



## WALL AND DUCT TEMPERATURE AND HUMIDITY TRANSMITTERS, IP65

TUT

### FUNCTION

Temperature and humidity measuring and transmission in voltage, current or resistive (only temperature) values:

- 0...10 Vdc, 0...5 Vdc, 3 wires;
- 4...20 mA, 2 wires;
- resistive output;

### APPLICATIONS

Designed for industrial applications with air duct mounting or wall mounting.

TYPE	RANGE	RANGE	OUTPUT (TEMPERATURE)	OUTPUT (HUMIDITY)	ACCURACY (TEMPERATURE)	ACCURACY (HUMIDITY)	APPLICATION	DIAGRAM FIG:
	°C	% r.h.			°C	% r.h.		
TUTC0111	0...+50	0...100	0...10 Vdc	0...10 Vdc	± 1	± 3	air duct	2
TUTC0121	-30...+50	0...100	0...10 Vdc	0...10 Vdc	± 1,5	± 3	air duct	2
TUTC0131	0...+100	0...100	0...10 Vdc	0...10 Vdc	± 2	± 3	air duct	2
TUTC0212	0...+50	0...100	4...20 mA	4...20 mA	± 1	± 3	air duct	1
TUTC0222	-30...+50	0...100	4...20 mA	4...20 mA	± 1,5	± 3	air duct	1
TUTC0232	0...+100	0...100	4...20 mA	4...20 mA	± 2	± 3	air duct	1
TUTC1101	-5...+50	0...100	NTC 10K	0...10 Vdc	± 0,6	± 3	air duct	4
TUTC1102	-5...+50	0...100	NTC 10K	4...20 mA	± 0,6	± 3	air duct	3
TUTC1103	-5...+50	0...100	NTC 10K	0...5 Vdc	± 0,6	± 3	air duct	4
TUTC1301	-5...+50	0...100	NTC 1K8	0...10 Vdc	± 0,6	± 3	air duct	4
TUTC1302	-5...+50	0...100	NTC 1K8	4...20 mA	± 0,6	± 3	air duct	3
TUTC1401	-5...+50	0...100	NTC 10K	0...10 Vdc	± 0,2	± 3	air duct	4
TUTC1402	-5...+50	0...100	NTC 10K	4...20 mA	± 0,2	± 3	air duct	3
TUTC1501	-5...+50	0...100	NTC 10K	0...10 Vdc	± 0,2	± 3	air duct	4
TUTC1502	-5...+50	0...100	NTC 10K	4...20 mA	± 0,2	± 3	air duct	3
TUTC1601	-5...+50	0...100	NTC 20K	0...10 Vdc	± 0,6	± 3	air duct	4
TUTC1602	-5...+50	0...100	NTC 20K	4...20 mA	± 0,6	± 3	air duct	3
TUTC1701	-5...+50	0...100	PT1000	0...10 Vdc	± 0,6	± 3	air duct	4
TUTC2101	-5...+50	0...100	PT100	0...10 Vdc	± 0,3	± 3	air duct	4
TUTC2102	-5...+50	0...100	PT100	4...20 mA	± 0,3	± 3	air duct	3
TUTE0111	0...+50	0...100	0...10 Vdc	0...10 Vdc	± 1	± 3	room/outdoor	2
TUTE0121	-30...+50	0...100	0...10 Vdc	0...10 Vdc	± 1,5	± 3	room/outdoor	2
TUTE0131	0...+100	0...100	0...10 Vdc	0...10 Vdc	± 2	± 3	room/outdoor	2
TUTE0212	0...+50	0...100	4...20 mA	4...20 mA	± 1	± 3	room/outdoor	1
TUTE0222	-30...+50	0...100	4...20 mA	4...20 mA	± 1,5	± 3	room/outdoor	1
TUTE0232	0...+100	0...100	4...20 mA	4...20 mA	± 2	± 3	room/outdoor	1
TUTE1101	-5...+50	0...100	NTC 10K	0...10 Vdc	± 0,6	± 3	room/outdoor	4
TUTE1102	-5...+50	0...100	NTC 10K	4...20 mA	± 0,6	± 3	room/outdoor	3
TUTE1103	-5...+50	0...100	NTC 10K	0...5 Vdc	± 0,6	± 3	room/outdoor	4



