

Instructions

Intelligent Digital Indicator

ZP60/ZP61/ZP80/ZP81/ZP90/ZP91



attestation

ISO 9001:2015

Please read this instruction manual carefully before installation



Introduction

ZP Series are used in conjunction with various analog output pressure transducer (mV/V), transmitter (4~20mA, 0~5V, 0~10V), etc to realize the control and alarm of pressure, vacuum etc., and can be configured with functions such as temperature measurement, pressure transmission signal output and RS-485 communication according to customer requirements.

Application

- chemical fiber industry
- injection molding industry
- rubber industry


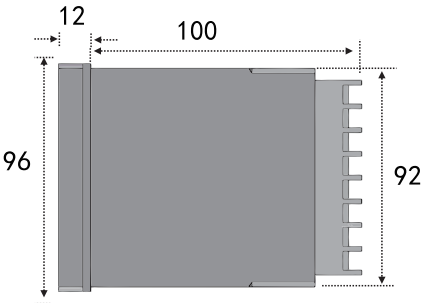
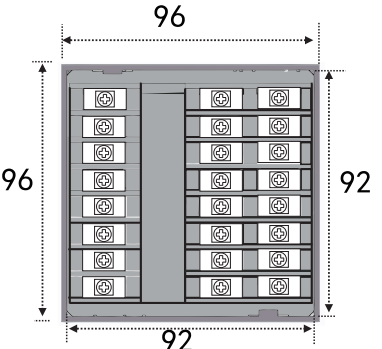
Product features


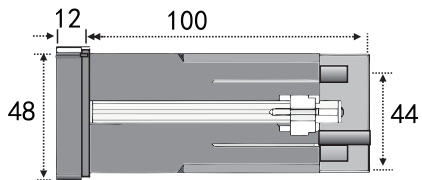
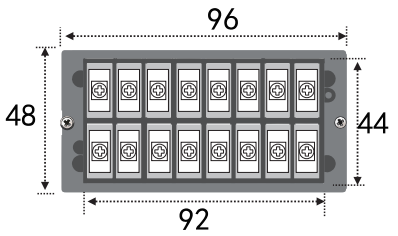
- Strong anti-interference
- Small size, light weight
- Diverse control output
- Fast response
- Simultaneous pressure&temperature display available


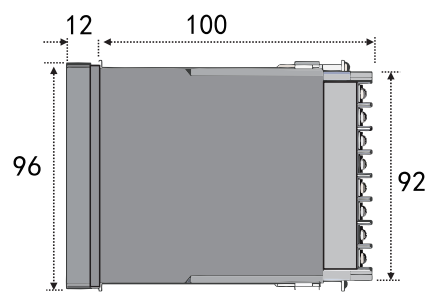
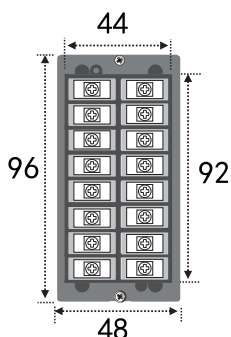
Technical data

Displayer	double-row four-digit highly bright LED digital display
Resolution	0.001
Range	pressure: 0000...9999(decimal point variable), temp: 000.1...400.0
Accuracy	0.2%FS \pm 1 bit
Signal Output	4-20mA, 0-5V, 0-10V, relay output, RS485RS232 communication
Working Temp	-10~50 $^{\circ}$ C Humidity:<80% RH
Sampling Speed	12.5 times/second
Overall power	85~265VAC 50Hz~60Hz;24V DC
Overall Weight	400g(Z900), 280g(Z600/800)

Dimensions

Instrument model	Top view	Back view
ZP90/ZP91 		

Instrument model	Top view	Back view
ZP60/ZP61 		

Instrument model	Top view	Back view
ZP80/ZP81 		

Layout of the Indicator Panel

There is a temperature unit °C on pressure and temperature meter panel, and the lower row displays the measured temperature value



