

ZNC-Y502 Mechanical Pressure Switch



Mainly applicable media: gas, liquid and other neutral media.

Mainly applicable occasions: air compressor supporting, combustion furnace, hydraulic equipment

Applications:

I. Overview

The controller adopts bellows type sensor. It can be used for neutral gases such as air, gas, water vapor and liquid media such as water, refrigerant and oil. The set value of the controller is adjustable, and the adjustment range is -0.1.....2.5MPa. It can be used for vacuum. If there are special requirements, the adjusting range can be designed separately -0.1~6.3MPa. The sensor is a bellows sensor made of stainless steel (316L).

II. Principle of operation

When the pressure increases, acting on the different sensing pressure components (diaphragm, bellows, piston) to produce deformation, will move upward, through the lever spring and other mechanical structures, and ultimately activate the uppermost micro-switch, the output of the switch signal.

III. Product characteristics

- No power supply required in the field to avoid electromagnetic interference
- Windows with setpoint adjustment panel for easy on-site adjustment
- With normally open and normally closed unrelated contact letter

IV. Technical parameters

4.1. Instrument parameters

Technical projects	conventional	explosion proof
operating viscosity	$<1 \times 10^{-3} \text{m}^2/\text{s}$	$<1 \times 10^{-3} \text{m}^2/\text{s}$
switching element	microswitch	Sealed Switches
Explosion-proof grade	---	Ex ed II CT4-T6 GB
Shell protection grade	IP65	IP54
environmental temperature	-40~50°C	-40~50°C

Medium temperature	0~120℃	0~120℃
mounting position	--	Pressure connection vertically down
Vibration resistance	Max: 40m/s ²	Max: 20m/s ²
repeatability error	≤1.5%	≤1.5%
Contact capacity	AC 220V 6A (resistive)	DC 250V 0.25A (resistive) 60W _{max} AC 250V 5A (resistive) 1250 VA _{max}

4.2. Setting value reference table (unit: MPa)

serial number	Adjustment range of the corresponding setpoint			pressure resistance	Corresponding form factor
	B	K	X		
01	-0.1~0	-0.1~0	-0.1~0	1	General: 01 Explosion-proof: 04
02	-0.1~0.1	-0.1~0.1	0~0.1		
03	-0.1~0.16	-0.1~0.16	0~0.16		
04	-0.1~0.25	-0.1~0.25	0.01~0.25		
05	0~0.1	0~0.1	0.01~0.3		
06	0~0.16	0~0.16	0.02~0.4		
07	0.01~0.25	0.01~0.25	0.03~0.6		
08	0.02~0.4	0.02~0.4	0.03~0.8	2	General: 02 Explosion-proof: 05
09	0.03~0.6	0.03~0.6	0.03~1.0		
10	0.03~1	0.03~1	0.03~1.6		
11	0.05~1.6	0.05~1.6	0.05~2.5	5	General: 03 Explosion-proof: 06
12	0.05~2.5	0.05~2.5	0.05~3.0		
13			0.05~4.0		

Note:

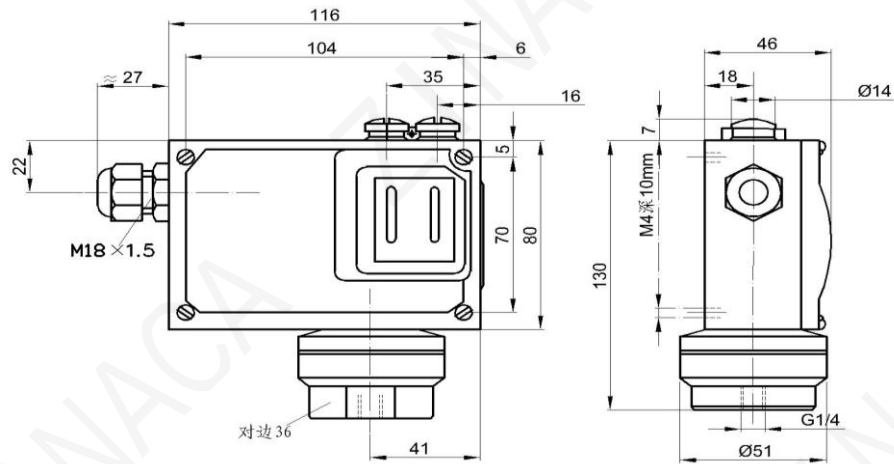
- ① Meaning of pressure-resistant value: In actual operation, even a short-lived pressure peak cannot exceed this value.
- ② X-type pressure controller: serial number 01 ~ 05 pressure resistance value of 0.5Mpa; 06 ~ 09 pressure resistance value of 3.0Mpa; 10 ~ 13 pressure resistance value of 6.0Mpa.
- ③ X-type corresponds to the external dimensions of 07,08, only the difference in connection threads, this does not add another label.

V. Instrument Selection

Type					Explanation
ZNC-Y502-	□	/□	/□	/□	
Instrument Type	B				Switching difference is not adjustable
	K				Adjustable switching differential
	X				Ultra-compact design
Setpoint adjustment range		**			Setpoint adjustment range refers to the setpoint reference table
connection method		LJY			G1/4 female thread
NOTE: Type X pressure switches are not available in explosion-proof form.					

