

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Pressure Indicator

with type designation(s)
63M-, 80M-, 100M-, 160M-, A1001, A1002, A1003, A1004, A09 & A12

Issued to

Tempress A/S
RISSKOV, Denmark

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	A
Humidity	B
Vibration	B
EMC	Not relevant
Enclosure	B

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

Issued at **Høvik** on **2017-01-25**

DNV GL local station: **Aalborg**

Approval Engineer: **Ståle Sneen**



for **DNV GL**

Digitally Signed By: Nesvåg, Odd Magne
Location: DNV GL Høvik, Norway
Signing Date: 2017-01-27

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.

Product description

Pressure indicators (manometers) with following designations:

Type:				
63M10-0	63M25-0	80M10-0	100M10-0	160M10-1
63M10-1	63M25-1	80M10-1	100M10-1	160M10-2
63M10-2	63M25-2	80M10-2	100M10-2	160M10-3
63M10-3	63M25-3	80M10-3	100M10-3	160M20-1
63M20-0		80M20-0	100M20-1	160M20-2
63M20-1		80M20-1	100M20-2	160M20-3
63M20-2		80M20-2	100M20-3	
63M20-3		80M20-3		
Including new type designations as follows:				
63M = A1001-, 80M = A1002-, 100M = A1003- & A09- & A12, 160M = A1004				

Type Approval documentation

63M10/20 dated 01.06.76
80M10/20 dated 01.06.76
100M10/20 dated 01.06.76
160M10/20 dated 01.06.76

Updated drawings for type 100M10/20:

0112-015F3 dated 1995-08-25, 000078 dated 2005-12-14, 000950 dated 2006-01-09

TA renewal assessment report for A-14340, DNV GL Aalborg 2016-12-12

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.

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