FM Approvals
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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

I. PROWIRL Vortex Flowmeter

PROWIRL 7abcc-defghiklmnop. Vortex Flowmeter.
IS/I,II,III/1/ABCDEFG/T* – FES0068, FES0068-0001, FES0068-0003, Entity; FES0068-0002, FISCO; Type 4X
I/0/AEx ia/IIC/T* – FES0068, FES0068-0001, FES0068-0003, Entity; FES0068-0002, FISCO; Type 4X
NI/I/2/ABCD/T* – FES0068-0004; Type 4X
NI/I/2/IIC/T* – FES0068-0004; Type 4X
DIP/II,III/1/EFG/T*; Type 4X

Entity Parameters:

I/O option A (4-20mA, HART Pulse, Entity) or W (4-20mA, HART, Entity):
Terminals 1and 2: Vmax = 30 V, Imax = 300 mA, Pi = 1 W, Ci = 5.3 nF, Li = 0 µH
Terminals 3and 4: Vmax = 30 V, Imax = 300 mA, Pi = 1 W, Ci = 0 nF, Li = 0 µH

I/O Option H (Profibus PA, FISCO) or K (Foundation Fieldbus, FISCO):
Vmax = 17.5 V, Imax = 500 mA, Pi = 5.5 W, Ci = 5 nF, Li = 10 µH

I/O Option H (Profibus PA, Entity) or K (Foundation Fieldbus, Entity):
Vmax = 17.5 V, Imax = 500 mA, Pi = 5.5 W, Ci = 5 nF, Li = 10 µH
or
Vmax = 24 V, Imax = 250 mA, Pi = 1.2 W, Ci = 5 nF, Li = 10 µH

a = Type of electronic: 2 or 3.
b = Type of sensor: F, W or X.
cc = Size: any double number or letter.
d = Material: any single number or letter.
e = Process connection: any single number or letter.

f = Sensor: 0, 1, 2, 3, 4, 5, 6, 7, B, C, F, G, H, or X.
g = Sealing of sensor: any single number or letter.
h = Calibration: any single number or letter.
i = Certificates: any single number or letter.
k = Approvals: N.
l = Version: A, E, F, J, K or L.
m = Cable gland: any single number or letter.
n = Display: any single number or letter.
o = Software: any single number or letter.
p = I/O's: A, H, K, W or X.

Special conditions of use:
1. *For installation instructions and the Temperature Class (*) which applies to specific models, ambient temperatures (Ta), and process medium temperatures (Tmed), refer to Control Drawing FES0068.*

II. PROWIRL Vortex Flowmeter

PROWIRL 7abcc-defghiklmnop
XP-AIS-DIP/I,II,III/1/ABCDEFG/T* – FES0077, FES0077-0001; Type 4X
XP-AIS/I/1/IIC/T* – FES0077, FES0077-0001; Type 4X

a = Type of electronic: 2 or 3.
b = Type of sensor: F, W or X.
cc = Size: any double number or letter.
d = Material: any single number or letter.
e = Process connection: any single number or letter.
f = Sensor: 0, 1, 2, 3, 4, 5, 6, 7, B, C, F, G, H, or X.
g = Sealing of sensor: any single number or letter.
h = Calibration: any single number or letter.
i = Certificates: any single number or letter.
k = Approvals: P.
l = Version: A, E, F, J, K or L.
m = Cable gland: B.
n = Display: any single number or letter.
o = Software: any single number or letter.
p = I/O's: A, H, K, W or X.

Special conditions of use:
1. For installation instructions and the Temperature Class (*) which applies to specific models, ambient temperatures (Ta), and process medium temperatures (Tmed), refer to Control Drawing FES0077.

FM Approvals

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Equipment Ratings:

I. Compact and Remote Versions

Intrinsically Safe for use in Class I, II & III, Division 1, Groups A, B, C, D, E, F & G; Class I, Zone 0, AEx ia IIC in accordance with Entity requirements when installed per FM Control Drawings FES0068, FES0068-0001, FES0068-0003, FES0068-0004 or in accordance with FISCO requirements when installed per FM Control Drawing FES0068-0002; Nonincendive for use in Class I, Division 2, Groups A, B, C & D, and Class I, Zone 2, Group IIC; Dust-Ignitionproof for use in Class II & III Division 1, Groups E, F & G Hazardous (Classified) indoor/outdoor (Type 4X) Locations

II. Compact and Remote Versions

Explosionproof Apparatus with Intrinsically Safe electronic compartment for Class I, Division 1, Groups A, B, C & D, when installed per FM Control Drawings FES0077 and FES0077-0001; Dust-Ignitionproof for Class II & III, Division 1, Groups E, F & G Hazardous (Classified) indoor/outdoor (Type 4X & IP67) Locations

FM Approved for:

Endress + Hauser Flowtec AG
Kaegenstrasse 7
CH-4153 Reinach
Switzerland

FM Approvals

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This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	1998
Class 3610	2010
Class 3611	2004
Class 3615	2006
Class 3810	2005
ANSI/ISA-82.02.01	2004
NEMA 250	1991

