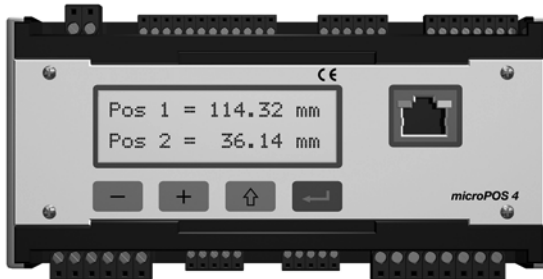


Servo Unit Micro



FEATURES

- 2 individual servo channels
- Analogue inputs: Position transducer 0 - 10V and pressure/force transducer $\pm 25\text{mV}$
- Analogue outputs: $\pm 10\text{V}$, ± 100 , ± 50 or 20mA
- Updating frequency: 200Hz
- Modbus communication by RS-485
- Power supply: 24VDC
- Compact installation on DIN rail
- CE marking, meets EMC and LVD

DESCRIPTION

MicroPOS 4 is a digital servo unit, suitable for very accurate positioning of two separate electrohydraulic actuators with position transducers.

Together with load cells or pressure transducers, microPOS 4 forms a strong unit for accurate regulation to set force values or pressure values.

MicroPOS 4 utilises bus communication via MODBUS-RTU, resulting in rapid and safe data transmission, and the possibility to have several servo units connected to a master control system by a common cable.

A separate communication port is used for setting of servo parameters by a computer with terminal programme.

MicroPOS 4 handles two servo channels in position, force or pressure control. Set values for the servos are transmitted from the master control system and compared to feedback

values, measured by position transducers or load cells. Parameters in the servo unit are used to control maximum speed, acceleration, and working range for the servo channels.

Inputs and outputs of the servo unit can be programmed for different functions like: commanded stop, service, "In position", alarm from the internal function check.

MicroPOS 4 will save all set parameter values in an internal memory, even after a power failure.

MicroPOS 4 is a compact unit, designed for installation on a DIN rail. Connection via plug-in screw terminals.

APPLICATIONS

Terminalfönster		
ONLINE QUICK SET-UP		
PARAMETER NAME	SERVO 1	SERVO 2
Cylinder length	- 200 mm	200 mm
Cylinder value	8.208	8.208
Zero offset fine	0.00 mm	0.00 mm
Proportional gain	1.30	1.30
Integration factor	2.0000 /s	2.0000 /s
Knee value	300.00 mm	300.00 mm
Positive velocity	200 mm/s	200 mm/s
Negative velocity	200 mm/s	200 mm/s
Acceleration control	On	On

F8=Return

Presentation of control parameters via servo TERM.

SPECIFICATIONS

TECHNICAL DATA

Analogue inputs, 2 channels
 Input Range
 Position Transducer 0 - 10V
 Load Cell or Pressure Transducer $\pm 25\text{mV}$
 Input Filter 100Hz
 Resolution 16 bits (65536)
 Unlinearity $< 0.01\%$ of range
 Inaccuracy $< 0.01\%$ at 25°C

ANALOGUE REFERENCE VOLTAGE OUTPUT

Output Voltage + 10V
 Load $< 200\text{mA}$, $> 50\%$
 Output Deviation $< 35\text{ppm}/^\circ\text{C}$

ANALOGUE OUTPUTS, 2 CHANNELS

Output Range, Current $\pm 100, 50, 20\text{mA}$
 Load $< 100, 200, 500\%$
 Output Range, Voltage $\pm 10\text{V}$
 Resolution 12 bits
 Unlinearity $< 0.1\%$ of range

COMMUNICATION, 2 PORTS FOR TERMINAL AND MASTER CONTROL UNIT RESPECTIVELY

Transmission RS-485, MODBUS-RTU
 2-wire or 4-wire
 Baud Rate 2400 - 115200 baud
 Isolation 500 VDC
 Cable Length $< 1000\text{m}$

DIGITAL INPUTS

Number of Inputs 5 with common return connector
 Low Level - 30 V to + 8 V
 High Level + 18 V to + 30 V
 Type of Input Opto-isolated
 Isolation 500 VDC

DIGITAL OUTPUTS

Number of Outputs 5 with common return connector
 Type of Output Relay, normally open
 Contact Data $< 1\text{A}$ at 30 VDC
 Isolation 500 VDC

POWER SUPPLY

Rated Voltage 24VDC
 Voltage Range 19 - 29VDC
 Start Current $< 2\text{A}$
 Consumption $< 0.5\text{A}$

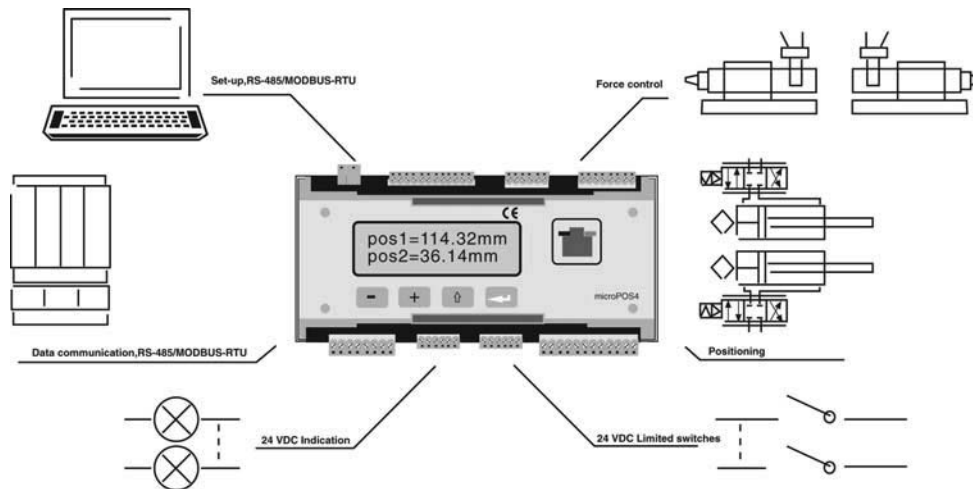
ENVIRONMENT

Temperature Range 0 - 50°C at operation
 - 20... + 70°C at storage
 Sealed to IP20

MECHANICAL DATA

Width, height, depth 150 x 90 x 110mm

POSSIBILITIES



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