

Features

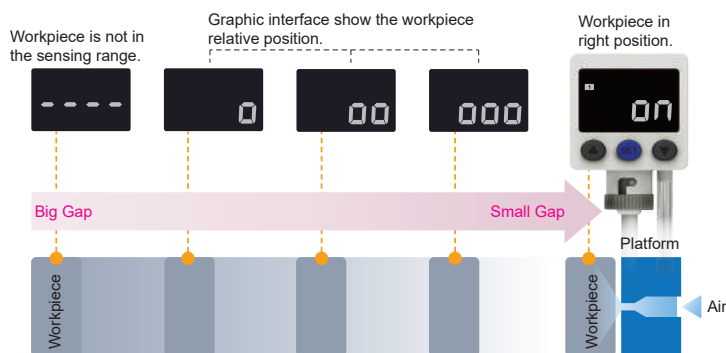
- Digital LCD display, easy readout
- IP65 enclosure
- Detection distance : 0.01 ~ 0.10 mm
- Repeatability : $\pm 5 \mu\text{m}$



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.

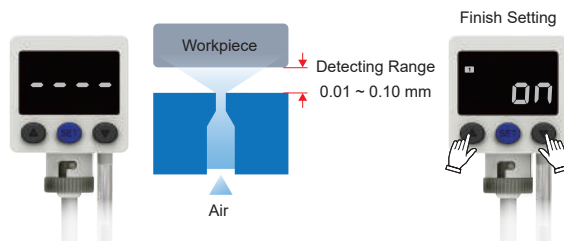


2 IP65 Compliance



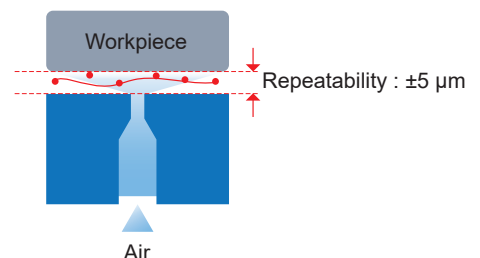
3 Reference Gap Easy Setting

- To set the reference gap by press up Δ + down ∇ at the same time.

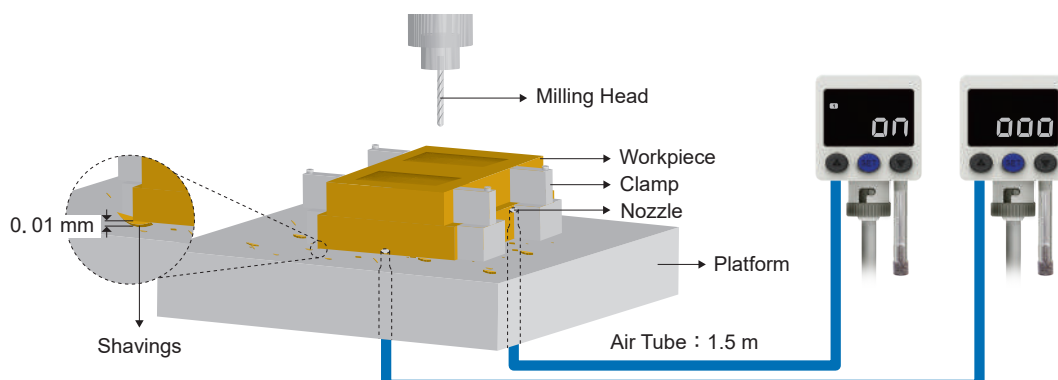


4 Repeatability : $\pm 5 \mu\text{m}$

- The higher repeatability is, the more guarantee is.



5 The Gap Cause by Shavings Can Be Detectable



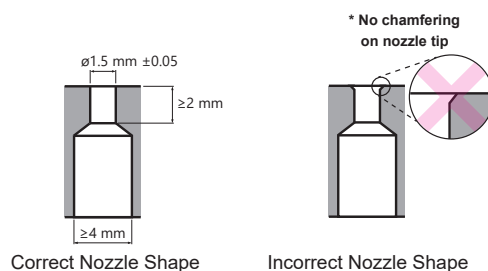
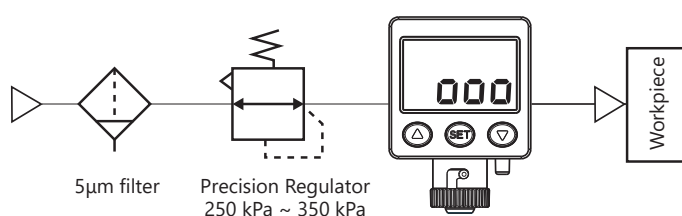
Specifications