Original Project ID: 3015769 Approval Granted: December 5, 2002

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
3017442	May 1, 2003		
3018695	November 24, 2003		
3020410	June 3, 2004		
100406	July 28, 2010		
100805	September 9, 2010		

FM Approvals LLC

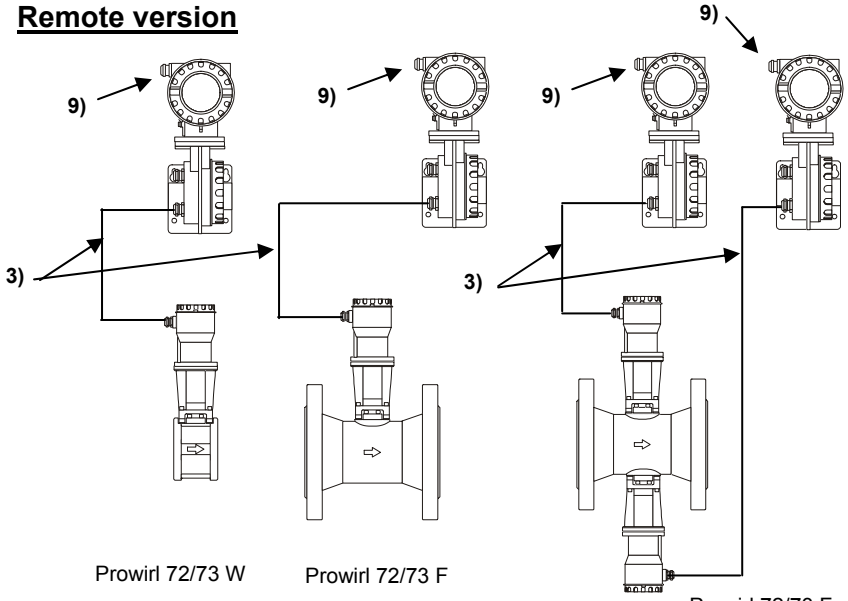
J. E. Marquedant
Group Manager, Electrical

9 September 2010
Date

Hazardous Locations

Class I Division 1 Groups ABCD or Class I Zone 0 Group IIC
and Class II and III Division 1 Groups EFG

Remote version



Prowirl 72/73 W | Prowirl 72/73 F | Prowirl 72/73 F (Dualsensor)

Sensor:

PROWIRL 7** **-**1***N*****, PROWIRL 7** **-**2***N*****, PROWIRL 7** **-**3***N*****,
PROWIRL 7** **-**4***N*****, PROWIRL 7** **-**6***N*****, PROWIRL 7** **-**7***N*****,
PROWIRL 7** **-**C***N*****, PROWIRL 7** **-**F***N*****, PROWIRL 7** **-**H***N*****:

	Max. medium temperature					
	T6 **2)**	T5 **2)**	T4	T3	T2	T1
Ta = 104°F	176°F	203°F	266°F	374°F	554°F	824°F
Ta = 140°F	---	203°F	266°F	374°F	554°F	824°F
Ta = 185°F	---	---	266°F	374°F	554°F	824°F

PROWIRL 7** **-**0***N*****, PROWIRL 7** **-**5***N*****,
PROWIRL 7** **-**B***N*****, PROWIRL 7** **-**G***N*****:

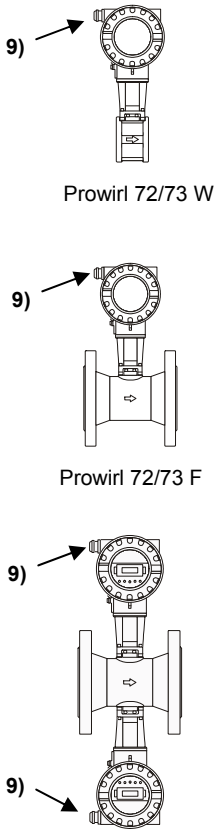
	Max. medium temperature				
	T6 **2)**	T5 **2)**	T4	T3	T2 - T1
Ta = 104°F	176°F	203°F	266°F	374°F	536°F
Ta = 140°F	---	203°F	266°F	374°F	536°F
Ta = 185°F	---	---	266°F	374°F	536°F

Transmitter:

PROWIRL 7** **-******N*****:

	T6 **2)**	T5 **2)**	T4 - T1
Ta =	104°F	140°F	176°F

Compact version



Prowirl 72/73 W | Prowirl 72/73 F | Prowirl 72/73 F (Dualsensor)

PROWIRL 7** **-**1***N*****, PROWIRL 7** **-**2***N*****, PROWIRL 7** **-**3***N*****,
PROWIRL 7** **-**4***N*****, PROWIRL 7** **-**6***N*****, PROWIRL 7** **-**7***N*****,
PROWIRL 7** **-**C***N*****, PROWIRL 7** **-**F***N*****, PROWIRL 7** **-**H***N*****:

