

## CYLINDER HEAD TEMPERATURE (CHT) FOR ROTAX ENGINES 912UL Diameter 57mm. °C. IM-538

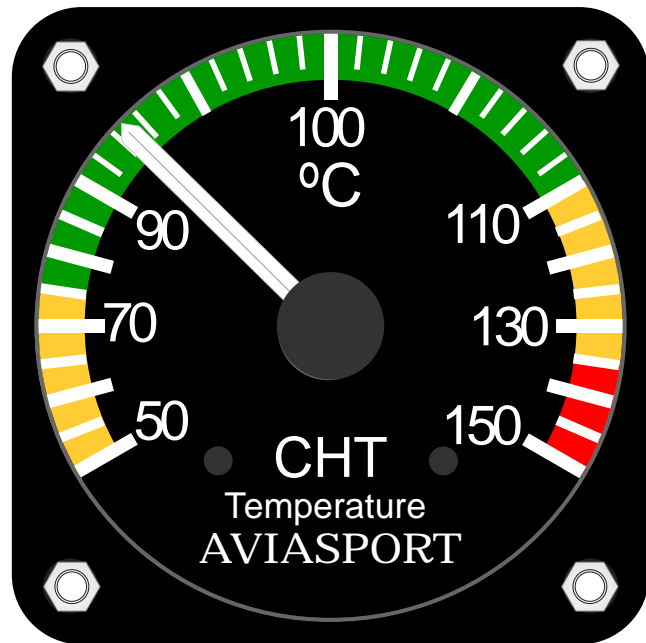
### Preface

The IM-538 instruments have been designed especially to measure the Cylinder Head Temperature (CHT) in Rotax® engines 912UL.

The IM-538 is available in 57 mm size.

The instruments have been designed to work with both 12V and 24V systems.

The minimum instrumentation requirements for BRP ROTAX® four stroke engines include a gauge for continuous CHT monitorization.



### General Information

**ATTENTION :** The IM-538 has not undergone any safety or durability examination to Civil Aviation standards but does incorporate the latest technical development and has been thoroughly tested. Despite the the CHT being a precision instrument, false indication or misinterpretation of data could occur. By utilizing this instrument the user acknowledges the possible danger and responsibility for all risks.

### State of receipt

- Instruments packed in a plastic bag
- 4 attachment screws
- 3 Loose plugs

### Technical data

Case:	Plastic
Weight:	220g
Suitable for:	Rotax 912UL
Power Supply:	10..30VDC
Power Current:	0.1 Amp. Max.
Scale:	50..150°C
Subdivision scale:	1°C
Max. Deviation:	2%
Dimensions:	See sketch
Calibration:	Calibrated by the manufacturer prior to shipment.

Yellow Zone*	50 to 90°C & 110 to 150°C
Green Zone*	90 to 110°C

\*Please refer to the updated User Manual of your engine BRP-ROTAX® engine for the operational limits