TYPE	RANGE °C	RANGE % r.h.	OUTPUT (TEMPERATURE)	OUTPUT (HUMIDITY)	ACCURACY (TEMPERATURE) °C	ACCURACY (HUMIDITY) % r.h.	APPLICATION	DIAGRAM FIG:
TUTE1301	-5...+50	0...100	NTC 1K8	0...10 Vdc	± 0,6	± 3	room/outdoor	4
TUTE1302	-5...+50	0...100	NTC 1K8	4...20 mA	± 0,6	± 3	room/outdoor	3
TUTE1401	-5...+50	0...10	NTC 10K	0...10 Vdc	± 0,2	± 3	room/outdoor	4
TUTE1402	-5...+50	0...100	NTC 10K	4...20 mA	± 0,2	± 3	room/outdoor	3
TUTE1501	-5...+50	0...100	NTC 10K	0...10 Vdc	± 0,2	± 3	room/outdoor	4
TUTE1502	-5...+50	0...100	NTC 10K	4...20 mA	± 0,2	± 3	room/outdoor	3
TUTE1601	-5...+50	0...100	NTC 20K	0...10 Vdc	± 0,6	± 3	room/outdoor	4
TUTE1602	-5...+50	0...100	NTC 20K	4...20 mA	± 0,6	± 3	room/outdoor	3
TUTE1701	-5...+50	0...100	PT1000	0...10 Vdc	± 0,6	± 3	room/outdoor	4
TUTE2101	-5...+50	0...100	PT100	0...10 Vdc	± 0,3	± 3	room/outdoor	4
TUTE2102	-5...+50	0...100	PT100	4...20 mA	± 0,3	± 3	room/outdoor	3

<b>Accessory</b>	DBZ-22 - mounting bracket for air duct transmitters TUTC
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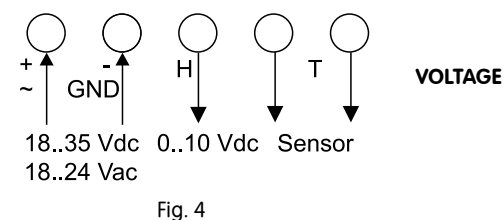
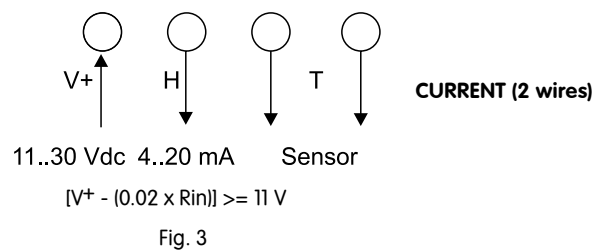
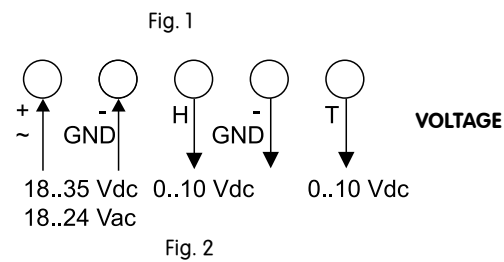
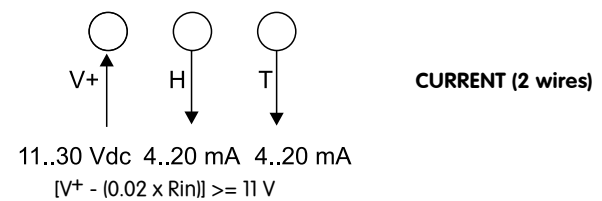
Operating temperature limit -5...+50 °C.

