

**Model FLXA202 / FLXA21
2-Wire Analyzer
Safety Precautions**



IM 12A01A02-20E

◆ Safety Precautions

■ Safety, Protection, and Modification of the Product

- In order to protect the system controlled by the product and the product itself and ensure safe operation, observe the safety precautions described in this user's manual. We assume no liability for safety if users fail to observe these instructions when operating the product.
- If this instrument is used in a manner not specified in this user's manual, the protection provided by this instrument may be impaired.
- If any protection or safety circuit is required for the system controlled by the product or for the product itself, prepare it separately.
- Be sure to use the spare parts approved by Yokogawa Electric Corporation (hereafter simply referred to as YOKOGAWA) when replacing parts or consumables.
- Modification of the product is strictly prohibited.
- The following safety symbols are used on the product as well as in this manual.



WARNING

This symbol indicates that an operator must follow the instructions laid out in this manual in order to avoid the risks, for the human body, of injury, electric shock, or fatalities. The manual describes what special care the operator must take to avoid such risks.



CAUTION

This symbol indicates that the operator must refer to the instructions in this manual in order to prevent the instrument (hardware) or software from being damaged, or a system failure from occurring.

CAUTION

This symbol gives information essential for understanding the operations and functions.

NOTE

This symbol indicates information that complements the present topic.



This symbol indicates Protective Ground Terminal.



This symbol indicates Function Ground Terminal. Do not use this terminal as the protective ground terminal.

■ Warning and Disclaimer

The product is provided on an "as is" basis. YOKOGAWA shall have neither liability nor responsibility to any person or entity with respect to any direct or indirect loss or damage arising from using the product or any defect of the product that YOKOGAWA can not predict in advance.

 **WARNING****Installation and wiring**

The FLXA202/FLXA21 should only be used with equipment that meets the relevant IEC, American or Canadian standards. Yokogawa accepts no responsibility for the misuse of this unit.

 **WARNING**

Don't install "general purpose type" instruments in the hazardous area.

 **CAUTION**

The Instrument is packed carefully with shock absorbing materials, nevertheless, the instrument may be damaged or broken if subjected to strong shock, such as if the instrument is dropped. Handle with care.

 **CAUTION**

This instrument is a Class A product, and it is designed for use in the industrial environment. Please use this instrument in the industrial environment only.

 **CAUTION**

When you open the front panel, make sure the screws are completely out of the screw holes, and then open the front panel slowly in order not to damage the threaded parts on the housing. If the threaded parts are damaged and the screws cannot be tightened, the waterproof performance will deteriorate.

 **CAUTION**

The HART communication may be influenced by strong electromagnetic field. In this case another trial of the HART communication and/or operation with FLXA202/FLXA21 touch screen can be carried out.



WARNING

- Do not use an abrasive or organic solvent in cleaning the instrument.
 - Substitution of components may impair suitability for Division 2.
Do not remove or replace while circuit is live unless area is known to be non hazardous.
Explosion Hazard – Do not disconnect equipment unless area is known to be non hazardous.
Do not reset circuit breaker unless power has been removed from the equipment or the area is known to be non hazardous.
-



WARNING

Electrostatic discharge

The FLXA202/FLXA21 contains devices that can be damaged by electrostatic discharge. When servicing this equipment, please observe proper procedures to prevent such damage. Replacement components should be shipped in conductive packaging. Repair work should be done at grounded workstations using grounded soldering irons and wrist straps to avoid electrostatic discharge.

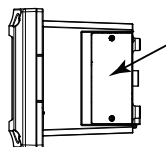
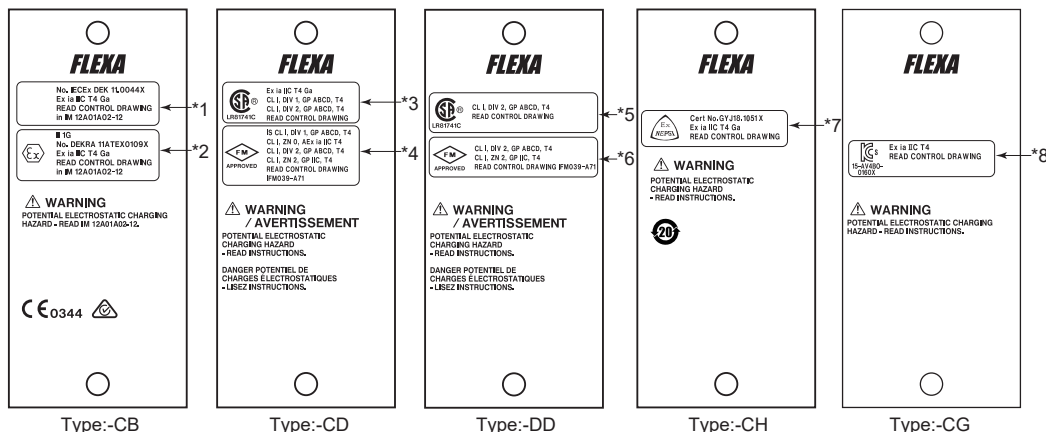
CAUTION

Be careful to touch the concentrated sulfuric acid.

Mark position of intrinsic safety and nonincendive

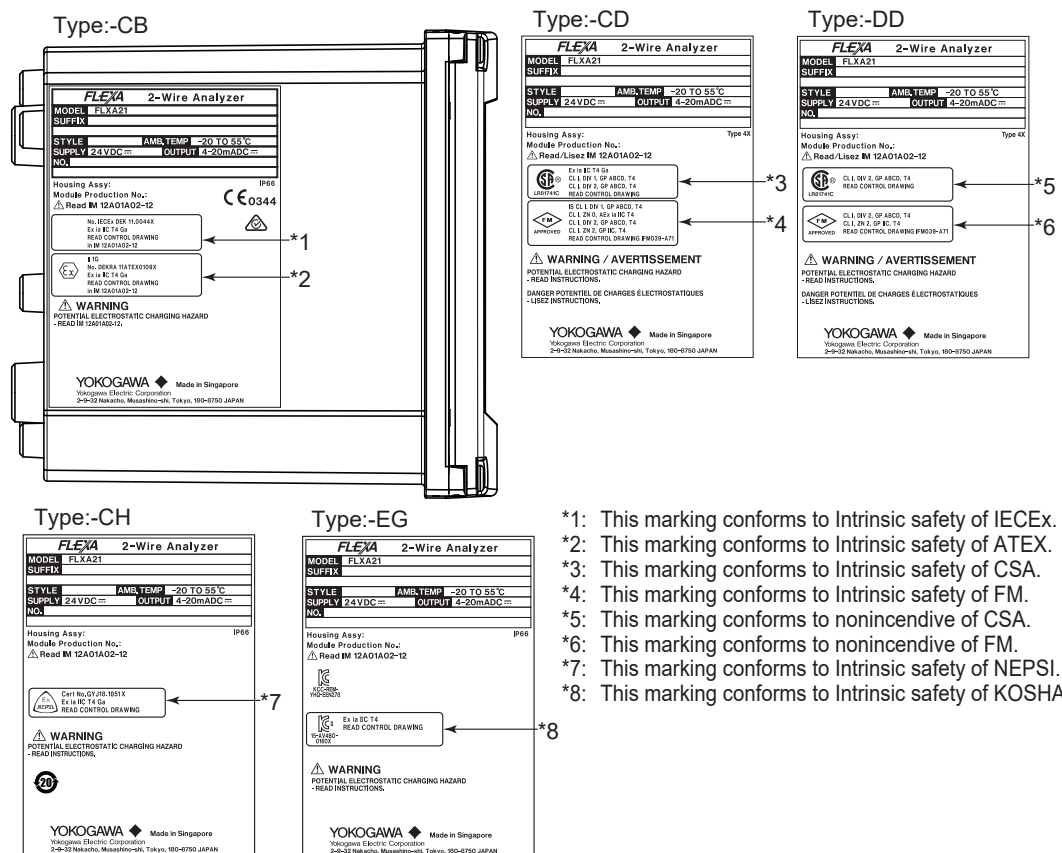
The mark position is shown as follows

FLXA202



- *1: This marking conforms to Intrinsic safety of IECEx.
- *2: This marking conforms to Intrinsic safety of ATEX.
- *3: This marking conforms to Intrinsic safety of CSA.
- *4: This marking conforms to Intrinsic safety of FM.
- *5: This marking conforms to nonincendive of CSA.
- *6: This marking conforms to nonincendive of FM.
- *7: This marking conforms to Intrinsic safety of NEPSI.
- *8: This marking conforms to Intrinsic safety of KOSHA.

FLXA21 (Output: -A)



- *1: This marking conforms to Intrinsic safety of IECEx.
- *2: This marking conforms to Intrinsic safety of ATEX.
- *3: This marking conforms to Intrinsic safety of CSA.
- *4: This marking conforms to Intrinsic safety of FM.
- *5: This marking conforms to nonincendive of CSA.
- *6: This marking conforms to nonincendive of FM.
- *7: This marking conforms to Intrinsic safety of NEPSI.
- *8: This marking conforms to Intrinsic safety of KOSHA.

FLXA21 (Output: -F, -P)

-F (FOUNDATION Fieldbus)

Type: -CB

Diagram for Type -CB of the FLXA21 2-Wire Analyzer. It shows a table with fields for MODEL (FLXA21), SUFFIX, STYLE, AMB. TEMP (-20 TO 55°C), SUPPLY (17.5/24 VDC), and OUTPUT. Below the table, it lists Housing Assy and Module Production No. (Read IM 12A01A02-12). It includes safety markings: No. ICEX DEK T10044X, Ex ia IIC T4 Ga, FISCO flame device, and FISCO flame device. A warning label states: "WARNING POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ INSTRUCTIONS". The Yokogawa logo and "Made in Singapore" are at the bottom.

Type: -CD

Diagram for Type -CD of the FLXA21 2-Wire Analyzer. It includes the same table and safety markings as the -CB type. It features a Type 4X marking and a warning label: "WARNING / AVERTISSEMENT POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ INSTRUCTIONS. DANGER POTENTIEL DE CHARGES ÉLECTROSTATIQUES - LIREZ INSTRUCTIONS".

Type: -DD

Diagram for Type -DD of the FLXA21 2-Wire Analyzer. It includes the same table and safety markings. It features a Type 4X marking and a warning label: "WARNING / AVERTISSEMENT POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ INSTRUCTIONS. DANGER POTENTIEL DE CHARGES ÉLECTROSTATIQUES - LIREZ INSTRUCTIONS".

Type: -CH

Diagram for Type -CH of the FLXA21 2-Wire Analyzer. It includes the same table and safety markings. It features a Type 4X marking and a warning label: "WARNING POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ INSTRUCTIONS".

-P (PROFIBUS PA)

Type: -CB

Diagram for Type -CB of the FLXA21 2-Wire Analyzer. It includes the same table and safety markings as the -CB type for -F. It features a Type 4X marking and a warning label: "WARNING POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ INSTRUCTIONS".

Type: -CD

Diagram for Type -CD of the FLXA21 2-Wire Analyzer. It includes the same table and safety markings. It features a Type 4X marking and a warning label: "WARNING / AVERTISSEMENT POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ INSTRUCTIONS. DANGER POTENTIEL DE CHARGES ÉLECTROSTATIQUES - LIREZ INSTRUCTIONS".

Type: -DD

Diagram for Type -DD of the FLXA21 2-Wire Analyzer. It includes the same table and safety markings. It features a Type 4X marking and a warning label: "WARNING / AVERTISSEMENT POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ INSTRUCTIONS. DANGER POTENTIEL DE CHARGES ÉLECTROSTATIQUES - LIREZ INSTRUCTIONS".

Type: -CH

Diagram for Type -CH of the FLXA21 2-Wire Analyzer. It includes the same table and safety markings. It features a Type 4X marking and a warning label: "WARNING POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ INSTRUCTIONS".

-F (FOUNDATION Fieldbus) -P (PROFIBUS PA)

Type: -EG

Diagram for Type -EG of the FLXA21 2-Wire Analyzer. It includes the same table and safety markings. It features a Type 4X marking and a warning label: "WARNING POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ INSTRUCTIONS".

Type: -EG

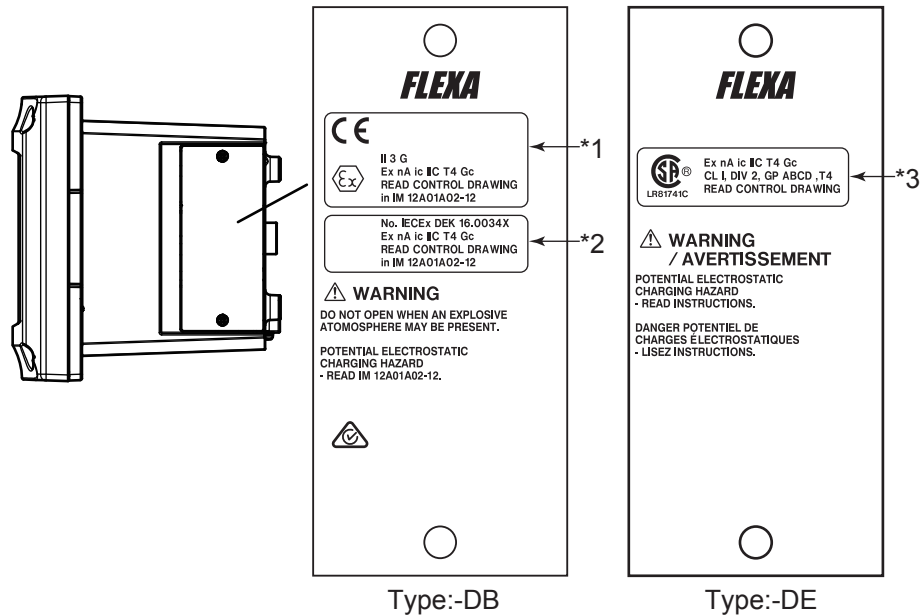
Diagram for Type -EG of the FLXA21 2-Wire Analyzer. It includes the same table and safety markings. It features a Type 4X marking and a warning label: "WARNING POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ INSTRUCTIONS".

