

Data Sheet

Temperature sensor Type **MBT 5722**

For monitoring bearing temperature in stern tubes



Designed specially for monitoring bearing temperature in stern tubes:

Flexible protection tube that makes it possible to reach bearings placed up to 20m from the terminal box.

Precision Pt 100 element secures fast and precise caption of the bearing temperature which makes it possible to prevent bearing damage.

Features

- Flexible sheath (bending radius down to $R = 30 \text{ mm}$)
- Moveable compression fitting
- Robust construction with resistance to shock and vibrations to IEC 60068-2-6
- Up to 200°C media temperature with Pt 100 resistance element
- Short reaction time

Product specification

Technical data

Table 1: General data

Measuring range	-50 – 200 °C
Sensing element	Pt 100, 3 wire connection
Protection tube	ø4.5 mm

Table 2: Response times

Indicative response time		
Water 0.2 m/s	$t_{0.5}$	$t_{0.9}$
	4 s	12 s

Table 3: Mechanical and environmental specifications

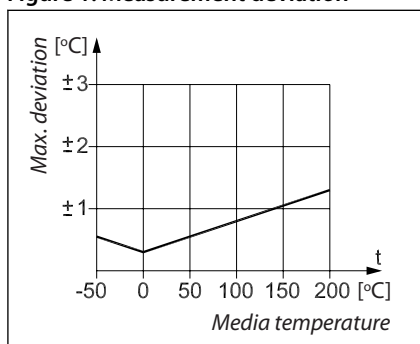
Max. ambient temperature	70 °C (brief in max. 2 hours: 80 °C)	
Vibration stability	Shock:	100 g/6 ms
	Vibrations:	4 g sine function 2 – 100 Hz, measured acc. to IEC 60068-2-6
Enclosure	Sensor tube IP67 according to IEC 60529; Terminal box IP65 according to IEC 60529	
Cable entry	Pg 11	
Material, wetted parts	AISI 316 Ti	

Table 4: Net weight with a length of 2000 mm

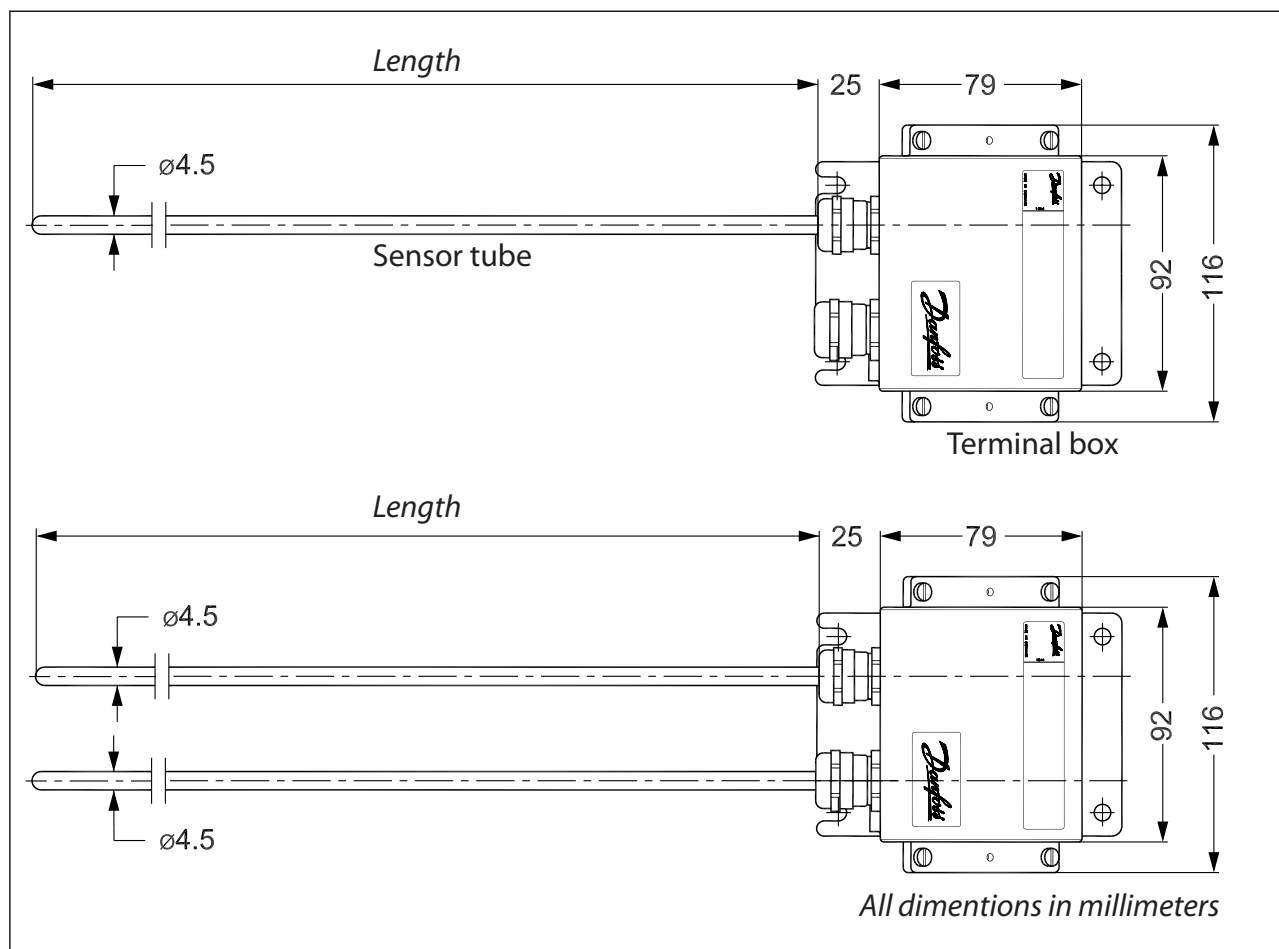
Net weight, approx.	600 g
Length / net weight ratio	40 g per 1000 mm

Table 5: Sensor tolerance

EN 60751 Class B	$\pm (0.3 + 0.005 \times t)$ t = media temperature, numerical value
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Figure 1: Measurement deviation


Dimensions



Ordering

Ordering standard

Type MBT 5722		Sensor											
Measuring range													
-50 – 200 °C													
Other													
Resistance value													
1 × Pt 100													
Other													
Sheath diameter, W.nr. 1.4571 (AISI 316 Ti)													
ø4.5 mm													
2 × ø4.5 mm													
Other													
Insertion length													
1.0 m													
2.0 m													
4.0 m													
6.0 m													
8.0 m													
x.x m													

Accessories

Box

Other

Adjustable fitting

None

Other

Connection

3-wire

Tolerance

EN 60751 Class B

Other

Preferred versions

Certificates, declarations, and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

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Table 6: Declarations

File name	Document type	Document topic	Approval authority
EAC RU Д-ДК.Б/108.В.03644	EAC Declaration	Machinery & Equipment	EAC

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