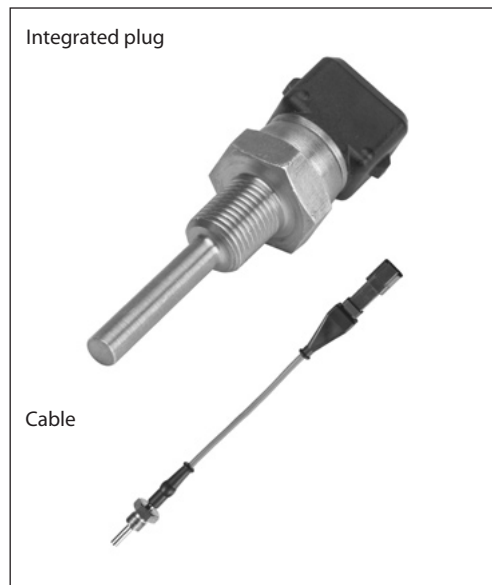


# Temperature Sensor MBT 3270

## Features



- OEM Temperature Sensor program
- Versions with integrated plug or cable available
- Various sensor elements available (RTD, NTC, PTC)
- Robust, high protection against moisture
- Fixed measuring insert
- Brass or stainless steel
- Low response times

**Tecnical data,  
Integrated Plug Version**
*Performance*

Sensor Element	PT100, PT1000, NTC, PTC
Process Connection	Refer to product specification key page 2
Sensor Length	Max 100 mm
Electrical Connection	AMP Junior Power Timer Delphi Metri Pack Other on request
Connection	2-wire

*Materials*

Protection tube in contact with media	W. no. 1.4571 (AISI 316 Ti) Brass
Process connection	W. no. 1.4571 (AISI 316 Ti) Brass
Gasket	Viton, NBR (other on request)
Plug	PA 6.6 (depending on chosen type)

*Mechanical and environmental specifications*

Sensor Tolerances	PT 100 NTC PTC	EN 60751 Class B: $\pm (0.3 + 0.005 \times t)$ on request on request
Vibration stability	Shock: Vibrations:	50 g in 6 ms 4g sine function 5 - 200 Hz, measured acc. to IEC 68-2-6
Enclosure	AMP Junior Power Timer Delphi Metri Pack	IP 65 according to IEC 529 IP 65 according to IEC 529

*Technical data*

Ambient temperature	AMP Junior Power Timer Delphi Metri Pack	-40°C - + 125°C -40°C - + 125°C
Media temperature	PT 100 NTC PTC	-50°C - + 200°C -50°C - + 150°C -50°C - + 150°C
Permissible media velocity	Air Water	25 m/s 3 m/s
Max. external pressure	Operating pressure	600 bar
	Burst pressure	> 900 bar
Max. tightening torque	W. no. 1.4571 (AISI 316 Ti)	100 Nm
	Brass	50 Nm

*Indicative response times*

Material protection tube	Protection tube	Indicative response times according to VDI/VDE 3522	
		Water 0,2 m/s	
		$t_{0,5}$	$t_{0,9}$
Stainless Steel	Ø 4 mm	1,5 s	5 s
Brass	Ø 4 mm	1,2 s	4 s



**Technical data,  
Cable version**
*Performance*

Sensor Element	PT100, PT1000, NTC, PTC
Process Connection	Refer to product specification key page 5
Sensor Length	Max 100 mm
Electrical Connection	cut-off cable with AMP spade (6,35) cable with AMP Junior Timer cable with Deutsch DT04-3P Other on request
Connection	2, 3 or 4 wire (depending on electrical connection)

*Materials*

Protection tube in contact with media	W. no. 1.4571 (AISI 316 Ti) Brass
Process connection	W. no. 1.4571 (AISI 316 Ti) Brass
Cable	PVC, Silicon, Teflon (Other on request)
Gasket	Viton, NBR (other on request)
Plug	PA 6.6 (depending on chosen type)