MODEL	KGS01-G-02	KGS01-G-04
Detection Distance	0.01 ~ 0.10 mm	
Operating Pressure Range	250 to 350 kPa	
Withstand Pressure	600 kPa	
Fluid	Clean air, Non-corrosive / Non-flammable gas *1	
Power Supply Voltage	12 to 24 V DC $\pm 10\%$, Ripple (p-p) 10 % or less	
Current Consumption	≤ 20 mA	
Switch Output	1NPN : open collector 1 output Max. Load Current : 125 mA Max. Supply Voltage : 30 V DC Residual Voltage : ≤ 1.5 V	1PNP : 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 or less	
Repeatability	± 5 μ m	
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	$\phi 1.5$ mm *2	
Piping Specifications	Supply Port	Rc1/8" *3
	Detection Port	Rc1/8" *3
Environment	Enclosure	IP 65 *4
	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)
	Vibration	Total amplitude 1.5 mm, 10 Hz ~ 55 Hz ~ 10 Hz scan for 1 minute, two hours each direction of X, Y and Z
Lead wire	Oil-resistance cable (0.15 mm ²)	
Weight (with 2 meter lead wire)	Approx. 115 g	

Note :

*1 : Please use air filter to clean air (5 μ m or less) and install precision regulator.

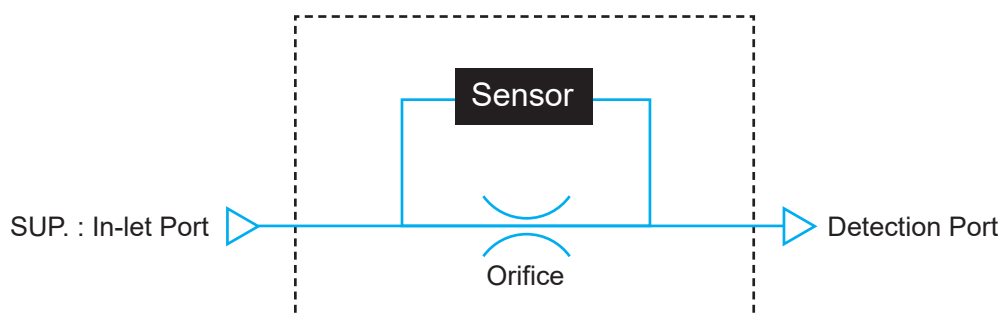
*2 : Detection nozzle



*3 : Back side of product, please refer to product dimension.

*4 : Dust protector is required to maintain IP 65 enclosure. Please refer to "Optional Parts Dimensions".

Detection Circuit

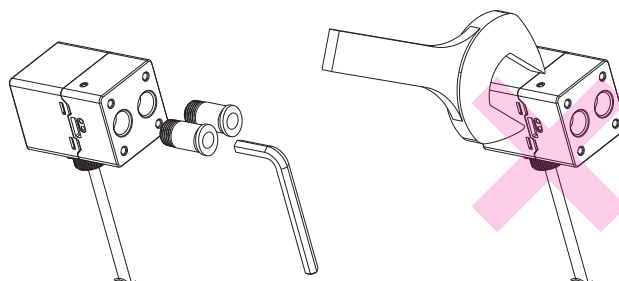


Panel Description



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.

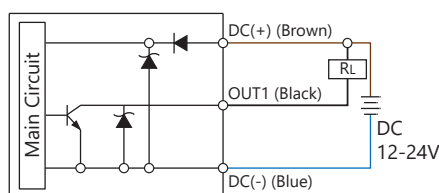


* Internal Hex Straight Tube-to-Tube Adaptors are recommended.

Output Circuit Wiring Diagrams

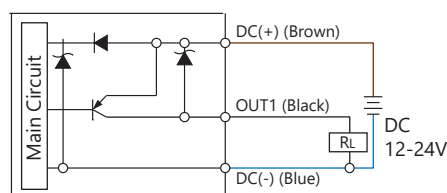
KGS01- G - 02

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

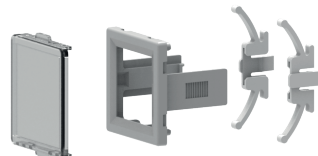
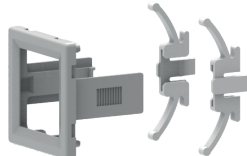
BT-18 : Mounting bracket
BT-19 : Mounting bracket
PA-E : Panel adapter
PA-F : Panel adapter + Front protective lid

