DNV·GL

Certificate No:
TAA00000X0

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Pressure Transmitter

with type designation(s)
EJX-A & EJA-E Series

Issued to
Yokogawa Electric Corporation
Musashino, Tokyo, Japan

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Location classes:

Temperature	**D**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**C (IP67)**

This Certificate is valid until **2021-12-31**.

Issued at **Høvik** on **2016-12-13**

for **DNV GL**

DNV GL local station: **Yokohama**

Approval Engineer: **Ståle Sneen**

Odd Magne Nesvåg
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Job Id:
Certificate No: **TAA00000X0**

Product description

The EJX series pressure and differential pressure transmitter can be used to measure liquid, gas, or steam flow, as well as liquid level, density and pressure. The EJX series features remote setup and monitoring through serial communication (HART and BRAIN).

Product Name	**EJX-A Series**	**EJA-E Series**
Differential Pressure Transmitter	EJX110A	EJA110E
Differential Pressure Transmitter	EJX120A	EJA120E
Differential Pressure Transmitter	EJX130A	EJA130E
Flange Mounted Differential Transmitter	EJX210A	EJA210E
Absolute Pressure Transmitter	EJX310A	EJA310E
Gauge Pressure Transmitter	EJX430A	EJA430E
Gauge Pressure Transmitter	EJX440A	EJA440E
Absolute and Gauge Pressure Transmitter	EJX510A / EJX530A	EJA510E/ EJA530E
Absolute and Gauge Pressure Transmitter	EJX610A / EJX630A	-
Diaphragm Sealed Differential Pressure Transmitter	EJX118A	EJA118E
Diaphragm Sealed Gauge Pressure Transmitter	EJX438A	EJA438E
Low Flow Transmitter	EJX115A	EJA115E
Multivariable Transmitter	EJX910A	-
Multivariable Transmitter	EJX930A	-

Place of manufacture

Yokogawa Electric Corporation,
155 Takamuro-cho, Kofu-city,
Yamanashi Pref., Japan

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Application/Limitation

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

The capillaries for EJX118A, EJA118E, EJX438A and EJA438E shall be mounted with due regard to relieving any stress forces that can occur where the capillaries meet the sensor or diaphragm seals.

When used on tanks containing flammable liquids in engine spaces it is required to have either self closing valves or remotely operated quick closing valves between the gauge and the tank flange. On such applications the process connection is required to be of flanged type.

Job Id:
Certificate No: **TAA00000X0**

Type Approval documentation

Tests carried out

Applicable tests according to Standard for Certification No. 2.4, April 2006.

Marking of product

The products to be marked with:
- manufacturer name
- model name (type)
- serial number
- power supply ratings

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE