

## Electronic contacts with PNP output

**Switching accuracy:** 1,5 times the instrument accuracy.

**Switching hysteresis:** 0,3...1% of full scale value.

**Adjustment:** over an arc of 270°, through the knob placed on front lens or through removable key.

**Supply:** 10...30 Vdc.

**Switching current:** max 100 mA

**Temperature range:** -25...+65°C

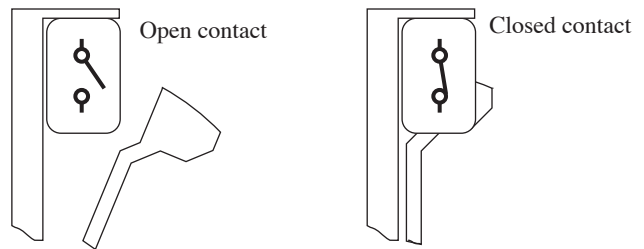
Electronic contacts are equipped with electrical distance sensors (proximity sensors). The output signal is governed by the presence or absence of a control vane moved by the actual value pointer in the magnetic field of the proximity sensor.

The switching behaviour of the PNP switches used in these contacts is normally defined as a "closer" (opposite to the inductive contacts).

Due to their proximity type of switching, respect to the traditional sliding contact they offer better switching accuracy and extended service life.

They are properly designed to switch small DC load and so particularly suitable for a **direct wiring to PLC/PC** direct input and to trigger optoelectronic coupler.

Also they are the best preference for oil filled instruments to be installed in the most severe operating conditions created by the ambient environments.



WIRING SCHEME (1)	ELECTRIC SCHEME (before set)	CLOCKWISE MOVEMENT OF THE POINTER CAUSES:	CONTACT CODE
<b>SINGLE CONTACT</b>			
<b>MAXI</b> 		<u>Closing</u>	<b>E1</b>
<b>MINI</b> 		<u>Opening</u>	<b>E2</b>
<b>DOUBLE CONTACT (2)</b>			
<b>1° MAXI</b> <b>2° MAXI</b> 		<u>Closing 1</u> <u>Closing 2</u>	<b>E11</b>
<b>1° MAXI</b> <b>2° MINI</b> 		<u>Closing 1</u> <u>Opening 2</u>	<b>E12</b>
<b>1° MINI</b> <b>2° MAXI</b> 		<u>Opening 1</u> <u>Closing 2</u>	<b>E21</b>
<b>1° MINI</b> <b>2° MINI</b> 		<u>Opening 1</u> <u>Opening 2</u>	<b>E22</b>

(1) The above numbers are the same of those stamped on the junction box.

(2) Each contact must not exceed the next one.

Inductive contacts are intrinsically safe and ATEX certified to EN 50014, EN 50020, EN 50284, IEC 61241-11 normes, with protection degree EEX ia IIC T6. They are incorporated in gauges and thermometers belonging to the group II with category 2GD and construction security protection "c". They are suitable to be installed in zones 1,2,22. To guarantee such protection degree the contacts must be supplied via a control relay which has the same type of certificate. When mounted on instruments with liquid filled case they are particularly suitable for application on chemical and petrochemical plants with vibrations and frequent operation.

B1 - 09 / 07

## Functional and constructive characteristics

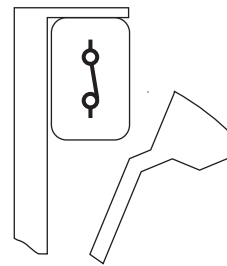
**Set-point accuracy:** 150% of instrument accuracy.

**Set-point hysteresis:** 0,3...1% of full scale value.

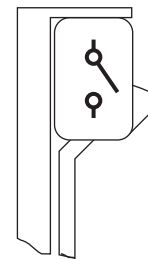
**Contact setting:** over an arc of 270 °, trough the knob placed on front lens or trough removable key.

**Electric wiring:** junction box as per VDE, see underdraw table.

Closed contact



Open contact



WIRING SCHEME (1)	ELECTRIC SCHEME (before set)	CLOCKWISE MOVEMENT OF THE POINTER CAUSES:	EX-CONTACT CODE
<b>SINGLE CONTACT</b>			
<b>MINI</b> 		Insertion of control flag into control head and <b><u>Opening</u></b>	<b>B1</b>
<b>MAXI</b> 		Release of control flag from control head and <b><u>Closing</u></b>	<b>B2</b>
<b>DOUBLE CONTACT (2) (3)</b>			
1° <b>MINI</b> 2° <b>MAXI</b> 		Insertion of control flag into control head n. 1, release of control flag from control head n. 2 and <b><u>Opening 1</u></b> <b><u>Closing 2</u></b>	<b>B12</b>
1° <b>MAXI</b> 2° <b>MAXI</b> 		Insertion of control flags into control heads <b><u>Closing 1-2</u></b>	<b>B22</b>

(1) The above numbers are the same of those stamped on the junction box.

(2) Each contact must not exceed the next one.

(3) Other electric contacts are available upon request.