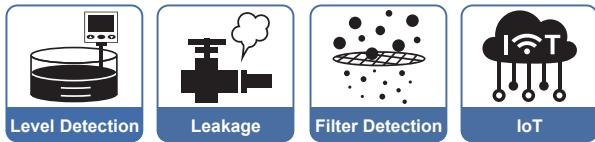


Features

- Digital LCD display
- IP65 enclosure
- Pressure range : 0 ~ 1000 kPa
- RS485 Modbus RTU
- High-resolution (10x)
- Selectable NPN or PNP open collector

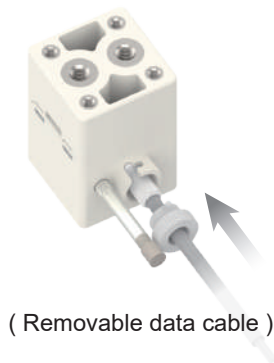
RS485 MODBUS CONTROL



Features Highlight

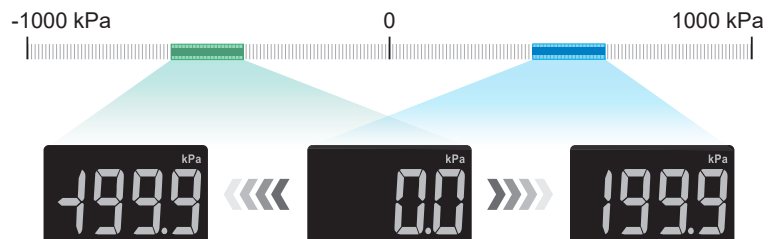
1 Quick Installation

- Save Installation Time
- Easy Removal



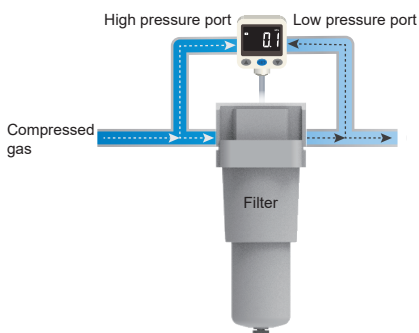
2 High Resolution Mode

- High resolution mode is settable in differential pressure range : -199.9 kPa ~ 199.9 kPa.
Under high resolution mode, the detection are 10 times accuracy that able to measure differential pressure.



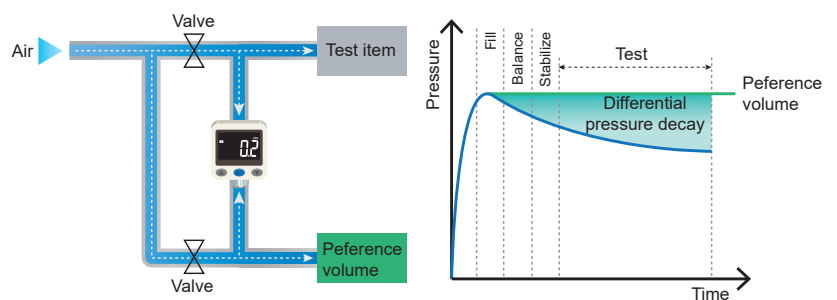
3 Filter Air Monitoring

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



4 Leakage Test

- To detect the differential pressure decay by sensing the change of line pressure.



Specifications

Model		KDS-P-02	KDS-P-04
			
Rated Pressure Range		-1000 ~ 1000 kPa	
Setting Pressure Range		0 ~ 1000 kPa	
Withstand Pressure		1200 kPa	
Fluid		Filtered air, Non-corrosive / Non-flammable gas	
Set Pressure Resolution	Standard Mode	1 kPa	
	High Resolution Mode ※1	0.1 kPa	
Power Supply Voltage		12 ~ 24 V DC $\pm 10\%$, Ripple (P-P) $\leq 10\%$	
Current Consumption		≤ 20 mA	
Switch Output		1 NPN open collector ※2 Max. Load Current : 200 mA Max. Supply Voltage : 30 V DC Residual Voltage : ≤ 1.5 V	1 PNP open collector ※2 Max. Load Current : 200 mA Max. Supply Voltage : 24 V DC Residual Voltage : ≤ 1.5 V
Repeatability (Switch Output)		$\pm 0.2\%$ F.S. ± 1 digit	
Hysteresis	Hysteresis Mode	1 ~ 15 digits	
	Window Comparator Mode		
Output Short Circuit Protection		Yes	
7 Segment LCD Display		3 ½ digital, 7 segment LCD display (White) (Sampling rate : 5 times / sec.)	
Indicator Accuracy	Standard Mode	$\pm 0.3\%$ F.S. ± 1 digit (Ambient temperature : $25 \pm 3^\circ\text{C}$)	
	High Resolution Mode	$\pm 0.1\%$ F.S. ± 1 digit (Ambient temperature : $25 \pm 3^\circ\text{C}$)	
Switch on Indicator		White indicator 1 : OUT1	
Environment	Enclosure	IP65 ※3	
	Ambient Temp. Range	Operation : $0 \sim 50^\circ\text{C}$; Storage : $-10 \sim 60^\circ\text{C}$ (No condensation or freezing)	
	Ambient Humidity Range	35 ~ 85 % RH (No condensation)	
	Withstand Voltage	1000 V AC in 1-min (between case and lead wire)	
	Insulation Resistance	≥ 50 M Ω (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/s ² (10 G), 3 times each in direction of X, Y and Z	
Temperature Characteristic	Standard Mode	$\pm 0.5\%$ F.S. of detected pressure (25°C) at temp. Range of $0 \sim 50^\circ\text{C}$	
	High Resolution Mode	$\pm 5\%$ F.S. of detected pressure (25°C) at temp. Range of $0 \sim 50^\circ\text{C}$	
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. 104 g	

