

Electronic position encoder ESGZ

1 General

The electronic position indicator ESGZ converts the resistance value of the potentiometer (F1000) in an proportional output current signal 4..20mA.

2 Connections

The electronic position indicator ESGZ is operated in a two-wire-circuit. the wiper of the potentiometer has to be connected with the yellow connection wire of the ESGZ. Both end connections of the potentiometer have to be connected with the red and the black wires of the ESGZ (Fig. 1). Exchange the end connections of the potentiometer, if the output signal I_a changes in the false direction.

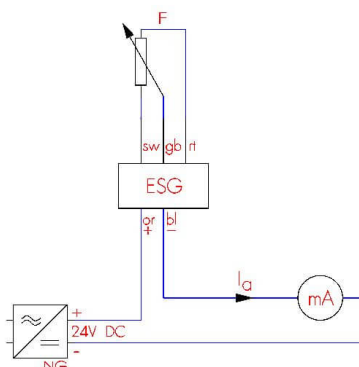


Figure 1: Connection of the ESGZ

The ESGZ is supplied via the orange connection wire (+) and the blue connection wire (-).

3 Dimensions

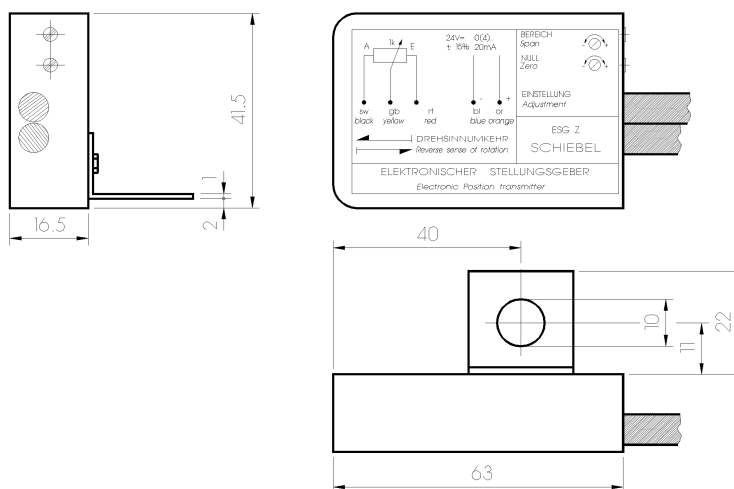


Figure 2: Dimensions

4 Adjustment

Prior to the adjustment of the ESGZ, the end position switches of the actuator (corresponding to the operation instructions of the actuator) and the potentiometer have to be adjusted. The "CLOSED" position corresponds to the output signal 4mA, the "OPEN" position corresponds to the output signal 20mA. connect the ESGZ like already explained (section Connections).

Initial value: Move the actuator into "CLOSED" position. Adjust the output current I_a 4mA using the Zero potentiometer of the ESGZ.

Final Value: Move the actuator into "OPEN" position. Adjust the output current I_a 20mA using the SPAN potentiometer of the ESGZ.

Verification: After adjusting, check both final positions and, if necessary, readjust the initial and final values according to the points.

5 Technical Data

Power supply	ESG Z
Power consumption	24V DC \pm 15%, geglättet
Potentiometerwert	1000
Power output.....	4...20mA
Output limitation	max. 35mA
Zero point shifting	max. 10%
Final point shifting	max. von 50% auf 100%
Ambient temperature.....	-20 °C...+60 °C
Influence of power supply	max. 0,2%
Temperature drift.....	0,2%/10K
Linearity	0,05%