



## Mechanical Differential Pressure Switches



measuring  
•  
monitoring  
•  
analysing

### SCH-28



- Setting range: 0.1 ... 1 bar to 0.2 ... 10 bar
- Temperature: Max. +100 °C
- Material: Stainless steel
- Connection: G 1/2" male, 1/2" NPT male, 1/4" NPT female, 1/2" NPT female



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**Description**

These differential pressure switches are IP65, and suitable for a variety of applications such as: food industry, cannery, pharmaceutical, petrochemical, conventional and nuclear power station where it is required to control differential pressure, level, flow. The sensing element is a metallic diaphragm with two metallic bellows and acts directly on the microswitch through a self-centering pivot. The simplicity of the design, without levers, cams or similar mechanism, gives the unit an exceptionally long working life.

Set-point adjustment: Internal, micrometric adjustable  
 Protection: IP 65 as per IEC 529  
 Electrical wiring: Terminal strip  
 Earth contacts: 1 internal and 1 external  
 Process temperature: Max. 100 °C (+212 °F)  
 Ambient temperature: -25 ... +65 °C (-13 ... +149 °F)  
 Thermal drift: ≤ 0.05% / °C (≤ 0.027% / °F)  
 Process connection: AISI 316 stainless steel  
 Elastic element: AISI 316 stainless steel diaphragm with AISI 321 stainless steel bellows; PTFE gasket  
 Case: AISI 304 stainless steel  
 Cover: AISI 304 stainless steel, bayonet lock  
 Flushing plugs: AISI 316 stainless steel  
 Tag: AISI 304 stainless steel, etched  
 Weight: 3.7 kg

**Technical Data**

Ranges: 0...1 bar/0...10 bar  
 Electrical specifications: 1...2 SPDT microswitches (see microswitches table)  
 Differential (dead band): Fixed (value as per setting range table), adjustable (microswitch code E/F) from 10% ... 50% of setting range  
 Repeatability: ≤ 1% of the full setting value

**Setting Ranges**

Code	Setting range	One side static pressure	Both side static pressure	Differential 1 micro <sup>1)</sup>	Differential 2 micro <sup>1)</sup>
B2	0.1...1 bar	10 bar	25 bar	60 mbar	80 mbar
B4	0.1...2.5 bar	15 bar	25 bar	60 mbar	80 mbar
B5	0.2...4 bar	15 bar	25 bar	70 mbar	100 mbar
B6	0.2...6 bar	15 bar	25 bar	100 mbar	150 mbar
B7	0.2...10 bar	15 bar	25 bar	120 mbar	170 mbar

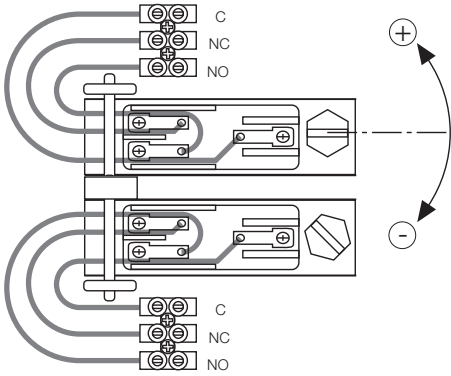
<sup>1)</sup> differential and minimum set-point values for microswitches cod. I, L, N, R, U, V are 300% of those shown in table

**Order Details** (Example: SCH-28 B2 A I2 1 B)

Model	Range	Microswitch Type	Process Connection (F)	Electrical Connection (F1)	Options
SCH-28	...B2... = 0.1...1 bar ...B4... = 0.1...2.5 bar ...B5... = 0.2...4 bar ...B6... = 0.2...6 bar ...B7... = 0.2...10 bar	...A = standard, single ...B = standard, double ...I = goldplated, single ...L = goldplated, double ...M = inert gas filled, single ...P = inert gas filled, double ...N = goldplated and inert gas filled, single ...R = goldplated and inert gas filled, double ...E = adjustable differential, single ...F = adjustable differential, double ...U = inert gas filled VDC, single ...V = inert gas filled VDC, double	I2 = ¼-18 NPT F N4 = ½-14 NPT I4 = ½-14 NPT F G4 = G ½ A	1 = R ½-ISO 7/1 2 = R ¾-ISO 7/1 3 = ½-14 NPT 4 = ¾-14 NPT A = M 20 x 1.5	N = none B = bottom connection S = degreasing for oxygen M = 2" stake's mounting bracket W = wall mounting bracket T = tropicalisation Y = special (specify in clear text)



