

**EJX/EJA-E Series
NEPSI Certification**
[Option code: /NF2, /NF21,
/NS21, /NS24 and /NS25]



IM 01C25A00-12E



1. Introduction

Thank you for purchasing the DPharp electronic pressure transmitter.

This manual contains important notes and handling cautions for the DPharp EJX Series and EJA-E Series Differential Pressure/Pressure Transmitters with NEPSI certification, option code /NF2, /NF21, /NS21, /NS24 and /NS25.

Refer to each of the following user's manuals for standard specifications, functions, handling cautions, and operations, etc.

Table 1 List of Individual User's Manuals

| Model | Document No. |
|---|------------------|
| EJX110A, EJX120A, EJX130A, EJX310A, EJX430A, EJX440A, EJA110E, EJA120E, EJA130E, EJA310E, EJA430E and EJA440E | IM 01C25B01-01E |
| EJX210A and EJA210E | IM 01C25C01-01E |
| EJX510A, EJX530A, EJX610A, EJX630A, EJA510E and EJA530E | IM 01C25F01-01E |
| EJX118A, EJX438A, EJA118E and EJA438E | IM 01C25H01-01E |
| EJX115A and EJA115E | IM 01C25K01-01E |
| EJX910A and EJX930A | IM 01C25R01-01E |
| EJXC40A Digital Remote Sensor | IM 01C25W05-01EN |
| DPharp BRAIN Communication Type | IM 01C25T03-01E |
| DPharp HART Communication Type | IM 01C25T01-06EN |
| DPharp Fieldbus Communication Type | IM 01C25T02-01E |
| DPharp PROFIBUS PA Communication Type | IM 01C25T04-01EN |

2. NEPSI Certification

a. NEPSI Flameproof Type (/NF2)

Caution for NEPSI flameproof type.

Note 1. Model EJX/EJA-E Series differential, gauge, and absolute pressure transmitters with optional code /NF2 are applicable for use in hazardous locations:

- Certificate No.: GYJ22.1941X
- Applicable Standard: GB/T 3836.1, GB/T 3836.2
- Type of Protection and Marking Code: Ex db IIC T6...T4 Gb
- Enclosure: IP66/IP67
- Ambient Temperature:
 - Electrical connection code 2,4,7,9,C and D
-50 to +75°C (T4), -50 to +80°C (T5), and -50 to +75°C (T6)
 - Electrical connection code 0,5,A and F
-40 to +60°C
- Process Temperature (Tp.):
 - Electrical connection code 2,4,7,9,C and D
-50 to +120°C (T4), -50 to +100°C (T5), and -50 to +85°C (T6)
 - Electrical connection code 0,5,A and F
-40 to +120°C (T4), -40 to +100°C (T5), and -40 to +85°C (T6)
- Supply Voltage: 42 V dc max.
32 V dc max. (FOUNDATION Fieldbus and PROFIBUS PA type)
9 to 28 V dc, 27 mW (Low Power type)
9 to 30 V dc, 250 mW (RS485 Modbus Communication Type)
- Output Signal: 4 to 20 mA dc
15 mA (FOUNDATION Fieldbus and PROFIBUS PA type)
1 to 5 V (Low Power type)
RS485 Modbus (RS485 Modbus Communication Type)
- Slave module type, output signal code "S", is only to be connected to Master module type, output signal code "P", for power supply and communication by a 4-wire connection.

Note 2. Wiring

- In hazardous locations, the cable entry devices shall be of a certified flameproof type, suitable for the conditions of use and correctly installed.
- Unused apertures shall be closed with suitable flameproof certified blanking elements. (The plug attached is certificated as the flame proof IP66/IP67 as a part of this apparatus.)
- In case of ANSI 1/2 NPT plug, ANSI hexagonal wrench should be applied to screw in.
- The external earth connection facility shall be connected reliably.

