

Temperature Sensor

FFAT041

Part Number

UniTemp



- Highly visible output indicator
- Simple operation via the display
- Temperature range: 0...200 °C available

Technical Data

Sensor-specific data

| | |
|-------------------------------|----------------|
| Temperature Measurement Range | 0...140 °C |
| Adjustable Range | 2...139 °C |
| Medium | Liquids, gases |
| Measuring error | ± 1 °C |
| Resolution | 1 °C |
| Switching Hysteresis | 2 °C |
| Response Time | 2...4 s |

Environmental conditions

| | |
|--|---------------------|
| Temperature of medium | 0...140 °C |
| Ambient temperature | -20...80 °C |
| Mechanical Strength | 60 bar |
| EMC | DIN EN 61326-2-3 |
| Shock resistance per DIN IEC 68-2-27 | 30 g / 11 ms |
| Vibration resistance per DIN IEC 60068-2-6 | 20 g (10...2000 Hz) |

Electrical Data

| | |
|---|--------------|
| Supply Voltage | 16...32 V DC |
| Current Consumption (U _b = 24 V) | 60 mA |
| Switching Outputs | 2 |
| Switching Output/Switching Current | < 250 mA |
| Switching Output Voltage Drop | < 2 V |
| Short Circuit Protection | yes |
| Reverse Polarity Protection | yes |
| Protection Class | III |

Mechanical Data

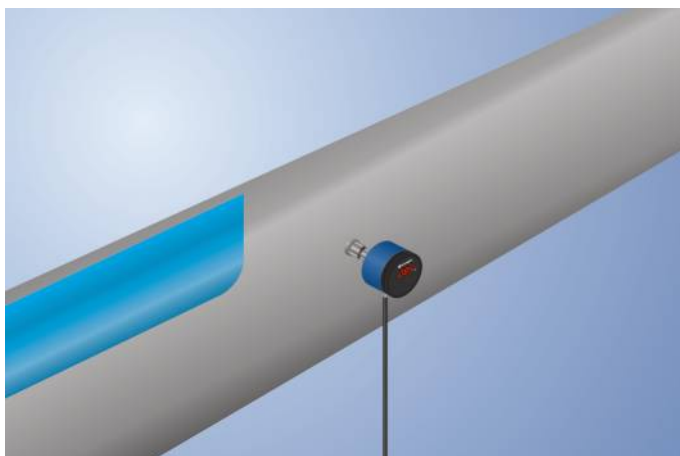
| | |
|---------------------------------|------------------------|
| Setting Method | Menu |
| Housing Material | PBT; PC; FKM |
| Material Control Panel | Polyester |
| Material in contact with media | 1.4435; 1.4404; FKM |
| Degree of Protection | IP67 * |
| Connection | M12 × 1; 4-pin |
| Process Connection | Sealing cone M18 × 1,5 |
| Process Connection Length (PCL) | 64 mm |
| Probe Length (PL) | 44 mm |

