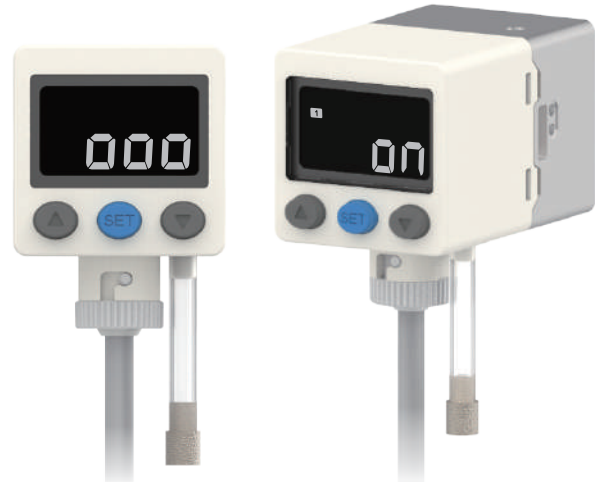


## Features

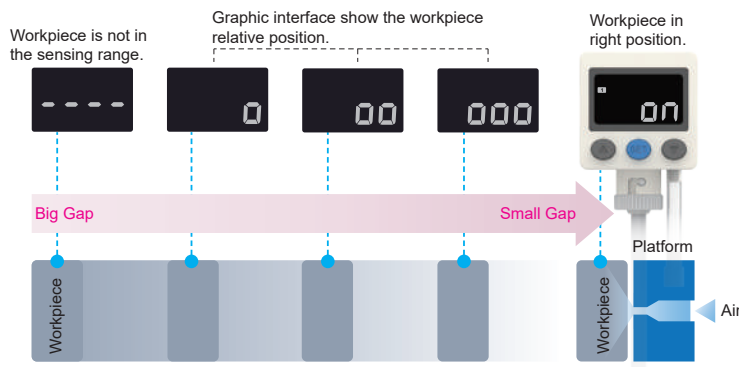
- Digital LCD display, easy readout
- IP65 enclosure
- Detection distance : 0.01 ~ 0.10 mm
- Repeatability :  $\pm 5 \mu\text{m}$



## Features Highlight

### 1 Easy to Check Workpiece Located on the Right Place

- Intuitive recognize in graphic interface, easy to check the gap between workpiece and platform.

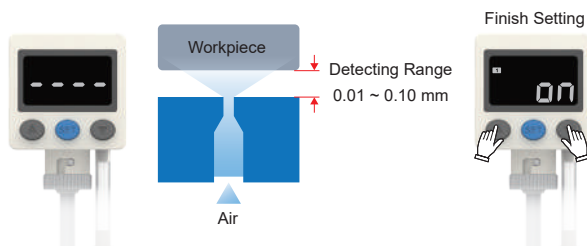


### 2 IP65 Compliance



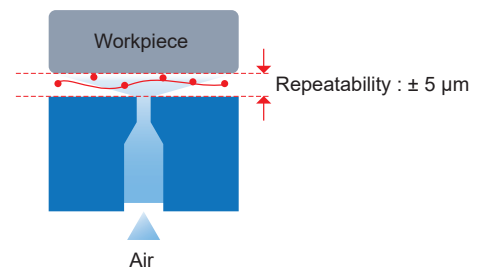
### 3 Reference Gap Easy Setting

- To set the reference gap by press up  $\Delta$  + down  $\nabla$  at the same time.

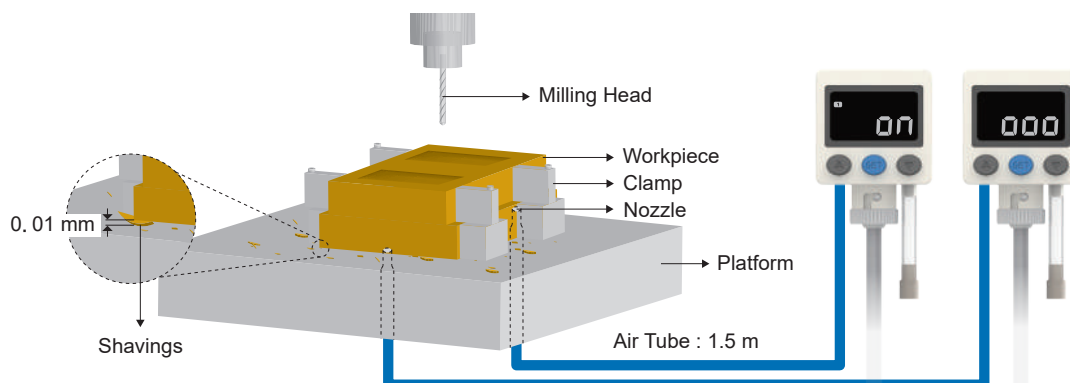


### 4 Repeatability : $\pm 5 \mu\text{m}$

- The higher repeatability is, the more guarantee is.