Note 3. Operation

**WARNING 警告**

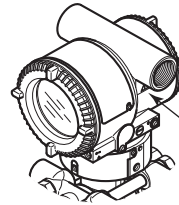
- Output signal code except P or S
AFTER DE-ENERGIZING, DELAY 5 MINUTES BEFORE OPENING.
切断电源后, 等待5分钟再打开
- Output signal code P or S
AFTER DE-ENERGIZING, DELAY 10 MINUTES BEFORE OPENING.
切断电源后, 等待10分钟再打开
- WHEN AMBIENT TEMPERATURE $\geq 65^{\circ}\text{C}$,
USE THE HEAT-RESISTING CABLES AND
CABLE GLAND $\geq 90^{\circ}\text{C}$.
- POTENTIAL ELECTROSTATIC CHARGING
HAZARD
存在潜在的静电危害, 使用前请参阅用户手册
- Take care not to generate mechanical
sparking when accessing to the instrument
and peripheral devices in a hazardous
location.
- Electrostatic charge may cause an explosion
hazard. Avoid any actions that cause the
generation of electrostatic charge, such as
rubbing with a dry cloth on coating face of
the product.

Note 4. Maintenance and Repair

**WARNING**

- The instrument modification or repair by other than personnel authorized by Yokogawa Electric Corporation is prohibited and will void NEPSI Certification.
- A modification of the equipment would no longer comply with the construction described in the certificate documentation.
- Electrical Connection
A mark indicating the electrical connection type is stamped near the electrical connection port.
These marks are as followed.

| Screw Size | Marking |
|----------------------|--------------------------------|
| JIS G1/2 | \triangle |
| ISO M20 \times 1.5 | \triangle M |
| ANSI 1/2 NPT | \triangle N or \triangle W |



Location of the mark

F0200.ai

Note 5. Special Condition for safe use

**WARNING**

- The flame paths differ from the standard values in GB/T 3836.2-2021. Repair of the equipment is only allowed when done by the manufacture or authorized representative.
- The property class of the fasteners used to fasten the transmitter enclosure onto the sensor capsule is at least A*-50.
- For transmitters with a membrane made of titanium, ignition hazard due to impact and friction on the membranes shall be avoided.

Note 6. Conditions for safe use

- In case of M20×1.5 or 1/2 - 14 NPT thread type cable entry, cable glands, adapters and/or blanking elements with a suitable IP rating shall be of Ex db IIC certified for GBEX and shall be installed so as to maintain the specific degree of protection (IP Code) of the equipment. If the thread type of cable entry is G1/2, only cable gland and/or blanking elements supplied by the manufacturer should be used.
- Forbid end user to change the configuration to ensure the equipment's explosion protection performance.
- When installation, use and maintenance of pressure transmitter, observe following standards
 GB/T 3836.13-2021 "Explosive atmospheres - Part 13: Equipment repair, overhaul and reclamation"
 GB/T 3836.15-2017 "Explosive atmospheres - Part 15: Electrical installations design, selection and erection"
 GB/T 3836.16-2017 "Explosive atmospheres - Part 16: Electrical installations inspection and maintenance"
 GB 50257-2014 "Code for construction and acceptance of electric equipment on fire and explosion hazard electrical equipment installation engineering"

b. NEPSI Flameproof Type and Dust Ignition proof Type (/NF21)

Caution for NEPSI flameproof type.

Note 1. Model EJX/EJA-E Series differential, gauge, and absolute pressure transmitters with optional code /NF21 are applicable for use in hazardous locations:

- Certificate No.: GYJ22.1941X
- Applicable Standard: GB/T 3836.1, GB/T 3836.2, GB/T 3836.31
- Type of Protection and Marking Code:
 Ex db IIC T6...T4 Gb
 Ex tb IIIC T85°C Db

