, cable

DN	Ta			T _n	, [°C]		
	[°C]	T6 [85 °C]	T5 [100 ℃]			T2 [300 °C]	T1 [450 °C]
	55 ²⁾	65 ¹⁾	80	130	150	150	150
	60 ²⁾	-	-	115	115	115	115

 $\label{eq:Tm} \begin{array}{l} T_{m}=50\ ^{\circ}\!C \mbox{ for optional specification, ID Cx (Sensor option)} = CI \mbox{ (Fluid Temperature Probe)} \\ T_{a}=50\ ^{\circ}\!C \mbox{ for optional specification, ID Cx (Sensor option)} = CI \mbox{ (Fluid Temperature Probe)} \end{array}$ 1)

2)

Promag P

DN	Liner	Ta			T _m	[°C]		
		[°C]	T6 [85 °C]	T5 [100 °C]	T4 [135 ℃]	T3 [200 °C]	T2 [300 °C]	T1 [450 ℃]
Without ther	mal insulation							
15600	PTFE	45	80	90	130	130	130	130
		50	60	90	130	130	130	130
		55	-	-	130	130	130	130
		60	-	-	100	100	100	100
25200	PFA	40	80	95	130	150	150	150
		45	80	95	130	130	130	130
		50	60	90	130	130	130	130
		60	-	-	100	100	100	100
Extended nec	k for insulatio	n (Option	al specificati	on, ID Cx (Sens	sor Option) = (CG), with or wi	thout thermal	insulation
15300	PTFE	50	60	95	130	130	130	130
		55	-	95	130	130	130	130
		60	-	-	100	100	100	100
25200	PFA	45	80	95	130	150	150	150
		50	60	95	130	150	150	150
		60	-	-	100	100	100	100

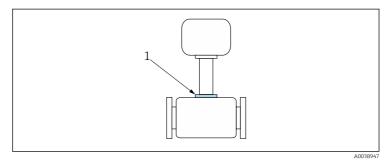
Promag W

DN	Liner	Ta	T _m [°C]					
		[°C]	T6 [85 °C]	T5 [100 °C]	T4 [135 ℃]	T3 [200 °C]	T2 [300 °C]	T1 [450 °C]
Without ther	mal insulation							
25300	PTFE	45	80	90	90	90	90	90

DN	Liner	Ta			T _m	[°C]		
		[°C]	T6 [85 °C]	T5 [100 °C]	T4 [135 ℃]	T3 [200 °C]	T2 [300 °C]	T1 [450 °C]
		50	60	90	90	90	90	90
		55	-	-	90	90	90	90
		60	-	-	90	90	90	90
502400	Hard rubber	50	60	80	80	80	80	80
		60	-	-	80	80	80	80
251200	PU	50	50	50	50	50	50	50
Extended neo	ck for insulation	n (Option	al specificati	on, ID Cx (Sens	sor Option) = (CG), with or wi	thout thermal	insulation
25300	PTFE	45	80	90	90	90	90	90
		50	60	90	90	90	90	90
		55	-	-	90	90	90	90
		60	-	-	90	90	90	90
50300	Hard rubber	50	60	80	80	80	80	80
		60	-	-	80	80	80	80
25300	PU	50	50	50	50	50	50	50

With thermal insulation without Endress+Hauser specifications

The specified reference temperature T_{ref} and the maximum medium temperature $T_{m, max}$ for each temperature class must not be exceeded.



- I High-temperature version or extension neck for insulation: position of reference point for temperature measurement
- 1 Reference point (T_{ref})

Reference temperature T_{ref}

T6	T5	T4	T3	T2	T1
[85 °C]	[100 °C]	[135 ℃]	[200 ℃]	[300 °C]	[450 °C]
56.4	71.3	72.2	72.2	72.2	72.2

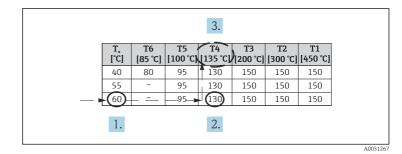
Explosion hazards arising from gas and dust

Determining the temperature class and surface temperature with the temperature table

- In the case of gas: Determine the temperature class as a function of the maximum ambient temperature T_a and the maximum medium temperature T_m .
- In the case of dust: Determine the maximum surface temperature as a function of the maximum ambient temperature T_a and the maximum medium temperature T_m .

Example

- Measured maximum ambient temperature: $T_{ma} = 63 \text{ °C}$
- Measured maximum medium temperature: $T_{mm} = 108$ °C



I Procedure for determining the temperature class and surface temperature

1. In the column for the maximum ambient temperature T_a select the temperature that is immediately greater than or equal to the maximum ambient temperature T_{ma} that is present.