### 5 The Gap Cause by Shavings Can Be Detectable



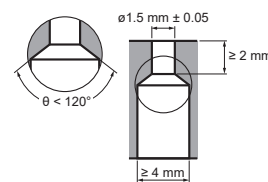
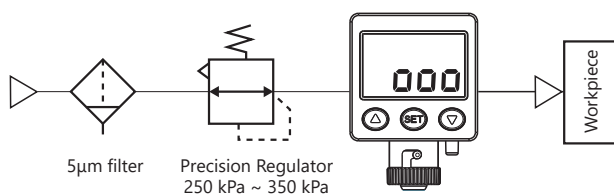
## Specifications

MODEL	KGS01-G-02	KGS01-G-04
Detection Distance	0.01 ~ 0.10 mm	
Operating Pressure Range	250 ~ 350 kPa	
Withstand Pressure	600 kPa	
Fluid	Clean air, Non-corrosive / Non-flammable gas ※1	
Power Supply Voltage	12 ~ 24 V DC ± 10 %, Ripple ( P-P ) ≤ 10 %	
Current Consumption	≤ 20 mA	
Switch Output	1 NPN : open collector 1 output Max. Load Current : 125 mA Max. Supply Voltage : 30 V DC Residual Voltage : ≤ 1.5 V	1 PNP : open collector 1 output Max. Load Current : 125 mA Max. Supply Voltage : 24 V DC Residual Voltage : ≤ 1.5 V
Consumption Flow Rate	≤ 18 L / min @ 300 kPa	
Repeatability	± 5 μm	
Hysteresis	Adjustable 1 ~ 30 digits	
Output Short Circuit Protection	Yes	
Display	3 ½ digital, 7 segment LCD display ( White ) ( Sampling rate : 5 times / sec. )	
Switch on Indicator	White Indicator 1 : OUT	
Detection Nozzle	Ø1.5 mm ※2	
Environment	Enclosure	IP65 ※3
	Ambient Temp. Range	Operation : 0 ~ 50 °C, Storage : -10 ~ 60 °C ( No condensation or freezing )
	Ambient Humidity Range	Operation / Storage : 35 ~ 85 % RH ( No condensation )
	Withstand Voltage	1000 V AC in 1-min ( between case and lead wire )
	Insulation Resistance	≥ 50 MΩ ( at 500 V DC, between case and lead wire )
	Vibration	Total amplitude 1.5 mm or 10 G, 10 Hz ~ 55 Hz ~ 10 Hz scan for 1 minute, 2 hours each direction of X, Y and Z
Piping Specifications	Shock	100 m/s <sup>2</sup> ( 10 G ), 3 times each in direction of X, Y and Z
	Supply Port	Rc1/8" ※4
Detection Port		
Lead wire	Ø4 Oil-resistance cable ( PVC ) - 26 AWG ( 0.15 mm <sup>2</sup> ) - 3 cores	
Weight ( with 2 meter lead wire )	Approx. 115 g	

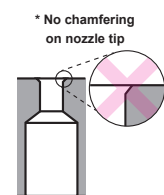
### NOTE

※1 : Please use air filter to clean air ( 5 μm or less ) and install precision regulator.

