



- ▶ **Very compact size**
- ▶ **Mould-proof housing**
- ▶ **Excellent thermal conduction characteristics due to homogenous constructional size**
- ▶ **Good temperature sensitivity**
- ▶ **Fast response time**

**Area of application**

The thermo switch O is used whenever switch-on function is needed, caused by overheating or increasing temperature. Specific applications include: cooling fan, alarm signal, controller, timer.

**Function**

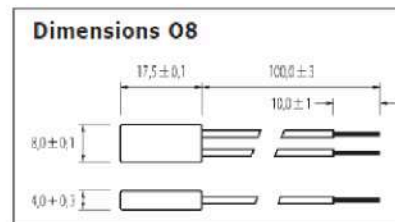
The thermo switch O operates independent from any current supply. Temperature detection is effected by means of a bimetal disk which was first dimensioned in

accordance with the required switch-on temperature  $T_E$ . When this fixed switch-on temperature  $T_E$  is reached, this bimetal disk will snap over, closing a contact system and thereby closing the electric circuit of the device to be started.

After cooling down and reaching the cut-off temperature  $T_A$ , the bimetal disk will automatically return into its original position and open the contact. The electric circuit is opened again.

**Technical specifications**

Breaking capacity	250V 1.0A / 50Hz
Min. current	20mA
Switching temperature	50°C - 130°C ( $\pm 10$ ) in 5 Kelvin steps
Switching differential	10K - 60K depending on switch-on temperature
Max. ambient temperature	160°C / 200°C, 1 minute
Approvals	VDE (EN 60730), RoHS conform

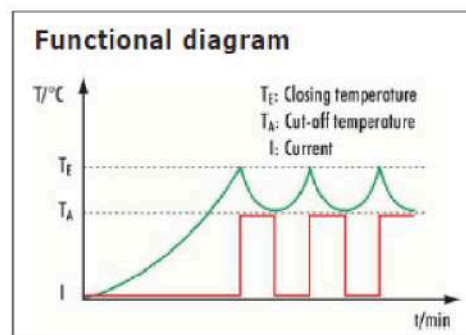
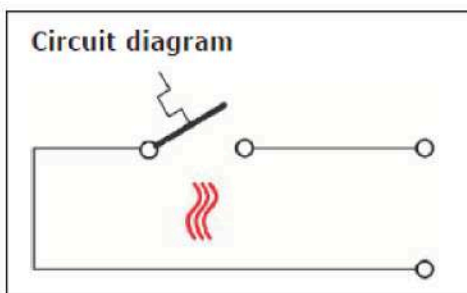


alternative:

5 housing type:  
**L 4,0 x W 8,0 x H 16,0**

1 housing type: \*  
**L 3,6 x W 8,0 x H 14,5**

\*Use with mounting bracket 506 000





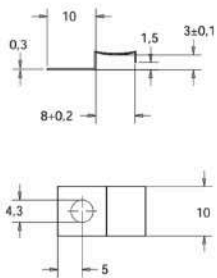
## Technical data

All housing types are voltage-free. Due to its constructional size the O switch is one of the most compact thermostats available. This ensures a very fast response rate.

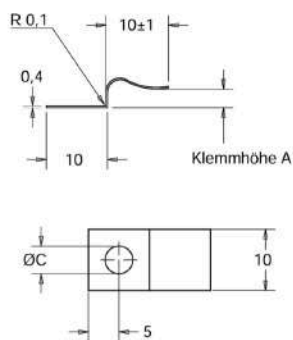
Its rectangular homogenous constructional size provides excellent thermal conduction characteristics.

## Accessories

Mounting brackets 506005



Mounting brackets

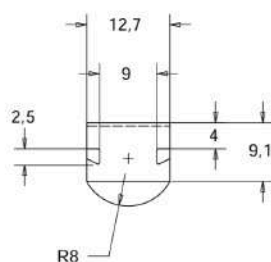
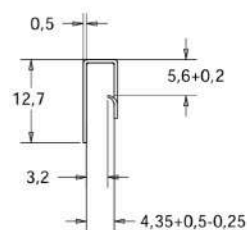


Part nr.	Name	A	Ø C
506 003	KL 0350 0430	3,5mm	4,3mm
506 002	KL 0350 0350	3,5mm	3,5mm
506 001*	KL 0250 0430	2,2mm	4,3mm
506 000*	KL 0250 0350	2,2mm	3,5mm

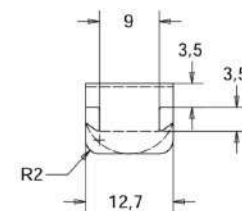
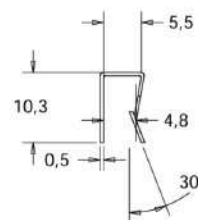
\* Exclusively suitable for housing type "1"



U-Clip 506100



U-Clip 506101





**Ordering information** (Please use the characters in the chart below to construct your product code)

**Sample code**

O - 8 2 - 125 - 10 - 100 - 10A

**Housing**

- 0 Semi-Enclosure

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- 1 PCB-Version

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- 5 Unsealed housing

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- 8 Sealed housing (Standard)

**Electrical connections**

- 1 Bare solid wire AWG 24

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- 2 Stranded wire double tinned AWG 24 (Standard)

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- 3 Insulated solid wire AWG 24

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- 4 Bare solid wire AWG 22

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- 5 Stranded wire AWG 24

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- 6 Insulated solid wire AWG 22

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- 7 Stranded wire AWG 22

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- 9 Stranded wire AWG20 or customized electrical connections

**Operating Temperature**

Temperature range 40°C - 150°C  
Selectable in 5° steps

e.g.:  
120 120°C

**Tolerance Operating Temperature**

- 05 ± 5 Kelvin (Standard)

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- 10 ± 10 Kelvin (Standard for 150°C switches)

**Lead Wire Length**

- 100 100mm (Standard)
- 3 - 9999 mm

**Lead specification**

Only with connection option "stranded wire"

10 mm	(Standard)	A	Fully stripped (Standard)
Other lengths upon request		HA	Half stripped