



## Multi-valued Pressure Switches ( 2 ~ 3 set value )

### Model: D500/6D

Suitable for corrosive gas and liquid medium. The set point is adjustable, and the range is from -0.1...6.3MPa.

#### □ Main Technical Performance

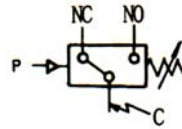
<b>Working viscosity</b>	<math>1 \times 10^{-3} \text{ m}^2/\text{s}</math>
<b>Switching element:</b>	Micro-switches group 1~3
<b>Protection Class:</b>	IP65
<b>Ambient temperature:</b>	-25~+55°C (bellow)
<b>Fluid temperature:</b>	-25~+90°C
<b>Vibrations:</b>	Max: 20m/s <sup>2</sup>
<b>Repeatability Error:</b>	≤1.5%
<b>Electrical rating:</b>	V <sub>max</sub> =380VAC I <sub>max</sub> =6A (Resistance) P <sub>max</sub> =600VA V <sub>max</sub> =250VDC I <sub>max</sub> =0.25A



上海远仪控制器厂有限公司

Tel: (021)56325599 56983311 69927271

Fax: 69927273 http://www.shyuanyi.com



**Switching Function:**

**Micro-switch SPDT**

**Terminals C-NC:Contacts**

**close on rising pressure**

**Terminals C-NO:Contacts**

**open on rising pressure**

#### □ Features

Suitable for vacuum  
The set point of Micro-switch Group 1 to 3 can be adjusted separately.

#### □ Characteristic date

Adjustable Range MPa	Switching pressure difference MPa	Max. Allowable Pressure*1 MPa	Number of switching cycles Z(1/min)	Pressure sensor materials		Connection (internal thread)	Weight kg	Drawing No.	Cat No.		
				Housing	sensor				Set 1	Set 2	Set 3
-0.1...0	0.01	1.0	10	1Cr18Ni9Ti stainless steel	316L stainless steel bellow	M18X1.5	1.4	0.2	145105511	145105521	145105531
0...0.1									145105512	145105522	145105532
0...0.25									145105513	145105523	145105533
0.03...1	0.04	2.0				G1/4"		0.3	145105514	145105524	145105534
0.05...2.5	0.09	3.5							145105515	145105525	145105535
0.2...4.0	0.14	4.5							145105516	145105526	145105536
0.3...6.3	0.2	8	145105517	145105527	145105537						

注:\*In practice work, Even shot pressure peaks must not exceed this value (=max.test pressure).

\* To make switches achieve the best results, users should simulate the actual working conditions to debug before using.

\*Technical performance in line with enterprise standards Q/YXBM 846-2002

**Remark: Please indicate on the contract if there is needs of group two or above set point.**



### Setting of the switching points

#### Example 1:

#### Choose a switch whose range is 0.03~1MPa

Desired : Lower switching point 0.5Mpa(one group)

Upper switching point 0.9MPa(another group)

Setting: 0.5MPa (with Range spindle)

0.9MPa (with Range spindle)

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.

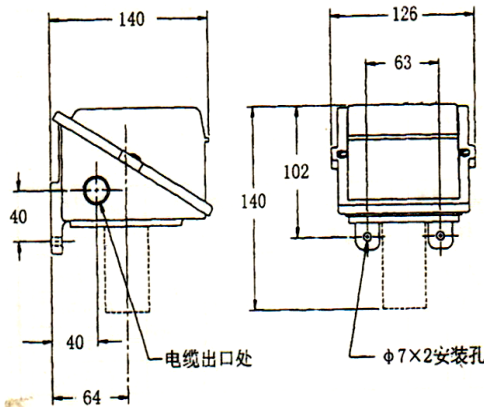
Turning the range spindle anticlockwise shifts both switching points upwards. Turning the differential spindle anticlockwise shifts only the upper switching point upwards, i.e. the switching pressure difference (distance between the upper and lower switching points) increases.

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.

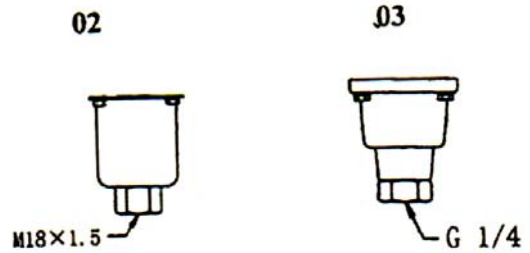
**Remark: If you use group-3 micro-switch which has three set points, the highest set point should be No.3 micro-switch(the middle one). The set procedure is the same as above.**

### Dimensional drawing

Units: mm



### Type of sensor



### Switch selection and mounting instructions

The switching points should normally be in about the middle of the adjustable range. (20%~80%)

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.