

## Kobold Differential Pressure & Thermal Flow Sensors

- 1-7 through 100-600 GPM Rates
- Bronze or Stainless Housing
- 4-20mA Process Output
- Rugged 316 Stainless Steel Bellows

The RCD series uses an orifice technique to generate a differential pressure which varies with flowrate but is unaffected by system pressure fluctuations. The single measuring bellows is coupled to a high accuracy hall effect detector.



### SPECIFICATIONS

Maximum Pressure:	580 PSIG
Maximum Temperature:	176°F
Seals:	Buna-N
Display:	3 digit LED
Output:	4-20mA, 3 wire
Output Accuracy:	±3% of full scale
Input Power:	24VDC ±20%, 80mA
Optional Switch:	PNP or NPN open collector, 80mA max.
Electronics Housing:	304 SS, NEMA 4x
Electrical Connection:	Micro-DC male, 5 pin

### ORDERING INFORMATION

KO/RCD- ABCD Example KO/RCD-1105GN4C34P

#### A Material

11	Bronze
12	Stainless Steel

#### B Flow Rate & Fitting Size

05GN4	1-7.2 GPM, 1/2" NPT
10GN4	2-11.2 GPM, 1/2" NPT
15GN5	2-17.6 GPM, 3/4" NPT
20GN5	2.5-22.5 GPM, 3/4" NPT
25GN6	5-35 GPM, 1" NPT
30GN6	8-44.5 GPM, 1" NPT
35GN8	10-73 GPM, 1 1/2" NPT
40GN8	20-114 GPM, 1 1/2" NPT
45GN9	20-184 GPM, 2" NPT
50GN9	25-240 GPM, 2" NPT
55GNB	30-280 GPM, 3" NPT
60GNB	50-410 GPM, 3" NPT
65GNB	100-620 GPM, 3" NPT

#### C Type

C3	Compact Electronics
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#### D Output

4P	4-20mA and 1 PNP switch
4N	4-20mA and 1 NPN switch
OR	2 PNP switches
OM	2 NPN switches

#### Options

-C	Calibrate for specific gravity other than water (<0.95 or >1.05)
-V	Calibrate for viscous liquids ( viscosity >10cSt)

Gas flowmeters also available.

- Temperature Independent Output
- 8 Segment LED Flow Rate Bar
- Optional Setpoint Relay
- Wide Viscosity Range
- No Moving Parts
- Extremely Low Pressure Loss
- NPT & Sanitary Fittings



The KAL-A uses the calorimetric principle to continuously monitor the flow of both viscous and non-viscous media. Flow rate is transmitted via a 4-20mA output, while an optional switch provides an alarm function. A single RTD element is used to both heat the probe tip and measure temperature. The internal microprocessor compensates for media temperature changes. An absence of protrusions prevents contaminants from building up on the probe tip.

### SPECIFICATIONS

Sensing Range	
Water:	0.05 - 2 m/s
Oils (approx.):	0.1 - 4 m/s
Response Time:	5.6s typ.
Maximum Pressure:	1450 PSIG (Sanitary 600 PSIG)
Ambient Temperature:	0°F to 176°F
CIP Temperature:	280°F
Housing:	NEMA 4 Nylon, Explosion Proof (AI) optional
Output:	4-20mA, 3-wire into 500Ω max.
Linearity:	±10% of full scale
Zero Adjustment:	0-75% of range
Span Adjustment:	25-100% of range
Power:	24±2VDC, 300mA max
Switch Option:	
Adjustment:	by Potentiometer
Output:	PNP open collector, 24V, 400mA max.
Status Indicator:	Bi-colored LED

### ORDERING INFORMATION

KO/KAL-7215	304 SS Sensor, 1/2" NPT fitting
KO/KAL-7315	316-Ti SS Sensor, 1/2" NPT fitting
KO/KAL-7320	316-Ti SS Sensor, 3/4" NPT fitting
KO/KAL-7340S	316-Ti SS Sensor, 1 1/2" Tri-Clamp fitting

### OPTIONS

-P	PNP Switch
-M12	6' cable & Micro DC connector

Also available with switch output in place of 4-20mA output.