NOTE

※1 : High resolution mode is settable in differential pressure range : -199.9 kPa ~ 199.9 kPa

※2 : Selectable NPN or PNP open collector circuits in setting.

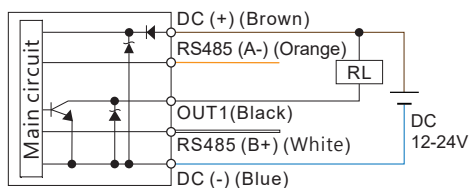
※3 : Dustproof protector must be installed to maintain IP65.

Panel Description

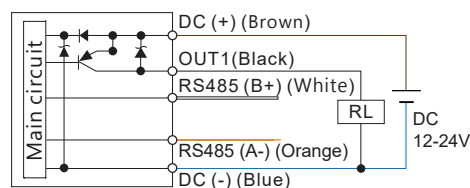


Output Circuit Wiring Diagrams

KDS - P - 02 NPN + RS485



KDS - P - 04 PNP + RS485



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

Ordering Information

K D S - P - 0 2 - M 5

Pressure Range

P : Positive pressure (0 ~ 1000 kPa)

Output Specifications

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

Optional Parts

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

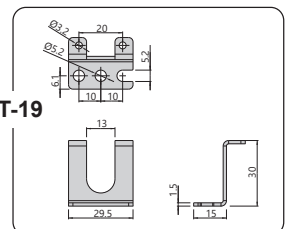
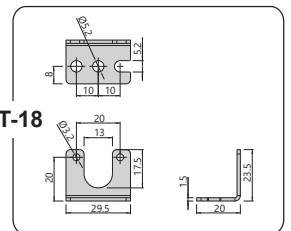
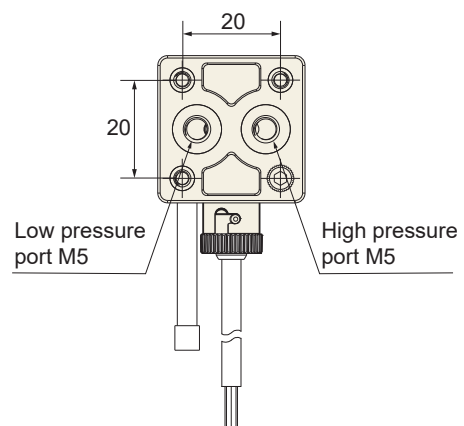
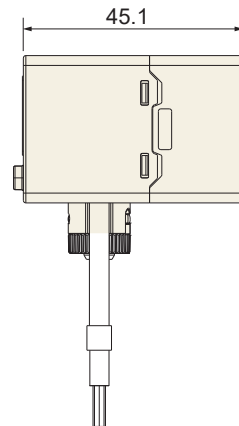
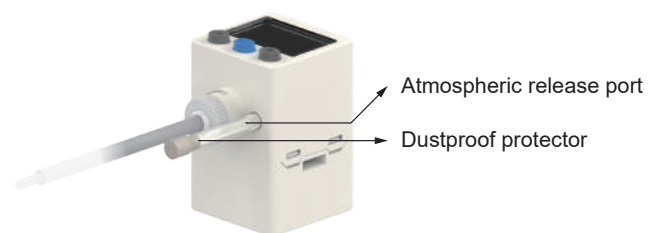
Optional Parts

■ Mounting bracket : BT-18 / BT-19

■ Panel adapter : PA-E

■ Panel adapter + Front protective lid : PA-F



[illegible]

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

77