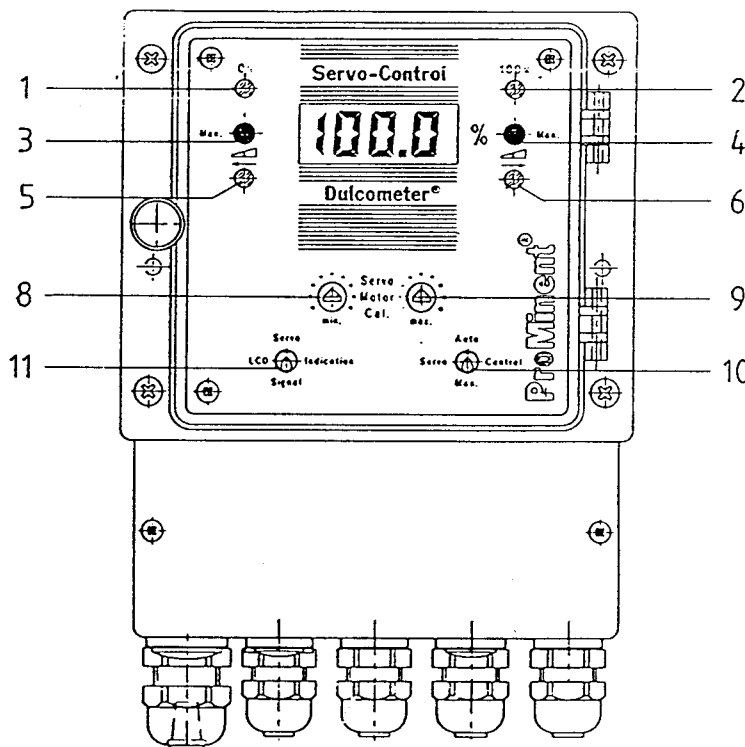


Operating Instruction Positioning control system "Servo Control" Type SCWS 1000

| | |
|---------------------|-------------------|
| 230 V / 0 ... 20 mA | Code No. 924988.9 |
| 115 V / 0 ... 20 mA | Code No. 924989.7 |
| 230 V / 4 ... 20 mA | Code No. 924967.3 |
| 115 V / 4 ... 20 mA | Code No. 924966.5 |



The Dulcometer® servomotor-type actuator control has been designed especially for servomotor-type actuators of metering pump stroke adjustment mechanisms and control valves. It is conceived as a continuous proportional-position control system. While it is easy to operate, it offers any comfort that one would desire of an automatic controller within a closed loop system. It is capable of adapting positioning motors to almost any control system requiring proportional control action. The convenient plastic housing is suitable for wall and panel mounting.

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Controls and operating instructions:

3 1/2-digit LCD display (7) to indicate percent of full stroke length from 0 ... 100 % via a 1000 Ohm position feedback potentiometer (other resistance values are possible). The actuator position will be indicated dependend of the position of change - over switch (11) both in the automatic mode and the manual mode.

Manual / Automatic mode selector switch (10) In the "Man." position the positioning motor can be remotely controlled by means of the white spring-return buttons. In the "Auto" position there is a continuous linear relation between the value of the input signal and the position of the positioning motor.

Green LED (1) "motor position 0%" As this LED lights up a relay pulls in, the switch status of which can be picked up via terminals 7 and 8 of the terminal strip. The contact is voltage-free, the contact load max. 2 A.

Green LED (2) "motor position 100%" As this LED lights up a relay pulls in, the switch status of which can be picked up via terminals 12 and 13 of the terminal strip. Again, the contact is voltage-free, the contact load max. 2 A.

White spring-return button (3), for remote manual control of the actuator in the direction of **CLOSURE**. Pressing this button causes a relay to pull in, which drives the motor in the desired sense of rotation. The relay contact is voltage-free and can be loaded by max. 2 A. Note: Actuation of Makro-TZ servo-motor requires an additional motor relais! The switch status of this relay is indicated by a **yellow LED (5)**, which lights up when the motor is running.

White spring-return button (4), for remote manual control of the actuator in the direction of **OPENING**. Pressing this button causes a relay to pull in, which drives the motor in the desired sense of rotation. The relay contact is voltage-free and can be loaded by max. 2 A. Note: Actuation of Makro-TZ servo-motor requires an additional motor relais! The switch status of this relay is indicated by a **yellow LED (6)**, which lights up when the motor is running.

Minimum potentiometer (8) As a rule this potentiometer serves as a zero adjuster, that is, when the actuator is in the "closed" position, the potentiometer is to be adjusted so that the stroke length display (7) reads "0%". If a basic flow output is desired, the stroke length display can be set to "0%" although the actuator is not in the fully "closed" position.

Maximum potentiometer (9) As a rule this potentiometer serves as a slope adjuster, that is, when the actuator is in the "open" position, the potentiometer is to be adjusted so that the stroke length display (7) reads "100 %". If a limitation of the flow output is desired, the stroke length display can be set to "100%" although the actuator is not in the fully "open" position.

Operating Instruction Positioning control system "Servo Control" Type SCWS 1000

Change-over switch (11) If the switch is in the "servo" position, the display indicates percent of the position of the feedback potentiometer. With the switch in the "signal" position, the display indicates percent of the full input signal.

Attention: With connection of inductive loads RC-Combinations on necessary.

Options: WS 01: Standard signal output

A standard signal output 0/4 ... 20 mA is available for remote transmission of the actuator position (Part No. 114949.3). The indicating instrument is to be connected to terminals 17 (+) and 18 (-) of the terminal strip.

Technical data:

Power supply: 230 V / 50/60 Hz / 0 ... 20 mA Code No. 924988.9
115 V / 50/60 Hz / 0 ... 20 mA Code No. 924989.7
230 V / 50/60 Hz / 4 ... 20 mA Code No. 924967.3
115 V / 50/60 Hz / 4 ... 20 mA Code No. 924966.5

Outputs: 2 sets of voltage-free contacts to close and open the actuator, maximum contact load 2 A
2 sets of voltage-free contacts, closing in the 0 and 100 % stroke-length positions, maximum contact load 2 A
1 standard 0/4 ... 20 mA signal output, optional (WS 01)

Inputs: or 1 standard 0/4 ... 20 mA signal input
or 1 standard 0/0,2 ... 1 V signal input
or 1 standard 0/1 ... 5 V signal input
or 1 standard 0/2 ... 10 V signal input
1 input for 1000 Ohm position feedback potentiometer

Dimensions: 144 x 175 x 125 mm w x h x d
When panel-mounted: 144 x 120 mm w x h
Panel cut-out: 139 x 115 mm w x h

Terminal plan:

