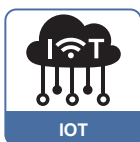
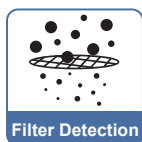
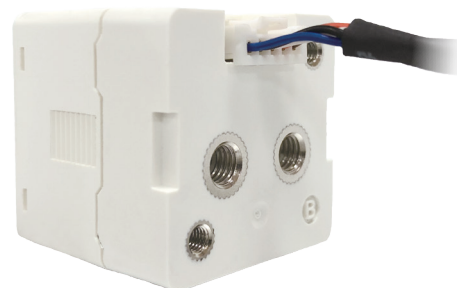


Features

- Digital LCD display, easy readout
- Pressure range :
-10 ~ 10 kPa, -1 ~ 1 kPa,
-2 ~ 2 kPa, -5 ~ 5 kPa
- RS485 Modbus RTU
- Remote control /
Real-time monitoring

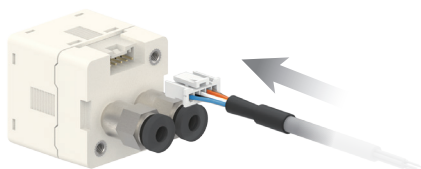
RS485 MODBUS CONTROL



Features Highlight

1 Quick Installation

- Save Installation Time
- Easy Removal



(Removable Data Cable)

2 Key-lock Function

- Key-lock icon is shown on the display when the function is enabled.



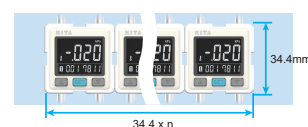
3 Save Installation Space

Panel opening for multiple pressure controller

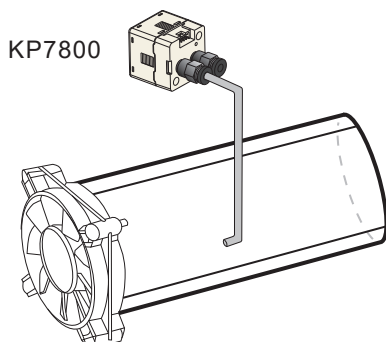


Calculation factor (A) = (34.4 x n) - 3.4
n = number of controller

Actual dimension after installation

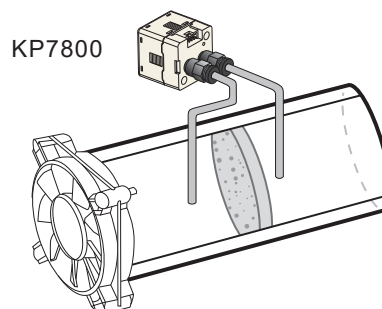


4 Air Flow Detection

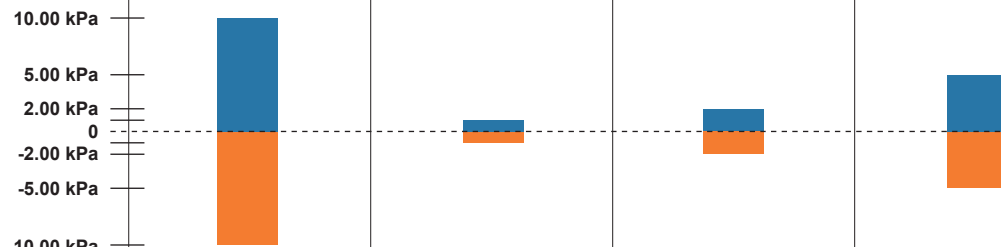


5 Filter Air Monitoring

- To monitor the clogging of filter by detecting the differential pressure.



