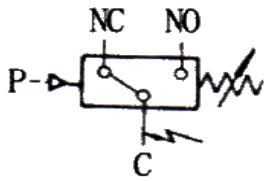




## Pressure Switches

### Model: YPK-500

The switch is direct-structure, and the Sensor is diaphragm-piston type. It can be suitable for neutral or corrosive gas and other fluid medium. The Set Point of the Switch is adjustable, and the adjustable range is from 0.02 MPa to 42MPa. The switching difference is unadjustable.



上海远仪控制器厂有限公司  
Tel: (021)56325599 56923311 69927271  
Fax: 69927273 <http://www.shyuanyi.com>

#### Switching Function:

##### Microswitch SPDT

Terminals C-NC close on the initial state

Terminals C-NO: Contacts close on rising pressure

Terminals C-NO: Contacts open on rising pressure

Terminals C-NC connect to the initial state

### □ Main Technical Performance

- Working viscosity: <math><400\text{m}^2/\text{S}</math>
- Switching element: (SPDT) micro-switch
- Protection Class: IP65
- Ambient temperature:  $-5^{\circ}\text{C} - 55^{\circ}\text{C}$
- Fluid temperature:  $0^{\circ}\text{C} - 90^{\circ}\text{C}$
- Mounting position: Vertical down
- Vibrations:  $20\text{m/s}^2$
- Repeatability: 1.5%
- Electrical rating: AC 220V 6A 600W

### □ Features

high-pressure, high sensitivity

### □ Characteristic data

Adjustable Range MPa	Switching pressure difference (MPa)	Max. working pressure MPa	Number of switching cycles Z(1/min)	Pressure sensor materials			Connecti on (internal thread)	Weight (kg)
				Housing	diaphragm	piston		
0.01-0.17	0.17	2.8MPa	20	1Cr18Ni9Ti	316L	1Cr18Ni9Ti	G1/4"	1
0.04-0.5	0.05	28MPa		stainless steel		Stainless steel		
0.12-1.4	0.12							
0.3-4.5	0.45							



1.0-12	1.2	48MPa						
1.6-24	2.4							
3.0-42	4.2							

1) Even shot pressure peaks must not exceed this value (=max.test pressure)

**Setting of the switching points**

Use range spindle to set the upper or lower switching point on design with **fixed** switching pressure difference. The opposite one is determined by the fixed switching pressure difference.

On designs with adjustable switching pressure difference. Use range spindle to set the lower switching point, then use differential spindle to set the upper switching point by adding the desired switching pressure difference.

Turning the range spindle anticlockwise shifts both switching points upwards. Turning the differential spindle anticlockwise shifts only the upper switching point upwards, i.e. the switching pressure difference (distance between the upper and lower switching points)increases.

**Example :**

Desired : Lower switching point 6Mpa

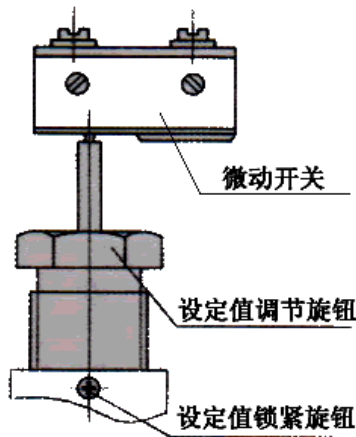
Upper switching point 7.2MPa

(Switching pressure difference=1.2Mpa)

To set precise switching points a pressure gauge is required.(The pressure switch is a switching and regulating device and not a measuring instrument even if has a scale to assist in the setting.)

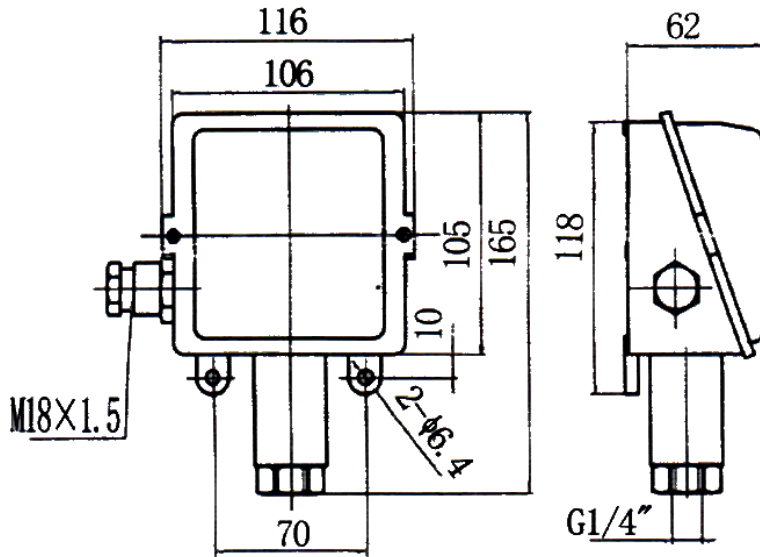
The setting can be changed at any time, even during operation.

Range and differential spindle are provided with a releasable detent; if desired, switch can also be leadsealed.



(设定值调整示意图)

**Dimensional drawing Units: mm**



### Switch selection and mounting instructions

The switching points should normally be in about the middle of the adjustable range.

Observe switching pressure during normal operation .

Do not exceed electrical ratings.

Electrical connection by a M18x1.5 cable gland, in accordance with local regulations. For outdoor installation sufficient protection has to be provided for Critical conditions are :Aggressiveness of air, high or low temperatures, drastic changes in temperature, solar radiation, penetration of water. For liquid media with pressure peaks and /or pulsating pressure, install surge damper upstream to eliminate scattering of switching points and excessive wear. If working fluid is steam, install condenser coil upstream.

Avoid twisting of pressure sensor, hold it tight when connecting the switch.