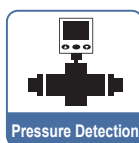


KP75 SERIES

IIoT Pneumatic, Hydraulic Pressure Sensor
(Multi-Medium)

Features

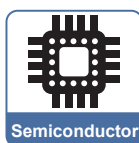
- Corrosive fluid or gas available (in the pipeline)
- Sensor parts & Fitting parts : SUS316L
- 2-color digital LCD display
- Remote control / Real-time monitoring
- RS485 Modbus RTU / ASCII
- 3½ digit, 7 segment LCD display
- IP65 enclosure



Pressure Detection



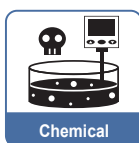
Exhaust Gas Treatment



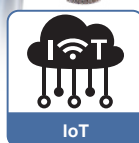
Semiconductor



Hydraulic



Chemical



IoT

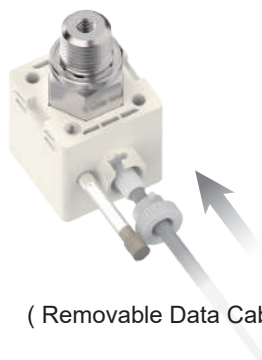
RS485 MODBUS CONTROL



Features Highlight

1 Quick Installation

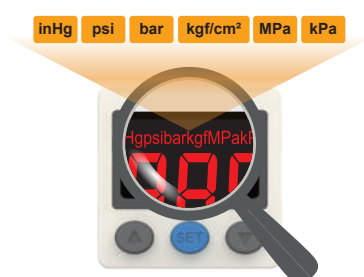
- Save installation time
- Easy removal



(Removable Data Cable)

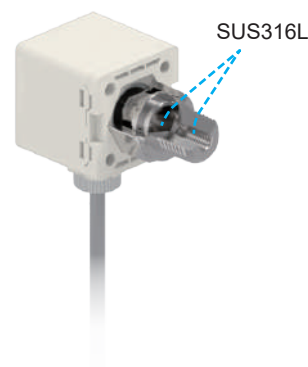
2 Easy Unit Identification

- Unit conversion easy to read



3 Applicable for Corrosive Fluid or Gas

- Sensor parts & Fitting parts are SUS316L, applicable for corrosive fluid or gas equipment



4 2-Color Display

- User selectable color mode, for different conditions use



	SoG	SoR	Grn	Red
ON	Green	Red	Green	Red
OFF	Red	Green	Green	Red

5 IP65 Compliance



Specifications

MODEL		KP75C	KP75P	KP75H02
		Compound Pressure	Positive Pressure	High Pressure
2.000 MPa 100.0 kPa 0 -101.0 kPa				
Rated Pressure Range		-100.0 ~ 100.0 kPa	0.000 ~ 1.000 MPa	0.000 ~ 2.00 MPa
Set Pressure Range		-101.0 ~ 101.0 kPa	-0.100 ~ 1.000 MPa	-0.100 ~ 2.00 MPa
Withstand Pressure		300 kPa	3 MPa	
Fluid		Fluid or air that will not corrode SUS316L		
Sealed Liquid		Silicone oil		
Set Pressure Resolution	kPa	0.1	-	-
	MPa	-	0.001	0.001 (~ 1.999) 0.01 (2.00 ~)
	kgf / cm²	0.001	0.01	0.01 (~ 19.99) 0.1 (20.0 ~)
	bar	0.001	0.01	0.01 (~ 19.99) 0.1 (20.0 ~)
	psi	0.01	0.1	0.1 (~ 199.9) 1 (200 ~)
	inHg	0.1	-	-
Power Supply Voltage		12 ~ 24 V DC ± 10 %, Ripple (P-P) ≤ 10 % (UL class2)		
Current Consumption		≤ 40 mA (with no load)		
Switch Output		1 NPN open collector output Max. Load Current : 125 mA Max. Supply Voltage : 30 V DC Residual Voltage : ≤ 1.5 V		1 PNP open collector output Max. Load Current : 125 mA Max. Supply Voltage : 24 V DC Residual Voltage : ≤ 1.5 V
Repeatability		± 0.3 % F.S. ± 1 digit		
Response Time		≤ 2.5 ms (Chattering-proof function : 25 ms, 100 ms, 250 ms, 500 ms, 1000 ms and 1500 ms selections)		
Output Short Circuit Protection		Yes		
Display		3 ½ digital, 7 segment LCD display (Red / Green / Orange) (Sampling rate : 5 times / sec.)		
Indicator Accuracy		± 2 % F.S. ± 1 digit (Ambient temperature : 25 ± 3 °C)		
Switch on Indicator		Orange Indicator 1 : OUT1		
Environment	Enclosure	IP65 ※1		
	Ambient Temp. Range	Operation : 0 ~ 50 °C ; Storage : -10 ~ 60 °C (No condensation or freezing)		
	Ambient Humidity Range	35 ~ 85 % RH (No condensation)		
	Withstand Voltage	250 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		
	Shock	100 m/s² (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 ※2		F1 : R1/4", M5 ; F2 : NPT1/4", #10-32UNF ; F3 : G1/4" (BSPP), M5		
Lead Wire		Ø4 Oil-resistance cable (PVC) - 26 AWG (0.15 mm²) - 5 cores		
Weight (with 2 meter lead wire)		Approx. 110 g (Rear ported) ; Approx. 150 g (Bottom ported)		

