

Instruction manual of TE 710 intelligent temperature switch

Description

The intelligent temperature switch is a temperature controller that provides dual-channel digital outputs including normally open/normally closed, digital pressure display and 4-20 mA current output.

Features

- Elaborate and nice-looking contour design
- Field programmable switch parameters including switch threshold, normally on/normally off, etc.
- Switch function supports two modes of hysteresis and window
- Flexible 4-20mA output and corresponding pressure point migration
- Quick field zero calibration, fast switching the units
- Switching signal damping, switching signal filtering algorithm
- Field programmable pressure sampling frequency
- NPN/PNP switch freely
- 180° flip of display information
- 300° rotation of main body of instrument

Electrical connection

M12X1 connector	Function	Wire color
	1 VCC supply+	Brown
	2 SP2 switch 2	White
	3 GND supply-	Blue
	4 SP1 switch 1	Black
	5 4-20mA	Grey

Menu descriptions

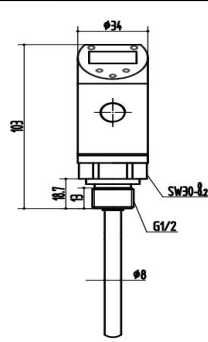
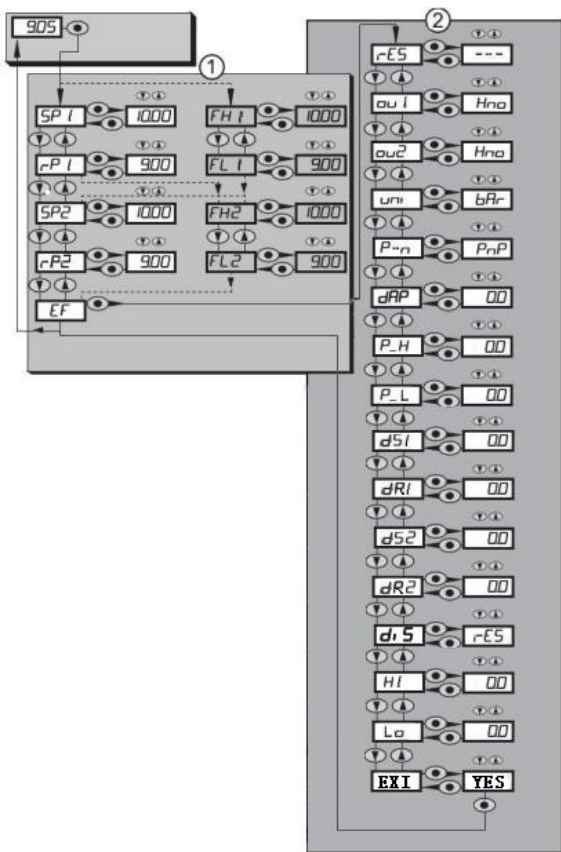


Figure 1
Overall configuration

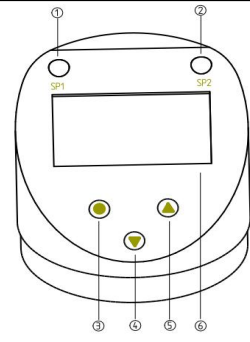


Figure 2
Display configuration

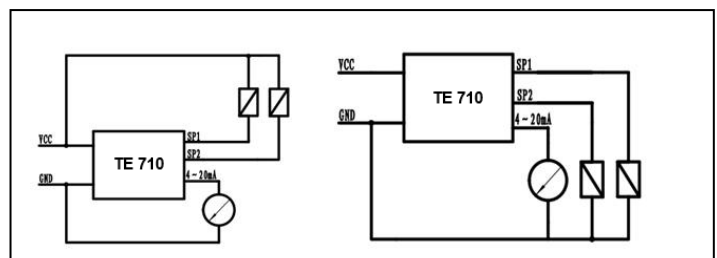
Introduction of display

- ① Alarm lamp of switching value 1
- ② Alarm lamp of switching value 2
- ③ [•] OK button
- ④ [▼] Down key
- ⑤ [▲] Up key

Operation instructions of buttons:

- When the pressure is displayed normally
 - [•] Call out menu interface
 - [▼] Quick zero correction
 - [▲] Quick unit switching
- When entering the menu interface
 - [•] OK / Exit
 - [▲][▼] Edit data

Recommended test circuit



NPN output

PNP output

Wiring diagram

Wiring diagram

Spx / rPx	Upper/lower limit of system temperature when Oux with hysteresis setting is turned on. If the parameter [Hno] or [Hnc] of OUTx is set in the extended function "EF" menu, Spx/rpx is displayed.
FHx / FLx	The upper/lower limit of the system pressure when Oux with window setting is opened. If the parameter [Fno] or [Fnc] of OUTx is set in the extended function "EF" menu, FHx/FLx is displayed.
EF	Extended function, open the second level menu
RES	Factory reset
Oux	Output mode selection
UNI	Select °C and °F display units, two units optional
P-N	NPN/PNP switch mode selection
DAP	Damping parameter
P-H/P-L	Full/zero migration of transmitter
DSx/DRx	Switch action delay
DIS	Inverted display on the screen
HI/LO	Historical maximum/minimum value
EXI	Exit the setting interface