- Enclosure: IP66/IP67
- Ambient Temperature for gas-proof: -50 to 75°C (T6), -50 to 80°C (T5), and -50 to 75°C (T4)
- Process Temperature (Tp.) for gas-proof: -50 to 85°C (T6), -50 to 100°C (T5), and -50 to 120°C (T4)
- Maximum Surface Temperature for dust-proof: T85°C (Tamb.: -30* to 75°C, Tp.: -30* to 85°C)
 * -15°C when /HE is specified.
- Supply voltage: 42 V dc max.
 32 V dc max. (FOUNDATION Fieldbus and PROFIBUS PA type)
 9 to 28 V dc, 27 mW (Low Power type)
 9 to 30 V dc, 250 mW (RS485 Modbus Communication Type)
- Output signal: 4 to 20 mA dc
 15 mA (FOUNDATION Fieldbus and PROFIBUS PA type)
 1 to 5 V (Low Power type)
 RS485 Modbus (RS485 Modbus Communication Type)
- Slave module type, output signal code "S", is only to be connected to Master module type, output signal code "P", for power supply and communication by a 4-wire connection.

Note 2. Wiring

- In hazardous locations, the cable entry devices shall be of a certified flameproof type, suitable for the conditions of use and correctly installed.
- Unused apertures shall be closed with suitable flameproof certified blanking elements. (The plug attached is certificated as the flame proof IP66/IP67 as a part of this apparatus.)
- In case of ANSI 1/2 NPT plug, ANSI hexagonal wrench should be applied to screw in.
- The external earth connection facility shall be connected reliably.

Note 3. Operation

**WARNING 警告**

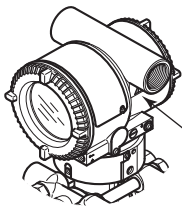
- Output signal code except P or S
AFTER DE-ENERGIZING, DELAY 5
MINUTES BEFORE OPENING.
切断电源后，等待5分钟再打开
- Output signal code P or S
AFTER DE-ENERGIZING, DELAY 10
MINUTES BEFORE OPENING.
切断电源后，等待10分钟再打开
- WHEN AMBIENT TEMPERATURE $\geq 65^{\circ}\text{C}$,
USE THE HEAT-RESISTING CABLES AND
CABLE GLAND $\geq 90^{\circ}\text{C}$.
- POTENTIAL ELECTROSTATIC CHARGING
HAZARD
存在潜在的静电危害，使用前请参阅用户手册
- Take care not to generate mechanical
sparking when accessing to the instrument
and peripheral devices in a hazardous
location.
- Electrostatic charge may cause an explosion
hazard. Avoid any actions that cause the
generation of electrostatic charge, such as
rubbing with a dry cloth on coating face of
the product.

Note 4. Maintenance and Repair

**WARNING**

- The instrument modification or repair
by other than personnel authorized by
Yokogawa Electric Corporation is prohibited
and will void NEPSI Certification.
- A modification of the equipment would
no longer comply with the construction
described in the certificate documentation.
- Electrical Connection
A mark indicating the electrical connection
type is stamped near the electrical
connection port.
These marks are as followed.

| Screw Size | Marking |
|----------------------|--------------------------------|
| ISO M20 × 1.5 female | $\triangle M$ |
| ANSI 1/2 NPT female | $\triangle N$ or $\triangle W$ |



Location of the mark

F0201.ai

Note 5. Special Condition for safe use

**WARNING**

- The flame paths differ from the standard
values in GB/T 3836.2-2021. Repair of the
equipment is only allowed when done by the
manufacture or authorized representative.
- The property class of the fasteners used to
fasten the transmitter enclosure onto the
sensor capsule is at least A*-50.
- For transmitters with a membrane made of
titanium, ignition hazard due to impact and
friction on the membranes shall be avoided.