	Max. medium temperature					
	T6 **2)**	T5 **2)**	T4	T3	T2	T1
Ta = 104°F	176°F	203°F	266°F	374°F	554°F	824°F
Ta = 140°F	---	203°F	266°F	374°F	554°F	824°F
Ta = 158°F	---	---	266°F	374°F	554°F	824°F

PROWIRL 7** **-**0***N*****, PROWIRL 7** **-**5***N*****,PROWIRL 7** **-**B***N*****,
PROWIRL 7** **-**G***N*****:

	Max. medium temperature				
	T6 **2)**	T5 **2)**	T4	T3	T2 - T1
Ta = 104°F	176°F	203°F	266°F	374°F	536°F
Ta = 140°F	---	203°F	266°F	374°F	536°F
Ta = 158°F	---	---	266°F	374°F	536°F

Notes:

1) Assignment of additional Control Drawings according to I/O options:

Drawing-No.	Model Codes:
FES0068-0001 C	Prowirl 7* **-******N****A and Prowirl 7* **-******N****W
FES0068-0002 C	Prowirl 7* **-******N****H and Prowirl 7* **-******N****K
FES0068-0003 C	
FES0068-0004 C	
FES0068-0005 C	

2) Temperature class T6 and T5 is not allowed for versions of Profibus PA and Fieldbus Foundation (not for PROWIRL 7** **-******N****H and PROWIRL 7** **-******N****K).
3) Max. cable length for intrinsically safe sensor installation (remote version) 100m / 320ft for using cable parameters L_{Cable} = 1mH/km / 0.3µH/ft and C_{Cable} = 1µF/km / 300nF/ft
4) Caution: Use supply wires suitable for 50°F above maximum ambient temperature
5) Caution: Surface temperature of transmitter enclosure can exceed 158°F depending on ambient temperature or medium temperature
6) Dust tight seals must be used at conduit entries for Class II and III installation
7) Fieldbus cable connectors are suitable for Class I, Div. 1 and 2, Groups ABCD (see FES0068-0005)
8) Prowirl 72 and Prowirl 73 transmitter is intended for installation to Service Interface FXA 193 when using the PROLINE EX-ZWEILEITER-KABEL (blue cable)
9) Prowirl 72/73 is a Dual Seal Device in accordance to ANSI/ISA-12.27.01-2003

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	A	24.03.03 / Bn	F			
	B	08.09.03 / Bn	G			
	C	10.12.03 / Bn	H			Ersatz für:
	D	08.08.12/ BIF	J			Ersteller: FES/Bn
	E		K			File: M:\ZEICHNG\...\FES0068D.doc **ID 1112**

FM CONTROL DRAWING
PROWIRL 72, PROWIRL 73 (IS and NI)
Compact Version, Remote version

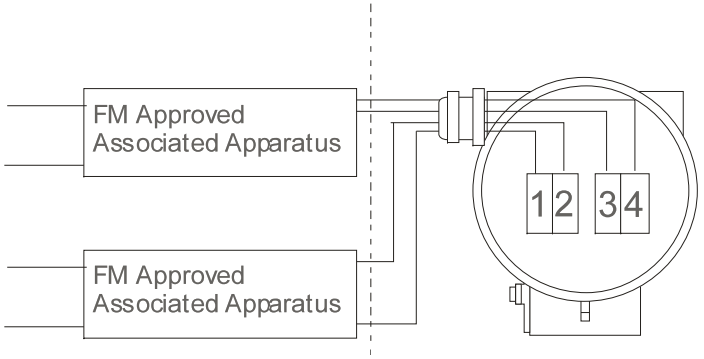
Massstab			
Gezeichnet	23.09.02	Bn
Geprüft		
Ex-geprüft	08.08.12	BIF
Gesehen		

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

FES0068 D

Nonhazardous Location

Hazardous Classified Locations
Class I Division 1 Groups ABCD
Class I Zone 0 Group IIC
Class II and III Div. 1 Groups EFG



Instrinsically safe installation

1) Control room equipment may not use or generate over 250 Vrms.
2) Wire all circuits for power supply per NEC ANSI/NFPA 70 and ISA RP 12.06.01
3) Use entity approved safety barrier or other associated equipment that satisfy the following conditions:
   $V_{oc} \leq V_{max}$, $I_{sc} \leq I_{max}$, $C_a \geq C_i + C_{cable}$, $L_a \geq L_i + L_{cable}$ transmitter entity parameters are as follows:
   Terminals 1 and 2 (Hart, current output)

V_{max}	I_{max}	P_i	C_i	L_i
30 V	300 mA	1 W	5.3 nF	0

   Terminals 3 and 4 (Pulse)

V_{max}	I_{max}	P_i	C_i	L_i
30 V	300 mA	1 W	0	0

4) **WARNING**: SUBSTITUTION OF COMPONENTS MAY IMPAIR INSTRINSIC SAFETY.
5) Ex ia is defined as Intrinsically Safe

Functional ratings:

