

Type UTS 7

For temperature monitoring with digital display, 2 solid state outputs and 1 analog output, accuracy class 0,5 % f. s.

Features

Alphanumeric 4-digit LED-Dot-Matrix-display, display rotatable around 330°, microcontroller and self monitoring with error output, all parameters programmable via keypad, adjustable keypad lock, different access levels, rugged stainless steel construction.

Measuring Ranges

0... +100 °C to -30...+150 °C

Applications

Hydraulics and pneumatics, process- and chemical industry, machine industry, machine tools

Technical data

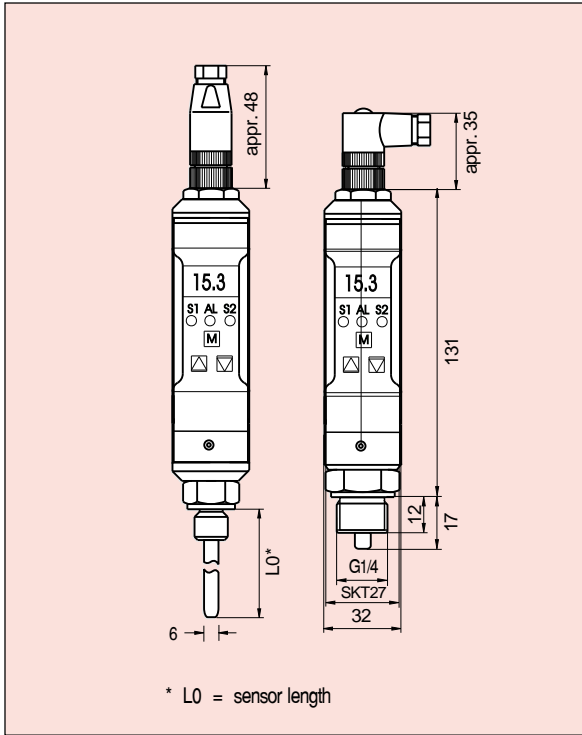
Sensor element	: Pt 100 (Class B)
Materials:	
Housing	: stainless steel W.-Nr. 1.4571
Process seal	: Viton standard, EPDM
Operating elements	: 3 easy response pushbuttons at the frontside, all parameters programmable, adjustable keypad lock
Protection class	: IP65 with plug, IP67 with cable gland
Process connection	: G1/4 Standard, G3/8, G1/2, male
Housing dimensions	: 131 mm (without electrical plug) rotatable housing for adjusting display after installation
Weight	: appr. 350 g with 5 mm sensor length
Measuring ranges	: -30 °C...+100 °C, -30 °C...+150 °C 0 °C...+100 °C, 0 °C...+150 °C
Linearity error	: < ± 0,5% f. s.
Time constant	: appr. 40 s
Data acquisition	: microcontroller and self monitoring with error output
Resolution	: 12 bit (4096 steps)
Scanning rate	: 100 Hz
Electrical connection	: cable gland PG7 with 1,5m cable or plug M 12 x 1, 4- or 5-pin
Sensor length	: 17 mm (standard) 25, 50, 100, 150, 200, 250 mm
Sensor diameter	: 6 mm



Temperature influence	: ± 0,1 % f. s. / 10 K
Compensation range	: -10 °C...+70 °C
Repeatability	: ± 0,1 % f. s.
Temperature range	: -30 °C...+150 °C (Media) -10 °C...+ 70 °C (Electronics) -30 °C...+80 °C (Storage)
Power supply	: 10...30V DC unregulated, max. 10% residual ripple, reversed polarity protected
Operating display	: 4-digit LED-Dot-Matrix-display, green, height 5 mm with decimal point
Display rate	: 5/s
Display unit	: °C
Delay	: 0,0...9,9s adjustable (for display damping)
Brightness	: 20...100% - adjustable
Error Display	: LED red and alphanumeric display
Power Consumption	: appr. 40 mA at $U_b = 24V DC$ (without load)
Output signal	: 4... 20 mA o. 0...10 V DC, short circuit-proof
Delay	: 0,0...9,9 s adjustable
Max. load	: max. RI = $(U_b - 12V) / 20mA$, 600 Ohm at 24 V DC
Solid state output(s)	: 1 or 2 pnp-Open-Collector solid state switching outputs
Adjustment range	: 0... 125% f. s.
Hysteresis	: 0... 125% f. s.
Switching frequency	: 100/s
Delay time	: 0,0...9,9 s - adjustable
Max. constant current	: 500 mA
Display	: 2 x LED green for activated set point
Option	: serial interface RS232 with Profibus-DP (Slave) or Windows user surface
Accessories	: conduit, electrical plugs

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Dimensions (in mm)



Connection chart

Plug	PG9 with cable LifYY11Y 4 / 5x0,25mm ²	Version with 1 switching output	Version with 2 switching outputs	Version with 1 switching output and 1 analog output	Version with 2 switching outputs and 1 analog output
Pin 1	brown	+Ub 18 .. 32 V/DC	+Ub 18 .. 32 V/DC	+Ub 18 .. 32 V/DC	+Ub 18 .. 32 V/DC
Pin 2	white	-	SP2 0,5A max.	analog 4-20mA/ 0-10VDC	analog 4-20mA/ 0-10VDC
Pin 3	blue	0V	0V	0V	0V
Pin 4	black	SP1 0,5A max.	SP1 0,5A max.	SP1 0,5A max.	SP1 0,5A max.
Pin 5	grey	-	-	-	SP2 0,5A max.

Connection chart (plug 2) for interface

plug M 12 x 1, 5-pin	Model with RS232 (V24) interface	Model with Profibus-DP interface
Pin 1	RXD	END_A
Pin 2	TXD	DAT_A
Pin 3	GND	END_B
Pin 4	- - -	DAT_B
Pin 5	- - -	GND

Order number example

Type	Series	Temperature range	Output signal switching output	Electrical connection	Process connection	Sensor length
UTS 7	64-07	08	1	1	3	01

Your order number

UTS 7						
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Series	Temp.-range	Output signal	Electrical connection	Connection	Sensor length
(64-07) LED-Dot-Matrix-display	(02) -30...+100 °C (04) -30...+150 °C (08) 0...+100 °C (10) 0...+150 °C	(1) 1 solid state output PNP (2) 2 solid state outputs PNP (3) 1 solid state output and 1 analog output 4...20 mA (4) 1 solid state output and 1 analog output 0...10V (5) 2 solid state outputs and 1 analog output 4...20 mA (6) 2 solid state outputs and 1 analog output 0...10V (7) Profibus-DP and 2 switching outputs (8) RS232 interface and 2 switching outputs and 1 analog output 4...20 mA	(1) Cable gland PG 9 incl. 1,5 m cable (2) Plug 4-pin, M12 x 1 (5) Plug 5-pin, M12 x 1 (9) 2 Plugs 5-pin, M12 x 1, (for devices with interface)	(1) G 1/4 A (2) G 3/8 A (3) G 1/2 A	(from sealing edge) (in mm) (01) 17 (Standard) (02) 25 (03) 50 (04) 100 (05) 150 (06) 200 (07) 250 (00) Special length

05 / 03 KTE-ENG 02/3

Barksdale Electronic Temperature Transducers / Switches

Specifications are subject to changes without notice.