※2 : Detection nozzle



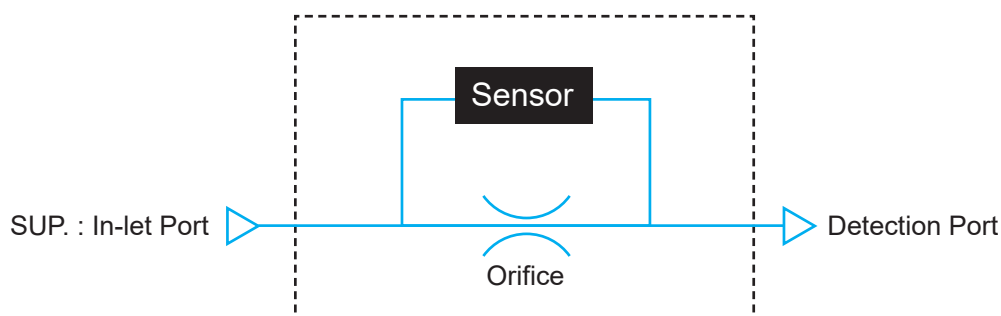
Correct Nozzle Shape



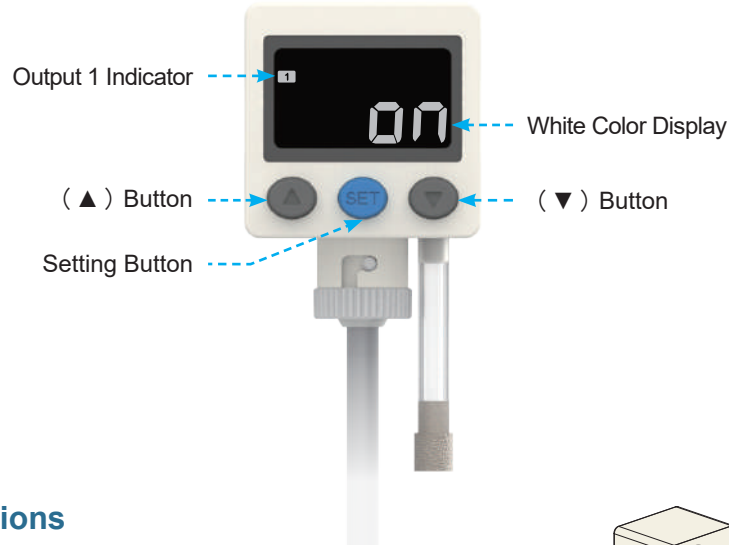
Incorrect Nozzle Shape

※3 : Dustproof protector must be installed to maintain IP65.  
 ※4 : Back side of product, please refer to product dimension.

## Detection Circuit

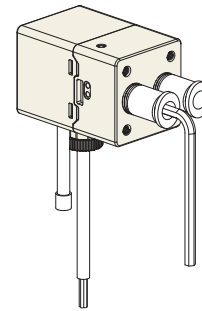


## Panel Description



## Installation Precautions

- When mounting, always use the wrench on the metallic area near the pressure port. Never apply a wrench to the plastic body, it will damage the sensor.
- Over tightening may cause damages to the port thread, mounting bracket and pressure sensor. Under tightening may result loosen or leakage.

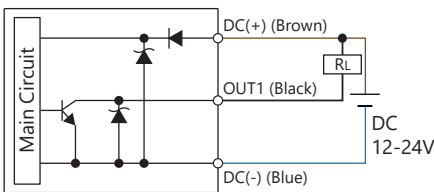


\* Internal Hex Straight Tube-to-Tube Adaptors are recommended.

## Circuit Wiring Diagrams

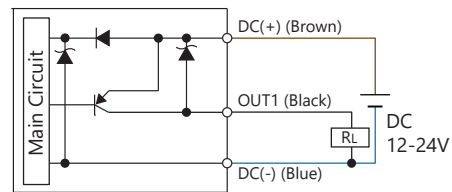
### KGS01- G - 02

1 NPN Output



### KGS01- G - 04

1 PNP Output



## Ordering Information

**K G S 0 1 - G - 0 2 - F 1 C**

### Rated Distance Range

G : 0.01 ~ 0.10 mm

### Output Specifications

02 : 1 NPN Output  
04 : 1 PNP Output

### Pressure Port

F1C : Rc1/8"

### Optional Parts

BT-18 : Mounting bracket  
BT-19 : Mounting bracket  
PA-E : Panel adapter  
PA-F : Panel adapter + Front protective lid