These ratings do not supersede Hazardous Location values.
Terminal 1 and 2:HART current output
U_{nom} = 12 ... 36 V
I_{nom} = 4 ... 20 mA (max. 25 mA)
Terminal 3 and 4 :Pulse output
$U_{nom} \leq$ 36 V, I_{nom} = 15 mA

Notes:

This page applies to model code:
Prowirl 7* **-*****N****A**, **Prowirl 7* **-*******N****W**

Division 2 and Zone 2 installation

6) Installation shall be in accordance with NEC using threaded conduit or other wiring methods in accordance with articles 500 to 510.
7) Nonincendive field wiring installation
   The Nonincendive Field Wiring Circuit Concept allowes interconnection of nonincendive field wiring apparatus with associated nonincendive field wiring apparatus or associated apparatus not specifically examined in combination as a system using any of the wiring methods permitted for unclassified locations, when
   $V_{max} \geq V_{oc}$ or V_t, $C_a \geq C_i + C_{cable}$, $L_a \geq L_i + L_{cable}$
   Transmitter parameters are as follows:

   Terminals 1 and 2 (Hart, current controlled circuit)

V_{max}	Imax	C_i	L_i
36 V	See note 8	5.3 nF	0

   Terminals 3 and 4 (Pulse, voltage controlled circuit)

V_{max}	Imax	C_i	L_i
36 V	See note 8	0	0

8) For these current and voltage controlled circuits, the parameter Imax is not required and need not to be aligned with parameter I_{SC} and I_t of the associated nonincendive field wiring or associated apparatus.
9) **WARNING**: EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2 OR CLASS I, ZONE 2.

Class II, III installation (without barrier)

10) Installation of transmitter circuit wiring according to NEC using threaded conduit or other wiring methods in accordance with articles 500 to 510.

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	A	24.03.03 / Bn	F			
	B	08.09.03 / Bn	G			
	C	10.12.03 / Bn	H			Ersatz für:
	D	08.08.12/ BIF	J			Ersteller: FES/Bn
	E		K			File: M:\ZEICHNG\...\FES0068D.doc **ID 1112**

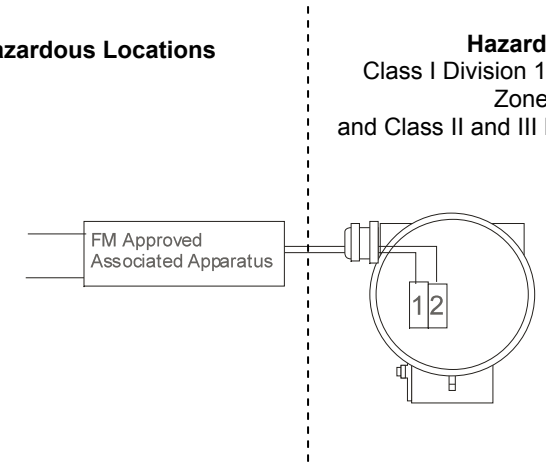
FM CONTROL DRAWING
PROWIRL 72, PROWIRL 73 (IS and NI)
Current output, Hart, Pulse
ENTITY INSTALLATION

Massstab			
Gezeichnet	23.09.02	Bn
Geprüft		
Ex-geprüft	08.08.12	BIF
Gesehen		

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

FES0068-0001 D

This page applies to model code: **Prowirl 7* **-******N****H and**
Prowirl 7* **-****N****K**



Instrinsically safe installation:

1) Control room equipment may not use or generate over 250 Vrms.
2) Wire all circuits for power supply per NEC ANSI/NFPA 70 and ISA RP 12.06.01
3) Use entity approved safety barrier or other associated equipment that satisfy the following conditions: $V_{oc} \leq V_{max}$, $I_{sc} \leq I_{max}$, $C_a \geq C_i + C_{cable}$, $L_a \geq L_i + L_{cable}$
   Transmitter entity parameters are as follows: Terminals 1 and 2

	V_{max}	I_{max}	P_i	C_i	L_i
	17.5 V	500 mA	5.5 W	≤ 5 nF	≤ 10 µH
or	24 V	250 mA	1.2 W	≤ 5 nF	≤ 10 µH

4) The transmitter is suitable for installation in accordance with the Fielbus Intrinsically Safe Concept (FISCO), see also FES0068-0003.
5) **WARNING**: SUBSTITUTION OF COMPONENTS MAY IMPAIR INSTRINSIC SAFETY.
6) Ex ia is defined as Intrinsically Safe

Division 2 and Zone 2 installation:

7) Installation shall be in accordance with NEC using threaded conduit or other wiring methods in accordance with articles 500 to 510.
8) Nonincendive field wiring installation
   The Nonincendive Field Wiring Circuit Concept allowes interconnection of nonincendive field wiring apparatus with associated nonincendive field wiring apparatus or associated apparatus not specifically examined in combination as a system using any of the wiring methods permitted for unclassified locations, when $V_{max} \geq V_{oc}$ or V_t, $C_a \geq C_i + C_{cable}$, $L_a \geq L_i + L_{cable}$
   Entity parameters are as follows: Terminals 1 and 2 (current controlled circuit)

V_{max}	I_{max}	C_i	L_i
36 V	See note 9	≤ 5 nF	≤ 10 µH

9) For this current controlled circuit, the parameter Imax is not required and need not to be aligned with parameter I_{SC} and I_t of the associated nonincendive field wiring or associated apparatus.
10) The transmitter is suitable for installation in accordance with the Fielbus Non-incendive Concept (FNICO), see also FES0068-0004.
11) **WARNING:** SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I DIVISION 2 OR CLASS I ZONE 2.