Note 6. Conditions for safe use

- Cable glands, adapters and/or blanking
elements with a suitable IP rating shall be
of Ex db IIC/Ex tb IIIC certified for GBEX
and shall be installed so as to maintain the
specific degree of protection (IP Code) of the
equipment.
- When installing the equipment, the selected
Type of Protection should be ticked as
follows.
 - Ex db IIC T6...T4 Gb
 - Ex tb IIIC T85 °C Db
- Forbid end user to change the configuration
to ensure the equipment's explosion
protection performance.
- When installation, use and maintenance
of pressure transmitter, observe following
standards
GB/T 3836.13-2021 "Explosive atmospheres
- Part 13: Equipment repair, overhaul and
reclamation"
GB/T 3836.15-2017 "Explosive atmospheres
- Part 15: Electrical installations design,
selection and erection"
GB/T 3836.16-2017 "Explosive atmospheres
- Part 16: Electrical installations inspection
and maintenance"
GB 50257-2014 "Code for construction and
acceptance of electric equipment on fire
and explosion hazard electrical equipment
installation engineering"
GB15577-2018 "Safety regulations for dust
explosion prevention and protection"

c. NEPSI Intrinsic Safety Type for HART/ BRAIN Protocol Type (Except for EJX9□0A)

Caution for NEPSI Intrinsic safety type.

Note 1. Model EJX/EJA-E Series differential, gauge, and absolute pressure transmitters with optional code /NS21 are applicable for use in hazardous locations:

- Applicable Standards:
GB/T 3836.1, GB/T 3836.4
- Certificate number: GYJ22.1766X
- Specific Ex marking: Ex ia IIC T4 Ga
- Ambient temperature: $-50\text{ °C} \leq T_a \leq +60\text{ °C}$
- Process temperature: $-50\text{ °C} \leq T_p \leq +120\text{ °C}$
- Enclosure: IP66/IP67
- Power supply: $\leq 30\text{ V} \leq 21.6\text{ mA}$
- Dielectric strength:
500 V AC, r.m.s., 1 min Terminals: to Enclosure
Supply +
Supply –

Note 2. Specific conditions of use 产品安全使用特殊条件

- When the equipment is mounted in an area where the use of EPL Ga equipment is required, it shall be installed in such a way that, even in the event of rare incidents, an ignition source due to impact and/or friction sparks is excluded.
当变送器外壳材质为铝合金且应用于设备保护级别（EPL）为 Ga 级的爆炸性气体危险区域时，其安装方式应保证罕见的情况下，防止冲击或摩擦产生的点燃危险。
- Precaution shall be taken to minimize the risk from electrostatic discharges on the non-metallic parts (excluding glass parts) or coated parts of the equipment.
应采取预防措施，将设备的非金属与涂层部件（不包括玻璃部件）的静电放电风险降至最低。
- The dielectric strength of at least 500 V of the intrinsically safe circuits of the equipment is limited only by the overvoltage protection. From the safety point of view, the intrinsically safe circuit of the equipment shall be assumed to be connected to earth.
设备本安电路的绝缘强度至少为 500V，仅受过电压保护的限。从安全角度来看，设备的本质安全电路假定接地。

Note 3. Installation and erection 安装

- Installation and maintenance of the equipment shall be done in accordance with GB/T 3836.13, GB/T 3836.15, GB/T 3836.16, GB/T 3836.18, and GB 50257.
设备的安装、使用、以及维护、须根据 GB/T 3836.13、GB/T 3836.15、GB/T 3836.16、GB/T 3836.18、GB 50257、以及相关的现地法律、法规来执行。
- This product should be used in explosive gas atmospheres together with associated apparatus, follow the instruction manual of this product and the associated apparatus when connecting the wiring. Connect the wiring terminals correctly.
该产品必须与已通过防爆认证的关联设备配套共同组成本安系统方可用于现场存在爆炸性气体混合物的场所，其系统接线必须同时遵守本产品和所配关联设备的使用说明书要求，接线端子不得接错。
- Forbid end user to change the configuration to ensure the equipment's explosion protection performance.
用户不得自行随意更换该产品的电气零部件，应会同产品制造商共同解决运行中出现的故障，以免影响防爆性能和损坏现象的发生。
- The enclosure of the Pressure Transmitter provides a protection of at least IP66/IP67 in accordance with GB/T4208-2017.
变送器外壳防护等级为符合 GB/T4208-2017 标准要求的 IP66/IP67。

