

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Pressure Transmitter

with type designation(s)
3151 Series: 3151SD, 3151SH, 3151SG, 3151SA

Issued to

Xi'yi Co., Ltd.
Xi'an, Shannxi, China

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.

Temperature	C
Humidity	B
Vibration	B
EMC	A
Enclosure	B (IP65)

Issued at **Hamburg** on **2020-09-14**

This Certificate is valid until **2025-09-13**.

DNV GL local station: **Wuhan NB & CMC**

for **DNV GL**

Approval Engineer: **Didier Girardin**

Joannis Papanuskas
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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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

Pressure transmitter 3151 Series including:

Type (3151xx ¹⁾ x ² Sxx ³)	Pressure range ⁴⁾	
	From	To
3151SD	-6890 kPa	6890 kPa
3151SH	-6890 kPa	6890 kPa
3151SG	-101 kPa	41370 kPa
3151SA	0 kPa	6890 kPa

Note: 3151 Series Nomenclature:

xx¹⁾

SD for differential pressure transmitter

SH high static pressure differential pressure transmitter

SG gauge pressure transmitter

SA absolute pressure transmitter

x²⁾ measuring range

X	SD (kPa)	SH (kPa)	SG (kPa)	SA (kPa)
2	-1.5~1.5			
3	-7.5~7.5	-7.5~7.5	-7.5~7.5	
4	-37.4~37.4	-37.4~37.4	-37.4~37.4	0~37.4
5	-186.8~186.8	-186.8~186.8	-100~186.8	0~186.8
6	-690~690	-690~690	-100~690	0~690
7	-2068~2068	-2068~2068	-100~2068	0~2068
8	-6890~6890	-6890~6890	-100~6890	0~6890
9			-100~20680	
0			-100~41370	

xx³⁾

xx	Flange	Vent	Diaphragm
22	316SST	316SST	316L SST
23	316SST	316SST	Hastelloy C-276
24	316SST	316SST	Monel
25	316SST	316SST	Tantalum
33	Hastelloy C-276	Hastelloy C-276	Hastelloy C-276
35	Hastelloy C-276	Hastelloy C-276	Tantalum
44	Monel	Monel	Monel

⁴⁾ Measuring principle: Capacitive

General technical data

- Metallic diaphragm (316L stainless steel, Hastelloy C-276, Monel, Tantalum)
- Output signal: (4~20) mA HART
- Power supply: (10.5~32) VDC (not Ex)
- Housing: Aluminum Alloy
- Electrical connection: Cable entry (gland or thread), connector
- Software Version: HART7

Application/Limitation

Process connection manufacturer's specification is to be observed.
shielded twisted pair to be used for connection

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.

Ex-certification if applicable 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

Hidden

Tests carried out

Applicable tests according to DNV GL CG-0339, Ed. Dec. 2019

Marking of product

The products to be marked with:

- Model name
- Manufacturer 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