

LED Digital Pressure Switch/Controller DPR-S80/S90

Features

- 4 digital LED display pressure, Accuracy $\leq 0.5\%$
- Three pressure units available (Psi, Kg/cm², Mpa)
- Adjustable high & low pressure threshold and delay time
- Adjustable control mode: normal control and reverse control
- Pressure leak and loss protection, secure setting-up
- Anti-electromagnetic interference design
- Zero clearing with one button



Protective Functions

- Upper limit alarm (high pressure)
- Lower limit alarm (low pressure)
- Pressure leak alarm
- Pressure loss alarm (no pressure)

Applications

- Machine Automation
- Engineering Machinery
- Pump & compressor
- Hydraulic System
- Electromechanical Integration Equipment
- Medical project
- Pipeline engineering

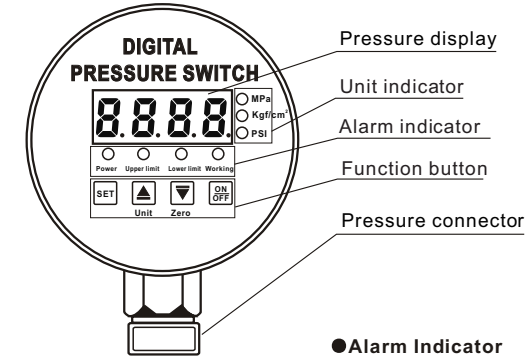
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Technical data

Model	DPR-S80	DPR-S90
Pressure range	General type: 0~1, 2, 3, 4, 5, 10, 20, 30, 40, 50, 60Mpa Micro type: 0~0.2, 0.5Mpa Negative type: -0.1~0.1Mpa	
Pressure unit	MPa, kgf/cm ² , PSI adjustable	
Overload pressure	150%	
Accuracy grade	$\pm 0.5\%$ FS	
Power supply	24VDC, 220VAC, 380VAC	
Alarm point	Full range can be set	
Alarm type	relay signal	
Load capacity	380V 3A, 220V 5A, 24V 5A	
Sampling frequency	10 times/sec	
Operating temperature	-20 ~ 80 °C	
Compensation Temperature	-10 ~ 60 °C	
Measurement medium	Gas, water, oil (compatible with 316 stainless steel)	
Electric protection	Short-circuit protection, reverse polarity protection, anti-electromagnetic interference design	
Pressure connector	M20*1.5, G1/2, G1/4, NPT1/2, NPT1/4 (other connector could be customized)	
Connector material	304SS	
Optional module	RS485 Modbus Communication	
Dial diameter	80mm	100mm
Shell material	ABS	304SS
Mounting methods	Radial direction only	Axial direction or radial direction optional
Weight	0.4Kg	0.6Kg

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Front Panel View



Function button

Button	Description
ON/OFF	Run or stop controller
ZERO	Digit - & zero clearing
UNIT	Digit + & unit switching
SET	Parameters setting

Alarm Indicator

Indicator	Description
Power	Lit when power is being supplied.
Upper limit	Lit when high pressure alarm or high pressure is setting
Lower limit	Lit when low pressure alarm or low pressure is setting
Working	Lit when controller is running

Operation guide

1. Run and stop the controller.

When power is supplied, the controller will run automatically. Working indicator lights. Press ON/OFF to stop, indicator turns off, press ON/OFF again to run.

2. Switch unit.

Make sure controller is stopped. Press \blacktriangle to switch the pressure unit.

3. Check and set upper and lower limit for pressure alarm.

Make sure controller is stopped. Press SET, display shows lower limit and lower limit indicator lights; press $\blacktriangle\blacktriangledown$ to set up value. Long press $\blacktriangle\blacktriangledown$ could accelerate increase or decrease. Press SET to save and shift to upper limit and upper

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Operation guide

indicator lights; after finishing setting, press SET to save and quit automatically. *if lower limit can't be set to specified value, please setting up limit first, as lower limit may be locked by upper limit. *if lower and upper limit are locked, can't be set, please refer to Parameter setting method, to disable secure setting-up.

4. Zero clearing

Make sure controller is stopped and pipeline is not pressurized, press \blacktriangledown /Zero, the value will set to 0. Do not do this if not necessary.

Parameter Setting Method

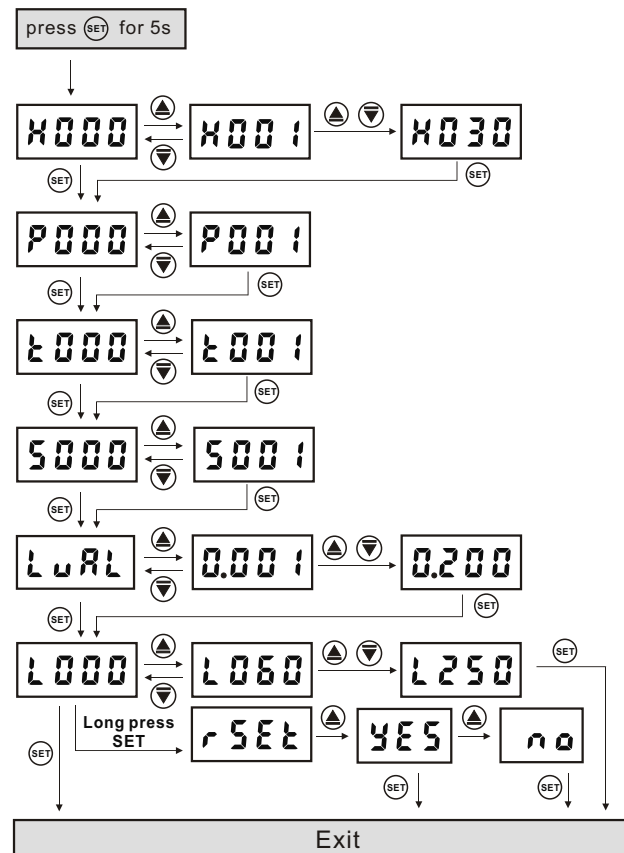
Make sure controller is stopped. Long press SET for 2s to enter into parameters setting interface. Press SET to shift to next parameter, press \blacktriangledown to enable or disable the function, press \blacktriangle to confirm, press $\blacktriangle\blacktriangledown$ to set up value. Long press $\blacktriangle\blacktriangledown$ could accelerate increase or decrease. After finishing setting, press ON/OFF to exit.

