DSSTech

KS105.9

Idee e prodotti italiani

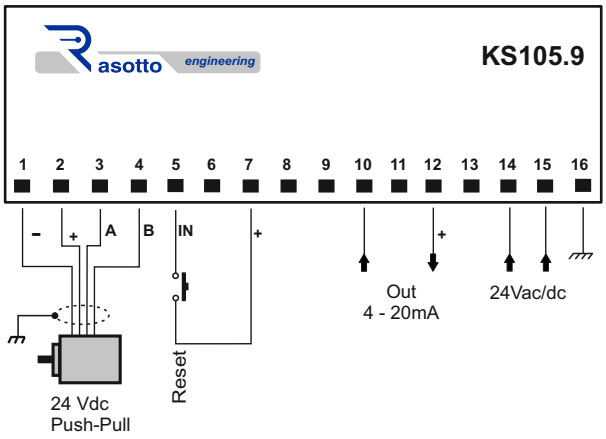
Position controller with 4-20mA OUT

The KS105.9 position viewer is an instrument that can automatically or manually control movements.
It supplies a 4 - 20mA output signal whose value is proportional to the displayed position value that is linked to a previously set full scale value.
This instrument is equipped with opto-isolated inputs in PNP version.
Data storage takes place on internal Eeprom memory.
The reading reset can be done by pressing together the arrow keys on the front panel or remotely after having brought the signal on the instrument terminal board as indicated on the connection diagram.

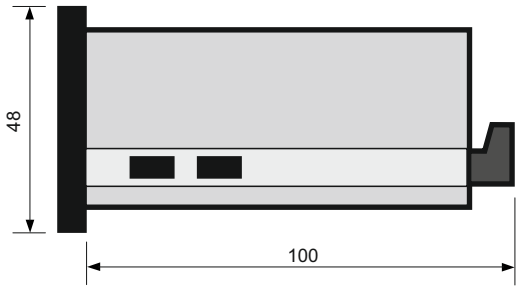
Technical features

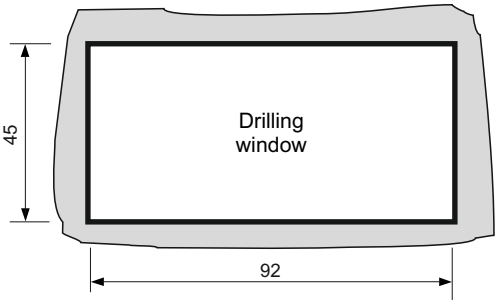
Power supply	24Vac/dc +/- 5 %
Absorption	6 VA nominal
Display	6 digits H= 13mm
Full scale max value	from -99999 to 999999 f.s.
Resolution	+/- 1 digit on f.s.
Count frequency	2100 Hz reading 4 fronts
Analog output	4 - 20mA
Storage conditions	-25.. +80°C / 20..90% R.U. without condensation
Mounting	recessed mounting
Container	Black ABS
Protection degree	IP30

Electrical connections



Dimensions

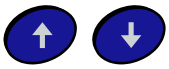




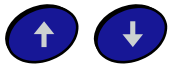
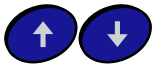
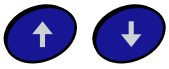
DSSTech Srl
Sede legale: via dell'Artigianato 3 - 36034 - Malo (VI) - Italy
Tel. +390445637541
E-mail: info@dsstech.it
WEB site: www.dsstechautomation.com
P.I., C.F., N. Reg. Imprese IT04118980244
Capitale sociale: 10.000,00 Euro i.v.

N°3143 N°IT-28601

Operation cycle

At power-on, after displaying the product name and the firmware version, the instrument displays the encoder position value and the 4-20mA analog output will be proportional to the encoder position according to the following logic: with displayed value equal to 0 the analogue output will be at 4mA while with the displayed value equal to the full scale value the analogue output will be 20mA. To reset the displayed value, press the keys  together or the reset input on the terminal board.

