



SERIES: P74

Dial: 3¼", 4", 4½", 6"
Accuracy: 2%

Reed Alarm Contacts (option)



DESCRIPTION

Indumart *P74 Series* Differential Pressure Gauges with Piston element are designed to display the pressure differential of two separate pressure inputs on a dial indicator. These gauges are suitable for fluids, where small migration between high and low inputs is permitted. The difference between high and low pressure inputs results in the movement of the piston element, and this movement is magnetically transferred to the indicating assembly.

The *P74 Series* Pressure Gauges cover an extended range from 0-25 kPa to 0-1000 kPa of differential pressure. The maximum allowable high pressure input is 20 MPa (2900 psi).

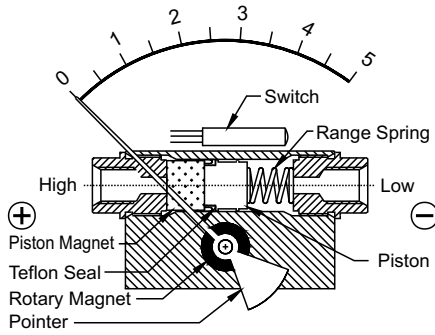
For switching action, these gauges can be equipped with Reed switches to initiate alarms or to control the process. Up to two SPDT or SPST relays may be installed for high and low limits.

If these pressure gauges are used at measuring points with high dynamic alternating loads and strong vibrations and pulses, they may be filled with glycerin to ensure smooth pointer movement and to provide lubrication of the moving parts; protecting the measuring system against wear.

Indumart *P74 Series* are mostly used for monitoring filters, pumps and valves in the water, air, natural gas and gasoline systems. They may be mounted directly to the pressure ports, mounted to a pipe or on the panel surface.

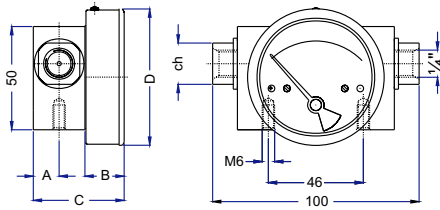
SPECIFICATIONS

| | |
|------------------------------|--|
| Accuracy | ±2% of full scale dial |
| Dial Size | 3¼" (80 mm), 4" (100 mm), 4½" (115 mm), 6" (160 mm) |
| Body Material | St. Steel, aluminum, brass |
| Wetted Parts | Body material, 304SS spring, PTFE, ceramic magnet |
| Dial Case | St. steel case and flange |
| Connection | In-line, bottom or back |
| Thread | ¼" NPT or BSP female; |
| Seal | Buna-N (std), Viton, EPDM |
| Window | Glass (std), acrylic, hard glass |
| Operating Principle | Magnetic coupling using piston and spring |
| Mounting | Direct, 2" pipe, front panel flange |
| Switch | One or two SPST or SPDT; Field adjustable from 20% to 90% of the range |
| SPST | 10 VA maximum (AC or DC) 50 VAC or 100 VDC max. 0.5 Amp. AC or DC max. |
| SPDT | 3 VA maximum (AC or DC) 28 VAC or 28 VDC max. 0.25 Amp. AC or DC max. |
| Media Temperature | 80°C / 175°F maximum |
| Environ. Protection | IP65 for the gauge & switch |
| Migration of Media | Very little |
| Range | 0...25 kPa to 0...1000 kPa; 0...3.6 psi to 0...150 psi; 0...0.25 bar to 0...10 bar Special ranges up to 7 MPa, 1000 psi and 70 bar (consult factory) |
| Pressure Display Unit | kPa, psi, mbar, bar |
| Max. Pressure Input | 3000 psi (standard aluminum or brass body); 6000 psi (304SS body) |

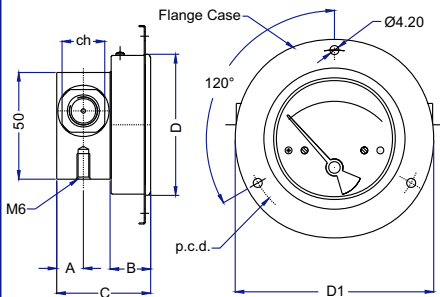


DIMENSIONS (mm)

STANDARD CASE



CASE WITH FRONT FLANGE



| Dial | A | B | C | D | D1 | ch | p.c.d. |
|--------|------|----|----|-----|-----|----|--------|
| 3 1/4" | 12.5 | 19 | 44 | 83 | 109 | 20 | 99 |
| 4" | 12.5 | 19 | 44 | 104 | 131 | 20 | 121 |
| 4 1/2" | 12.5 | 19 | 44 | 120 | 146 | 20 | 136 |
| 6" | 12.5 | 19 | 44 | 154 | 181 | 20 | 171 |

