## SpaceLogic MG600C

## Installation

Hot media hazard. Before removing an actuator from an installed valve, the valve should be isolated and the system de-pressureised. The pipe work should be de-pressureised before a valve and actuator assembly is removed
 or the valve is opened in an open circuit. Work should only be carried out by a competent engineer.





## Wiring examples

## FLOATING



50 VA transformer required per actuator


## PROPORTIONAL



2-10 V

50 VA transformer required per actuator


Modulating control, 24 V AC supply to the controller
(EN)


Function in the Description
"OFF" pos. "ON" position

| 1 | In | Out |
| :--- | :--- | :--- |
| 2 | Modulating | Increase/decrease |
| 3 | - | Sequence |
| 4 | $0-10 \mathrm{~V}$ | $2-10 \mathrm{~V}$ |
| 5 | $0-5 \mathrm{~V}, 2-6 \mathrm{~V}$ | $5-10 \mathrm{~V}, 6-10 \mathrm{~V}$ |
| 6 | $60 \mathrm{~s},(0 \%)^{*}$ | $300 \mathrm{~s},(50 \%)^{*}$ |
| 7 | Normal | Inverted |
| 8 | Normal | Linear/Logarithmic |
| 9 | Operation | End position adjust |

Valve closing screw direction
Control (not at Sequence)
Sequence control
Voltage range
Part of voltage range
Running time (Security function)
Direction of movement
Valve characteristic
Operation/End position adjustment

There are nine switches in a row on the circuit board. On delivery ('Factory'), all switches are in the "OFF" position.

1 Valve Closing Screw DirectionIN / OUT

IN direction of movement efines the actuator as fitted to a stem up closed valve. All Venta VG210/310 valves are all stem up closed.

OUT is used on Stem down closed valves (Switch No. 1 should not be ON when fitted to Venta VG210/310 valves)

## 2 Control signal-MOD / INC

SpaceLogic actuators can either be controlled by a vari-able direct voltage, a so called modulating signal (MOD), or by an increase/decrease signal (INC/DEC)

3 Sequence or parallel control---/SEQ
With sequence (or parallel) control (SEQ), two actuators/valves can be controlled by only one control signal.

For each of these you can choose which part of the voltage range to use, the upper one, 5-10 V (6-10 V) or the lower one, 0-5 V (2-6 V).

If the switch NORM / INV is in the NORM position, the higher voltage corresponds to $100 \%$ flow and the lower one to $0 \%$ (direct acting).
With INV position you will get the opposite function (reverse action).

4 Voltage range- 0 -10/2-10
You can choose whether to use the control signal voltage range $0-10 \mathrm{~V}$ or $2-10 \mathrm{~V}$.

5 Part of voltage range-

$$
0-5,2-6 / 5-10.6-10
$$

Voltage range in use, OFF position of switch selects the lower range, $0-5 \mathrm{~V}(2-6 \mathrm{~V}$ with switch 4 ON ). ON position of switch selects the higher range, $5-10 \mathrm{~V}(6-10 \mathrm{~V}$ with switch 4 ON).

If the switch is in the NORM position, the higher voltage corresponds to $100 \%$ flow and the lower one to $0 \%$. To achieve the opposite function, the switch should be put in its INV position (reverse action).

## 6a Running time-60 s/300 s

On increase/decrease control, you can choose a running time between 60 s or 300 s.
With modulating control, the running time is always 60 s .
6b Security function-0\% / 50\%
With 2-10 V control signal you can select which security function in the event of a loss of control signal.
If the actuator is used for heating control and switch 6 is ON (50\%), the actuator will open the valve halfway if the control signal disappears, e.g. if the X 1 connection is unplugged.

If it is desired to have a closed valve, set switch 6 to OFF (0\%).
7 Direction of movement-NORM / INV
When normal direction of movement is used, the screw of the actuator moves inwards (retracts) when the control voltage decreases or if the actuator gets a decrease signal (on a stem up closed VG210/310
valves NORM direction of movement is DIRECT acting closing to close the valve on a decreasing signal).
With the switch NORM / INV, the direction of movement can be changed (reverse action).
8 Linearization-NORM / LIN/LOG
With LIN/LOG selected, the valve characteristics can be modified. The setting LIN/ LOG will make the characteristics of an equally modified percentage (EQM) valve almost linear.
Subsequently, with LIN/LOG selected, a linear valve will operated with "Quick open characteristics". So with a small control signal, the valve will be almost completely open.

Note! For the actuator to register new settings of the switches, the supply voltage must be cut or the manual operation handle lowered, the settings done, and then the handle raised again.

Please refer to illustration on page 2.
(This does not apply to the switch OP/ADJ).

## 9 End position adjustment-OP / ADJ

This switch is used to adjust the end positions when the actuator is commissioned or distrubed.

Momentarily to the switch in the ON position for the actuator to automatically calibrate the end positions of the valve.

| Commercial Reference | Range Name |  | Product Description |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { 880XXXXXXX } \\ \text { MXXX }(\mathrm{X}) \mathrm{A}(\mathrm{X})(\mathrm{X})(-\mathrm{S} 2)(-\mathrm{VB}) \\ \mathrm{MGXXX}(-\mathrm{S}(\mathrm{R}) \mathrm{X})(-\mathrm{W}) \end{gathered}$ | SPACELOGIC <br> VALVES \＆ACTUATORS |  | SPACELOGIC 800 SERIES GLOBE VALVE ACTUATOR SR／NSR SPACELOGIC M SERIES GLOBE VALVE ACTUATOR SR／NSR SPACELOGIC MG SERIES GLOBE VALVE ACTUATOR SR／NSR SPACELOGIC MP SERIES PIBCV ACTUATOR SR／NSR |  |  | －20 |
| MPXXXX（－SRX）（－W） | 有害物质－Hazardous Substances |  |  |  |  |  |
| 部件名称 Part Name | $\begin{gathered} \text { 铅 } \\ (\mathrm{Pb}) \end{gathered}$ | $\begin{gathered} \text { 湬 } \\ \text { (Hg) } \end{gathered}$ | $\begin{gathered} \text { 镉 } \\ \text { (Cd) } \end{gathered}$ | 六价铬 <br> （Cr（VI）） | 多溴联苯 （PBB） | 多溴二苯醚 （PBDE） |
| 属部件 Metal Parts | X | O | 0 | 0 | 0 | 0 |
| 塑料部件 <br> Plastic Parts | 0 | O | 0 | 0 | 0 | 0 |
| 电子件 Electronic | X | 0 | 0 | 0 | 0 | 0 |
| 触点 Contacts | 0 | O | 0 | 0 | 0 | 0 |
| 线缆和线缆附件 Cable \＆Cabling Accessories | 0 | 0 | 0 | 0 | 0 | 0 |

本表格依据 SJ／T11364 的规定编制。
O：表示该有害物质在该部件所有均质材料中的含量均在 GB／T 26572 规定的限量要求以下。
X ：表示该有害物质至少在该部件的某一均质材料中的含量超出 GB／T 26572 规定的限量要求。 （企业可在此处，根据实际情况对上表中打＂$X$＂的技术原因进行进一步说明。）

This table is made according to $\mathrm{SJ} / \mathrm{T} 11364$.
O ：indicates that the concentration of hazardous substance in all of the homogeneous materials for this part is below the limit as stipulated in GB／T 26572.
X ：indicates that concentration of hazardous substance in at least one of the homogeneous materials used for this part is above the limit as stipulated in GB／T 26572

