



## Description

Electric Contact Pressure Gauges have been developed for different industrial applications where the indication of the system pressure is required and the circuits in process control systems need to be switched in the meantime. Electric Contact Pressure Gauges are mostly used for the pressure measurement of fluids that do not attack Copper Alloys. In corrosive environments, the versions made of AISI 316L are recommended to be used.

Based on the location of the pressure gauge's pointer, the electrical contact switches on or off the control circuits of the system. The electrical contacts, which are adjustable all over the scale range, are mounted on the dial. The limit pointers of the electrical contacts can be adjusted by the adjustment key on the window. As electrical switch contacts, magnetic snap-action contacts are being used.

## Industrial Applications

Process control, petrochemical plants, mining industry, machine building, pumps/compressors, hydraulic/pneumatic systems, water and waste water treatment systems, HVAC systems, etc.

## General Specifications

### Conformity:

EN 837-1

### Gauge Sizes (mm):

Ø100, Ø160

### Unit: bar/psi

### Measurement Ranges:

-1/0, 0/0,6 bar ...1000 bar (-15/0, 0/9.... 15000 psi)  
Equivalent compound gauge scales

### Accuracy Class: Cl.1,0

### Working Pressure: 75% of Full Scale

### Overpressure Resistance:

1,25x Full Scale (Up to 100bar)  
1,15x Full Scale (From 100bar to 600bar )  
1,1x Full Scale (Over 600bar)

### Ingress Protection Rate: IP65

### Versions:

Standard, Fillable, Silicone Oil Filled

### Working Temperature Range:

Ambient: -20...60°C  
Process: -20...60°C, 120°C (Silver Brazed), 200°C (AISI 316L)

### Process Connections: G1/2"

### Recommended Working Conditions:

| Voltage |        | Ohmic Load |         |
|---------|--------|------------|---------|
| DC (V)  | AC (V) | DC (mA)    | AC (mA) |
| 220     | 220    | 100        | 120     |
| 110     | 110    | 200        | 240     |
| 48      | 48     | 300        | 450     |
| 24      | 24     | 400        | 600     |

### Materials:

#### Bourdon Tube:

Copper Alloy, AISI 316L

#### Socket:

Brass, AISI 316

#### Case:

AISI 304, AISI 316L

#### Cover:

AISI 304, AISI 316L

#### Movement:

Brass, Stainless Steel

#### Window:

Polycarbonate

#### Dial:

Aluminium

#### Pointer:

Aluminium

#### Connector:

Plastic (EN 175301-803 A)

### Options:

Other Process Connections  
Other Pressure Units  
Special Dial Design  
Dampened Movement (Vib-Lock)  
Silver Brazed  
Flanged Type

### Electrical Contact Types:

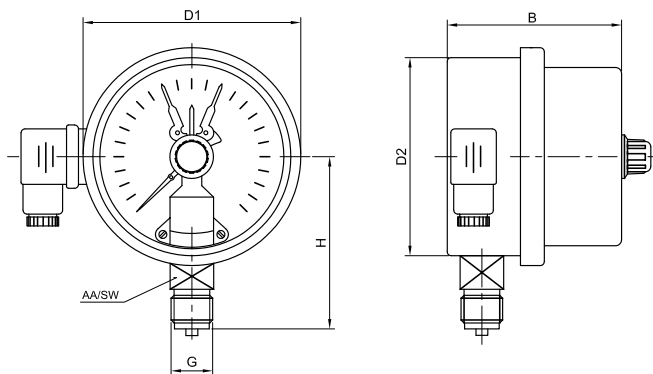
NO - NC - NONO - NCNO - NONC - NCNC

### Features of Electrical Contact:

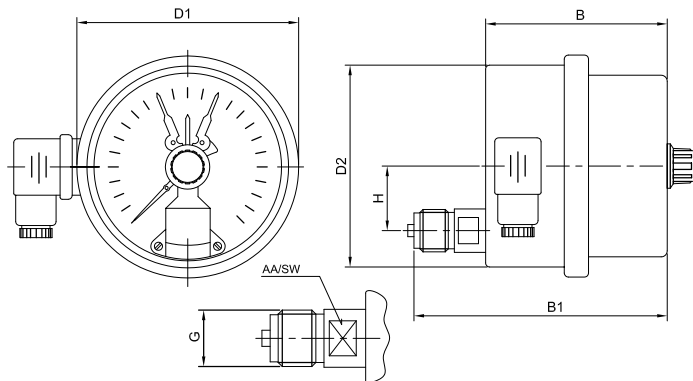
Minimum Voltage: 24V  
Maximum Voltage: 250V  
Minimum Power Capacity: 0.4W~0.4VA  
Maximum Power Capacity: 30W~50VA  
Maximum Current: 1A (Switch on-Switch off ),  
0.6A (Continuous)