- *1: This marking conforms to Intrinsic safety of IECEx.
- *2: This marking conforms to Intrinsic safety of ATEX.
- *3: This marking conforms to Intrinsic safety of CSA.
- *4: This marking conforms to Intrinsic safety of FM.
- *5: This marking conforms to nonincendive of CSA.
- *6: This marking conforms to nonincendive of FM.
- *7: This marking conforms to Intrinsic safety of NEPSI.
- *8: This marking conforms to Intrinsic safety of KOSHA.

■ Mark position of Type n

The mark position is shown as follows

FLXA202



- *1: This marking conforms to Type n of ATEX.
- *2: This marking conforms to Type n of IECEx.
- *3: This marking conforms to Type n of CSA.

■ Regulatory Compliance

● Safety, EMC and RoHS Compliance

Safety: UL 61010-1
 UL 61010-2-030
 CAN/CSA-C22.2 No.61010-1
 CAN/CSA-C22.2 No.61010-2-030
 EN61010-1
 EN61010-2-030

EMC: EN61326-1 Class A, Table 2 (For use in industrial locations)

Influence of immunity environment (Criteria A): Output shift is specified within $\pm 25\%$ of F.S.

EN61326-2-3

EN61326-2-5 (suffix code Output: -F, -P)

RCM: EN61326-1 Class A, Table 2

Korea Electromagnetic Conformity Standard Class A 한국 전자파적합성 기준

A급 기기 (업무용 방송통신기자재)

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는
 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서
 사용하는 것을 목적으로 합니다.

Russian: TR CU 020/2011 (suffix code Output: -A)

RoHS: EN 50581: 2012 (FLXA202; Style 1.02 or newer, FLXA21; Style 3.03 or newer)

Installation altitude: 2000 m or less

Category based on IEC 61010: I (Note 1)

Pollution degree based on IEC 61010: 2 (Note 2)

Note 1: Installation category, called over-voltage category, specifies impulse withstand voltage.

Equipment with "Category I" (ex. two-wire transmitter) is used for connection to circuits in which measures are taken to limit transient over-voltages to an appropriately low level.

Note 2: Pollution degree indicates the degree of existence of solid, liquid, gas or other inclusions which may reduce dielectric strength. Degree 2 is the normal indoor environment.


● Explosion Protected Type Compliance

FLXA202, FLXA21 (Output: -A)

Item	Description	'Type' in MS code
Europe (ATEX)	FLXA202 and FLXA21: [Intrinsic safety "ia"] Applicable Standard: EN 60079-0: 2012 + A11: 2013, EN 60079-11: 2012 Certificate No: DEKRA 11ATEX0109X Marking/Rating: Ex II 1 G Ex ia IIC T4 Ga Ambient Temperature: -20 to 55°C Control Drawing: Refer to 1.1	-CB
International (IECEX)	FLXA202 and FLXA21: [Intrinsic safety "ia"] Applicable Standard: IEC 60079-0: 2011, IEC 60079-11: 2011 Certificate No: IECEX DEK 11.0044X Marking/Rating: Ex ia IIC T4 Ga Ambient Temperature: -20 to 55°C Control Drawing: Refer to 1.1	
United States (FM)	FLXA202 and FLXA21: [Intrinsically safe / Nonincendive] Applicable Standard: Class 3600: 2011, Class 3610: 2010, Class 3611: 2004, Class 3810:2005, NEMA 250: 2014, ANSI/ISA 60079-0: 2013, ANSI/ISA 60079-11: 2014 Certificate No: 3039632 Marking/Rating: IS CL I, DIV 1, GP ABCD CL I, ZN 0, AEx ia IIC NI CL I, DIV 2, GP ABCD CL I, ZN 2 IIC T4: for ambient temperature: -20 to 55°C Enclosure: Type 4X Control Drawing: Refer to 1.3	-CD
Canada (CSA)	FLXA202 and FLXA21: [Intrinsically safe / Nonincendive] Applicable Standard: C22.2 No.0-10 (R2015), CAN/CSA-C22.2 No.94-M91 (R2011), C22.2 No.213-M1987 (R2013), CAN/CSA-C22.2 No.60079-0:11, CAN/CSA-C22.2 No.60079-11:14, CAN/CSA-C22.2 No.61010-1-12, CAN/CSA-C22.2 No.61010-2-030-12 Certificate No: 2425510 Marking/Rating: Ex ia IIC T4 Ga Intrinsically safe for Class I, Division 1, Groups A, B, C, D, T4 Nonincendive for Class I, Division 2, Groups A, B, C, D, T4 Ambient Temperature: -20 to 55°C Ambient Humidity: 0 – 100% (No Condensation) Enclosure: IP66, NEMA 4X Control Drawing: Refer to 1.2	
United States (FM)	FLXA202 and FLXA21: [Nonincendive] Applicable Standard: Class 3600: 2011, Class 3611: 2004, Class 3810: 2005, NEMA 250: 2014 Certificate No: 3039632 Marking/Rating: NI CL I, DIV 2, GP ABCD ZN 2 IIC T4: for ambient temperature: -20 to 55°C Control Drawing: Refer to 1.3	-DD
Canada (CSA)	FLXA202 and FLXA21: [Nonincendive] Applicable Standard: C22.2 No.0-10 (R2015), CAN/CSA-C22.2 No.94-M91 (R2011), C22.2 No.213-M1987 (R2013), CAN/CSA-C22.2 No.61010-1-12, CAN/CSA-C22.2 No.61010-2-030-12 Certificate No: 2425510 Marking/Rating: Nonincendive for Class I, Division 2, Groups A, B, C, D, T4 Ambient Temperature: -20 to 55°C Ambient Humidity: 0 – 100% (No Condensation) Enclosure: IP66, NEMA 4X Control Drawing: Refer to 1.2	

Item	Description	'Type' in MS code
Canada (CSA)	<p>FLXA202: Applicable Standard: [Type of protection 'n' / Nonincendive] C22.2 No.0-10 (R2015), CAN/CSA-C22.2 No.94-M91 (R2011), C22.2 No.213-M1987 (R2013), CAN/CSA-C22.2 No.60079-0:11, CAN/CSA-C22.2 No.60079-11:14, CAN/CSA-C22.2 No.60079-15:12, CAN/CSA-C22.2 No.61010-1-12, CAN/CSA-C22.2 No.61010-2-030-12</p> <p>Certificate No: 2425510 Marking/Rating: Ex nA ic IIC T4 Gc Nonincendive for Class I, Division 2, Groups A, B, C, D, T4</p> <p>Ambient Temperature: -20 to 55°C Ambient Humidity: 0 – 100% (No Condensation) Enclosure: IP66, NEMA 4X Control Drawing: Refer to 1.2</p>	-DE
Europe (ATEX)	<p>FLXA202: Certificate: [Type of protection 'n'] Applicable Standard: Not Applicable as per Annex VIII to ATEX 2014/34/EU EN 60079-0: 2012 + A11:2013, EN 60079-11: 2012, EN 60079-15: 2010, EN 60529: 1991+A2:2013</p> <p>Marking/Rating: Ex II 3 G Ex nA ic IIC T4 Gc Ambient Temperature: -20 to 55°C Enclosure: IP66 Control Drawing: Refer to 1.4</p>	-DB
International (IECEX)	<p>FLXA202: Applicable Standard: [Type of protection 'n'] IEC 60079-0: 2011, IEC 60079-11:2011, IEC 60079-15: 2010</p> <p>Certificate No: IECEX DEK 16.0034X Marking/Rating: Ex nA ic IIC T4 Gc Ambient Temperature: -20 to 55°C Enclosure: IP66 Control Drawing: Refer to 1.5</p>	
China (NEPSI)	<p>FLXA202 and FLXA21: [Intrinsic safety "ia"] Applicable Standard: GB3836.1-2010, GB3836.4-2010, GB 3836.20-2010</p> <p>Certificate No: GYJ18.1051X Marking/Rating: Ex ia IIC T4 Ga Ambient Temperature: -20 to 55°C Control Drawing: Refer to 1.6</p>	-CH
Korea (KOSHA)	<p>FLXA202: Applicable Standard: [Intrinsic safety "ia"] Notice of Ministry of Labor No. 2016-54</p> <p>Certificate No: 15-AV4BO-0160X Marking/Rating: Ex ia IIC T4 Ga Ambient Temperature: -20 to 55°C Control Drawing: Refer to 1.6</p>	-CG
	<p>FLXA21: Applicable Standard: [Intrinsic safety "ia"] Notice of Ministry of Labor No. 2016-54</p> <p>Certificate No: 15-AV4BO-0160X Marking/Rating: Ex ia IIC T4 Ambient Temperature: -20 to 55°C Control Drawing: Refer to 1.6</p>	-EG

FLXA21 (Output: -F, -P)

Item	Description	'Type' in MS code
Europe (ATEX)	<p>Applicable Standard: [Intrinsic safety "ia"] EN 60079-0: 2012 + A11: 2013, EN 60079-11: 2012</p> <p>Certificate No: DEKRA 11ATEX0109X</p> <p>Marking/Rating:  II 1 G Ex ia IIC T4 Ga, FISCO field device</p> <p>Ambient Temperature: -20 to 55°C</p> <p>Control Drawing: Refer to 2.1</p>	-CB
International (IECEX)	<p>Applicable Standard: [Intrinsic safety "ia"] IEC 60079-0: 2011, IEC 60079-11: 2011</p> <p>Certificate No: IECEX DEK 11.0044X</p> <p>Marking/Rating: Ex ia IIC T4 Ga, FISCO field device</p> <p>Ambient Temperature: -20 to 55°C</p> <p>Control Drawing: Refer to 2.1</p>	
United States (FM)	<p>Applicable Standard: [Intrinsically safe / Nonincendive] Class 3600: 2011, Class 3610: 2010, Class 3611: 2004, Class 3810:2005, NEMA 250: 2014, ANSI/ISA 60079-0: 2013, ANSI/ISA 60079-11: 2014</p> <p>Certificate No: 3039632</p> <p>Marking/Rating: IS CL I, DIV 1, GP ABCD CL I, ZN 0, AEx ia IIC NI CL I, DIV 2, GP ABCD CL I, ZN 2 IIC FISCO field device</p> <p>T4: for ambient temperature: -20 to 55°C</p> <p>Enclosure: Type 4X</p> <p>Control Drawing: Refer to 2.2</p>	-CD
Canada (CSA)	<p>Applicable Standard: [Intrinsically safe / Nonincendive] C22.2 No.0-10 (R2015), CAN/CSA-C22.2 No.94-M91 (R2011), C22.2 No.213-M1987 (R2013), CAN/CSA-C22.2 No.60079-0:11, CAN/CSA-C22.2 No.60079-11:14, CAN/CSA-C22.2 No.61010-1-12, CAN/CSA-C22.2 No.61010-2-030-12</p> <p>Certificate No: 2425510</p> <p>Marking/Rating: Ex ia IIC T4 Ga, FISCO field device Intrinsically safe for Class I, Division 1, Groups A, B, C, D, T4 Nonincendive for Class I, Division 2, Groups A, B, C, D, T4</p> <p>Ambient Temperature: -20 to 55°C</p> <p>Ambient Humidity: 0 – 100% (No Condensation)</p> <p>Enclosure: IP66, NEMA 4X</p> <p>Control Drawing: Refer to 2.3</p>	
United States (FM)	<p>Applicable Standard: [Nonincendive] Class 3600: 2011, Class 3611: 2004, Class 3810: 2005, NEMA 250: 2014</p> <p>Certificate No: 3039632</p> <p>Marking/Rating: NI CL I, DIV 2, GP ABCD ZN 2 IIC</p> <p>T4: for ambient temperature: -20 to 55°C</p> <p>Control Drawing: Refer to 2.2</p>	
Canada (CSA)	<p>Applicable Standard: [Nonincendive] C22.2 No.0-10 (R2015), CAN/CSA-C22.2 No.94-M91 (R2011), C22.2 No.213-M1987 (R2013), CAN/CSA-C22.2 No.61010-1-12, CAN/CSA-C22.2 No.61010-2-030-12</p> <p>Certificate No: 2425510</p> <p>Marking/Rating: Nonincendive for Class I, Division 2, Groups A, B, C, D, T4</p> <p>Ambient Temperature: -20 to 55°C</p> <p>Ambient Humidity: 0 – 100% (No Condensation)</p> <p>Enclosure: IP66, NEMA 4X</p> <p>Control Drawing: Refer to 2.3</p>	-DD

Item	Description	'Type' in MS code
China (NEPSI)	Applicable Standard: [Intrinsic safety "ia"] GB3836.1-2010, GB3836.4-2010, GB 3836.20-2010 Certificate No: GYJ18.1051X Marking/Rating: Ex ia IIC T4 Ga, FISCO field device Ambient Temperature: -20 to 55°C Control Drawing: Refer to 2.4	-CH
Korea (KOSHA)	Applicable Standard: [Intrinsic safety "ia"] Notice of Ministry of Labor No. 2016-54 Certificate No: 15-AV4BO-0160X Marking/Rating: Ex ia IIC T4, FISCO field device Ambient Temperature: -20 to 55°C Control Drawing: Refer to 2.4	-EG

■ Product Disposal:

The instrument should be disposed of in accordance with local and national legislation/regulations.

■ Warranty and service

Yokogawa products and parts are guaranteed free from defects in workmanship and material under normal use and service for a period of (typically) 12 months from the date of shipment from the manufacturer.

Individual sales organisations can deviate from the typical warranty period, and the conditions of sale relating to the original purchase order should be consulted. Damage caused by wear and tear, inadequate maintenance, corrosion, or by the effects of chemical processes are excluded from this warranty coverage.

In the event of warranty claim, the defective goods should be sent (freight paid) to the service department of the relevant sales organisation for repair or replacement (at Yokogawa discretion). The following information must be included in the letter accompanying the returned goods:

- Part number, model code and serial number
- Original purchase order and date
- Length of time in service and a description of the process
- Description of the fault, and the circumstances of failure
- Process/environmental conditions that may be related to the failure of the device.
- A statement whether warranty or nonwarranty service is requested
- Complete shipping and billing instructions for return of material, plus the name and phone number of a contact person who can be reached for further information.