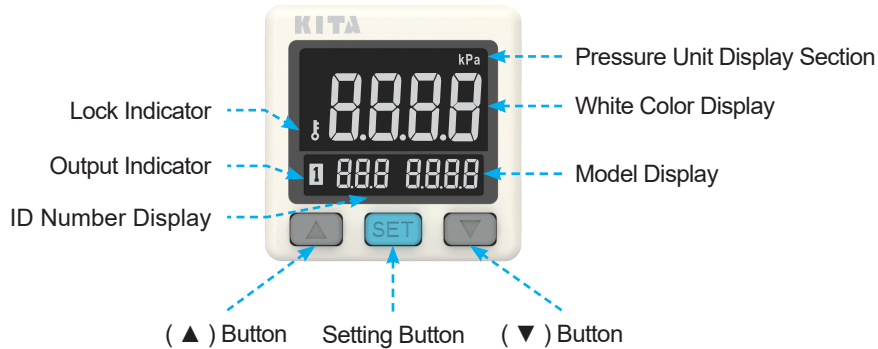
Specifications

MODEL		KP7810	KP7811	KP7812	KP7815
					
Rated Pressure Range		-10.00 ~ 10.00 kPa	-1.000 ~ 1.000 kPa	-2.00 ~ 2.00 kPa	-5.00 ~ 5.00 kPa
Set Pressure Range		-10.00 ~ 10.00 kPa	-1.000 ~ 1.000 kPa	-2.00 ~ 2.00 kPa	-5.00 ~ 5.00 kPa
Withstand Pressure		30 kPa	3 kPa	6 kPa	15 kPa
Fluid		Filtered air, Non-corrosive / Non-flammable gas			
Set Pressure Resolution	kPa	0.01	0.001	0.01	0.01
	mmAq ※1	1	0.1	1	1
Power Supply Voltage		12 ~ 24 V DC ± 10 %, Ripple (P-P) ≤ 10 %			
Current Consumption		≤ 40 mA (with no load)			
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	
Repeatability		± 0.5 % F.S. ± 1 digit			
Hysteresis	Hysteresis Mode	Adjustable			
	Window Comparator Mode				
Response Time		≤ 2.0 ms (Chattering-proof function : 32 ms, 128 ms, 1024 ms selectable)			
Output Short Circuit Protection		Yes			
Display		4 digital, 7 segment LCD display (White) (Sampling rate : 0.1 ~ 3 sec select)			
Indicator Accuracy		± 2 % F.S. ± 1 digit (Ambient temperature : 25 ± 3 °C)			
Switch on Indicator		White Indicator 1 : OUT1			
Environment	Enclosure	IP40			
	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 ~ 150 Hz ~ 10 Hz scan for 1 minute, 2 hours each direction of X, Y and Z			
	Shock	100 m/s ² (10 G), 3 times each in direction of X, Y and Z			
Temperature Characteristic		± 3 % F.S. of detected pressure (25 °C) at temp. (Range of 0 ~ 50 °C)			
Communication Interface		RS485			
Port Size		M5 : M5 female thread			
Lead Wire		Ø4 Oil-resistance cable (PVC) - 26 AWG (0.15 mm ²) - 5 cores			
Weight (with 2 Meter Lead Wire)		Approx. 75 g			

NOTE

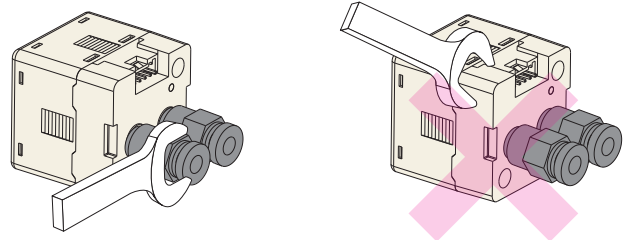
※1 : When the unit is mmAq, the pressure unit is not displayed.

Panel Description



Installation Precautions

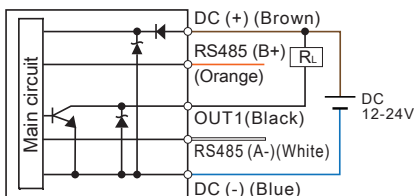
- Do not use the wrench on the plastic body while connecting the sensor connector or pressure port.
- Over tightening may cause damage to the port thread, mounting bracket and pressure sensor. Under tightening may result loosen or leakage.
- Apply air pressure and power after installation, make necessary adjustments and inspect any possible signs of leakage to ensure proper installation.
- Do not insert metal or sharp objects into the pressure port.



