

DNV

DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **A-11680**

This is to certify that the
Pressure Transmitter

with type designation(s)

EPT 8242/82; EPTCR 8242/82; SPT 8240/80, EPT 8242; EPTCR 8242; SPT 8240

Manufactured by

Trafag AG
MANNEDORF, Switzerland


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:

Type	Temperature	Humidity	Vibration	EMC	Enclosure
EPT 8242/82; EPTCR 8242/82; SPT 8240/80	D	B	B	B	B
EPT 8242; EPTCR 8242; SPT 8240 with zz = 08 or 25	D	B	B	B	D


Høvik, 2010-03-26
for Det Norske Veritas AS


Odd Magne Nesvåg
Head of Section



DNV local office:
Essen

This Certificate is valid until
2012-12-31


Krzysztof Jankowski
Surveyor

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.



Certificate No.: A-11680
File No.: 892.10
Job Id.: 262.1-005913-1

Product description

Type approval of EPT 8242.xx.20.yy.zz.79 and EPT 8282.xx.20.yy.zz.79 covers the following variants:

xx = Ranges	75, 76, 77, 78, 79, 80, 81, 82, 83, 85, 74, 84, 86,
Accuracy	20
yy = Pressure connections	10, 17, 21, 22
zz = Electrical connections	04, 08, 25

Type approval of EPTCR 8242.xx.20.yy.zz.79 and EPTCR 8282.xx.20.yy.zz.79 covers the following variants:

xx = Ranges	89, 90
Accuracy	20
yy = Pressure connections	28, 29
zz = Electrical connections	04, 08, 25

Type approval of SPT 8240.xx.25.yy.zz.79 and SPT 8280.xx.25.yy.zz.79 covers the following variants:

xx = Ranges	75, 76, 77, 78, 79, 80, 81, 82, 83, 85, 74, 84, 86
Accuracy	25
yy = Pressure connection	17
zz = Electrical connection	04, 08, 25

Approval Condition

The Type Approval covers hardware listed under Product Description. In each case the hardware is used in application to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system. Reference to applied hardware as listed above, as well as reference to this certificate is to be made through the instrument and equipment list covering the application system in question.

Reference is made to DNV Rules for Ships Pt. 4 Ch. 9 - Control and Monitoring Systems

Type Approval documentation

Data sheet:	H72223i; H72225m; H72237g
Test Reports:	V 888, dated 19.01.1999, V-0317, dtd. 30.09.04 Ascom No. 199528-10050, dated 07.01.1999 STS Report No. EMCKP15A, dtd.10.07.2003
Survey Report:	DNV Retention Survey Report for A-9515 dated 2009-12-08

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

Retention survey is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE