



## Mounting block Limit switch box Solenoid valve

SOMAS pneumatic actuators type A can on request, be equipped with various accessories. Information about limit switch box, proximity switches and solenoid valves is present on following pages.

### Mounting block

The mounting block is used as a standard solution to assembly accessories to the actuator. The block is an adapter between actuator and the accessories, which make the mounting simple. All accessories following the standard VDI/VDE 3845 can easily be mounted. The mounting block is a patent pending construction and is available in different sizes depending on actuator size.

Nuts are secured to avoid that they get lost when changing i.e. a positioner.

The actuator is equipped with a lower type of driver when the mounting block is used.





## Limit switch box

The limit switch box can also be used as junction box for the solenoid valve. The box can be equipped with different types of mechanical and proximity switches. Non-step adjustment of cam/flags for activating of switches.

Mounting standard VDI/VDE 3845 to the actuator, allows easy mounting by using the mounting block between box and actuator.

Visual indication in the cover (big position indicator of 3D-model) allows good display of the valve position. Also available with feedback [4 – 20 mA] or AS-i Bus.



## Data, switch box

<b>Protection class</b>	IP 67, NEMA4/4X
<b>Material</b>	Painted aluminium / Makrolon (cover)
<b>Cable inlet</b>	M20x1.5

Different types of switches for installation in the limit switch box.

## Data for electromechanical proximity and switches

### Electromechanical switch type SPDT

<b>Operating voltage</b>	5A/250 VAC – 3 A/24 VDC
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Silver-coated contacts.

### Proximity switch type AC/DC

<b>Sensor range</b>	0–3.2 mm
<b>Operating voltage</b>	24 – 240 V AC (50 – 60 Hz) alt. 24 – 210 V DC
<b>Temperature</b>	–25 to 80 °C
<b>Protection class</b>	IP 68
<b>Indication</b>	LED

Short circuit protection.

### Proximity switch type PNP

<b>Sensor range</b>	0 – 3.2 mm
<b>Operating voltage</b>	10 – 30 V
<b>Temperature</b>	–25 to 70 °C
<b>Protection class</b>	IP 67
<b>Indication</b>	LED

Short circuit and polarity reversal protection.

EMC directive EN 60947-5-2

### Proximity switch type Namur (Ex ia)

<b>Sensor range</b>	0 – 1.6 mm
<b>Operating voltage</b>	8 V
<b>Temperature</b>	–25 to 100 °C
<b>Protection class</b>	IP 68

EMC directive EN 60947-5-2

DIN EN 60947-5-6 (Namur)



## Directly mounted proximity switches

This design eliminates the need of a box. The switch is directly mounted to the actuator and contains two limits (open/close). A rotary puck with adjustable flags for switch triggering is connected to the actuators drive shaft. Visual indication is included in the rotary puck. This solution has a good resistance against vibrations. As an alternative solution the solenoid wiring can be done through the switch. This reduces the wiring and connection points. On large actuators a bracket is used for mounting the switch.



## Data for directly mounted proximity switches

### Proximity switches, universal current

2 switches AC/DC Normally Open (2 wire)

<b>Operation voltage</b>	20– 250 V AC/DC
<b>Sensor range</b>	0 – 3.2 mm
<b>Temperature</b>	–25 to +80 °C
<b>Indication</b>	2 x LED
<b>Protection class</b>	IP 65, II
<b>Connection</b>	Screen RTF cable, 2 m
<b>Protection class</b>	IP 67, II
<b>Connection</b>	PVC cable, 2 m

EMC directive EN 60947-5-2, EN 55011 Class B

### Proximity switches, DC

2 switches DC PNP Normally Open (3 wire)

2 switches DC PNP/NPN Normally Open (2 wire)

<b>Power supply</b>	10 – 36 V DC
<b>Sensor range</b>	0 – 3.2 mm
<b>Temperature</b>	–25 to +80 °C
<b>Indication</b>	2 x LED
<b>Protection class</b>	IP 67, II
<b>Connection</b>	PVC cable, 2 m

EMC directive EN 60947-5-2, EN 55011 Class B

Short circuit, polarity reversal and overload protection.

### Proximity switch for AS-I bus

2 limit switches and integrated connection of solenoid valve.

2 inputs (position)

1 output (solenoid valve)

Protection class	IP 67
Temperature	–20 to +70 °C
Connection	connector, thread M12

T-connection and cable between transmitter and solenoid valve is included.

EMC directive EN 50081-1, EN 50082-2

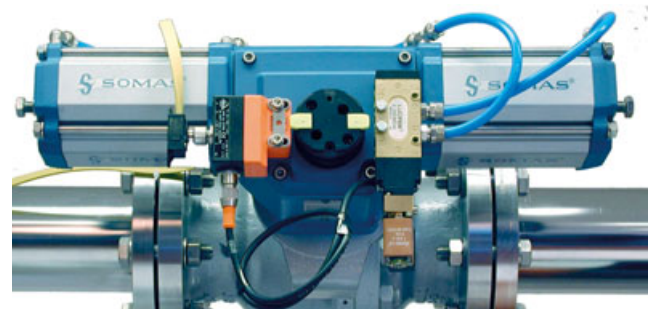
#### Input

<b>Input type</b>	PNP
<b>Operating voltage</b>	20 – 30 V DC
<b>Power supply</b>	Trough AS-i bus

#### Output

<b>Indication</b>	2 x LED
<b>Current limit</b>	100 mA

Short circuit protected





## Solenoid valves

5/2 valves for actuator control.

Valve body made of aluminium (anodic protection).

Connection between solenoid valve and actuator is made of plastic hose (standard) or stainless steel tube (option).

### 341 P01

Solenoid valves for actuator A11 – A34

<b>Connection</b>	G 1/8"
<b>Capacity</b>	400 NI/min
<b>Protection Class</b>	IP 65
<b>Process temperature</b>	-25 to +80 °C
<b>Ambient temperature</b>	-25 to +50 °C



### 341 P02

Solenoid valves for actuator A41 – A 52

<b>Connection</b>	G 1/4"
<b>Capacity</b>	1400 NI/min

For the rest data, see 341.P01

#### Coils

24/48/110/115/220/230 VAC (50 Hz), 2 W  
110/115 V AC (60 Hz), 2 W  
24 V DC, 2,5 W

<b>Protection class</b>	IP 65
<b>Temperature</b>	-40 to +90 °C

DIN 43650 B

## Special functions

Contact SOMAS for further information concerning

- Fail-safe system
- Lock-up system
- Quick opening function

*SOMAS reserves the right to make improvements without prior notice.*

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