



# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAA000006R**  
Revision No:  
**1**

## This is to certify:

**That the Pressure Transmitter**

with type designation(s)  
**Pressure transmitters FCX-AII & FCX-AIII**

Issued to  
**Fuji Electric France S.A.S.U.**  
**Clermont-Ferrand, France**

is found to comply with  
**DNV 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.**

## Location classes:

<b>Temperature</b>	<b>D</b>
<b>Humidity</b>	<b>B</b>
<b>Vibration</b>	<b>B</b>
<b>EMC</b>	<b>B</b>
<b>Enclosure</b>	<b>C</b>

Issued at **Høvik** on **2021-12-17**

This Certificate is valid until **2026-12-16**.

DNV local station: **France CMC**

Approval Engineer: **Martin Skårerverket**

for **DNV**

.....  
**Trond Sjøvåg**  
**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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



### Product description

FKA...5	ABSOLUTE PRESSURE TRANSMITTER
FKC...5	DIFFERENTIAL PRESSURE (FLOW) TRANSMITTER
FKG...5	PRESSURE TRANSMITTER
FKH...5	ABSOLUTE PRESSURE TRANSMITTER
FKP...5	PRESSURE TRANSMITTER
FKE...F	LEVEL TRANSMITTER
FKP,FKH...F	ABSOLUTE ANG GAUGE PRESSURE TRANSMITTER FOR REMOTE SEAL
FKB, FKD, FKM...F	ABSOLUTE, DIFFERENTIAL & GAUGE PRESSURE TRANSMITTER FOR REMOTE SEAL
FKC...4	DIFFERENTIAL PRESSURE (FLOW) TRANSMITTER FOR HIGH STATIC PRESSURE

### Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, 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 rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

### Application/Limitation

EMC in the range 2 GHz to 6 GHz according to DNV-CG-0339, August 2021 has not been documented. EMC up to 6 GHz must additionally be documented for installation on ships contracted for construction on or after 2022-01-01.

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.

### Type Approval documentation

	Document	Revision
Data sheets:	ECNO611c	--
	EDSF5-91g	2014-03
	EDSF6-05k	2014-03
	EDSF6-134i	2014-03
	EDSF7-68h	2014-03
	EDSF5-92g	2014-03
	EDSF5-97f	2014-03
	EDSF5-98g	2014-03
	EDSF6-06g	2014-03
	Manuals:	HD FCX All 102
INF-TN4 FCXA2f-E		2010-02
INF-TN5FCXA2V5e-E		2014-04
Test reports:	DNV-Survey_Test-Report_20150930	
	R-ADE-BNN-15-300314-1/A	0 / 2015-07-31
	R-ADE-BNN-15-300314-2/A	0 / 2015-08-10
	R-ADE-BNN-15-300314-3/A	0 / 2015-09-02
	AU/SIM/ExTR06.0009/00	2006-05-22
	CA/CSA/ExTR08.0006/00	2008-07-15
	R041-15-103257-1A	1 / 2015-07-27
	S42382	2004-06-28
	S22551-1	2002-08-23
	E93166	2010-03-05

Type approval renewal assessment report for TAA000006R, DNV Paris 2021-05-01

### Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.

### Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number

### **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