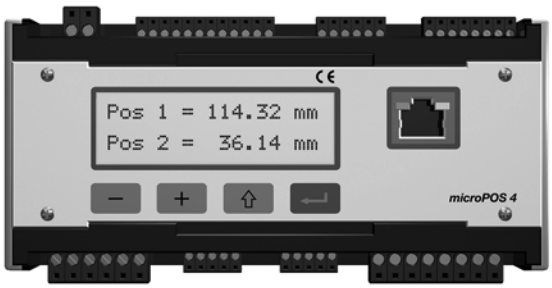
Servo Unit Micro



FEATURES

- 2 individual servo channels
- Analogue inputs: Position transducer 0 - 10V and pressure/force transducer ± 25mV
- Analogue outputs: ± 10V, ± 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 reglation 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	± 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, > 50¾
Output Deviation	< 35ppm/°C

ANALOGUE OUTPUTS, 2 CHANNELS

Output Range, Current	± 100, 50, 20mA
Load	< 100, 200, 500¾
Output Range, Voltage	± 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