### Optional Parts

- Mounting bracket : BT-18 / BT-19



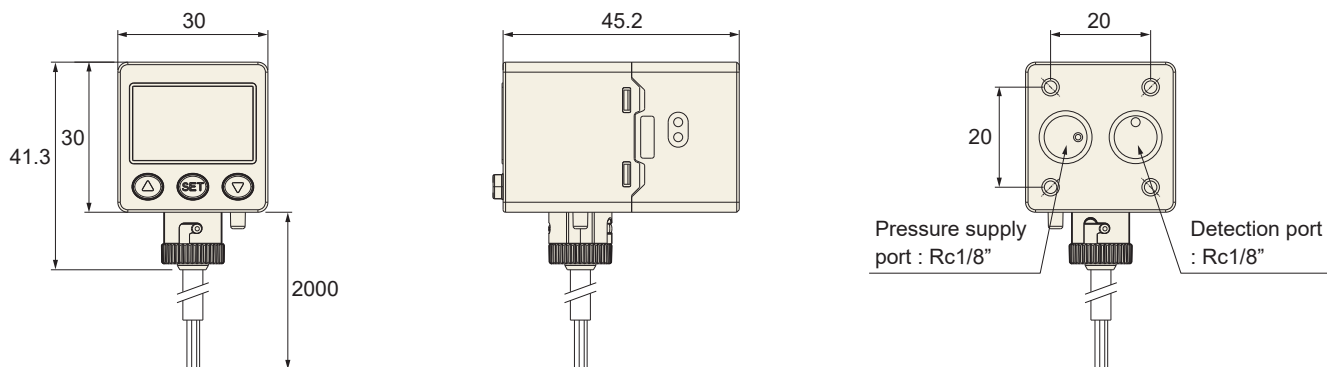
- Panel adapter : PA-E



- Panel adapter + Front protective lid : PA-F

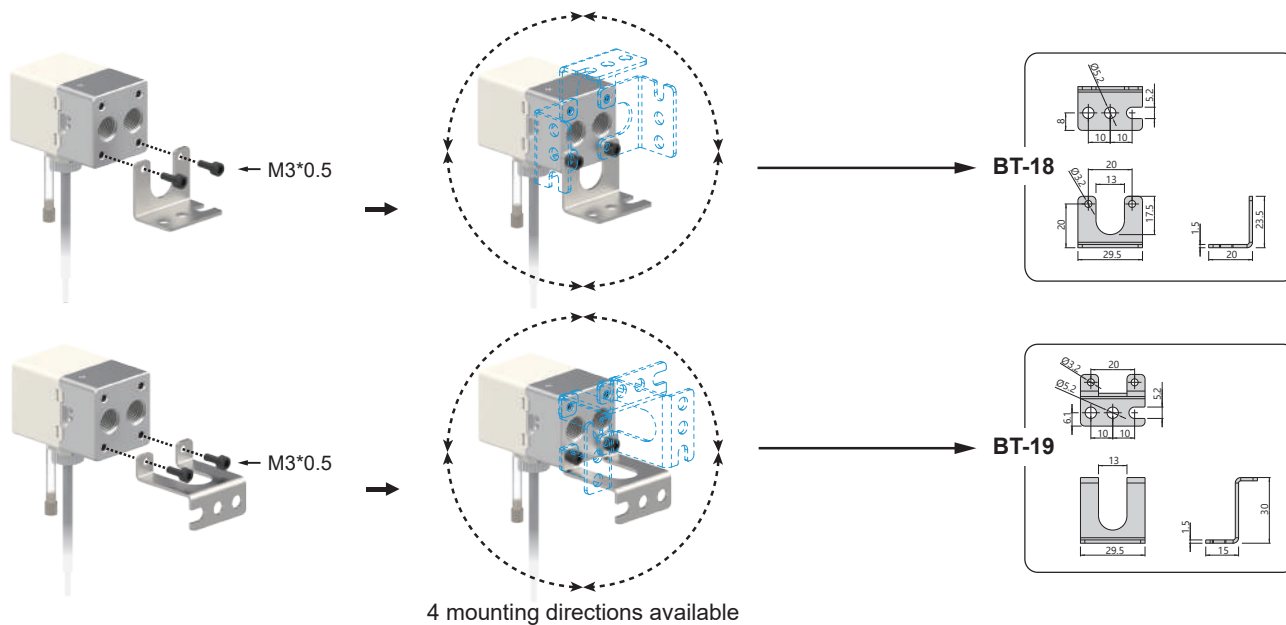


## Dimensions

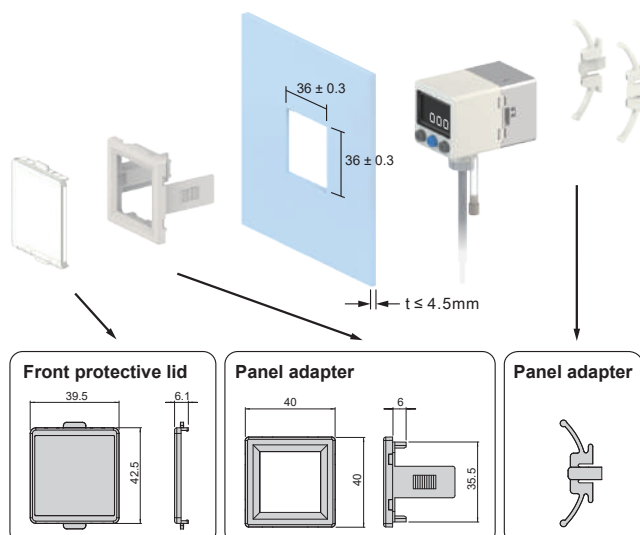


## Optional Parts Dimensions

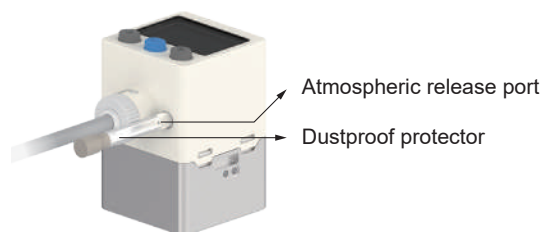
### 1 Mounting Bracket



### 2 Panel Mount Adapter + Front Protective Lid



### 3 IP65 Protector



**Caution :**

This device must be installed to maintain IP65 ( Dust and splash proof ) enclosure rating.

Unit : mm