## **Bi-Metal Temperature Switch**

for Liquids



measuring • monitoring

analyzing

# TBS

- Switchpoints from 14...212 °F
- Process Connections: G 1/4...G 1<sup>1</sup>/<sub>2</sub>, 1/4" NPT...1<sup>1</sup>/<sub>2</sub>" NPT
- Material: Brass or Stainles Steel
- Tolerance: ± 3 K
- Resetting Hysteresis: 6 K ± 2 K
- Highly Repeatable Setpoint
- Long Service Life



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## Description

The KOBOLD TBS bi-metal temperature switches are used for temperature monitoring and control. The rugged, straightforward design is noted for having both long life and reliability. Bi-metal temperature switches have high repeatability as they are insensitive to the operating environment. Constructed with a rugged brass or stainless steel housing and internal G or NPT threads on both sides for inline installation, they are supplied with a 5' silicone jacketed cable for convenience. The temperature contacts have a fixed, factory-set switchpoint in intervals of 9 °F over the ranges of 14 °F to 122 °F and in intervals of 18 °F over the ranges of 122 °F.

#### **Specifications**

## Wetted Materials

Housing:	Brass or Stainles Steel
Seal:	FKM
Cable:	5 ft. (1.5m) Silicone Jacketed (Longer Cable on Request)
Process Temperature:	-40248 °F
Ambient Temperature:	-22220 °F

## Order Details (Example: TBS-11 N25 010)



#### Maximum Pressure:

	360 PSIG (Stainless Steel)		
Tolerance:	± 3 K		
Resetting Hysteresis:	6 K ± 2 K		
Contact:	N/C (Opens on Rising Temperature)		
Contact Rating:	Max. 240 VAC/ 24 VDC/ 1.3 A		
Contact Resistance:	< 30 mOhm		
Switching Cycles:	Max. 100,000 at Nominal Load		
Electrical Protection:	NEMA 4X / IP65		

230 PSIG (Brass)

Housing Material	Fitting Type		Switchpoint	
			<b>M10</b> = 14 °F (-10 °C)	<b>035</b> = 95 °F (35 °C)
	N08 = 1/4" NPT	<b>R08</b> = G 1/4	<b>M05</b> = 23 °F (-5 °C)	<b>040</b> = 104 °F (40 °C)
<b>TBS-11</b> = Brass	N10 = 3/8" NPT	<b>R10</b> = G 3/8	000 = 32 °F (0 °C)	<b>045</b> = 113 °F (45 °C)
	N15 = 1/2" NPT	<b>R15</b> = G 1/2	<b>005</b> = 41 °F (5 °C)	<b>050</b> = 122 °F (50 °C)
<b>TBS-12</b> = Stainless Steel	N20 = 3/4" NPT	<b>R20</b> = G 3/4	010 = 50 °F (10 °C)	<b>060</b> = 140 °F (60 °C)
	N25 = 1" NPT	<b>R25</b> = G 1	015 = 59 °F (15 °C)	070 = 158 °F (70 °C)
	N32 = 1¼ NPT	<b>R32</b> = G 1¼	020 = 68 °F (20 °C)	<b>080</b> = 176 °F (80 °C)
	N40 = 1½ NPT	<b>R40</b> = G 1½	<b>025</b> = 77 °F (25 °C)	<b>090</b> = 194 °F (90 °C)
			030 = 86 °F (30 °C)	<b>100</b> = 212 °F (100 °C)

#### Dimensions

Connection A (Internal Thread)	В	С	D	E Max.
1/4"	1.06"	0.39"	1.97"	3.03"
3/8"	1.06"	0.39"	1.97"	3.03"
1/2"	1.06"	0.39"	1.97"	3.03"
3/4"	1.26"	0.59"	2.05"	3.07"
1"	1.54"	0.59"	2.20"	3.19"
11⁄4	1.81"	0.59"	1.97"	4.29"
11/2	2.17"	0.59"	1.97"	4.57"