Optional Parts

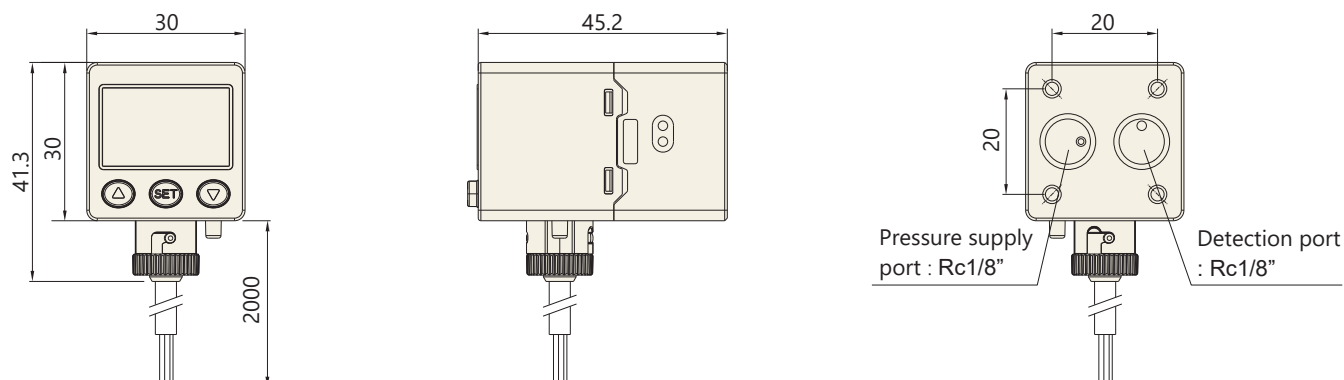
- Mounting bracket : BT-18 / BT-19

- Panel adapter : PA-E

- Panel adapter + Front protective lid : PA-F

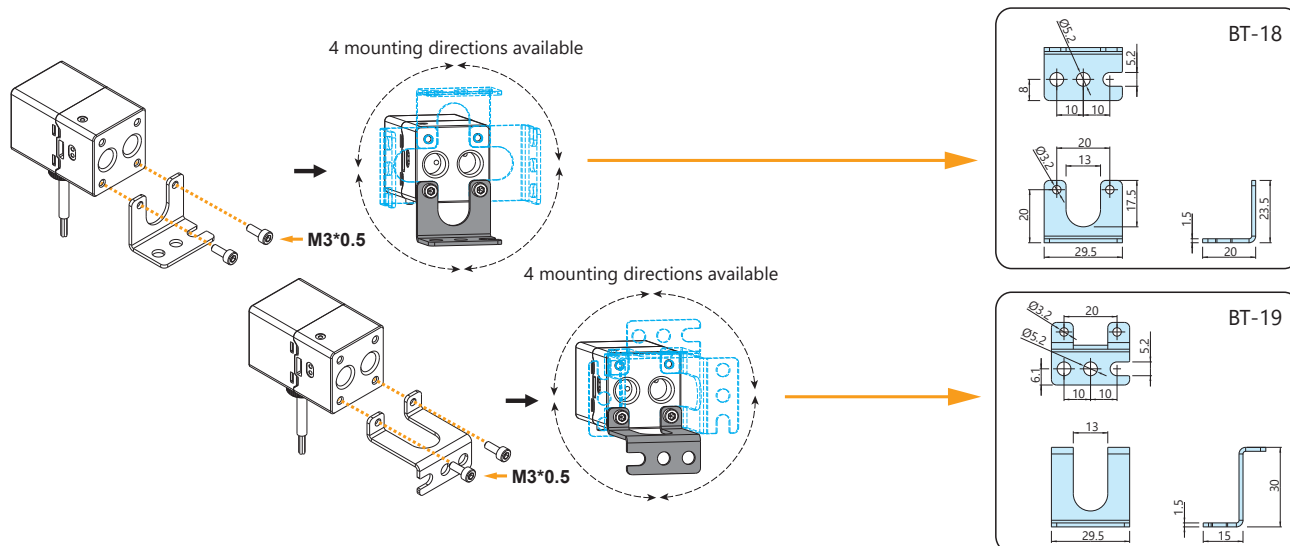


Dimensions

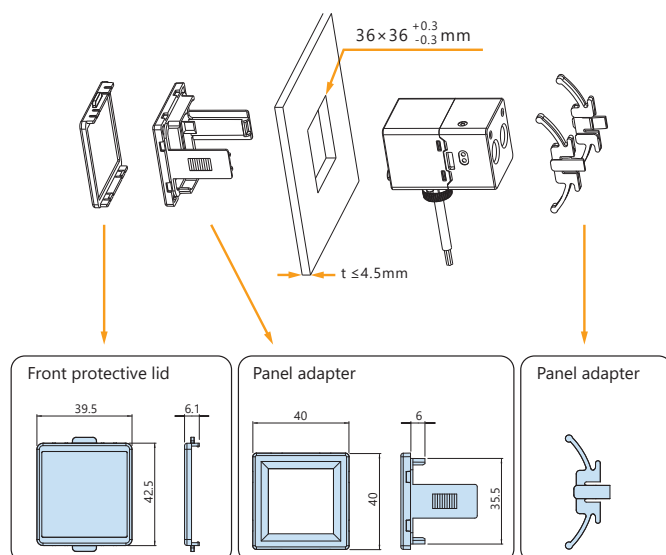


Optional Parts Dimensions

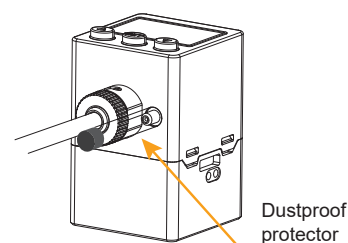
1 Mounting Bracket



2 Panel Mount Adapter + Front Protective Lid



3 IP65 Protector



Caution:
This device must be installed to maintain IP 65
(Dust and splash proof) enclosure rating.

Unit : mm