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Automatic valves
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Switchmaster®

## bar

Opto-electric position indicator for actuators/ valves with many advantages

It's got a lot to offer! The new patented Switchmaster ${ }^{\oplus}$.
A lot of power and a lot of safety e.g. ca. $50 \%$ savings in time and cost for installing and using compared to previous units.

- Rapid comfortable connecting of the cable
Switchmaster ${ }^{\circledR}$ opens and closes in seconds

Easy, rapid mounting of the
telescopic feet
Easy and rapid adjustment of the switching points
Indication of the valve position recognizable from as far away as 30 m

Clear description of flow path.

- . . . also for 3-way or 4-way valves
- Constructional dimensioning prevents wrong mounting
Protection type IP 67 (water-tight)
No brackets needed
Can be used with all DIN 5211 classified actuators

High corrosion resistance and much more - but have a look yourself. .


## Removable

 mounting platese 1. is the foot set to correct height, then all you do is press the clip and the height is safely fixed! Use 2: would you like to have your company logo on the clips?
Left and right?
Everything is possible!

Disconnecting is easy, because it happens outside the casing:
Remove mounting plate
Thread the cable through the opening and connect acc. to the plan
Clip the plate into position, tighten the fixing screw-finished!

Flow path display

The green marking clearly
 shows the open flow path.
Just press-on the marker as required

## Position easily recognized

## from long distances

The display can be easily seen from afar and from all sides and clearly indicates the switching position: red = closed green = open The green marking indicates the flow path.


One foot for all standard dimensions

The foot is always the same: whether left or right, inside or outside Simply rotate the foot $180^{\circ}$ and the Switchmaster ${ }^{\circledR}$ is ready for NAMUR dimensiones of 80 or for 130 mm .

The new generation of position indicator

## (1) Quick-acting closure

The transparent cap with bayonet socket enables rapid and easy opening/closing for connecting and adjusting.

## (2) Electromechanical or inductive?

 The mounting plate is equipped with either micro-switches or inductive switches - i.e. direct switching or acc. to NAMUR.

## (3) Vertically adjustable feet

 Depending on the pinion overlap $(20,30,40$, or 50 mm ), the Switchmaster® can be universally mounted in seconds. Simply mount the feet (without casing) onto the valve, slide the casing over the feet brackets until the pivot with cheeks covers the pinion. Then press the clips and the position is fixed. Brackets are not needed!


## (4) Rapid marking

The flow path of the valve can be easily indicated in seconds by pressing on the green path indicator, not only through valves but multiple valves.


## (5) Universal switching cams

The patented switching cams activate the electromechanical or inductive switches. Inductive switches can be switched in either damped or undamped situations, depending on the adjustment. The switching point is quickly and easily changed by rotating the integrated adjusting tool.
The positive form-fitting onnection between cam and rocker guarantees the stability of the switching point.


## (6 Cap markings

Rotate the cap in the closed position and the Switchmaster ${ }^{\circledR}$ is closed water-tight.
The quick-acting closure lets you to open and close the cap, enabling connecting, adjusting and programming, all within seconds.

## Highly visible flow paths

When using multiple valves (L or T models), the green marking indicates the flow path. The closed routes are indicated by red markings.

| General Data |  | Switchmaster ${ }^{\text {® }}$-versions |  |
| :---: | :---: | :---: | :---: |
| Mounting measurements: | acc. to VDI/VDE 3845 for flange facing $30 \times 80$ and $30 \times 130$ (see drawing) | Typ M, microswitch Voltage range Current range Switching function | $\begin{aligned} & \text { type SM - M2 (signal "open + closed") } \\ & \text { 4V/DC }-250 \mathrm{~V} / \mathrm{AC} \\ & \text { 1mA } 5 \mathrm{FA} \\ & \text { change-over, contacts gilded } \end{aligned}$ |
| Materials: |  |  |  |
| Cap: | Lexan 143 R | Type D, inductive sensor, direct switching, 3-wire system, with LED Voltage range Constant current Switching function | type SM - D2 (signal "open + closed") <br> type SM - DA (signal "open") <br> type SM - DZ (signal "closed") <br> 9V-36V/DC <br> 200 mA <br> plus switching <br> contact in end position <br> damped or undamped |
| Stem: | Delrin (POM) |  |  |
| Seals: | Perbunan (NBR) |  |  |
| Cable gland/ Nut: | Polyamide (PA) |  |  |
| Other plastic parts: | Bayblend T45, ABS |  |  |
| Hexagon socket screw: | Stainless steel (A2-70) |  |  |
| Protection: | IP67, VDE 0470/EN 60529 |  |  |
| Temperature range: | $-20^{\circ} \mathrm{C}$ up to $+70^{\circ} \mathrm{C}$ | Type $\mathbf{N}$, inductive sensor, Namur $\cong$ DIN 19234/EN 50227 + LED explosion-proofed, EExia IIC T6 rated voltage output current <br> Switching function | type SM - N2 (signal "open + closed") <br> type SM - NA (signal "open") <br> type SM - NZ (signal "closed") <br> 8V/DC <br> damped $<1 \mathrm{~mA}$ <br> undamped > 3mA <br> in end position <br> damped or undamped |
| Display \& switching range: | $0^{\circ} \ldots . .90^{\circ}$ pivoting angle |  |  |
| Cable gland: | with strain relief Clamp range $7-13 \mathrm{~mm}$ |  |  |
| Cable: | $\emptyset 7-13 \mathrm{~mm}$, max. $2,5 \mathrm{~mm}^{2}$ |  |  |
| Weight: | ca. $0,325 \mathrm{~kg}$ |  |  |

## Automatic-valves



