

**OPTION-AO
J-C-C6-T**

**AMPLIFIED OUTPUT SIGNAL FOR LOAD-CELL AND TORQUE
METER**

The option converts the signal from the Wheatstone bridge (mV/V) in a robust industrial standardized 4 to 20 mA signal.



Features

- Internal or external mounting depending of the size of the transducer
- If external : Cylindrical housing in nickel plated brass or rectangular box in aluminium (low-cost version)
- Protection :
 - o If internal : see transducer
 - o Cylindrical housing : IP67
 - o Rectangular box : P65
- Available version with shifted zero for bidirectional utilization for versions 4..20 mA and 0..10 V.
- Version 2 wires : Protection against wrong cabling

Applications

The options C, J and T of SENSY are perfectly designed to the following applications

- Transmission of a weight measurement in an industrial site (4..20 mA)
- Acquisition of a force measurement in a PLC
- Transmission of a load measurement in the festoon of an overhead cranes (4..20 mA)

Functions

- Correspond to the standardized analogue input signal of PLC and industrial measuring systems
- 4..20 mA version: Allow a signal transmission up to 1,000 m with a good immunity to electromagnetic disturbance.

| Specifications | J | C | C6 | T (0...10V) | T (-10...0...+10V) | |
|--|----------------------|------------------------------|---------------------------------------|----------------------|------------------------|-------------|
| Type | 4-20mA | 4-20mA | 4-20mA (ATEX and/or IECEx and/or CSA) | 0...10V | -10...0...+10V | - |
| Wiring | 3 | 2 | 2 | 3 | 3 | wires |
| Input range | 0.5...2.5...5.5 mV/V | 0.5...2.5...5.5 mV/V | 0.5...2.5...5.5 mV/V | 0.5...2.5...5.5 mV/V | 0.5...2.5 mV/V | - |
| Impedance of Wheatstone bridge | 350...5000 | 350...5000 | 1000...5000 | 350...5000 | 350...5000 | Ohm |
| Sensor excitation | 5VDC | 0.5...2** | 0.5...2** | 5VDC | 8VDC | - |
| Output signal | 4...20 (24 max) | 4...20 (24 max) | 4...20 (24 max) | 0...10 (11 max) | -10...0...+10 (11 max) | - |
| Load resistance | <= 1000 | <= 750 | <= 750 | > 5000 | > 10000 | Ohm |
| Reference excitation voltage. | 24 VDC | 24 VDC | 24 VDC | 24 VDC | 15 VDC* | - |
| Power supply | 13...30 | 9...30 | 9...30 | 13...30 | 15...18* | - |
| Current consumption (max.) | <= 45 | Same as the measured signal. | Same as the measured signal. | <= 23 | <= 25 | mA |
| Combined error | < ± 0.02 | < ± 0.02 | < ± 0.02 | < ± 0.02 | < ± 0.02 | % F.S. |
| Bandwidth | 0...1000 | 0...1000 | 0...1000 | 0...1000 | 0...1000 | Hz |
| Reference temperature | 23 | 23 | 23 | 23 | 23 | C |
| Nominal temperature range | -10...+45 | -10...+45 | -10...+45 | -10...+45 | -10...+45 | C |
| Service temperature range | -40...+85 | -40...+85 | -40...+85 | -40...+85 | -40...+85 | C |
| Temperature coefficient of zero signal | < ± 0.025 | < ± 0.05 | < ± 0.05 | < ± 0.025 | < ± 0.025 | % F.S./10 C |
| Temperature coefficient of the sensitivity | < ± 0.064 | < ± 0.14 | < ± 0.14 | < ± 0.064 | < ± 0.065 | % F.S./10 C |

* : 24VDC is acceptable if impedance of Wheatstone bridge >= 1000 Ohm

** : According of the impedance of Wheatstone bridge

F.S.: full scale - Specifications subject to change without notice