Class II, III installation

12) Installation of transmitter circuit wiring according to NEC using threaded conduit or other wiring methods in accordance with articles 500 to 510.

Functional ratings:

These ratings do not supersede Hazardous Location values.
Terminals 1 and 2 (Fieldbus):
U_{nom} = 9 ... 32 V, I_{nom} = 16 mA

Aenderungen:					
	A	27.02.03 / Bn	F		
	B	08.09.03 / Bn	G		
	C	10.12.03 / Bn	H		
	D	08.08.12 / BIF	J		
	E		K		

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Ersatz für:
Ersteller: FES/Bn
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FM CONTROL DRAWING (IS and NI)
PROWIRL 72, PROWIRL 73
Fieldbus Foundation and Profibus PA
IS installation, Entity - Concept

Massstab

Gezeichnet	23.09.02	Bn
Geprüft		
Ex-geprüft	08.08.12	BIF
Gesehen		

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

FES0068-0002 D

This page applies to model code: **Prowirl 7* **-******N****H and**
Prowirl 7* **-****N****K**

FISCO-Concept

The FISCO Concept allows interconnection of intrinsically safe apparatus to associated apparatus not specifically examined in such combination. The criteria for interconnection is that the voltage (Ui or Vmax), the current (Ii or Imax) and the power (Pi) which intriniscally safe apparatus can receive and remain intrinsically safe, considering faults, must be equal or greater than the voltage (Uo or Voc), the current (Io or Isc) and the power (Po) levels which can be delivered by the associated apparatus, considering faults and applicable factors. In addition, the maximum unprotected capacitance (Ci) and inductance (Li) of each apparatus (other than the termination) connected to the fieldbus must be less than or equal to 5 nF and 10 μH respectively.

In each segment only one active device, normally the associated apparatus, is allowed to provide the necessary energy for the fieldbus system. The voltage Uo of the associated apparatus has to be limited to the range of 14V to 24V d.c. All other equipment connected to the bus cable has to be passive, meaning that they are not allowed to provide energy to the system, except to a leakage current of 50 μA for each connected device. Separately powered equipment needs a galvanic isolation to assure that the intrinsically safe fieldbus circuit remains passive.

The cable used to interconnect the devices needs to have the parameters in the following range:

loop resistance R'	: 15 .... 150 Ω/km
inducance per unit length L'	: 0.4 .... 1 mH/km
capacitance per unit length C'	: 80 .... 200 nF/km

C' = C' line/line + 0.5 C' line/screen, if both lines are floating or
C' = C' line/line + C' line/screen, if the screen is connected to one line

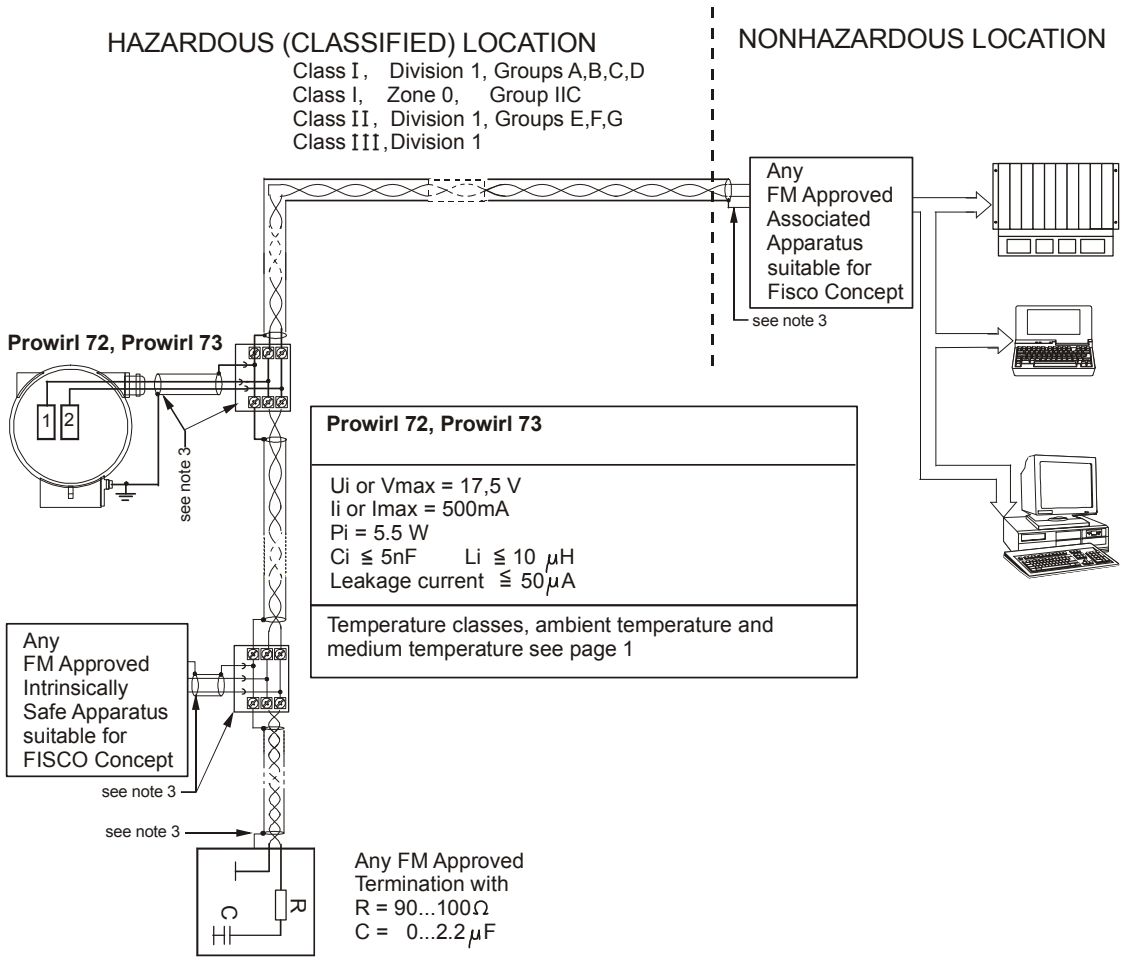
length of spur cable	: ≤ 30 m
length of trunk cable	: ≤ 1 km
length of splice	: ≤ 1 m

At each end of the trunk cable an approved infallible line termination with the following parameters is suitable:

R = 90 .... 100 Ω
C = 0 .... 2.2 μF

One of the allowed terminations might already be integrated in the associated apparatus. The associated apparatus has to be installed within 30 m from the end of the trunk cable.

The number of passive devices connected to the bus segment is not limited due to I.S. reasons. If the above rules are respected, up to a total length of 1000 m (sum of the length of trunk cable and all spur cables), the inductance and capacitance of the cable will not impair the intrinsic safety of the installation.



Notes:

Intrinsically safe installation

1) Be aware of multiple earthing of the screen. The screen must be connected in accordance with ISA RP 12.06.01

Aenderungen:					
	A	24.03.03 / Bn	F		
	B	08.09.03 / Bn	G		
	C	10.12.03 / Bn	H		
	D	08.08.12 / BIF	J		
	E		K		

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Ersatz für:
Ersteller: FES/Bn
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FM CONTROL DRAWING
PROWIRL 72, PROWIRL 73 (IS)
Div. 1 / Zone 0
FISCO (fieldbus intrinsically safe concept)

Massstab

Gezeichnet	23.09.02	Bn
Geprüft		
Ex-geprüft	08.08.12	BIF
Gesehen		

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

FES0068-0003 D

This page applies to model code: **Prowirl 7* **-******N****H and**
Prowirl 7* **-****N****K**

FNICO (fieldbus nonincendive concept)

The concept allows interconnection of nonincendive apparatus to associated apparatus not specifically examined in such combination. The criteria for interconnection is that the voltage (Ui or Vmax), which nonincendive apparatus can receive and remain nonincendive, must be equal or greater than the voltage (Uo or Voc), which can be delivered by the associated apparatus. In addition, the maximum unprotected capacitance (Ci) and inductance (Li) of each apparatus (other than the termination) connected to the fieldbus must be less than or equal to 5 nF and 10 µH respectively.

In each segment only one active device, normally the associated apparatus, is allowed to provide the necessary energy for the fieldbus system. The voltage Uo of the associated apparatus has to be limited to the range of 14 V to 24 V d.c. All other equipment connected to the bus cable has to be passive, meaning that they are not allowed to provide energy to the system, except to a leakage current of 50 µA for each connected device. Separately powered equipment needs a galvanic isolation to assure that the nonincendive fieldbus circuit remains passive.