## Dimensions (mm)

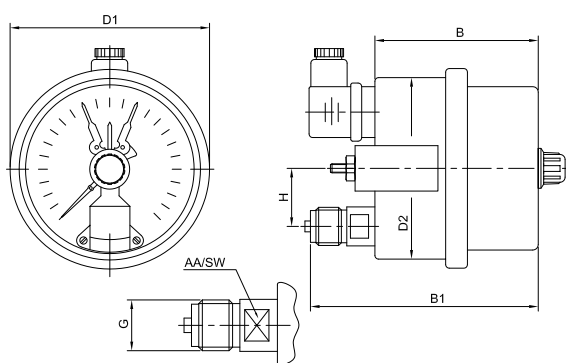
01-Bottom Connection



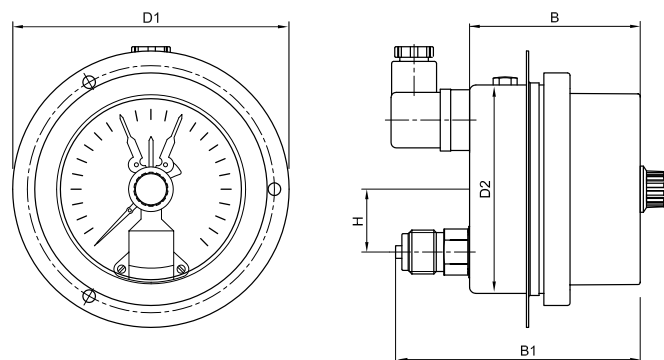
02-Lower Back Connection



03-Lower Back Panel Mount



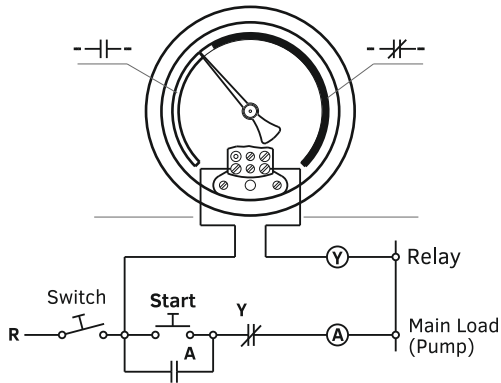
04-Lower Back, Front Flange Connection



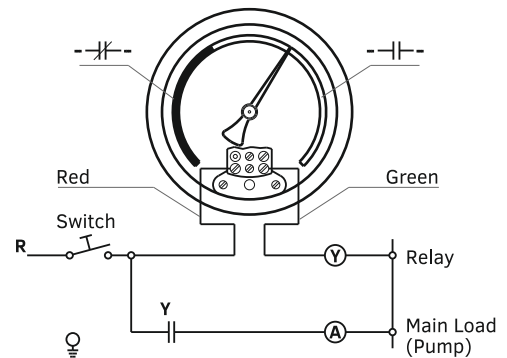
| Ø    | Connections             | Version  | Case  | Window        | Cover | D1  | D2  | B  | B1  | H  | G     | SW |
|------|-------------------------|----------|-------|---------------|-------|-----|-----|----|-----|----|-------|----|
| Ø100 | Bottom                  | Standard | Metal | Polycarbonate | Metal | 110 | 100 | 88 | -   | 87 | G1/2" | 17 |
|      | Lower Back              | Standard | Metal | Polycarbonate | Metal | 110 | 100 | 90 | 125 | 32 | G1/2" | 17 |
|      | Lower Back Panel Mount  | Standard | Metal | Polycarbonate | Metal | 110 | 100 | 90 | 125 | 32 | G1/2" | 17 |
|      | Lower Back Front Flange | Standard | Metal | Polycarbonate | Metal | 132 | 100 | 90 | 125 |    | G1/2" | 17 |
| Ø160 | Bottom                  | Standard | Metal | Polycarbonate | Metal | 174 | 160 | 89 | -   | 89 | G1/2" | 17 |

