

Technical leaflet

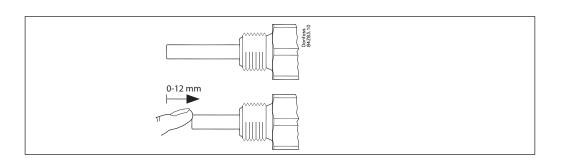
Bearing temperature sensor MBT 5310

Features



- For monitoring of bearing temperatures where there is risk of overheating, such as:
- Wind Turbines
- Engines
- Gearboxes
- Based on Pt100 technology for use up to 200 °C
- Spring loaded to ensure good contact with the bearing

Spring function



Ordering standard programme

• Measuring range: -50 to +200°C

• Sensing element: Pt 100, EN 60751 Class B

• Protection tube: Ø8 × 1 mm, W. No. 1.4571 (AISI 316)

Туре	Insertion length [mm]	Insertion range [mm]	Process connection	Electrical connection	Code no.
	48	36 – 48	G1/2A Stainless steel	2 wire/ 3 terminals	084Z7280
	60	48 – 60			084Z5211
	72	60 – 72			084Z3147
	96	84 – 96			084Z3128
	128	116 – 128			084Z7276
	144	132 – 144			084Z3129
	180	168 – 180			084Z5281
	320	308 – 320			084Z3189
	435	423 – 435			084Z3188
	450	438 – 450			084Z3198



It is possible to order the sensors with a B-head, please contact Danfoss for further information.

Technical leaflet

Temperature sensor, MBT 5310

Technical Data

Response time

Protection tube	Indicative response times according to VDI/VDE 3522					
	Wate	er 0.2 m/s	Air 1 m/s			
Ø 8 x 1 mm	t _{0.5}	t _{0.9}	t _{0.5}	t _{0.9}		
	1.2 s	2.4 s	6 s	12 s		

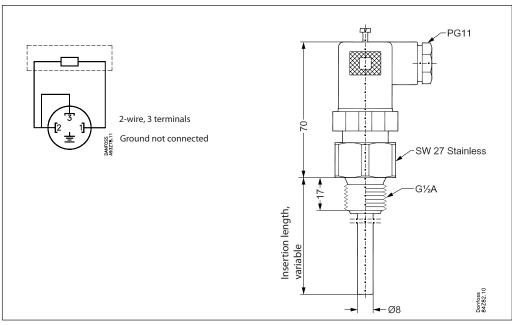
Materials

Protection tube in contact with the media	W. No. 1.4571 (AISI 316 Ti)	
O-ring	FPM	
Nut	Nickel plated brass	
Process connection	AISI 316	
Gasket	Silicone	
Plug DIN 43650	PA (max. 125 °C)	

Mechanical and environmental specifications

Sensor tolerance	EN 60751 Class B: $\pm -(0.3^{\circ}C + 0.005 \times t)$ t = temperature of medium, numerical value		
Vibration stability	Shock	100g in 6 ms	
	Vibrations	4g sine function 2 – 100 Hz, acc. to IEC 68-2-6	
Enclosure	IP 65 according to IEC 529		
Cable entry	Pg 11		

Electrical connection and dimension



Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed.

All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

2 IC.PD.P30.Q1.02 © Danfoss A/S 02-2008, DE-BD