Note 4. Use and setting-up (operation) 使用和设置

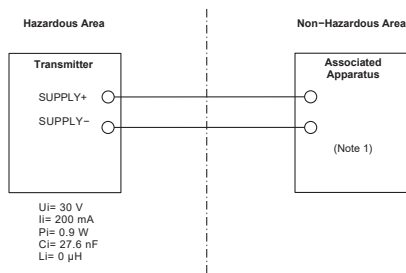
- If the pressure transmitter is mounted in an area where explosive atmospheres may be present, it must be installed in such a way that the risk from electrostatic discharges. 如果压力变送器安装在可能存在爆炸性环境的区域中，安装时必须防止静电放电的危险。

Note 5. Maintenance and repair 维护和修理

**WARNING 警告**

- A modification of the equipment would no longer comply with the construction described in the certificate documentation. 设备的改装将不再符合证书文档中描述的结构。
- Only personnel authorized by Yokogawa Electric Corporation can repair the equipment. 横河电机株式会社的授权人员，才可以修理设备。

Note 6. Control drawing



Notes:

1. Associated Apparatus must be a linear power source whose output current is resistively limited.

d. NEPSI Intrinsic Safety Type for Fieldbus Type (Except for EJX9□0A)

Caution for NEPSI Intrinsic safety.

Note 1. Model EJX/EJA-E Series differential, gauge, and absolute pressure transmitters with optional code /NS25 are applicable for use in hazardous locations:

- Applicable Standards:
GB/T 3836.1, GB/T 3836.4
- Certificate number: GYJ21.1008X
- Specific Ex marking: Ex ia IIC/IIB T4 Ga
- Ambient temperature: $-55\text{ °C} \leq T_a \leq +60\text{ °C}$
- Process temperature: $-55\text{ °C} \leq T_p \leq +120\text{ °C}$
- Enclosure: IP66/IP67
- Power supply: $\leq 24\text{ V}, \leq 24\text{ mA}$
- Dielectric strength:
500 V AC, r.m.s., 1 min Terminals: to Enclosure
Supply +
Supply –

Note 2. Electrical Parameters

Intrinsically safe ratings are as follows:

[Entity]

 $U_i = 24\text{ V}$ $I_i = 250\text{ mA}$ $P_i = 1.2\text{ W}$ $C_i = 3.52\text{ nF}$ $L_i = 0\text{ μH}$

[FISCO IIC]

 $U_i = 17.5\text{ V}$ $I_i = 380\text{ mA}$ $P_i = 5.32\text{ W}$ $C_i = 3.52\text{ nF}$ $L_i = 0\text{ μH}$

[FISCO IIB]

 $U_i = 17.5\text{ V}$ $I_i = 460\text{ mA}$ $P_i = 5.32\text{ W}$ $C_i = 3.52\text{ nF}$ $L_i = 0\text{ μH}$

Note 3. Specific conditions of use 产品安全使用特殊条件

- When the pressure transmitter is made of aluminum alloy, if it is mounted in an area where the use of EPL Ga equipment is required, it shall be installed such that, even in the event of rare incidents, an ignition source due to impact and friction sparks is excluded.

当变送器外壳材质由铝合金制成且应用于设备保护级别（EPL）为 Ga 级的爆炸性气体危险区域时，其安装方式应可防止冲击或摩擦产生的点燃危险（即使是罕见事故风险）。

- Precautions shall be taken to minimize the risk from electrostatic discharge or propagating brush discharges of painted parts.
应采取预防措施以最大程度地减少涂漆零件的静电放电或传播电刷放电的风险。
- The dielectric strength of at least 500V of the intrinsically safe circuits of the Pressure Transmitter is limited only by the overvoltage protection.
仅当选配过压保护时，不具备至少 500V 的介电强度。
- When a zener barrier is used together with the pressure transmitter, the earthing facility in nonhazardous locations should be in accord with Clause 12.2.4 in GB/T 3836.15-2017.
当产品使用齐纳式安全栅时，其安全场所接地应满足 GB/T3836.15-2017 标准第 12.2.4 条要求。

