

Datasheet Accessories for SOMAS actuators type A

Si-806 EN

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**Mounting block, Limit switch box,
Solenoid valve**



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Product Information

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.





Limit switch box

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

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

Electromechanical switch type SPDT

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

Proximity switch type PNP

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

Short circuit and polarity reversal protection.

EMC directive EN 60947-5-2.

Proximity switch type AC/DC

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

Short circuit protection.

Proximity switch type Namur (Ex ia)

Sensor range	0 – 1.6 mm
Operating voltage	8 V
Temperature	–25 to 100 °C
Protection class	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.





Proximity switches, universal current

2 switches AC/DC Normally Open (2 wire)

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

Power supply	10 – 36 V DC
Sensor range	0 – 3.2 mm
Temperature	–25 to +80 °C
Indication	2 x LED
Protection class	IP 67, II
Connection	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	
Input type	PNP
Operating voltage	20 – 30 V DC
Power supply	Trough AS-i bus

Output	
Indication	2 x LED
Current limit	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

Connection	G 1/8"
Capacity	400 NI/min
Max. pressure drop	10 bar
Protection Class	IP 65
Process temperature	–25 to +80° C
Ambient temperature	–25 to +50° C

341 P02

Solenoid valves for actuator A41 – A 52

Connection	G 1/4"
Capacity	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, 110 V DC, 2,5 W

Protection class	IP 65
Temperature	–40 to +90 °C

DIN 43650 B

Special functions

Contact SOMAS for further information concerning.

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



Filter Regulator

A filter regulator should be used for the supply air to the positioner in order to prevent dirt coming in to the positioner and causing control problems.

Type BIT Filter Regulator 1/4" 08 RMSA



Technical specification

Port connection	1/4"
Degree of filtration	5µm
Max inlet pressure	13 barG
Semi automatic drain	



Type SMC AW20K-F02CE1/4"



Technical specification

Port connection	1/4"
Degree of filtration	5µm
Max inlet pressure	10 barG
Automatic drain	



Type SMC AW30KDE 3/8"



Technical specification

Port connection	3/8"
Degree of filtration	5µm
Max inlet pressure	10 barG
Automatic drain	

SOMAS reserves the right to make improvements without prior notice.



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