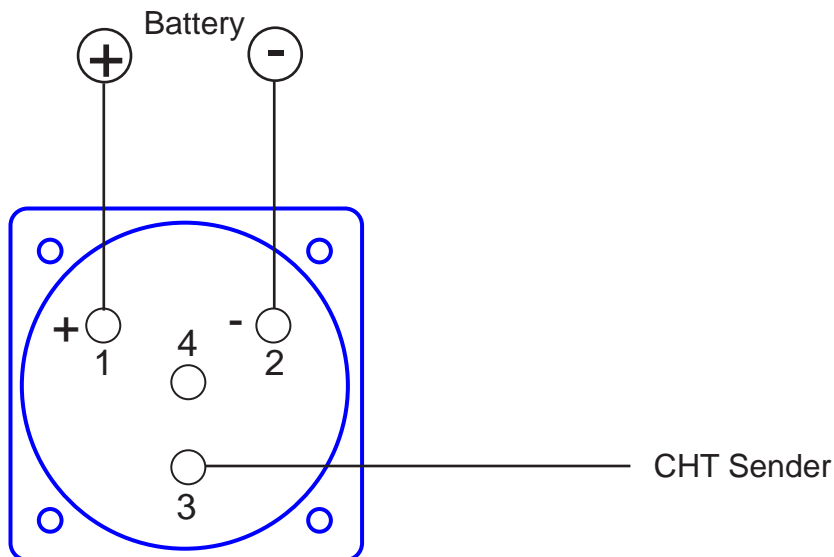
## Installation Instructions

- Install instruments in pilot's field of vision, free from vibration and glare.
- Protect the instruments against dampness and any kind of gasoline or acid.
- Pay attention to installation dimensions
- Wiring has to be carried out with good quality plastic-sheathed cable.
- When routing cables, prevent possible damage to cables from heat, vibration, shearing or crushing.
- Install a breaker or fuse of 1 Amp.

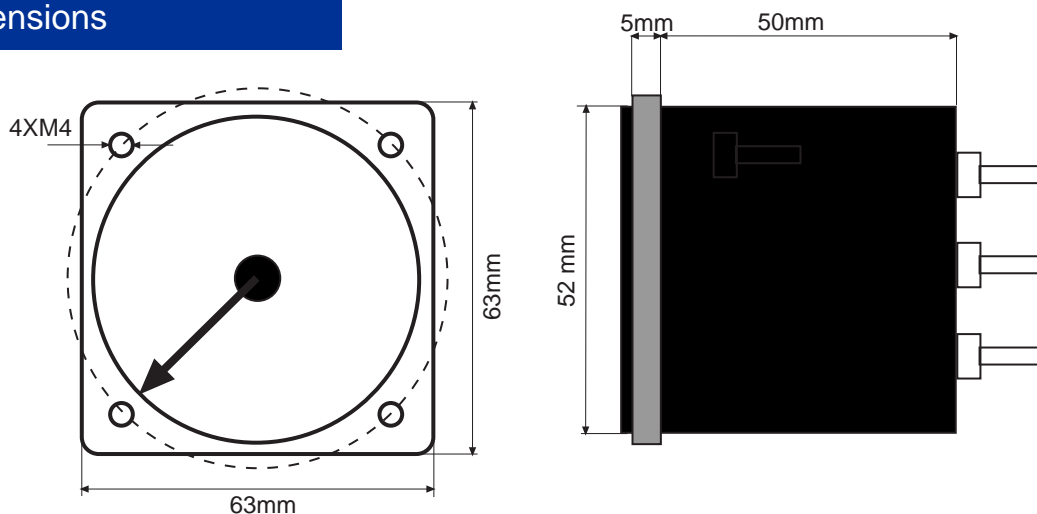
### Instruments Terminals

- 1) (+) Red wire to positive terminal of battery.
- 2) (-) Black wire to negative terminal of battery.
- 3) Input to the Sender.
- 4) Factory calibration input.

