

AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHINA, CZECHIA, FRANCE, GERMANY, GREAT BRITAIN, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, REPUBLIC OF KOREA, SPAIN, SWITZERLAND, THAILAND, TUNISIA, TURKEY, USA, VIETNAM

KOBOLD Messring GmbH Nordring 22-24 D-65719 Hofheim/Ts. ♦ Head Office: +49(0)6192 299-0 ♦ +49(0)6192 23398 info.de@kobold.com www.kobold.com

1



Technical Details

Description

Bimetal temperature switches are used for temperature monitoring and control. They are characterised by their long service life and operational reliability.

A particular advantage is their excellent repeatability, as bimetal temperature switches are practically insensitive to the service environment.

The model TBS bimetal temperature switches are supplied in a robust housing made of brass or stainless steel with G $\frac{1}{2}$... G $\frac{1}{2}$ internal thread on both sides and with a 1.5 m silicone sheathed cable. They are thus also suitable for service in rough conditions.

The temperature contacts have a fixed switch point in intervals of 5 °C over the range -10 °C ... 50 °C, and in intervals of 10 °C over the range 50 °C ... 100 °C and are designed as N/C contacts.

Application

The model TBS bimetal temperature switches are suited for universal use. They can be used in applications where temperature monitoring or control is required.

Order Details (Example: TBS-11 R08 000)

Material:	
Housing:	brass or stainless steel
Seal:	FPM
Cable:	1.5 m silicone sheathed cable (longer cable on request))
Pressure:	PN 16 version brass
	PN25 version stainless steel
Allowed ambient temperature:	-30°C+105°C
Allowed temp. of medium:	-40°C+120°C
Tolerance:	±3 K
Resetting hysteresis:	6 K ±2 K
Contact:	N/C contact
	with rising temperature
Switching cycles:	max. 100000 at nominal load
DC voltage:	max. 24 V _{DC}
AC voltage:	max. 240 V _{AC}
Permanent current:	max. 1,3 A
Contact resistance:	<30 mOhm
Protection:	IP65

We recommend service contact protection relays for switching with higher currents (see brochure Z2).

Model	Connection (female) G thread I NPT thread		Switch point (N/C contact with rising temperature)		
	G tillead	NFTUIIeau	(N/C contact with fishing temperature)		
	R08 = G 1⁄4	N08 = 1/4" NPT	M10 = -10°C	035 = 35°C	
	R10 = G ³ / ₈	N10 = 3/8" NPT	M05 = -5°C	$040 = 40^{\circ}C$	
TDO 11 have			000 = 0°C	045 = 45 °C	
TBS-11 = brass housing	R15 = G ½	N15 = ½" NPT	005 = 5°C	050 = 50°C	
	R20 = G ³ ⁄ ₄	N20 = ¾" NPT	010 = 10°C	060 = 60°C	
TBS-12 = st. st. housing	R25 = G1	N25 = 1" NPT	015 = 15°C	070 = 70°C	
riousing		-	020 = 20°C	080 = 80°C	
	R32 = G 1¼	N32 = 1¼" NPT	025 = 25°C	090 = 90°C	
	R40 = G 1½	N40 = 1½" NPT	030 = 30°C	100 = 100 °C	

Dimensions

A	B [mm]	C [mm]	D [mm]	E max. [mm]
G 1⁄4	27	10	50	77
G3⁄8	27	10	50	77
G1⁄2	27	10	50	77
G¾	32	15	52	78
G1	39	15	56	81
G1¼	46	15	50	109
G1½	55	15	50	116

