

differential pressure gauges with double Bourdon tube, DS 4" (100mm)

MD18



These instruments are used to check filter obstructions, pressure drops, flow rate differences, level, measurements and generally a difference between two pressures of one or different circuits. The measuring element is formed by two Bourdon tubes, acting on the same movement. In this way the pointer shows only the difference between the two pressures corresponding respectively to upstream and downstream pressure of the circuit.

2.18.1 - Standard Model

Accuracy class as per EN 837: 2,5 for range 0...6 *psi* (0...0,4 bar);
1,6 for ranges $\geq 0...10$ *psi* (0...0,6 bar).

Ambient temperature: -13...+149°F (-25...+65 °C.)

Process fluid temperature: max. +212°F (+100 °C);
max +149°F (+65 °C) when filled.

Protection: IP 55 as per IEC 529 (IP 65 when filled).

Thermal drift: $\pm 0,8\%$ every $\pm 50^\circ\text{F}$ (10 °C) of ambient temperature.

Process connection: AISI 316 st.st.

Elastic element: AISI 316 L. st.st. Bourdon tube, seamless.

Case: st.st.

Ring: st.st. polished, bayonet lock.

Window: plastic.

Movement: stainless steel.

Dial: aluminium, white with black markings.

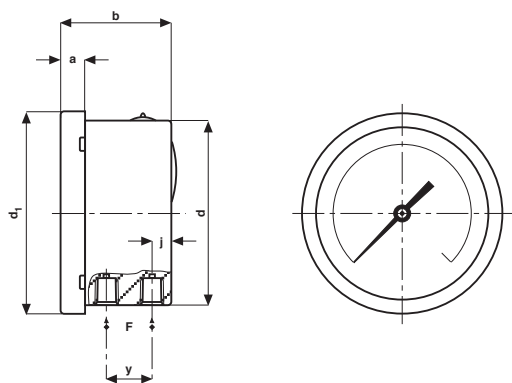
Special dial: ranges different from standard, custom artworks available on request.

Pointer: adjustable, aluminium, black.

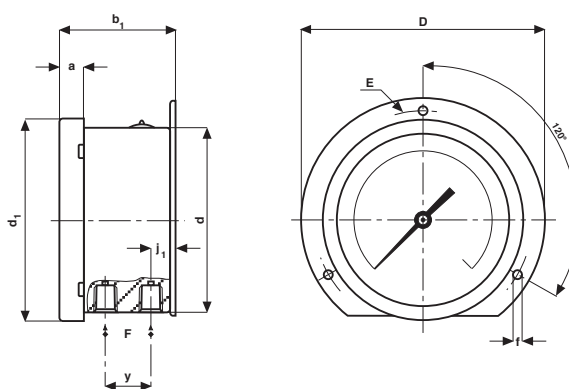
Differential Δp (1) : <i>psi</i> (bar)	Static pressure, both sides or side "+": <i>psi</i> (bar)	Static pressure, side "-": <i>psi</i> (bar)
0...6 (0...0,4)	10.44 (0,72)	8.70 (0,6)
0...10 (0...0,6)	23.21 (1,6)	14.50 (1)
0...16 (0...1)	58 (4)	23.21 (1,6)
0...25 (0...1,6)	116 (8)	29 (2)
0...40 (0...2,5)	181.30 (12,5)	43.51 (3)
0...60 (0...4)	232 (16)	72.52 (5)
0...100 (0...6)	348 (24)	145 (10)
0...160 (0...10)	580.15 (40)	232 (16)

(1) Other units of measurement upon request.

Damping liquids	Ambient temperature
Glycerine 98%	+60...+150 °F (+15...+65 °C)
Silicone oil	-50...+150 °F (-45...+65 °C)



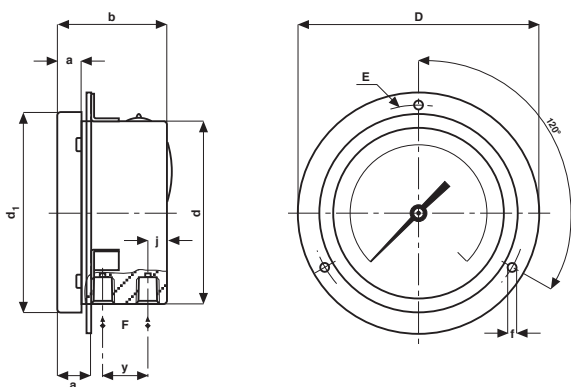
A - Lower connection



Lower (Mounting code A) , with back flange (Option code C)

F	a	a ₁	b	b ₁	d	d ₁	D	E	f	j	j ₁	y	Weight : lbs (kg)
23F 1/4-18 NPT	0.51 (13)	0.67 (17)	2.48 (63)	2.64 (67)	4.35 (110,6)	3.98 (101)	5.28 (134)	4.65 (118)	0.24 (6)	0.54 (13,8)	0.70 (17,8)	0.91 (23)	2.20 (1)

dimensions : inches (mm)



Lower (Mounting code A) , with front flange (Option code F)

OPTIONS

C - Back flange for DN100-150 instruments
F - Front flange for DN100 instruments
C40 - AISI 316 st.st. case and ring
R10 - Glycerine filling
R11 - Silicone oil filling
T01 - Tropicalization
T32 - Safety glass window

"HOW TO ORDER" SEQUENCE

Section / Model / Case / Mounting / Diameter / Range / Process connection / Options
2 / **18** / **1** / **A** / **E** / **23F** / **C, F**
C40...T32