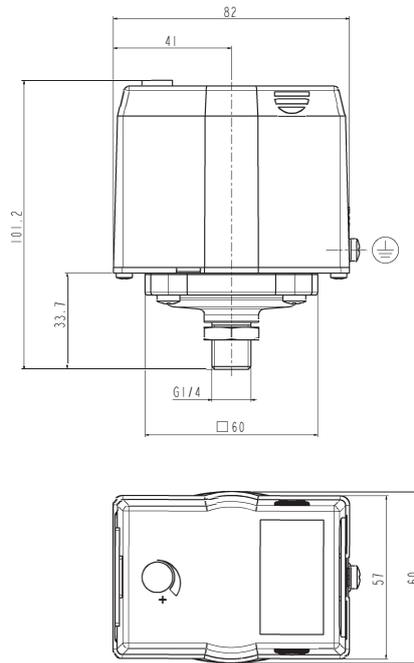


# ASCO™ TWO POLE PRESSURE SWITCH

**SERIES  
P203**

**PATENTED**



## General Features

This switch is designed so as to open a two-pole electric circuit when the pressure in the system rises and to close it when the pressure decreases. Designed for electric boilers of coffee machines as main application.

In conformity with EU Directive **2011/65/EC (RoHS 2 Directive)**

## Technical Features

Housing and cover in fibreglass reinforced PBT (Polybutylene-terephthalate). Both supporting plate and main lever are in zinc plated steel.

A diaphragm in PTFE (polytetrafluoroethylene) backed by a diaphragm in FPM (fluoro-carbon elastomer) is the sensing element wetted by the medium: it can withstand overpressures equivalent to max. pressure plus about 50%.

Snap action switch is vibration resistant type.

Silver contacts with double break for each phase.

Diaphragm housing in forged brass with pressure intake for bi-conical connection.

**Protection Degree** - IP00

**Ambient Temperature** - 80°C max

## Calibration

The pressure switch can be adjusted at will at pressure value "P": in this way the opening pressure (P+ΔP) is set.

The P setting is made by the bushing "B" as shown in the section overleaf: each clockwise turn of the screw is about 0,025bar.

The Δp value is pre-fixed and understood as the differential of the pressure switch.

Once the adjustment is made, the pressure switch closes the circuit at pressure "P" and opens it at pressure "P+ΔP".

| Port size<br>ISO 228                           | Adjustable<br>pressure range▲<br>(bar) | Pre-fixed<br>differential pressure▲<br>Δp (bar) | Max<br>fluid temp.<br>(°C) | Series and type | Max<br>breaking capacity<br>(contacts)<br>(AC1) | Notes | Weight<br>(kg) |
|------------------------------------------------|----------------------------------------|-------------------------------------------------|----------------------------|-----------------|-------------------------------------------------|-------|----------------|
| Male thread<br>G 1/4<br>for pipe<br>Ø 4 x 6 mm | 0,5 ÷ 1,4                              | 0,18 ± 0,03                                     | 140                        | <b>P203T01</b>  | 20A – 400V AC                                   | 1     | 0,395          |
|                                                | 0,9 ÷ 1,7                              | 0,21 ± 0,03                                     |                            | <b>P203T02</b>  |                                                 |       |                |

## Notes

▲ See chart overleaf

• The temperature at the contacts of terminal board can raise up to 160°C in heavy operating conditions: provide any suitable electric connection.

1 – UL approved as per file **E118977**

2 – For applications in conformity with UL standard: 20A – 240V AC - (AC1)

