

## SERIES: P82

**Dial:** 4"  
**Accuracy:** 1.6%

### DESCRIPTION

Indumart *P82 Series* Fillable Contact Pressure Gauges are both reliable pressure gauges and accurate multi-stage pressure switches. They are ideal tools for controlling process sequences with the aid of process pressure.

Because of their robust design, they are suitable for harsh environment and most corrosive media, and meet stringent demands to bring the advantages of high accuracy, long-term stability and protection against water jets and dust on their moving parts.

These heavy duty pressure gauges can be used at measuring points with high dynamic alternating loads and strong vibrations and pulses. They may be filled with dielectric oil to ensure smooth pointer movement and to provide lubrication of the moving parts; protecting the measuring system against wear.

Optionally, monel K400 may be specified as the wetted parts material for the *P82 Series* pressure gauges, and various types of wall and panel mounting such as front or back flange and U-bracket may be ordered to suit most applications.



## Indicating Pressure Switch

### SPECIFICATIONS

<b>Accuracy</b>	1.6%
<b>Dial Sizes</b>	4" (100 mm)
<b>Case &amp; Bayonet Bezel</b>	Stainless steel
<b>Connection</b>	Bottom or lower back
<b>Thread</b>	1/2" NPT, BSP thread (option)
<b>Gasket &amp; Blow-out Disc</b>	Neoprene
<b>Window</b>	Safety glass (non-fillable) Plexiglas (fillable)
<b>Bourdon Tube System</b>	316 st. steel (standard), monel K400 (option)
<b>Contact Type</b>	Silver-Nickel contacts See the electric alarm contact types section
<b>Contact Rating</b>	Magnetic: 1 A for up to 230 VAC 0.5 A for up to 48 VDC Inductive: 0.4 A up to 220 VAC Booster for current up to 5 A (op.)
<b>Process Temperature</b>	-20...100°C (non-fillable) 15...65°C (filled version)
<b>Range</b>	0...25 to 0...20000 psi; 0...160 to 0...160000 kPa; 0~1.6 to 0...1600 bar Vacuum and compound ranges are available; see the Range Table

Specifications may change without prior notice

### ORDER CODES

**Model P82**  -  -  -

#### CONNECTION

Back   
Bottom

K  
T

#### DIAL SIZE

100 mm (4")

4

#### CONTACT TYPE

Specify a code from the contact tables

#### OPTIONS (more than one option may be selected)

Dielectric Oil Filling  
Monel K400 Wetted Parts  
Booster for current up to 5A  
BSP Thread  
Back Flange for wall mounting  
Front Flange for panel mounting  
U-bracket for panel mounting

FD  
IM  
SF  
TB  
MK  
MF  
MU

Example: P82T4-M22-FD,IM,MF

# Electric Alarm Contact Types

Indumart offerstwo types of electrical contacts: 1)Magnetic, 2)Inductive

## Magnetic Contacts

The magnetic contacts can be virtually used under all conditions, they are largely insensitive to vibration. The contact pin holder of the setting pointer is fitted with an adjustable magnet which attracts the contact arm just before the preset level is reached. The magnetic action makes contact almost insensible to vibrations, and prohibits arcing and scorching of the contact pin.

In the table below single and double contacts are shown. The functions are given considering the pointer moves clockwise so that the pointer passes the set point.

Code	Version	1 <sup>st</sup> Contact	Contact Type	2 <sup>nd</sup> Contact
M1	magnetic	NO		
M2	magnetic	NC		
M3	magnetic	Special single change over contact (SPDT)		
M11	magnetic	NO		NO
M12	magnetic	NO		NC
M21	magnetic	NC		NO
M22	magnetic	NC		NC
M33	magnetic	Special double change over contact (DPDT)		

## Inductive Contacts

The inductive contacts are non-contacting electrical switches, which are suitable for 5 to 25 VDC operations. Basically the contact system consists of a pair of coils energized in a transistorized oscillator, whose RF magnetic field is influenced by a metal control tab. By means of an amplifier, a relay is controlled which performs the actual switching task. The advantages of this contact are: 1)these switches can be applied in rooms with an explosion hazard classification "Ex i G5", and 2)they are wear-resistant due to the lack of mechanical contact, and thus require absolutely no maintenance. In the following table only single and double contacts are shown, but the contact devices can also be delivered as triple or quadruple-type. The functions are given considering the pointer moves clockwise so that the pointer passes the set point.

Code	Version	1 <sup>st</sup> Contact	Contact Type	2 <sup>nd</sup> Contact
I1	inductive	NO		
I2	inductive	NC		
I11	inductive	NO		NO
I12	inductive	NO		NC
I21	inductive	NC		NO
I22	inductive	NC		NC

