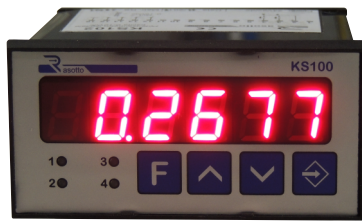


**12-bit potentiometer viewer with thresholds**


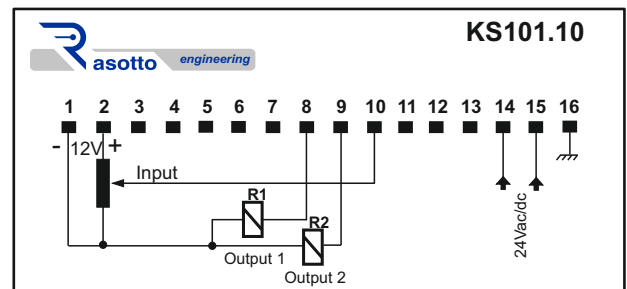
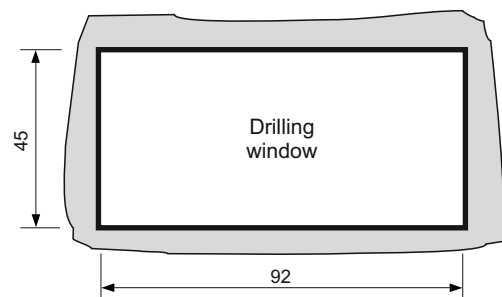
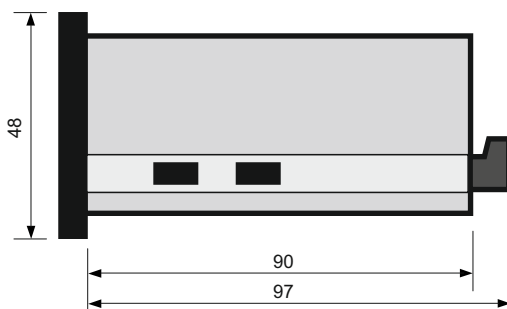
Instrument with 12 bit A/D converter used for measuring potentiometric inputs.

The tool offers the following functions:

- 6-digit displaying
- setting any reading with any input value
- potentiometer calibration from 2 to 6 points
- readings refresh rate configuration
- decimal point setting up to 5 points
- negative values selection
- averages number selection for more stable readings
- data protection with password
- relay outputs activation when the relative thresholds are exceeded

**Technical features**



Power supply	24Vac/dc +/- 5%
Absorption	24Vdc 150mA
Display	6 digits H= 13mm
Full scale max value	9999
Resolution	+/- 1 digit on 4096 f.s.
A/D conversion	12 Bit = 4096 points
Full scale value	-999 ÷ 9999
Zero scale value	-999 ÷ 9999
Delay between 2 readings	0 ÷ 50
Negative values block	0 - 1
Operation conditions	0.. +55°C / 20..90% R.U. without condensation
Storage conditions	-25.. +80°C / 20..90% R.U. without condensation
Mounting	recessed mounting
Container	ABS 48 x 97 x 90mm
Protection degree	IP30



**Electrical connections**

**Dimensions**








*12-bit potentiometer viewer with thresholds*
**OPERATION CYCLE**



All'accensione, dopo la visualizzazione del nome prodotto e della versione firmware, lo strumento visualizza il valore dell'ingresso analogico dato dalla posizione del potenziometro in base ai dati impostati in fase di programmazione. Le uscite vengono abilitate al superamento delle relative soglie.



**CALIBRATION MENU**



Press  It shows **PASS.** Press  It shows **0**


With the keys   scroll the digits on the display until **507** Password value

Press  **n.Punti** press  and using the keys   set the points number that you wish to use to calibrate the potentiometer (minimum 2 maximum 6) confirm the desired value using the key  **POS 1** position yourself on the first known measure and then press 



**0.0** Flashing of the stored value. To set up the desired value use  



and confirm with  **POS 2** position yourself on the second known measure and press 



**0.0** Flashing of the stored value. To set up the desired value use  



Continue in the same way until you reach the last position based on the selected points number and confirm with the  key or let it flash to confirm the value and end programming.


