

# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

**CERTIFICATE NO. A-10221**  
This Certificate consists of 4 pages

*This is to certify that the*  
**Pressure Transmitter**

*with type designations*  
**2600 T - 265DS / 269CS / 265GS / 265AS**  
*as specified on page 2*

*Manufactured by*  
**ABB Automation Products GmbH**  
MINDEN WESTFALEN, Germany

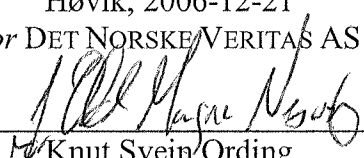
*is found to comply with*  
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and  
Det Norske Veritas' Offshore Standards

### *Application*

Location classes:

Temperature	D
Humidity	B
Vibration	B
EMC	B
Enclosure	C



*Place and date*  
Høvik, 2006-12-21  
for DET NORSKE VERITAS AS

  
Knut Svein Ording  
Head of Section



Local Office  
DNV Essen

*This Certificate is valid until*  
2008-12-31

  
Ståle Sneen  
Surveyor 

**Notice: 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.**

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Cert. No.: A-10221  
File No.: 892.10

## Product description

2600T Series pressure transmitters for absolute-, gage-, differential-, and absolute pressure available in the following types:

Base type	Transmitter specification (character 6-12)						
265 DS	A	B	C	D	E	F	G
269 CS	A	B	C	D	E	F	G
265 GS	A	C	D	E	F	G	
265 AS	A	C	D	E	F	G	
A : SENSOR - Span limits							
B : Static pressure value / range							
C : Diaphragm material / Fill fluid (wetted parts)							
D : Process flanges / adapters material and connection (wetted parts)							
E : Bolts/gaskets (wetted parts)							
F : Housing material and electrical connection							
G : Output/Additional options							
A-G: Ranges and limits according to suppliers specification							

External communication protocols: Profibus PA, Foundation Fieldbus or Hart 4-20 mA

## Application/Limitation

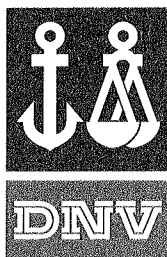
The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case, by inclusion into an instrument list. Reference is made to DNV Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Ex-certification is not covered by this certificate.

Information on Ex-Certification received from manufacturer – Not verified by DNV:  
Optional available as EX-certified: EEx d IIC T6, EEx ia IIB/IIC T6

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.

Ex-loops are to be documented according to the requirements in Pt.4 Ch.8 Sec.11.



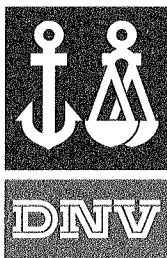
Cert. No.: A-10221  
File No.: 892.10

## Type Approval documentation

Document type	Document no.
Typetable 265DS	V15712 X200 (4)
Typetable 269 CS	V15712 X201 (4)
Typetable 265GS	V15753 X38 (4)
Typetable 265AS	V15753 X39 (4)
2600T Series Pressure Transmitters, Data Sheet, Model 265DS	SS/265DS 1
2600T Series Pressure Transmitters, Data Sheet, Model 269CS	SS/269CS 1
2600T Series Pressure Transmitters, Data Sheet, Model 265GS/265AS	SS/265GS/AS 1
2600T Series, Instruction Manual, Model 263 D & 265 D	IM 263D/265D Rev. 1
2600T Series, Instruction Manual, Model 263 G/A & 265 G/A	IM 263G/A / 265G/A Rev1
2600T Series, Operating instructions, Model 267 C & 269 C	IM 267 C Rev0
Blockschaltbild MV2000	V15712 X138 (3)
Main-Board HART	V15712 X137 (1)
Main-Board Fieldbus	V15712 X136 (1)
Characterization-Board p-piezo	V15712 X135 (1)
Characterization-Board dp-piezo	V15712 X134 (1)
Description MV2010 T	V15712 X86 (4)
Description MV2020 T	V15753 X23 (4)
EX-certificate, measuring converter	PTB 00 ATEX 1018
EX-certificate, pressure / diff pressure transducer	PTB 00 ATEX 2060
EX-certificate, pressure / diff pressure transducer w/Profibus & FF	ZELM 01 ATEX 0063
EX-certificate, pressure / diff pressure transducer w/Hart	ZELM 01 ATEX 0064
EMC Test Report / Phoenix test-lab, MV2000 2010TD	E10707A
Environmental test reports :	
- Visual inspection	ITE-91/2002
- Performance test	ITE-92/2002
- Power supply failure/variation test	A 20/00
- Vibration test	IAE-A33 / 2002
- Vibration test	IAE-A34 / 2002
- Vibration test	MWME-A14 / 2003-T
- Dry heat test	ITE-95/2002
- Damp heat test	IAE-A35 / 2002
- Cold test	ITE-94/2002
- Insulation resistance test	ITE-93/2002
- High voltage test	ITE-96/2002
- Electromagnetic compatibility test	IAE-A03/2001-T
- Acceleration test	A02/01
- Salt mist test	A12/00
- Shock test	A02/01

## Tests carried out

Applicable tests according to Standard for Certification No. 2.4, April 2001



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### Certificate retention survey

The scope of the retention/renewal survey 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 survey 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

Survey is to be performed at renewal of this certificate.

END OF CERTIFICATE