Note 4. Installation and erection 安装

- Installation and maintenance of the equipment shall be done in accordance with GB/T 3836.13, GB/T 3836.15, GB/T 3836.16, GB/T 3836.18, and GB 50257. 设备的安装、使用、以及维护、须根据 GB/T 3836.13、GB/T 3836.15、GB/T 3836.16、GB/T 3836.18、GB 50257、以及相关的现场法律、法规来执行。
- This product should be used in explosive gas atmospheres together with associated apparatus, follow the instruction manual of this product and the associated apparatus when connecting the wiring. Connect the wiring terminals correctly. 该产品必须与已通过防爆认证的关联设备配套共同组成本安系统方可用于现场存在爆炸性气体混合物的场所，其系统接线必须同时遵守本产品 and 所配关联设备的使用说明书要求，接线端子不得接错。
- Forbid end user to change the configuration to ensure the equipment's explosion protection performance. 用户不得自行随意更换该产品的电气零部件，应会同产品制造商共同解决运行中出现的故障，以免影响防爆性能和损坏现象的发生。
- The enclosure of the Pressure Transmitter provides a protection of at least IP66/IP67 in accordance with GB/T4208-2017. 变送器外壳防护等级为符合 GB/T4208-2017 标准要求的 IP66/IP67。

Note 5. Use and setting-up (operation) 使用和设置

- If the pressure transmitter is mounted in an area where explosive atmospheres may be present, it must be installed in such a way that the risk from electrostatic discharges. 如果压力变送器安装在可能存在爆炸性环境的区域中，安装时必须防止静电放电的危险。

Note 6. Maintenance and repair 维护和修理

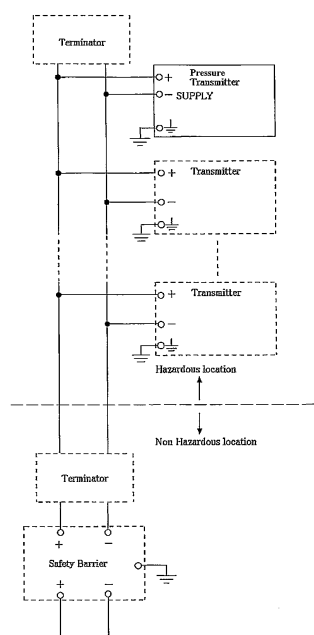


WARNING 警告

- A modification of the equipment would no longer comply with the construction described in the certificate documentation. 设备的改装将不再符合证书文档中描述的结构。
- Only personnel authorized by Yokogawa Electric Corporation can repair the equipment. 横河电机株式会社的授权人员，才可以修理设备。

Note 7. Control drawing

Drawings
Installation Diagram



Note

- In the rating 1(*1), the output current of the barrier must be limited by a resistor 'Rs' such that $I_o = U_o / R_s$.
- In the rating 2(*2), the output of the barrier must be the characteristics of the trapezoid or the rectangle and this transmitter can be connected to Fieldbus equipment which are in according to the FISCO model.
- The terminators may be built in by a barrier.
- More than one transmitter may be connected to the power supply line.
- The terminator and the safety barrier shall be certified.

Electrical data:

| | | |
|---|---|--------------|
| Maximum Input Voltage U_i : 24V | } | *1: Rating 1 |
| Maximum Input Current I_i : 250mA | | |
| Maximum Input Power P_i : 1.2W | | |
| Maximum Internal Capacitance C_i : 1.76nF 3.52nF Δ | | |
| Maximum Internal Inductance L_i : 0 μ H | | |
| or | | |
| Maximum Input Voltage U_i : 17.5V | } | *2: Rating 2 |
| Maximum Input Current I_i : 380mA Δ | | |
| Maximum Input Power P_i : 5.32W Δ | | |
| Maximum Internal Capacitance C_i : 1.76nF 3.52nF Δ | | |
| Maximum Internal Inductance L_i : 0 μ H | | |
| or | | |
| Maximum Input Voltage U_i : 17.5V | | |
| Maximum Input Current I_i : 460mA | | |
| Maximum Input Power P_i : 5.32W | | |
| Maximum Internal Capacitance C_i : 1.76nF 3.52nF Δ | | |
| Maximum Internal Inductance L_i : 0 μ H | | |

e. NEPSI Intrinsic safety Type for Digital Remote Sensor

Caution for NEPSI Intrinsic safety.