## Wire Connections

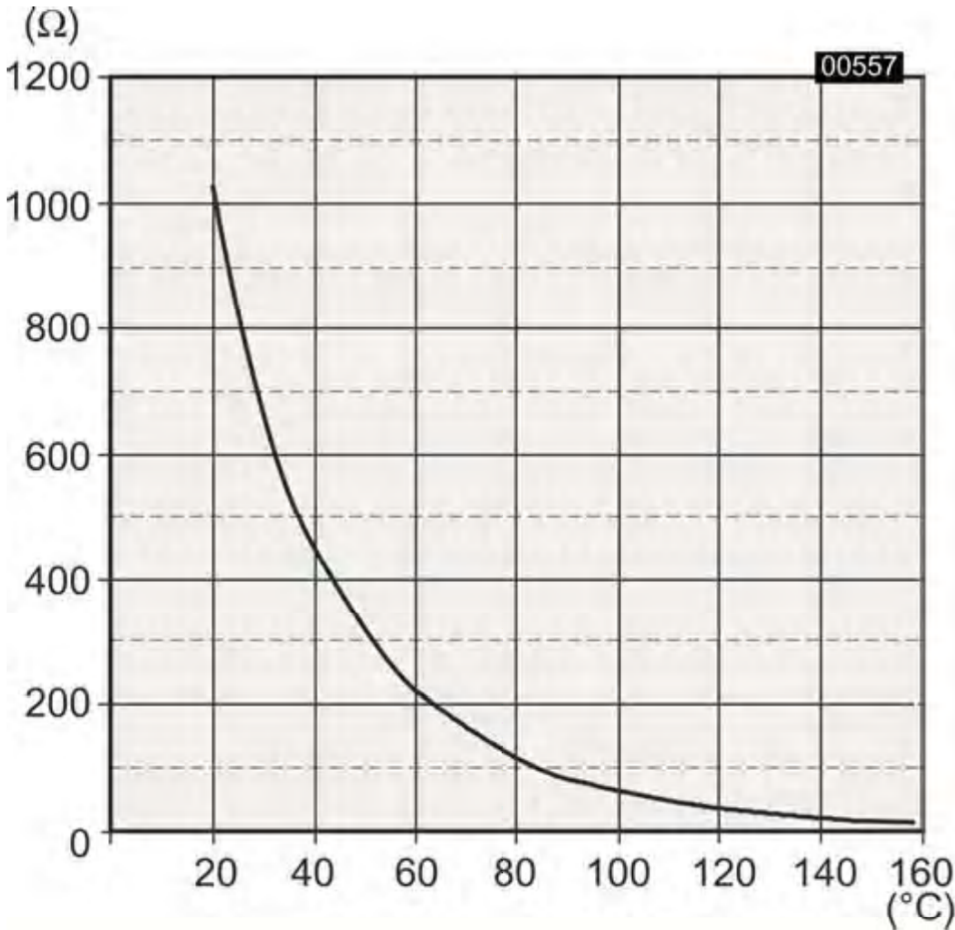
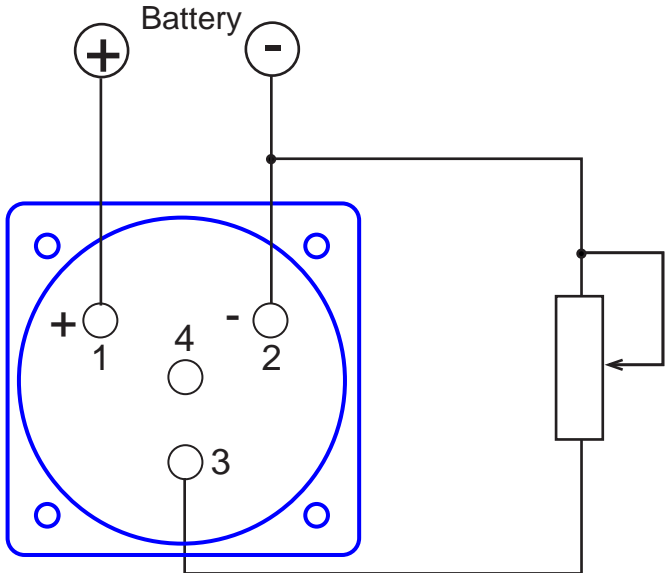


## Dimensions



# Test & Calibration

The OIL Temperature sender is a resistance which varies with the Oil Temperature. To check the instrument your need a 1000 Ohm potentiometer and a multimeter. Adjust the potentiometer to the multimeter read 62.2 Ohm. Being careful not to turn the potentiometer, connect according to Figure 1. With 62.2 Ohm, the instrument should show 100°C. Try with other resistance values.



°C	OHM
50	322.8
60	165
70	133
80	112.5
90	83
100	62.2
110	47.5
120	36.5
130	28.9
140	23.1
150	18.6