DNV·GL

Certificate No:
TAA00000YE

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Pressure Switch

with type designation(s)
HNS…W, DNS…W, ONS…W, WNS…W, FPS…W, ANS…W, FNS…W, SNS…W, YNS…W, WPS…W, SPS…W, YPS…W, ANS…P, FNS…P, SNS…P, DNS…P

Issued to
SAGINOMIYA SEISAKUSHO, INC.
Shinjuku-ku, 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	**B**
EMC	**Not Relevant**
Enclosure	**B For series NS…W.**
	C For series NS…P

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

Issued at **Høvik** on **2017-01-12**

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.

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Job Id:
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Product description

High Sensitive Pressure Switch
ANS...W, ANS...P, FPS...W, FNS...W, FNS...P

Single Function Pressure Switch
SPS...W, SNS...W, SNS...P

Differential Pressure Switch
WPS...W, WNS...W

High Sensitive Differential Pressure Switch
YPS...W, YNS...W

Dual Pressure Switch
DNS...W, DNS...P

Oil protection pressure switch
ONS...W

High pressure switch
HNS...W

Output : 1 potential-free contact, type C1 (SPDT)
Rating : 5 A 250 VAC (non-inductive)

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

Manual reset types are only for applications where DNV GL accepts switches with manual reset.
Dual control, type DNS, is not for applications where DNV GL requires independence.

Type Approval documentation

Tests carried out

Regulations for the Performance of Type Tests, Edition 2003

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