

ELECTRONIC CONTACTS

for pressure gauges and thermometers

Electronic contacts with PNP output

Switching accuracy: 1,5 times as much as the instrument accuracy. **Switching hysteresis:** 0,3...1% of full scale value.

Adjustement: on full scale (270 °), through a removable key.

Supply: 10...30 Vdc.

Switching current: max 100 mA **Temperature range:** -25...+65°C

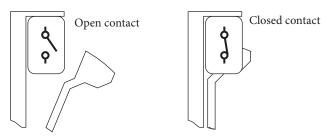
Electronic contacts are provided with electrical distance sensors (proximity sensors). The output signal is governed by the presence or absence of a control vane moved by the actual value pointer in the magnetic field of the proximity sensor.

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

Due to their proximity type of switching, compared to the traditional sliding contact, they offer a better switching accuracy and an 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 choice 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			
SINGLE CONTACT						
MAXI		Closing	E 1			
MINI		Opening	E2			
DOUBLE CONTACT (2)						
1° MAXI 2° MAXI = 1 3 4 2	1°	Closing 1 Closing 2	E11			
1° MAXI 2° MINI	1° 2° 4 1 2 2	Closing 1 Opening 2	E12			
1° MINI 2° MAXI = 1 3 4 2 + +	1°	Opening 1 Closing 2	E21			
1° MINI 2° MINI = 2 3 4 1	1° 2°	Opening 1 Opening 2	E22			

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INDUCTIVE CONTACTS

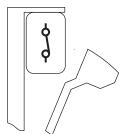
Inductive contacts are intrinsically safe and ATEX certified to EN 50014, EN 50020, EN 50284, IEC 61241-11 standards, with EEX ia IIC T6 protection degree. They are incorporated into gauges and thermometers belonging to the group II with category 2GD and construction security protection "c". They are suitable to be installed in zones 1,2,22. To guarantee such a protection degree, contacts must be supplied through a control relay which must be provided with the same type of certification. When assembled to instruments with liquid filled case, these instruments can be particularly suitable for application to all plants where a high level of reliability is required because of the presence of severe vibrations and where a high operational activity is expected.

Functional and constructive characteristics

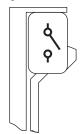
Set-point accuracy: 150% of instrument accuracy. **Set-point hysteresys:** 0,3...1% of full scale value.

Adjustment: on full scale (270°), through a removable key. Electric wiring: junction box as per VDE, see underdraw table.





Open contact



WIRI SCHEM		ELECTRIC SCHEME (before set)	CLOCKWISE MOVEMENT OF THE POINTER CAUSES:	EX-CONTACT CODE	
SINGLE CONTACT					
MINI	₹ 1 3 - +	1°	Insertion of control flag into control head and <u>Opening</u>	B1	
MAXI	₹ 3 1 + ·	1°	Release of control flag from control head and <u>Closing</u>	B2	
DOUBLE CONTACT (2) (3)					
1° MINI 2° MAXI		1 3 4 2	Insertion of control flag into control head n. 1, release of control flag from control head n. 2 and Opening 1 Closing 2	B12	
1° MAXI 2° MAXI	₹ 3 4 2 1 + + +	1° 2° 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Insertion of control flags into control heads <u>Closing 1-2</u>	B22	

- (1) The above numbers are the same as those reported on the junction box.
- (2) Each contact must not exceed the next one.
- (3) Other types of electric contacts are available upon request.

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