*Mechanical and environmental specifications*

Sensor Tolerances	PT 100 NTC KTY11-6	EN 60751 Class B: $\pm (0.3 + 0.005 \times t)$ on request +/- 1% of span
Vibration stability	Shock: Vibrations:	50 g in 6 ms 4g sine function 5 - 200 Hz, measured acc. to IEC 68-2-6
Enclosure	sensor only cable with AMP spade cable with AMP Junior Timer cable with Deutsch	IP 67 according to IEC 529 IP 00 according to IEC 529 IP 65 according to IEC 529 IP 65 according to IEC 529

*Technical data*

Ambient temperature	<b>Cable</b> PVC Silicon Teflon Polyolefin (oil resistant) <b>Plug</b> AMP spade AMP Junior Power Timer Deutsch DT04-3P	-40°C - +100°C -40°C - + 200°C -40°C - + 200°C -40°C - + 150°C -40°C - + 200°C -40°C - + 125°C -40°C - + 125°C
Media temperature	PT 100 NTC PTC	-50°C - + 200°C -50°C - + 150°C -50°C - + 150°C
Permissible media velocity	Air Water	25 m/s 3 m/s
Max. external pressure	Operating pressure	600 bar
	Burst pressure	> 900 bar
Max. tightening torque	W. no. 1.4571 (AISI 316 Ti)	100 Nm
	Brass	50 Nm

*Indicative response times*

Material protection tube	Protection tube	Indicative response times according to VDI/VDE 3522	
		Water 0,2 m/s	
		$t_{0,5}$	$t_{0,9}$
Stainless Steel	Ø 6,5 mm	3,5 s	11 s
Brass	Ø 6,5 mm	4,5 s	13 s

**Ordering,  
Cable version**

<p><b>Type</b> MBT 3270-</p> <p><b>Measuring range</b> -50 to + 150°C..... 0 -50 to + 200°C..... 1 Other..... 9</p> <p><b>Sensor element</b> 1 x Pt 100..... 0 1 x KTY 2000 (KTY 11-6)..... 4 1 x NTC 2000..... 6 Other..... 9</p> <p><b>Tolerance</b> EN 60751 Class B..... 0 1%..... 1 2%..... 2 3%..... 3 Other..... 9</p> <p><b>NTC Characteristic</b> No NTC..... 0 Other..... 9</p> <p><b>Protection tube material</b> Brass..... 0 Acid-Proof Steel, AISI 316..... 1 Other..... 9</p> <p><b>Insertion length (100mm max)</b> 25mm..... 0 2 5 30mm..... 0 3 0 40mm..... 0 4 0 60mm..... 0 6 0 Other..... X X X</p>		<p><b>Cable length</b> 0 0 5 ... 0,5 m 0 1 0 ... 1,0 m 0 2 0 ... 2,0 m 0 4 0 ... 4,0 m X X X ... x,x m</p> <p><b>Cable</b> 0 ..... None 1 ..... Silicon 2 ..... Silicon screened 3 ..... Teflon 4 ..... Teflon screened 5 ..... PVC 6 ..... PVC screened 9 ..... Other</p> <p><b>Connection</b> 0 ..... 2-wire 1 ..... 3-wire 2 ..... 4-wire</p> <p><b>Plug</b> 0 ..... None 1 ..... AMP (Spade 6,35) 2 ..... AMP Junior Power Timer 5 ..... Deutsch DT04-3P 9 ..... Other</p> <p><b>Insert</b> 0 ..... Fixed</p> <p><b>Process connection</b> 0 ..... G<sup>1</sup>/<sub>4</sub>A 1 ..... G<sup>3</sup>/<sub>8</sub>A 2 ..... G<sup>1</sup>/<sub>2</sub>A 3 ..... M10 x 1 4 ..... M18 x 1,5 9 ..... Other</p>
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**Electrical connections**

AMP spade (6,35)	AMP Junior Power Timer	Deutsch
<p style="text-align: right; font-size: small;">Danfoss 606373.10</p>	<p style="text-align: right; font-size: small;">Danfoss 606376.10</p>	<p style="text-align: right; font-size: small;">Danfoss 606372.10</p>

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