



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **A-13016**

This is to certify that the
Pressure Indicator

with type designation(s)
RF __, Series D4 __, D7 __, D8 __ and D9 __

Manufactured by
Afriso-Euro-Index GmbH
Amorbach, Germany

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

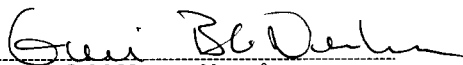
Application
Location classes:

Temperature	D
Humidity	B
Vibration	B, C
EMC	Not relevant
Enclosure	C


Høvik, 2012-12-06
for Det Norske Veritas AS



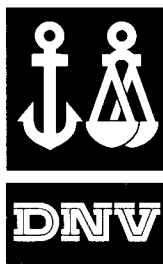
This Certificate is valid until
2016-12-31


Odd Magne Nesvåg
Head of Section

DNV local office:
Essen CMC Southern Germany


Jan Aksel Nilsen
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-13016
 File No.: 893.10
 Job Id.: 262.1-005533-2

Product description

Type : RF __, Series D4 __, D7 __, D8 __ and D9 __ in any combinations as follows:

Type	Series		
RF	40	D	4 0 1
	50		7 1 2
	63		8 2
	80		9 3
	100		4
	160		5

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 Ships Pt.4 Ch.9 Control and Monitoring Systems.

Type Approval documentation

AFRISO EURO-INDEX, Manual for Pressure and Temperature: 2007/2008	
Test Reports	Vibration Test Report, dated 96-10-01
	Dry Heat Test Report, dated 96-10-01
	Damp Heat Test, dated 96-10-01
	Cold Test Report, dated 96-10-01
	Salt Mist Test Report, dated 96-10-01
Survey Reports	DNV SHL: AFRISO, dated 96-06-18
	DNV SHL: 6-0996, dated 96-10-11
	Retention Survey Report, TAC no.:A-10961, dated 2012-11-14
Datasheet	Bourdon tube pressure gauge D7 & D9, MX-2610N_20121115_070229
Material declaration	Afrisio Euro-Index Material Declaration ASBESTOS, dated 2012-12-27

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