Returned goods that have been in contact with process fluids must be decontaminated/disinfected before shipment. Goods should carry a certificate to this effect, for the health and safety of our employees.

Material safety data sheets should also be included for all components of the processes to which the equipment has been exposed.

◆ CE marking products

■ Authorised Representative in EEA

The Authorised Representative for this product in EEA is Yokogawa Europe B.V. (Euroweg 2, 3825 HD Amersfoort, The Netherlands).

■ Identification Tag

This manual and the identification tag attached on a packing box are essential parts of the product.

Keep them together in a safe place for future reference.

■ Users

This product is designed to be used by a person with specialized knowledge.

■ How to dispose the batteries:

This is an explanation about the EU Battery Directive. This directive is only valid in the EU.

Batteries are included in this product. Batteries incorporated into this product cannot be removed by yourself. Dispose them together with this product.

When you dispose this product in the EU, contact your local Yokogawa Europe B.V.office. Do not dispose them as domestic household waste.

Battery type: Manganese dioxide lithium battery



Notice:

The symbol (see above) means they shall be sorted out and collected as ordained in the EU Battery Directive.

■ Information of the WEEE Directive

This product is purposely designed to be used in a large scale fixed installations only and, therefore, is out of scope of the WEEE Directive. The WEEE Directive does not apply. This product should be disposed in accordance with local and national legislation/regulations.

The WEEE Directive is only valid in the EU.

Model: FLXA21 /FLXA202

Date: Mar 24, 2013

Specific Conditions of Use

- When the enclosure of the Analyzer is made of aluminum alloy (FLXA202), and when the Analyzer used in an explosive atmosphere requiring equipment of Category 1 G or EPL Ga, it must be installed in such a way that, even in the event of rare incidents, an ignition source due to impact friction sparks is excluded.

- When accessing the display window or other non-metallic parts of the enclosure of FLXA202/FLXA21, take following measures to minimize the risk of explosion from electrostatic discharge.
Also, avoid any actions that cause the generation of electrostatic charge, such as rubbing with a dry cloth.

To avoid electrostatic charge on the operator,

- Earth the operator through a wrist-strap, or
- Operate FLXA202/FLXA21 on the conductive floors, wearing anti-static work clothes and electrostatic safety shoes, or
- Neutralize the operator and FLXA202/FLXA21 by a static elimination bar which has a metal part earthed through resistor from 100k Ω to 100M Ω .

In case that those measures cannot be taken or static electricity cannot be suppressed, bring a gas detector and make sure there is no ignition capable atmosphere around FLXA202/FLXA21 before the operation.

Notes:

1. The associated apparatus must be a linear source.
2. Measuring Module 2 is not necessarily installed. As for ISC module and SENCOM module, only one module is permitted to be installed at a time.
3. Sensor 1 and Sensor 2 may be simple apparatus or intrinsically safe apparatus.
4. **WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE USER'S MANUAL**

Rev.2: July. 25, 2016

Doc. No.: IKE039-A12 P.1-1

Yokogawa Electric Corporation

1.2 CSA

FLXA202/FLXA21: Intrinsic safety, Nonincendive,
FLXA202: Type of protection 'n'

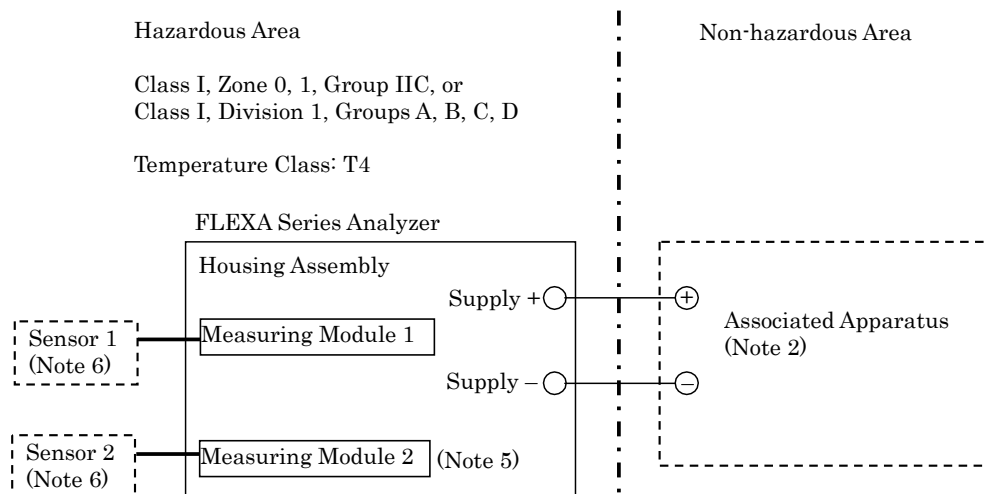
Model: FLXA21 / FLXA202

Date: May 29, 2017

Control drawing (4-20mA type)

Installation for Zone 0, 1 / Division 1

Applicable models: FLXA21-D-x-x-CD-xx-xx-A-..., FLXA202-D-x-x-CD-xx-xx-A-...



Supply +, Supply - (Note 2):

U_i: 30 V
 I_i: 100 mA
 P_i: 0.75 W
 C_i: 13 nF
 L_i: 0 mH

Measuring Module 1, 2 (Note 6):

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
U _o	11.76 V	11.76 V	5.36 V
I _o	116.5 mA	60.6 mA	106.16 mA
P _o	0.3424 W	0.178 W	0.1423 W
C _o	100 nF	100 nF	31 μF
L _o	1.7 mH	8 mH	0.45 mH

Specific conditions of use

- Electrostatic charges on the non-metallic or coated parts of the two wire analyzer shall be avoided.
- In the case where the enclosure of the analyzer is made of Aluminum, if it is mounted in Zone 0, it must be installed such, that even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.

Rev.

Doc. No.: ICS032-A71 P.1

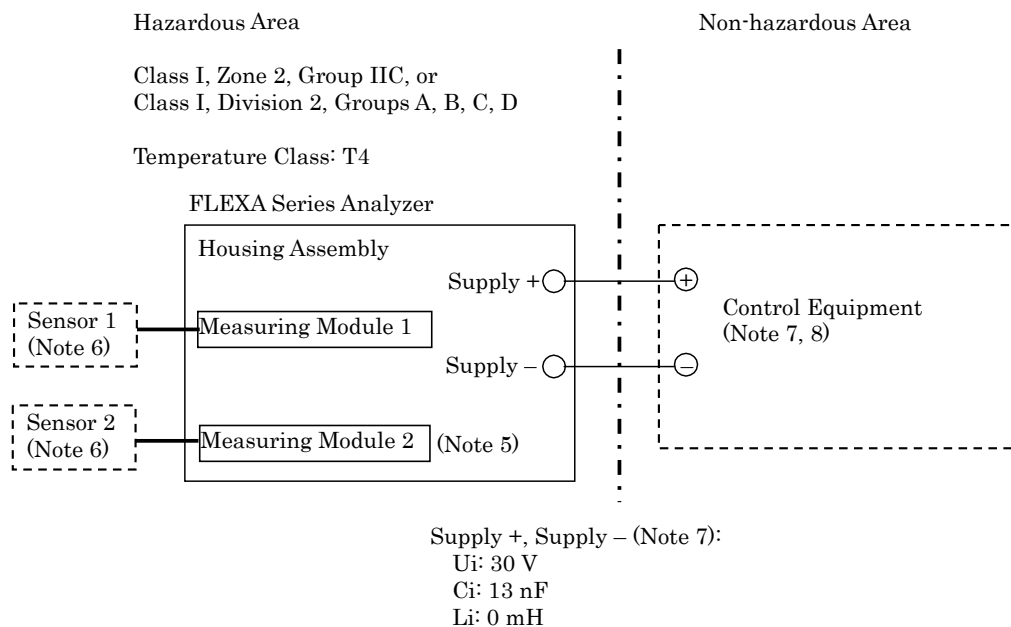
Yokogawa Electric Corporation

Model: FLXA21 / FLXA202

Date: May 29, 2017

Installation for Zone 2 / Division 2

Applicable models: FLXA21-D-x-x-CD-xx-xx-A-...; FLXA21-D-x-x-DD-xx-xx-A-...;
 FLXA202-D-x-x-CD-xx-xx-A-...; FLXA202-D-x-x-DD-xx-xx-A-...
 FLXA202-D-x-x-DE-xx-xx-A-...



Measuring Module 1, 2 (Note 6):

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
U _o	11.76 V	11.76 V	5.36 V
I _o	116.5 mA	60.6 mA	106.16 mA
P _o	0.3424 W	0.178 W	0.1423 W
C _o	100 nF	100 nF	31 μF
L _o	1.7 mH	8 mH	0.45 mH

Specific condition of use

- Electrostatic charges on the non-metallic or coated parts of the two wire analyzer shall be avoided.

Specific conditions of use for FLXA202-D-x-x-DE-xx-xx-A-... when it is used as “Ex nA ic”

- The cable glands accompanying the equipment may not provide sufficient clamping. Additional clamping of the cable shall be provided to ensure that pulling and twisting are not transmitted to the termination. Alternatively, Ex d, Ex e, or Ex n cable glands which provide sufficient clamping shall be used instead of the accompanying cable gland.
- The gaskets of the cable glands shall be protected from light.
- Analyzer must be installed in such a way that the air vent is physically protected from any possible impact.

Rev.

Doc. No.: ICS032-A71 P.2

Yokogawa Electric Corporation

Model: FLXA21 / FLXA202

Date: May 29, 2017

Notes:

1. Installation must be in accordance with the Canadian Electric Code Part I (C22.1), ANSI/ISA-RP12.06.01 and relevant local codes.
2. The associated apparatus must be a linear source meeting the following conditions.

$$\begin{aligned}
 U_o \text{ (or } V_{oc}) &\leq U_i \\
 I_o \text{ (or } I_{sc}) &\leq I_i \\
 P_o &\leq P_i \\
 C_o \text{ (or } C_a) &\geq C_i + C_{cable} \\
 L_o \text{ (or } L_a) &\geq L_i + L_{cable}
 \end{aligned}$$

3. Control equipment connected to the associated apparatus must not use or generate a voltage which exceeds U_m of the associated apparatus.
4. The control drawing of the associated apparatus must be followed when installing the equipment.
5. Measuring Module 2 is not always installed. As for ISC module and SENCOM module, only one module is permitted to be installed at a time.
6. When installed in Zone 0 or 1, or Division 1, Sensor 1 and Sensor 2 may be simple apparatus or intrinsically safe apparatus meeting the conditions below. When installed in Zone 2 or Division 2, Sensor 1 and Sensor 2 may be simple apparatus or non-incendive field wiring apparatus meeting the conditions below, or alternatively, they may be equipment suitable for Zone 2 or Division 2 respectively, if a suitable wiring method other than non-incendive field wiring is employed.

$$\begin{aligned}
 U_i \text{ (or } V_{max}) &\geq U_o \\
 I_i \text{ (or } I_{max}) &\geq I_o \\
 P_i &\geq P_o \\
 C_i &\leq C_o - C_{cable} \\
 L_i &\leq L_o - L_{cable}
 \end{aligned}$$

7. The control equipment must be an associated non-incendive field wiring apparatus meeting the conditions below. Alternatively, it may be general-purpose equipment, if a suitable wiring method other than non-incendive field wiring is employed.

$$\begin{aligned}
 U_o \text{ (or } V_{oc}) &\leq U_i \\
 C_o \text{ (or } C_a) &\geq C_i + C_{cable} \\
 L_o \text{ (or } L_a) &\geq L_i + L_{cable}
 \end{aligned}$$

8. When FLXA202-D-x-x-DE-xx-xx-A... is used as "Ex nA ic", it must be installed in accordance with one of the following:
 - a) in a SELV or PELV system, or
 - b) via a safety isolating transformer complying with the requirements of IEC 61558-2-6, or a technically equivalent standard, or
 - c) directly connected to apparatus complying with IEC60950 series, IEC61010-1, or a technically equivalent standard, or
 - d) fed directly from cells or batteries.
9. When FLXA202-D-x-x-DE-xx-xx-A... is used as "Ex nA ic" and with the accompanying cable glands, cable with an external diameter of 6 to 12 mm must be used for field wiring. The cable glands must be secured with a tightening torque of 6 Nm so that they can be released only with the aid of a tool. Unused cable gland shall be sealed with the accompanying metal plug.

Rev.

Doc. No.: ICS032-A71 P.3

Yokogawa Electric Corporation

Model: FLXA21 / FLXA202

Date: May 29, 2017

10. WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD
AVERTISSEMENT – DANGER POTENTIEL DE CHARGES ÉLECTROSTATIQUES
11. WARNING – SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY
AVERTISSEMENT – LA SUBSTITUTION DE COMPOSANTS PEUT COMPROMETTRE LA SÉCURITÉ INTRINSÈQUE.
12. WARNING – SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR ZONE 2 / DIVISION 2
AVERTISSEMENT – LA SUBSTITUTION DE COMPOSANTS PEUT RENDRE CE MATÉRIEL INACCEPTABLE POUR LES EMPLACEMENTS DE ZONE 2 / DIVISION 2

Rev.