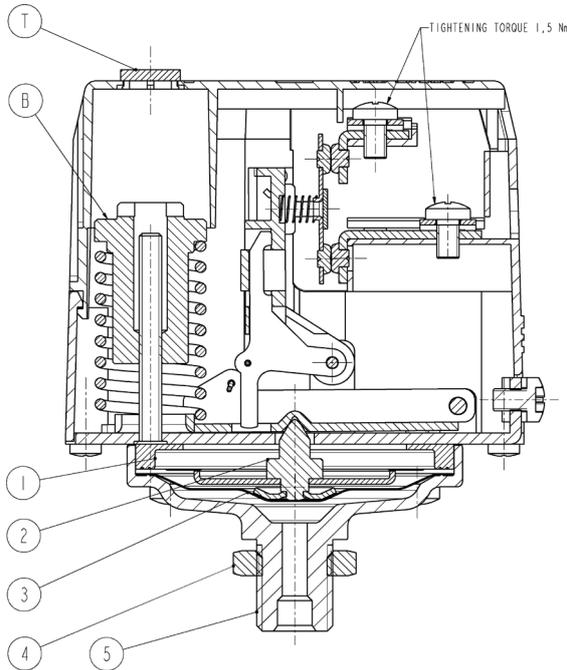
3 – CB certificate N°. IT-7503

4 – ENEC 03 certificate N°. CA02.03588

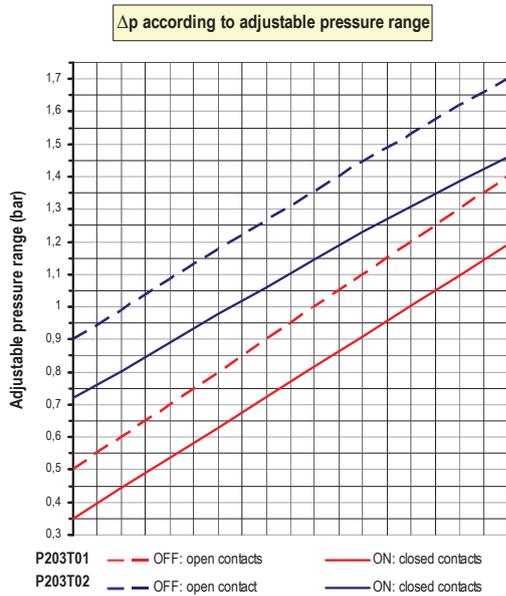
**SERIES  
P203**

**ASCO™ TWO POLE PRESSURE SWITCH**

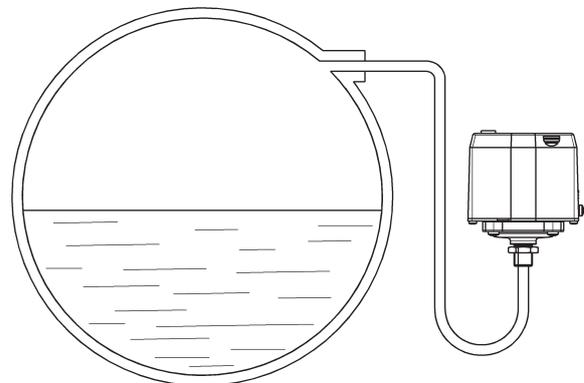
**Spare Parts**



| Kit description              | Kit P.N. | Consisting of:                                              |
|------------------------------|----------|-------------------------------------------------------------|
| Diaphragms kit               | G3137801 | Ring pos.1<br>Diaphragm group pos.2<br>PTFE Diaphragm pos.3 |
| Housing with pressure intake | G3137901 | Nut pos.4<br>Housing with pressure intake pos.5             |



**Scheme for the connection to the boiler**



The pressure switch can be mounted in any position, but the mounting with vertical axis and pressure intake as per scheme is suggested. This to avoid that the boiler deposits obstruct the pressure pipe.  
The regular cleaning of components with a suitable lubrication of mechanical parts can guarantee optimum performances and functioning in the lifetime.

**Definition as per IEC 60730-1 Standard**

The P203 is a control device in class 1, of action and additional features Type 1A, in which the protection against the electric discharges is guaranteed by both the main insulation and the connection of the conductive parts to a protection conductor (grounding) that is part of the built-in wiring. In this way in case of failure any accessible conductive part cannot become active. Control pollution situation: normal.

**Main insulation as per IEC 60730-1 Standard**

The main insulation is the insulation of the alive parts needed to guarantee the main protection against electric discharges. In this device the insulation is made by the terminal box contained in the PBT housing.

THE VALIDITY OF REPORTED DATA IS REFERRED TO THE DATE OF ISSUE. POSSIBLE UPDATES ARE AVAILABLE ON REQUEST