- → $T_a = 60$ °C. The row showing the maximum medium temperature is determined.
- 2. Select the maximum medium temperature T_m of this row, which is immediately greater than or equal to the maximum medium temperature T_{mm} that is present.
 - → The column with the temperature class for gas is determined: 108 °C ≤ 130 °C \rightarrow T4.
- 3. The maximum temperature of the temperature class determined corresponds to the maximum surface temperature for dust: T4 = 135 °C.

ConnectionThe following tables contain specifications which are dependent on the
transmitter type and its input and output assignment. Compare the
following specifications with those on the nameplate of the transmitter.

Terminal assignment

Transmitter: supply voltage, input/outputs

HART

Supply	voltage	e Input/output 1		Input/output 2		Input/output 3	
1 (+)	2 (-)	26 (+)	27 (-)	24 (+)	25 (-)	22 (+)	23 (-)
		Device-s	pecific term	iinal assignr cov		ive label in	terminal

FOUNDATION Fieldbus

Supply	voltage	Input/output 1		Input/output 2		Input/o	output 3
1 (+)	2 (-)	26 (A)	27 (B)	24 (+)	25 (-)	22 (+)	23 (-)
		Device-s	pecific term	inal assignr cov		ive label in	terminal

PROFIBUS DP

Supply	voltage	Input/output 1		Input/output 2		Input/output 3	
1 (+)	2 (-)	26 (B)	27 (A)	24 (+)	25 (-)	22 (+)	23 (-)
		Device-s	pecific term	inal assignr cov		ive label in	terminal

PROFIBUS PA

Supply	voltage	Input/output 1		Input/output 2		Input/output 3	
1 (+)	2 (-)	26 (B)	27 (A)	24 (+)	25 (-)	22 (+)	23 (-)
		Device-s	pecific term	inal assignr cov		ive label in	terminal

Modbus RS485

Supply	voltage	Input/output 1		Input/output 2		Input/output 3	
1 (+)	2 (-)	26 (B)	27 (A)	24 (+)	25 (-)	22 (+)	23 (-)
		Device-s	pecific term	inal assignr cov		ive label in	terminal

Modbus TCP with Ethernet-APL

Supply voltage		Input/output 1		Input/output 2		Input/output 3	
1 (+)	2 (-)	26 (+)	27 (-)	24 (+)	25 (-)	22 (+)	23 (-)
		Device-s	pecific term	inal assignr cov		ive label in	terminal

PROFINET

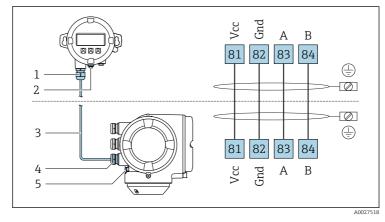
Supply	Supply voltage Input/output 1		Input/o	utput 2	Input/o	utput 3
1 (+)	2 (-)	PROFINET (RJ45 connector)	Device	25 (–) -specific ter esive label ir	ı minal assigı	nment:

PROFINET with Ethernet-APL

Supply	voltage	Input/output 1		Input/output 2		Input/output 3	
1 (+)	2 (-)	26 (+)	27 (-)	24 (+)	25 (-)	22 (+)	23 (-)
		Device-specific terminal assignment: adhesive label in terminal cover.				terminal	

EtherNet/IP

Supply	Supply voltage Input/output 1		Input/output 2		Input/output 3	
1 (+)	2 (-)	EtherNet/IP (RJ45 connector)	Device	25 (–) -specific ter esive label ir	minal assigi	nment:



Remote display and operating module DKX001

- 1 Remote display and operating module DKX001
- 2 Protective earth (PE)
- 3 Connecting cable
- 4 Measuring device
- 5 Protective earth (PE)

Safety-related values

Order code for "Output; input 1"	Output type	Safety-related values "Output; input 1"		
		26 (+)	27 (-)	
Option BA	Current output 4 to 20 mA HART	$U_{N} = 30 V_{DC}$ $U_{M} = 250 V_{AC}$		
Option GA	PROFIBUS PA	$U_{\rm N} = 32 V_{\rm DC}$ $U_{\rm M} = 250 V_{\rm AC}$		
Option LA	PROFIBUS DP	$U_{N} = 32 V_{DC}$ $U_{M} = 250 V_{AC}$		
Option MA	Modbus RS485	$U_{N} = 30 V_{DC}$ $U_{M} = 250 V_{AC}$		
Option MB	Modbus TCP with Ethernet-APL	$\begin{array}{l} \mbox{APL port profile SLAX} \\ \mbox{SPE PoDL classes 10, 1} \\ \mbox{U}_N = 30 \ V_{DC} \\ \mbox{U}_M = 250 \ V_{AC} \end{array}$		
Option SA	FOUNDATION Fieldbus	$U_{N} = 32 V_{DC}$ $U_{M} = 250 V_{AC}$		
Option NA	EtherNet/IP	$U_{N} = 30 V_{DC}$ $U_{M} = 250 V_{AC}$		

