INDUMART Canada
www.indumart.com

Fillable Contact Pressure Gauges

SERIES: P82

Dial: 4"
Accuracy: 1.0%

- Stabilizer Movement, (the dry gauge performs very stable and accurate)
- Liquid-filled version also available

Indicating Pressure Switch

DESCRIPTION

Indumart *P82 Series* 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 equipped with **internal movement stabilizer** 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 may be ordered to suit most applications.

SPECIFICATIONS

Accuracy	1.0%*
Dial Sizes	4" (100 mm)
Case& Bayonet Bezel	Stainless steel
Connection	Bottom or centre back
Thread	½" NPT (std.), BSP thread or other sizes as option
Gasket & Blow-out Disc	Neoprene (std.), NBR (filled version)
Window	Plexiglas (std.), Safety glass (op.) Plexiglas (fillable)
Bourdon Tube System	316L st. steel (standard), monel K400 (option)
Contact Type	Silver-Nickel contacts See the electric alarm contact types section
Contact Rating	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.)
Process Temperature	-20...100°C (non-fillable) 15...65°C (filled version)
Environmental Protection	IP65
Range	0...15 to 0...20000 psi; 0...160 to 0...160000 kPa; 0...1 to 0...1600 bar Vacuum and compound ranges are available; see the Range Table

* Addition of mechanical or magnetically assisted contacts changes the accuracy of the instrument to 1.6%. Also filling the case with liquid would affect the accuracy of the instrument as much as one class.

Specifications may change without prior notice

ORDER CODES

Model P82 [ ] [ ] – [ ] – [ ]

CONNECTION
Back K
Bottom 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	FD
Monel K400 Wetted Parts	IM
Booster for current up to 5A	SF
½" BSP Thread	TB
Other connection size or thread (⅜" , ¼" , M20 x1.5)	NY
Safety Glass	WS
Tested to NACE Standard	RN
Internal Over-pressure Stop	XS
Internal Vacuum Stop	VS
Helium Leak Test	LH
Back Flange for wall mounting	MK
Front Flange for panel mounting	MF

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	Contact Type	
		1st Contact	2nd 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	Contact Type	
		1st Contact	2nd Contact
I1	inductive	NO	
I2	inductive	NC	
I11	inductive	NO	NO
I12	inductive	NO	NC
I21	inductive	NC	NO
I22	inductive	NC	NC

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