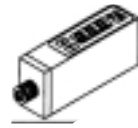




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Model JTSED-W Pressure Switch

ELECTRONIC PRESSURE SWITCH JTSED-W

CE (Compliance with EMC Standards)

Instruction Sheet V1.0

Thank you very much for purchasing our product. For safe and proper use of the product, please thoroughly read this instruction sheet and understand the contents before using. Also, please keep this instruction sheet in a safe place for future reference



WARNING



CAUTION The following warnings notify the user that injury or damage may occur if the product is used improperly.

- This product is neither a drip proof nor a dust proof structure. Never use it under conditions where water or oil drips, dust rises, or corrosion occurs.
- Do not use corrosive gases or liquids as pressure media.
- Do not apply pressure in excess of maximum pressure.
- Do not short-circuit the unit by touching one output terminal wire to another. Also, do not cause current over 80mA to flow to/from the switch. This may cause damage to the internal circuitry.
- When handling the product, always pick it up by the body and do not apply excessive force to the cable.
- When performing piping work on the product, always hold the product by the port section, and do not exceed the specified torque when tightening the pipes.
- For stability, use a regulated DC power supply. Surge absorbing circuits (diodes, varistors, etc.) are necessary if inductive loads such as relays and solenoids are connected to the same power line as the JTSED-W. If a DC power supply unit such as a switching power supply is used, the FG terminal should be grounded (see Figure 1, right).
- Use pH neutral detergents to clean the switch body. Do not use lacquer thinner and other solvents for cleaning.

Major Specifications

You have purchased ANVER Electronic Pressure Switch:

JTSED-W

- Pressure Range:** 0--100kPa
Fitting Part Type: R1/8 with M5 female screw
Switch Output Type: One-Switch Output (Variable Hysteresis) and Analog Output
Output transistor configuration: PNP Open Collector

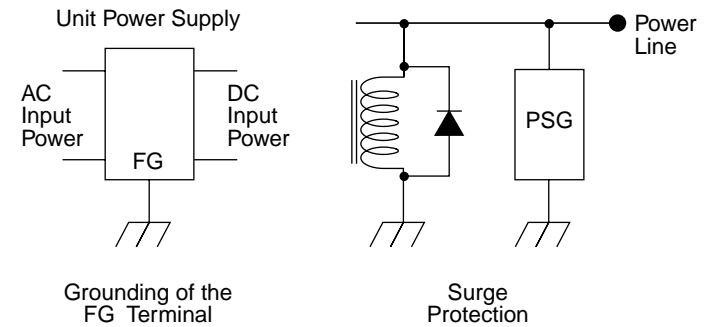


Figure 1

Piping

1. When using R1/8 fitting:
 Use a wrench on the port section of the body to tighten, applying a torque of 4 lbf•in or less. Apply sealing tape if necessary.
2. When using a commercially available fitting for M5 female screw:
 Hold the switch by the port section. Tighten the fitting with a wrench, applying a torque of 4 lbf•in or less.



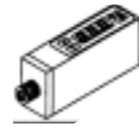
Do not hold the switch body directly when tightening. Do not use a wrench on any part other than the port section when tightening. Failure to observe this rule may cause damage/ breakage to the switch.

Wiring

The wires should be connected as shown in the table below. Be sure to connect the wires properly.

| Color | |
|-------|---------------|
| Brown | Power supply |
| Blue | Common |
| Black | Switch output |
| White | Analog output |

NOTE: Ground the shield wire if necessary.

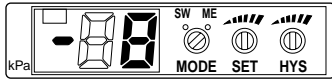


Setting

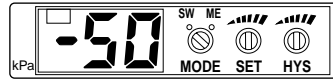
One switch output

- Turn the display selector switch (MODE) to the "SW" position.
- Turn the pressure setting trimmer (SET) to set the switch operating pressure.
- Turn the hysteresis adjustment trimmer (HYS) to get the desired hysteresis.
- Turn the display selector switch (MODE) back to the "ME" position.

Pressure Measurement



Switch Setting Mode



NOTE: For an even more precise setting, apply pressure and get the optimum pressure level by adjusting trimmers several times.

NOTE: The setting range of the switch, that is to say, the adjustable range of the setting trimmer, does not agree with the rated indication range of the display.

