



Bearing temperature sensor MBT 5310



Technical brochure

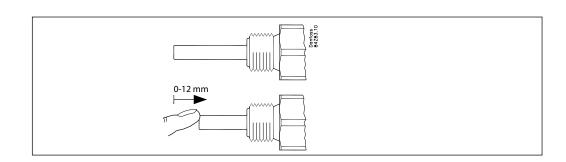
Temperature sensor, MBT 5310

Features



- For monitoring of bearing temperatures where there is risk of overheating, such as:
- Wind Turbines
- Engines
- Gearboxes
- \bullet 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
ļ	96	84 – 96			084Z3128
	128	116 – 128			084Z7276
	144	132 – 144			084Z3129
	180	168 – 180			084Z5281
U	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.

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Technical Data

Response time

Protection tube	Indicative response times according to VDI/VDE 3522		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}	
	4 s	16 s	35 s	140 s	

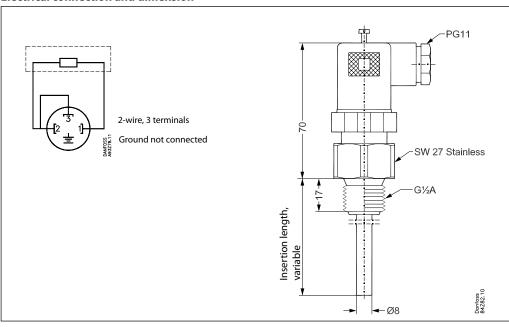
Materials

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)	

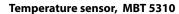
Mechanical and environmental specifications

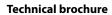
Sensor tolerance	EN 60751 Class B: +/-(0.3°C + 0.005 x t) t = temperature of medium, numerical value		
Vibration stability	Shock	100g in 6 ms	
	Vibrations	4g sine function 2 – 100 Hz, acc. to IEC 68-2-6	
Enclosure	IP 65 according to IEC 529		
Cable entry	Pg 11		

Electrical connection and dimension



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