Doc. No.: ICS032-A71 P.4

Yokogawa Electric Corporation

1.3 FM

FLXA202/FLXA21: Intrinsic safety, Nonincendive

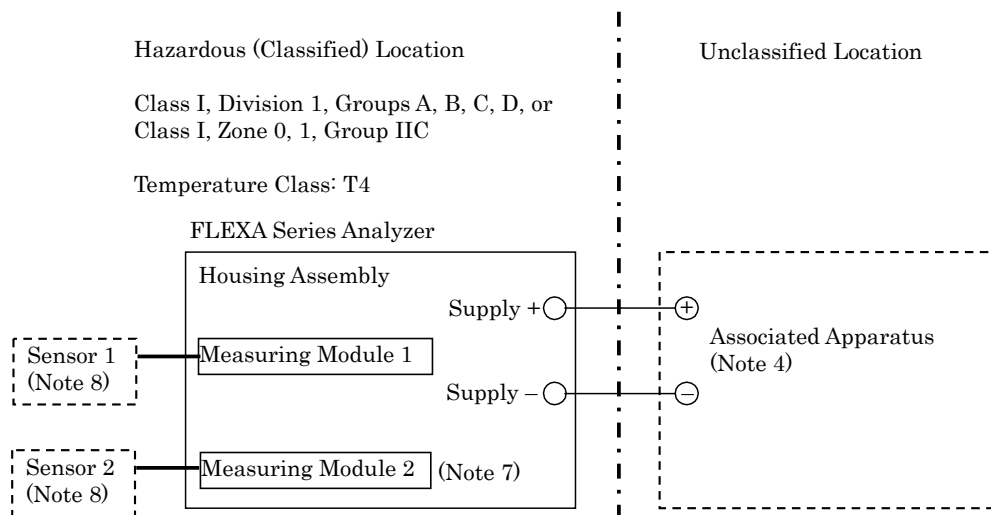
Model: FLEXA Series

Date: April 17, 2015

Control drawing (4–20 mA type)

Installation for Division 1 / Zone 0, 1

Applicable models: FLXA21-D-x-x-CD-xx-xx-A-..., FLXA202-D-x-x-CD-xx-xx-A-...



Supply +, Supply - (Note 4):

U_i : 30 V
 I_i : 100 mA
 P_i : 0.75 W
 C_i : 13 nF
 L_i : 0 mH

Measuring Module 1, 2 (Note 8):

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
U_o	11.76 V	11.76 V	5.36 V
I_o	116.5 mA	60.6 mA	106.16 mA
P_o	0.3424 W	0.178 W	0.1423 W
C_o	100 nF	100 nF	31 μ F
L_o	1.7 mH	8 mH	0.45 mH

Specific conditions of use:

- Electrostatic charges on the non-metallic or coated parts of the two wire analyzer shall be avoided.
- In the case where the enclosure of the analyzer is made of Aluminum, if it is mounted in ZONE 0, it must be installed such that, even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.

Rev.1: May 29, 2017

Doc. No.: IFM039-A71 P.1

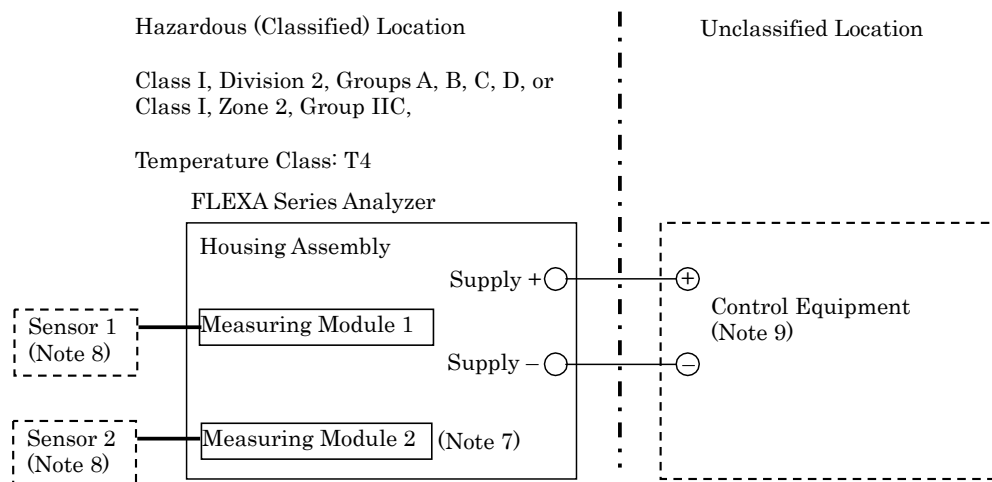
Yokogawa Electric Corporation

Model: FLEXA Series

Date: April 17, 2015

Installation for Division 2 / Zone 2

Applicable models: FLXA21-D-x-x-CD-xx-xx-A-..., FLXA21-D-x-x-DD-xx-xx-A-...;
 FLXA202-D-x-x-CD-xx-xx-A-..., FLXA202-D-x-x-DD-xx-xx-A-...



Supply +, Supply - (Note 9):

U: 30 V

Ci: 13 nF

Li: 0 mH

Measuring Module 1, 2 (Note 8):

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
U _o	11.76 V	11.76 V	5.36 V
I _o	116.5 mA	60.6 mA	106.16 mA
P _o	0.3424 W	0.178 W	0.1423 W
C _o	100 nF	100 nF	31 μF
L _o	1.7 mH	8 mH	0.45 mH

Specific condition of use:

- Electrostatic charges on the non-metallic or coated parts of the two wire analyzer shall be avoided.

Rev.1: May 29, 2017

Doc. No.: IFM039-A71 P.2

Yokogawa Electric Corporation

Model: FLEXA Series

Date: May 29, 2017

Notes:

1. This drawing replaces the former control drawing IKE039-A12.
2. No revision to this drawing without prior approval of FM.
3. Installation must be in accordance with the National Electric Code (NFPA 70), ANSI/ISA-RP12.06.01 and relevant local codes.
4. The associated apparatus must be an FM-approved linear source meeting the following conditions.

$$\begin{aligned}
 U_o \text{ (or } V_{oc}) &\leq U_i \\
 I_o \text{ (or } I_{sc}) &\leq I_i \\
 P_o &\leq P_i \\
 C_o \text{ (or } C_a) &\geq C_i + C_{cable} \\
 L_o \text{ (or } L_a) &\geq L_i + L_{cable}
 \end{aligned}$$

5. Control equipment connected to the associated apparatus must not use or generate a voltage which exceeds U_m of the associated apparatus.
6. The control drawing of the associated apparatus must be followed when installing the equipment.
7. Measuring Module 2 is not always installed. As for ISC module and SENCOM module, only one module is permitted to be installed at a time.
8. When installed in Division 1, Zone 0 or Zone 1, Sensor 1 and Sensor 2 may be simple apparatus or intrinsically safe apparatus meeting the conditions below.
When installed in Division 2 or Zone 2, Sensor 1 and Sensor 2 may be simple apparatus or nonincendive field wiring apparatus meeting the conditions below, or alternatively, they may be equipment suitable for Division 2 or Zone 2 respectively, if a suitable wiring method other than nonincendive field wiring is employed.

$$\begin{aligned}
 U_i \text{ (or } V_{max}) &\geq U_o \\
 I_i \text{ (or } I_{max}) &\geq I_o \\
 P_i &\geq P_o \\
 C_i &\leq C_o - C_{cable} \\
 L_i &\leq L_o - L_{cable}
 \end{aligned}$$

9. The control equipment must be an FM-approved associated nonincendive field wiring apparatus meeting the conditions below. Alternatively, it may be general-purpose equipment, if a suitable wiring method other than nonincendive filed wiring is employed.

$$\begin{aligned}
 U_o \text{ (or } V_{oc}) &\leq U_i \\
 C_o \text{ (or } C_a) &\geq C_i + C_{cable} \\
 L_o \text{ (or } L_a) &\geq L_i + L_{cable}
 \end{aligned}$$

10. WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – WHEN THE EQUIPMENT IS USED IN HAZARDOUS LOCATIONS, AVOID ANY ACTION WHICH GENERATE ELECTROSTATIC DISCHARGE SUCH AS RUBBING WITH A DRY CLOTH.
11. WARNING – IN THE CASE WHERE THE ENCLOSURE OF THE ANALYZER IS MADE OF ALUMINUM, IF IT IS MOUNTED IN ZONE 0, IT MUST BE INSTALLED SUCH THAT, EVEN IN THE EVENT OF RARE INCIDENTS, IGNITION SOURCES DUE TO IMPACT AND FRICTION SPARKS ARE EXCLUDED
12. WARNING – SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY AND SUITABILITY FOR DIVISION 2 / ZONE 2.

Rev.

Doc. No.: IFM039-A71 P.3

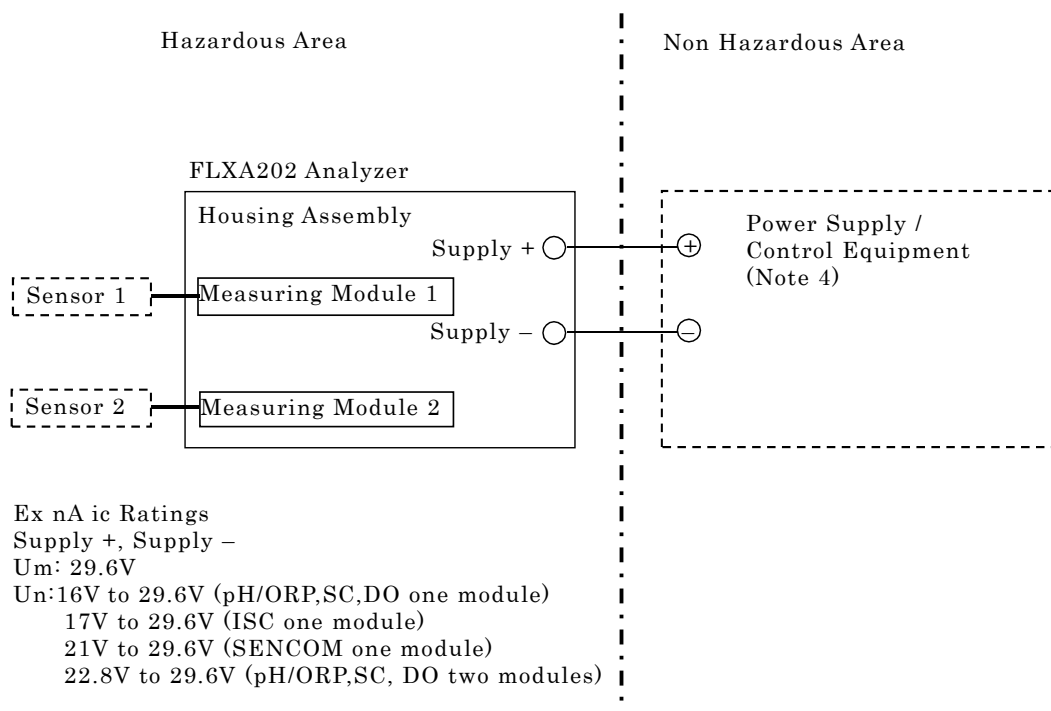
Yokogawa Electric Corporation

1.4 ATEX (Type n) FLXA202: Type of protection 'n'

Model: FLXA202

Date: December 25, 2015

Control Drawing



Measuring Module 1, 2

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
Uo	11.76 V	11.76 V	5.36 V
Io	116.5 mA	60.6 mA	106.16 mA
Po	0.3424 W	0.178 W	0.1423 W
Co	100 nF	100 nF	31 μ F
Lo	1.7 mH	8 mH	0.45 mH

Specific condition of use

- Electrostatic charges on the non-metallic or coated parts of the two wire analyzer shall be avoided.
- The cable gland accompanying the equipment may not provide sufficient clamping. Additional clamping of the cable shall be provided to ensure that pulling and twisting are not transmitted to the termination. Alternatively, an Ex d, Ex e, or Ex n cable gland which provides sufficient clamping shall be used instead of the accompanying cable gland.
- Analyzer must be installed in such a way that the air vent is physically protected from any possible impact.

Rev. 1: July 24, 2017

Doc.No.: NKE053-A71 P.1

Yokogawa Electric Corporation

Model: FLXA202

Date: December 25, 2015

Notes:

1. Installation must be in accordance with EN60079-14 and relevant local codes.
2. Measuring Module 2 is not always installed. As for ISC module and SENCOM module, only one module is permitted to be installed at a time.
3. When installed in an area where the use of Category 3 G equipment is required, Sensor 1 and Sensor 2 may be simple apparatus, intrinsically safe apparatus meeting conditions below, or other Category 3 G equipment.

$$U_i \text{ (or } V_{\max}) \geq U_o$$

$$I_i \text{ (or } I_{\max}) \geq I_o$$

$$P_i \geq P_o$$

$$C_i \leq C_o - C_{\text{cable}}$$

$$L_i \leq L_o - L_{\text{cable}}$$

4. FLXA202 Analyzer must be installed in accordance with one of the following:
 - a) in a SELV or PELV system, or
 - b) via a safety isolating transformer complying with the requirements of IEC 61558-2-6, or a technically equivalent standard, or
 - c) directly connected to apparatus complying with IEC60950 series, IEC61010-1, or a technically equivalent standard, or
 - d) fed directly from cells or batteries.
5. When FLXA202 Analyzer is installed with accompanying cable glands, cable with an external diameter of 6 mm to 12 mm must be used for field wiring. The cable glands must be secured with a tightening torque of 6 Nm so that they can be released only with the aid of a tool. Unused cable gland shall be sealed with the accompanying metal plug.
6. The gaskets of the cable glands shall be protected from light.