The cable used to interconnect the devices needs to have the parameters in the following range:

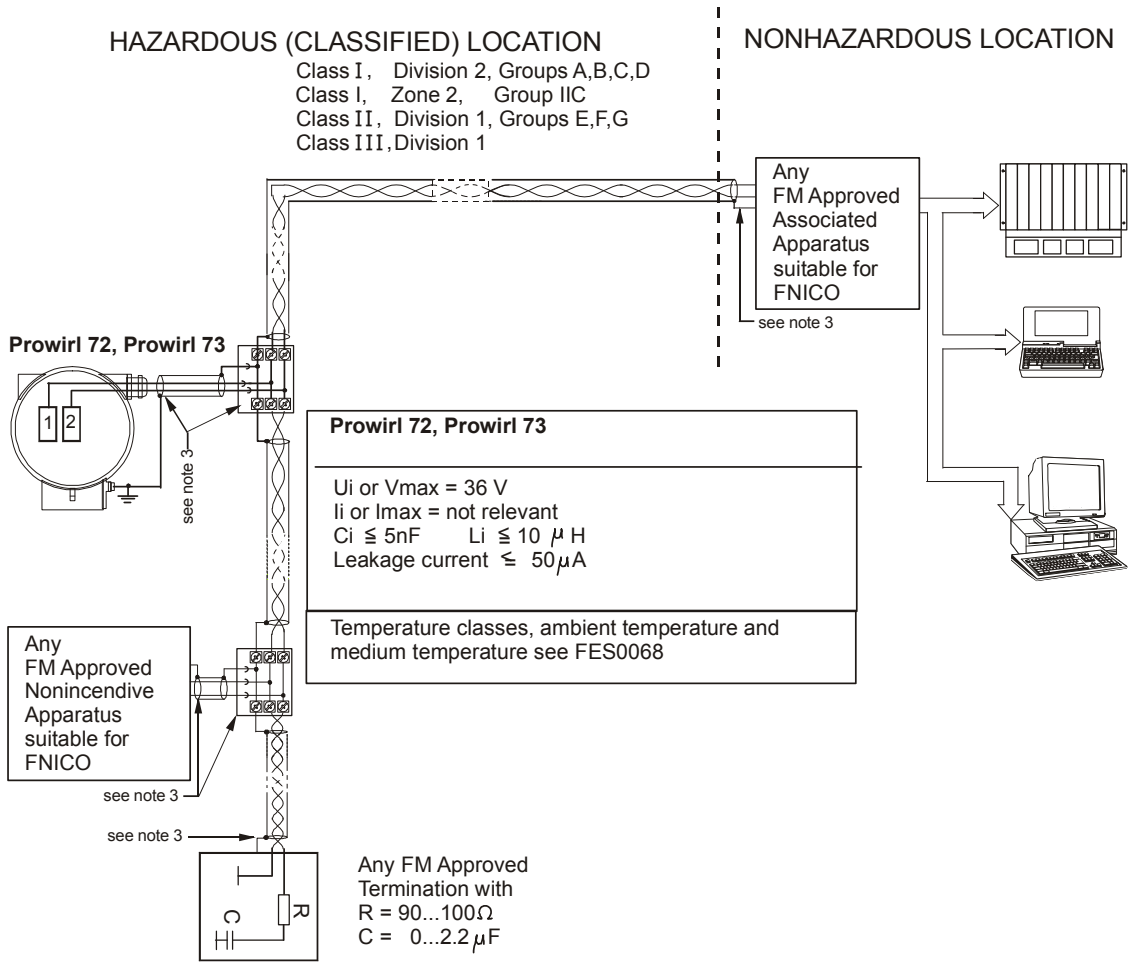
loop resistance R' : 15 .... 150 Ω/km
inducance per unit length L' : 0.4 .... 1 mH/km
capacitance per unit length C' : 80 .... 200 nF/km
C' = C' line/line + 0.5 C' line/screen, if both lines are floating or
C' = C' line/line + C' line/screen, if the screen is connected to one line
length of spur cable : ≤ 30 m
length of trunk cable : ≤ 1 km
length of splice : ≤ 1 m

At each end of the trunk cable an approved infallible line termination with the following parameters is suitable:

R = 90 .... 100 Ω
C = 0 .... 2.2 µF

One of the allowed terminations might already be integrated in the associated apparatus. The associated apparatus has to be installed within 30 m from the end of the trunk cable.

The number of passive devices connected to the bus segment is not limited due to NI reasons. If the above rules are respected, up to a total length of 1000 m (sum of the length of trunk cable and all spur cables), the inductance and capacitance of the cable will not impair the intrinsic safety of the installation.



Notes:

Nonincendive field wiring installation

1) Be aware of multiple earthing of the screen. The screen must be connected in accordance with ISA RP 12.06.01

Aenderungen:					Alle gesetzlichen Urheberrechte vorbehalten. Diese Zeichnung darf ohne unsere Genehmigung weder vervielfältigt werden noch dritten Personen und Konkurrenzfirmen zugängig gemacht werden.	
	A	24.03.03 / Bn	F			
	B	08.09.03 / Bn	G			
	C	10.12.03 / Bn	H			Ersatz für:
	D	08.08.12 / BIF	J			Ersteller: FES/Bn
	E		K			File: M:\ZEICHNG\...\FES0068D.doc **ID 1112**

FM CONTROL DRAWING
PROWIRL 72, PROWIRL 73 (NI)
Div. 2 / Zone 2
FNICO (fieldbus nonincendive concept)

