Electrical contact pressure gauges 5500 Series



- Transparent polycarbonate hood
- 1 or 2 contacts for Ø 100 pressure gauges
- Dry (7470 or 7870B Series) or Filled (7970B Series)

APPLICATIONS

The pressure gauges are equipped with a system of electrical contacts allowing the control and regulation of industrial processes.

These pressure gauges are used where pressure must be displayed locally and where it is necessary to regulate this pressure.

DESCRIPTION

The 5500 series electrical contact kits are adjustable over the total measuring range of the measuring scale and open and close depending on the position of the pressure gauge needle and therefore the indication.

The pressure gauge needle moves freely over the entire measuring range regardless of the contact setting.

The contacts are adjusted manually using a removable key and the contact is triggered when the needle passes.

TYPES OF CONTACTS

The following type of contacts are fitted on dry pressure gauges Ø 100 only, Dry (7470 Series, Doc. 806-36 or 7870B Series, Doc. 806-35), or filled (7970B Series, Doc. 806-35)

Low-action contact :

The low-action contact is a mechanical contact for low power switching. Switching is activated at the set limit values (red set pointer) by means of a contact arm, which is moved by the actual value pointer. To be used in environment without vibrations or shocks and aggressive atmosphere, only with non-liquid filled pressure gauges.

Magnetic snap-action contact :

An additional magnet is installed to increase the contact force, hence its use is recommended for an environment with vibrations or shaking. This contact allows higher switching power than the dry contact. On the other hand, the switching deviation from the set point is increased.

Technical details	Low-action	Magnetic snap-action	
Rated working voltage	250 V maxi	250 V maxi	
Priming / Depriming	0,7A maxi	1,0 A maxi	
Current on load	0,36 A maxi	0,6 A maxi	
Breaking capacity	10 W	30 W maxi	
Contact	Ag 80 Ni 20	Ag 80 Ni 20	
	(Other on demand)	(Other on demand)	
Precision	±0,5 % FS	±2 at 5 % FS	

Inductifs contact :

Due to the absence of mechanical contact, inductive contacts are used for explosive atmosphere or corrosive environment. (On demand)

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TECHNICAL DETAILS

Pressure gauge used	Ø 100, all SS Dry : 7470 Serie (Doc. 806-36) or 7870B Serie (Doc. 806-35) Filled : 7970B Serie (Doc. 806-35)
Accuracy class	1 to 2,5 according to contacts / pointer position
Measuring range	-1 to 1600 bar
Min. range of pressure gauge	With 1 contact : 0,6 bar With 2 contacts : 1 bar
Switching accuracy	Low-action contact : $\pm 0,5 \%$ F.S. Magnetic snap-action contact : ± 2 to 5 % F.S.
Set point adjustment	Set pointer adjusted by key
Electrical connexion	Removable connector on the front panel, supplied with 2m of cable
Window	Front mounting : Transparent polycarbonate hood
`Filling liquid	Silicon oil
Protection	IP 65
Operating temperature	See pressure gauge used

EC Conformity : The instrument meets the legal requirements of the current European Directives

Note :

DIN 43650 connection, on the side or back position, see 5600 Serie (Doc. 807-03)

DIAPHRAGM SEALS MOUNTING

The instrument-diaphragm seals assembly can't be assembly by the user, because special assembly requiring evacuation and filling with oil must be carried out. To place an order, you must indicate the references of the instrument and the separator to be mounted. CITEC installs all types of separators on pressure gauges, pressure switches and pressure transmitters.



(Example with diaphragm seal)

DIAGRAMS MEANING

The electrical contact activates the opening or closing of an electrical circuit.



A "Normally Closed" (NC) contact opens a circuit with rising pressure (needle movement clockwise) A "Normally Open" (NO) contact closes a circuit with rising pressure.

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Non-contractual document: Subject to amendments due to improvements

CONTACT BLOCK REFERENCES

Diagrams 1 to 7: The contact is closed when the needle is located in the thick sector(s) of the measuring zone.

Diagram	Function	1 contact block for p Low-action contact	ressure gauge Ø 100 Snap-action contact	1 contact with magnet block for filled pressure gauge Ø 100
	Maxi - 1 NO Closing 4 ————————————————————————————————————	436 010	436 025	436 200
	Mini - 1 NF Opening 4	436 015	436 030	436 205
	1 NO + 1 NF Changeover $4 - 2 - 2 - 2$ Changeover	436 020	436 035	436 210
Diagram	Functions	2 contacts block for pressure gauge Ø 100 Low-action contact Snap-action contact		2 contacts with magnet block for filled pressure gauge Ø 100
	$\frac{\text{Maxi/Maxi - 2 NO}}{1 \text{ st contact closing}}$ 2nd contact closing $4 - \begin{array}{c} & & & \\ & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & $	436 040	436 065	436 220
	axi/Mini - 1 NO + 1 NF 1st contact closing 2nd contact opening $4 - \begin{array}{c} & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & $	436 045	436 070	436 225
	ini/Maxi - 1 NF + 1 NO 1st contact opening 2nd contact closing $4 - \begin{array}{c} & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\$	436 050	436 075	436 230
	$\begin{array}{r} \text{Mini/Mini - 2 NF} \\ 1 \text{ nd contact opening} \\ 2 \text{ nd contact opening} \\ 4 - \underbrace{1}_{0 - 0 - 1}^{0 - 1} \\ 4 - \underbrace{1}_{0 - 0 - 2}^{0 - 1} \end{array}$	436 055	436 080	436 235

To define each contact pressure gauge ref, identify the reference of the pressure gauge to be equipped with contacts, among these two series: - Dry pressure gauges: 7470 Series all stainless steel, Ø 100 (Doc 806-36), or Filled pressure gauges : 7970B Series, Ø 100 (Doc 806-35) Then, add at the end of the pressure gauge reference, the reference of the contact kit to be fitted.

Example: 468410 + 436040 dry pressure gauge (7470 Serie) or 479410B + 436220 filled pressure gauge (7970B Serie).



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