Programmazione parametri tecnici

To enter programming press the  key, the message **PASS** appears, press 
and using the keys  enter the password **569** , confirm with the key  and it will be displa **dP**
dP represents the decimal point. To change the decimal point position, press the key 
and using the keys  , put the decimal point in the desired position.
As soon as a key is released, the set DP value will flash; to continue with the programming
press the key  and it will be displayed **COEFF** representing the multiplication coefficient of the encoder pulses.
To change the coefficient value press the key  and use the keys  to enter the desired coefficient
value. As soon as a key is released, the set coefficient value will flash; to continue
with the programming press the key  and it will be displayed **POS** representing the current position that is
shown on the display. To change the current position value, press the key  and using the keys 
enter the desired position value. As soon as a key is released, the set position value will flash;
to continue with the programming press the key  and it will be displayed **F.SCALA** representing the full scale
value to which the 20mA analog value will be generated. To change the full scale value press the button 
and using the keys  enter the desired full scale value. As soon as a key is released, you will see
flashing the set full scale; to continue with the programming press the button  and you will return to the programming
beginning that is **dP** . If you wish to end programming, wait for the display to stop flashing.

DSSTech Srl
Sede legale: via dell'Artigianato 3 - 36034 - Malo (VI) - Italy
Tel. +390445637541
E-mail: info@dsstech.it
WEB site: www.dsstechautomation.com
P.I., C.F., N. Reg. Imprese IT04118980244
Capitale sociale: 10.000,00 Euro i.v.

Coefficient automatic calculation

To enter programming press the key F the message is displayed **PASS** press the key
and using the keys enter the password **375** , confirm with the key and it will be displayed **PoSIZ.1**
PoSIZ.1 represents the machine starting position. Move the machine to a known position and then press
It will be displayed **dP** again and using the keys move the decimal point to the desired position.
Press it will be displayed **qUotA1** again and using enter the initial quota value,
again and it will be displayed **PoSIZ.2** . Move the machine to a second known position and then with
the message will be shown **qUotA2** again and using the keys enter the final quota value, press
and it will be displayed **CALc.CO** again and wait for the automatic coefficient calculation; at the end the new
coefficient value will be shown, confirm with and you will exit the automatic coefficient programming menu.

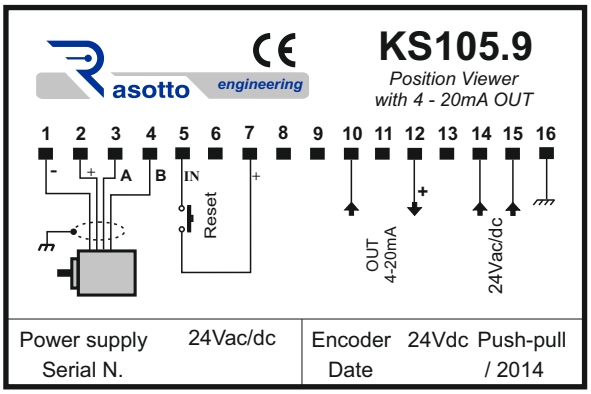
4-20mA analog signals calibration

To enter programming press the key F the message appears **PASS** , press
and using the keys enter the password **105** , confirm with the key and it will be displayed **tAr4**
tAr4 represents the calibration of the 4mA value. To change the 4mA value press the key on the display will appear the
default value calibrated in the laboratory **200** and automatically the analog output will go to 4mA. If you want to recalibrate the
the value of 4mA use the keys ; at every 1unit increase or decrease there will be a variation of about 0.02mA.
If you wish to continue with the calibration of 20mA, press the key and it will be displayed **tAr20** that
represents the calibration of the 20mA value. To change the calibration, press the key and the display will show the
default value calibrated in the laboratory **1000** and automatically the analog output will go to 20mA. If you want to recalibrate
the 20mA value use the keys ; at every 1 unit increase or decrease you will have a variation of about 0.02mA.
As soon as a key is released, the set value will flash; to continue programming, press the button
and we will return to the programming beginning ie **tAr4** . If instead you want to end the programming wait for the display to
stop flashing.

<u>ATTENTION:</u> at the end of the calibration procedure, the value shown on the display will not correspond to the encoder position. It is necessary to set again the encoder position by entering the TECHNICAL PARAMETERS menu with 569 password and by modifying the POS parameter or by taking the machine to 0 position and pressing reset.

DSSTech Srl
Sede legale: via dell'Artigianato 3 - 36034 - Malo (VI) - Italy
Tel. +390445637541
E-mail: info@dsstech.it
WEB site: www.dsstechautomation.com
P.I., C.F., N. Reg. Imprese IT04118980244
Capitale sociale: 10.000,00 Euro i.v.

Position controller with 4-20mA OUT



DSSTech Srl
Sede legale: via dell'Artigianato 3 - 36034 - Malo (VI) - Italy
Tel. +390445637541
E-mail: info@dsstech.it
WEB site: www.dsstechautomation.com
P.I., C.F., N. Reg. Imprese IT04118980244
Capitale sociale: 10.000,00 Euro i.v.