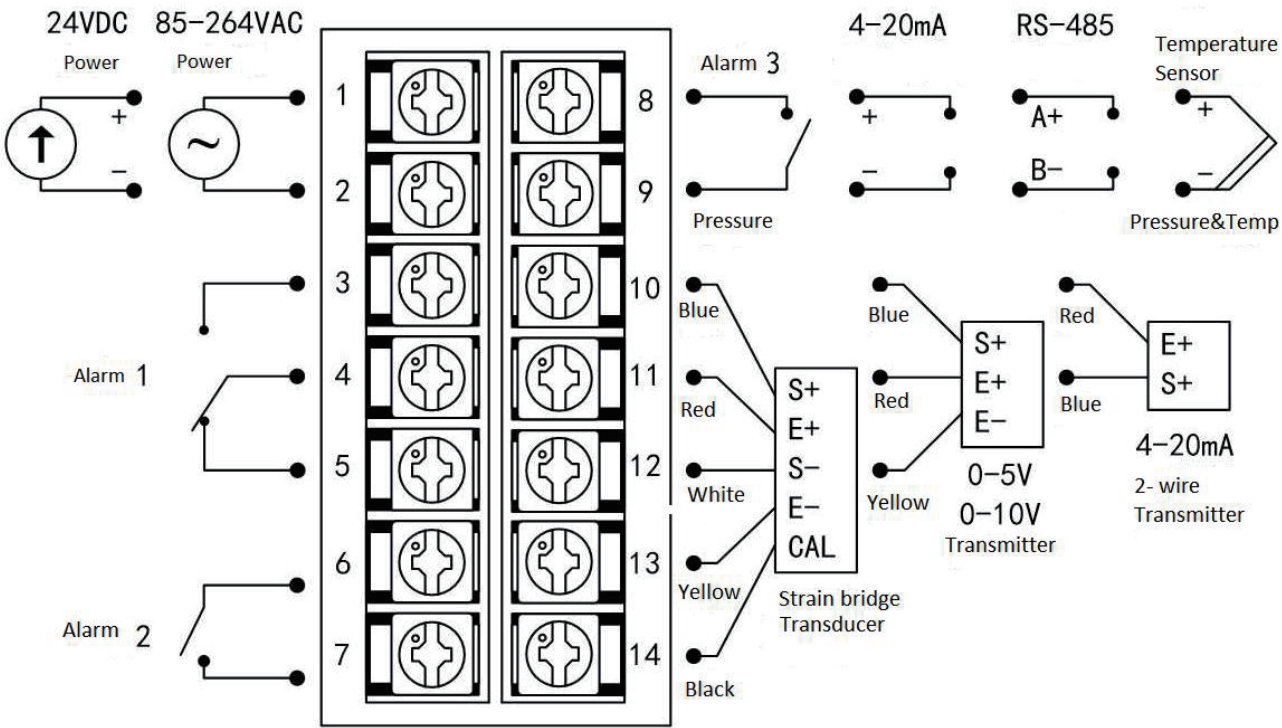
There is no temperature unit °C on only pressure function instrument panel, and the lower row displays the ALM3 alarm value.



Ordering guide

Serie No	ZP		X	-	X	-	X	-	X	-	X
Basic form	Intelligent Digital Indicator										
Product Type	Square 96*96 Pressure		90								
	Vertical 48*96 Pressure		80								
	Horizontal 96*48 Pressure		60								
	Square96*96 Pressure&Temperature		91								
	Vertical 48*96 Pressure&Temperature		81								
	Horizontal 96*48 Pressure&Temperature		61								
Power Supply	85 ~ 265VAC				V1						
	24Vdc				V2						
Pressure Range	XMPa						Mx				
Input Signal	1.5mV/V								S1		
	2mV/V								S2		
	3.33mV/V								S3		
	4 ~ 20mA								S4		
	0 ~ 10Vdc								S5		
	0 ~ 5Vdc								S6		
Output Signal	2 way replay output										H1
	2 way replay output + 1way replay output										H2
	2 way replay output + 4-20mA output										H3
	2 way replay output + 0-10V output										H4
	2 way replay output + 0~5V output										H5
	2 way replay output + RS485 Communication										H6
	2 way replay output + RS232 Communication2										H7

InstrumentWiring



FunctionandOperation

Power-on Inspection

P OX/CK (means pressure and temperature are detected at the same time, temperature is K-couple signal in degrees Celsius, or NP70). After about 2 seconds, it will display: 50.0/600.0 (means max pressure -ED and max temperature range) Or -ED-)...return to the normal measurement state after about 2 seconds

Button Description

The SET key is used to enter the menu and confirm the parameter settings; FUNC is the clear key and 80% check key; "» " is the shift key, and " ⤴ " is the increase key, which is used to modify the parameters.

