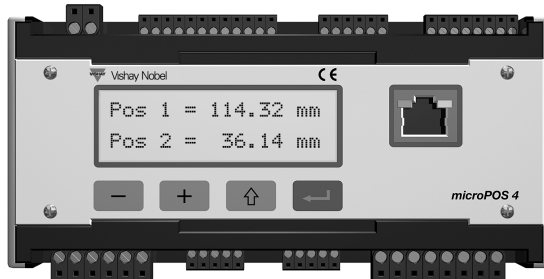


## Servo Unit Micro



### FEATURES

- 2 individual servo channels
- Analogue inputs: Position transducer 0 - 10V and pressure/force transducer  $\pm 25\text{mV}$
- Analogue outputs:  $\pm 10\text{V}$ ,  $\pm 100$ ,  $\pm 50$  or  $20\text{mA}$
- 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

Terminalfenster		
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  $\pm 25mV$   
 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 < 200mA, > 50%  
 Output Deviation < 35ppm/°C

**ANALOGUE OUTPUTS, 2 CHANNELS**

Output Range, Current  $\pm 100, 50, 20mA$   
 Load < 100, 200, 500%  
 Output Range, Voltage  $\pm 10V$   
 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 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 < 1A at 30 VDC  
 Isolation 500 VDC

**POWER SUPPLY**

Rated Voltage 24VDC  
 Voltage Range 19 - 29VDC  
 Start Current < 2A  
 Consumption < 0.5A

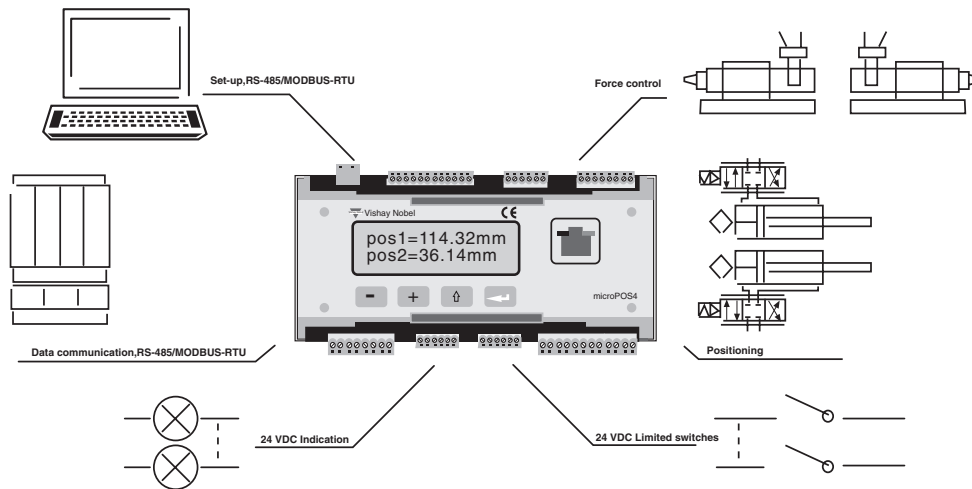
**ENVIRONMENT**

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**



## Disclaimer

All product specifications and data are subject to change without notice.

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