

**A precision, high current micro switch,
Oil or Winding temperature controller for Alarm, Trip and
Cooler control suitable for seismic use.
Optional analogue output.**



- Configured as an Oil Temperature Indicator (OTI) or Winding Temperature Indicator (WTI) for simulation of transformer 'Hot Spot' temperature.
- ONAN/OFAF Dual gradient option
Marine, Offshore and Transport versions available.
- Approved for seismic applications in association with BS142, IEC255
- High current switching (10 Amps)
Maximum number of control switches '4'
- Extra long capillary length 60 metres
Weatherproof case to IP55*
- Maximum Pointer
- Fully compensated for ambient temperature
- Optional selectable analogue output
Full Installation and Maintenance Instructions supplied
- 10 year warranty when supplied **& fitted** by Accurate Controls Ltd



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Accurate Controls Ltd.

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Accurate Controls

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Indicating Scale:

Diameter : 5.5" Angular Sweep – 270°
 Range : 0-120°C, 0-150°C, 0-160°C, 0-180°C,
 30 - 150°C
 Accuracy : 1.5% FSD

Accuracy of Indication:

To Class 1: EN 13190:2001

Electrical Connections:

Full circuit diagram supplied with each instrument.
 All circuits insulation tested with 2000 V AC.
 Terminal block conductor size: 0.5 – 4.5mm²

Switch Configurations:

Maximum 4 Changerover (SPDT)
 Switch Type: Up to 10A @ 250V AC (Z136)
 Switch Type: Up to 3A @ 250V AC/DC(Z137)

Two switches can have adjustable differential for cooler control

Winding Temperature simulation (where fitted)

Gradients set to customer specification
 Dual ONAN and OFAF gradients.
 Overload protection to 200% load
 Matching unit not required
 Suitable for 10A CT currents

Analogue Output (where fitted) :

0-10, 0-20, 2-10 & 4-20mA analogue output for interfacing with industry standard SCADA ,substation control systems. (also digital or analog meters are available upon request)

Includes internal or external power pack with universal input voltage:

85-265V AC 47-63Hz or 70-360 V DC

Lower DC input voltage range available by special request

Standard Case:

Steel with powder coat paint.
 Electrical entry point: rear & bottom
 Surface mount.
 *Weatherproof to IP55—bottom capillary entry only

Capillary System:

Material: Capillary protected by stainless steel sheathing. Optional P.V.C. outer cover.

Length: 2 to 60 metres.

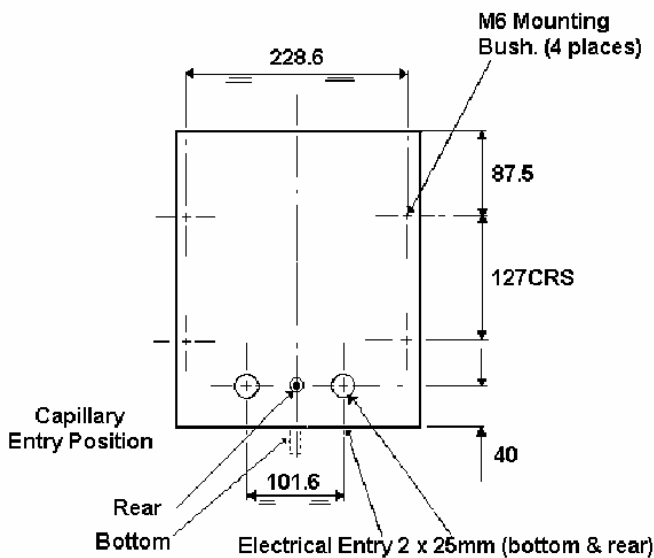
Case entry point: Top, rear or bottom

Ambient compensation as standard
 Bulb and pocket to suit customer requirements.