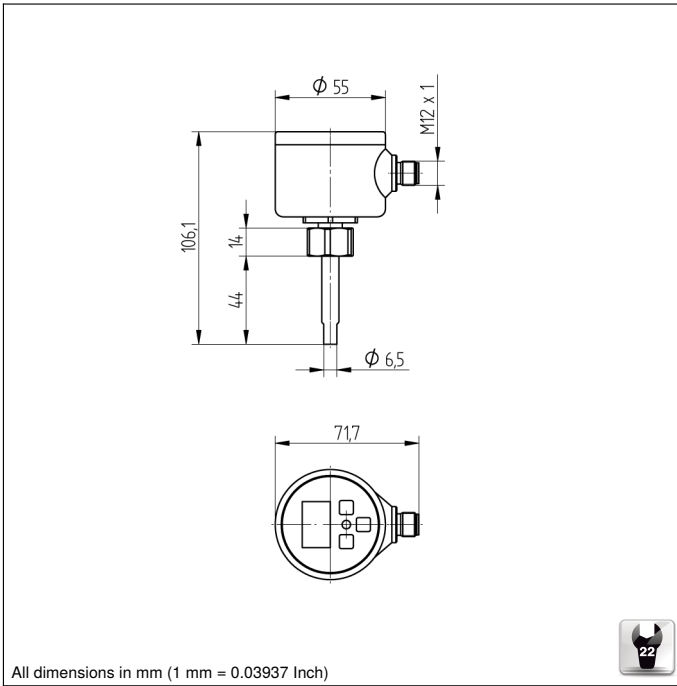
Safety-relevant Data

| | |
|------------------------------------|-------------------------------------|
| MTTFd (EN ISO 13849-1) | 1341,35 a |
| PNP NO/NC switchable | <input checked="" type="checkbox"/> |
| Connection Diagram No. | 536 |
| Control Panel No. | A01 |
| Suitable Connection Technology No. | 21 |
| Suitable Mounting Technology No. | 900 901 |

* Tested by wenglor

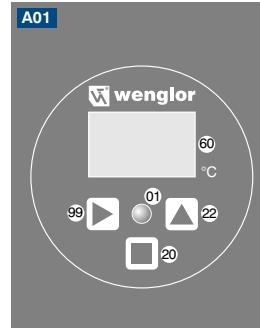
UniTemp temperature sensors measure the temperature of liquid or gaseous media and facilitate the temperature monitoring of processes.



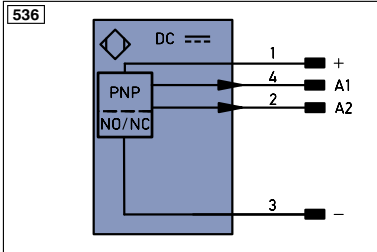


All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel



- 01 = Switching Status Indicator
- 20 = Enter Button
- 22 = UP Button
- 60 = Display
- 99 = Right button



Legend

| | | | | | |
|---------|--|---------|------------------------------|--------|---------------------|
| + | Supply Voltage + | PT | Platinum measuring resistor | ENa | Encoder A |
| - | Supply Voltage 0 V | nc | not connected | ENb | Encoder B |
| ~ | Supply Voltage (AC Voltage) | U | Test Input | AMIN | Digital output MIN |
| A | Switching Output (NO) | U | Test Input inverted | AMAX | Digital output MAX |
| Ā | Switching Output (NC) | W | Trigger Input | AOK | Digital output OK |
| V | Contamination/Error Output (NO) | O | Analog Output | SY In | Synchronization In |
| ṽ | Contamination/Error Output (NC) | O- | Ground for the Analog Output | SY OUT | Synchronization OUT |
| E | Input (analog or digital) | BZ | Block Discharge | Out | Brightness output |
| T | Teach Input | AWV | Valve Output | M | Maintenance |
| Z | Time Delay (activation) | a | Valve Control Output + | | |
| S | Shielding | b | Valve Control Output 0 V | | |
| RxD | Interface Receive Path | SY | Synchronization | | |
| TxD | Interface Send Path | E+ | Receiver-Line | | |
| RDY | Ready | S+ | Emitter-Line | | |
| GND | Ground | ≡ | Grounding | | |
| CL | Clock | SnR | Switching Distance Reduction | | |
| E/A | Output/Input programmable | Rx+/- | Ethernet Receive Path | | |
| | IO-Link | Tx+/- | Ethernet Send Path | | |
| PoE | Power over Ethernet | Bus | Interfaces-Bus A(+)/B(-) | | |
| IN | Safety Input | La | Emitted Light disengageable | | |
| OSSD | Safety Output | Mag | Magnet activation | | |
| Signal | Signal Output | RES | Input confirmation | | |
| Bl_D+/- | Ethernet Gigabit bidirect. data line (A-D) | EDM | Contactur Monitoring | | |
| EN0RS42 | Encoder 0-pulse 0-0 (TTL) | ENAR542 | Encoder A/Ā (TTL) | | |
| | | ENBR542 | Encoder B/B̄ (TTL) | | |

Wire Colors according to DIN IEC 757

| | |
|------|--------------|
| BK | Black |
| BN | Brown |
| RD | Red |
| OG | Orange |
| YE | Yellow |
| GN | Green |
| BU | Blue |
| VT | Violet |
| GY | Grey |
| WH | White |
| PK | Pink |
| GNYE | Green/Yellow |