ORDER CODES

Model 74

CONNECTION

In-line (standard)
Back
Bottom

DIAL SIZE

3 1/4" (80 mm)
4" (100 mm)
4 1/2" (115 mm)
6" (160 mm)

FUNCTION

Gauge
Switch
Gauge + Switch

BODY MATERIAL

Aluminum (Anodized)
Brass
316 St. Steel

CASE

304 St. Steel (standard)
304 St. Steel (standard flange)

CONNECTION

1/4" NPT female
1/4" BSP female

WINDOW

Glass (standard)
Acrylic
Hard Glass

SEALS

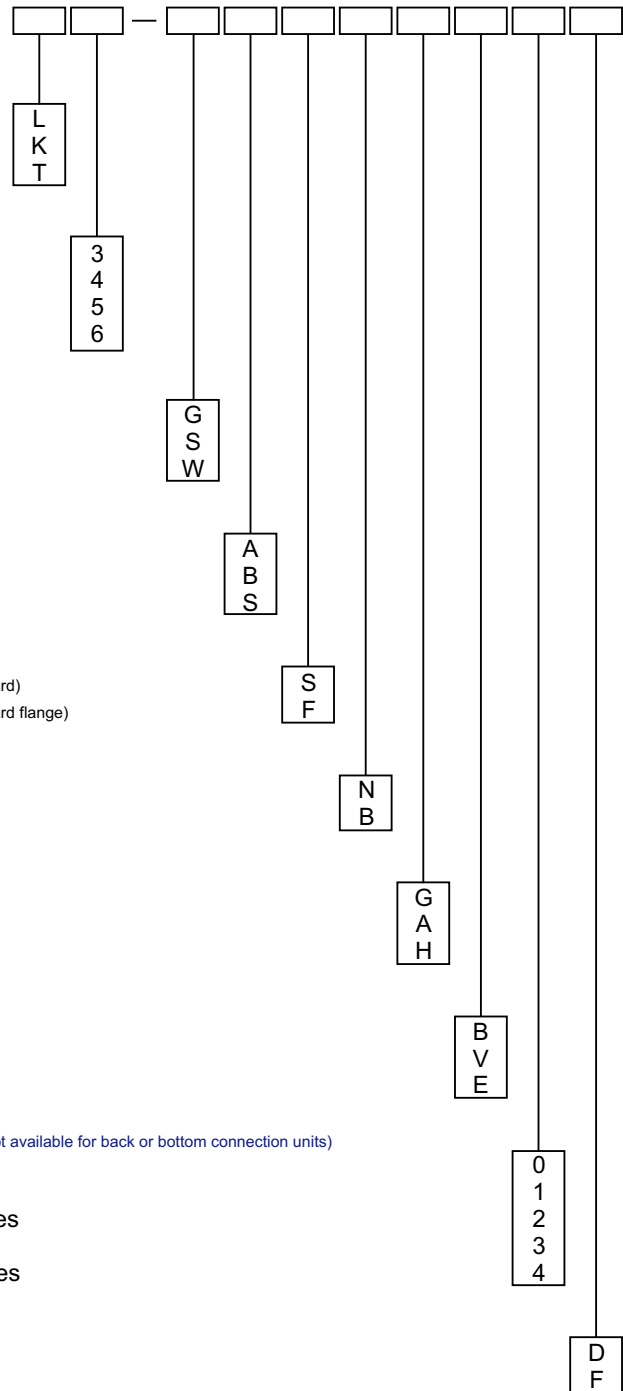
Buna N (standard)
Viton
EPDM

REED SWITCH (not available for back or bottom connection units)

None
One SPST Switch
Two SPST Switches
One SPDT Switch
Two SPDT Switches

LIQUID FILLING

Not required
Glycerine filled



Specifications may change without prior notice.

STANDARD RANGES

| | |
|--------------------|---|
| kPa | 0-25, 0-50, 0-75, 0-100, 0-160, 0-200, 0-250, 0-300, 0-350, 0-400, 0-500, 0-600, 0-700, 0-900, 0-1000 |
| psi | 0-5, 0-8, 0-15, 0-20, 0-25, 0-30, 0-40, 0-50, 0-60, 0-80, 0-100, 0-150 |
| bar | 0-0.25, 0-0.5, 0-0.75, 0-1, 0-1.6, 0-2, 0-2.5, 0-3, 0-3.5, 0-4, 0-5, 0-6, 0-7, 0-9, 0-10 |
| mbar | 0-250, 0-500, 0-750, 0-1000 |
| kg/cm ² | 0-0.25, 0-0.5, 0-0.75, 0-1, 0-1.6, 0-2, 0-2.5, 0-3, 0-3.5, 0-4, 0-5, 0-6, 0-7, 0-9, 0-10 |

Other ranges up to 7 MPa, 1000psi and 70 bar are available, on request.