

# Switches for pressure gauges



## APPLICATION

A pressure gauge with one or two contacts is an easy solution to have at the same time a permanent reading of process pressure with a survey of limit pressure over ranges. The pressure indication is done on a 100 mm or a 160 mm dial pressure gauge (*up to 4 contacts*). The contact is actuated as the pressure index come over.

## FAST RESPONSE SWITCHES

The contact is actuated instantaneously; the hysteresis is short, about 0.5%. They may not be use when there are vibrations on the process or with aggressive ambient conditions. They must be used in a dry (not filled) pressure gauge case.

## Technical features

Nominal voltage:	250 V, as a maximum
Release or priming current:	0.7 A as a maximum
Load current:	0.36 A as a maximum
Switching power:	10 W as a maximum
Contacts:	Ag 80 / Ni 20
Accuracy:	0.5% F.S.

## MAGNET SWITCHES

They are suitable for most of applications, even with weak vibrations. The switch actuates with the help of a spring for a quick release. They must be used in a dry (not filled) pressure gauge case.

## Technical features

Nominal voltage:	250 V, as a maximum
Release or priming current:	1.0 A as a maximum
Load current:	0.6 A as a maximum
Switching power:	30 W as a maximum
Contacts:	Ag 80 / Ni 20
Accuracy:	from 2 to 5% F.S.

## INDUCTIVE SWITCHES

These switches do not have electrical contact, as per standard DIN 19234. They have a greater life than the magnet switches and a better accuracy. They can be used with silicone filled cases. The output signal reflects the location of the pressure index inside the magnetic field of the switch.

## Technical features

Load voltage:	8 V DC (Ri =1 kOhm) as a maximum
Nominal voltage:	5 to 25 V
Consumption:	> 3 mA ( <i>open circuit output</i> ) < 1 mA ( <i>closed circuit output</i> )
Accuracy:	0.5% F.S.

With a relay RDN 11, connected, the intrinsic safety protection could apply for 1 & 2 zones on EEx ib II C T6, please request more information to us.

## CODE NUMBERS FOR ORDERING

First, please ask for a quotation with the following details:

- Fluid, pressure range, temperature, and accuracy required
- Ambient characteristic, ATEX zone if any
- Status of the contact(s) and quantity of each

1 = NC / 2 = NO / M = magnet switch / I = inductive switch  
S = fast response switches – (*See the examples on the next page*)

**BAMO MESURES**

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**SWITCHES FOR  
PRESSURE GAUGES**

29-06-2011

812.11 17 C

**PR**

**812-17/1**

**EXISTING SWITCH MODELS**

NO = "normally open"  
NC = "normally closed"

**FAST RESPONSE SWITCHES**

- S-1: Contact NO
- S-2: Contact NC
- S-11: First contact NO  
Second contact NO
- S-12: First contact NO  
Second contact NC
- S-21: First contact NC  
Second contact NO
- S-22: First contact NC  
Second contact NC

**MAGNET SWITCHES**

- M-1: Contact NO
- M-2: Contact NC
- M-11: First contact NO  
Second contact NO
- M-12: First contact NO  
Second contact NC
- M-21: First contact NC  
Second contact NO
- M-22: First contact NC  
Second contact NC

**INDUCTIVE SWITCHES**

- I-1: Contact NO
- I-2: Contact NC
- I-11: First contact NO  
Second contact NO
- I-12: First contact NO  
Second contact NC
- I-21: First contact NC  
Second contact NO
- I-22: First contact NC  
Second contact NC

WIRING	INDEX MOVEMENT TO THE RIGHT	CODIFICATION and DEFINITION
<b>WITH ONE SWITCH</b>		
	Status = NO (normally open)	S - 1    M - 1    I - 1
	Status = NC (normally closed)	S - 2    M - 2    I - 2
<b>WITH TWO SWITCHES</b>		
	First contact: Status = NO (normally open)  Second contact: Status = NC (normally open)	S - 11    M - 11    I - 11
	First contact: Status = NO (normally open)  Second contact: Status = NC (normally closed)	S - 12    M - 12    I - 12
	First contact: Status = NC (normally closed)  Second contact: Status = NO (normally open)	S - 21    M - 21    I - 21
	First contact: Status = NC (normally closed)  Second contact: Status = NC (normally closed)	S - 22    M - 22    I - 22

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**SWITCHES FOR  
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