Material with electrical contacts

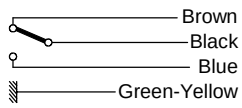
450

Some of our material can be equipped with electrical contacts that can allow them, furthermore their indication function, to assure a regulation, signalisation or alarm function. There are two families of electrical contacts:

1. Micro-contacts with hard breaking, adjusted in factory

Unipolar Inverter Switch, with a breaking set point of 3 Ampere under 220 Volts.
This breaking power allows to control directly one contactor or a little electro-valve.
The functioning point for rising pressure is different from the functioning point for falling pressure. This difference, called bracket is included between 10 and 25% of the graduation scale.

Scheme 211 603



Contact represented at the minimum pressure or temperature.
The rising of the pressure, depression or temperature induces the inversion of the contact.

ADJUSTMENT: specific to each range of material.
ELECTRICAL CONNECTION: for each contact, by a wire 4 conductors, length of 800 mm according to scheme 211603.

2. Sensible contacts without hard breaking adjustable on the glass

These contacts have a maximum breaking power of 25 VA, maximum tension 220 Volts, maximum intensity 0,1 Ampere
This low power makes generally compulsory the use of an auxiliary relay with very low consumption (see leaflet Relay R2F).

ADJUSTMENT : These contacts are adjustable on all the graduation scale with buttons placed on the centre of the transparent.
: Their bracket is nearly zero. The functioning point is marked by a blue index (mini contact) or red (maxi contact).

ELECTRICAL CONNECTION : By a 3 conductors wire for contacts (the table 2.A)
: By a 4 conductors wire for all other contacts (Table 2.B. and 2.C.)
: For all contacts, the length of this cable is of 800 mm.
: Cabling scheme – see tables below.

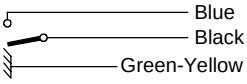
2.A. Glass with 1 contact

This contact can be closed by the rising of the pressure (maxi) or the falling of the pressure (mini) :

- When the contact is open, the reading is not perturbated ;
- When the contact is closed, if the pressure continues to rise (maxi) or to fall (mini) beyond the closing point, the reading is slightly moved, late (maxi) or in advance (mini).

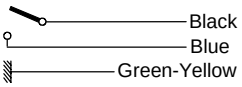
The contact is isolated from the ground and the connection is done by a 3 conductor's cable with length of 800 mm (with wire green-yellow to the ground).

Scheme 212 382/1 : Material with maxi contact



Circuit closing by the rise of pressure, depression or temperature.

Scheme 212 382/2 : Material with mini contact



Circuit closing by the fall of pressure, depression or temperature.

2.B. Glass with 1 Inverter Switch

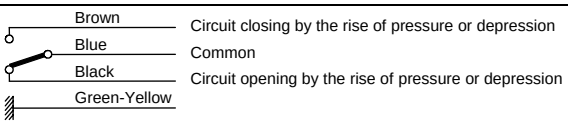
This contacts are Inverter Switch :

- 1 circuit is closing when the pressure rises (maxi) or falls (mini) ;
- The other circuit opens when the pressure already rises slightly (maxi) or falls slightly (mini).

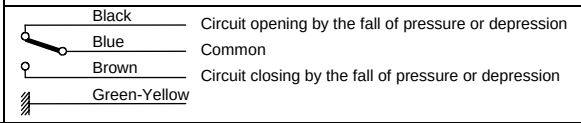
So there is a little re-covering which allows eventually to have a crossing contact. When the pressure :

- Is below the maxi contact and superior to the mini contact, the reading is not disturbed;
- Has passed the functioning point, the reading is a little moved, late (maxi), or in advance (mini).

Scheme 209 021/1 : Material with 1 maxi contact



Scheme 209 021/2: Material with 1 mini contact



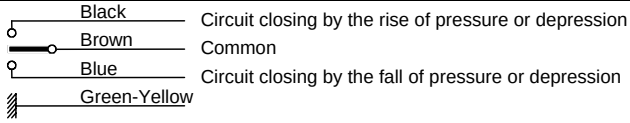
2.C. Glass 2 contacts

a/ «1 maxi contact and 1 mini contact»

These 2 contacts, which have always a common point, close when the pressure rises (maxi), or falls (mini). When the pressure:

- Is included between the mini and the maxi, the reading is not disturbed.
- Is inferior to the mini, the reading is slightly disturbed in advance.
- Arrives to the maximum point, the reading stops at this point, but if it continues to rise, the material is not damaged.

Scheme 209 021/3: Material with 2 MAXI-MINI Contacts



b/ «2 maxi Contacts» or «2 mini Contacts »

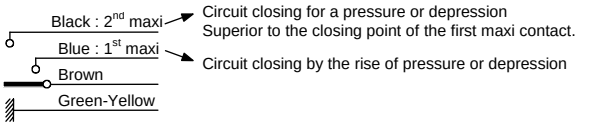
These contacts always have a common point and close at 2 different values when the pressure rises (maxi) or falls (mini). When the pressure:

- Is inferior to the first maxi or superior to the first mini, the reading is not disturbed.
- Is situated between the 2 maxi, or the 2 mini, the reading is slightly disturbed, late (maxi) or in advance (mini).

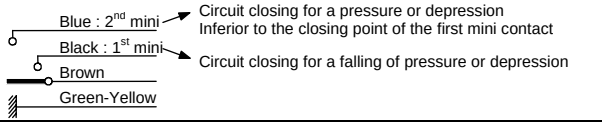
When the second maxi or mini contact is closed, if the pressure continues to rise (maxi) or to fall (mini) beyond, the reading is stopped at this point, but the manometer is not damaged.

Contacts adjustment : done by 2 independent buttons.

Scheme 209 021/4: Material with 2 MAXI Contacts



Scheme 209 021/5 : Material with 2 MINI Contacts



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