Order code for "Output; input 1"	Output type	Safety-related values "Output; input 1"			
		26 (+)	27 (-)		
Option RA	PROFINET	$U_{N} = 30 V_{DC}$ $U_{M} = 250 V_{AC}$			
Option RB	PROFINET with Ethernet-APL	$\begin{array}{l} \mbox{APL port profile SLAX} \\ \mbox{SPE PoDL classes 10, 11, 12} \\ \mbox{U}_N = 30 \ V_{DC} \\ \mbox{U}_M = 250 \ V_{AC} \end{array}$			

Order code for	Output type	Safety-related values				
"Output; input 2"; "Output; input 3"		Output;	input 2	Output;	input 3	
		24 (+)	25 (-)	22 (+)	23 (-)	
Option B	Current output 4 to 20 mA	$\begin{array}{l} U_N = 30 \ V_{DC} \\ U_M = 250 \ V_{AC} \end{array}$				
Option D	User-configurable input/output	$U_{N} = 30 V_{DC}$ $U_{M} = 250 V_{AC}$				
Option E	Pulse/frequency/ switch output	$U_{\rm N} = 30 V_{\rm DC}$ $U_{\rm M} = 250 V_{\rm AC}$				
Option F	Double pulse output	t $U_N = 30 V_{DC}$ $U_M = 250 V_{AC}$				
Option H	Relay output	$U_{N} = 30 V_{DC}$ $I_{N} = 100 mA_{DC} / 500 mA_{AC}$ $U_{M} = 250 V_{AC}$				
Option I	Current input 4 to 20 mA	$U_{N} = 30 V_{DC}$ $U_{M} = 250 V_{AC}$				
Option J	Status input	$U_{N} = 30 V_{DC}$ $U_{M} = 250 V_{AC}$				

Intrinsically safe values

Order code for "Output; input 1"	Output type	Intrinsically safe values "Output; input 1"	
		26 (+)	27 (-)
Option CA	Current output 4-20mA HART Ex-i passive	$\begin{array}{l} U_i = 30 \ V \\ l_i = 100 \ mA \\ P_i = 1.25 \ W \\ L_i = 0 \ \mu H \\ C_i = 6 \ nF \end{array}$	
Option CC	Current output 4-20mA HART Ex-i active		
Option HA	PROFIBUS PA Ex i (STANDARD + FISCO)		

Order code for "Output; input 1"	Output type	Intrinsically safe values "Output; input 1"		
		26 (+)	27 (-)	
Option MC	Modbus TCP with Ethernet-APL Ex i	2-WISE power load, A	APL port profile	
Option RC	PROFINET with Ethernet-APL Ex i	Ex ia U ₁ = 17.5 V I _i = 380 mA P ₁ = 5.32 W L _i = 10 μ H C _i = 5 nF Cable specifications a R _c = 15 to 150 Ω /km L _c = 0.4 to 1 mH/km C _c = 45 to 200 nF/km C _c = C _c line/line + 0,5 lines are floating, or C _c = C _c line/line + C _c li screen is connected to Length of cable (not ir ≤200 m (656.2) Length of cable stubs:	C _c line/screen, if both ne/screen, if the one line ncluding cable stubs)	
Option TA	FOUNDATION Fieldbus Ex i (STANDARD + FISCO)	$\begin{array}{l} \textbf{Ex ia} \\ \textbf{U}_{i} = 30 \ \textbf{V} \\ \textbf{i}_{i} = 570 \ \textbf{mA} \\ \textbf{P}_{i} = 8.5 \ \textbf{W} \\ \textbf{L}_{i} = 10 \ \mu \textbf{H} \\ \textbf{C}_{i} = 5 \ \textbf{nF} \end{array}$		

1) For further options see Ethernet-APL Installation Drawing HE_01622.

Order code for	Output type	Intrinsically safe values		s	
"Output; input 2"; "Output; input 3"		Output;	input 2	Output;	input 3
		24 (+)	25 (-)	22 (+)	23 (-)
Option C	Current output 4 to 20 mA Ex i passive	$\begin{array}{l} U_i = 30 \ V \\ l_i = 100 \ mL \\ P_i = 1.25 \ V \\ L_i = 0 \\ C_i = 0 \end{array}$			
Option G	Pulse/frequency/ switch output Ex i passive	$\begin{array}{l} U_{i} = 30 \text{ V} \\ l_{i} = 100 \text{ m}. \\ P_{i} = 1.25 \text{ V} \\ L_{i} = 0 \\ C_{i} = 0 \end{array}$			

Remote display DKX001

Basic specification, position 1, 2 Approval	Terminal assignment	Basic specification, position 8 Display; Operation Option O
Option ¹⁾ JD	81, 82, 83, 84	A connecting cable with the value L/R \leq 24 μ H/ Ω and $C_{cable} \leq$ 1000 nF must be used for the version for connecting to the remote display DKX001 or ODKX001. The cable supplied meets this requirement.

1) With separate order of DKX001: JE, JF, JG



www.addresses.endress.com

