

Signal Amplifier / filtering electronics unit with +/-4 Volt DC output

Features

- Can work directly on a non-regulated power supply from +8...30VDC
- Internal zero setting of sensor offset
- Reverse polarity protected
- Output is surge-protected
- High-stability supply to the sensor
- Protection against wrong sensor wiring
- Zero and span adjustment by means of high quality potentiometers
- Electronics parts hermetically enclosed
- Can optionally be supplied to order with programmable low-pass filter
- High-pass filter also optional
- Custom made connectors also possible

Description

The NV4a is used for excitation, for filtering and for standardisation of the different of SEIKA sensors output signals. The symmetrical output signal permits a problem-free signal transfer to measurement equipment as an oscilloscope AD-cards in PC's or to other OEM equipment.

Even with a high range of changes at the power supply to the unit, the NV4a will act very stable both for offsetting of the sensors zero point and on supplying an stable +/-4 VDC output linear with the sensors working range.

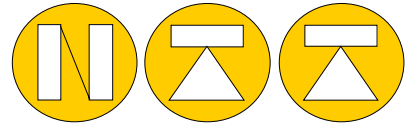
Application

The NV4a is used everywhere where a SEIKA sensor should be combined with a user-specific demand for high voltage output / special wishes for filtering of the sensor signal, plus where a non-stabilised 8...30VDC supply can be an advantage for the system

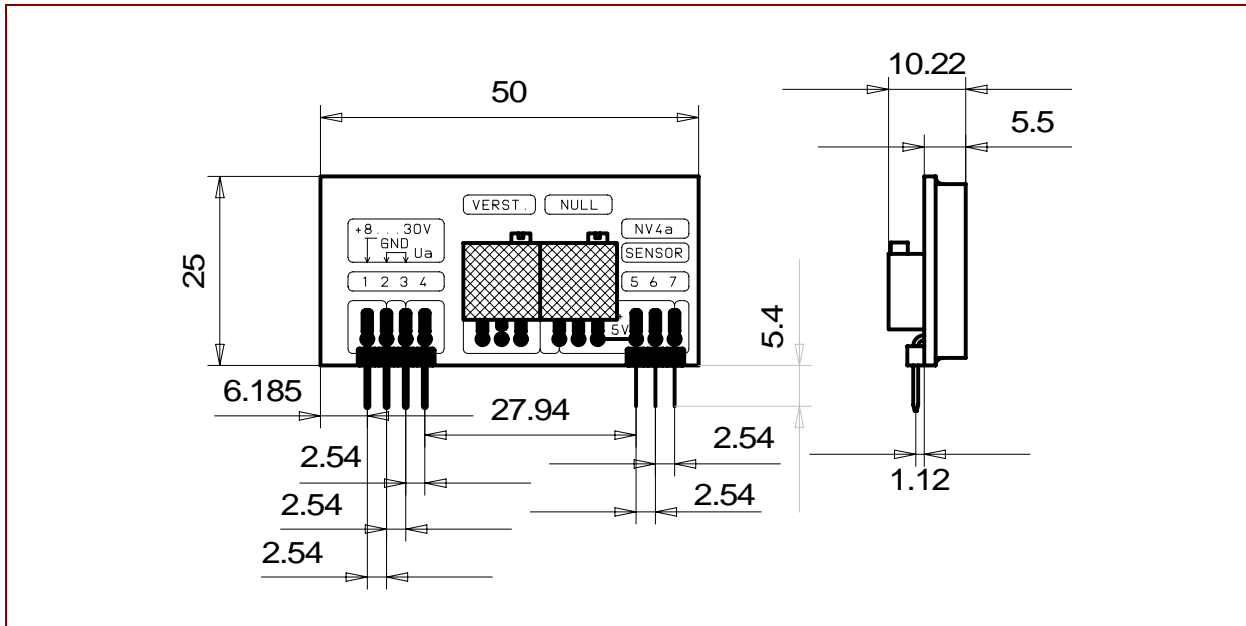
For 0..5VDC output, please have a look at NV8a and 4..20mA output = NV6a is the correct solution.

TECHNICAL DATA

Dimensions	Please see drawing
Supply voltage	+8..+30Volt (reverse polarity protected to -70Volt)
Current consumption without sensor	Approx.2mA
Operating temperature	0...70°C
Sensor supply	+5.00 Volt
Sensor supply –temperature drift	20ppm /°C
Max. Output voltage	±4 Volt
Active measuring range equal to sensor range	±3.5 Volt
Offset range	2.4 ...2.6 Volt (larger for e.g. B1 in Z-direction)
Output impedance	Approx.100 Ω
Power supply noise	30μV _{pp}
Signal audio-frequency noise at standard sensor	Approx.80dB
Frequency range	0...10Hz, 0...200Hz, 0...2kHz plus custom wishes
Electrical connections	Pin connector 2.54mm, length 5.7mm, Ø 0.63mm gold plated optional soldering pads



Dimensions



Pin connections