**Note:** the transmitters model TUTC are supplied with mounting bracket model DBZ-22

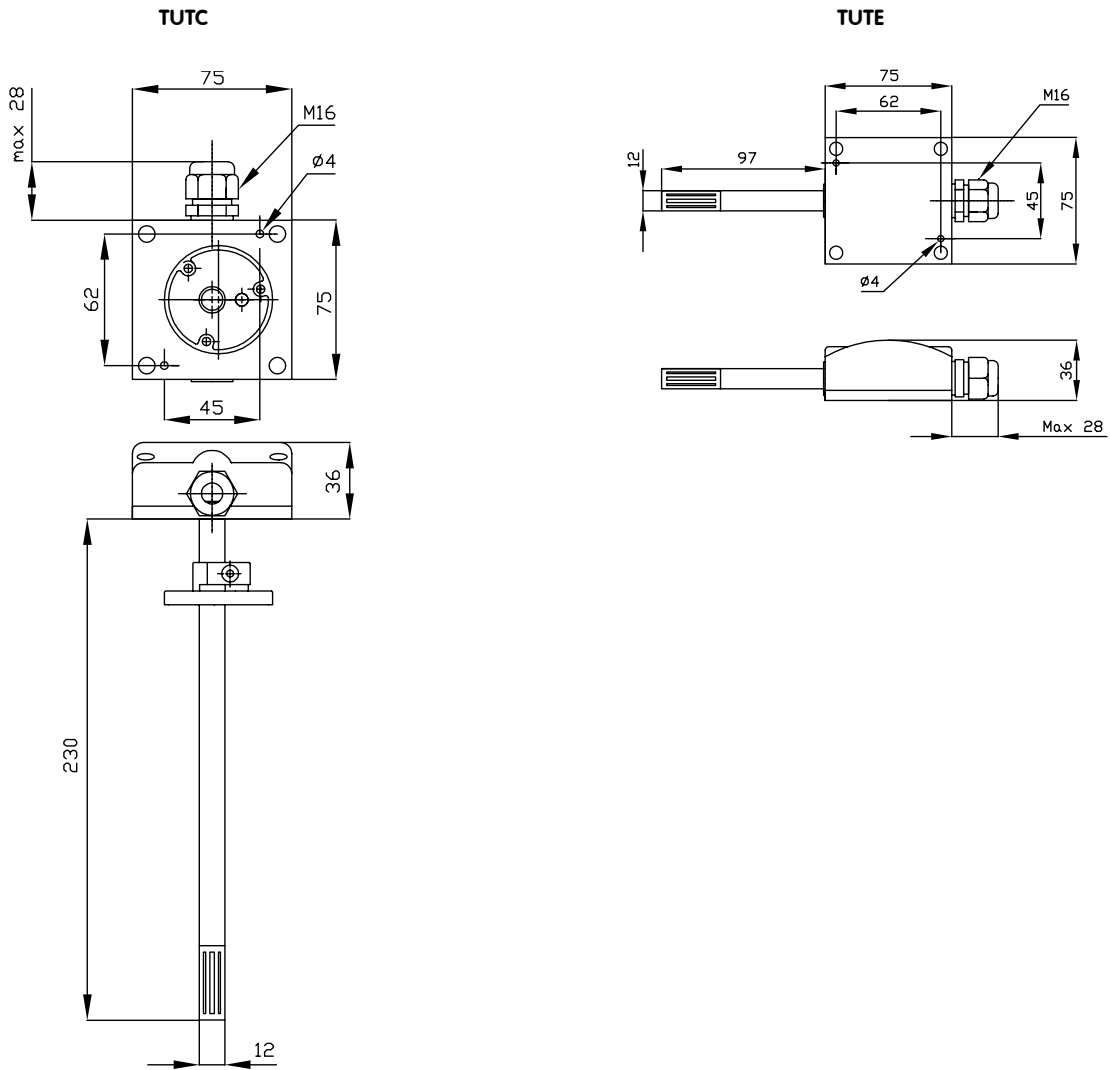
**TECHNICAL DATA**

**Power supply:** see electrical wirings  
**Sensors:** temperature: resistive  
 humidity: capacitive  
**Outputs:** see schedule  
**Power cons.:** < 1 W  
**Elect. connections:** screw terminals max. 0.75 mm<sup>2</sup>  
**Measuring range:** see schedule  
**Working temp. :** -5...+50 °C  
**Working humidity:** 10...95 % r.h. (without condensing)  
**Storage:** -20...+70 °C  
**Precision:** humidity: ±3 % r.h. at 20 °C  
 temperature:  
 max error 1 °C (range 0...50 °C)  
 max error 1.5 °C (range -30...50 °C)  
 max error 2 °C (range 0...100 °C)  
**Temp. dependence of electronics:** output 4...20 mA (temperature): 0.015 °C/°C  
 output 4...20 mA (humidity): 0.015 % r.h./°C  
**Load limits:** output 4...20 mA  
 - power supply 11...17 Vdc:  $R_L < 50 \text{ Ohm}$   
 - power supply 21...30 Vdc:  $R_L < 500 \text{ Ohm}$   
 output 0...10 Vdc, 0...5 Vdc:  $R_L > 1000 \text{ Ohm}$   
**Housing:** cover: white polycarbonate  
 base: gray polycarbonate  
**Dimensions:** wall: 75 x 172 x 36 mm  
 duct: 75 x 103 x 266 mm  
**Protection:** IP65, class I (sensors excluded)  
**Weight:** 180...300 g

**WIRING DIAGRAM**



**DIMENSIONS (mm)**



**MOUNTING BRACKET DBZ-22 SUPPLIED WITH TUTC**