Rev. 1: July 24, 2017

Doc.No.: NKE053-A71 P.2

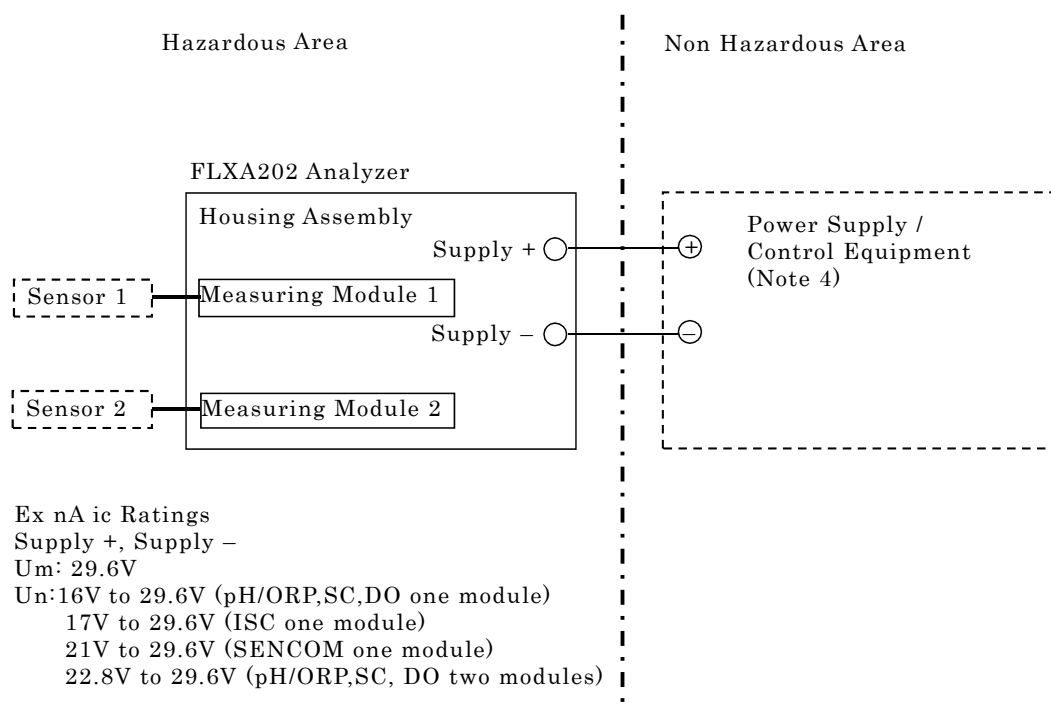
Yokogawa Electric Corporation

1.5 IECEx (Type n) FLXA202: Type of protection 'n'

Model: FLXA202

Date: March 31, 2016

Control Drawing



Measuring Module 1, 2

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
Uo	11.76 V	11.76 V	5.36 V
Io	116.5 mA	60.6 mA	106.16 mA
Po	0.3424 W	0.178 W	0.1423 W
Co	100 nF	100 nF	31 μF
Lo	1.7 mH	8 mH	0.45 mH

Specific condition of use

- Electrostatic charges on the non-metallic or coated parts of the two wire analyzer shall be avoided.
- The cable gland accompanying the equipment may not provide sufficient clamping. Additional clamping of the cable shall be provided to ensure that pulling and twisting are not transmitted to the termination. Alternatively, an Ex d, Ex e, or Ex n cable gland which provides sufficient clamping shall be used instead of the accompanying cable gland.
- The gaskets of the cable glands shall be protected from light.
- Analyzer must be installed in such a way that the air vent is physically protected from any possible impact.

Rev.

Doc.No.: NIE015-A71 P.1

Yokogawa Electric Corporation

Model: FLXA202

Date: March 31, 2016

Notes:

1. Installation must be in accordance with IEC60079-14 and relevant local codes.
2. Measuring Module 2 is not always installed. As for ISC module and SENCOM module, only one module is permitted to be installed at a time.
3. When installed in an area where EPL Gc is required, Sensor 1 and Sensor 2 may be simple apparatus, intrinsically safe apparatus meeting conditions below, or other EPL Gc equipment.

$$U_i \text{ (or } V_{\max}) \geq U_o$$

$$I_i \text{ (or } I_{\max}) \geq I_o$$

$$P_i \geq P_o$$

$$C_i \leq C_o - C_{\text{cable}}$$

$$L_i \leq L_o - L_{\text{cable}}$$

4. FLXA202 Analyzer must be installed in accordance with one of the following:
 - a) in a SELV or PELV system, or
 - b) via a safety isolating transformer complying with the requirements of IEC 61558-2-6, or a technically equivalent standard, or
 - c) directly connected to apparatus complying with IEC60950 series, IEC61010-1, or a technically equivalent standard, or
 - d) fed directly from cells or batteries.
5. When FLXA202 Analyzer is installed with accompanying cable glands, cable with an external diameter of 6 mm to 12 mm must be used for field wiring. The cable glands must be secured with a tightening torque of 6 Nm so that they can be released only with the aid of a tool. Unused cable gland shall be sealed with the accompanying metal plug.

Rev.

Doc.No.: NIE015-A71 P.2

Yokogawa Electric Corporation

1.6 NEPSI and KOSHA**FLXA202/FLXA21: Intrinsic safety “ia”**

(Refer to 1.1 ATEX and IECEx Control Drawing)

2. FLXA21 (Output: -F, -P)

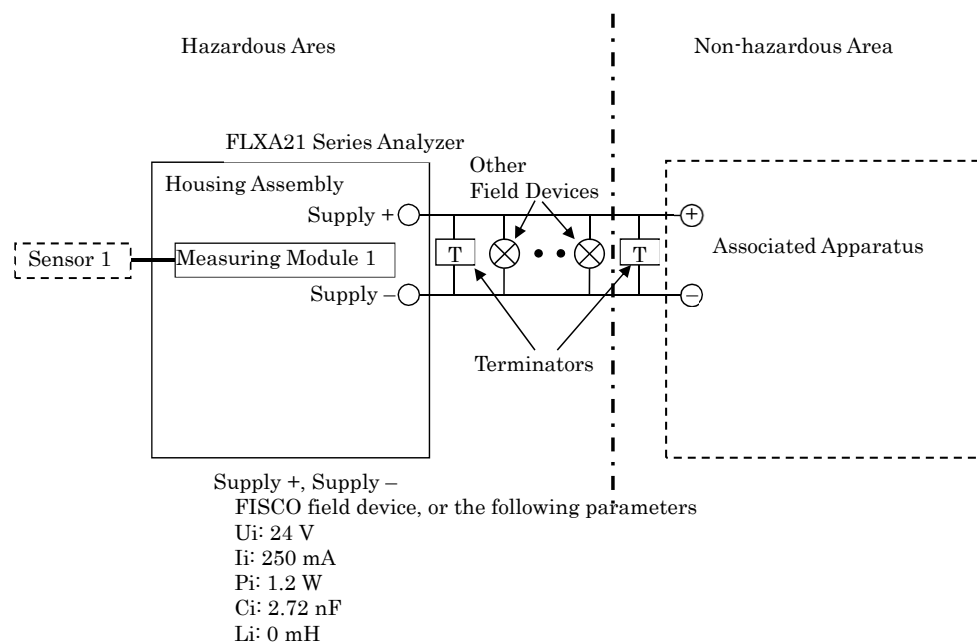
2.1 ATEX and IECEx

FLXA21: Intrinsic safety “ia”

Model: FLXA21 /FLXA202

Date: July 25, 2016

11.2 Control Drawing (FOUNDATION Fieldbus / PROFIBUS PA Type)



Measuring Module 1

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
U_o	11.76 V	11.76 V	5.36 V
I_o	116.5 mA	60.6 mA	106.16 mA
P_o	0.3424 W	0.178 W	0.1423 W
C_o	100 nF	100 nF	31 μ F
L_o	1.7 mH	8 mH	0.45 mH

Doc. No.: IKE039-A12 P.1-2

Yokogawa Electric Corporation

Model: FLXA21 /FLXA202

Date: July 25, 2016

Specific Conditions of Use

- When operating FLXA21 through the display window or touching the non-metallic part of the enclosure of FLXA21, take following measures to minimize the risk of explosion from electrostatic discharge.

Also, avoid any actions that cause the generation of electrostatic charge, such as rubbing with a dry cloth.

To avoid electrostatic charge on the operator,

- Earth the operator through a wrist-strap, or
- Operate FLXA21 on the conductive floors, wearing anti-static work clothes and electrostatic safety shoes, or
- Neutralize the operator and FLXA21 by a static elimination bar which has a metal part earthed through resistor from 100k Ω to 100M Ω .

In case that those measures cannot be taken or static electricity cannot be suppressed, bring a gas detector and make sure there is no ignition capable atmosphere around FLXA21 before the operation.

Notes:

1. The associated apparatus must be a linear source or a FISCO power supply.
2. Sensor 1 may be simple apparatus or intrinsically safe apparatus.
3. WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE USER'S MANUAL

Doc. No.: IKE039-A12 P.1-3

Yokogawa Electric Corporation

2.2 FM

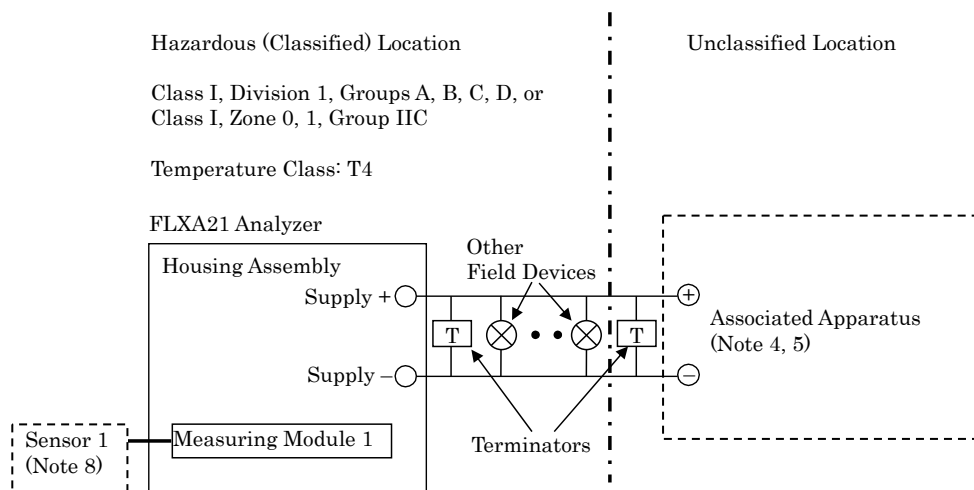
FLXA21: Intrinsic safety, Nonincendive

Model: FLEXA Series Date: April 17, 2015

Control drawing (FOUNDATION Fieldbus / PROFIBUS PA type)

Installation for Division 1 / Zone 0, 1

Applicable models: FLXA21-D-x-x-CD-xx-xx-F-..., FLXA21-D-x-x-CD-xx-xx-P-...



Supply +, Supply - (Note 5):
 FISCO field device
 or
 U_i : 24 V
 I_i : 250 mA
 P_i : 1.2 W
 C_i : 2.72nF
 L_i : 0 mH

Measuring Module 1 (Note 8):

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
U_o	11.76 V	11.76 V	5.36 V
I_o	116.5 mA	60.6 mA	106.16 mA
P_o	0.3424 W	0.178 W	0.1423 W
C_o	100 nF	100 nF	31 μ F
L_o	1.7 mH	8 mH	0.45 mH

Specific condition of use

- Electrostatic charges on the non-metallic or coated parts of the two wire analyzer shall be avoided.

Rev.1: May 29, 2017

Doc. No.: IFM039-A72 P.1

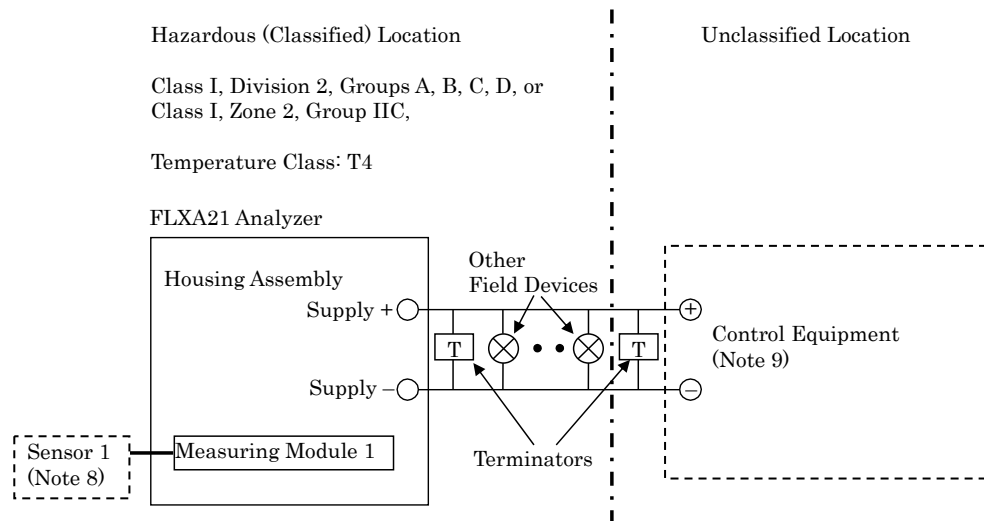
Yokogawa Electric Corporation

Model: FLEXA Series

Date: April 17, 2015

Installation for Division 2 / Zone 2

Applicable models: FLXA21-D-x-x-CD-xx-xx-F-..., FLXA21-D-x-x-CD-xx-xx-P-...
 FLXA21-D-x-x-DD-xx-xx-F-..., FLXA21-D-x-x-DD-xx-xx-P-...



Supply +, Supply - (Note 9):
 U_i : 24 V
 C_i : 2.72 nF
 L_i : 0 mH

Measuring Module 1 (Note 8):

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
U_o	11.76 V	11.76 V	5.36 V
I_o	116.5 mA	60.6 mA	106.16 mA
P_o	0.3424 W	0.178 W	0.1423 W
C_o	100 nF	100 nF	31 μ F
L_o	1.7 mH	8 mH	0.45 mH

Specific condition of use:

- Electrostatic charges on the non-metallic or coated parts of the two wire analyzer shall be avoided.

