



TXZ-S8 Catalog & Manual

CHANGZHOU TIANLI INTELLIGENT CONTROL CO.,LTD.

2

Electronic Pressure Switch

K3 ↘



↙ **K4, K5**

↖ **K1**



1, Summary

Electronic series pressure switch is a set within pressure measurement, display, output, control in one of the intelligent digital pressure measurement and control products. This product is fully electronic structure, Front-end used with membrane filled with oil pressure resistance type pressure sensor, By high-precision A/D conversion Processed by the microprocessor operation, Field display and output the way analog and four-way switch.

This intelligent pressure-controller is easy to use, simple to operate and debug, and very safe and reliable. It is widely used to measurement the pressure in a fluid medium and to display and control on site in industry, such as hydropower, water supply, petroleum industry, chemical industry, machinery industry, hydraulic pressure, and so on.

2, characteristics

- ◆4-digit LED digital tube display
- ◆Controlling points and delay both can be set on site.
- ◆Controlling points can be arbitrarily set from zero to full.
- ◆There are two lights for alarm to be easily observed.
- ◆The instrument parameters can be adjust and set conveniently.
- ◆2 switch outputs, load capacity 1.2A.
- ◆The type of PNP or NPN can be chosen.
- ◆The analog output (4 ~ 20mA) optional is supported.
- ◆The shell can be rotated up to 330° .

3, Technical Parameters

Instruction Manual



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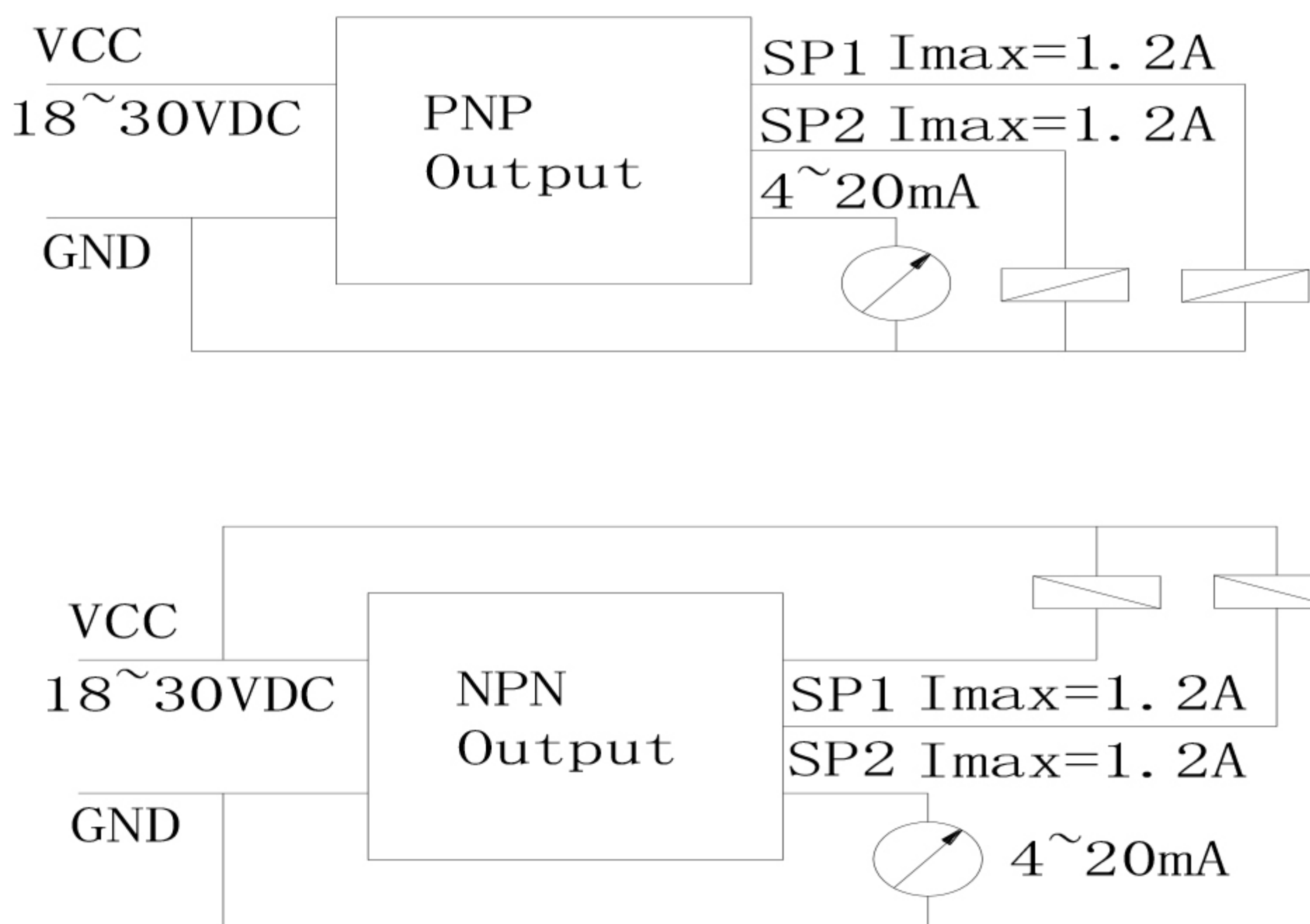
4, Installation

4.1 Mechanical Connection

An Electronic Pressure Switch could connect to hydraulic lines with the connector(M20*1.5) (connectors with different sizes are available to be described at the time of ordering) . In a critical case (such as severe vibration or shock) , the mechanical connection may be decoupled by mini hose.

Note: the instrument, of witch one' s measuring range is less than 100Kpa, must be installed vertically.

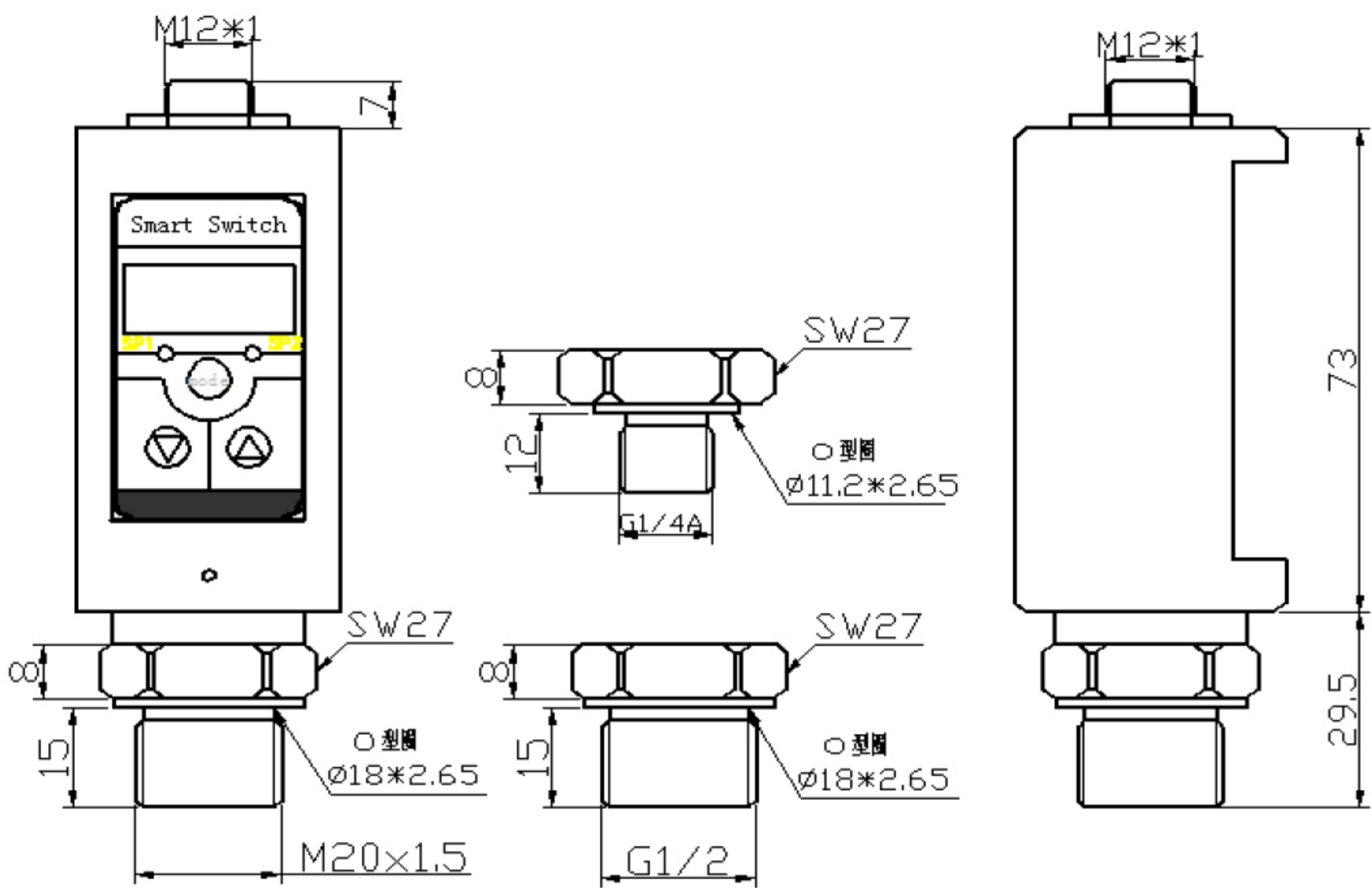
4.2 Electrical Connection



prevent the effects of electromagnetic interference:

- Connect with shielded cable witch should be as short as possible.
- Avoid closing to the user' s devices witch will cause interference and wires of electrical and electronic equipments.
- In the case of using mini hose for installation, the shell must be grounded separately.

5, Dimensions



6, Settings

6.1 Switch Output

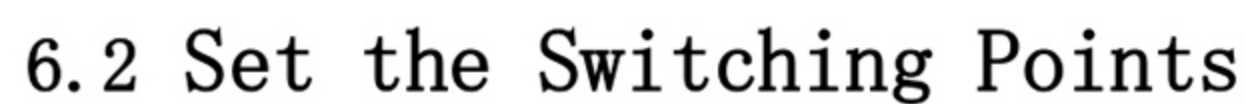
Measuring Range	MPa	Precision Grade	≤±0.25%FS
Stability	≤0.2% /year	Overload Pressures	200%
Display Mode	4 Digital tube	Display Range	-1999~9999
Power Supply	24VDC±20%	Power Consumption	< 3W
load capacity	<24V1.2A	Lead Way	5 pin connector
Protection grade	IP65	switch life	>1 million times
Ambient temperature	-30℃~70℃	medium temperature	-40℃~85℃
Storage temperature	-40℃~85℃	relative humidity	0~80%