Note 1. EJX/EJA-E series pressure transmitters with optional code /NS24 are applicable for use in hazardous locations.

- Applicable Standards:
GB/T 3836.1, GB/T 3836.4
- Certificate No.: GYJ22.1765X
- Specific Ex marking: Ex ia IIC T4 Ga
- Ambient Temperature: $-50\text{ }^{\circ}\text{C} \leq T_a \leq +60\text{ }^{\circ}\text{C}$
- Process temperature: $-50\text{ }^{\circ}\text{C} \leq T_p \leq +120\text{ }^{\circ}\text{C}$
- Enclosure: IP66/IP67
- Power supply: $\leq 30\text{ V}$, $\leq 21.6\text{ mA}$
- Dielectric strength:
[EJX****-P, EJA****-P]
100 V AC, r.m.s., 1 min Terminals: to Enclosure
Supply +
Supply –
[EJX****-S, EJA****-S]
500 V AC, r.m.s., 1 min Terminals: to Enclosure
Supply +
Supply –

Note 2. Electrical Parameters

- EJX****-P, EJA****-P series
Supply/Output Circuit (Terminal: + and –)
U_i: 30 V I_i: 200 mA P_i: 0.9 W
C_i: 27.6 nF L_i: 0 mH
- Communication Circuit (Connector)
U_o: 8.2 V I_o: 160 mA P_o: 0.3 W
C_o: 7.6 μF L_o: 1 mH
- EJX****-S, EJA****-S series
U_i: 8.2 V I_i: 200 mA P_i: 0.4 W
C_i: 6 μF L_i: 0 mH

Note 3. Specific conditions of use 产品安全使用特殊条件

- When the enclosure of the Pressure Transmitters is made of aluminum alloy, if it is mounted in a potentially explosive atmosphere requiring apparatus of equipment EPL Ga, it shall be installed such that, even in the event of rare incidents, an ignition source due to impact and/or friction sparks is excluded.
当变送器外壳材质为铝合金且应用于设备保护级别（EPL）为 Ga 级的爆炸性气体危险区域时，其安装方式应可防止冲击或摩擦产生的点燃危险。

- Precautions shall be taken to minimize the risk from electrostatic discharge of painted parts.
产品外壳带有非金属涂覆层，用于危险场所时注意严禁干擦以防静电积累危险。
- Model EJX****-P and EJA****-P series pressure transmitters are not capable of withstanding the dielectric strength of 500V r.m.s between the intrinsically safe circuit and the enclosure. The earthing facility should be in accordance with Clause 12.2.4 of GB/T 3836.15-2017.
EJX****-P 和 EJA****-P 系列 DPharp 变送器 (4-20mA output) 其本质安全电路和外壳之间不能够承受 500V r.m.s 的介电强度。接地装置应符合 GB/T 3836.15-2017 的第 12.2.4 条的要求。

Note 4. Installation and erection 安装

- Installation and maintenance of the equipment shall be done in accordance with GB/T 3836.13, GB/T 3836.15, GB/T 3836.16, GB/T 3836.18, and GB 50257. 设备的安装、使用、以及维护、须根据 GB/T 3836.13、GB/T 3836.15、GB/T 3836.16、GB/T 3836.18、GB 50257、以及相关的现地法律、法规来执行。
- This product should be used in explosive gas atmospheres together with associated apparatus, follow the instruction manual of this product and the associated apparatus when connecting the wiring. Connect the wiring terminals correctly.
该产品必须与已通过防爆认证的关联设备配套共同组成本安系统方可使用于现场存在爆炸性气体混合物的场所，其系统接线必须同时遵守本产品 and 所配关联设备的使用说明书要求，接线端子不得接错。
- Forbid end user to change the configuration to ensure the equipment's explosion protection performance.
用户不得自行随意更换产品内部电气零部件，以免影响防爆性能。
- Cable entry should be applied when installation in hazardous location and redundant holes for cable entry should be closed by blanking elements. The IP code should be IP66/IP67.
变送器的电缆引入口应配接电缆引入装置，且其与变送器配套使用时，外壳防护等级不得低于 IP66/IP67；冗余电缆引入口应采用堵头进行封堵。