Rev.1: May 29, 2017

Doc. No.: IFM039-A72 P.2

Yokogawa Electric Corporation

Model: FLEXA Series

Date: May 29, 2017

Notes:

1. No revision to this drawing without prior approval of FM.
2. Installation must be in accordance with the National Electric Code (NFPA 70), ANSI/ISA-RP12.06.01 and relevant local codes.
3. FISCO installation must be in accordance with ANSI/UL-60079-25.
4. The associated apparatus must be FM-approved.
5. The associated apparatus must be a FISCO power supply or a linear source meeting the following conditions.

$$\begin{aligned} U_o \text{ (or } V_{oc}) &\leq U_i \\ I_o \text{ (or } I_{sc}) &\leq I_i \\ P_o &\leq P_i \\ C_o \text{ (or } C_a) &\geq C_i + C_{cable} \\ L_o \text{ (or } L_a) &\geq L_i + L_{cable} \end{aligned}$$

6. Control equipment connected to the associated apparatus must not use or generate a voltage which exceeds U_m of the associated apparatus.
7. The control drawing of the associated apparatus must be followed when installing the equipment.
8. When installed in Division 1, Zone 0 or Zone 1, Sensor 1 may be a simple apparatus or an intrinsically safe apparatus meeting the conditions below.
When installed in Division 2 or Zone 2, Sensor 1 may be a simple apparatus or a nonincendive field wiring apparatus meeting the conditions below, or alternatively, it may be equipment suitable for Division 2 or Zone 2 respectively, if a suitable wiring method other than nonincendive field wiring is employed.

$$\begin{aligned} U_i \text{ (or } V_{max}) &\geq U_o \\ I_i \text{ (or } I_{max}) &\geq I_o \\ P_i &\geq P_o \\ C_i &\leq C_o - C_{cable} \\ L_i &\leq L_o - L_{cable} \end{aligned}$$

9. The control equipment must be an FM-approved FISCO power supply, FNICO power supply or an associated nonincendive field wiring apparatus meeting the conditions below. Alternatively, it may be general-purpose equipment, if a suitable wiring method other than nonincendive field wiring is employed.

$$\begin{aligned} U_o \text{ (or } V_{oc}) &\leq U_i \\ C_o \text{ (or } C_a) &\geq C_i + C_{cable} \\ L_o \text{ (or } L_a) &\geq L_i + L_{cable} \end{aligned}$$

10. WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – WHEN THE EQUIPMENT IS USED IN HAZARDOUS LOCATIONS, AVOID ANY ACTION WHICH GENERATE ELECTROSTATIC DISCHARGE SUCH AS RUBBING WITH A DRY CLOTH.
11. WARNING – IN THE CASE WHERE THE ENCLOSURE OF THE ANALYZER IS MADE OF ALUMINUM, IF IT IS MOUNTED IN ZONE 0, IT MUST BE INSTALLED SUCH THAT, EVEN IN THE EVENT OF RARE INCIDENTS, IGNITION SOURCES DUE TO IMPACT AND FRICTION SPARKS ARE EXCLUDED
12. WARNING – SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY AND SUITABILITY FOR DIVISION 2 / ZONE 2.

Rev.

Doc. No.: IFM039-A72 P.3

Yokogawa Electric Corporation

2.3 CSA

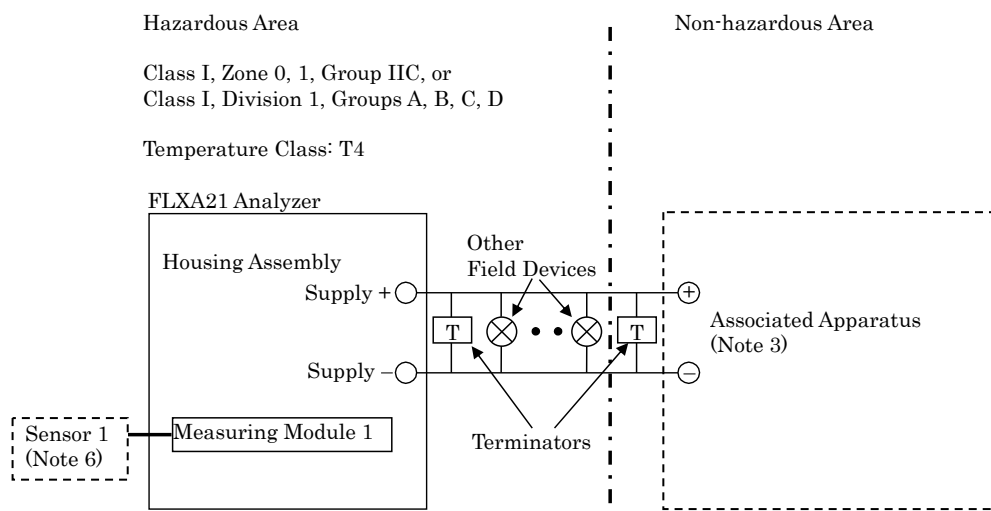
FLXA21: Intrinsic safety, Nonincendive

Model: FLXA21 / FLXA202 Date: May 29, 2017

Control drawing (FOUNDATION Fieldbus / PROFIBUS PA type)

Installation for Zone 0, 1 / Division 1

Applicable models: FLXA21-D-x-x-CD-xx-xx-F..., FLXA21-D-x-x-CD-xx-xx-P...



Supply +, Supply - (Note 3):

FISCO field device

or

Ui: 24 V

Ii: 250 mA

Pi: 1.2 W

Ci: 2.72nF

Li: 0 mH

Measuring Module 1 (Note 6):

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
Uo	11.76 V	11.76 V	5.36 V
Io	116.5 mA	60.6 mA	106.16 mA
Po	0.3424 W	0.178 W	0.1423 W
Co	100 nF	100 nF	31 μF
Lo	1.7 mH	8 mH	0.45 mH

Specific condition of use

- Electrostatic charges on the non-metallic or coated parts of the two wire analyzer shall be avoided.

Rev.

Doc. No.: ICS032-A72 P.1

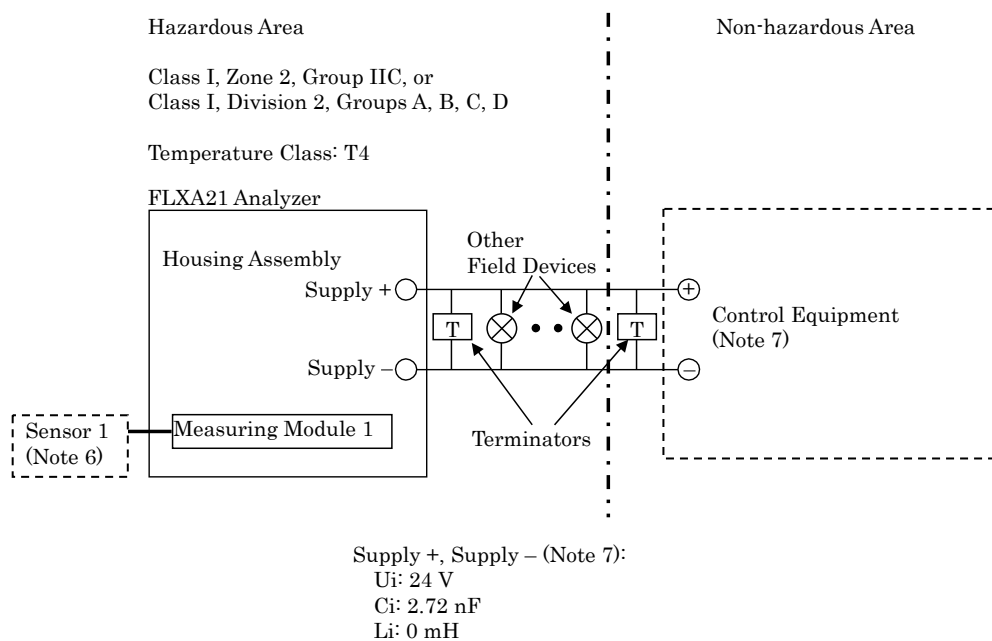
Yokogawa Electric Corporation

Model: FLXA21 / FLXA202

Date: May 29, 2017

Installation for Zone 2 / Division 2

Applicable models: FLXA21-D-x-x-CD-xx-xx-F-..., FLXA21-D-x-x-CD-xx-xx-P-...
 FLXA21-D-x-x-DD-xx-xx-F-..., FLXA21-D-x-x-DD-xx-xx-P-...



Measuring Module 1 (Note 6):

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
U _o	11.76 V	11.76 V	5.36 V
I _o	116.5 mA	60.6 mA	106.16 mA
P _o	0.3424 W	0.178 W	0.1423 W
C _o	100 nF	100 nF	31 μF
L _o	1.7 mH	8 mH	0.45 mH

Specific condition of use

- Electrostatic charges on the non-metallic or coated parts of the two wire analyzer shall be avoided.

Rev.

Doc. No.: ICS032-A72 P.2

Yokogawa Electric Corporation

Model: FLXA21 / FLXA202

Date: May 29, 2017

Notes:

1. Installation must be in accordance with the Canadian Electric Code Part I (C22.1), ANSI/ISA-RP12.06.01 and relevant local codes.
2. FISCO installation must be in accordance with CAN/CSA-C22.2 No. 60079-25.
3. The associated apparatus must be a FISCO power supply or a linear source meeting the following conditions.

$$\begin{aligned} U_o \text{ (or } V_{oc}) &\leq U_i \\ I_o \text{ (or } I_{sc}) &\leq I_i \\ P_o &\leq P_i \\ C_o \text{ (or } C_a) &\geq C_i + C_{cable} \\ L_o \text{ (or } L_a) &\geq L_i + L_{cable} \end{aligned}$$

4. Control equipment connected to the associated apparatus must not use or generate a voltage which exceeds U_m of the associated apparatus.
5. The control drawing of the associated apparatus must be followed when installing the equipment.
6. When installed in Zone 0 or 1, or Division 1, Sensor 1 may be a simple apparatus or an intrinsically safe apparatus meeting the conditions below.
When installed in Zone 2 or Division 2, Sensor 1 may be a simple apparatus or a non-incendive field wiring apparatus meeting the conditions below, or alternatively, it may be equipment suitable for Zone 2 or Division 2 respectively, if a suitable wiring method other than non-incendive field wiring is employed.

$$\begin{aligned} U_i \text{ (or } V_{max}) &\geq U_o \\ I_i \text{ (or } I_{max}) &\geq I_o \\ P_i &\geq P_o \\ C_i &\leq C_o - C_{cable} \\ L_i &\leq L_o - L_{cable} \end{aligned}$$

7. The control equipment must be a FISCO power supply, FNICO power supply or an associated non-incendive field wiring apparatus meeting the conditions below.
Alternatively, it may be general-purpose equipment, if a suitable wiring method other than non-incendive field wiring is employed.

$$\begin{aligned} U_o \text{ (or } V_{oc}) &\leq U_i \\ C_o \text{ (or } C_a) &\geq C_i + C_{cable} \\ L_o \text{ (or } L_a) &\geq L_i + L_{cable} \end{aligned}$$

8. WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD
AVERTISSEMENT – DANGER POTENTIEL DE CHARGES ÉLECTROSTATIQUES
9. WARNING – SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY
AVERTISSEMENT – LA SUBSTITUTION DE COMPOSANTS PEUT COMPROMETTRE LA SÉCURITÉ INTRINSÈQUE.
10. WARNING – SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR ZONE 2 / DIVISION 2.
AVERTISSEMENT – LA SUBSTITUTION DE COMPOSANTS PEUT RENDRE CE MATÉRIEL INACCEPTABLE POUR LES EMPLACEMENTS DE ZONE 2 / DIVISION 2.

Rev.

Doc. No.: ICS032-A72 P.3

Yokogawa Electric Corporation

2.4 NEPSI and KOSHA

FLXA21: Intrinsic safety “ia”

(Refer to 2.1 ATEX and IECEx Control Drawing)

Revision Record

- Manual Title : Model FLXA202 / FLXA21 2-Wire Analyzer Safety Precautions
- Manual No. : IM 12A01A02-20E

Mar. 2018/5th Edition

Overall review.

Oct. 2015/4th Edition

Addition of FLXA202.

Regulatory Compliance (P.4)

Apr. 2015/3rd Edition

Regulatory Compliance (P.4)

Oct. 2014/2nd Edition

Addition of NEPSI and ATEX/IECEX (SENCOM module).

Sep. 2013/1st Edition

Newly published

EU DECLARATION OF CONFORMITY

We **Yokogawa Electric Corporation**
2-9-32 Nakacho, Musashino-shi, Tokyo, 180-8750 Japan

declare under our sole responsibility that the Products identified as:

Model code	Model name
FLXA202	2-Wire Analyzer

further specified with model suffix and option codes:

As listed in General Specification: GS 12A01A03-01EN (Ed.5)
See Appendix 2 for additional information.

are in compliance with the EU law and legislation providing for the CE-marking, as listed in Appendix 1.

Information relevant to the conformity and identification of these Products is provided in Appendix 3 and Appendix 4.

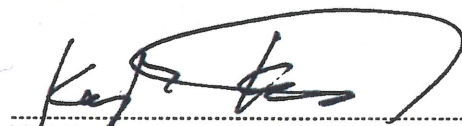
Subject products are:

- Produced according to appropriate quality control procedure.
- Provided with the CE-marking as from **2015**.

Signature:

(Manufacturer)

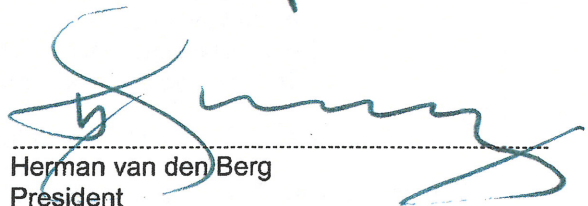
Tokyo, 29 March, 2017



Koji Komatsu
General Manager
Analytical Products Dept.
Product Business Center
IA Platform Business Headquarters
Yokogawa Electric Corporation

(Authorized Representative in the EEA)

Amersfoort, 4 April 2017





Herman van den Berg
President
Yokogawa Europe B.V.
Euroweg 2, 3825 HD Amersfoort,
P.O.Box 163, 3800 AD Amersfoort,
The Netherlands

YEF-HQ internal reference:
EU DoC: FLXA202

Appendix 1

The products are built in compliance with requirements of the following EU Directives and Standards;

Model – Suffix / Option code structure: **FLXA202**-b-c-d-ee-ff-gg-h-i-jj-k-ll / x
(Distinctive combinations of suffix and option codes as indicated per table).