NOTE

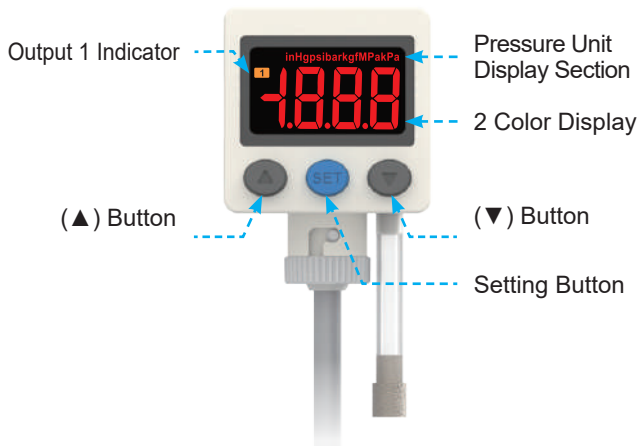
※1 : Dustproof protector must be installed to maintain IP65.

※2 : G port O-Ring material is NBR. If any special request, please contact KITA.

KP75 SERIES

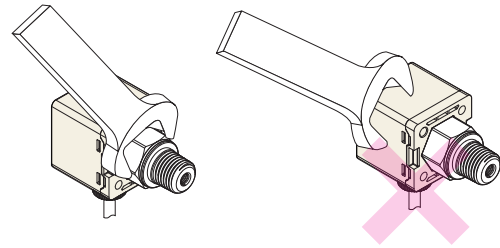
IIoT Pneumatic, Hydraulic Pressure Sensor
(Multi-Medium)

Panel Description



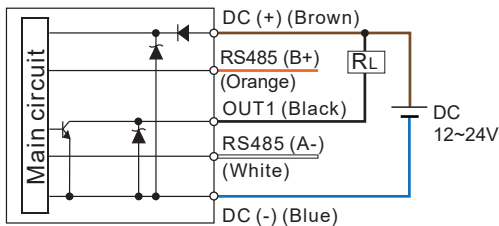
Installation Precautions

- 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 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.



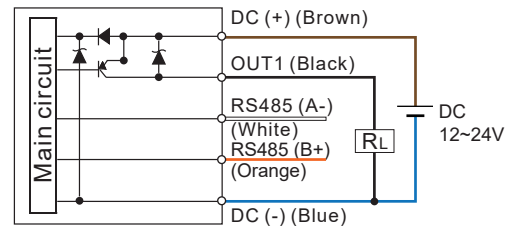
Circuit Wiring Diagrams

KP75□ - 02 - □
NPN output + RS485



※ Wiring for RS485 MODBUS :
Please connect RS485 (B+) or (A-) before connecting power supply to avoid short circuit to damage to product.

KP75□ - 04 - □
PNP output + RS485



Ordering Information

K P 7 5 C - 0 2 - F 1 □

Pressure Range

C : Compound pressure
(-101.0 ~ 101.0 kPa)
P : Positive pressure
(-0.100 ~ 1.000 MPa)
H02 : High pressure
(-0.100 ~ 2.00 MPa)

Output Specifications

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

Pressure Port

F1 : R1/4", M5
F2 : NPT1/4", #10-32UNF
F3 : G1/4" (BSPP), M5

Piping Direction

Blank : Rear ported
L : Bottom ported

Optional Parts

BT-10 : Mounting bracket
BT-11 : Mounting bracket
PA-E : Panel adapter
PA-F : Panel adapter + Front protective lid

I-0360 : Snubber (for Pressure Port F1 & F3)
I-0379 : Snubber (for Pressure Port F2)
※ KP75P & KP75H02 suggest to select a snubber

Optional Parts

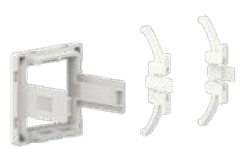
■ Mounting Bracket :
BT-10 / BT-11

■ Panel Adapter : PA-E

■ Panel adapter + Front protective lid :
PA-F

■ Snubber

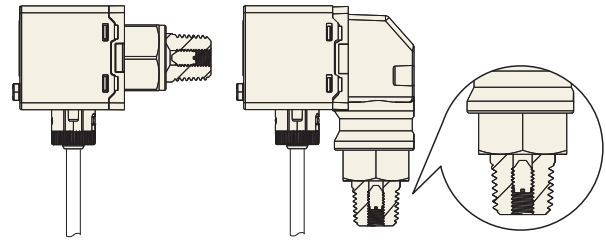
I-0360 : for Pressure Port F1 & F3
I-0379 : for Pressure Port F2