Display	Description	Setting range
X000	Delay time. Controller will stop with a delay time if pressure exceed upper limit or below lower limit.	1-30s. 0 for disable, disable by default
P000	Secure setting-up. If it is enable, lower and upper limit will be lock. If you need to change limit, you should disable this function.	0 for disable, 1 for enable, disable by default
L000	Reverse control mode. please refer to page 6 Control mode.	0 for disable, 1 for enable, disable by default
S000	Pressure leak protection. Controller stops and display shows "E-L" if pressure doesn't change for more than 3 min.	0 for disable, 1 for enable, disable by default
LwRL	Pressure loss threshold. Controller stops and display shows "E-F" if pressure is lower than setting value for loss delay time as below.	LED shows pressure value, range is 3-30% of full range, 0 for disable, disable by default
L000	Pressure loss delay time. Controller stops and display shows "E-F" if pressure is lower than loss threshold for this setting time.	60-250s, 0 for disable, disable by default

* when display L000, long press SET, LED will show "rset", choose "yes", all the values will be reset to defaults, please refer to page 5 for detail..

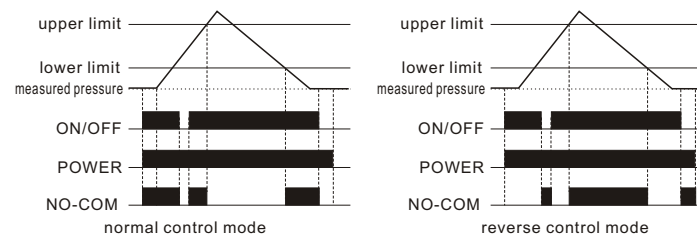
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Parameter Setting Guide

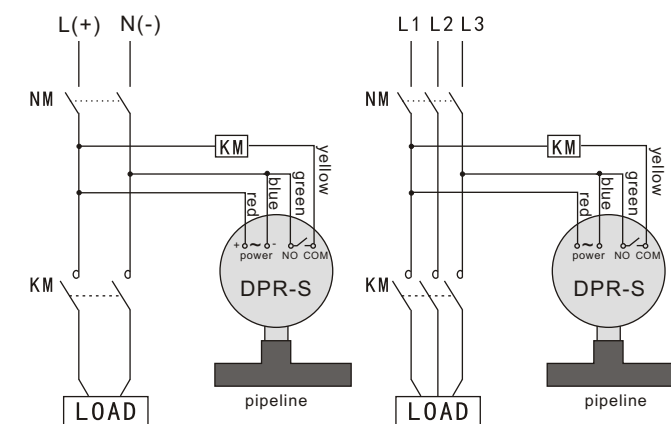


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Control mode



Wiring Diagram



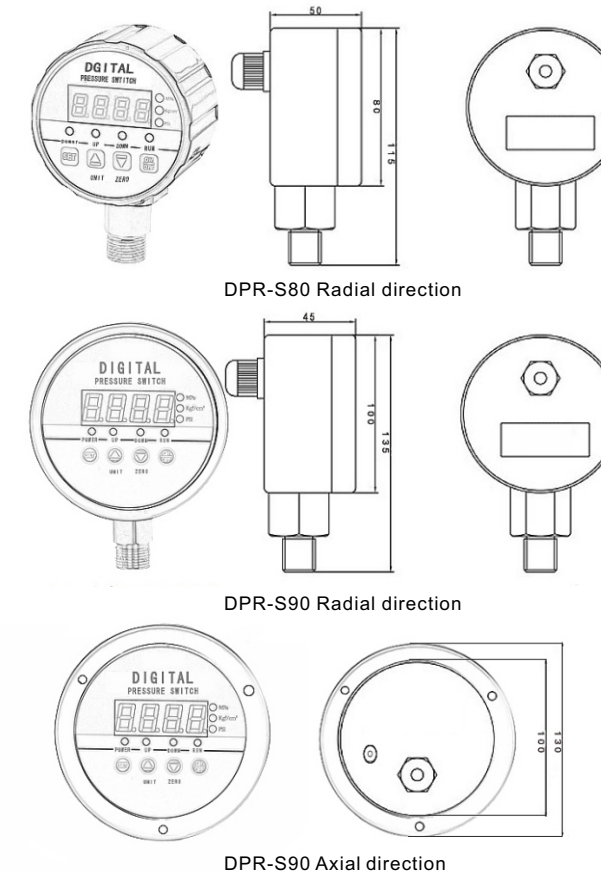
for AC220V/DC24V control circuit in normal control mode

for AC380V control circuit in normal control mode

Relay contact position shown in 'Power off' condition

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Dimensions (mm)



DPR-S80 Radial direction

DPR-S90 Radial direction

DPR-S90 Axial direction

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Note: specifications are subject to change without notice.

GENERAL SAFETY
POTENTIALLY HAZARDOUS VOLTAGES ARE PRESENT AT THE TERMINALS OF THE RELAYS.
ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING.
THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.



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