EU Directive	Standards	-Suffix
2014/30/EU (EMC)	EN 61326-1:2013 Class A Table 2 Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements	ee = AB, CB or DB
	EN 61326-2-3:2013 Electrical equipment for measurement, control and laboratory use – EMC requirements Part 2-3: Particular requirements – Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning	
2011/65/EU *1 (RoHS)	EN 50581:2012 Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.	
2014/34/EU (ATEX)	EN 60079-0:2012+A11:2013 Explosive atmospheres - Part 0: Equipment - General requirements EN 60079-11:2012 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i" The marking of the equipment or protective system:  II 1 G Ex ia IIC T4 Ga	ee = CB
	The Name of the Notified Body: DEKRA Certification B.V. The Identification Number of the Notified Body: 0344 The Address of the Notified Body: Meander 1051 6825 MJ Arnhem, The Netherlands The Number of the EC Type-Examination Certificate: DEKRA 11ATEX0109 X	
	EN 60079-0:2012+A11:2013 Explosive atmospheres - Part 0: Equipment - General requirements EN 60079-11:2012 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i" EN 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection 'n' The marking of the equipment or protective system:  II 3 G Ex nA ic IIC T4 Gc	ee = DB

*1: The product after Style 1.02 is applicable.

Other Normative Standards	-Suffix
<p>EN 61010-1:2010 Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements</p> <p>EN 61010-2-030:2010 Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-030: Particular requirements for testing and measuring circuits</p> <p>EN 60529:1991+A1:2000+A2:2013 Degrees of protection provided by enclosures (IP Code)</p>	<p>ee = AB, CB or DB</p>

Appendix 2

In case the Product model code contains the option code "Z", it means that the Product is produced with a customer specific modification. Customer specific modification is to change the settings or inspection method and there is no change of hardware. Therefore, any such Product - in case produced after the date of signing this document by the Manufacturer - is also in scope of this EU-Declaration of Conformity. Each customized product is identified by a unique number such as XJFLXA202.### (where ### is number) and this number is indicated in the name plate. The option code "Z"- specific application notes and this unique number of customized product are listed in a dedicated document, of which original is a part of the Technical Documentation. A copy of that document is accompanying each product at delivery.

Appendix 3

The product has no accessories.

IM 12A01A02-12E has CE-marking significant compliance relevance as the essential part of the product. Instructions relevant for safe use are described in **IM 12A01A02-01E** guided by **IM 12A01A02-12E**.

Appendix 4

External View of FLXA202

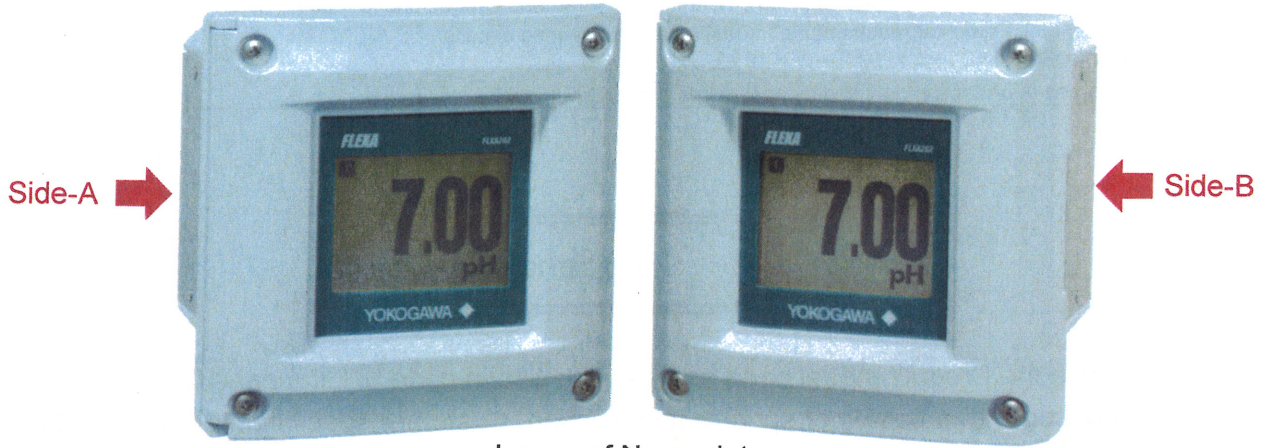


Image of Nameplate
(Typical example; details may differ)

Type code: -AB	Type code: -CB or -DB	Type code: -CB	Type code: -DB																																
<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">FLEXA 2-Wire Analyzer</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>MODEL</td><td>FLXA202</td></tr> <tr><td>SUFFIX</td><td>-D-B-D-AB-P1-NN-A</td></tr> <tr><td></td><td>-N-LA-N-NN/U</td></tr> <tr><td>STYLE</td><td>S1.02</td></tr> <tr><td>SUPPLY</td><td>24VDC</td></tr> <tr><td>OUTPUT</td><td>4-20mADC</td></tr> <tr><td>AMB. TEMP</td><td>-20 TO 55°C</td></tr> <tr><td>NO.</td><td>C2T400718 2017.04</td></tr> </table> <p>IP66 Read IM 12A01A02-12</p> <p style="text-align: center;">CE </p> <p style="font-size: small;">Yokogawa Electric Corporation 2-9-32 Nakacho, Musashino-shi, Tokyo, 180-8750 JAPAN</p> <p style="text-align: center;">YOKOGAWA ◆ Made in Singapore</p> </div> <p style="text-align: center;">To be affixed on Side-A</p>	MODEL	FLXA202	SUFFIX	-D-B-D-AB-P1-NN-A		-N-LA-N-NN/U	STYLE	S1.02	SUPPLY	24VDC	OUTPUT	4-20mADC	AMB. TEMP	-20 TO 55°C	NO.	C2T400718 2017.04	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">FLEXA 2-Wire Analyzer</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>MODEL</td><td>FLXA202</td></tr> <tr><td>SUFFIX</td><td>-D-B-D-CB-P1-NN-A</td></tr> <tr><td></td><td>-N-LA-N-NN/U</td></tr> <tr><td>STYLE</td><td>S1.02</td></tr> <tr><td>SUPPLY</td><td>24VDC</td></tr> <tr><td>OUTPUT</td><td>4-20mADC</td></tr> <tr><td>AMB. TEMP</td><td>-20 TO 55°C</td></tr> <tr><td>NO.</td><td>C2T400718 2017.04</td></tr> </table> <p>IP66 Read IM 12A01A02-12</p> <p style="font-size: small;">Yokogawa Electric Corporation 2-9-32 Nakacho, Musashino-shi, Tokyo, 180-8750 JAPAN</p> <p style="text-align: center;">YOKOGAWA ◆ Made in Singapore</p> </div> <p style="text-align: center;">To be affixed on Side-A</p>	MODEL	FLXA202	SUFFIX	-D-B-D-CB-P1-NN-A		-N-LA-N-NN/U	STYLE	S1.02	SUPPLY	24VDC	OUTPUT	4-20mADC	AMB. TEMP	-20 TO 55°C	NO.	C2T400718 2017.04	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">FLEXA</p> <p style="font-size: x-small;">No. IECEx DEK 11.0044X Ex ia IIC T4 Ga READ CONTROL DRAWING in IM 12A01A02-12</p> <p style="font-size: x-small;">■ 1G No. DEKRA 11ATEX0109X Ex ia IIC T4 Ga READ CONTROL DRAWING in IM 12A01A02-12</p> <p style="font-size: x-small;">IP66 Read IM 12A01A02-12</p> <p style="text-align: center;">WARNING POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ IM 12A01A02-12.</p> <p style="text-align: center;">CE 0344 </p> </div> <p style="text-align: center;">To be affixed on Side-B</p>	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">FLEXA</p> <p style="font-size: x-small;">CE</p> <p style="font-size: x-small;">■ 3G Ex na ic IIC T4 Gc READ CONTROL DRAWING in IM 12A01A02-12</p> <p style="text-align: center;">WARNING DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT, POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ INSTRUCTIONS.</p> <p style="text-align: center;"></p> </div> <p style="text-align: center;">To be affixed on Side-B</p>
MODEL	FLXA202																																		
SUFFIX	-D-B-D-AB-P1-NN-A																																		
	-N-LA-N-NN/U																																		
STYLE	S1.02																																		
SUPPLY	24VDC																																		
OUTPUT	4-20mADC																																		
AMB. TEMP	-20 TO 55°C																																		
NO.	C2T400718 2017.04																																		
MODEL	FLXA202																																		
SUFFIX	-D-B-D-CB-P1-NN-A																																		
	-N-LA-N-NN/U																																		
STYLE	S1.02																																		
SUPPLY	24VDC																																		
OUTPUT	4-20mADC																																		
AMB. TEMP	-20 TO 55°C																																		
NO.	C2T400718 2017.04																																		

-/-

EU DECLARATION OF CONFORMITY

We **Yokogawa Electric Corporation**
2-9-32 Nakacho, Musashino-shi, Tokyo, 180-8750 Japan

declare under our sole responsibility that the Products identified as:

Model code	Model name
FLXA21	2-Wire Analyzer

further specified with model suffix and option codes:

As listed in General Specification: GS 12A01A02-01E (Ed.14),
GS 12A01A02-71E (Ed.5) for FOUNDATION Fieldbus Communication,
GS 12A01A02-72E (Ed.5) for PROFIBUS PA Communication
 See Appendix 2 for additional information.

are in compliance with the EU law and legislation providing for the CE-marking, as listed in Appendix 1.

Information relevant to the conformity and identification of these Products is provided in Appendix 3 and Appendix 4.

Subject products are:

- Produced according to appropriate quality control procedure.
- Provided with the CE-marking as from 2010.

Signature:

(Manufacturer)

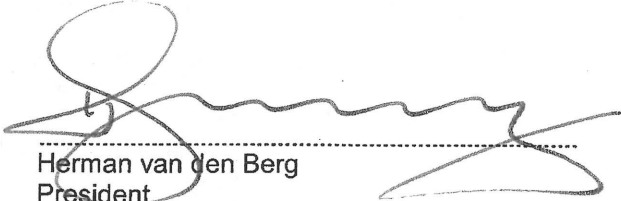
Tokyo, 29 March, 2017



Koji Komatsu
 General Manager
 Analytical Products Dept.
 Product Business Center
 IA Platform Business Headquarters
 Yokogawa Electric Corporation

(Authorized Representative in the EEA)

Amersfoort, 30 March 2017




Herman van den Berg
 President
 Yokogawa Europe B.V.
 Euroweg 2, 3825 HD Amersfoort,
 P.O.Box 163, 3800 AD Amersfoort,
 The Netherlands

Appendix 1

The products are built in compliance with requirements of the following EU Directives and Standards;

Model – Suffix / Option code structure: **FLXA21-b-c-d-ee-ff-gg-h-i-jj-k-ll / x**
 (Distinctive combinations of suffix and option codes are indicated per table. Unless otherwise stated, all defined codes are relevant.)

EU Directive	Standards	-Suffix
2014/30/EU (EMC)	EN 61326-1:2013 Class A Table 2 (For use in industry locations) Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements EN 61326-2-3:2013 Electrical equipment for measurement, control and laboratory use – EMC requirements Part 2-3: Particular requirements – Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning	ee = AB or CB and h = A
	EN 61326-1:2013 Class A Table 2 (For use in industry locations) Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements EN 61326-2-3:2013 Electrical equipment for measurement, control and laboratory use – EMC requirements Part 2-3: Particular requirements – Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning EN 61326-2-5:2013 Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-5: Particular requirements Test configurations, operational conditions and performance criteria for devices with field bus interfaces according to IEC 61784-1	ee = AB or CB and h = F or P
2011/65/EU *1 (RoHS)	EN 50581:2012 Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.	ee = AB or CB
2014/34/EU (ATEX)	EN 60079-0:2012+A11:2013 Explosive atmospheres - Part 0: Equipment - General requirements EN 60079-11:2012 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i" The marking of the equipment or protective system:  II 1 G Ex ia IIC T4 Ga The Name of the Notified Body: DEKRA Certification B.V. The Identification Number of the Notified Body: 0344 The Address of the Notified Body: Meander 1051 6825 MJ Arnhem, The Netherlands The Number of the EC Type-Examination Certificate: DEKRA 11ATEX0109 X	ee = CB

*1: The product after Style 3.03 is applicable.

Other Normative Standards	-Suffix
<p>EN 61010-1:2010 Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements</p> <p>EN 61010-2-030:2010 Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-030: Particular requirements for testing and measuring circuits</p> <p>EN 60529:1991+A1:2000+A2:2013 Degrees of protection provided by enclosures (IP Code)</p>	<p>ee = AB or CB</p>

Appendix 2

In case the Product model code contains the option code "Z", it means that the Product is produced with a customer specific modification. Customer specific modification is to change the settings or inspection method and there is no change of hardware. Therefore, any such Product - in case produced after the date of signing this document by the Manufacturer - is also in scope of this EU-Declaration of Conformity. Each customized product is identified by a unique number such as XJFLXA21.### (where ### is number) and this number is indicated in the name plate. The option code "Z"- specific application notes and this unique number of customized product are listed in a dedicated document, of which original is a part of the Technical Documentation. A copy of that document is accompanying each product at delivery.

Appendix 3

The product has no accessories.

IM 12A01A02-12E has CE-marking significant compliance relevance as the essential part of the product. Instructions relevant for safe use are described in **IM 12A01A02-01E** guided by **IM 12A01A02-12E**.

Appendix 4

External View of FLXA21

Model – Suffix / Option code structure: **FLXA21**-b-c-d-ee-ff-gg-h-i-jj-k-ll / x
 (Symbol of suffix/ option code shown above uses in the following figure.)