Note 5. Use and setting-up (operation) 使用和设置

- If the pressure transmitter is mounted in an area where explosive atmospheres may be present, it must be installed in such a way that the risk from electrostatic discharges. 如果压力变送器安装在可能存在爆炸性环境的区域中，安装时必须防止静电放电的危险。

Note 6. Maintenance and repair 维护和修理

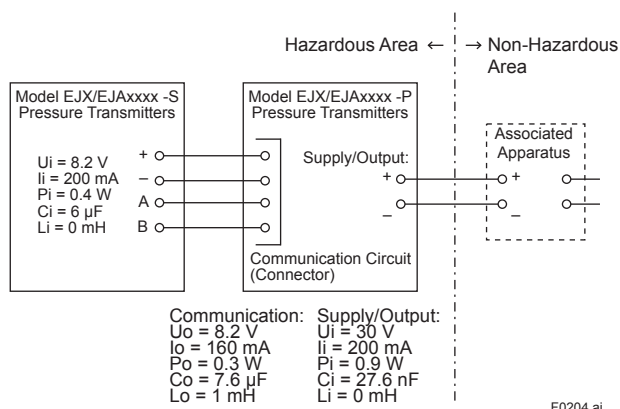


WARNING 警告

- A modification of the equipment would no longer comply with the construction described in the certificate documentation. 设备的改装将不再符合证书文档中描述的结构。
- Only personnel authorized by Yokogawa Electric Corporation can repair the equipment. 横河电机株式会社的授权人员，才可以修理设备。

Note 7. Control drawing

Refer to the control drawing. All wiring shall comply with local installation requirements.



Note: The Associated Apparatus must be a linear power source.

Revision Record

| Edition | Data | Revised Item |
|---------|------------|--|
| 1st | Feb. 2007 | New Publication. |
| 2nd | Oct. 2008 | Revise certificate no. and ambient temperature specification for flameproof type. Remove intrinsically safe type description. |
| 3rd | April 2010 | Correct WARNING statement for ambient temperature. |
| 4th | Dec. 2011 | Add limitation when /HE is specified. Delete certificate no. |
| 5th | Aug. 2012 | Add EJA-E Series. |
| 6th | Dec. 2012 | Add "b. NEPSI Intrinsically Safe Type." |
| 7th | May 2013 | Add renewed certificate information. |
| 8th | Dec. 2015 | Correct WARNING message. Add figure of electrical connection. |
| 9th | July 2016 | Add "c. NEPSI Intrinsic Safety Type for Fieldbus Type". Change "Intrinsically safe" to "Intrinsic safety". |
| 10th | May 2017 | Add descriptions for Digital Remote Sensor (Output signal code -P and -S) to "a. NEPSI Flameproof type." |
| 11th | Sep. 2017 | Update the certification of b & c. Add "d. NEPSI Intrinsic safety Type for Digital Remote Sensor." |
| 12th | Mar. 2018 | Update the certificate number of NEPSI Flameproof Type. |
| 13th | June 2018 | Add "b. NEPSI Flameproof Type (/NF21)." The alphabet of the item title shifts by one accordingly. |
| 14th | April 2021 | Update "d. NEPSI Intrinsic Safety Type for Fieldbus Type (Except for EJJ9□0A)" |
| 15th | May 2022 | Update "c. NEPSI Intrinsic Safety Type for HART/BRAIN Protocol Type (Except for EJJ9□0A)" and "e. NEPSI Intrinsic safety Type for Digital Remote Sensor" |
| 16th | Mar. 2024 | Update all clause of "2. NEPSI certification" |