Output Circuit Wiring Diagrams

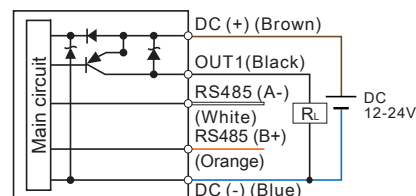
KP78□ - 02 - M5

1 NPN + RS485



KP78□ - 04 - M5

1 PNP + RS485



* Procedure to wiring RS485 products : To prevent product damage due to short circuit , MUST do RS485 line connection BEFORE power line connection.

Ordering Information

K P 7 8 0 1 - 0 2 - M 5

Pressure Range

10 : -10.00 ~ 10.00 kPa 12 : -2.000 ~ 2.000 kPa
11 : -1.000 ~ 1.000 kPa 15 : -5.000 ~ 5.000 kPa

Output Specifications

02 : 1 NPN output + RS485
04 : 1 PNP output + RS485

Optional Parts

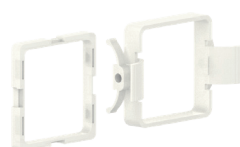
BT-20 : Mounting bracket
BT-21 : Mounting bracket
PA-C : Panel adapter
PA-D : Panel adapter + Front protective lid

Optional Parts

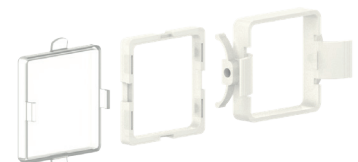
- Mounting Bracket : BT-20 / BT-21



- Panel Adapter : PA-C



- Panel Adapter + Front Protective Lid : PA-D



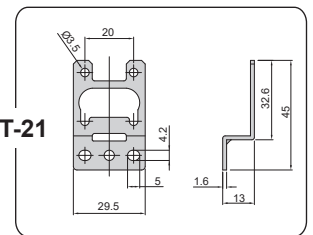
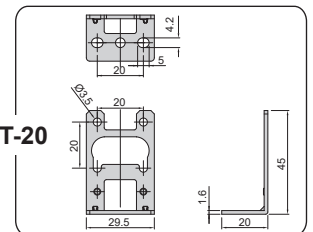
Technical drawings of the device showing front and side views with dimensions.

The front view (left) shows a square device with a width of 30 and a height of 30. It features a large rectangular display area, a smaller rectangular area below it, and three buttons at the bottom: an upward arrow, a "SET" button, and a downward arrow.

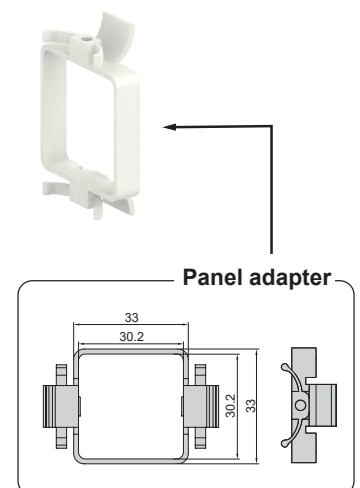
The side view (right) shows the device's profile with a width of 30. It highlights the depth of the device and the location of the display and buttons on the front face.



The diagram illustrates the assembly of the top and bottom covers. It shows two views: the top cover and the bottom cover. For each view, a side perspective shows the cover with a bracket and two screws being inserted. A top-down perspective shows the cover with the bracket and screws already in place. The screws are labeled M3*0.5.



Technical drawing showing the assembly of the front protective lid and panel adapter. The drawing includes two views of the front protective lid (top and side) and two views of the panel adapter (top and side). The front protective lid has a width of 34.4 mm and a height of 8.5 mm. The panel adapter has a width of 34.4 mm and a height of 4 mm. The assembly is shown with a blue panel adapter and a white front protective lid. The panel adapter has a central square opening with dimensions $31^{+0}_{-0.4}$ mm. The front protective lid has a central square opening with dimensions $31^{+0}_{-0.4}$ mm. The thickness of the panel adapter is indicated as $t \leq 4.5$ mm. A small digital display unit is shown to the right of the panel adapter.



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