

# differential pressure switches ATEX flameproof enclosure

# 3.49



**Certificate :  
CESI 04 ATEX 027**

These flameproof electrical apparatus comply with European Directive ATEX 94/9/EC, for group II and category 2 GD. They are suitable for a variety of uses in hazardous zones 1, 2, 21 and 22 in which the use of flameproof instrument is required. The sensing element is a metallic diaphragm with 2 metallic bellows and acts directly on the microswitch through a self-centering pivot. The simplicity of the design, without levers, cams or similar mechanisms, gives the unit an exceptionally long working life.

## 3.49 - Standard Model

**Type of ignition protection:** Ex d IIC T6 as per EN 60079-0, EN 60079-1 and Ex tD A21 IP65 T85°C as per EN 61241-0, EN 61241-1.

**Protection:** IP 65 as per IEC 529.

**Ranges:** 0...250 mbar / 0...600 mbar.

**Electrical specifications:** N. 1...2 SPDT microswitches, or N. 1 with adjustable differential. (see microswitches table)

**Differential:** fixed.

**Repeatability:**  $\leq 1\%$  of the full setting value.

**Set-point adjustment:** internal, micrometric adjustable.

**Earth contacts:** N. 1 internal, N. 1 external.

**Process fluid temperature:**  $-4...+140^{\circ}\text{F}$  ( $-20...+60^{\circ}\text{C}$ ).

**Ambient temperature:**  $-4...+149^{\circ}\text{F}$  ( $-20...+65^{\circ}\text{C}$ ).

**Thermal drift:**  $\leq 0,027\% / ^{\circ}\text{F}$  ( $\leq 0,05\% / ^{\circ}\text{C}$ ).

**Process connection:** AISI 316 st.st.

**Elastic element:** AISI 316 st.st. diaphragm with N. 2 AISI 321 st.st. bellows; PTFE gasket.

**Case:** aluminium, blue polyurethane painted.

**Cover:** aluminium, beige polyurethane painted.

**Tag:** AISI 304 st.st., silk-screen painted.

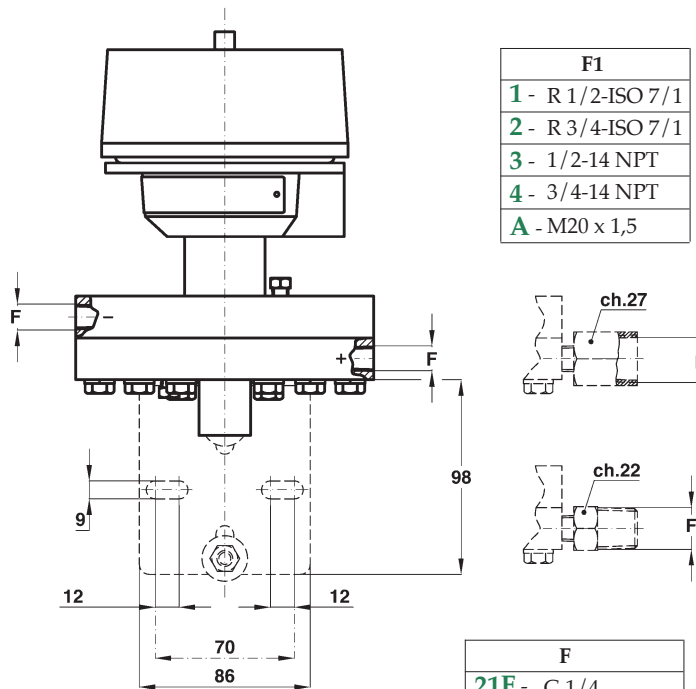
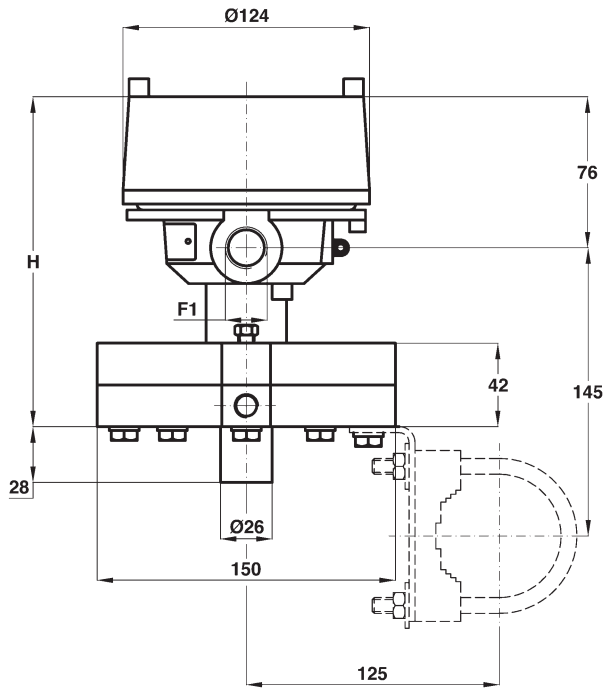
**Tell-tale vents:** polypropylene.

**Flushing plugs:** AISI 316 st.st.

**Weight:** 14.77 lbs (6,7 kg).

Setting ranges	One side static pressure	Both side static pressure	Differential 1 micro (1)	Differential 2 micro (1)
20...250 mbar	2,5 bar	4 bar	10 mbar	15 mbar
25...400 mbar	4 bar	4 bar	16 mbar	20 mbar
35...600 mbar	4 bar	4 bar	20 mbar	30 mbar

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

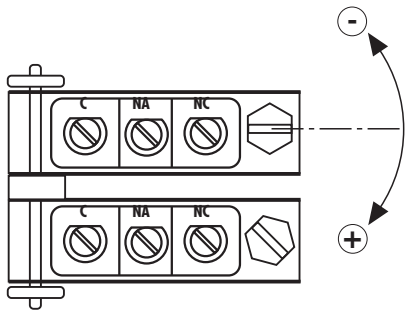


F1	
1	R 1/2-ISO 7/1
2	R 3/4-ISO 7/1
3	1/2-14 NPT
4	3/4-14 NPT
A	M20 x 1,5

F	
21F	G 1/4
23F	1/4-18 NPT
43F	1/2-14 NPT
43M	1/2-14 NPT M

dimensions : inches (mm)

**Set- point adjustment**



**MICROSWITCHE**  
ohmic load

Single / Double	Type	250	125	24
		Vac	Vac	Vdc
C/D	std.	15A	15A	0,1A
G/H	SPLASH	15A	15A	0,1A
I/L	goldplated		1A	0,1A
M/P	inert gas filled	15A	15A	0,1A
N/R	goldplated and inert gas filled		1A	0,1A
S/T	SPLASH VDC	15A	15A	6A
U/V	inert gas filled VDC	15A	15A	6A

**"HOW TO ORDER" SEQUENCE**

Section / Model / Set-point Adjustment / Microswitch / Electrical connection / Process connection / ATEX / Options					
3 / 49	C, D, G, H	1	21F	2D2	
	I, L, M, P	2	23F		
	N, R	3	43F		
	S, T, U, V	4	43M		
		A			