

# Series SWCN electronic vacuum/pressure switches

With digital display High precision, easy to use



- » Compact and lightweight
- » Digital indicator: precised electronic insertion with two separated switch outputs
- » Switching point and hysteresis can be programmed with a membrane keypad
- » Upper and lower limit values can be programmed through two PNP switch outputs

#### **APPLICATIONS:**

- electronic vacuum/pressure switch for safety monitoring, optimization of cycle times or energy saving devices;
- it can be installed directly on the gripping point of a handling system;
- setting of the limit vacuum value and continuous vacuum control;
- perfectly suitable for customer needs.

#### **ELECTRIC CONNECTION:**

the device is available with hardwired cable of 2 meters or can be supplied with M8 connector.

Accessories and extensions have to be ordered separately. Codes can be found at the end of this section.

#### **GENERAL DATA**

Type of pressure/vacuum switch
Port with external thread G1/8 and internal thread M5
Display 3 digit display with membrane keypad for the values set up
LED integrated LED indicators for switching state
Electric connection with M8 4-pole connector or pre-wired cable of 2 meters



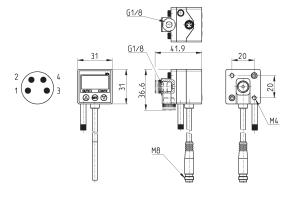
#### **CODING EXAMPLE**

SWCN	-	V01	-	P3	-	2
SWCN	SERIES					
V01	SET PRESSURE RANGE: V01 = from -1 bar to 1 ba P10 = from 0 bar to 10 ba					
Р3	TYPE OF ELECTRIC CONNEC P3 = 2 PNP outputs + 1 ar P4 = 2 PNP outputs	TION: nalog output 1 - 5 V DC (this version	n is available with 5-pole o	cable only)		
2	ELECTRIC CONNECTION: 2 = cable of 2 meters M = M8 4 pin connector					

# Vacuum/Pressure switch Series SWCN



1 = brown (+) 2 = white (OUT 2) 3 = blue (-) 4 = black (OUT 1) Analogic output = orange



Mod.

SWCN-V01-P3-2

SWCN-V01-P4-2

SWCN-V01-P4-M SWCN-P10-P3-2

SWCN-P10-P4-2

SWCN-P10-P4-M



#### **TECHNICAL DATA**

CHARACTERISTICS				
	SWCN-V01 SWCN-P10			
Rated pressure range (set-value)	-1 ÷ 1 bar 0 ÷ 10 bar			
Setting pressure range (it can be displayed on the screen)	-1 ÷ 1 bar -1 ÷ 10 bar			
Nithstand (Maximum) pressure	3 bar 15 bar			
Fluid	Air, non-corrosive gases, incombustible gases			
Set pressure resolution: kPa	0,1 -			
MPa	- 0,001			
Kgf/cm² bar	$0,001   0,01 \ 0,001   0,01$			
Psi	0,01 0,1			
InHg mmHq	0,1 - 1 -			
mmH2O	0,1			
ower supply voltage	12-24 VDC ± 10%, ripple (P-P) 10% or less			
urrent consumption	≤55mA			
PNP switch output	2 outputs with open collector			
	max. load current of 80mA max. power supply voltage of 24VDC			
	residual voltage ≤ 1V (with load current of 80mA)			
tepeatibility (switch output)	≤ ± 0,2% F.S. ± 1 digit			
nalog output (where foreseen)	1 - 5V ± 5% F.S. 1 - 5V ± 2,5% F.S.			
	((within the linearity range: ≤ ± 1% F.S.)			
lysteresis: Hysteresis mode Window comparator mode	Adjustable Fixed (3 digits)			
lesponse time	≤ 2,5ms (chattering-proof function: 24ms, 192ms and 768ms)			
output short circuit protection	YES			
segment LED display	3 ½ digit (sampling rate of 5 times/sec)			
ndicator accuracy	$\leq$ ± 2% F.S. ± 1 digit (ambient temperature: 25 ± 3°C)			
ndicator	green LED (OUT1), red LED (OUT2)			
nvironment: Protection class	IP65			
Temperature	Operation: 0 ÷ 50°C			
	Storage: -20 ÷ 60°C			
	(without condensation or freezing)			
Relative humidity	Operation/Storage: 35 ÷ 85% (without condensation)			
Withstand (Max.) voltage	1000 VAC in 1 min ((between case and lead wire)			
Insulation resistance				
mantation teasiating	$50M\Omega$ min. (at $500VDC$ between case and lead wire)			
Vibration	Total amplitude 1.5 mm			
	10Hz-55Hz-10Hz scan for 1 minute 2 hours each direction of X, Y and Z			
- ·				
Shock	980 m/s² (100G) 3 times each direction of X, Y and Z			
Changes due to temperature	≤±2% F.S. of detected pressure (25°C) within the operating temperature range			
Port size	G1/8 - M5			
ead wire	Oil-resistance cable(0,15 mm²)			
	About 105 g for the version with 2-meter lead wire			
	About 71 g for the version with male connector			

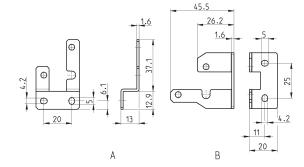
SERIES SWCN ELECTRONIC VACUUM/PRESSURE SWITCHES

# Mounting bracket Mod. SWCN-B



Supplied with:

- 4 fixing screws M4x5 ISO 724 (fine pitch)
- 1 fixing bracket for surface mounting (A)
- 1 fixing bracket for wall mounting (B)



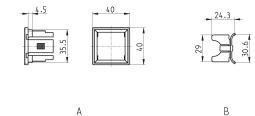
Mod. SWCN-B

#### Panel mounting set Mod. SWCN-F



Supplied with:

- 1 pressure switch holder (A)
- 2 panel mounting brackets (B)

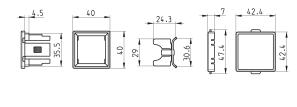


Mod. SWCN-F

## Panel mounting set + transparent cover Mod. SWCN-FP



- Supplied with:
   1 pressure switch holder (A)
- 2 panel mounting brackets (B)
- 1 transparent cover (C)



В

Α

C

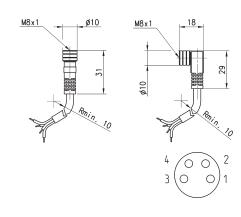
Mod. SWCN-FP

#### Circular M8 4-pole connectors, Female



With PU sheathing, non shielded cable. Protection class: IP65

Type of connector	Cable length (m)
straight	2
straight	5
right angle (90 degrees)	2
right angle (90 degrees)	5
	straight straight right angle (90 degrees)

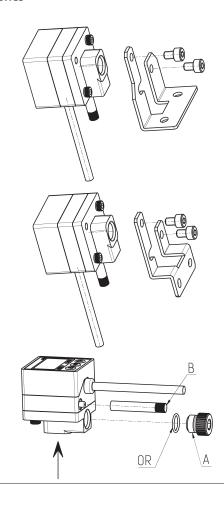


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### Example of mounting with bracket Mod. SWCN-B and standard accessories

A: ADDITIONAL POWER SUPPLY In case of use, please unscrew plug A from one side and mount it on the other one.

B: Use of the AIR FILTER TUBE to reach the IP 65 protection class.



#### Example of mounting with panel mounting set Mod. SWCN-F

- A = PANEL MOUNTING SET MOD. SWCN-F B = PRESSURE SWITCH MOD. SWCN-...
- C = PANEL