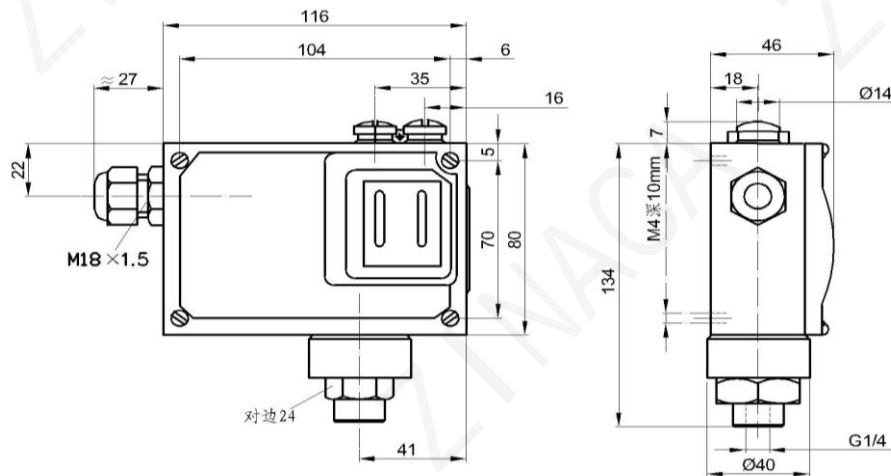
VI. External Dimensions

1、Normal type



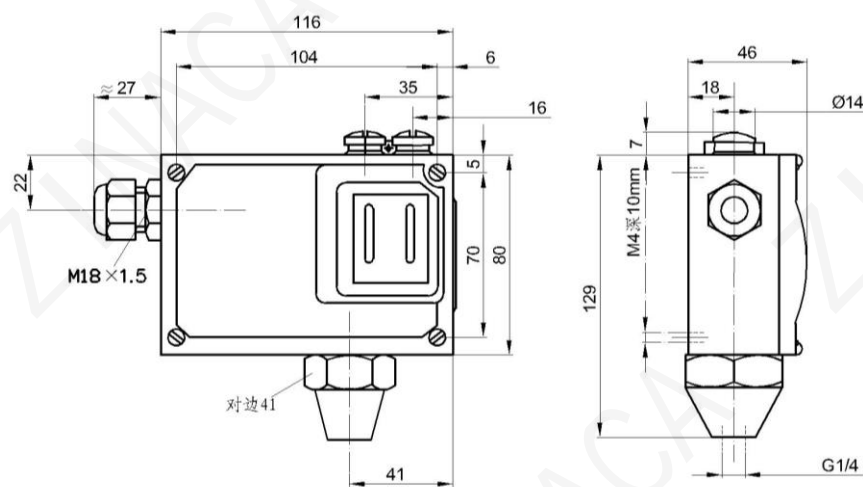
01. Front

01. Side



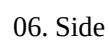
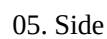
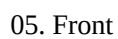
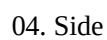
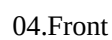
02. Front

02. Side

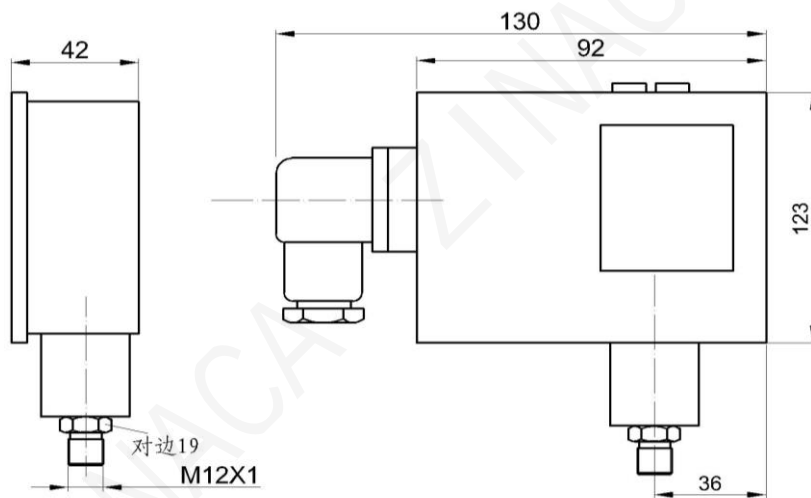


03. Front

03. Side



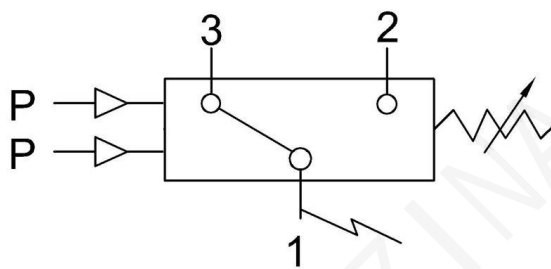
3、超小型



07. Front

07. Side

VII. Instrument Wiring



Single-pole, double-throw microswitch process:

Terminal 1-3

Pressure rises to the upper switching value

Terminal 1-2

The pressure rises to the upper switching value.