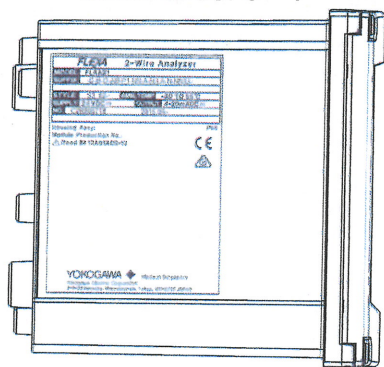
Suffix code: c = P



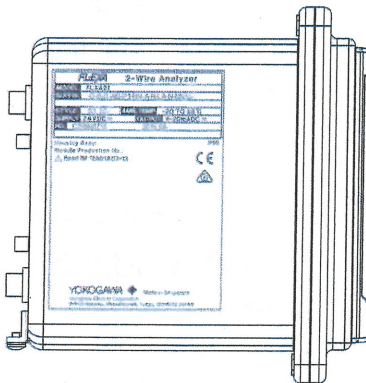
Suffix code: c = S, U, E or W



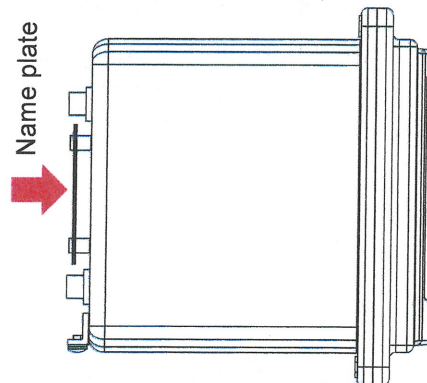
Suffix code: c = P



Suffix code: c = S



Suffix code: c = U, E or W



Side View

Image of Nameplate
(Typical example; details may differ)

<p style="text-align: center;">Suffix code: ee = AB Suffix code: c = P or S</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;">FLEXA 2-Wire Analyzer</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>MODEL</td><td colspan="3">FLXA21</td></tr> <tr><td>SUFFIX</td><td colspan="3">-D-P-D-AB-P1-NN-A-N-NN/U</td></tr> <tr><td>STYLE</td><td>S3.03</td><td>AMB. TEMP</td><td>-20 TO 55°C</td></tr> <tr><td>SUPPLY</td><td>24VDC</td><td>OUTPUT</td><td>4-20mADC</td></tr> <tr><td>NO.</td><td>C2T400718</td><td></td><td>2017.04</td></tr> </table> <p>Housing Assy: IP66 Module Production No.: ⚠ Read IM 12A01A02-12</p> <div style="text-align: right;"> </div> <p style="text-align: center;">YOKOGAWA Made in Singapore <small>Yokogawa Electric Corporation 2-9-32 Nakacho, Musashino-shi, Tokyo, 180-8750 JAPAN</small></p> </div> <p style="text-align: center;">Suffix code: c = U, E or W</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="4" style="text-align: center;">FLEXA 2-Wire Analyzer</td></tr> <tr><td>MODEL</td><td colspan="3">FLXA21</td></tr> <tr><td>SUFFIX</td><td colspan="3">-D-P-D-AB-P1-NN-A-N-NN/U</td></tr> <tr><td>STYLE</td><td>S3.03</td><td>AMB. TEMP</td><td>-20 TO 55°C</td></tr> <tr><td>SUPPLY</td><td>24VDC</td><td>OUTPUT</td><td>4-20mADC</td></tr> <tr><td>NO.</td><td>C2T400718</td><td></td><td>2017.04</td></tr> </table> <p>Housing Assy: IP66 Module Production No.: ⚠ Read IM 12A01A02-12</p> <div style="text-align: right;"> </div> <p style="text-align: center;">YOKOGAWA Made in Singapore <small>Yokogawa Electric Corporation 2-9-32 Nakacho, Musashino-shi, Tokyo, 180-8750 JAPAN</small></p> </div>	MODEL	FLXA21			SUFFIX	-D-P-D-AB-P1-NN-A-N-NN/U			STYLE	S3.03	AMB. TEMP	-20 TO 55°C	SUPPLY	24VDC	OUTPUT	4-20mADC	NO.	C2T400718		2017.04	FLEXA 2-Wire Analyzer				MODEL	FLXA21			SUFFIX	-D-P-D-AB-P1-NN-A-N-NN/U			STYLE	S3.03	AMB. TEMP	-20 TO 55°C	SUPPLY	24VDC	OUTPUT	4-20mADC	NO.	C2T400718		2017.04	<p style="text-align: center;">Suffix code: ee = CB Suffix code: c = P or S</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;">FLEXA 2-Wire Analyzer</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>MODEL</td><td colspan="3">FLXA21</td></tr> <tr><td>SUFFIX</td><td colspan="3">-D-P-D-AB-P1-NN-A-N-NN/U</td></tr> <tr><td>STYLE</td><td>S3.03</td><td>AMB. TEMP</td><td>-20 TO 55°C</td></tr> <tr><td>SUPPLY</td><td>24VDC</td><td>OUTPUT</td><td>4-20mADC</td></tr> <tr><td>NO.</td><td>C2T400718</td><td></td><td>2017.04</td></tr> </table> <p>Housing Assy: IP66 Module Production No.: ⚠ Read IM 12A01A02-12</p> <p style="text-align: right;"> </p> <p style="text-align: right; font-size: small;"> No. IECEx DEK 11.0044X Ex ia BC T4 Ga READ CONTROL DRAWING in IM 12A01A02-12 II G No. DEKRA 11ATEX0109X Ex ia BC T4 Ga READ CONTROL DRAWING in IM 12A01A02-12 </p> <p style="text-align: center;">WARNING POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ IM 12A01A02-12.</p> <p style="text-align: center;">YOKOGAWA Made in Singapore <small>Yokogawa Electric Corporation 2-9-32 Nakacho, Musashino-shi, Tokyo, 180-8750 JAPAN</small></p> </div> <p style="text-align: center;">Suffix code: c = U, E or W</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="4" style="text-align: center;">FLEXA 2-Wire Analyzer</td></tr> <tr><td>MODEL</td><td colspan="3">FLXA21</td></tr> <tr><td>SUFFIX</td><td colspan="3">-D-P-D-AB-P1-NN-A-N-NN/U</td></tr> <tr><td>STYLE</td><td>S3.03</td><td>AMB. TEMP</td><td>-20 TO 55°C</td></tr> <tr><td>SUPPLY</td><td>24VDC</td><td>OUTPUT</td><td>4-20mADC</td></tr> <tr><td>NO.</td><td>C2T400718</td><td></td><td>2017.04</td></tr> </table> <p>Housing Assy: IP66 Module Production No.: ⚠ Read IM 12A01A02-12</p> <div style="text-align: right;"> </div> <p style="text-align: right; font-size: small;"> No. IECEx DEK 11.0044X Ex ia BC T4 Ga READ CONTROL DRAWING in IM 12A01A02-12 II G No. DEKRA 11ATEX0109X Ex ia BC T4 Ga READ CONTROL DRAWING in IM 12A01A02-12 </p> <p style="text-align: center;">WARNING POTENTIAL ELECTROSTATIC CHARGING HAZARD - READ IM 12A01A02-12.</p> <p style="text-align: center;">YOKOGAWA Made in Singapore <small>Yokogawa Electric Corporation 2-9-32 Nakacho, Musashino-shi, Tokyo, 180-8750 JAPAN</small></p> </div>	MODEL	FLXA21			SUFFIX	-D-P-D-AB-P1-NN-A-N-NN/U			STYLE	S3.03	AMB. TEMP	-20 TO 55°C	SUPPLY	24VDC	OUTPUT	4-20mADC	NO.	C2T400718		2017.04	FLEXA 2-Wire Analyzer				MODEL	FLXA21			SUFFIX	-D-P-D-AB-P1-NN-A-N-NN/U			STYLE	S3.03	AMB. TEMP	-20 TO 55°C	SUPPLY	24VDC	OUTPUT	4-20mADC	NO.	C2T400718		2017.04
MODEL	FLXA21																																																																																								
SUFFIX	-D-P-D-AB-P1-NN-A-N-NN/U																																																																																								
STYLE	S3.03	AMB. TEMP	-20 TO 55°C																																																																																						
SUPPLY	24VDC	OUTPUT	4-20mADC																																																																																						
NO.	C2T400718		2017.04																																																																																						
FLEXA 2-Wire Analyzer																																																																																									
MODEL	FLXA21																																																																																								
SUFFIX	-D-P-D-AB-P1-NN-A-N-NN/U																																																																																								
STYLE	S3.03	AMB. TEMP	-20 TO 55°C																																																																																						
SUPPLY	24VDC	OUTPUT	4-20mADC																																																																																						
NO.	C2T400718		2017.04																																																																																						
MODEL	FLXA21																																																																																								
SUFFIX	-D-P-D-AB-P1-NN-A-N-NN/U																																																																																								
STYLE	S3.03	AMB. TEMP	-20 TO 55°C																																																																																						
SUPPLY	24VDC	OUTPUT	4-20mADC																																																																																						
NO.	C2T400718		2017.04																																																																																						
FLEXA 2-Wire Analyzer																																																																																									
MODEL	FLXA21																																																																																								
SUFFIX	-D-P-D-AB-P1-NN-A-N-NN/U																																																																																								
STYLE	S3.03	AMB. TEMP	-20 TO 55°C																																																																																						
SUPPLY	24VDC	OUTPUT	4-20mADC																																																																																						
NO.	C2T400718		2017.04																																																																																						

-/-

Thank you for selecting our FLXA202/FLXA21 2-Wire Analyzer.
The following addition has been made on User's Manual, IM 12A01A02-20E 5th Edition.
Please read carefully before using the FLXA202/FLXA21.

Note

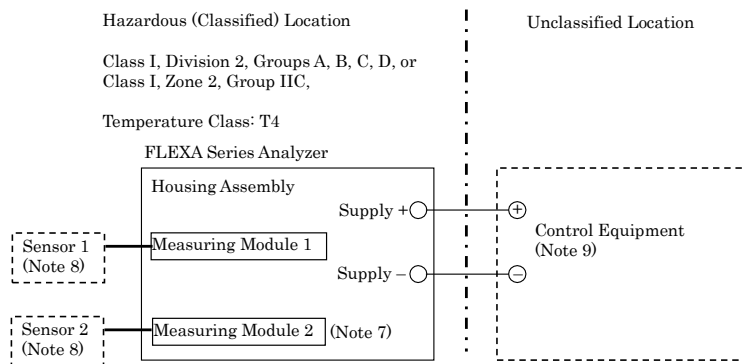
◆ Control Drawings has changed. (P. 19 “1.3 FM FLXA202/FLXA21: Intrinsic safety, Nonincendive”)

Control drawings (4-20 mA type) of Installation for Division 2/ Zone 2 on P. 20 has been replaced with the following.

Model: FLEXA Series Date: April 17, 2015

Installation for Division 2 / Zone 2

Applicable models: FLXA21-D-x-x-CD-xx-xx-A-..., FLXA21-D-x-x-DD-xx-xx-A-...;
FLXA202-D-x-x-CD-xx-xx-A-..., FLXA202-D-x-x-DD-xx-xx-A-...



Supply +, Supply - (Note 9):
 U_i : 30 V
 C_i : 13 nF
 L_i : 0 mH

Measuring Module 1, 2 (Note 8):

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
U_o	11.76 V	11.76 V	5.36 V
I_o	116.5 mA	60.6 mA	106.16 mA
P_o	0.3424 W	0.178 W	0.1423 W
C_o	4 μ F	4 μ F	31 μ F
L_o	4.5 mH	19 mH	0.45 mH

Specific condition of use:

- Electrostatic charges on the non-metallic or coated parts of the two wire analyzer shall be avoided.

◆ **Control Drawings has changed.**
(P. 29 “2.2 FM FLXA21 Intrinsic safety, Nonincendive”)

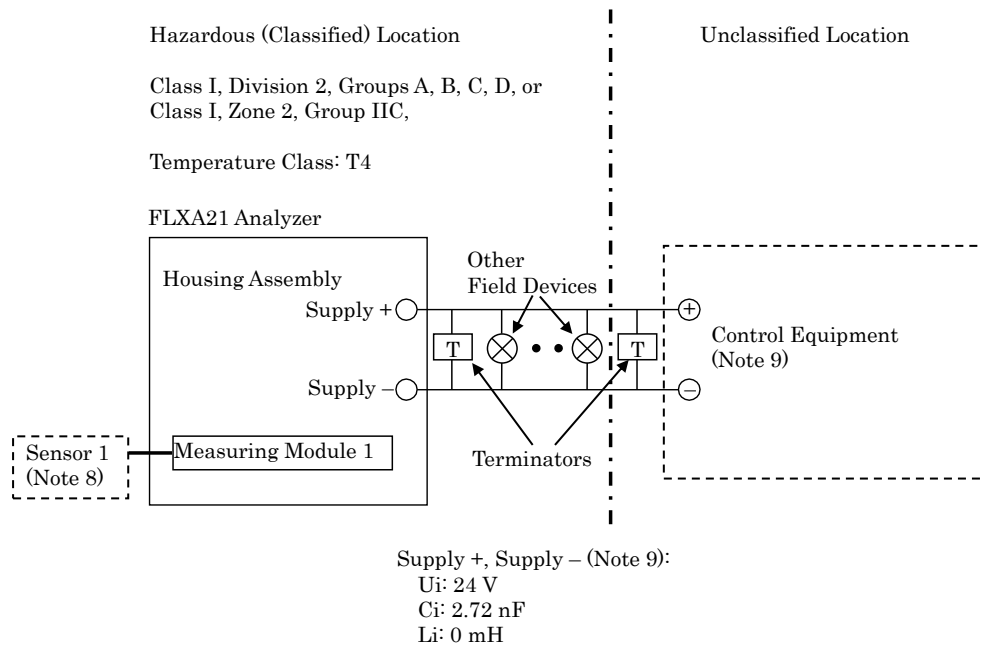
Control drawing (FOUNDATION Fieldbus / PROFIBUS PA type) of Installation for Division 2/ Zone 2 on P. 30 has been replaced with the following.

Model: FLEXA Series

Date: April 17, 2015

Installation for Division 2 / Zone 2

Applicable models: FLXA21-D-x-x-CD-xx-xx-F-..., FLXA21-D-x-x-CD-xx-xx-P-...
 FLXA21-D-x-x-DD-xx-xx-F-..., FLXA21-D-x-x-DD-xx-xx-P-...



Measuring Module 1 (Note 8):

	Type of Measuring Module		
	pH, SC, DO	ISC	SENCOM
U _o	11.76 V	11.76 V	5.36 V
I _o	116.5 mA	60.6 mA	106.16 mA
P _o	0.3424 W	0.178 W	0.1423 W
C _o	4 μF	4 μF	31 μF
L _o	4.5 mH	19 mH	0.45 mH

Specific condition of use:

- Electrostatic charges on the non-metallic or coated parts of the two wire analyzer shall be avoided.

Rev.2: Sep. 15, 2017

Doc. No.: IFM039-A72 P.2

Yokogawa Electric Corporation