

Y71-Y76 TR Temperature sensor-transmitters intrinsically safe version

Meet the toughest requirements of electromagnetic compatibility standards CE

Output 4-20 mA, 2 wires.

Range from - 200 ... + 400 °C

Ligthing protection (optional).

Intrinsically safe versions : Y71TR, Y76TR.

LCIE 02 ATEX 6132X.

CE 0081



I M1 G and D
EEx ia I



II 1 G and D
EEx ia IIC T6 or T5

Hazardous area : Area 0, 1, 2, 20, 21, 22

Delivering an output current of 4-20 mA, these temperature transmitters (Platinum probe PT100 as per standard IEC751) are used for the measurement of the temperature in industrial applications.

2 versions :

s.s. case, IP65 or IP67 : **Y71TR**.

cast epoxy painted casing (Aluminium AS10G), IP65 or IP66 with zero and span adjustment : **Y76TR**.



Technical Data (20 °C)

Mechanical specifications

Vibrations as per specifications (IEC 68-2-6) 0.375 mm (10-55 Hz), 5 g (55 Hz - 1kHz).
The pin containing the sensing element (PT100), the sliding connection (G1/2 or 1/2 NPT optional) and the possible extension are made of stainless steel. This enables an operating temperature between - 200 °C ... + 400 °C.
The minimum immersion length for the sensing pin in the fluid is 60 mm.

Materials in contact with the fluid Stainless steel pin 316 Ti
Stainless steel connection 316 L.

These transmitters can be fitted with :

	Welded :	AGW (TGS)
Thermowell	Bored :	AGF (TGF)
Flanged	TBR	
Range (°C)	- 200 ... + 50	0 ... + 160
	- 120 ... + 40	0 ... + 200
	- 50 ... + 50	0 ... + 250
	- 20 ... + 40	0 ... + 300
	0 ... + 60	0 ... + 400
	0 ... + 100	
	Other temperature ranges on request.	

Standard length of probe (P dimension)
100 - 160 - 250 - 400 - 600 - 1000 mm

The extensions (E) according to temperature (°C)

Mounting	- 200	- 100	0	100	200	300	400
Direct assembly	[Diagram showing direct assembly]						
With connection	[Diagram showing with connection]						
Extension 65 mm + connection	[Diagram showing extension 65 mm + connection]						
Extension 120 mm + connection	[Diagram showing extension 120 mm + connection]						

With extension 120 mm, the heat insulator must not exceed a maximum thickness of 60 mm.

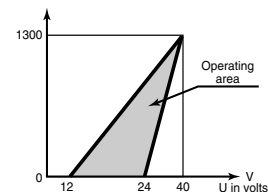
Adjustment
Y71TR : zero and span adjusted in factory
Y76TR : zero : $\pm 5\%$ of the F.S. • span : $\pm 5\%$ of the F.S.
Other adjustments are available on request.

Electrical specifications

Power supply U = 12 to 28 Vdc

Output signal 4-20 mA, 2 wires.

Load resistance $R_{in} \text{ in ohms } R < \frac{U - 12}{0.020}$



Global accuracy $\pm 0.25\%$ of full scale (with respect to the TBL).

Ambient temperature (°C) Temperature class T6 for - 25 $\leq T \leq 40^\circ$
Temperature class T5 for - 25 $\leq T \leq 70^\circ$

Influence of the ambient temperature $< 0.01\%$ F.S./°C.

Connector, protection index DIN 43650 (standard) : IP 65
Y71TR : cable gland + 1.5 mm (IP67)
Y76TR : terminal board through a cable gland (IP66)

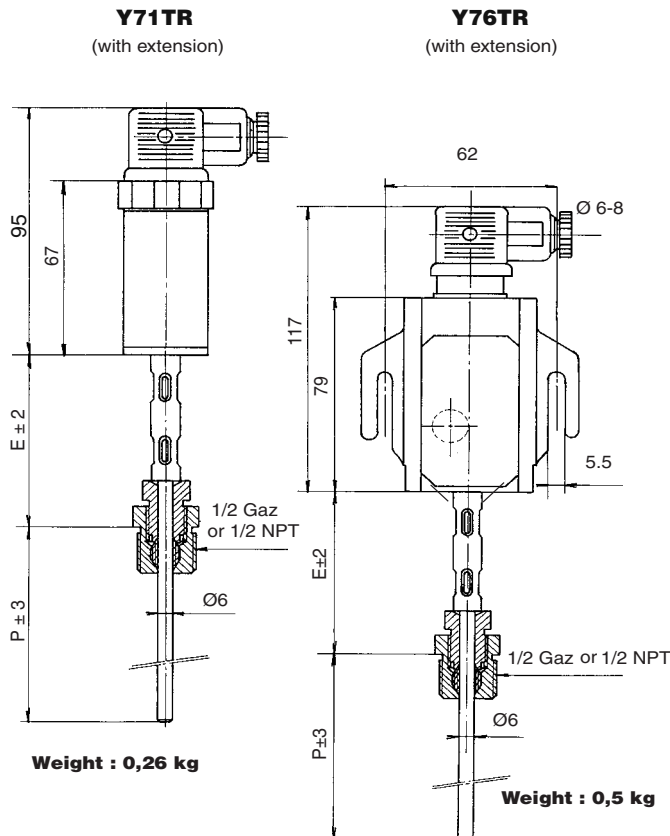
Electromagnetic compatibility Directive 89/336/CE (EN50082-1 and -2, EN50081-1 and -2) with screened cable, screen connected at both ends.

**BOURDON
HAENNI**

made to measure



Dimensions (mm)



	E (mm)
Without extension	25
Extension 65	65
Extension 120	120

Options

Uncoded Options (have to be listed after the code)

- Extension 65 mm
- Extension 120 mm
- Sliding connection G 1/2 ; G 1/4 ; 1/2 NPT or 1/4 NPT
- Cable length (only Y71TR) specified the length
- Others units (400°C max.)
- Others Stem length (100 mm max.)
- Terminal board + cap (only Y76TR)
- Lightning protection

Ordering Details

		Y7xTRxxxxx
Type	1'...5' digit	
Sensor-transmitter		Y71TR
Sensor-transmitter with zero and span adjustment		Y76TR
Pressure range	6'...8' digit	
See codes in tables		xxx
Stem length	9'...10' digit	
100 mm		10
160 mm		16
250 mm		25
400 mm		40
600 mm		60

code	Range in °C	
702	-200	+ 50
708	-120	+ 40
721	-50	+ 50
725	-20	+ 40
747	0	+ 60
751	0	+ 100
757	0	+ 160
761	0	+ 200
766	0	+ 250
771	0	+ 300
781	0	+ 400

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