

# differential pressure switches ATEX flameproof enclosure

# 3.48



CE  II 2 GD Ex d IIC T6 Ex tD A21 IP65 T85°C

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.

## 3.48 - 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.

**Certificate:** no. 04 ATEX 027, issued by CESI - Milano, notified body no. 0722.

**Ranges:** 0...1 bar / 0...10 bar.

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

**Differential:** fixed, or adjustable 10%...50% of setting range (see microswitches table).

**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.

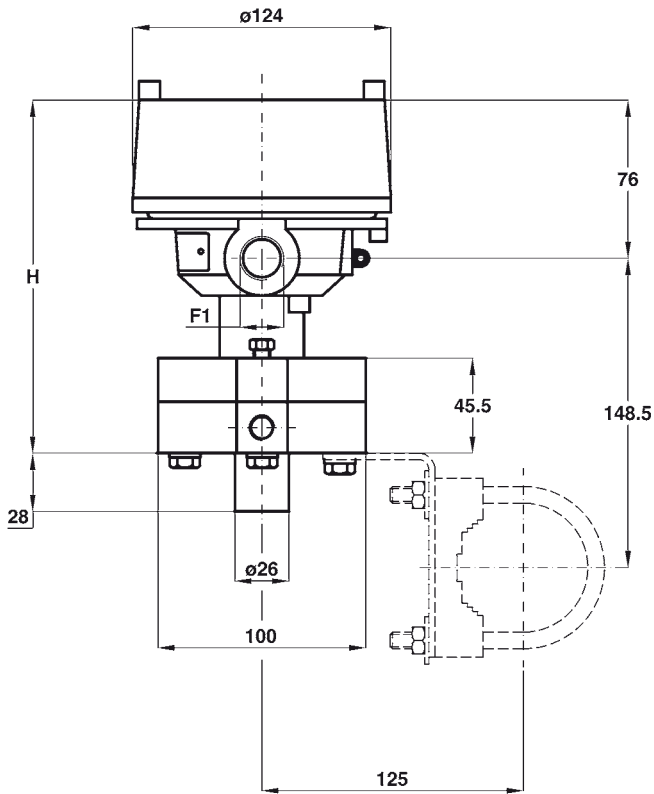
**Tell-tale vents:** polypropylene.

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

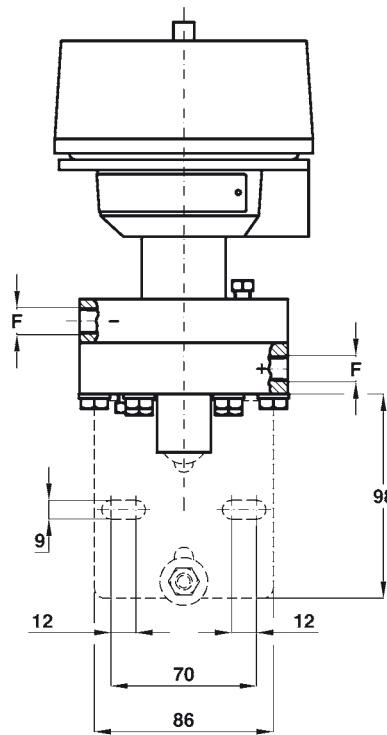
**Weight:** 9.25 lbs (4,2 kg).

Setting ranges	One side	Both side	Differential	Differential
	static pressure	static pressure	1 micro (1)	2 micro (1)
0,1...1 bar	10 bar	25 bar	60 mbar	80 mbar
0,1...2,5 bar	15 bar	25 bar	60 mbar	80 mbar
0,2...4 bar	15 bar	25 bar	70 mbar	100 mbar
0,2...6 bar	15 bar	25 bar	100 mbar	150 mbar
0,2...10 bar	15 bar	25 bar	120 mbar	170 mbar

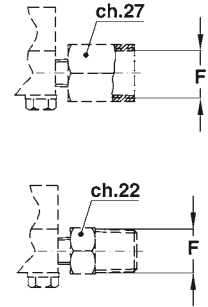
1) differential and minimum set-point values for microswitches cod. I, L, N, R, S, T, U, V are 300% of those shown in table.



dimensions : inches (mm)

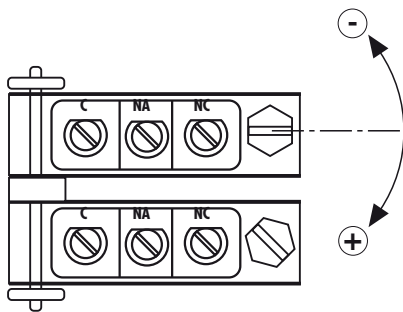


F1	
1	R 1/2-ISO 7/1
2	R 3/4-ISO 7/1
3	1/2-14 NPT
4	3/4-14 NPT
A	M20 x 1,5



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

**Set- point adjustment**



**MICROSWITCHES**  
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
E	adjustable dead band	20A	20A	0,1A
S/T	SPLASH VDC	15A	15A	2A
U/V	inert gas filled VDC	15A	15A	2A

**"HOW TO ORDER" SEQUENCE**

Section / Model / Set-point Adjustment / Microswitch / Electrical connection / Process connection / ATEX / Options  
**3**    **48**    **C, D, G, H**    **1**    **21F**    **2D2**  
**I, L, M, P**    **2**    **23F**  
**N, R, E**    **3**    **43F**  
**S, T, U, V**    **4**    **43M**  
**A**