LIEDTKE Antriebstechnik GmbH & Co.KG **Böcklerstraße 1, D-31789 Hameln**
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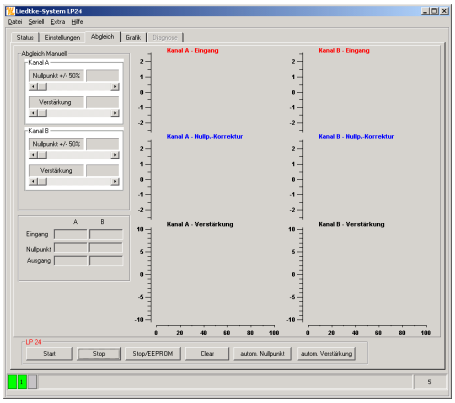
LP 24 Digital measuring amplifier

For all tensile force devices,
Torque and force measurements

The measuring chain consists of the Electronic Measuring Amplifier and the electromechanical Equipment for the capture of tensile or compressive forces or torques.

The amplifier has been designed as a Surface- mounted device and features a 4- Line display, 2- channel design, microprocessor- controlled input signals: Channel A: 0..10mV, channel B: 0..10mV, channel A+B: 0..10mV (synchronous signal conversion); output signals: 0..10V, 0..20mA, 4..20mA
Permanent synchronous import and synchronous output of the signals from channels A, B und A+B
The measuring sensors are isolated from the system earth and from the signal processor.
For basic amplification, the input amplifier can be switched with a reed relay.
Dynamic measurement as an option at f= 1 kHz

PID- controller for Tension-/ Torque-/ Dancer control (optionally).



Operation via membrane keyboard or programming software for Windows® (included in the scope of supply) via serial interface, data logger for graphic based evaluation of analog signals,
19“-cassette enclosure with front panel 3U / 21UP, snap- on foot for rail mounting.

Technical data:

Bridge resistance	120...800 Ω
Bridge supply	5VDC
Temperature influence on bridge supply	< 2,1mV / K
Sensitivity	1mV... 0,1V Adjustable
Appropriate amplification	1....2.000 (12.000)
Input resistance	> 1 MΩ
Linearity	< 0,1 %
Measuring frequency range	0...5Hz with filter
Output for indicating instrument	1 mA indicating instrument
Voltage output 0...10VDC	Load resistance R > 1 kΩ
Current output 0(4)...20mA	Load resistance R < 500 Ω
Zero suppression	± 15 mV
Power supply	24 VDC
Power consumption	max. 8 VA
Degree of protection	IP20
Chassis	19 “ rack- mounted enclosure, 3U / 21UP with snap- on foot, connection via terminal strip

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Signal output

Signals are output on three DA converters with filtering:

Channel A	:	Converter 1
Channel B	:	Converter 2
Channel (A+B)/2		Converter 3

Output signal standard: Adjustable
Absolute
Positive bridge signal
Bridge signal

Further features

- Separate current loop
- Two additional analog inputs
- Scalable display
- Online actual value display on a PC
- Operation via RS 232 interface/ USB port
- Automatic/ manuel modification
- Scalable data logger function; additional text editor

Options:

Option 1: Limit frequency 1kHz includes modification of input low- pass filter to maintain the scanning theorem as well as modification of the low- pass filter on the DA- converter side; Software adaption of the signal processor; as a result, the measuring amplifier has a single channel.

Option 2: Modification of low- pass filter to change the input- and output frequency responses.