

TRANSMITTER OC35-P SENSOR OCNT 25

Owner's Manual

ORBIT CONTROLS AG

Zürcherstrasse 137
CH-8952 Schlieren/ZH

Tel: +41 1 730 2753

Fax: +41 1 730 2783

info@orbitcontrols.ch
www.orbitcontrols.ch

- ✓ Input for 1k Ω to 100k Ω Potentiometers
- ✓ Two independant Outputs
 - Current Output 4-20mA
 - Voltage Output 0-10V
- ✓ Fast response Time
- ✓ For 35 mm DIN - rails
- ✓ Supply 24V DC

OC35P-DAY is an analog transmitter for potentiometric sensors. It converts the mechanical linear or rotational movement into a proportional analog output signal. Two outputs are available, 0 - 10V and 0/4 - 20mA. The current output can be set for 0 or 4mA inside the transmitter.



OC35-P has very high accuracy, stability and very attractive price.

Potentiometric sensors between 1k Ω and 100k Ω can be connected. For rotative sensors the output signal can be calibrated in degrees e.g. 0 ... 345 ° = 4 - 20mA.

The connected sensor is supplied with a stable voltage reference. Very high input impedance of the transmitter assures very small current flowing through the potentiometer's rider.

Fast response time makes the transmitter suitable for applications in which the generated signal has to follow very fast the mechanical movements of the sensor.

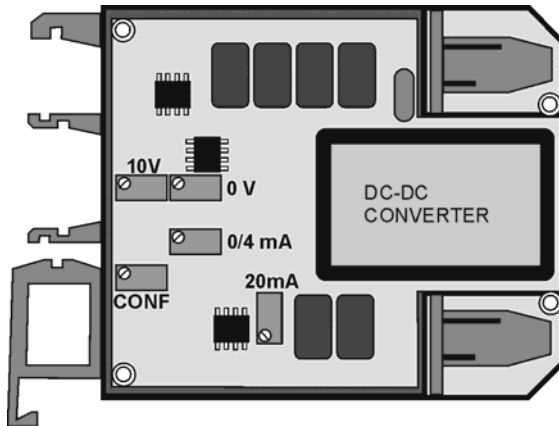
The transmitter is supplied with 24VDC and is enclosed in a cabinet for DIN 35mm rails. The connection is via screw terminals.

SPECIFICATIONS

Input:	1k Ω - 100k Ω potentiometric sensors with three terminals.
Input Impedance:	10 G Ω .
Voltage Output:	0 - 10V, max. load of 10k Ω . Response time 5ms.
Current Output:	0/4-20mA, load 0 ... 300 Ω . 0 or 4mA are selectable.
Accuracy:	$\pm 0.1\%$ from range.
Tempco	25ppm/K.
Excitation	1.235V, max. load 10mA.
Supply:	24VDC $\pm 10\%$, 2W.
Case:	25 x 60 x 70mm, weight 75g.
Terminals:	Screw terminals

CALIBRATION

The adjusting potentiometers can be accessed after the cabinet has been opened.



Calibration Steps

The transmitter has been precisely calibrated at the factory. When recalibration is required, follow the next steps:

1. Connect the sensor and set it to zero position, corresponding to output signals 0V and 0mA or 4mA
2. Adjust **0V** for 0V at the output.
Adjust **0/4 mA** for 0mA oder 4mA at the output, whatever required.
3. Set the sensor for the maximum displacement, corresponding to 10V and 20mA.
4. Adjust **10V** for the output of 10.00V.
Adjust **20mA** for the output of 20.00mA.
5. Adjust **CONF** to obtain the same output current of 20mA with or without a resistor of 270 Ohm connected externaly to the current output.

Repeat the calibration steps when required.

Example: Transmitter connected to a linear displacement sensor OCNT 25

