

differential pressure switches ATEX flameproof enclosure

3.48



CE **Ex** 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: ≤ 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°F (-20...+60 °C).

Ambient temperature: -4...+149°F (-20...+65 °C).

Thermal drift: ≤ 0,027% / °F (≤ 0,05% / °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.

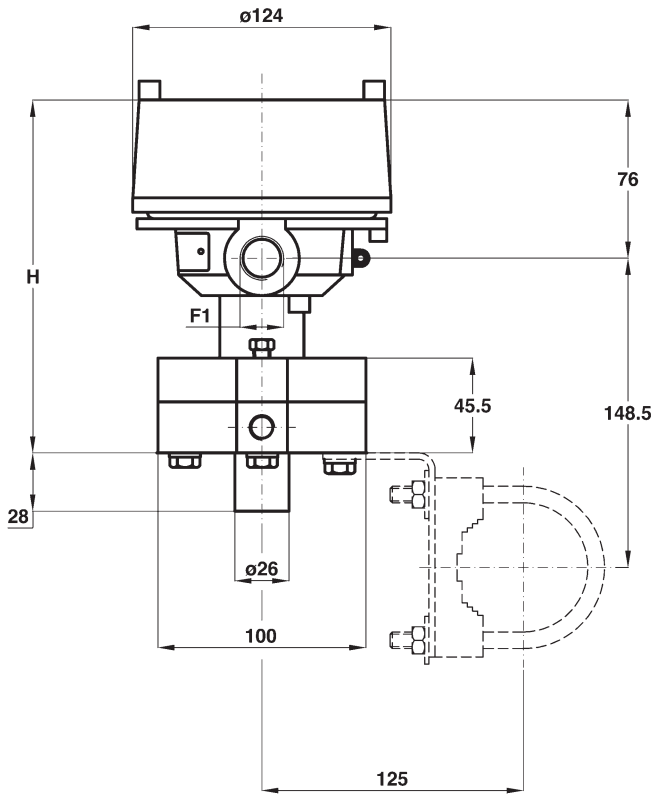
Tell-tale vents: polypropylene.

Flushing plugs: AISI 316 st.st.

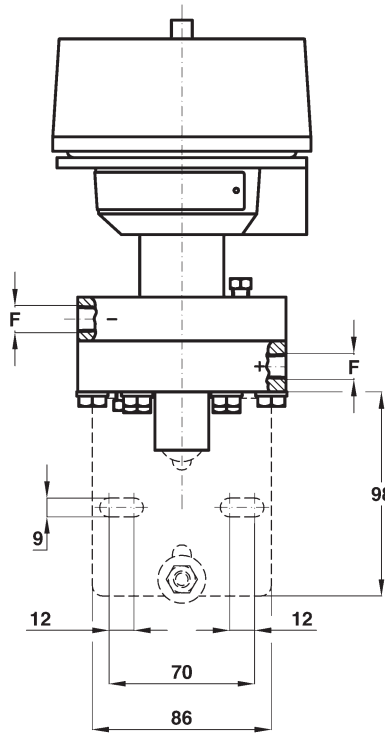
Weight: 9.25 lbs (4,2 kg).

| 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 |

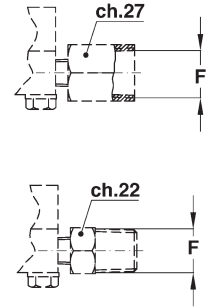
1) differential and minimum set-point values for microswitches cod. I, L, N, R, S, T, U, V are 300% of those shown in table.



dimensions : inches (mm)

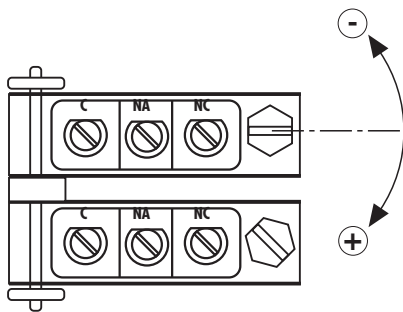


| F1 | |
|----|---------------|
| 1 | R 1/2-ISO 7/1 |
| 2 | R 3/4-ISO 7/1 |
| 3 | 1/2-14 NPT |
| 4 | 3/4-14 NPT |
| A | M20 x 1,5 |



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

Set- point adjustment



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 |
| E | adjustable dead band | 20A | 20A | 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 | 48 | | C, D, G, H I, L, M, P N, R, E S, T, U, V | 1 2 3 4 A | 21F 23F 43F 43M | 2D2 | |