

RK300-12 Differential Pressure Transmitter For Air

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RK300-12 Differential Pressure Transmitter using piezoresistive pressure sensor chips, the use of thin film resistor for zero calibration and temperature compensation and zero compensation sensitivity, high performance and stable silicon chips encapsulation, make its high static pressure resistance value, strong anti-jamming performance.

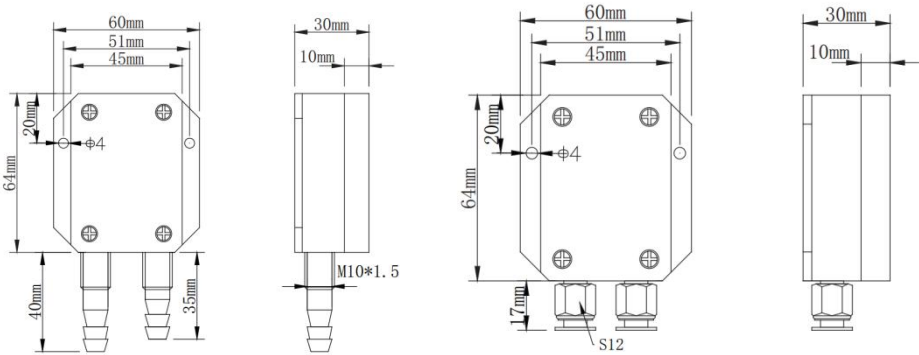
APPLICATION

- Medical equipment
- HVAC and air conditioning
- Industrial control
- Environmental monitoring

SPECIFICATIONS

Item	Specification
Medium	Gas(Compatible with the contact material)@-40-+100℃
Measuring range	-0.2kpa-+0.2kpa,other optional
Maximum static pressure	±10kpa
Supply	12-36VDC,24VDC
Accuracy	±0.5%(≥1kpa),±1%(<1kpa)
Output	4-20mA(2-wires)
Temperature compensation	-10-+60℃
Shock	10g(20-2000Hz)
Operating temperature	-40-+85℃
Long term stability	±0.3%FS/year (≥1kPa), ±0.5%FS/year(<1kPa)
Temperature drift	±0.03%FS/℃
Main material	Element: silicon chip, Φ8 pagoda connector: aluminum alloy, Φ6 quick connector: copper nickel plating, Housing:aluminum alloy, Seals:Nitrile rubber
Ingress protective	IP54
Weight(unpacked)	200g

DIMENSION



Φ8 pagoda connector

Φ6 quick connector

RANGE & MAX. STATIC PRESSURE

Range(kpa)	0-0.1,0.2,0.5,1	0-2	0-5	0-10	±0.1,±0.2,±0.5,±1	±2	±5	±10
Max. static pressure(kpa)	± 10	±20	± 55	± 100	±10	±20	±55	±100

Note:Long tube side is high pressure.

WARRANTY

This product is warranted to be free of defects in materials and construction for a period of 12 months from date of lead time.

Liability is limited to repair or replacement of defective item.

ELECTRICAL CONNECTIONS

Connector (cable)	Current	RS485
Red	V+	V+
Blue	lout	V-
Yellow		RS485A
White		RS485B

Note: This product has been tested and complies with European CE requirements for EMC directive.

Communication Protocol (MODBUS)

Transmission mode: MODBUS-RTU,Baud rate: 9600bps,Data bits:8,Stop bit:1,Check bit:no

Slave address:the factory default is 01H (set according to the need,00H to FEH)

- The 03H Function Code Example: Read value

Host Scan Order(slave address:0x01)

01 03 00 00 00 01 840A

Slave Response

01 03 02 02 AC B959

value:(02AC)H=(684)D=684

Calculation formula: $p=0.5*684/2000=0.171Kpa$

(Upper range limit—Lower range limit)/2000* Measured value+ Lower range limit= Current pressure value

- The 06H Function Code Example: Modify the slave address(After the restart to take effect)

Host Scan Order (Changed the 01H to 09H):


01 06 00 0F 00 09 79CF

Slave Response:

01 06 00 0F 00 09 79CF

5

7

 Complies with applicable CE directives.

Manual subject to change without notice. Version 1.0

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