## Electrical Circuit Schemes:

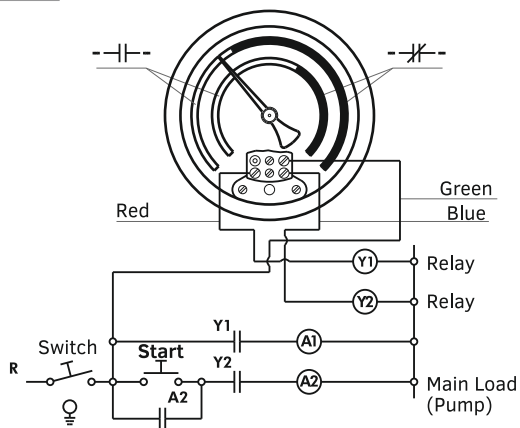
**NO**



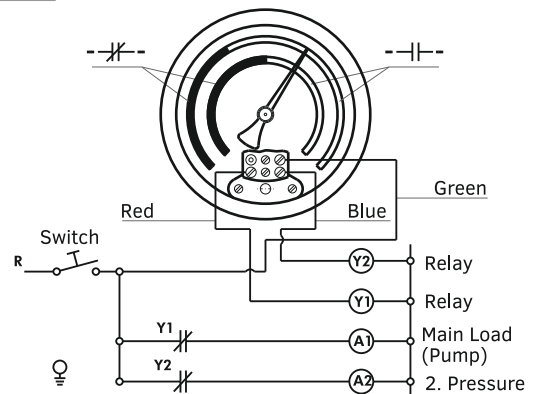
**NC**



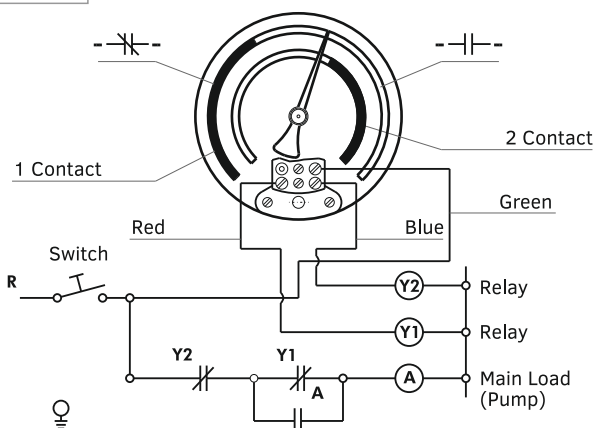
**NONO**



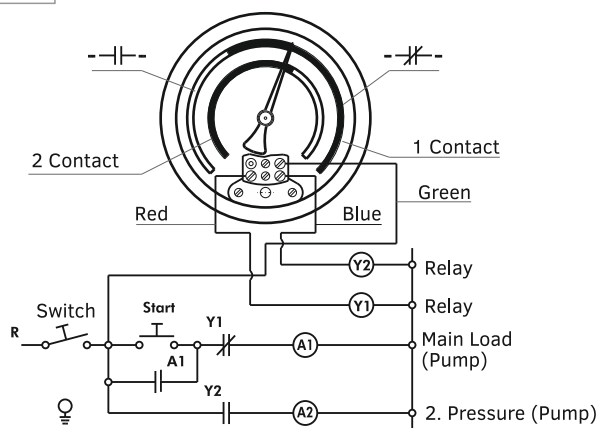
**NCNC**



**NCNO**



**NONC**



## Approvals:

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Turkish Standards Institution



ISO 9001 Quality Management System



TURKAK Calibration Laboratory Accreditation Certificate



2014/68/EU Pressure Equipment Directive - Certificate of Conformity



2011/65/EU Restriction of Hazardous Substances Directive - Declaration of Conformity



Gost Certificate

*System and quality certifications of PAKKENS Inc.  
Product and product group certifications may vary*