

Differential Pressure Gauges PN 100 with double diaphragm Type 02.16 - DS 100-150

02.16



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

Functional and constructive characteristics

Accuracy: $\pm 2,5\%$ of the full scale value.

Scale amplitude: 180.

Static pressure: max 100 bar

Ambient temperature: $-25...+65$ °C.

Process fluid temperature: $+150$ °C.

Protection: IP 55 as per IEC 529.

Process connection: AISI 316L st.st.

Elastic element: AISI 316L st.st. double diaphragm.

Gasket: VITON and PTFE.

Case: AISI 304 st.st.

Ring: AISI 304 st. st. polished, bayonet lock.

Window: glass, 4 mm. thick.

Movement: stainless steel.

Dial: aluminium, white with black markings.

Pointer: aluminium, micrometric adjustable.

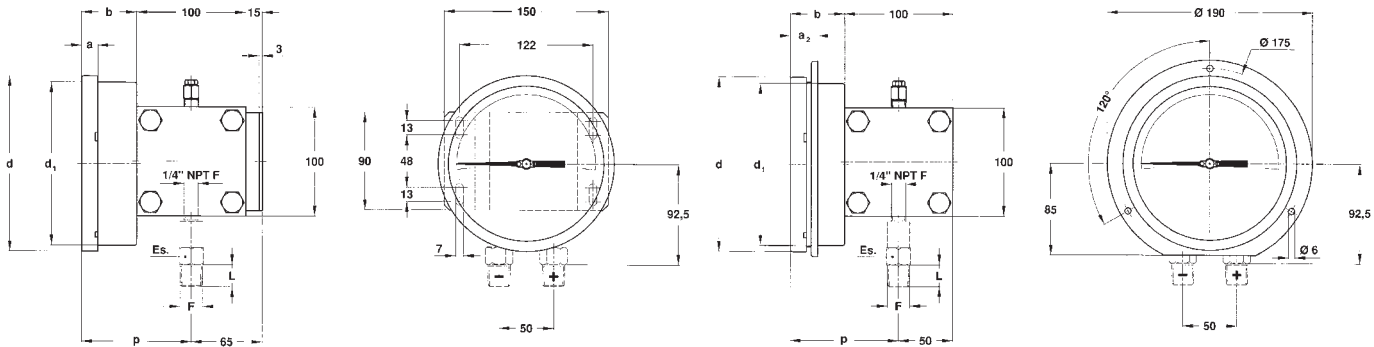
Window gasket and blow out vent: EPDM.

RANGES

| RANGES | mbar | mmH2O | bar | kPa |
|-----------|------|-------|-----|-----|
| 0...0,6 | | | ◆ | |
| 0...1 | | | ◆ | |
| 0...1,6 | | | ◆ | |
| 0...2,5 | | | ◆ | |
| 0...4 | | | ◆ | |
| 0...6 | | | ◆ | |
| 0...10 | | | ◆ | |
| 0...40 | | | | ◆ |
| 0...60 | | | | ◆ |
| 0...100 | | | | ◆ |
| 0...160 | | | | ◆ |
| 0...250 | | | | ◆ |
| 0...400 | ◆ | | | ◆ |
| 0...600 | ◆ | | | ◆ |
| 0...1000 | ◆ | | | ◆ |
| 0...1600 | ◆ | | | |
| 0...4000 | | ◆ | | |
| 0...6000 | | ◆ | | |
| 0...10000 | | ◆ | | |

Differential Pressure Gauges PN 100 with double diaphragm - Type 02.16 DS 100-150

TYPES, DIMENSIONS AND WEIGHTS (mm)



TYPE C

surface mounting, back flange;
lower connections.

TYPE E

panel mounting, front flange;
lower connections.

| DS | Type | F | a | b | d | d ₁ | p | L | ch | Weight |
|-----|------|-----------------|------|------|-------|----------------|-------|----|----|----------|
| 100 | C | 1/2" BSP or NPT | 13 | 48,5 | 110,5 | 101 | 98,5 | 20 | 22 | 4,86 Kg. |
| 150 | C | 1/2" BSP or NPT | 15 | 50,5 | 161 | 149,5 | 100,5 | 20 | 22 | 5,35 Kg. |
| 150 | E | 1/2" BSP or NPT | 25,5 | 50,5 | 161 | 149,5 | 100,5 | 20 | 22 | 5,15 Kg. |

HOW TO ORDER

| | |
|-----------|--|
| 02 | 02- differential and low pressure gauges |
| 16 | 16 - differential press. gauges, MD16 |
| 1 | standard |
| C | C - lower connections - back flange E - lower connections - front flange (DS150 only) |
| E | E - DS100 G - DS150 |
| 0 | standard |
| 0...1 bar | see ranges table |
| 23F | 23F - 1/4" NPT F 41M - 1/2" BSP M 43M - 1/2" NPT M |
| C40 | see Options tables |

OPTIONS

| Description | Code |
|---|------|
| Inductive and mechanical electric contacts (1) | --- |
| AISI 316 st.st. case and ring | C40 |
| NACE MR 01.75 version (2) (3) | E30 |
| Protection IP65 | E65 |
| Maximum pointer IP65 (4) | L22 |
| MONEL 400 diaphragms (2) | M23 |
| Oxygen service (5) | P02 |
| Special dial | Q01 |
| Case glycerine filling (Ambient Temperature +15...+65). | R10 |
| Silicone glycerine filling (Ambient Temperature -40...65) (6) | R11 |
| 2" pipe mounting bracket (7) | S31 |
| Tropicalization | T01 |
| Stainless steel label | T25 |
| Plexiglas window | T31 |
| Safety glass window | T32 |

- (1) codes, descriptions and wiring on data-sheet MN14
- (2) available only for ranges ³ 1 bar
- (3) to be ordered with MONEL 400 diaphragm (code M23)
- (4) to be ordered with Plexiglas window (code T31)
- (5) filling of internal chamber with Fluorolube
- (6) window gasket and blow out vent: VITON
- (7) mounting type "C" only



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