Massstab			
	Gezeichnet	23.09.02	Bn
	Geprüft		
	Ex-geprüft	08.08.12	BIF
	Gesehen		

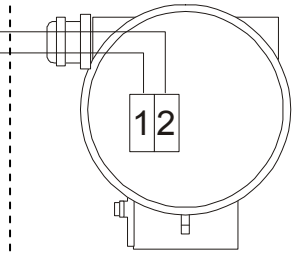
Flowtec AG, Kaegenstrasse 7, CH-4153 Reinach BL1, Postfach

FES0068-0004 D

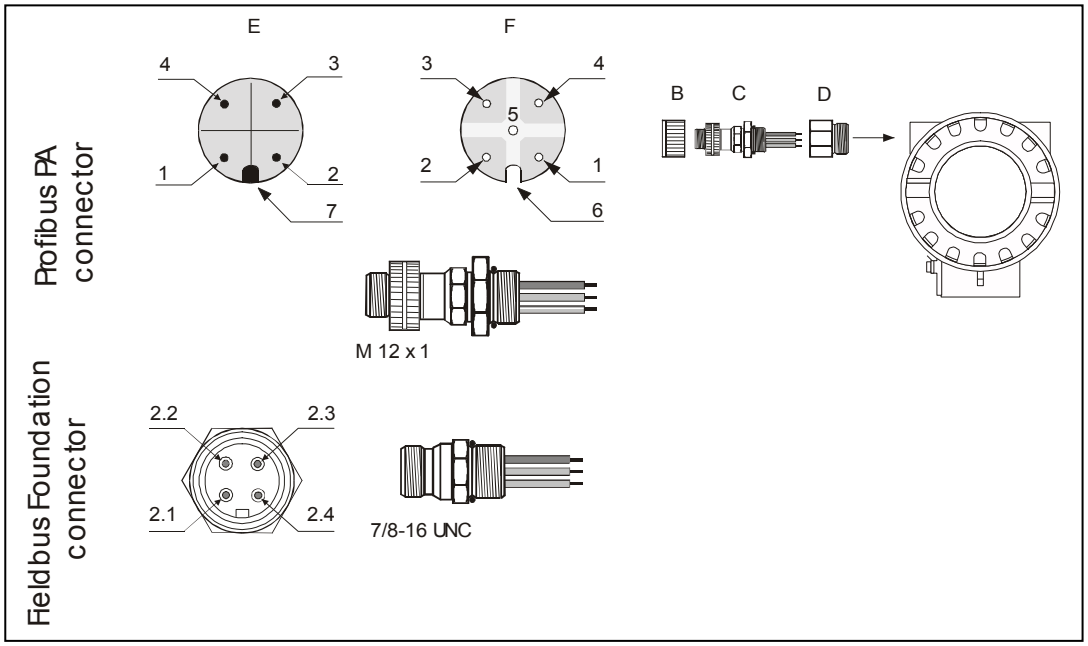
This page applies to model code: **Prowirl 7* **-******N****H and**
Prowirl 7* **-****N****K**
with Fieldbus Cable Connector

Non Hazardous Locations

FM approved
ANI/I/2/ABCD or
AIS/I/1/ABCD
equipment



Hazardous Locations
Class I, Division 1 and 2 Groups ABCD or
Class I Zone 0 and Zone 2 Groups IIC,



B = Protection cap for connector, C = Fieldbus connector, D = Thread adapter
E = Connector on housing (male), F = Connector (female)

Pin assignment:

Profibus PA
1 = Brown wire, PA+ (terminal 26)
2 = Not connected
3 = Blue wire, PA- (terminal 27)
4 = Black wire, ground
5 = Female connector not assigned
6 = Positioning groove
7 = Positioning key

Fieldbus Foundation
2.1 = Brown wire, FF+ (terminal 26)
2.2 = Blue wire, FF- (terminal 27)
2.3 = Grey wire, ground
2.4 = Not assigned

Notes:

1) Fieldbus cable connectors are suitable for Class I, Div. 2, Groups ABCD and Class I Zone 2 Groups IIC, if non-incendive circuits are connected.
2) Fieldbus cable connectors are suitable for Class I, Div. 1, Groups ABCD and Class I Zone 0 Groups IIC, if intrinsically safe circuits are connected.

Aenderungen:					Alle gesetzlichen Urheberrechte vorbehalten. Diese Zeichnung darf ohne unsere Genehmigung weder vervielfältigt werden noch dritten Personen und Konkurrenzfirmen zugängig gemacht werden.	
	A	24.03.03 / Bn	F			
	B	08.09.03 / Bn	G			
	C	10.12.03 / Bn	H			Ersatz für:
	D	08.08.12 / BIF	J			Ersteller: FES/Bn
	E		K			File: M:\ZEICHNG\...\FES0068D.doc **ID 1112**

FM CONTROL DRAWING
PROWIRL 72, PROWIRL 73
Fieldbus Cable Connector
IS/NI installation

Massstab

Gezeichnet	23.09.02	Bn
Geprüft		
Ex-geprüft	08.08.12	BIF
Gesehen		

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

FES0068-0005 D