



## Differential Pressure Switches

### Model:D520/11DD

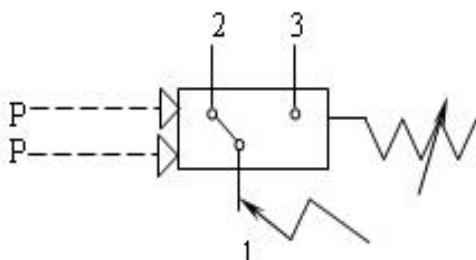
The sensor is diaphragm, the switches can be suitable for neutral gas, liquid medium. The Set Point is adjustable, and the adjustable range is from 0.1 to 25kPa. The working pressure range is from 0 to 50kpa.



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#### SPDT Switching process:

Terminals 1-3: switching element switch-on  
when pressure rises to Increasing set point

Terminals 1-2: switching element switch-off  
when pressure rises to Increasing set point

#### Main Technical Performance

Working Viscosity:  $<1 \times 10^{-3}$  m<sup>2</sup>/s  
Switching Elements: Microswitches  
Ambient temperature: -5°C~+40°C  
Medium Temperature: 0~80°C  
Protection Class of Enclosure: IP65 (accord with DIN40050)  
Vibrations: Max:10m/s<sup>2</sup>  
Mounting Position: Avoid to be mounted in oscillatory place  
Repeatability Error: ≤1.5%  
Electrical rating: AC 220V , 2A(Resistance)

#### Features

Suitable for control of very low differential pressure.

#### Specifications

##### ● Switching pressure difference not adjustable

Differential pressure range kPa	Switching pressure difference		Working pressure range * ) kPa	Max allowable pressure** ) kPa	Number of switching cycles (1/min)	Pressure sensor materials		Connection (female threaded)	Total weight Kg	Dimensional drawing No.	Cat. No.
	lower range kPa	upper range kPa				housing	bellows				
0.1…2	0.1	0.12	0…50	60	10	aluminum	Nitrile rubber	G1/4"	0.52	1	0823200***)
2…25	0.25	0.7	0…50	60	10			G1/4"	0.52	1	0823300

Remarks: \* This refers to the medium pressure range at Hi-Pressure port.

\*\* In practice, even the temporal peak value of medium pressure at two pressure ports, should no exceed the Max. Allowable Pressure.

\*\*\*) it is ONLY fit for the application in non-vibration place.



### Setting the switching points

Switching difference not adjustable to adjust the controller setpoint steps. For example:

Use the switch of order No.0823300 to fall the pressure to 10kpa(the next switch value) issued a contact single, the steps are as follows:

The product of the high-pressure entrance into the pressure check station rotary screw interface, low pressure air at the entrance to take.

Cable wire access micro-switches on-chip wiring, cables to connect the other end of the multimeter.

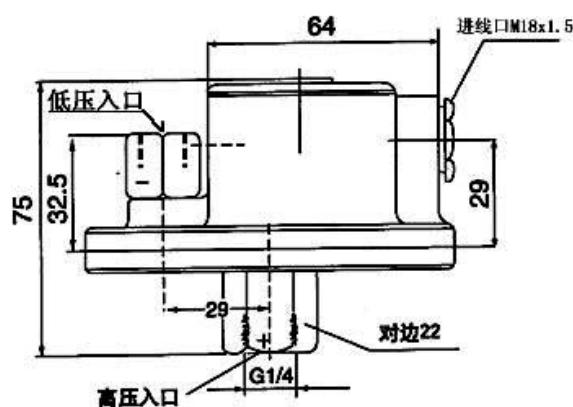
the pressure is increased to 10kPa, this value can be read out from the standard gauge.

Clockwise rotating adjustment nut to set the value from small to big until the switch contacts shifts in the 10kPa.

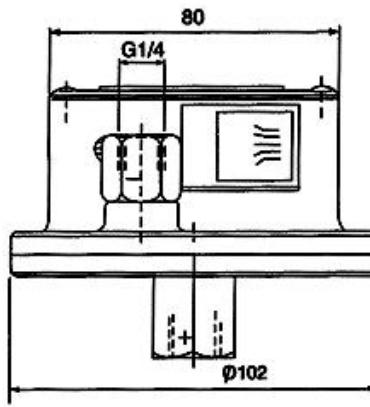
Check the pressure of the pressure regulating station, so that the pressure is back and forth in 10kPa. Check the switching value of contact is 10kpa or not when the pressure falls. That is the next switching value to be set. The corresponding value of the upper switch should be 10kpa plus switching difference 0.4kpa around, that's 10.4kpa around. The set controller had better Simulate actual working conditions, and input pressure singles into the two inputs at the same time, and then recheck whether the contact will react in the value of set difference pressure.



### Outline overall and installing dimensions (units:mm)



(侧面图)



(正面图)

图一

### Switch selection and mounting instructions

Selected controller, it is best to use pre-set value in the controller settings.

The middle part of the adjustment range, (usually 20% ~ 80% of adjustable range).

If the controller is set up outdoor, it should be protected from dramatic changes in ambient temperature, the sun's radiation, corrosive gases or water infiltration.

For the peak pressure and pulse pressure controlled liquid medium, the controller interface can be installed on a pressure shock damper to eliminate the adverse effects.

Off-current can not exceed the rating.

Install (or demolition) controller to pay attention to: Screwed pipe joints within a depth of no more than 12mm sensor.