



# Type Approval Certificate

[ Temperature Sensors ]

**Initial Approval** 1 July 2015

**Manufacturer** Danfoss (Tianjin) Ltd.

Wuqing Development Area 9 Quanhui Road, 301700 Tianjin China

**Product Description** Type : MBT 5250/5252/5253/5260/5310/5410  
MBT 5310/5253/5250/5260 Customized

\* Applicant : Danfoss A/S  
Nordborgvej 81, DK-6430 Nordborg, Denmark

" See Appendix 1 "

- Approval Condition**
1. This approval is granted on the basis of the test report no. 2006-2299 issued by Danfoss Laboratory.
  2. The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.
  3. Individual Product Certification is not required.

**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships.

This Certificate is valid until 30 June 2030

Issued at Shanghai, China on 14 July 2025



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME25030534078) and certificate No.(DLN34014-AE002).



**KOREAN REGISTER**

*General Manager of  
Ship System Solution Team*

**Note :** 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.  
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.  
3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.  
4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

## Product Description and/or Approval Condition

Date of Issue : 14 July 2025

Product Description :

### 1. General Specification :

Type	Sensor Element	Temperature Range (°C)	Insert	Insertion Length (mm)	Extension Length (mm)	Application
MBT 5250	Pt 100 Pt 1000	-50 ~ 200	MBT 150	50 up to 500	50	Universal Temp. Sensor
MBT 5252	Pt 100	-50 ~ 200	MBT 152	50 up to 500	50	Universal Temp. Sensor
MBT 5253	Pt 100 Pt 1000	-50 ~ 200	MBT 153	50 up to 500		Universal Temp. Sensor
MBT 5260	Pt 100 Pt 1000	-50 ~ 200	Fixed	50 up to 250	50	Universal Temp. Sensor
MBT 5310	Pt 100	-50 ~ 200		60 up to 300		Bearing
MBT 5410	Pt 100	-50 ~ 100		100		Room

### 2. Documentation

#### 1) Data sheet

- MBT 5250, MBT 5260, MBT 5252, MBT 5253 : IC.PD.P30.I6.02
- MBT 5310 : IC.PD.P30.Q4.02
- MBT 5410 : IC.PD.P30.J7.02

#### 2) URE10 rev.7 test report for MBT 5252 : FORCE TECHNOLOGY 117-34687-2 (2020.04.01)

#### 3) MBT 5310/5253/5250/5260 Customized :

- Data sheet / Engineering sheet No. : 090518-5, 090206-5, 09428-5, 100128-5
- Drawing / Spec. No. : 084Z9115, 084R2037, 084Z3238, 084R2016, 084Z9002, 084R2034
- Vibration & shock test report No. : 2008-2142, T205006 (2013.03.15)
- Environmental test report No. : 084Z3025 (2012.11.07) for MBT 5310

&lt; End of Certificate &gt;