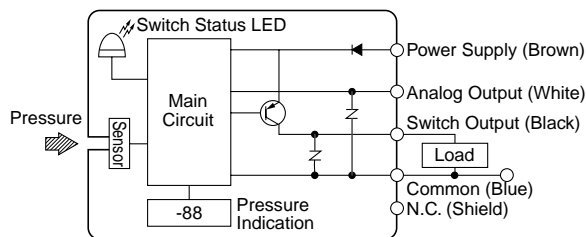
Even though the display indicates "0 through 99", the switch can be set at a pressure of under 0 or over 99 with an extra margin of a few % FS.



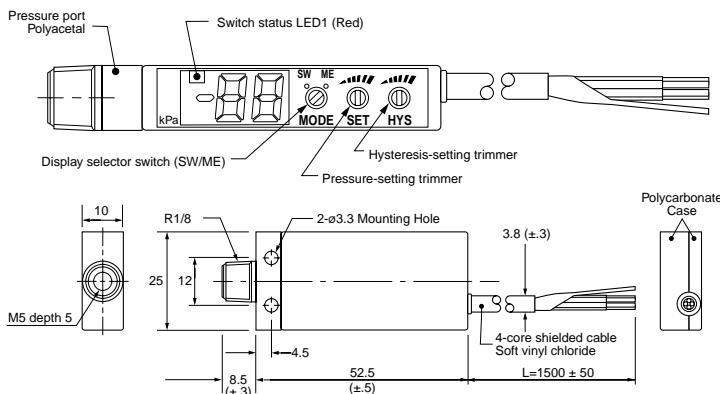
When setting the display selector switch and the pressure-setting trimmer, be careful not to apply too much force. The allowable torque for the display selector switch and the pressure setting trimmer should be no more than 2 lbf•in.

Internal Circuits

One PNP Output



Outline Dimensions



Major Specifications

General Specifications

| | |
|-------------------------|---------------------|
| Type(indicator) | Gauge pressure |
| Pressure media | Non-corrosive-gases |
| Operating temperature | -10~60°C |
| Storage temperature | -20~70°C |
| Compensated temperature | 0~50°C |
| Pressure range | 0~100 kPa |
| Rated pressure | -100 kPa |
| Maximum pressure | 200 kPa |
| Breakdown pressure | 500 kPa |

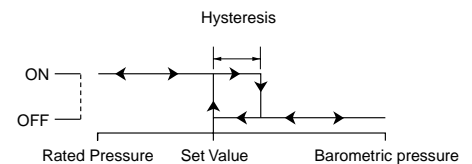
Power Supply

| | |
|-----------------------|------------------------------------|
| Driving Power Voltage | 12~24V (±10%) Ripple Content |
| Current consumption | 35mA maximum (No load switch "ON") |

Switch Outputs

| | |
|----------------------------|-------------------------------------|
| Setting range | 0~100 of Rated pressure |
| Setting method | Adjustable with single turn trimmer |
| Number of settable outputs | 1 |
| Hysteresis | 0 ~15% FS (adjustable) |

Switching Operation



| | |
|------------------|---|
| Switch rating | 30V, 80mA maximum |
| Residual voltage | 1.2V max. (at flow-out current load of 80mA) |
| Accuracy Display | ±3 % FS max. (0~50°C reference temperature 25°C) |

Pressure Indication

| | |
|-----------------------------|----------------------------|
| Number of digits of display | 2 digits |
| Display element | LED (red) |
| Pressure range | 0~100 kPa |
| Rated Indication (Display) | -0~99 kPa |
| Sampling cycle | Approx. 4 times per second |
| Accuracy Display | ±3% FS |

Analog output

| | |
|----------------|---|
| ZERO voltage | 1±0.1V |
| SPAN voltage | 4±0.1V |
| Output current | 1mA max. (output load resistance should be 5k Ω minimum) |

WARRANTY

This Product is covered by a one-year warranty. ANVER warrants that any part of the product which proves to be defective due to design and/or manufacturing within one year of purchase, will be repaired or replaced, free of charge. Note that the warranty will only be applied to the product alone, not to damages induced by any failure of the product. However, the warranty will not be applied in any of the following circumstances.

- Failure and/or damage caused by improper use not conforming to the instruction sheet or negligent handling.
- Failure and/or damage caused by inappropriate modification, adjustment on repair.
- Failure and/or damage caused by natural disaster, fire or any other act of God.