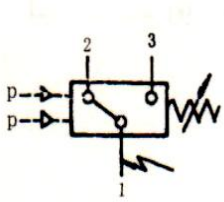
Model: CPK-50
Differential Pressure Switches

The sensor is diaphragm.The switches can be suitable for neutral gas such as air, and liquid medium such as lubricating oil, light fuel oil. The setpoint control range is adjustable and is from 70 to 300kpa.
The product is qualified to Q/YXBM810.3~2002.

☐ Main Technical Performance

Switching element:	OMRON micro-switch
Housing protection class:	IP65
Ambient temperature:	-25℃~+80℃
Medium temperature:	0℃~+80℃
Mounting position:	With the pressure connector downward vertically(a slope of 15° is allowed)
Vibrations:	40m/s^2
Repeatability Error:	2%
Electrical rating:	AC 220V 3A 500W(Resistance)



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

☐ Features

Ultra-small design

☐ Specifications

- Switching pressure difference not adjustable

Differential pressure range KPa	Switching pressure difference KPa	Max allowable pressure *) MPa)	Pressure sensor materials		Interface external thread
			Housing	Diaphragm	
70~170	50	3.5	1Cr18Ni9Ti Stainless steel	NBR	M14X1.5
130~300	80				

☐ 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.

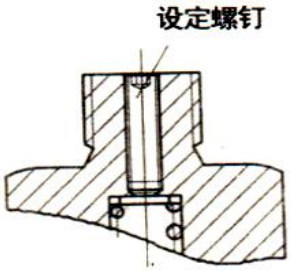
On designs with adjustable switching pressure difference . Use Range spindle to set the lower switching point, then use Differential spindle to set the upper switching point by adding the desired switching pressure difference. Turning the range spindle anticlockwise shifts both switching points upwards. 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.

地址：上海市嘉定区南翔镇顺达路300弄46号
电话：（021）56325599 56983311 69927271
传真：（021）69927273
邮编：201802
网址：Http://www.shyuanyi.com

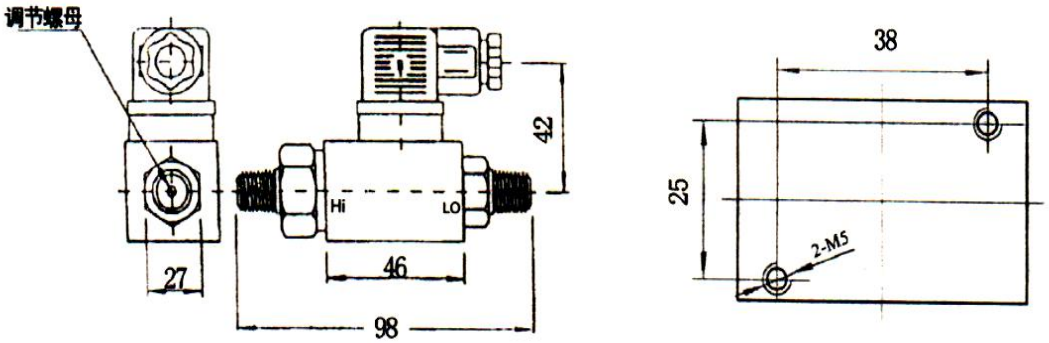
Address: NO.46,Lane300,Shunda Road,Nanxiang Town,Jiading District,Shanghai, China
Tel：（021）56325599 56983311 69927271
Fax：（021）69927273
PostCode:：201802
Mail : 6369039@qq.com

Example :
Switching differential pressure range is from 70 to 170kpa
Upper switching point is 120kpa
Switching difference is 30kpa
Lower switching point is 90kpa

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.). Switches can be adjusted even during operation. Range- and differential spindle are provided with a releasable detent; switch can also be leadsealed.



☐ Dimensional drawings Unit: mm



☐ Switch selection and mounting instructions

Off-current can not exceed the rating.
If the controller is set up outdoor, it should be pretended from dramatic changes in ambient temperature, the sun's radiation, corrosive gases or water infiltration.
For liquid media with pressure peaks and/or pulsating pressure, install surge damper upstream to eliminate scattering of switching points and excessive wear, possible failure of differential setting.
Installation of pressure interface should be gripping the outer hexagonal interface controller interface Department, to prevent the controller shell with high and low voltage connector came loose, affecting controller performance.
High and low voltage interface can not be reversed, otherwise the controller does not move.

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