**Set-point Adjustment**



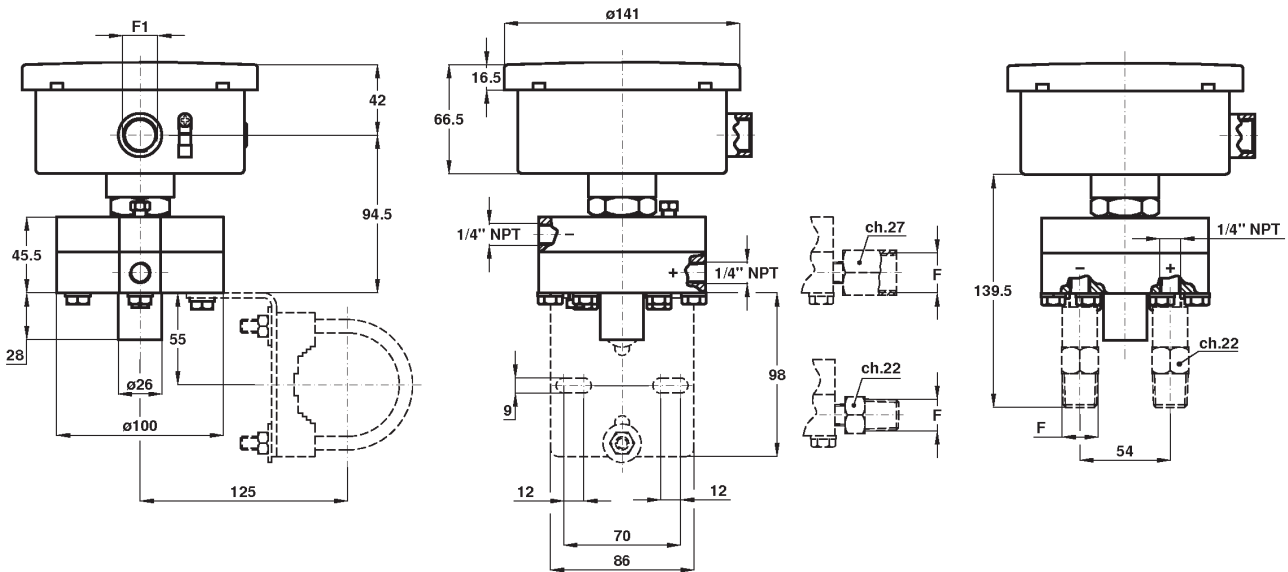
**Microswitch Electrical Rating**

Ohmic load

Single	Double	Type	250V <sub>AC</sub>	125 V <sub>AC</sub>	24 V <sub>DC</sub>
A	B	standard	15 A	15 A	0.1 A
I	L	goldplated		1 A	0.1 A
M	P	inert gas filled	15 A	15 A	0.1 A
N	R	goldplated and inert gas filled		1 A	0.1 A
E	F	adjustable differential	20 A	20 A	0.1 A
U	V	inert gas filled VDC	15 A	15 A	6 A

**Dimensions (mm)**

Example with 2" bracket yoke mount



F1
1 = R 1/2 ISO 7/1
2 = R 3/4 ISO 7/1
3 = 1/2-14 NPT
4 = 3/4-14 NPT
A = M20 x 1.5

F
I2 = 1/4-18 NPT F
N4 = 1/2-14 NPT
I4 = 1/2-14 NPT F
G4 = G 1/2 A

