

Temperature Sensor

FFAT012

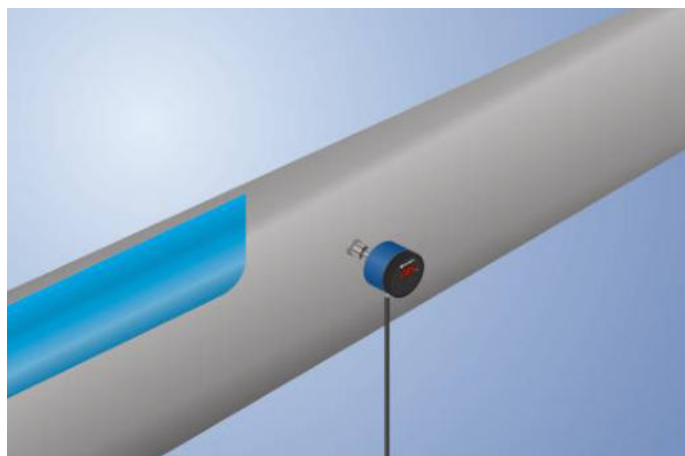
Part Number

UniTemp



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

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



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	1
Analog Output	4...20 mA Temp
Current Output Load Resistance	< 500 Ohm
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; 5-pin
Process Connection	G 1/2" CIP-capable
Process Connection Length (PCL)	48 mm
Probe Length (PL)	10 mm

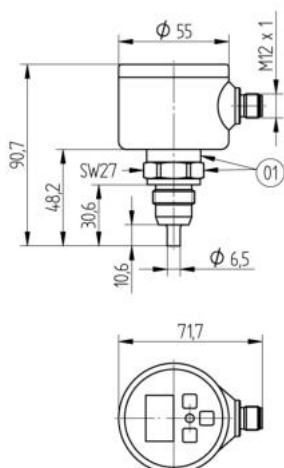
Safety-relevant Data

MTTFd (EN ISO 13849-1)	766,91 a
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Analog Output	●
PNP NO/NC switchable	●

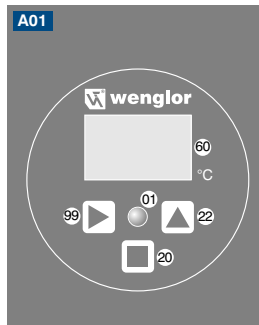
Connection Diagram No.	1002
Control Panel No.	A01
Suitable Connection Technology No.	35
Suitable Mounting Technology No.	903 905 906

* Tested by wenglor



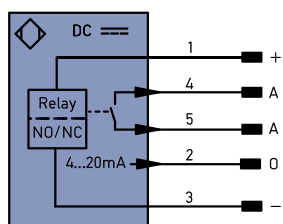
All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel



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

1002



Legend

+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	U	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
Ṽ	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	AWV	Valve Output
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	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
BI-D+/-	Ethernet Gigabit bidirect. data line (A-D)	EDM	Contact Monitoring
EN0 RS422	Encoder 0-pulse 0-0 (TTL)	ENAR5422	Encoder A/Ā (TTL)
		ENBR5422	Encoder B/B̄ (TTL)

ENa	Encoder A
ENb	Encoder B
AMIN	Digital output MIN
AMAX	Digital output MAX
AOK	Digital output OK
SY In	Synchronization In
SY OUT	Synchronization OUT
LI	Brightness output
M	Maintenance

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

