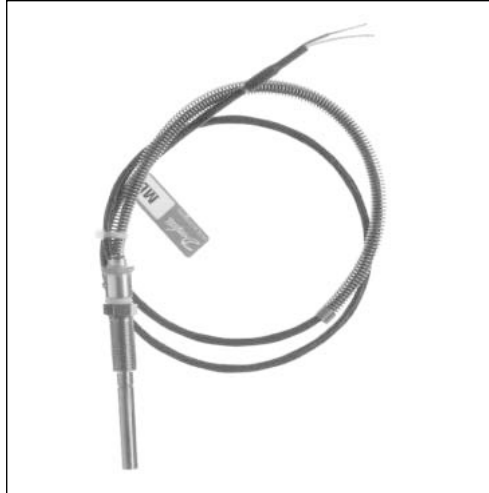


Bearing temperature sensor type MBT 5310

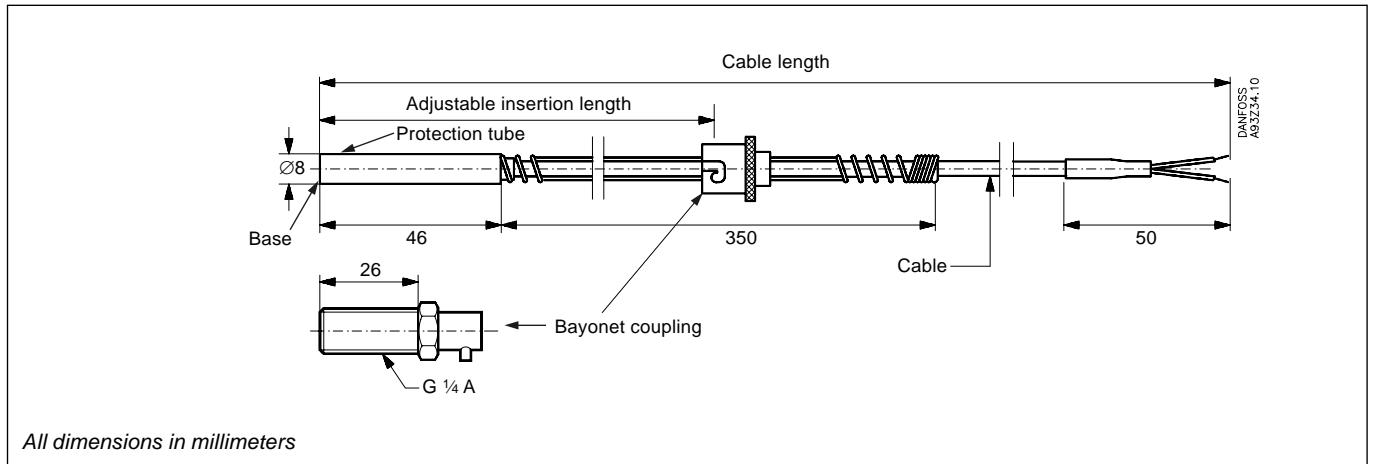
MBT 5310

Features and application



- For monitoring and registering bearing temperature in ships' engines and other machines where there is a risk of over-heated bearings
- Insertion length adjustable from 60 to 300 mm
- Up to +200°C media temperatures
- Pt 100 resistance element
- Extremely short reaction time
- Approvals
 - Lloyds Register of Shipping, LR
 - Germanischer Lloyd, GL
 - Bureau Veritas, BV
 - Det Norske Veritas, DNV
 - Nippon Kaiji Kyokai, ClassNK

Dimensions



Technical data

Response times

Protection tube	Indicative response times. Typical measured values.	
	Change from 200°C to 20°C by insertion in water	
	$t_{0.5}$	$t_{0.9}$
Ø8 × 1	0.5	1.5

Materials

Protection tube	W.no. 1.4571 (AISI 316 Ti)
Base	Silver
Bayonet coupling	Nickel plated brass
Cable	Armoured teflon 2 × 0.6 mm ²

Weight

	MBT 5310 with 3000 mm cable
Weight, approx.	130 g

Mechanical and environmental specifications

Ambient temperature	Max.: +100°C Max. (cable): +200°C	
Sensor element	Pt 100 according to EN 60751 Class B	
Sensor tolerance	EN 60751 Class B: $\pm(0.3 + 0.005 \times t)$	t = temperature of medium, numerical value
Vibration stability	Shock: 100 g in 6 ms Vibrations: 4g sine function 2 - 100 Hz, measured acc. to IEC 68-2-6	

Ordering - Standard programme

- Measuring range: -50 to +200°C
- Resistance value: 1 × Pt100
- Protection tube: Ø8 × 1 mm with silver base
- Tolerance: EN 60751 Class B

Connection	Cable length [mm]	MBT 5310-	Code no.
2-wire	3.000	000000	084Z0094
4-wire	3.000	000020	084Z0387
2-wire	6.000	000009	084Z0688

Ordering - Special versions

Type	MBT 5310 -	Sensor		
		0	0	
Measuring range, sensor element -50 to +200°C		0		0 9
Resistance value 1 × Pt100			0 1	
2 × Pt100				0 1 2
Other				
Protection tube, W.nr. 1.4571 (AISI 316 Ti) Acid-proof steel with silver base, Ø8 × 1 mm		0		
			0 9	

Cable length
..... 3000 mm
..... Other

Connection
..... 2-wire
..... 3-wire (only 1 × Pt100)
..... 4-wire (only 1 × Pt100)

Tolerance
..... EN 60751 Class B
..... Other

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