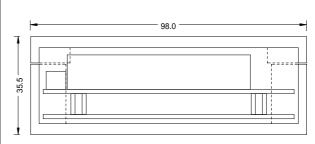
## Signal adapter hol500

### **DUO-Signal-Converter**





### Description

The DUO-Signal-Converter provides the option of recording two different types of measurement quantities independently of each other and preparing them for further processing.

Since you can connect two different sensors to the instrument, the simultaneous monitoring of vibration and temperature, for example, is possible with one instrument. The advantage of this is that by monitoring two measurement quantities, you can achieve double the safety for your machines and the installation costs are lower.

The evaluation electronics in the instrument converts the incoming sensor signals, which are then output in the form of 0 to 20mA or 4 to 20mA analog signals. The warning devices that follow can then be actuated. Thanks to this early detection, increased wear and the concomitant costs are avoided, and the life of the monitored machines or equipment is extended.

A high degree of reliability is ensured by the integrated sensor, the robust aluminum die cast cabinet as well as the simple installation and operation of the DUO-Signal-Converter.

## **Application fields**

In all technical applications in which oscillations occur, the DUO-Signal-Converter is a valuable aid. Here are a few examples for vibration monitoring:

- Fans, pumps and blowers
- Jolters, decanters and separators
- Hoisting and transportation devices
- Drives
- Machine tools, processing machines and production machines

date: 15.03.05 document: hol500\_pd\_e.doc further information: www.holthausen-elektronik.de



# Signal adapter hol500

#### **DUO-Signal-Converter**

The technical design of the DUO-Signal-Converter varies according to the requirements that you place on the device. Many physical or electrical values can be registered and processed with suitable sensors. Measuring sensors for pressure, strength, sound, light, temperature but also fill level, speed or revolutions can be combined meaningfully. The version described below includes vibration and temperature measurement. The connection for the temperature sensor (e.g. Pt100) can be built up in four wire technology.

Owing to its flexible structure, holthausen elektronik GmbH can fulfill customer wishes and produce specific versions. Should you have any questions, we are always at your service.

### **Technical Data (example)**

operation voltage 24V DC  $\pm 10\%$  current input max. 120mA temperature range 0°C to 65°C

type of protection IP 65

case aluminium pressure-die-casting case dimensions 98 x 34 x 64mm (B x H x T)

weight approx. 480g

vibration measuring

type of sensor vibration sensor with constant current-supply (ICP)

sensor sensitivity 100mV/g

measuring value vibration velocity in mm//s

measuring range 10mm/s, 20mm/s, 50mm/s or 100mm/s, switchable

frequency range 10 to 1kHz (-3dB)

filter Butterworth, 60dB/dec resp. 18dB/okt signal assessment arithmetical mean value, adjusted to RMS

analog output 4 to 20mA, current source

load max. 500Ohm

#### temperature measuring

type of sensor Pt100

sensor connection 2-, 3- or 4-cable circuit

adjustable by jumpers in case

measuring value temperature measuring range 0°C to 100°C

signal assessment arithmetical mean value analog output 0 to 20mA, constant current

load max. 500Ohm