Hirschmann-1	Hirschmann-2	Hirschmann-3	M12-4P-1	M12-4P-2	10 cores aviation plug
1.VCC	1.VCC	1.VCC	1.VCC(BRN)	1.VCC (BRN)	1.VCC(RD)
2.GND	2.GND	2.GND	2.AL2 (WHT)	2.4-20mA (WHT)	2.GND(YL)
3.4-20mA	3.AL1	3.AL1	3.GND (BU)	3.GND (BU)	3.NO1 (BLK)
	≐4-20mA	≐AL2	4.AL1 (BLK)	4.AL1 (BLK)	4.COM1 (BRN)
M12-4P-3	M12-5P-1	M12-5P-2	5 cores aviation plug-1	5 cores aviation plug-2	5.NC1 (GY)
					6.NO2 (WHT)
1.VCC(BRN)	1.VCC(BRN)	1.VCC(BRN)	1.VCC(BRN)	1.VCC(BRN)	7.COM2 (VT)
2.NO (WHT)	2.AL2 (WHT)	2.NO (WHT)	2.AL2 (WHT)	2.NO (WHT)	
3.GND (BU)	3.GND (BU)	3.GND (BU)	3.GND (BU)	3.GND (BU)	
4.COM (BLK)	4.AL1 (BLK)	4.NC (BLK)	4.AL1 (BLK)	4.NC (BLK)	
	5.4-20mA(GY)	5.COM(GY)	5.4-20mA(GY)	5.COM(GY)	

Please observe the following precautions, in order to



An Electronic pressure switch has two switches (PNP type) output. Each switch output can be set to 1 independent pressure switch point and an switch delay value. The corresponding output will switch when the value of the pressure reaches the switch value, and will be released when the pressure drops below the release value.



AL2D: Switch-delay for SP2(if the output should be changed, delay in seconds.)

function). The difference between the switch-on value and the switch-off value, is the return difference of the switching point.

For example, to set the SP1 as an upper-limiting alert (normally open function), closed when the pressure is up to (or higher than) 4Mpa, and released when the pressure is down to (or lower than) 3.95Mpa, delay for 3 seconds before switching; to set the SP2 as an down-limiting alert (normally closed function), released when the pressure is up to (or higher than) 10Mpa, and closed when the pressure is down to (or lower than) 9.95Mpa, delay for 10 seconds before switching.

AL2H=9.95 AL1L=10.00 ALID=10

- Press the key "MODE" to enter the main menu.
- Show "LOCK" (prompting for password).
- Press the key ▲ or ▼ to enter the password "0001".
- Press the key "MODE" to confirm it and enter the second level menu.
- Press the key ▲ or ▼ to up or down the menu for selections (AL1H、AL1L、AL1D、,,,,、END)
- Press the key "MODE" to enter the parameter setting interface.
- Press the key ▲ or ▼ to change the value corresponding to a switch.
- Press the key "MODE" to confirm it and back to main menu.
If you need, press the key ▲ or ▼ to select other parameter, and press the key "MODE" to enter its parameter setting interface.
- When you finish the settings, select "END" menu, and press the key "MODE" to confirm all the parameters (save and exit, back to the normal display interface).
- If no key is pressed over 30 seconds, the menu will be closed and back to the normal display interface, and will not save any parameter setting that you change.

There is one year warranty with the instrument from the date of manufacture, and this need the user to follow this



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instruction manual without wrong operation. Any time, we welcome customers to send messages and call us for question or suggestion.

Product Slection Guide

TXZ-S8 Intelligent pressure switch

TXZ-S8	K1	71*36*44mm Cast aluminum shell (gray, orange)						
	K2	65 * 59 * 35mm cast aluminum shell (gray)						
	K3	φ35mm side display stainless steel shell						
	K4	φ38mm bevel display stainless steel housing						
	K5	φ40mm bevel display stainless steel housing						
	Shell shape	Installation Type	A	standard one				
			X	split				
			Electrical interface	H	Hirschmann connector			
				M	M12 connector			
				J	aviation plug			
					010	2 circuits PNP switch		
					011	1 circuit PNP & (4-20) mA		
					012	2 circuits PNP & (4-20) mA		
					020	2 circuits NPN		
					021	1 circuit NPN & (4-20) mA		
					022	2 circuits NPN & (4-20) mA		
					030	2 circuits relay		
					031	1 circuit relay & (4-20) mA		
						G14	G1 / 4 male thread	
				G12		G1 / 2 male thread		
				M20		M20 * 1.5 External thread		
						(…) is filled in as needed		