Indicator Light

AL-1 AL-2 AL-3 respectively correspond to the alarm 1 to alarm 3 indicator lights, when there is an alarm, the corresponding light is on; CAE is the clear zero and 80% calibration indicator, the CAE light flashes when entering the menu to clear zero, in the normal measurement state The CAE light will be on when it is cleared, and it will be on when it enters 80% calibration.

First Level Menu(Alarm value setting)

Press the SET key to enter:

Prompt Symbol	Name	Predetermined Area	Illustration	Initial Value
AL1	Alarm 1 setting value	Full scale	Alarm when ALS1 is greater than or less than according to the alarm mode	20.0
AL2	Alarm 2 setting value	Full scale	Alarm when ALS2 is greater than or less than according to the alarm mode	40.0
AL3	Alarm 3 setting value	Full scale	The dual-function meter does not have this alarm output, only the indicator light and the buzzer remind, and the single-function meter can output	50.0

Second Level Menu(Range Alarm)

In the normal measurement state or in the first-level menu state, long press the SET button for more than 4 seconds to enter

Prompt Symbol	Name	Predetermined Area	Illustration	Initial value
-AC-	Clear Zero	-----	The CAE indicator flashes, press the FUNC button to clear it effectively. In the normal measurement state, press and hold the FUNC key for more than 2 seconds (CAE light is on) and the buzzer will be cleared after it sounds once. Pressing the SET key is invalid	0.0
-Ed-	Upper limit of pressure range	Full scale	Set the upper limit of the measured pressure	50.0
-Ld-	Lower limit of pressure range	Full scale	Set the lower limit of the measured pressure.	00.0
-Ed-	80% automatic calibration	$(0.8)*(-Ed-)$	It is valid when the sensor with 80% calibration function, the CAE indicator light is on, and it is valid by pressing the FUNC key	40.0

ALS1	Alarm 1 method	0---250	<p>Units place: =1 Temperature lower limit alarm; =2 Temperature upper limit alarm; =3 Lower pressure limit alarm; =4 Pressure upper limit alarm; = Others No alarm output.</p> <p>Tens place: =2 When the lower limit alarm, there is a standby alarm function; = Other non-standby alarm functions.</p> <p>Hundred's place: =1 with alarm hold function; = Other non-alarm keep function..</p>	002
-AC1	Alarm 1 return difference	Full scale	<p>When the upper limit alarm occurs, if the measured value is less than the alarm value minus the return difference value, the alarm relay will be released.</p> <p>When the lower limit alarms, if the measured value is greater than the alarm value plus the return difference value, the alarm relay will be released.</p>	0.5
Prompt Symbol	Name	Predetermined area	Illustration	Initial value
ALS2	Alarm 2 way	0---250	Same as ALS1.	002
-AC2	Alarm 2 return difference	Full scale	Same as -AC1.	0.5
-AC3	Alarm 3 return difference	Full scale	<p>Alarm when the pressure measurement value is greater than AL3</p> <p>Release the alarm relay when the pressure measurement value is less than (AL3-(-AC3))</p>	0.5

AL1T	Delay alarm 1	0--250	=0 No delay function; The delay time is AL1T*0.5 seconds, that is, the longest delay is 125 seconds, the shortest delay is 0.5 seconds, and the delay accuracy is 0.5 seconds. When the alarm condition is reached, the relay will alarm after the delay time. The alarm will be output during the delay period. If the conditions are not met, it ends.	0
AL2T	Delay alarm 2	0--250	Same function as AL1T	0
-GL-	Filter parameter	0---250	Pressure filter parameter, the larger the value, the slower the display update is, the more stable, the smaller the value, the faster the display update will be slightly fluctuating	100
dot	Pressure decimal point	0---3	=0 no decimal point, =1/2/3 means one or 2 or 3 decimal points.	1
CTR	Fahrenheit Celsius	0--3	=1 means Fahrenheit, = other means Celsius; There is no such parameter when single function meter does not have temperature measurement	0
Pb	Measured value correction	Full scale	Correction of temperature measurement value, test PV=measurement value+Pb	0.0
LoCK	password	0--3	=0 No parameter lock function; =1 Only lock the main menu. =2/3 All menus are locked	0