

Product Information

On Site Electronics ESK2



- Controller electronics for RRI / H flow meter
- 2 electronic switching outputs
- Setting the set points using a magnet
- Switching status display with LEDs

Characteristics

With an inductive or a Hall sensor (with or without bias), the electronics record the rotational movements of a rotor blade. Here, the rotor's rotational speed is proportional to the flow rate. A microcontroller records the frequency, and if the minimum value is fallen short of (ALARM1) or the maximum value is exceeded (ALARM2), it changes over the relevant electronic output.

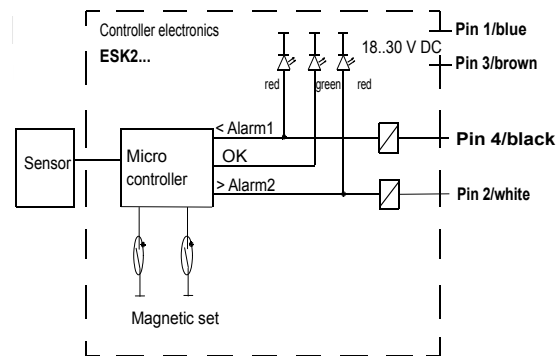
The transistor outputs are designed in such a way that they can be switched as both an NPN or as a PNP output, without needing to make a change on the device. The status of the outputs is indicated at the front of the device by two red and one green LEDs.

The compact electronics are connected directly to a suitable transmitter (see "Dimensions")

Technical data

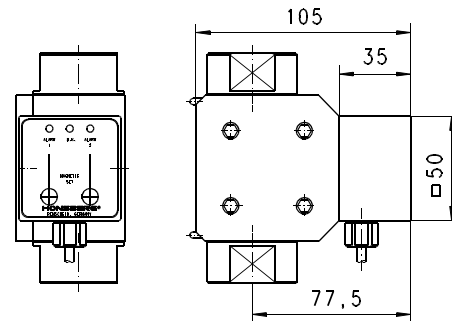
Sensor	inductive proximity switch
Working ranges	see relevant flow meter
Measurement accuracy	
Operating pressure	
Operating temperature for the electronics	-20..+80 °C
Operating temperature	max. 80 °C
Materials	PA6.6
Supply voltage	18..30 V DC
Current consumption	< 30 mA (outputs not connected)
Outputs	electronic, connectable as NPN / PNP
Current under load	max. 200 mA / output
Electrical connection	for round plug connector M12x1, 4-pole Optionally cable outlet
Ingress protection	IP 60

Terminal assignment



Dimensions

ESK2-RR025



Handling and operation

Installation

The ESA2 electronics must be fully inserted into the RR10 / 25 (Rototron) flow meter in order to detect the signal securely. For RR.25... there is the option of turning the converter by 90 ° in order to create the most suitable reading position. For RR.10... the position should be stated when ordering.

The function of the LEDs:

- The green LED lights when the flow rate is greater than alarm 1 and less than Alarm 2 (both outputs are at the supply voltage).
- A red LED lights when the minimum value is fallen short of (Alarm 1) or the maximum value is exceeded (Alarm 2) (associated output has 0 V)
- The red LEDs flash alternately when the microcontroller has a short circuit, or has detected an overload at one of the outputs or an internal error (both outputs show 0 V).

Product Information

Adjustment

- There are two magnetic areas at the front (magnetic set), with the aid of which the minimum and the maximum values can be set:
- When a magnet is placed on one of the surfaces, the green and the related red LED then flash alternately for 4 seconds. Then both LEDs light simultaneously for 2 seconds.
- If the magnet is removed from the surface during the 2 second period, the currently existing flow rate is saved as the switching value.
- If the magnet is removed earlier or later, then the old value is retained without modification.

Ordering code

The base device is ordered, e.g. RRI-xxx with the signal output E and the electronics described here e.g. ESK2-RRI- xxx.

ESK2- 1. 2. 3. 4.

○=Option

1. For types	RR	for flow meter RR
2. Sensor	I	inductive sensor
	H	hall sensor
3. Nominal width	010	for flow meter size DN 10
	020	for flow meter size DN 20
	025	for flow meter size DN 25
4. Electrical connection	S	for round plug connector M12x1, 4-pole
	K	<input type="checkbox"/> cable outlet 2 m

Options

- Ingress protection IP 65

Accessories

- Cable/round plug connector (KB...) see additional information "Accessories"
- Fixing clamps RR.-010
- Fixing clamps RR.-025