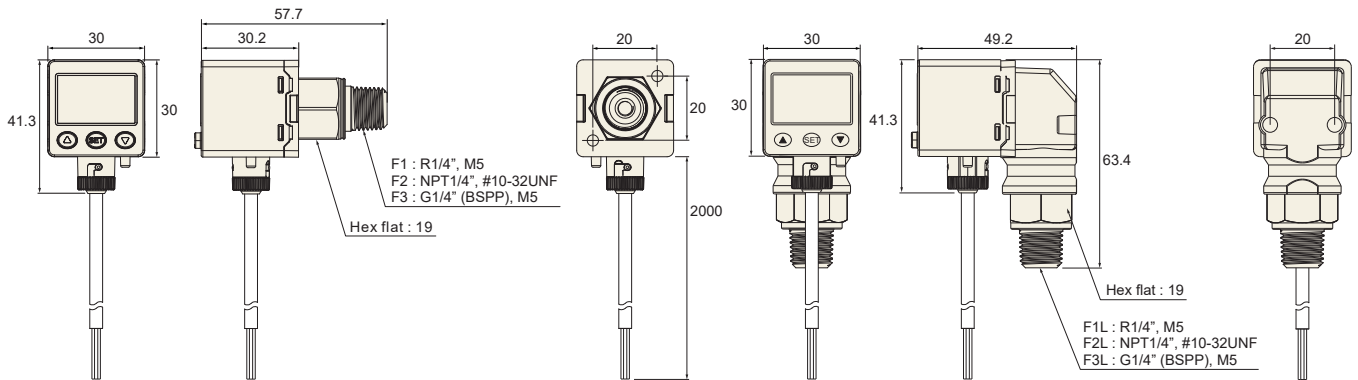
Removable Snubber Installed

- Pressure port equipped with snubber can avoid damage caused by sudden pressure surge of water or oil, improve product durability.

※ When snubber is clogged with contaminants, please use a flat head screwdriver to remove the snubber, clean and reinstall.

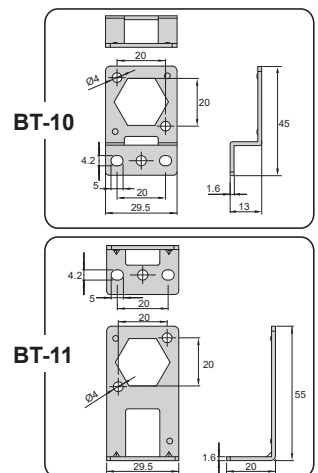
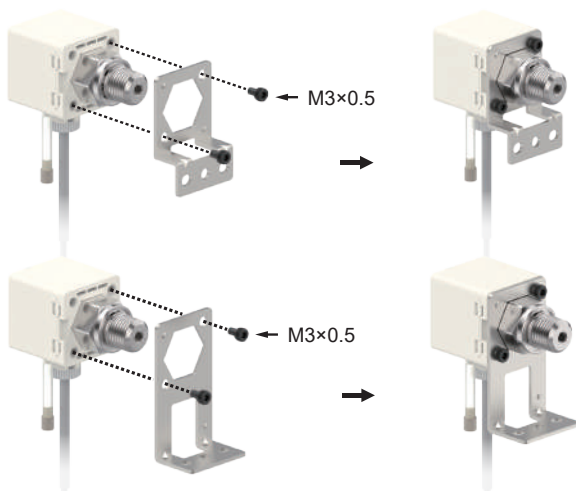


Dimensions

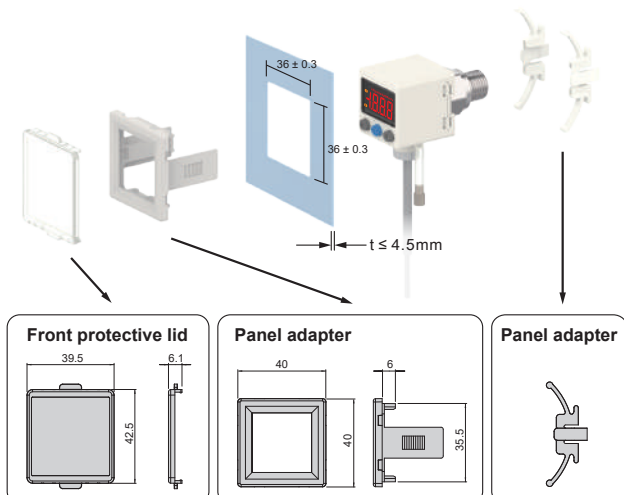


Optional Parts Dimensions

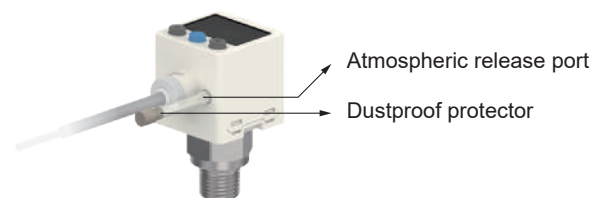
1 Mounting Bracket



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