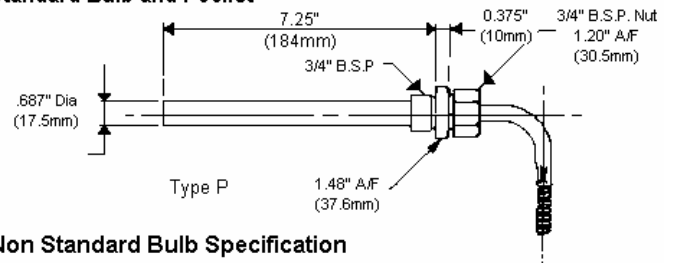
Options:

Anti-vibration mounts.
 Anti-condensation heater.
 Surface Mount with backstraps
 Laminated safety glass window with 99% UV blocking
 ** PVC coated capillary & other cases are available should the environment require it.

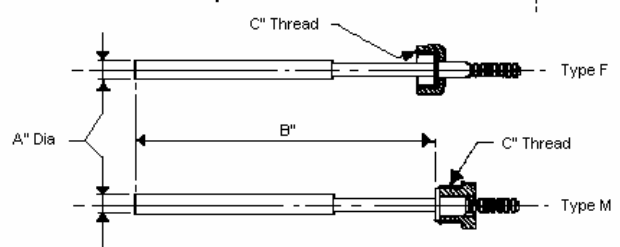
Full on site installation, calibration and maintenance service available.
 Please contact Accurate Controls for technical assistance.



Standard Bulb and Pocket



Non Standard Bulb Specification



Please state Type F or Type M and maximum dimensions for A", B", C": Thread Size

INSTRUMENT SPECIFICATION SHEET

Quotation Request

A275

For replacement of an existing instrument please advise serial number if known

Customer reference

Qty required Delivery required

Case Mounting Surface only Back Strap Mounting Kit
 Case Window Standard Acrylic Laminated Glass 99%UV blocking*
 Case Finish Standard Painted (Normal Environments) Customer specified (comments box)

Capillary Length (metres) Min 2 metre Max 60 metre

Capillary Type 304 Stainless Steel Sheathed
 304 Stainless Steel & PVC sheathed (*Harsh environments)

Capillary Entry Bottom Rear
 Electrical Cable Entry Bottom Rear

Bulb & Pocket Type Accurate Std Bulb A501 Matching Pocket A501P
 DIN 42554 Std Bulb
 Customer Specified Bulb Diameter Thread Size
 Length Gender
 Customer Specified Matching Pocket Y/ N Mounting Thread

Scale Range 0 -120°C 0 -160°C 30 -150°C
 0 -150°C 0 -180°C

Instrument Type OTI WTI (Single gradient) WTI (Dual Gradient)

1st Gradient Natural (ONAN) cooling °C at Amps
 2nd Gradient Forced (OFAF) cooling °C at Amps

Instrument Label

Switch Options Table

Switch Options – select for each switch from table

| Switch No | Part No. | Configuration | Switch No | Part No. | Configuration |
|-----------|----------|---------------|-----------|----------|---------------|
| 1 | | | 3 | | |
| 2 | | | 4 | | |

* NOTE: ATEX - EX Rated switches for hazardous environments are also available, please contact factory for details.

| A275 Micro-switch Options | | |
|---------------------------|--|-------------------|
| Part No. | Description | Configuration |
| MZ137F | 3 Amp AC/DC Fixed Differential (3-5°C) | 3 wire changeover |
| MZ137V (Max of 2) | 3 Amp AC/DC Adjustable Differential (Max 25% scale span) | |
| MZ136F | 10 Amp AC Fixed Differential (3-5°C) | |
| MZ136V (Max of 2) | 10 Amp AC Adjustable Differential (Max 25% scale span) | |

Analog Output for Remote Indication YES PSU options Internal PSU mA output options 0-10mA 0-20mA
 NO External PSU 2-10mA 4-20mA

Anti Vibration Mounts Y/ N Test Certificate Y/ N

Anti Condensation Heater (requires supply at specified voltage) 115V 240V

* Harsh or Hazardous Environment Contact Factory for further information

Warranty:
12 months: supply only.
10 years: for Accurate Controls installed instruments.
 Please contact factory for

Submitted by:

| Name | Company & Address | Tel No. | E-mail |
|------|-------------------|---------|--------|
| | | | |

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