



# Model KW18 Load sensor

## OUTLINE

This is a high output, high-precision and small type load sensor module using a semiconductor strain gauge. This sensor module complies with both compression and tension load. Various types regarding measuring ranges are provided, complying with measuring load and change, controlling. A hook according to application can be installed by welding at the load sensing portion.

## FEATURE

- A pressure sensing portion using a vacuum-evaporation-type semiconductor strain gauge is installed. Therefore, durability and stability are assured.
- Because of this small and light gauge, a compact apparatus can be designed.
- Because of no moving portion, this load sensor demonstrates excellent vibration resistance and impact resistance.
- Because of equipping a metallic diaphragm, this load sensor demonstrates excellent corrosion resistance and overload resistance.

## SPECIFICATION

### Operating condition:

Under the normal condition, where there is no inflammable gas or liquid which cause the ignition or explosion.

### Type:

Pull type, Push type

### Load sensing parts material:

630st.st.(17-4PH st.st.)

### Load range:

Pull Type 0 ~ 0.6 → 0 ~ 50kgf

Push Type 0 ~ 2 → 0 ~ 100kgf

### Max. allowable load:

200% of rated load

### Operating temperature:

-20 ~ 70°C

### Power source:

5V DC

### Output:

60±25mV DC

### Input and output impedance:

3.5kΩ (Typ.)

### Zero point offset:

±6mV max.

### Lead wire:

With 100mm

### Accuracy:

±0.5 % F.S. or ±1.0 % F.S.

(Include non-linearity, hysteresis, repeatability)

### Temperature coefficient:

Zero } ±0.05%F.S./°C (Accuracy ±0.5%F.S.)

Span } ±0.1%F.S./°C (Accuracy ±1.0%F.S.)

### Case material:

Stainless steel

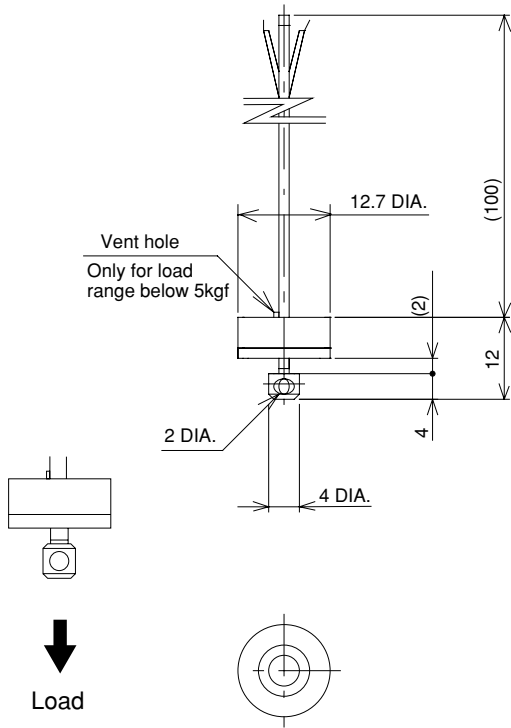
### Hook material:

304st.st.(Pull type)

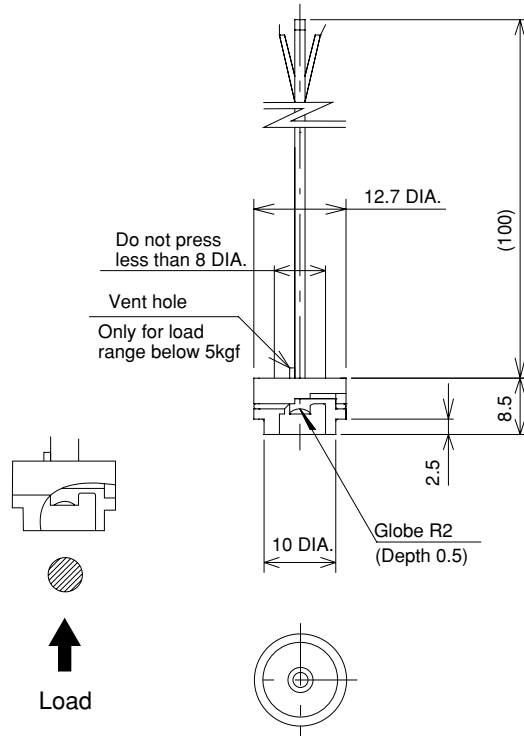
### Weight:

Approx. 5g

## DIMENSIONS

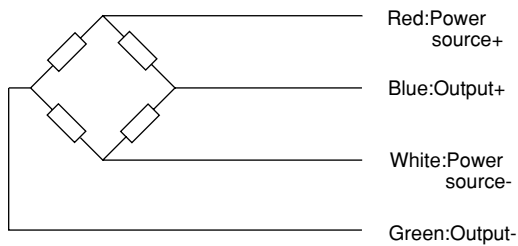


[Pull Type]

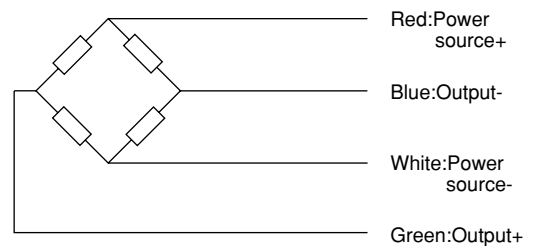


[Push Type]

## WIRING



[Pull Type]

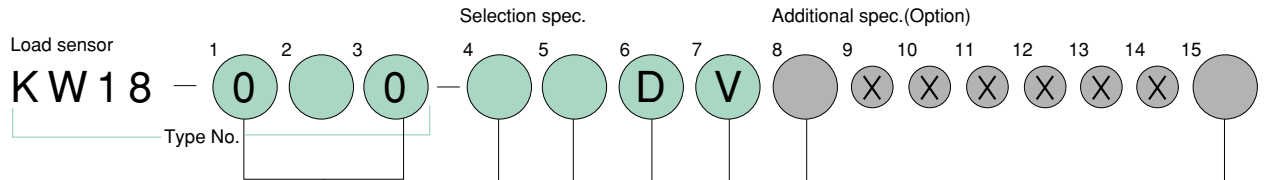


[Push Type]

# Type No. constitution

Please specify Type No., each specification and range, when ordering.

Note: For this Model, there is no applicable item for the figures X, but please specify X when ordering.



1 2 3 Type

010	Push Type
020	Pull Type

8 Treatment

0	Nil
1	Use no oil
2	Use no water
3	Use no oil & water

7 Output

V	60±25mA DC
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4 Load range(kgf) In case of Pull Type  
(When ordering, please specify pressure range & unit.)

1	0 ~ 0.6 ±1.0%F.S. only
2	0 ~ 1, 2
3	0 ~ 5, 7, 10, 20, 35
4	0 ~ 50

6 Power source

D	5V DC
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5 Accuracy

4	±0.5%F.S.
6	±1.0%F.S.

4 Load range(kgf) In case of Push Type  
(When ordering, please specify pressure range & unit.)

2	0 ~ 2
3	0 ~ 5, 10, 20
4	0 ~ 50, 100

15 Document

0	Nil
1	Please specify your requirement Drawing one sheet, Instruction manual, Inspection procedure, Mill sheet, Test report