**READINGS AVERAGE VALUES CALIBRATION MENU**

Press  It shows **PASS.** Press  It shows **0**

With the keys   scroll the digits on the display until **103** Password value

Press  **nu. MEd** number of averages, press 

**10** Flashing of the stored value. To set up the desired value use  

Confirm with the  key or let it flash to confirm the value and end programming.



**PARAMETERS DESCRIPTION**





Technical parameters displayed during programming.

- 1) **POS 1** = Known position 1. Position the potentiometer in the first known position.
- 2) **POS 2** = Known position 2. Position the potentiometer in the second known position.
- 3) **POS 3** = Known position 3. Position the potentiometer in the third known position.
- 4) **POS 4** = Known position 4. Position the potentiometer in the fourth known position.
- 5) **POS 5** = Known position 5. Position the potentiometer in the fifth known position.
- 6) **POS 6** = Known position 6. Position the potentiometer in the sixth known position.
- 7) **nu. MEd** = Number of averages. It represents the readings number that the instrument makes before displaying the data on the display. The shown value is therefore the set readings number average. The higher the value, the more stable the measurement is, but at the expense of the display speeds. Default value is 10.

12-bit potentiometer viewer with thresholds

**SET PROGRAMMING**



Press  **Set 1**  **Dato Visualizzato** Scroll the digits   up to the desired value.



Press  **Set 2**  **Dato Visualizzato** Scroll the digits   up to the desired value.


Let it flash, at the end of the flashing the instrument will exit the programming after having stored the new values.

**PROGRAMMING MENU**

Press  It shows **PASS.** Press  It shows **0**




With the keys   scroll the digits on the display until **569** Password value

Press  **dP** setting decimal number  $0 \div 6$  with the key 

Press  **Fsc** Flashing of the stored value. To set up use  




Full scale value reachable with max value applied to analogue input

**(Parameter is visible only if a 2-point calibration is selected, not visible with calibrations from 3 to 6 points)**



Press  **0Sc** Current value flashing. If you want to modify use  

Zero Scale value means any value set with Analog Input signal = 0


**(Parameter is visible only if a 2-point calibration is selected, not visible with calibrations from 3 to 6 points)**

Press  **rAt** Current value flashing. If you want to modify use  

Rating. Delay in 1/10 sec. for refreshing between two successive readings (0 - 50) for slow analog signals.

Press  **bL-** Current value flashing. If you want to modify use 

Function to set or remove the negative sign (0 - 1)

Press again  to return to the menu or allow the digits flashing until the programming is finished.

**TECHNICAL PARAMETERS DESCRIPTION**

Parametri tecnici visualizzati durante la programmazione.

- 1) **dP** = Decimal point. Move the decimal point to the desired position using the arrow keys.
- 2) **rAt** = Rating. It is the delay set in 1/10 sec. which allows the refreshment between two successive readings suitable for slow variations.
- 3) **0Sc** = Zero scale. It is the reading starting value that can also have negative values.  
Displayed value with analog signal equal to 0V.  
Parameter is visible only if a 2-point calibration is selected, not visible with calibrations from 3 to 6 points
- 4) **Fsc** = Full scale. It is the value that is fixed as potentiometer maximum excursion, that is equal to 12V.  
Parameter is visible only if a 2-point calibration is selected, not visible with calibrations from 3 to 6 points
- 5) **bL-** = Set or remove the negative sign. With a 1 setting, it does not display negative values but the display of negative values is locked to 0.
- 6) **Set1** = Set threshold value; when this is reached, output 1 is activated.
- 7) **Set2** = Set threshold value; when this is reached, output 2 is activated.

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