



## Marine Pressure Switches

**Model:YWK-50-C**

**Pressure Switches**

**Model:YWK-50**

The Sensors of YWK-50-C and YWK-50 are diaphragm type, they can be suitable for air, steam and other fluid medium. The Set Point of the Switch is adjustable, and the adjustable range is from 0.1 MPa to 4Mpa. The switch's housing is Aluminum and water-proof.

**YWK-50-C:aluminum housing, water-proof and suitable for marine**

**YWK-50: Phenol-type powder pressing plastic shell, general type**

### Main Technical Performance

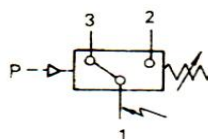
<b>Ambient temperature</b>	-25℃~+55℃
<b>Protection Class:</b>	YWK-50-C: IP44 YWK-50: IP40
<b>Vibrations:</b>	YWK-50-C: 2~25HZ 1.6mm 25~100HZ 40m/s <sup>2</sup> YWK-50: 10~60HZ 0.075mm 60~150HZ 10m/s <sup>2</sup>
<b>Electrical rating:</b>	AC 380V 3A(Resistance) DC 220V 0.25A(Resistance)
<b>Repeatability:</b>	You can see the Characteristic date form

### Characteristic date

- Switching pressure difference adjustable



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Switching Function:  
Microswitch SPDT  
Terminals 1-3:Contacts close on rising pressure  
Terminals 1-2:Contacts open on rising pressure  
Lamp:  $\varnothing$  12 used for marine or Three-core  $\varnothing$  7.5



No.	Adjustable Range MPa	pressure difference range MPa	Setting error MPa	Repeatability error MPa	note
1	-0.1...0	0.0065...0.026	±0.004	0.002	Same as 6-11 note
2	0...0.1	0.006...0.028	±0.004	0.002	The charged medium has no corrosion effect on brass, bronze and tin-lead solder
3	0...0.2	0.01...0.08	±0.008	0.004	
4	0...0.3	0.025...0.1	±0.012	0.006	
5	0...0.5	0.03...0.1	±0.02	0.01	
6	0...0.8	0.07...0.25	±0.032	0.016	
7	0...1	0.07...0.25	±0.04	0.02	The charged medium has no corrosion effect on brass, 1Cr18Ni9Ti Stainless steel and tin-lead solder
8	0...1.5	0.1...0.28	±0.06	0.03	
9	0...2	0.12...0.3	±0.08	0.04	
10	0...3	0.15...0.5	±0.12	0.06	
11	0...4	0.25...0.6	±0.16	0.08	

### 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 0.5Mpa

Upper switching point 0.6MPa

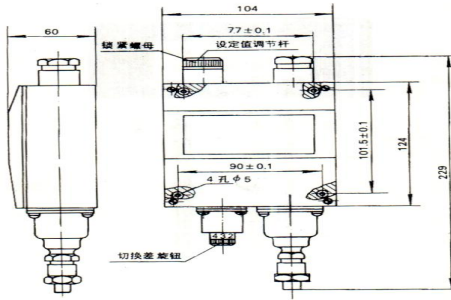
(Switching pressure difference=0.07~0.25Mpa)

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.)

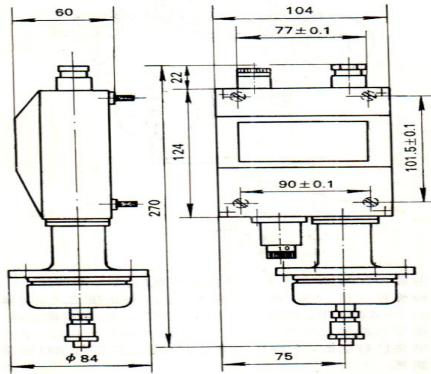
The setting can be changed at any time, even during operation.

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

### Dimensional drawing Units: mm



序号 3~11 规格的压力控制器



序号 1.2 规格的压力控制器

## 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.

